

Supplementary Document 6

Shift-Share Analysis: New York, 2005 - 2018

**Prepared for the Appalachian Regional Commission by the
West Virginia University Regional Research Institute**

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Chapter 1. Allegany County, New York

Employment in Allegany County, New York, declined from 14,280 in 2005 to 13,154 in 2018, for a change of -1,126, or -7.89%. Readers should compare the employment values in the tables below to total county employment.

The first table shows the referent region share (NS), the Total Share (TS), Industry Mix (IM), and Regional Shift (RS) job values for the county. The summary values shown represent sums of individual industry component values for all county industries. To be clear, the SSA components always refer to the county that is being compared to the referent region, and the NS label always refers to the county growth that would have taken place had it matched overall average growth in the referent region, which can be the United States, the Appalachian Region, or the county and its neighbors. The largest and smallest NS components in the summary table correspond to the fastest and slowest growing referent regions.

Summary Results for Allegany County, New York

County Summary	NS	TS	IM	RS
vs. U.S.	1,605	-2,737	-83	-2,654
vs. Appalachia	46	-1,174	219	-1,393
vs. Neighbors	-904	-224	141	-365

The next table displays the group membership categories for industries belonging to any of the first three categories (signifying a positive total share value) for the Appalachian Region or the county relative to the United States — i.e., A, B, C, I, II, or III — and for the county relative to the Appalachian Region or its neighboring counties — i.e., a, b, c, i, ii, or iii. These are the industries that have passed the first screening step, as they have proven to be positive contributors to either the Appalachian Region in comparison to the United States as a whole, or to Allegany County, New York, in comparison to at least one of the three referent regions.

Chapter 1. Allegany County, New York

Industry Group Membership for Allegany County, New York

Industry	Name	Group Membership	Type A or B or C	Type I or II or III	Type a or b or c	Type i or ii or iii
29	Motor vehicle and parts ...	F III a iii	no	yes	yes	yes
31	General merchandise ...	F III c i	no	yes	yes	yes
53	Miscellaneous profession ...	B I a i	yes	yes	yes	yes
58	Ambulatory health care ...	B I a i	yes	yes	yes	yes
61	Social assistance	B V b ii	yes	no	yes	yes
64	Accommodation	A I a i	yes	yes	yes	yes
66	Other services, exc. gov ...	F III c i	no	yes	yes	yes

Notes:

Groups A, B, and C are from Appalachia vs. the United States

Groups I, II, and III are from Allegany County, New York vs. the United States

Groups a, b, and c are from Allegany County, New York vs. Appalachia

Groups i, ii, and iii are from Allegany County, New York vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Allegany County, New York, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Allegany County, New York, and its neighboring counties. The results for each of the three analyses are presented both visually and in tabular form.

The chart provides a visual display of the Total Share (TS), Industry Mix (IM), and Regional Shift (RS) components of change. The IM indicates the change in industry employment that would have occurred had the industry grown at a rate equal to the difference between the industry-specific growth rate in the referent region and the overall referent-region growth rate. So, a positive value here also means that the industry is growing more rapidly than the overall growth rate for the referent region. The RS component measures the actual employment change in the industry in Allegany County, New York, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Allegany County, New York, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

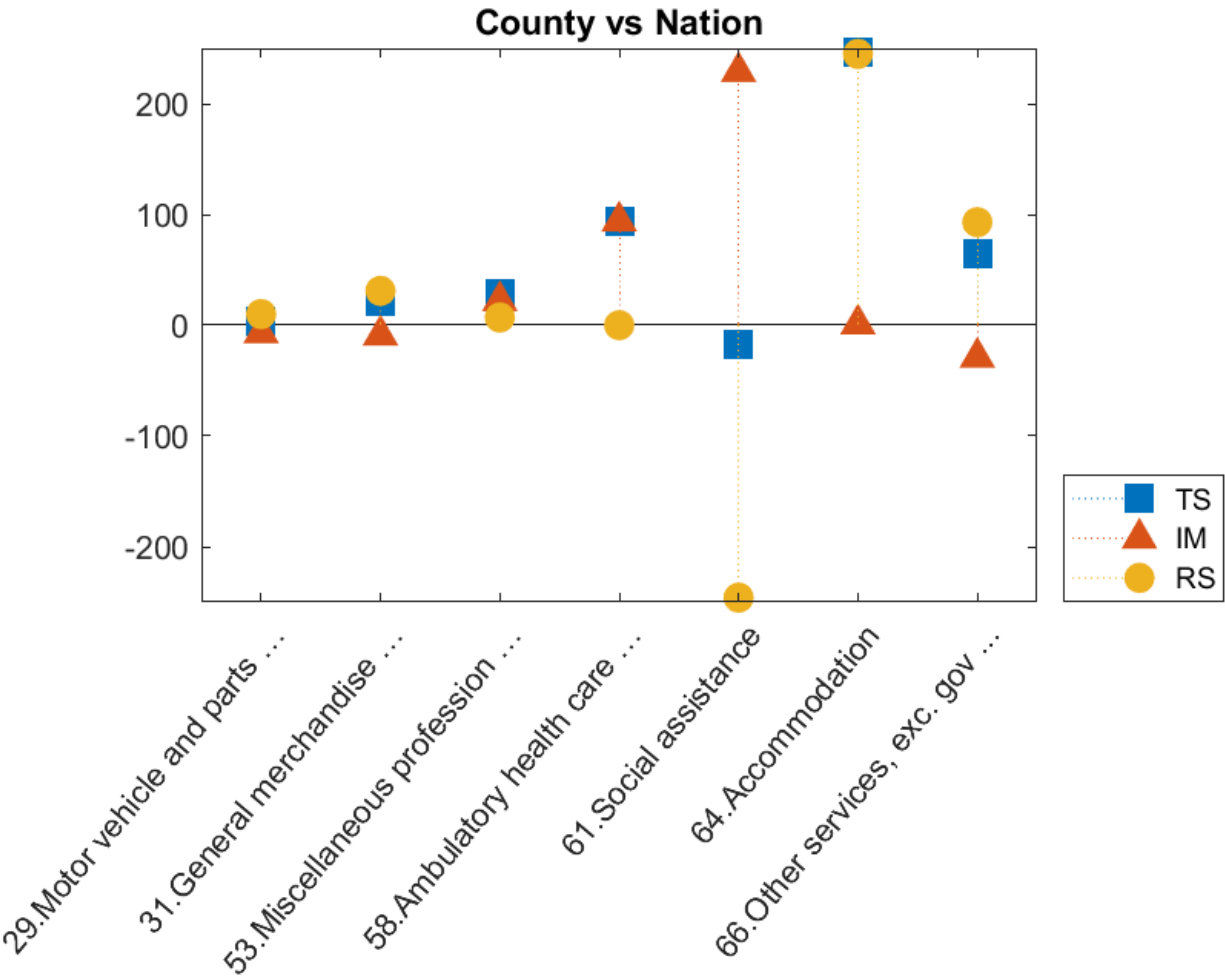
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Allegany County, New York, is still growing at a faster rate than the overall referent region average. Likewise, when IM is negative and RS is positive, the implication is that the regional comparative advantage is sufficiently strong to overcome the slower than average industry growth rate.

Interpreting Different Referent Region Results

The three SSA are conducted relative to three different referent regions: (1) the United States as a whole, (2) the Appalachian Region, and (3) the region defined by the county and its neighboring counties. As such, the IM component indicates the change in industry employment that would have occurred had the industry grown at a rate equal to the difference between the industry-specific growth rate in the referent region and the overall referent-region growth rate. Likewise, the regional shift components, RS, reflect county-specific industry comparative (dis)advantages relative to those same industries in each of the three referent regions. As before, the NS label always refers to county growth that would have occurred had the county industry grown at the overall average rate of growth in the referent region.

Reporting the results for each of three referent regions enables readers to compare county performance to the United States, the Appalachian Region, and the region defined by the county and its neighboring counties. Although economic growth in Appalachia overall and by industry generally lags the rest of the United States, positive SSA components can still be useful for identifying industries that are positive contributors relative to Appalachian Region and to the more localized economy.

Selected SSA Components for Allegany County, New York vs the U.S.

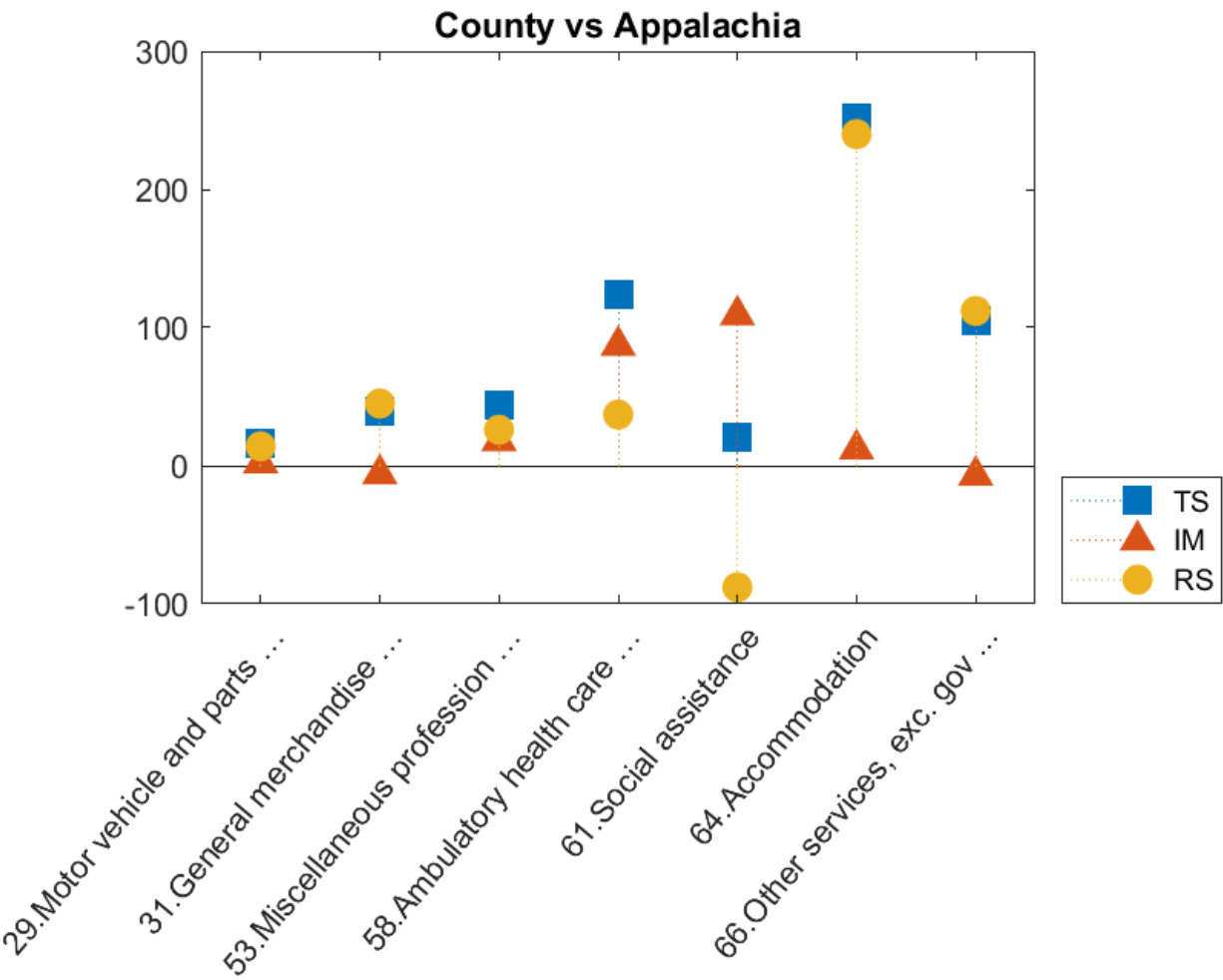


Chapter 1. Allegany County, New York

Allegany County, New York vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
29	Motor vehicle and parts ...	13	3	-7	10	134
31	General merchandise ...	18	22	-9	31	201
53	Miscellaneous profession ...	15	29	22	7	177
58	Ambulatory health care ...	30	94	94	0	394
61	Social assistance	39	-17	229	-246	372
64	Accommodation	7	246	1	245	314
66	Other services, exc. gov ...	42	64	-29	93	482

Selected SSA Components for Allegany County, New York vs the Appalachian Region

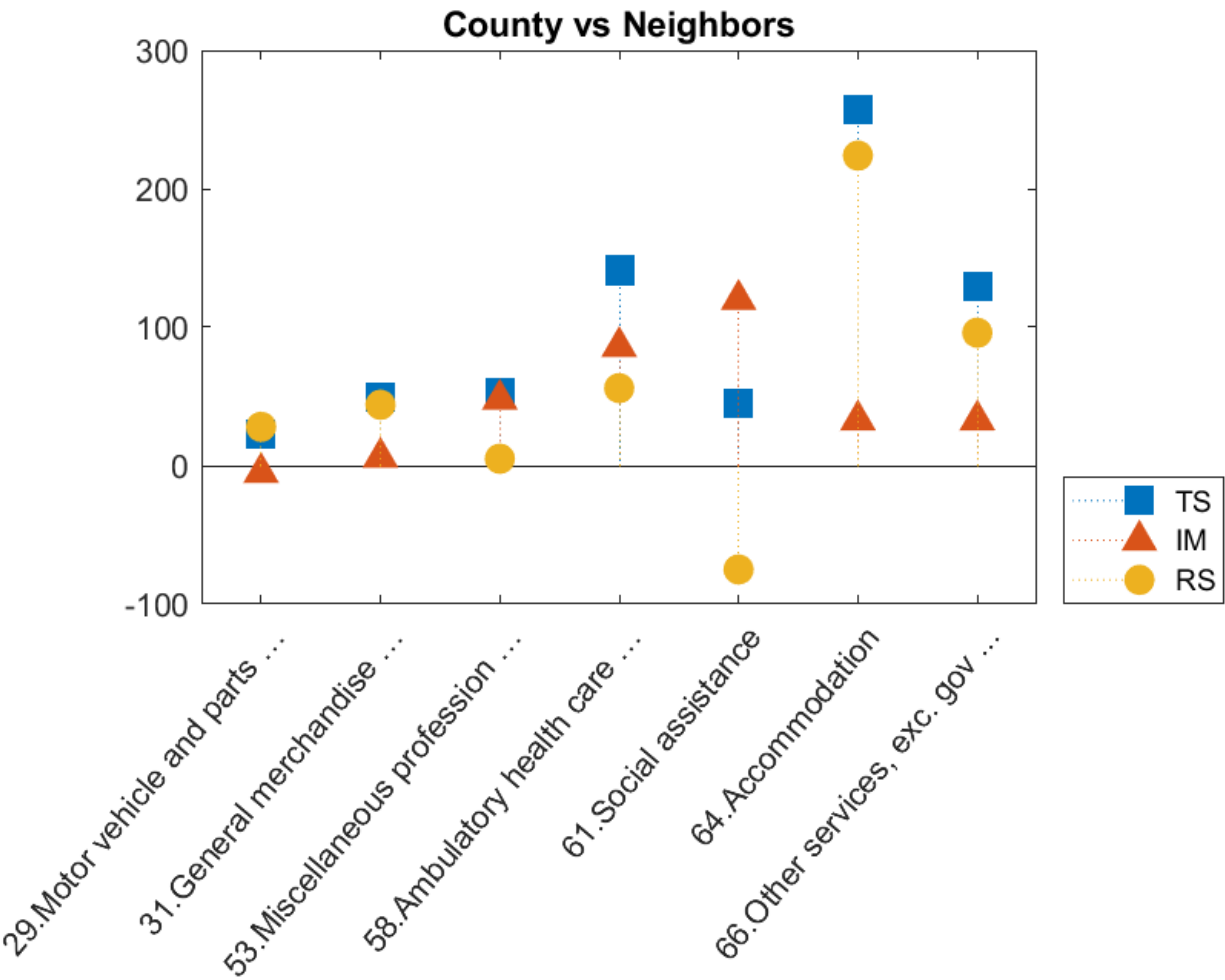


Chapter 1. Allegany County, New York

Selected SSA Components for Allegany County, New York vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
29	Motor vehicle and parts ...	0	16	2	14	134
31	General merchandise ...	1	39	-6	45	201
53	Miscellaneous profession ...	0	44	18	26	177
58	Ambulatory health care ...	1	124	87	37	394
61	Social assistance	1	21	109	-88	372
64	Accommodation	0	252	12	240	314
66	Other services, exc. gov ...	1	105	-7	112	482

Selected SSA Components for Allegany County, New York vs Neighbors



Chapter 1. Allegany County, New York

Selected SSA Components for Allegany County, New York vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
29	Motor vehicle and parts ...	-7	23	-5	28	134
31	General merchandise ...	-10	50	6	44	201
53	Miscellaneous profession ...	-8	53	48	5	177
58	Ambulatory health care ...	-17	142	86	56	394
61	Social assistance	-22	45	120	-75	372
64	Accommodation	-4	257	33	224	314
66	Other services, exc. gov ...	-24	129	33	96	482

Chapter 2. Broome County, New York

Employment in Broome County, New York, declined from 94,559 in 2005 to 86,171 in 2018, for a change of -8,388, or -8.87%. Readers should compare the employment values in the tables below to total county employment.

The first table shows the referent region share (NS), the Total Share (TS), Industry Mix (IM), and Regional Shift (RS) job values for the county. The summary values shown represent sums of individual industry component values for all county industries. To be clear, the SSA components always refer to the county that is being compared to the referent region, and the NS label always refers to the county growth that would have taken place had it matched overall average growth in the referent region, which can be the United States, the Appalachian Region, or the county and its neighbors. The largest and smallest NS components in the summary table correspond to the fastest and slowest growing referent regions.

Summary Results for Broome County, New York

County Summary	NS	TS	IM	RS
vs. U.S.	10,663	-19,046	-893	-18,153
vs. Appalachia	326	-8,706	249	-8,955
vs. Neighbors	-5,190	-3,191	286	-3,477

The next table displays the group membership categories for industries belonging to any of the first three categories (signifying a positive total share value) for the Appalachian Region or the county relative to the United States — i.e., A, B, C, I, II, or III – and for the county relative to the Appalachian Region or its neighboring counties — i.e., a, b, c, i, ii, or iii. These are the industries that have passed the first screening step, as they have proven to be positive contributors to either the Appalachian Region in comparison to the United States as a whole, or to Broome County, New York, in comparison to at least one of the three referent regions.

Chapter 2. Broome County, New York

Industry Group Membership for Broome County, New York

Industry	Name	Group Membership	Type A or B or C	Type I or II or III	Type a or b or c	Type i or ii or iii
53	Miscellaneous profession ...	B V e ii	yes	no	no	yes
54	Management of companies ...	A II b i	yes	yes	yes	yes
58	Ambulatory health care ...	B V b ii	yes	no	yes	yes
59	Hospitals	E I a i	no	yes	yes	yes
61	Social assistance	B V b ii	yes	no	yes	yes
65	Food services and drinking ...	B II b i	yes	yes	yes	yes
66	Other services, exc. gov ...	F III c i	no	yes	yes	yes

Notes:

Groups A, B, and C are from Appalachia vs. the United States

Groups I, II, and III are from Broome County, New York vs. the United States

Groups a, b, and c are from Broome County, New York vs. Appalachia

Groups i, ii, and iii are from Broome County, New York vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Broome County, New York, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Broome County, New York, and its neighboring counties. The results for each of the three analyses are presented both visually and in tabular form.

The chart provides a visual display of the Total Share (TS), Industry Mix (IM), and Regional Shift (RS) components of change. The IM indicates the change in industry employment that would have occurred had the industry grown at a rate equal to the difference between the industry-specific growth rate in the referent region and the overall referent-region growth rate. So, a positive value here also means that the industry is growing more rapidly than the overall growth rate for the referent region. The RS component measures the actual employment change in the industry in Broome County, New York, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Broome County, New York, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

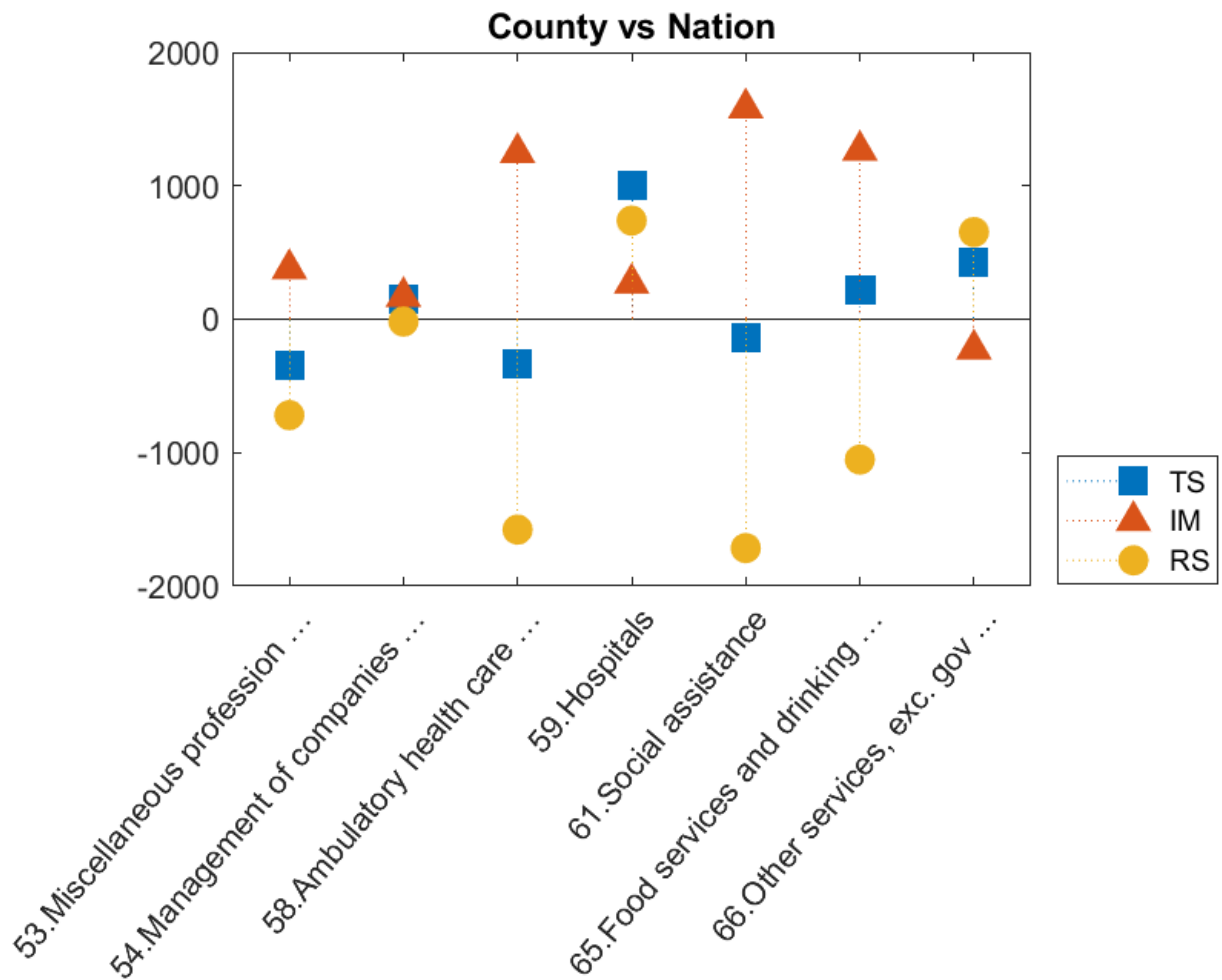
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Broome County, New York, is still growing at a faster rate than the overall referent region average. Likewise, when IM is negative and RS is positive, the implication is that the regional comparative advantage is sufficiently strong to overcome the slower than average industry growth rate.

Interpreting Different Referent Region Results

The three SSA are conducted relative to three different referent regions: (1) the United States as a whole, (2) the Appalachian Region, and (3) the region defined by the county and its neighboring counties. As such, the IM component indicates the change in industry employment that would have occurred had the industry grown at a rate equal to the difference between the industry-specific growth rate in the referent region and the overall referent-region growth rate. Likewise, the regional shift components, RS, reflect county-specific industry comparative (dis)advantages relative to those same industries in each of the three referent regions. As before, the NS label always refers to county growth that would have occurred had the county industry grown at the overall average rate of growth in the referent region.

Reporting the results for each of three referent regions enables readers to compare county performance to the United States, the Appalachian Region, and the region defined by the county and its neighboring counties. Although economic growth in Appalachia overall and by industry generally lags the rest of the United States, positive SSA components can still be useful for identifying industries that are positive contributors relative to Appalachian Region and to the more localized economy.

Selected SSA Components for Broome County, New York vs the U.S.

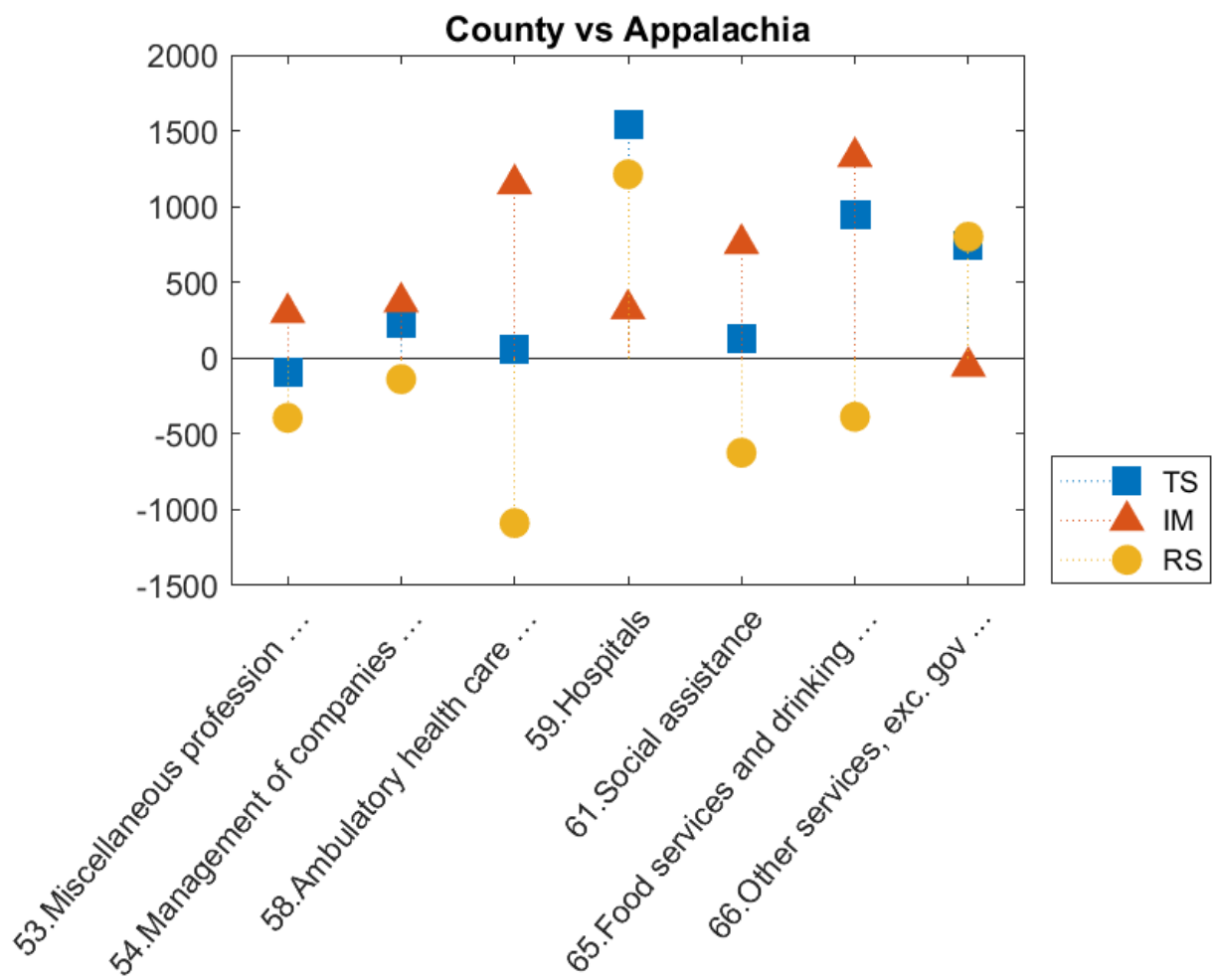


Chapter 2. Broome County, New York

Broome County, New York vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
53	Miscellaneous profession ...	252	-341	378	-719	2,150
54	Management of companies ...	81	152	169	-17	956
58	Ambulatory health care ...	401	-329	1,248	-1,577	3,632
59	Hospitals	546	1,008	269	739	6,399
61	Social assistance	272	-133	1,582	-1,715	2,554
65	Food services and drinking ...	749	214	1,266	-1,052	7,603
66	Other services, exc. gov ...	328	428	-225	653	3,662

Selected SSA Components for Broome County, New York vs the Appalachian Region

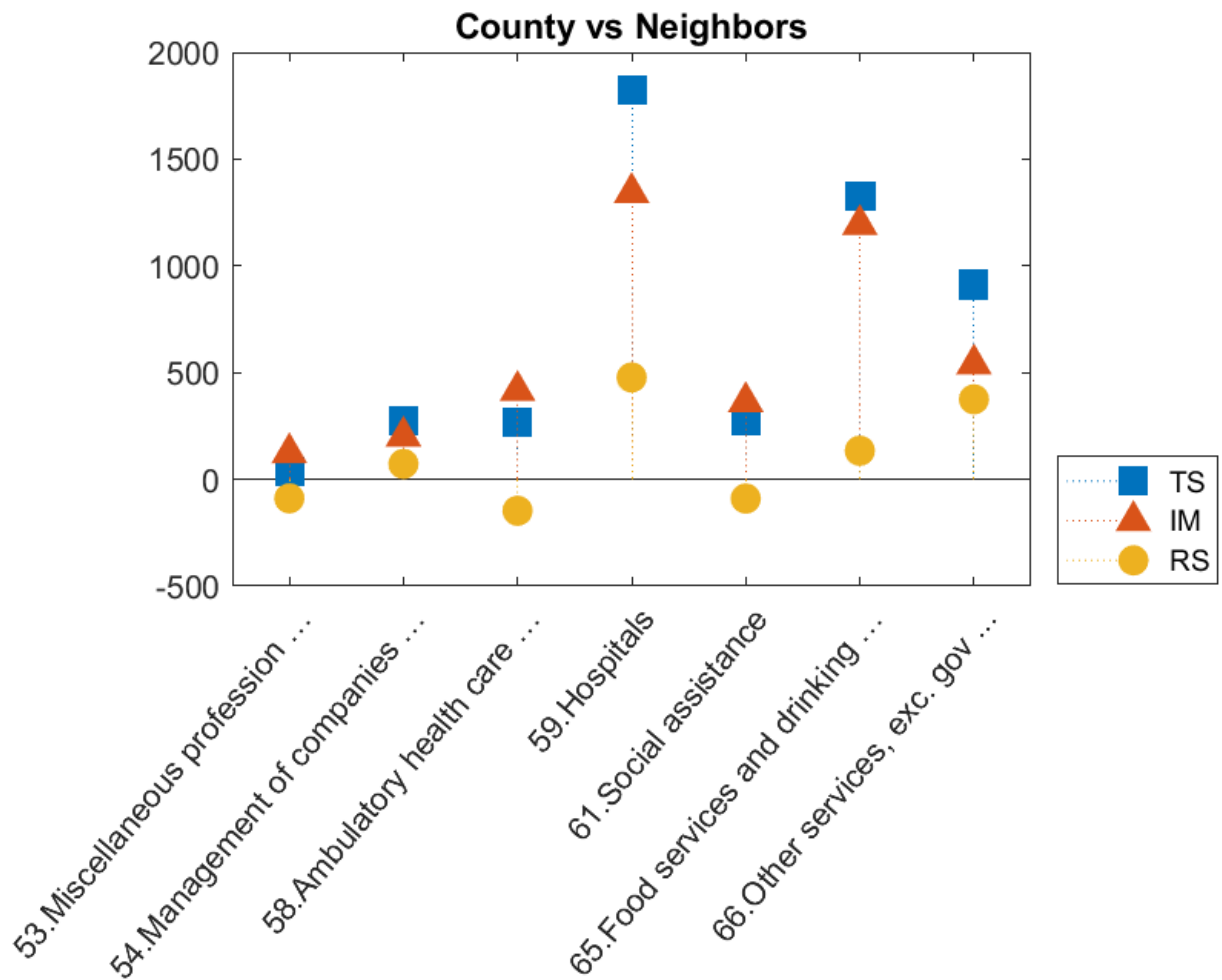


Chapter 2. Broome County, New York

Selected SSA Components for Broome County, New York vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
53	Miscellaneous profession ...	8	-95	299	-394	2,150
54	Management of companies ...	2	231	370	-139	956
58	Ambulatory health care ...	12	61	1,149	-1,088	3,632
59	Hospitals	16	1,537	324	1,213	6,399
61	Social assistance	8	131	755	-624	2,554
65	Food services and drinking ...	23	941	1,328	-387	7,603
66	Other services, exc. gov ...	10	746	-55	801	3,662

Selected SSA Components for Broome County, New York vs Neighbors



Chapter 2. Broome County, New York

Selected SSA Components for Broome County, New York vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
53	Miscellaneous profession ...	-123	35	124	-89	2,150
54	Management of companies ...	-40	274	202	72	956
58	Ambulatory health care ...	-195	269	416	-147	3,632
59	Hospitals	-266	1,820	1,343	477	6,399
61	Social assistance	-133	273	363	-90	2,554
65	Food services and drinking ...	-364	1,327	1,193	134	7,603
66	Other services, exc. gov ...	-160	915	540	375	3,662

Chapter 3. Cattaraugus County, New York

Employment in Cattaraugus County, New York, declined from 31,954 in 2005 to 28,974 in 2018, for a change of -2,980, or -9.33%. Readers should compare the employment values in the tables below to total county employment.

The first table shows the referent region share (NS), the Total Share (TS), Industry Mix (IM), and Regional Shift (RS) job values for the county. The summary values shown represent sums of individual industry component values for all county industries. To be clear, the SSA components always refer to the county that is being compared to the referent region, and the NS label always refers to the county growth that would have taken place had it matched overall average growth in the referent region, which can be the United States, the Appalachian Region, or the county and its neighbors. The largest and smallest NS components in the summary table correspond to the fastest and slowest growing referent regions.

Summary Results for Cattaraugus County, New York

County Summary	NS	TS	IM	RS
vs. U.S.	3,600	-6,582	-677	-5,905
vs. Appalachia	105	-3,092	203	-3,295
vs. Neighbors	-145	-2,838	6	-2,844

The next table displays the group membership categories for industries belonging to any of the first three categories (signifying a positive total share value) for the Appalachian Region or the county relative to the United States — i.e., A, B, C, I, II, or III — and for the county relative to the Appalachian Region or its neighboring counties — i.e., a, b, c, i, ii, or iii. These are the industries that have passed the first screening step, as they have proven to be positive contributors to either the Appalachian Region in comparison to the United States as a whole, or to Cattaraugus County, New York, in comparison to at least one of the three referent regions.

Chapter 3. Cattaraugus County, New York

Industry Group Membership for Cattaraugus County, New York

Industry	Name	Group Membership	Type A or B or C	Type I or II or III	Type a or b or c	Type i or ii or iii
53	Miscellaneous profession ...	B II a i	yes	yes	yes	yes
58	Ambulatory health care ...	B V b ii	yes	no	yes	yes
61	Social assistance	B V b ii	yes	no	yes	yes
63	Amusements, gambling, ...	B I a i	yes	yes	yes	yes
64	Accommodation	A I a ii	yes	yes	yes	yes
65	Food services and drinking ...	B II b ii	yes	yes	yes	yes
68	Government	F III a iii	no	yes	yes	yes

Notes:

Groups A, B, and C are from Appalachia vs. the United States

Groups I, II, and III are from Cattaraugus County, New York vs. the United States

Groups a, b, and c are from Cattaraugus County, New York vs. Appalachia

Groups i, ii, and iii are from Cattaraugus County, New York vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Cattaraugus County, New York, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Cattaraugus County, New York, and its neighboring counties. The results for each of the three analyses are presented both visually and in tabular form.

The chart provides a visual display of the Total Share (TS), Industry Mix (IM), and Regional Shift (RS) components of change. The IM indicates the change in industry employment that would have occurred had the industry grown at a rate equal to the difference between the industry-specific growth rate in the referent region and the overall referent-region growth rate. So, a positive value here also means that the industry is growing more rapidly than the overall growth rate for the referent region. The RS component measures the actual employment change in the industry in Cattaraugus County, New York, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Cattaraugus County, New York, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

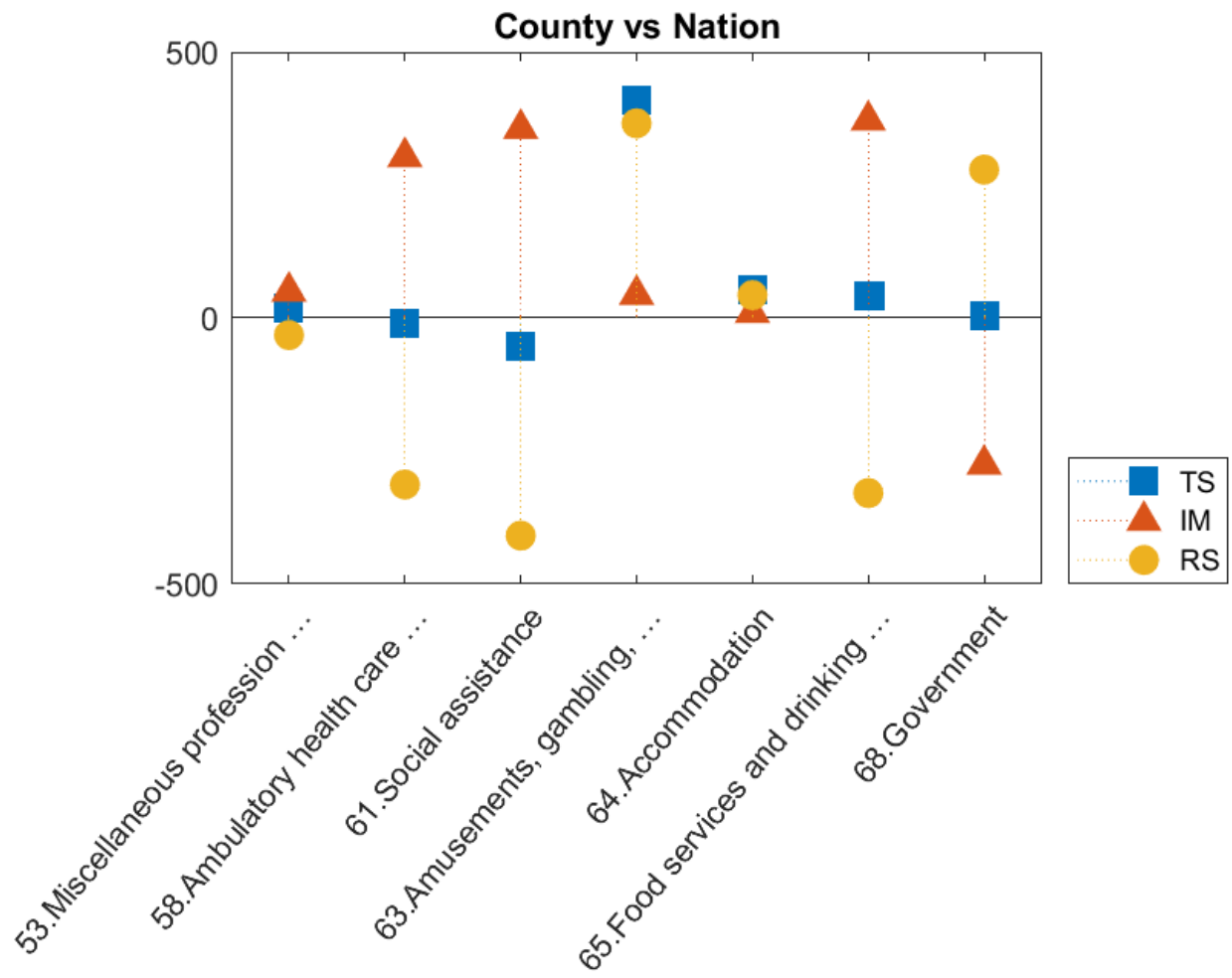
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Cattaraugus County, New York, is still growing at a faster rate than the overall referent region average. Likewise, when IM is negative and RS is positive, the implication is that the regional comparative advantage is sufficiently strong to overcome the slower than average industry growth rate.

Interpreting Different Referent Region Results

The three SSA are conducted relative to three different referent regions: (1) the United States as a whole, (2) the Appalachian Region, and (3) the region defined by the county and its neighboring counties. As such, the IM component indicates the change in industry employment that would have occurred had the industry grown at a rate equal to the difference between the industry-specific growth rate in the referent region and the overall referent-region growth rate. Likewise, the regional shift components, RS, reflect county-specific industry comparative (dis)advantages relative to those same industries in each of the three referent regions. As before, the NS label always refers to county growth that would have occurred had the county industry grown at the overall average rate of growth in the referent region.

Reporting the results for each of three referent regions enables readers to compare county performance to the United States, the Appalachian Region, and the region defined by the county and its neighboring counties. Although economic growth in Appalachia overall and by industry generally lags the rest of the United States, positive SSA components can still be useful for identifying industries that are positive contributors relative to Appalachian Region and to the more localized economy.

Selected SSA Components for Cattaraugus County, New York vs the U.S.

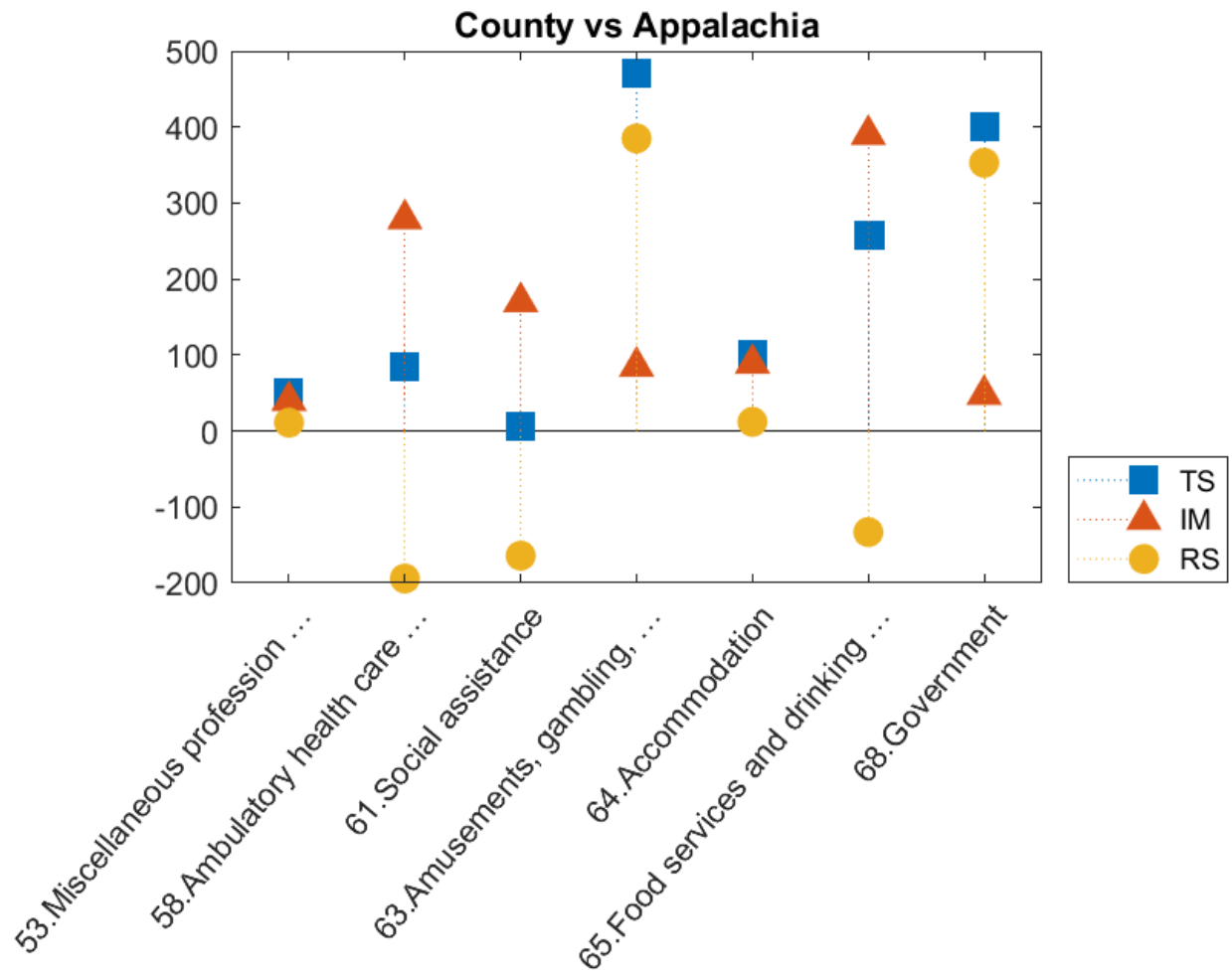


Chapter 3. Cattaraugus County, New York

Cattaraugus County, New York vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
53	Miscellaneous profession ...	33	18	50	-32	348
58	Ambulatory health care ...	98	-10	303	-313	953
61	Social assistance	61	-53	356	-409	551
63	Amusements, gambling, ...	63	410	44	366	1,028
64	Accommodation	50	53	10	43	542
65	Food services and drinking ...	220	43	372	-329	2,217
68	Government	408	4	-275	279	4,035

Selected SSA Components for Cattaraugus County, New York vs the
Appalachian Region

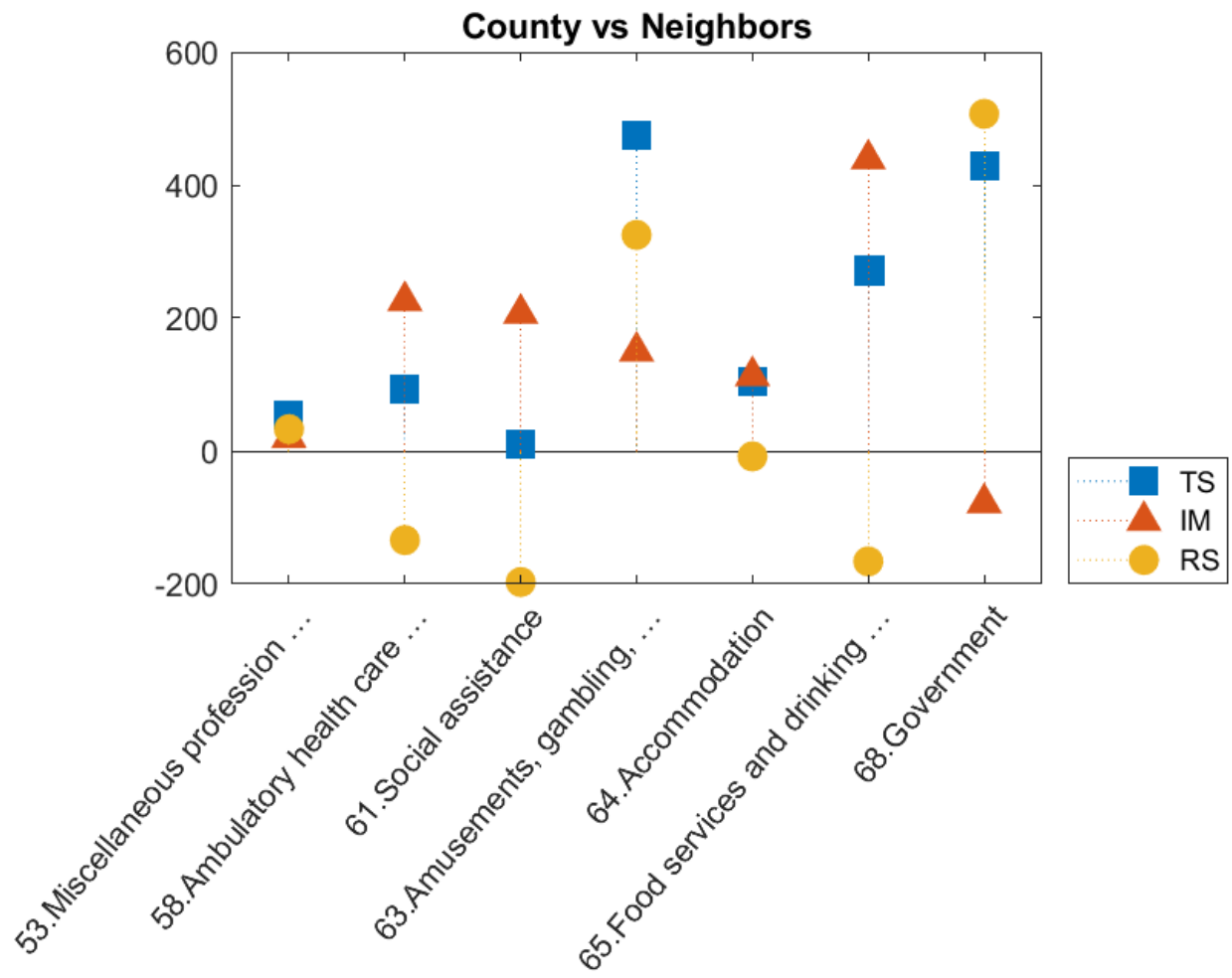


Chapter 3. Cattaraugus County, New York

Selected SSA Components for Cattaraugus County, New York vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
53	Miscellaneous profession ...	1	51	40	11	348
58	Ambulatory health care ...	3	85	279	-194	953
61	Social assistance	2	6	170	-164	551
63	Amusements, gambling, ...	2	470	85	385	1,028
64	Accommodation	1	101	89	12	542
65	Food services and drinking ...	7	257	390	-133	2,217
68	Government	12	401	48	353	4,035

Selected SSA Components for Cattaraugus County, New York vs Neighbors



Chapter 3. Cattaraugus County, New York

Selected SSA Components for Cattaraugus County, New York vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
53	Miscellaneous profession ...	-1	53	20	33	348
58	Ambulatory health care ...	-4	92	226	-134	953
61	Social assistance	-2	10	207	-197	551
63	Amusements, gambling, ...	-3	475	150	325	1,028
64	Accommodation	-2	105	113	-8	542
65	Food services and drinking ...	-9	273	439	-166	2,217
68	Government	-17	429	-78	507	4,035

Chapter 4. Chautauqua County, New York

Employment in Chautauqua County, New York, declined from 55,213 in 2005 to 48,637 in 2018, for a change of -6,576, or -11.91%. Readers should compare the employment values in the tables below to total county employment.

The first table shows the referent region share (NS), the Total Share (TS), Industry Mix (IM), and Regional Shift (RS) job values for the county. The summary values shown represent sums of individual industry component values for all county industries. To be clear, the SSA components always refer to the county that is being compared to the referent region, and the NS label always refers to the county growth that would have taken place had it matched overall average growth in the referent region, which can be the United States, the Appalachian Region, or the county and its neighbors. The largest and smallest NS components in the summary table correspond to the fastest and slowest growing referent regions.

Summary Results for Chautauqua County, New York

County Summary	NS	TS	IM	RS
vs. U.S.	6,225	-12,803	-997	-11,806
vs. Appalachia	186	-6,761	148	-6,909
vs. Neighbors	-352	-6,229	-961	-5,268

The next table displays the group membership categories for industries belonging to any of the first three categories (signifying a positive total share value) for the Appalachian Region or the county relative to the United States — i.e., A, B, C, I, II, or III – and for the county relative to the Appalachian Region or its neighboring counties — i.e., a, b, c, i, ii, or iii. These are the industries that have passed the first screening step, as they have proven to be positive contributors to either the Appalachian Region in comparison to the United States as a whole, or to Chautauqua County, New York, in comparison to at least one of the three referent regions.

Chapter 4. Chautauqua County, New York

Industry Group Membership for Chautauqua County, New York

Industry	Name	Group Membership	Type A or B or C	Type I or II or III	Type a or b or c	Type i or ii or iii
08	Construction	F III c i	no	yes	yes	yes
31	General merchandise	F III c i	no	yes	yes	yes
58	Ambulatory health care	B II a i	yes	yes	yes	yes
60	Nursing and residential ...	E I a i	no	yes	yes	yes
63	Amusements, gambling, ...	B V b ii	yes	no	yes	yes
65	Food services and drinking ...	B V b ii	yes	no	yes	yes

Notes:

Groups A, B, and C are from Appalachia vs. the United States

Groups I, II, and III are from Chautauqua County, New York vs. the United States

Groups a, b, and c are from Chautauqua County, New York vs. Appalachia

Groups i, ii, and iii are from Chautauqua County, New York vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Chautauqua County, New York, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Chautauqua County, New York, and its neighboring counties. The results for each of the three analyses are presented both visually and in tabular form.

The chart provides a visual display of the Total Share (TS), Industry Mix (IM), and Regional Shift (RS) components of change. The IM indicates the change in industry employment that would have occurred had the industry grown at a rate equal to the difference between the industry-specific growth rate in the referent region and the overall referent-region growth rate. So, a positive value here also means that the industry is growing more rapidly than the overall growth rate for the referent region. The RS component measures the actual employment change in the industry in Chautauqua County, New York, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Chautauqua County, New York, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

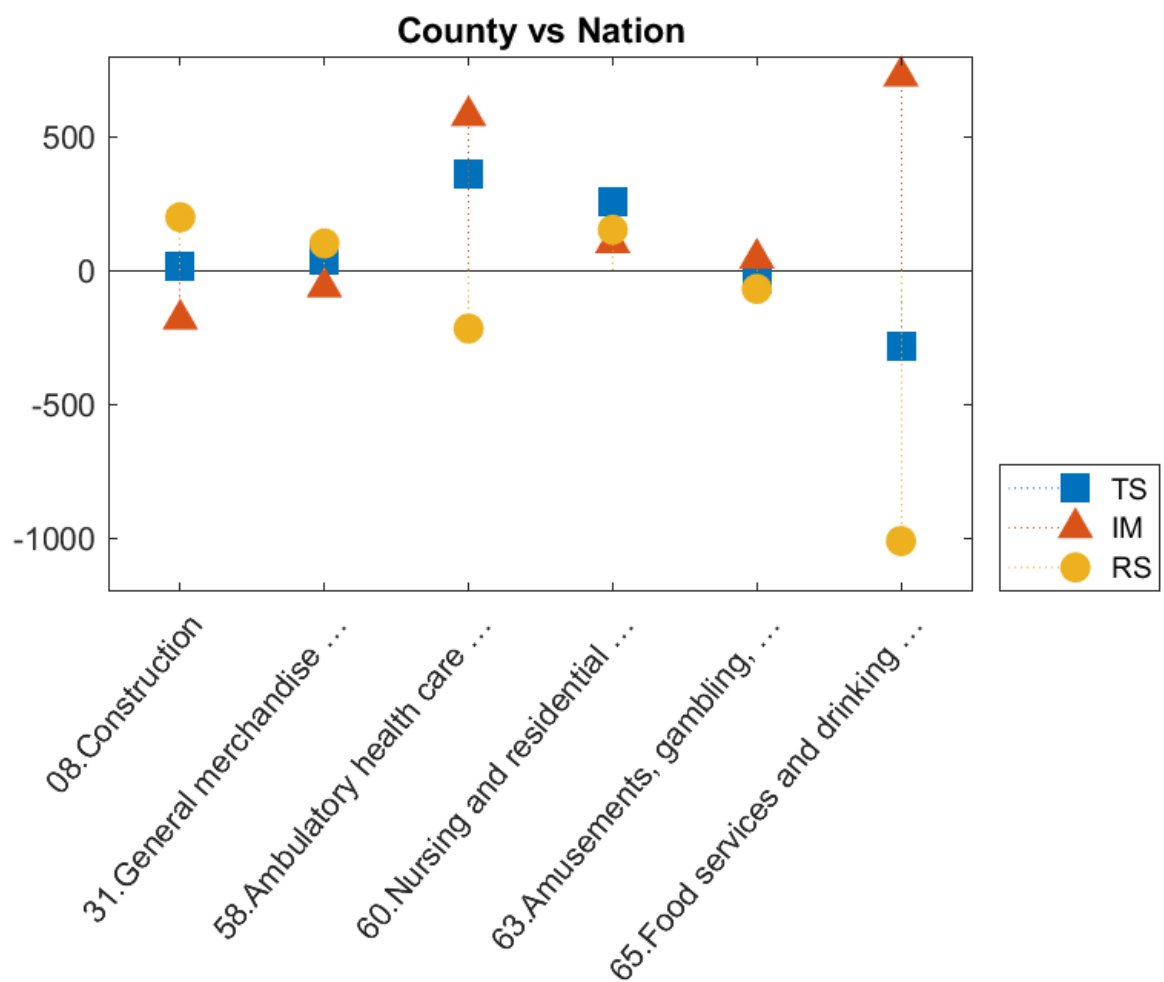
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Chautauqua County, New York, is still growing at a faster rate than the overall referent region average. Likewise, when IM is negative and RS is positive, the implication is that the regional comparative advantage is sufficiently strong to overcome the slower than average industry growth rate.

Interpreting Different Referent Region Results

The three SSA are conducted relative to three different referent regions: (1) the United States as a whole, (2) the Appalachian Region, and (3) the region defined by the county and its neighboring counties. As such, the IM component indicates the change in industry employment that would have occurred had the industry grown at a rate equal to the difference between the industry-specific growth rate in the referent region and the overall referent-region growth rate. Likewise, the regional shift components, RS, reflect county-specific industry comparative (dis)advantages relative to those same industries in each of the three referent regions. As before, the NS label always refers to county growth that would have occurred had the county industry grown at the overall average rate of growth in the referent region.

Reporting the results for each of three referent regions enables readers to compare county performance to the United States, the Appalachian Region, and the region defined by the county and its neighboring counties. Although economic growth in Appalachia overall and by industry generally lags the rest of the United States, positive SSA components can still be useful for identifying industries that are positive contributors relative to Appalachian Region and to the more localized economy.

Selected SSA Components for Chautauqua County, New York vs the U.S.

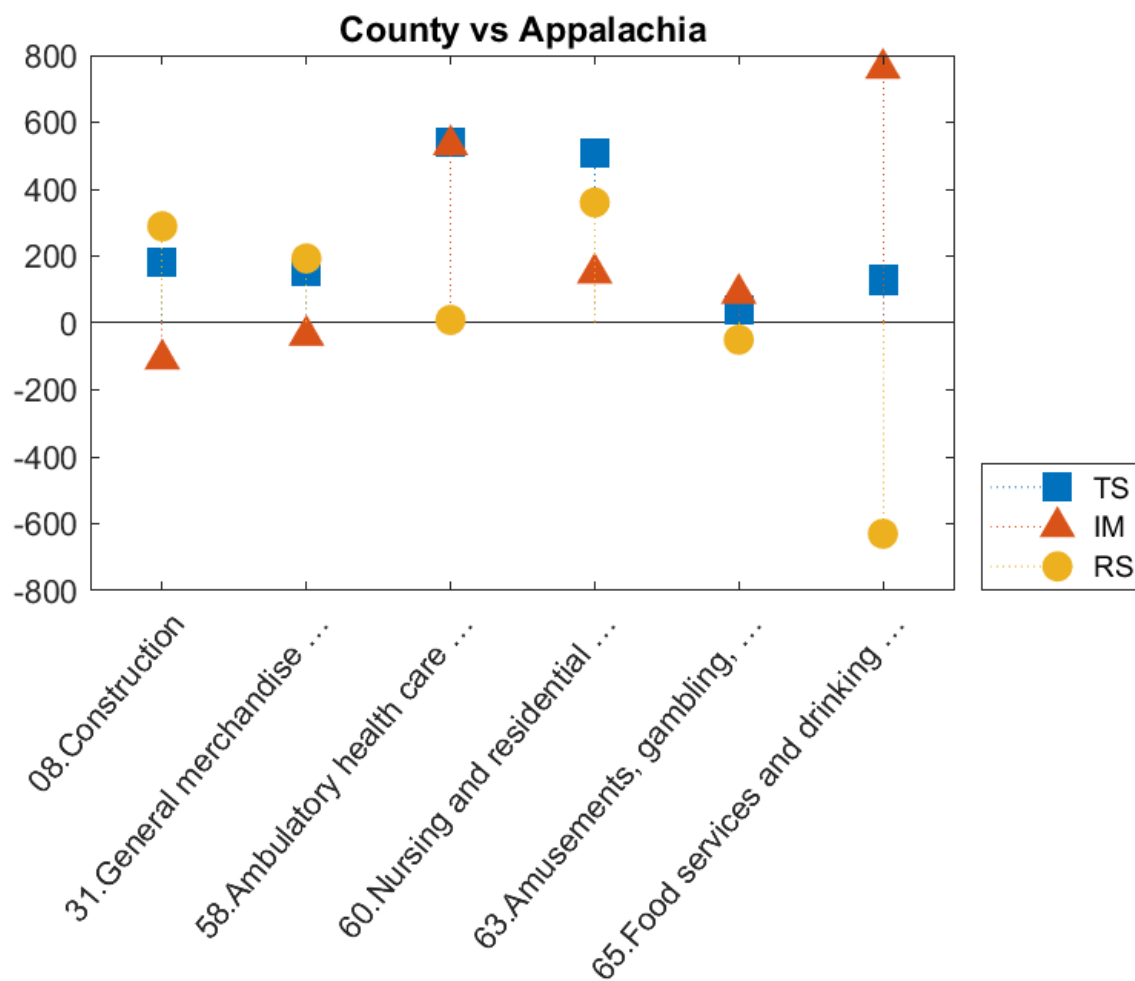


Chapter 4. Chautauqua County, New York

Chautauqua County, New York vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
08	Construction	169	17	-182	199	1,685
31	General merchandise	121	39	-62	101	1,231
	...					
58	Ambulatory health care	186	361	578	-217	2,195
	...					
60	Nursing and residential ...	262	255	103	152	2,844
63	Amusements, gambling, ...	65	-24	45	-69	612
	...					
65	Food services and drinking ...	429	-285	726	-1,011	3,952

Selected SSA Components for Chautauqua County, New York vs the Appalachian Region

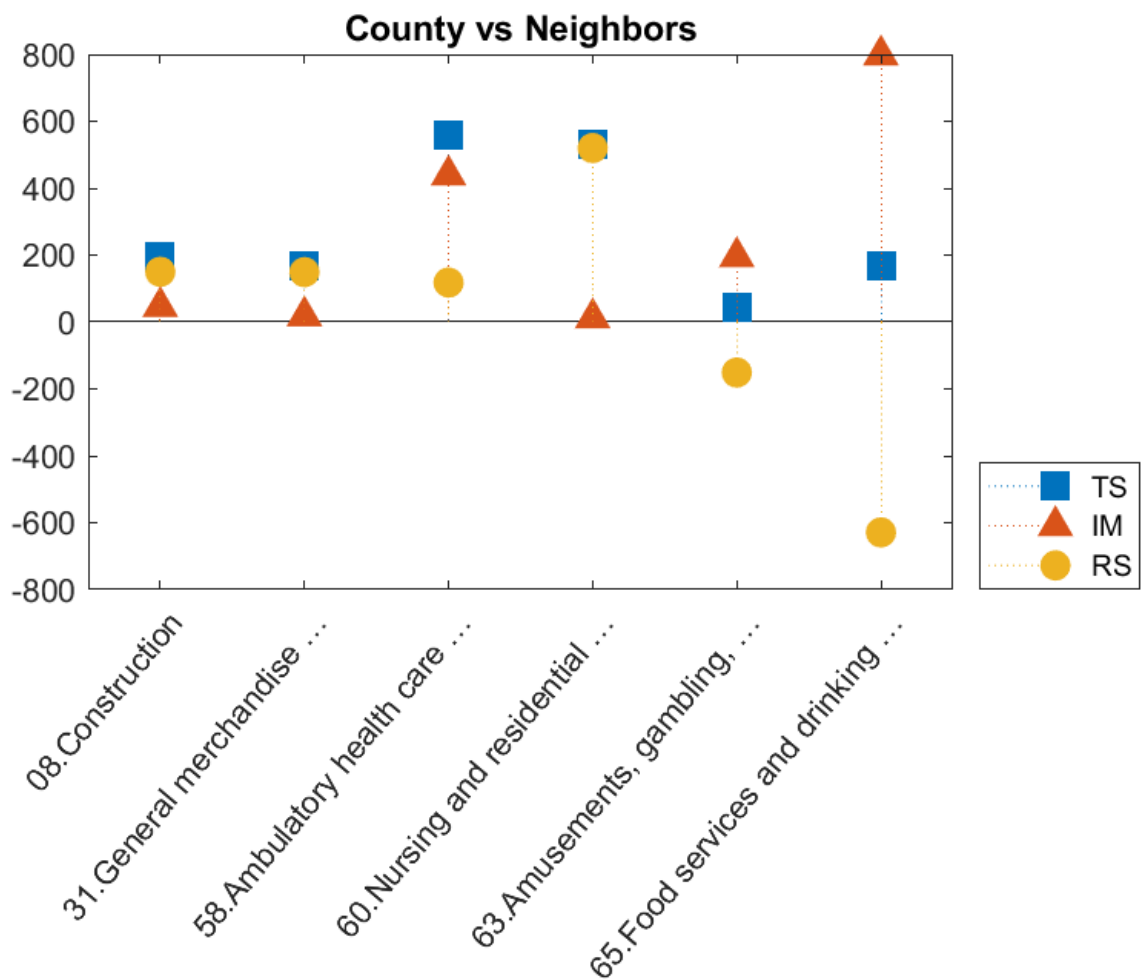


Chapter 4. Chautauqua County, New York

Selected SSA Components for Chautauqua County, New York vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
08	Construction	5	181	-108	289	1,685
31	General merchandise ...	4	156	-37	193	1,231
58	Ambulatory health care ...	6	541	532	9	2,195
60	Nursing and residential ...	8	509	149	360	2,844
63	Amusements, gambling, ...	2	38	88	-50	612
65	Food services and drinking ...	13	131	761	-630	3,952

Selected SSA Components for Chautauqua County, New York vs Neighbors



Chapter 4. Chautauqua County, New York

Selected SSA Components for Chautauqua County, New York vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
08	Construction	-10	196	46	150	1,685
31	General merchandise ...	-7	167	18	149	1,231
58	Ambulatory health care ...	-10	557	439	118	2,195
60	Nursing and residential ...	-15	532	12	520	2,844
63	Amusements, gambling, ...	-4	44	195	-151	612
65	Food services and drinking ...	-24	169	798	-629	3,952

Chapter 5. Chemung County, New York

Employment in Chemung County, New York, declined from 38,333 in 2005 to 35,280 in 2018, for a change of -3,053, or -7.96%. Readers should compare the employment values in the tables below to total county employment.

The first table shows the referent region share (NS), the Total Share (TS), Industry Mix (IM), and Regional Shift (RS) job values for the county. The summary values shown represent sums of individual industry component values for all county industries. To be clear, the SSA components always refer to the county that is being compared to the referent region, and the NS label always refers to the county growth that would have taken place had it matched overall average growth in the referent region, which can be the United States, the Appalachian Region, or the county and its neighbors. The largest and smallest NS components in the summary table correspond to the fastest and slowest growing referent regions.

Summary Results for Chemung County, New York

County Summary	NS	TS	IM	RS
vs. U.S.	4,323	-7,373	-803	-6,570
vs. Appalachia	131	-3,178	-169	-3,009
vs. Neighbors	-694	-2,357	96	-2,453

The next table displays the group membership categories for industries belonging to any of the first three categories (signifying a positive total share value) for the Appalachian Region or the county relative to the United States — i.e., A, B, C, I, II, or III – and for the county relative to the Appalachian Region or its neighboring counties — i.e., a, b, c, i, ii, or iii. These are the industries that have passed the first screening step, as they have proven to be positive contributors to either the Appalachian Region in comparison to the United States as a whole, or to Chemung County, New York, in comparison to at least one of the three referent regions.

Chapter 5. Chemung County, New York

Industry Group Membership for Chemung County, New York

Industry	Name	Group Membership	Type A or B or C	Type I or II or III	Type a or b or c	Type i or ii or iii
19	Miscellaneous manufac ...	F III c i	no	yes	yes	yes
31	General merchandise ...	F III c iii	no	yes	yes	yes
33	Air transportation	F III c i	no	yes	yes	yes
61	Social assistance	B II b ii	yes	yes	yes	yes
65	Food services and drinking ...	B II b ii	yes	yes	yes	yes

Notes:

Groups A, B, and C are from Appalachia vs. the United States

Groups I, II, and III are from Chemung County, New York vs. the United States

Groups a, b, and c are from Chemung County, New York vs. Appalachia

Groups i, ii, and iii are from Chemung County, New York vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Chemung County, New York, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Chemung County, New York, and its neighboring counties. The results for each of the three analyses are presented both visually and in tabular form.

The chart provides a visual display of the Total Share (TS), Industry Mix (IM), and Regional Shift (RS) components of change. The IM indicates the change in industry employment that would have occurred had the industry grown at a rate equal to the difference between the industry-specific growth rate in the referent region and the overall referent-region growth rate. So, a positive value here also means that the industry is growing more rapidly than the overall growth rate for the referent region. The RS component measures the actual employment change in the industry in Chemung County, New York, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Chemung County, New York, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

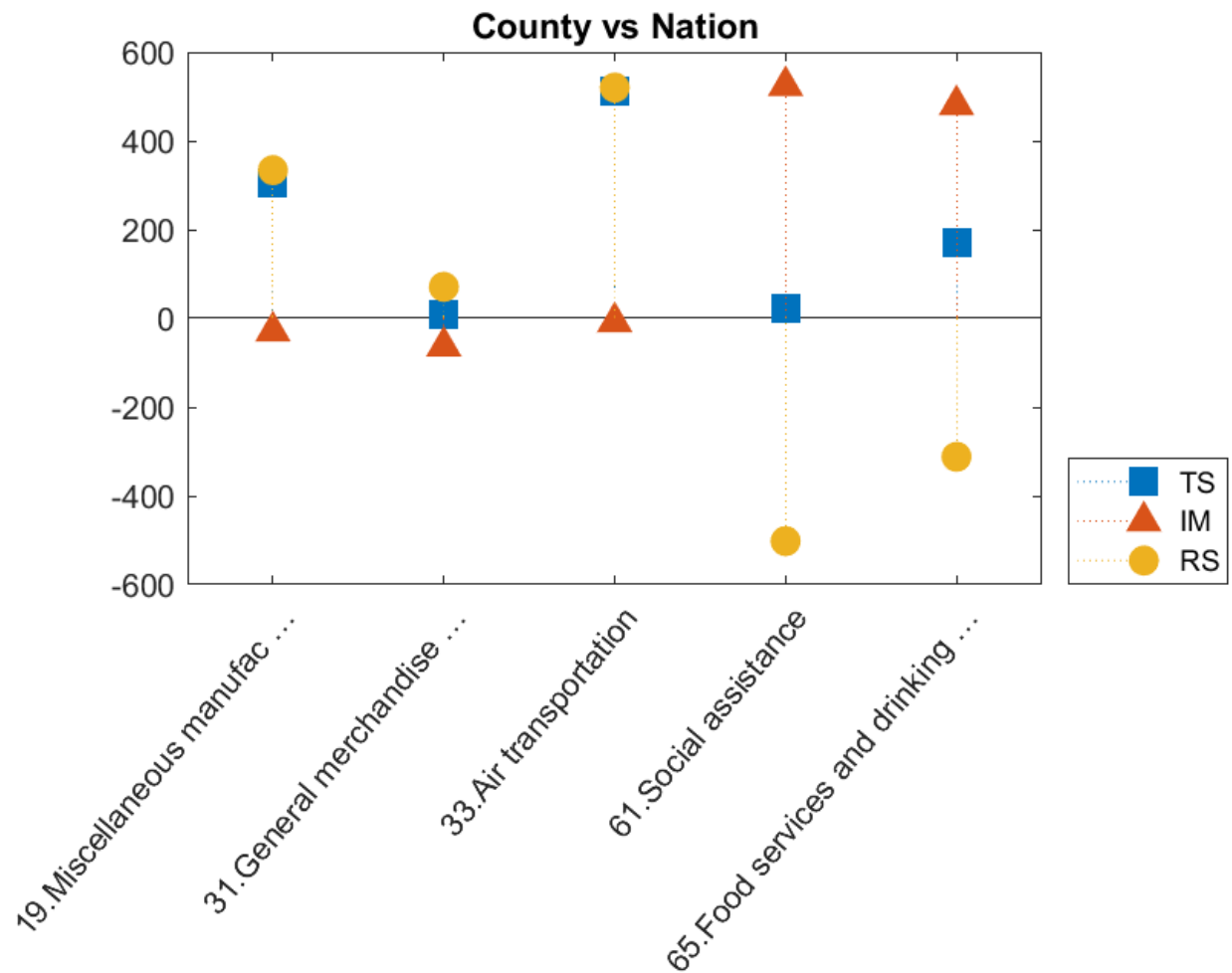
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Chemung County, New York, is still growing at a faster rate than the overall referent region average. Likewise, when IM is negative and RS is positive, the implication is that the regional comparative advantage is sufficiently strong to overcome the slower than average industry growth rate.

Interpreting Different Referent Region Results

The three SSA are conducted relative to three different referent regions: (1) the United States as a whole, (2) the Appalachian Region, and (3) the region defined by the county and its neighboring counties. As such, the IM component indicates the change in industry employment that would have occurred had the industry grown at a rate equal to the difference between the industry-specific growth rate in the referent region and the overall referent-region growth rate. Likewise, the regional shift components, RS, reflect county-specific industry comparative (dis)advantages relative to those same industries in each of the three referent regions. As before, the NS label always refers to county growth that would have occurred had the county industry grown at the overall average rate of growth in the referent region.

Reporting the results for each of three referent regions enables readers to compare county performance to the United States, the Appalachian Region, and the region defined by the county and its neighboring counties. Although economic growth in Appalachia overall and by industry generally lags the rest of the United States, positive SSA components can still be useful for identifying industries that are positive contributors relative to Appalachian Region and to the more localized economy.

Selected SSA Components for Chemung County, New York vs the U.S.

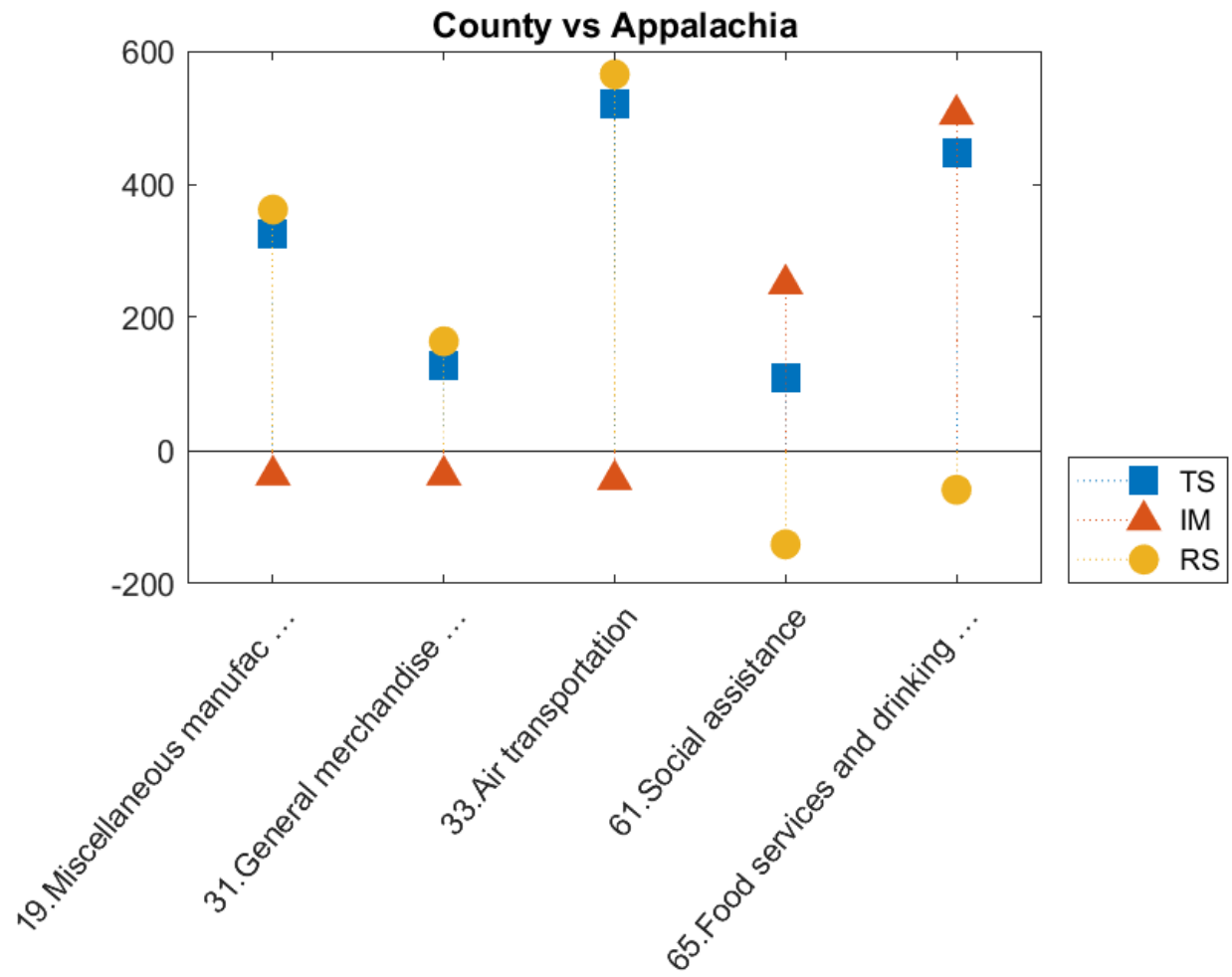


Chapter 5. Chemung County, New York

Chemung County, New York vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
19	Miscellaneous manufac ...	20	305	-29	334	503
31	General merchandise ...	122	8	-63	71	1,212
33	Air transportation	8	512	-8	520	594
61	Social assistance	90	22	524	-502	911
65	Food services and drinking ...	285	169	481	-312	2,978

Selected SSA Components for Chemung County, New York vs the Appalachian
Region

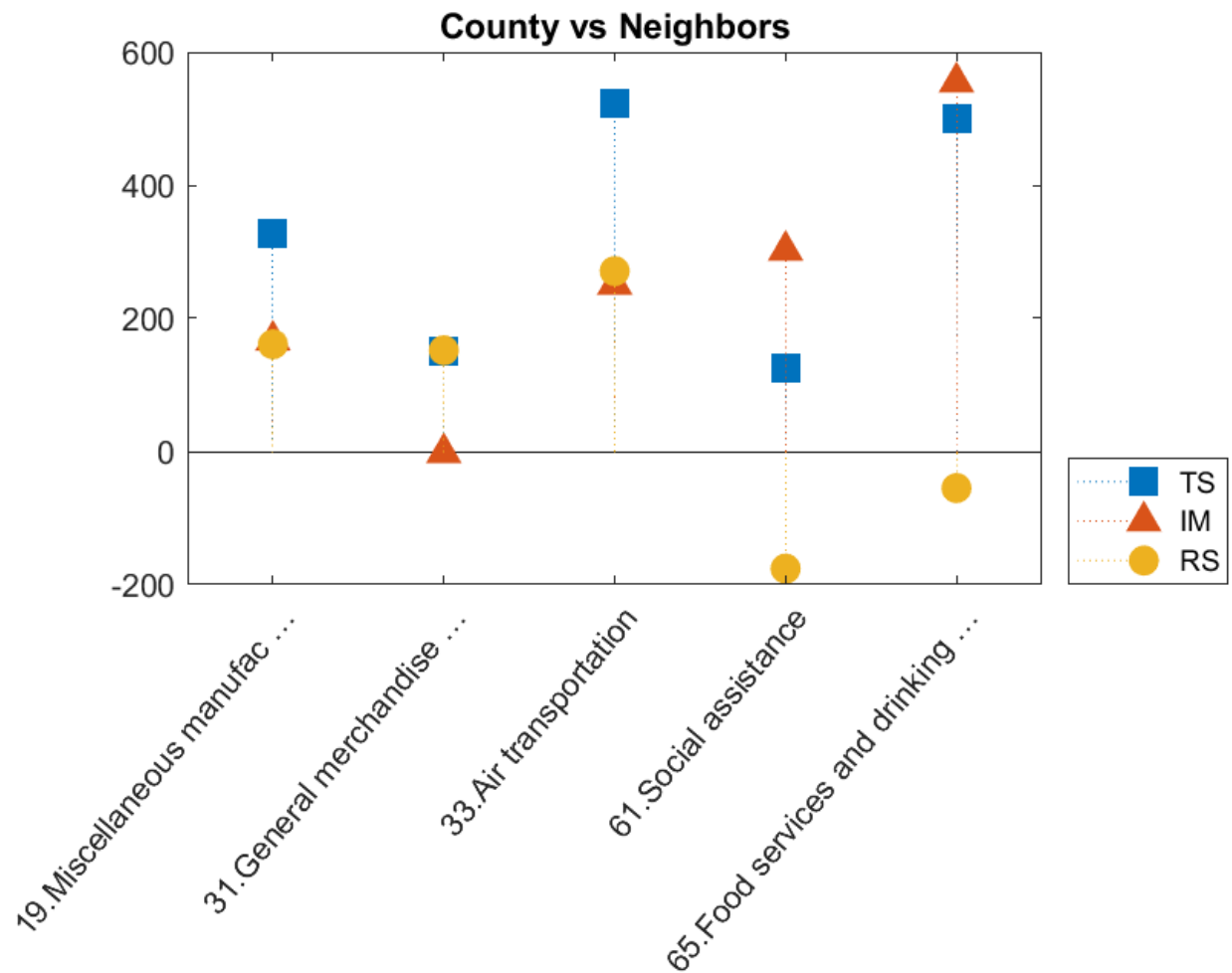


Chapter 5. Chemung County, New York

Selected SSA Components for Chemung County, New York vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
19	Miscellaneous manufac ...	1	325	-37	362	503
31	General merchandise ...	4	127	-37	164	1,212
33	Air transportation	0	521	-44	565	594
61	Social assistance	3	109	250	-141	911
65	Food services and drinking ...	9	446	505	-59	2,978

Selected SSA Components for Chemung County, New York vs Neighbors



Chapter 5. Chemung County, New York

Selected SSA Components for Chemung County, New York vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
19	Miscellaneous manufac ...	-3	328	167	161	503
31	General merchandise ...	-20	150	-2	152	1,212
33	Air transportation	-1	522	251	271	594
61	Social assistance	-14	126	302	-176	911
65	Food services and drinking ...	-46	500	555	-55	2,978

Chapter 6. Chenango County, New York

Employment in Chenango County, New York, grew from 15,945 in 2005 to 17,288 in 2018, for a change of 1,343, or 8.42%. Readers should compare the employment values in the tables below to total county employment.

The first table shows the referent region share (NS), the Total Share (TS), Industry Mix (IM), and Regional Shift (RS) job values for the county. The summary values shown represent sums of individual industry component values for all county industries. To be clear, the SSA components always refer to the county that is being compared to the referent region, and the NS label always refers to the county growth that would have taken place had it matched overall average growth in the referent region, which can be the United States, the Appalachian Region, or the county and its neighbors. The largest and smallest NS components in the summary table correspond to the fastest and slowest growing referent regions.

Summary Results for Chenango County, New York

County Summary	NS	TS	IM	RS
vs. U.S.	1,796	-455	-662	207
vs. Appalachia	48	1,294	-234	1,528
vs. Neighbors	-856	2,201	-108	2,309

The next table displays the group membership categories for industries belonging to any of the first three categories (signifying a positive total share value) for the Appalachian Region or the county relative to the United States — i.e., A, B, C, I, II, or III — and for the county relative to the Appalachian Region or its neighboring counties — i.e., a, b, c, i, ii, or iii. These are the industries that have passed the first screening step, as they have proven to be positive contributors to either the Appalachian Region in comparison to the United States as a whole, or to Chenango County, New York, in comparison to at least one of the three referent regions.

Chapter 6. Chenango County, New York

Industry Group Membership for Chenango County, New York

Industry	Name	Group Membership	Type A or B or C	Type I or II or III	Type a or b or c	Type i or ii or iii
08	Construction	F III c i	no	yes	yes	yes
09	Wood products	F III c iii	no	yes	yes	yes
13	Machinery	F III c iii	no	yes	yes	yes
17	Other transportation	F III c ii	no	yes	yes	yes
19	Miscellaneous manufac ...	F III c ii	no	yes	yes	yes
20	Food and beverage ...	E I c i	no	yes	yes	yes
31	General merchandise	F III c iii	no	yes	yes	yes
43	Broadcasting and telecom	F III c iii	no	yes	yes	yes
58	Ambulatory health care ...	B II b i	yes	yes	yes	yes
60	Nursing and residential ...	E I a i	no	yes	yes	yes
65	Food services and drinking	B II a i	yes	yes	yes	yes

Notes:

Groups A, B, and C are from Appalachia vs. the United States

Groups I, II, and III are from Chenango County, New York vs. the United States

Groups a, b, and c are from Chenango County, New York vs. Appalachia

Groups i, ii, and iii are from Chenango County, New York vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Chenango County, New York, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Chenango County, New York, and its neighboring counties. The results for each of the three analyses are presented both visually and in tabular form.

The chart provides a visual display of the Total Share (TS), Industry Mix (IM), and Regional Shift (RS) components of change. The IM indicates the change in industry employment that would have occurred had the industry grown at a rate equal to the difference between the industry-specific growth rate in the referent region and the overall referent-region growth rate. So, a positive value here also means that the industry is growing more rapidly than the overall growth rate for the referent region. The RS component measures the actual employment change in the industry in Chenango County, New York, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Chenango County, New York, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

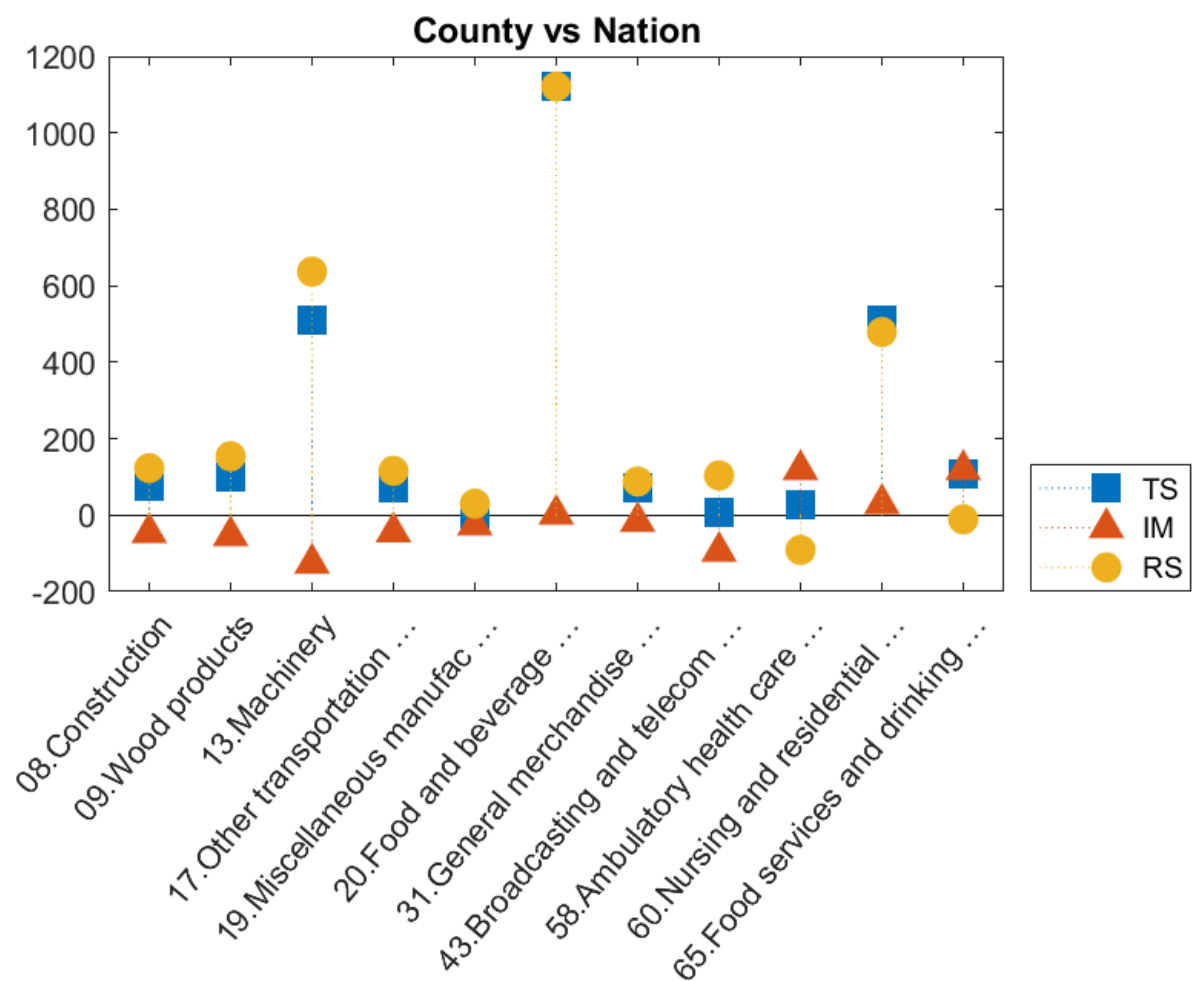
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Chenango County, New York, is still growing at a faster rate than the overall referent region average. Likewise, when IM is negative and RS is positive, the implication is that the regional comparative advantage is sufficiently strong to overcome the slower than average industry growth rate.

Interpreting Different Referent Region Results

The three SSA are conducted relative to three different referent regions: (1) the United States as a whole, (2) the Appalachian Region, and (3) the region defined by the county and its neighboring counties. As such, the IM component indicates the change in industry employment that would have occurred had the industry grown at a rate equal to the difference between the industry-specific growth rate in the referent region and the overall referent-region growth rate. Likewise, the regional shift components, RS, reflect county-specific industry comparative (dis)advantages relative to those same industries in each of the three referent regions. As before, the NS label always refers to county growth that would have occurred had the county industry grown at the overall average rate of growth in the referent region.

Reporting the results for each of three referent regions enables readers to compare county performance to the United States, the Appalachian Region, and the region defined by the county and its neighboring counties. Although economic growth in Appalachia overall and by industry generally lags the rest of the United States, positive SSA components can still be useful for identifying industries that are positive contributors relative to Appalachian Region and to the more localized economy.

Selected SSA Components for Chenango County, New York vs the U.S.

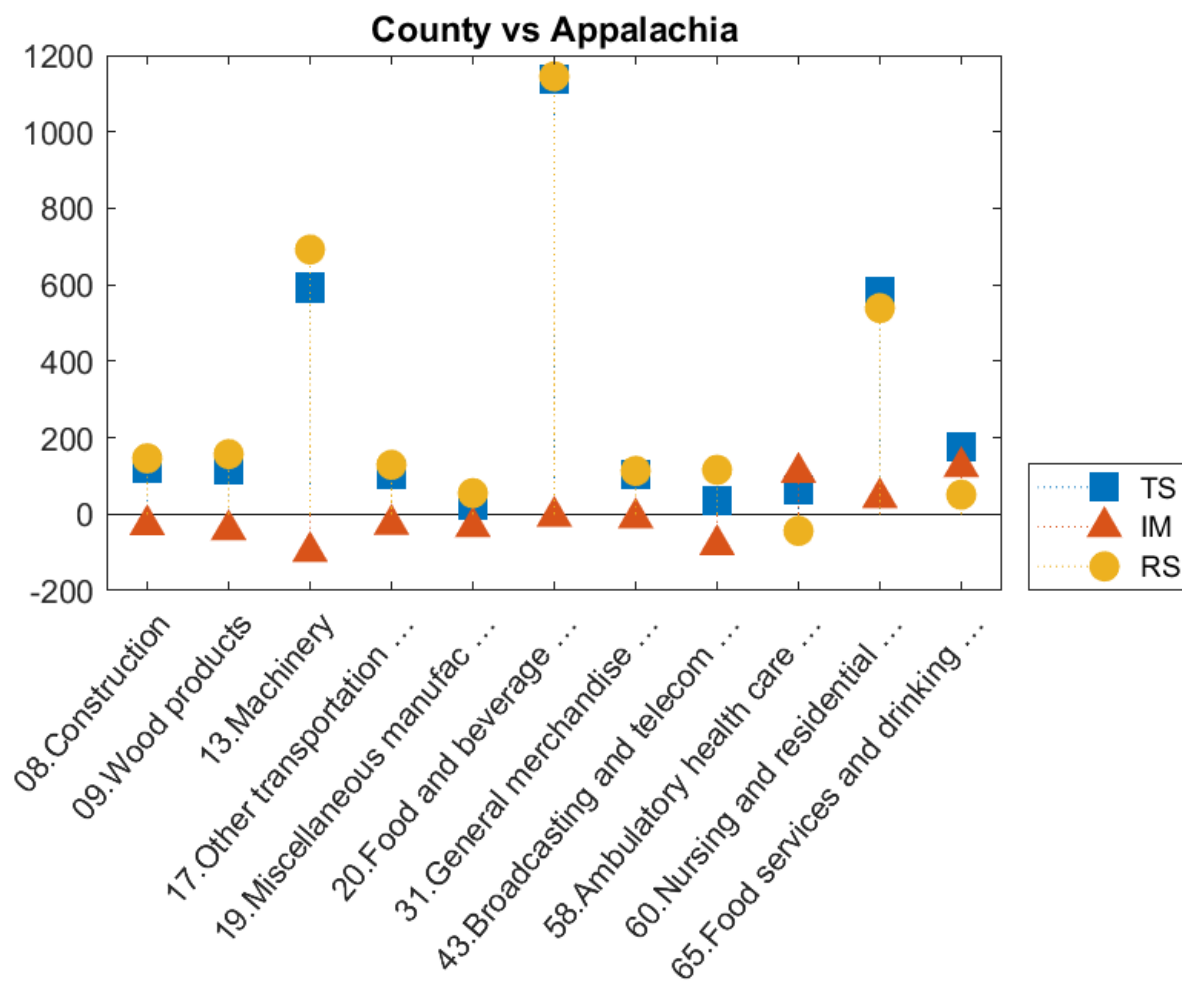


Chapter 6. Chenango County, New York

Chenango County, New York vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
08	Construction	43	77	-46	123	503
09	Wood products	16	100	-54	154	254
13	Machinery	85	511	-126	637	1,351
17	Other transportation	32	72	-44	116	384
19	Miscellaneous manufac ...	18	4	-26	30	181
20	Food and beverage ...	16	1,123	2	1,121	1,284
31	General merchandise	33	71	-17	88	394
43	Broadcasting and telecom	27	9	-95	104	277
58	Ambulatory health care ...	38	28	119	-91	405
60	Nursing and residential ...	76	509	30	479	1,262
65	Food services and drinking ...	70	108	119	-11	799

Selected SSA Components for Chenango County, New York vs the Appalachian Region

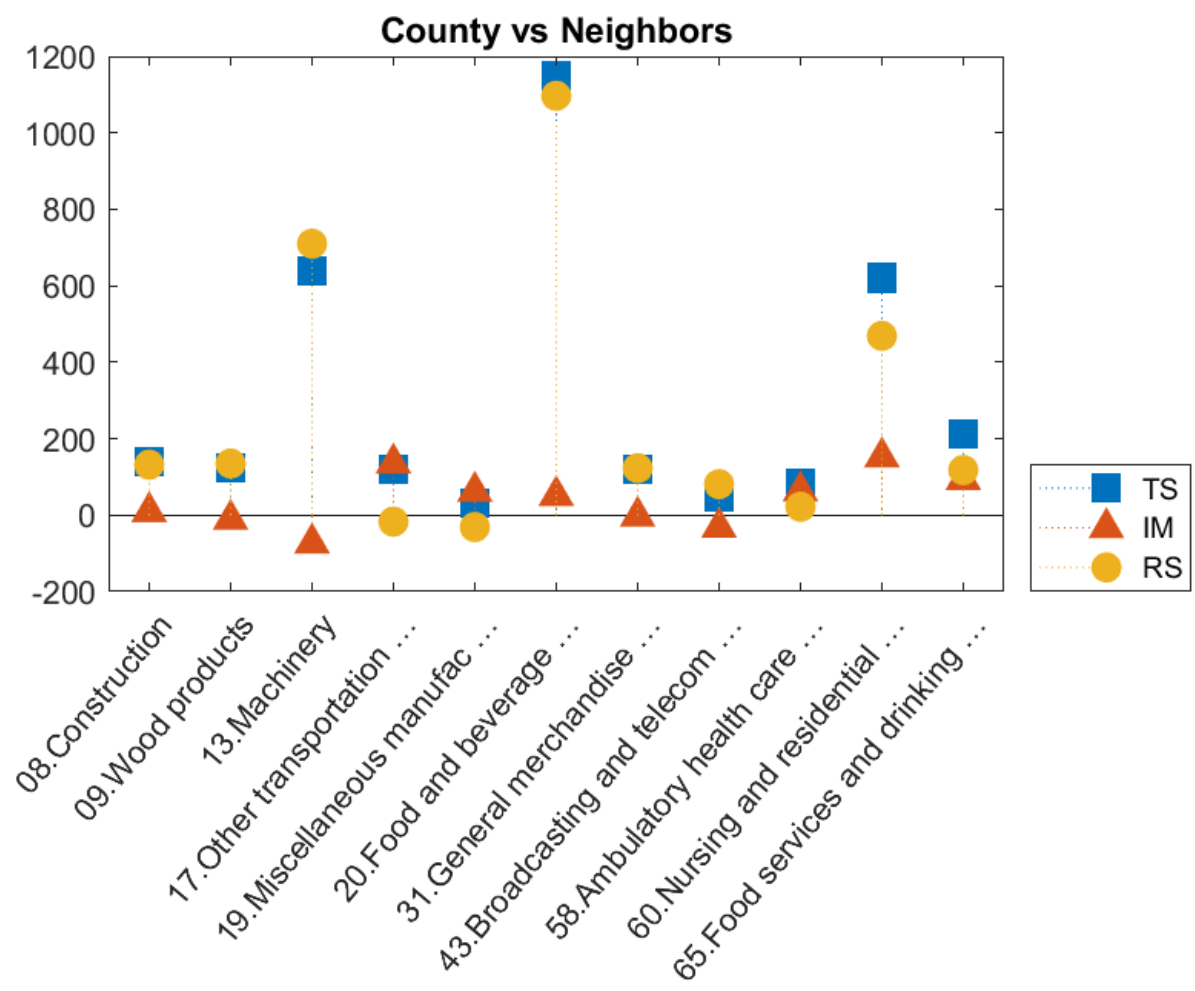


Chapter 6. Chenango County, New York

Selected SSA Components for Chenango County, New York vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
08	Construction	1	118	-28	146	503
09	Wood products	0	116	-41	157	254
13	Machinery	3	594	-98	692	1,351
17	Other transportation ...	1	102	-27	129	384
19	Miscellaneous manufac ...	1	22	-33	55	181
20	Food and beverage ...	0	1,139	-6	1,145	1,284
31	General merchandise ...	1	103	-10	113	394
43	Broadcasting and telecom ...	1	36	-80	116	277
58	Ambulatory health care ...	1	65	109	-44	405
60	Nursing and residential ...	2	582	43	539	1,262
65	Food services and drinking ...	2	175	124	51	799

Selected SSA Components for Chenango County, New York vs Neighbors



Chapter 6. Chenango County, New York

Selected SSA Components for Chenango County, New York vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
08	Construction	-21	141	9	132	503
09	Wood products	-7	124	-11	135	254
13	Machinery	-41	637	-73	710	1,351
17	Other transportation ...	-15	119	136	-17	384
19	Miscellaneous manufac ...	-9	31	62	-31	181
20	Food and beverage ...	-8	1,148	51	1,097	1,284
31	General merchandise ...	-16	120	-3	123	394
43	Broadcasting and telecom ...	-13	49	-32	81	277
58	Ambulatory health care ...	-18	85	63	22	405
60	Nursing and residential ...	-36	621	152	469	1,262
65	Food services and drinking ...	-33	211	93	118	799

Chapter 7. Cortland County, New York

Employment in Cortland County, New York, grew from 17,318 in 2005 to 18,036 in 2018, for a change of 718, or 4.15%. Readers should compare the employment values in the tables below to total county employment.

The first table shows the referent region share (NS), the Total Share (TS), Industry Mix (IM), and Regional Shift (RS) job values for the county. The summary values shown represent sums of individual industry component values for all county industries. To be clear, the SSA components always refer to the county that is being compared to the referent region, and the NS label always refers to the county growth that would have taken place had it matched overall average growth in the referent region, which can be the United States, the Appalachian Region, or the county and its neighbors. The largest and smallest NS components in the summary table correspond to the fastest and slowest growing referent regions.

Summary Results for Cortland County, New York

County Summary	NS	TS	IM	RS
vs. U.S.	1,950	-1,238	54	-1,292
vs. Appalachia	53	656	536	120
vs. Neighbors	-492	1,214	298	916

The next table displays the group membership categories for industries belonging to any of the first three categories (signifying a positive total share value) for the Appalachian Region or the county relative to the United States — i.e., A, B, C, I, II, or III — and for the county relative to the Appalachian Region or its neighboring counties — i.e., a, b, c, i, ii, or iii. These are the industries that have passed the first screening step, as they have proven to be positive contributors to either the Appalachian Region in comparison to the United States as a whole, or to Cortland County, New York, in comparison to at least one of the three referent regions.

Chapter 7. Cortland County, New York

Industry Group Membership for Cortland County, New York

Industry	Name	Group Membership	Type A or B or C	Type I or II or III	Type a or b or c	Type i or ii or iii
01	Farms	F III a i	no	yes	yes	yes
26	Chemical products	F III c iii	no	yes	yes	yes
27	Plastics and rubber prod...	D III a i	no	yes	yes	yes
31	General merchandise ...	F III c i	no	yes	yes	yes
47	Insurance carriers and ...	F III c iii	no	yes	yes	yes
53	Miscellaneous profession ...	B V e ii	yes	no	no	yes
57	Educational services	F III a i	no	yes	yes	yes
58	Ambulatory health care ...	B II a i	yes	yes	yes	yes
60	Nursing and residential ...	E I a i	no	yes	yes	yes
61	Social assistance	B V e ii	yes	no	no	yes
63	Amusements, gambling, ...	B V b ii	yes	no	yes	yes
64	Accommodation	A I a i	yes	yes	yes	yes
65	Food services and drinking ...	B II b ii	yes	yes	yes	yes
66	Other services, exc. gov ...	F III c i	no	yes	yes	yes

Notes:

Groups A, B, and C are from Appalachia vs. the United States

Groups I, II, and III are from Cortland County, New York vs. the United States

Groups a, b, and c are from Cortland County, New York vs. Appalachia

Groups i, ii, and iii are from Cortland County, New York vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Cortland County, New York, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Cortland County, New York, and its neighboring counties. The results for each of the three analyses are presented both visually and in tabular form.

The chart provides a visual display of the Total Share (TS), Industry Mix (IM), and Regional Shift (RS) components of change. The IM indicates the change in industry employment that would have occurred had the industry grown at a rate equal to the difference between the industry-specific growth rate in the referent region and the overall referent-region growth rate. So, a positive value here also means that the industry is growing more rapidly than the overall growth rate for the referent region. The RS component measures the actual employment change in the industry in Cortland County, New York, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Cortland County, New York, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

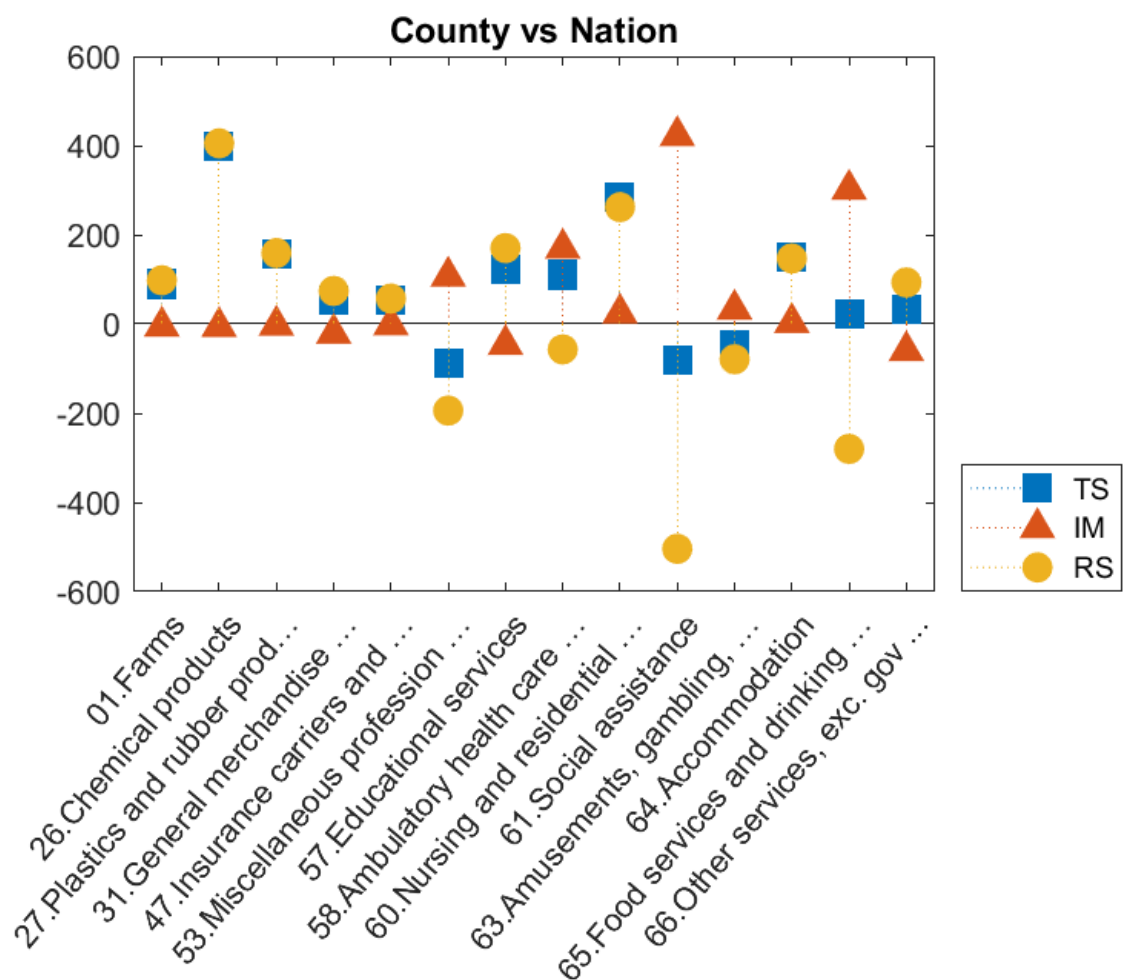
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Cortland County, New York, is still growing at a faster rate than the overall referent region average. Likewise, when IM is negative and RS is positive, the implication is that the regional comparative advantage is sufficiently strong to overcome the slower than average industry growth rate.

Interpreting Different Referent Region Results

The three SSA are conducted relative to three different referent regions: (1) the United States as a whole, (2) the Appalachian Region, and (3) the region defined by the county and its neighboring counties. As such, the IM component indicates the change in industry employment that would have occurred had the industry grown at a rate equal to the difference between the industry-specific growth rate in the referent region and the overall referent-region growth rate. Likewise, the regional shift components, RS, reflect county-specific industry comparative (dis)advantages relative to those same industries in each of the three referent regions. As before, the NS label always refers to county growth that would have occurred had the county industry grown at the overall average rate of growth in the referent region.

Reporting the results for each of three referent regions enables readers to compare county performance to the United States, the Appalachian Region, and the region defined by the county and its neighboring counties. Although economic growth in Appalachia overall and by industry generally lags the rest of the United States, positive SSA components can still be useful for identifying industries that are positive contributors relative to Appalachian Region and to the more localized economy.

Selected SSA Components for Cortland County, New York vs the U.S.

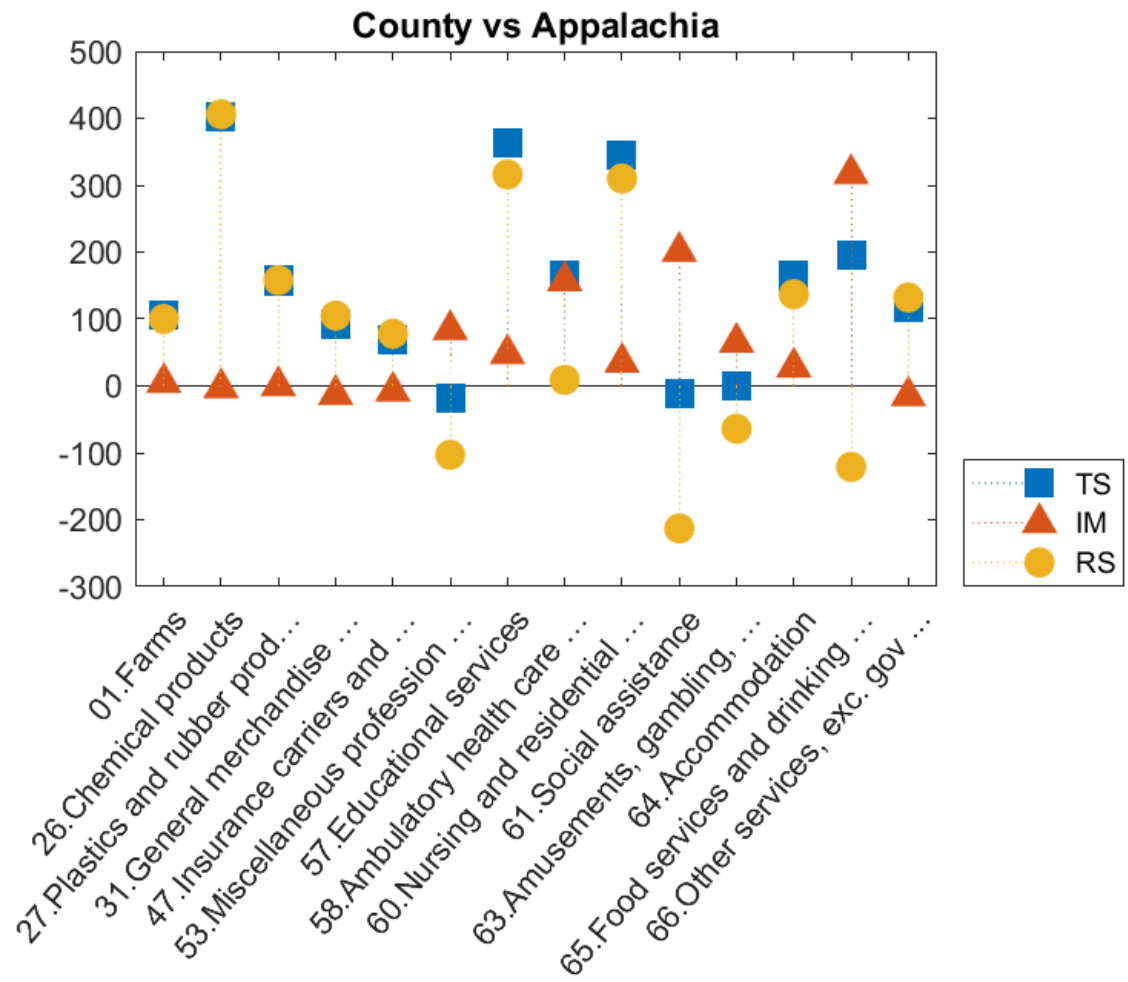


Chapter 7. Cortland County, New York

Cortland County, New York vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	12	93	-5	98	216
26	Chemical products	4	399	-6	405	441
27	Plastics and rubber prod...	3	156	-3	159	185
31	General merchandise ...	41	53	-21	74	460
47	Insurance carriers and ...	16	55	-2	57	214
53	Miscellaneous profession ...	71	-87	107	-194	616
57	Educational services	247	124	-46	170	2,563
58	Ambulatory health care ...	55	113	170	-57	654
60	Nursing and residential ...	61	286	24	262	891
61	Social assistance	73	-82	422	-504	635
63	Amusements, gambling, ...	47	-46	33	-79	422
64	Accommodation	16	150	3	147	306
65	Food services and drinking ...	179	22	302	-280	1,785
66	Other services, exc. gov ...	87	33	-60	93	892

Selected SSA Components for Cortland County, New York vs the Appalachian Region

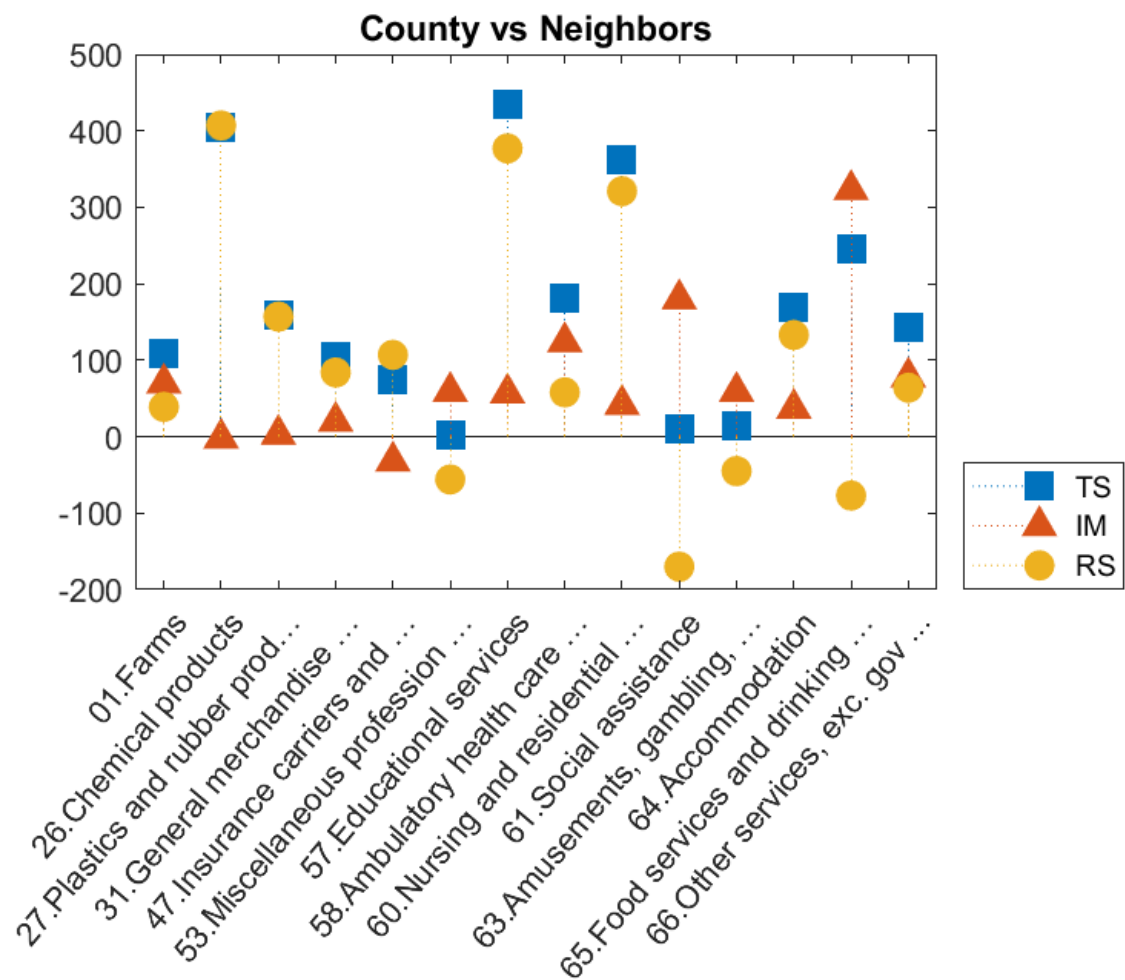


Chapter 7. Cortland County, New York

Selected SSA Components for Cortland County, New York vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	0	105	5	100	216
26	Chemical products	0	403	-3	406	441
27	Plastics and rubber prod...	0	158	0	158	185
31	General merchandise ...	1	92	-13	105	460
47	Insurance carriers and ...	0	70	-8	78	214
53	Miscellaneous profession ...	2	-19	84	-103	616
57	Educational services	7	364	48	316	2,563
58	Ambulatory health care ...	2	166	157	9	654
60	Nursing and residential ...	2	345	35	310	891
61	Social assistance	2	-12	201	-213	635
63	Amusements, gambling, ...	1	1	65	-64	422
64	Accommodation	0	165	28	137	306
65	Food services and drinking ...	5	196	317	-121	1,785
66	Other services, exc. gov ...	3	117	-15	132	892

Selected SSA Components for Cortland County, New York vs Neighbors



Chapter 7. Cortland County, New York

Selected SSA Components for Cortland County, New York vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	-3	109	70	39	216
26	Chemical products	-1	405	-2	407	441
27	Plastics and rubber prod...	-1	160	3	157	185
31	General merchandise ...	-10	104	20	84	460
47	Insurance carriers and ...	-4	75	-32	107	214
53	Miscellaneous profession ...	-18	3	59	-56	616
57	Educational services	-63	434	57	377	2,563
58	Ambulatory health care ...	-14	182	124	58	654
60	Nursing and residential ...	-16	363	42	321	891
61	Social assistance	-18	10	180	-170	635
63	Amusements, gambling, ...	-12	14	59	-45	422
64	Accommodation	-4	170	37	133	306
65	Food services and drinking ...	-45	246	323	-77	1,785
66	Other services, exc. gov ...	-22	142	78	64	892

Chapter 8. Delaware County, New York

Employment in Delaware County, New York, declined from 17,920 in 2005 to 14,690 in 2018, for a change of -3,230, or -18.02%. Readers should compare the employment values in the tables below to total county employment.

The first table shows the referent region share (NS), the Total Share (TS), Industry Mix (IM), and Regional Shift (RS) job values for the county. The summary values shown represent sums of individual industry component values for all county industries. To be clear, the SSA components always refer to the county that is being compared to the referent region, and the NS label always refers to the county growth that would have taken place had it matched overall average growth in the referent region, which can be the United States, the Appalachian Region, or the county and its neighbors. The largest and smallest NS components in the summary table correspond to the fastest and slowest growing referent regions.

Summary Results for Delaware County, New York

County Summary	NS	TS	IM	RS
vs. U.S.	2,021	-5,252	-1,222	-4,030
vs. Appalachia	54	-3,296	-825	-2,471
vs. Neighbors	-564	-2,661	-1,124	-1,537

The next table displays the group membership categories for industries belonging to any of the first three categories (signifying a positive total share value) for the Appalachian Region or the county relative to the United States — i.e., A, B, C, I, II, or III — and for the county relative to the Appalachian Region or its neighboring counties — i.e., a, b, c, i, ii, or iii. These are the industries that have passed the first screening step, as they have proven to be positive contributors to either the Appalachian Region in comparison to the United States as a whole, or to Delaware County, New York, in comparison to at least one of the three referent regions.

Chapter 8. Delaware County, New York

Industry Group Membership for Delaware County, New York

Industry	Name	Group Membership	Type A or B or C	Type I or II or III	Type a or b or c	Type i or ii or iii
31	General merchandise ...	F III c iii	no	yes	yes	yes
43	Broadcasting and telecom ...	F III c iii	no	yes	yes	yes
59	Hospitals	E II a i	no	yes	yes	yes
64	Accommodation	A I a i	yes	yes	yes	yes

Notes:

Groups A, B, and C are from Appalachia vs. the United States

Groups I, II, and III are from Delaware County, New York vs. the United States

Groups a, b, and c are from Delaware County, New York vs. Appalachia

Groups i, ii, and iii are from Delaware County, New York vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Delaware County, New York, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Delaware County, New York, and its neighboring counties. The results for each of the three analyses are presented both visually and in tabular form.

The chart provides a visual display of the Total Share (TS), Industry Mix (IM), and Regional Shift (RS) components of change. The IM indicates the change in industry employment that would have occurred had the industry grown at a rate equal to the difference between the industry-specific growth rate in the referent region and the overall referent-region growth rate. So, a positive value here also means that the industry is growing more rapidly than the overall growth rate for the referent region. The RS component measures the actual employment change in the industry in Delaware County, New York, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Delaware County, New York, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

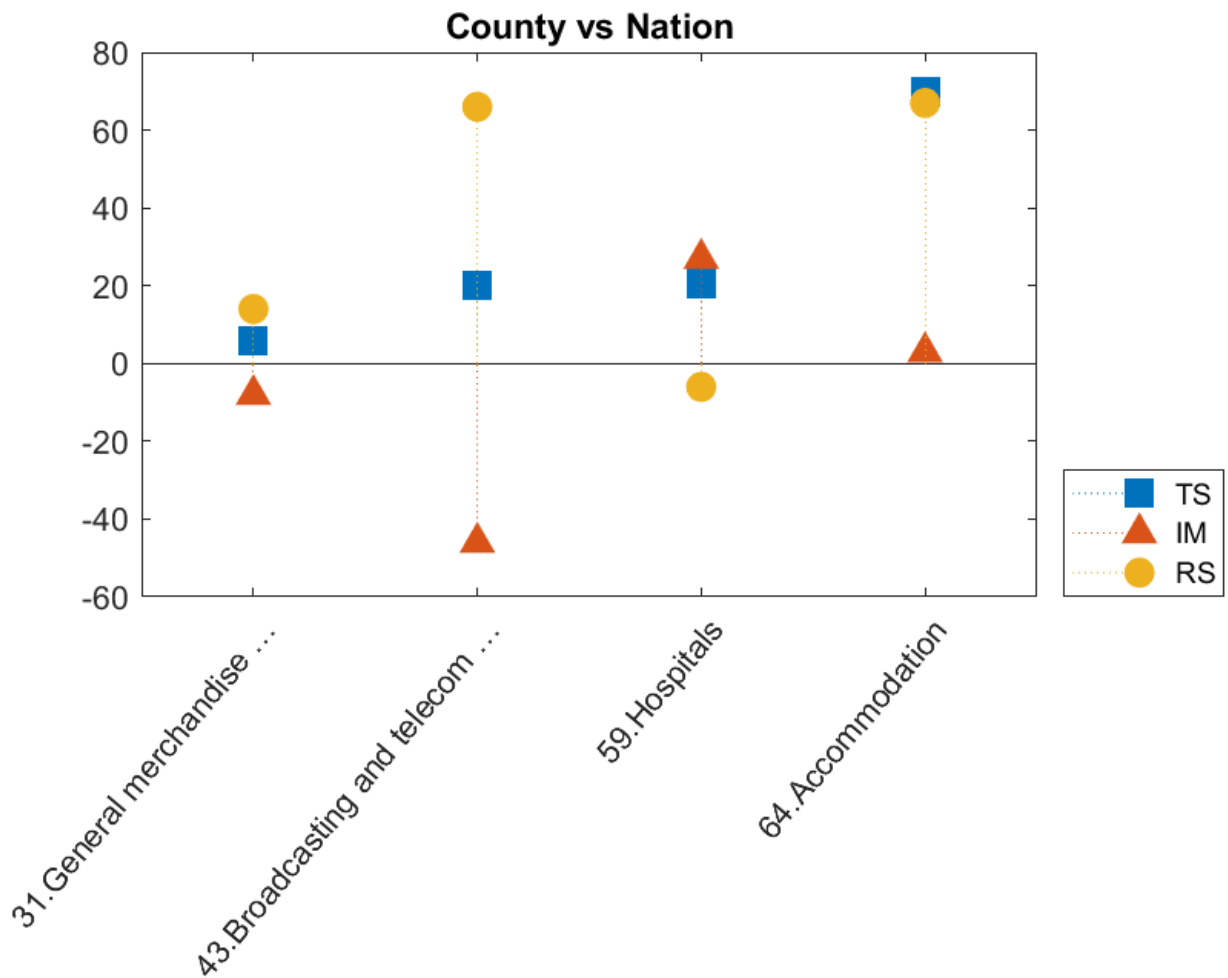
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Delaware County, New York, is still growing at a faster rate than the overall referent region average. Likewise, when IM is negative and RS is positive, the implication is that the regional comparative advantage is sufficiently strong to overcome the slower than average industry growth rate.

Interpreting Different Referent Region Results

The three SSA are conducted relative to three different referent regions: (1) the United States as a whole, (2) the Appalachian Region, and (3) the region defined by the county and its neighboring counties. As such, the IM component indicates the change in industry employment that would have occurred had the industry grown at a rate equal to the difference between the industry-specific growth rate in the referent region and the overall referent-region growth rate. Likewise, the regional shift components, RS, reflect county-specific industry comparative (dis)advantages relative to those same industries in each of the three referent regions. As before, the NS label always refers to county growth that would have occurred had the county industry grown at the overall average rate of growth in the referent region.

Reporting the results for each of three referent regions enables readers to compare county performance to the United States, the Appalachian Region, and the region defined by the county and its neighboring counties. Although economic growth in Appalachia overall and by industry generally lags the rest of the United States, positive SSA components can still be useful for identifying industries that are positive contributors relative to Appalachian Region and to the more localized economy.

Selected SSA Components for Delaware County, New York vs the U.S.

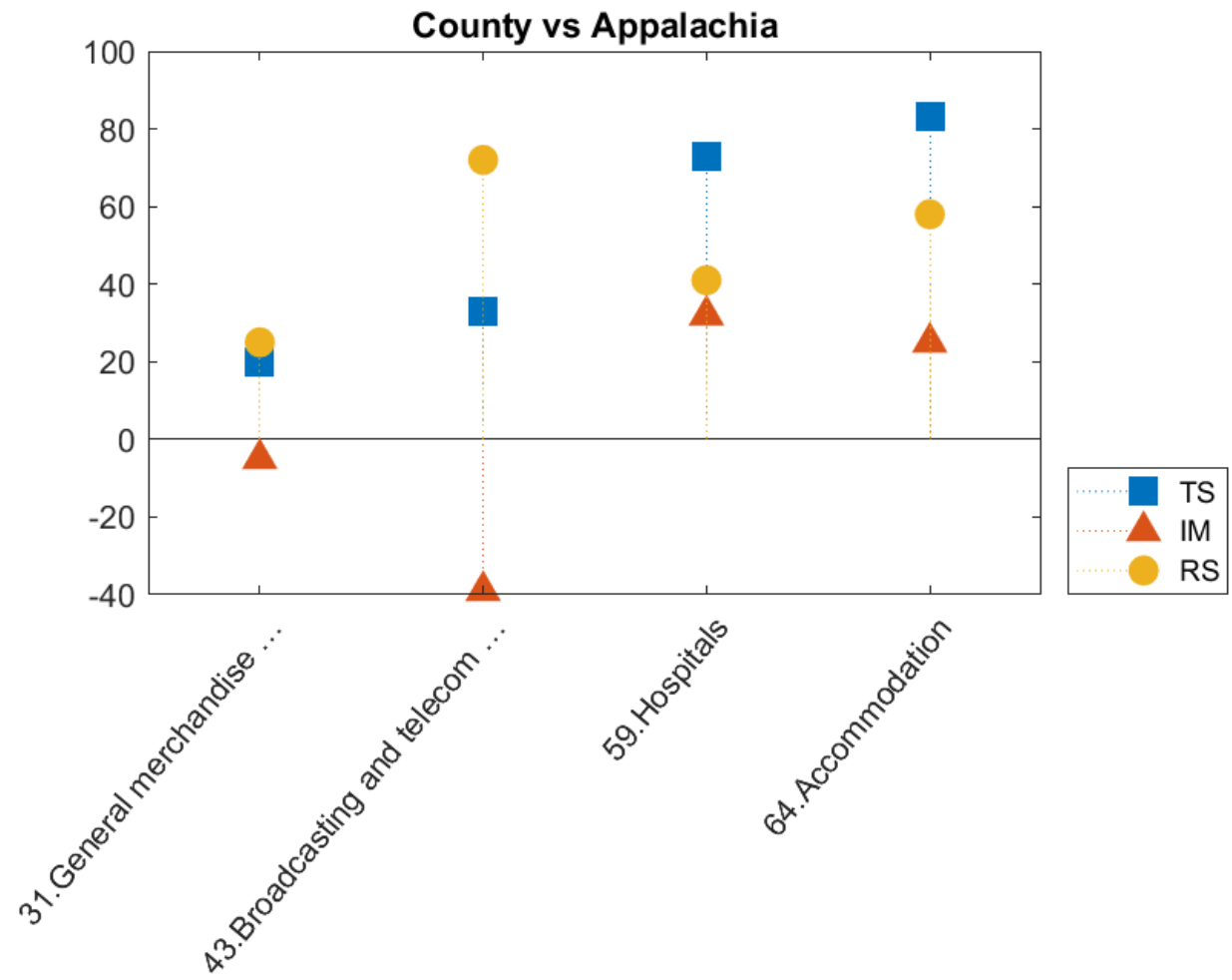


Chapter 8. Delaware County, New York

Delaware County, New York vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
31	General merchandise ...	15	6	-8	14	155
43	Broadcasting and telecom ...	13	20	-46	66	149
59	Hospitals	54	21	27	-6	555
64	Accommodation	14	70	3	67	204

Selected SSA Components for Delaware County, New York vs the Appalachian Region

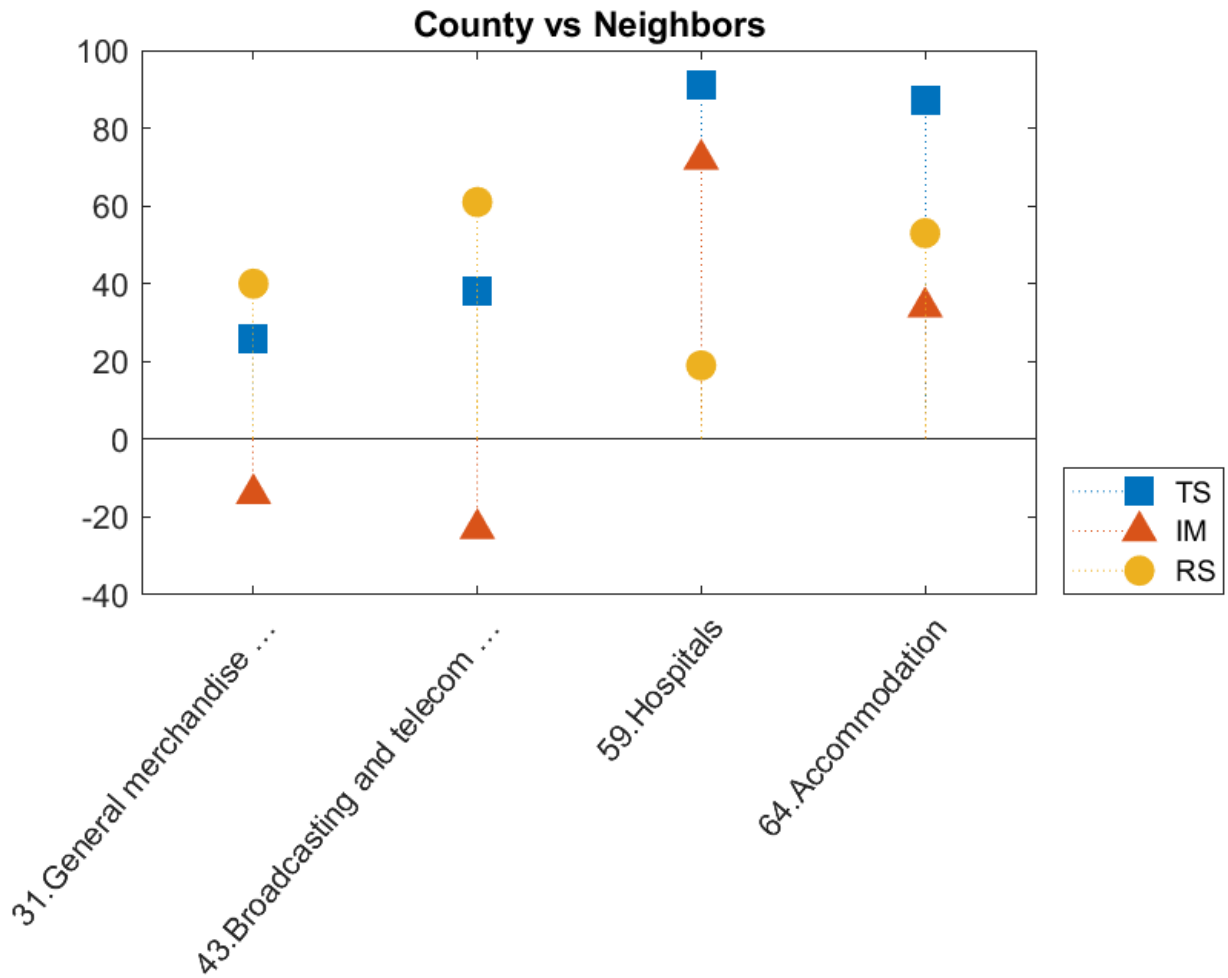


Chapter 8. Delaware County, New York

Selected SSA Components for Delaware County, New York vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
31	General merchandise ...	0	20	-5	25	155
43	Broadcasting and telecom ...	0	33	-39	72	149
59	Hospitals	2	73	32	41	555
64	Accommodation	0	83	25	58	204

Selected SSA Components for Delaware County, New York vs Neighbors



Chapter 8. Delaware County, New York

Selected SSA Components for Delaware County, New York vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
31	General merchandise ...	-4	26	-14	40	155
43	Broadcasting and telecom ...	-4	38	-23	61	149
59	Hospitals	-15	91	72	19	555
64	Accommodation	-4	87	34	53	204

Chapter 9. Otsego County, New York

Employment in Otsego County, New York, declined from 24,351 in 2005 to 23,663 in 2018, for a change of -688, or -2.83%. Readers should compare the employment values in the tables below to total county employment.

The first table shows the referent region share (NS), the Total Share (TS), Industry Mix (IM), and Regional Shift (RS) job values for the county. The summary values shown represent sums of individual industry component values for all county industries. To be clear, the SSA components always refer to the county that is being compared to the referent region, and the NS label always refers to the county growth that would have taken place had it matched overall average growth in the referent region, which can be the United States, the Appalachian Region, or the county and its neighbors. The largest and smallest NS components in the summary table correspond to the fastest and slowest growing referent regions.

Summary Results for Otsego County, New York

County Summary	NS	TS	IM	RS
vs. U.S.	2,746	-3,431	324	-3,755
vs. Appalachia	76	-766	775	-1,541
vs. Neighbors	-832	140	145	-5

The next table displays the group membership categories for industries belonging to any of the first three categories (signifying a positive total share value) for the Appalachian Region or the county relative to the United States — i.e., A, B, C, I, II, or III — and for the county relative to the Appalachian Region or its neighboring counties — i.e., a, b, c, i, ii, or iii. These are the industries that have passed the first screening step, as they have proven to be positive contributors to either the Appalachian Region in comparison to the United States as a whole, or to Otsego County, New York, in comparison to at least one of the three referent regions.

Chapter 9. Otsego County, New York

Industry Group Membership for Otsego County, New York

Industry	Name	Group Membership	Type A or B or C	Type I or II or III	Type a or b or c	Type i or ii or iii
20	Food and beverage ...	E I c ii	no	yes	yes	yes
58	Ambulatory health care ...	B I a i	yes	yes	yes	yes
60	Nursing and residential ...	E I a i	no	yes	yes	yes
61	Social assistance	B II a ii	yes	yes	yes	yes
62	Performing arts, spectator ...	B II b i	yes	yes	yes	yes
63	Amusements, gambling, ...	B I a i	yes	yes	yes	yes
64	Accommodation	A I a i	yes	yes	yes	yes

Notes:

Groups A, B, and C are from Appalachia vs. the United States

Groups I, II, and III are from Otsego County, New York vs. the United States

Groups a, b, and c are from Otsego County, New York vs. Appalachia

Groups i, ii, and iii are from Otsego County, New York vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Otsego County, New York, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Otsego County, New York, and its neighboring counties. The results for each of the three analyses are presented both visually and in tabular form.

The chart provides a visual display of the Total Share (TS), Industry Mix (IM), and Regional Shift (RS) components of change. The IM indicates the change in industry employment that would have occurred had the industry grown at a rate equal to the difference between the industry-specific growth rate in the referent region and the overall referent-region growth rate. So, a positive value here also means that the industry is growing more rapidly than the overall growth rate for the referent region. The RS component measures the actual employment change in the industry in Otsego County, New York, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Otsego County, New York, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

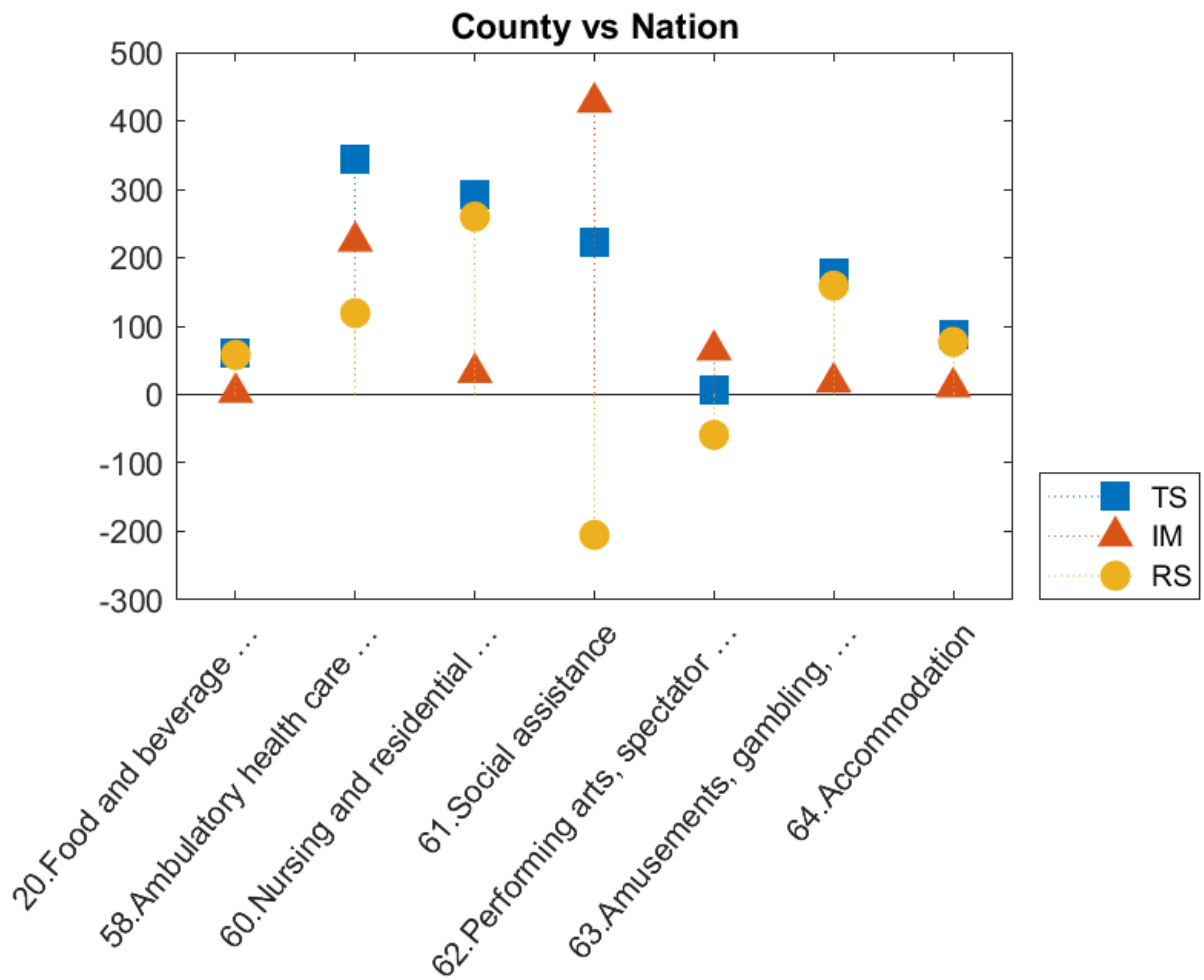
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Otsego County, New York, is still growing at a faster rate than the overall referent region average. Likewise, when IM is negative and RS is positive, the implication is that the regional comparative advantage is sufficiently strong to overcome the slower than average industry growth rate.

Interpreting Different Referent Region Results

The three SSA are conducted relative to three different referent regions: (1) the United States as a whole, (2) the Appalachian Region, and (3) the region defined by the county and its neighboring counties. As such, the IM component indicates the change in industry employment that would have occurred had the industry grown at a rate equal to the difference between the industry-specific growth rate in the referent region and the overall referent-region growth rate. Likewise, the regional shift components, RS, reflect county-specific industry comparative (dis)advantages relative to those same industries in each of the three referent regions. As before, the NS label always refers to county growth that would have occurred had the county industry grown at the overall average rate of growth in the referent region.

Reporting the results for each of three referent regions enables readers to compare county performance to the United States, the Appalachian Region, and the region defined by the county and its neighboring counties. Although economic growth in Appalachia overall and by industry generally lags the rest of the United States, positive SSA components can still be useful for identifying industries that are positive contributors relative to Appalachian Region and to the more localized economy.

Selected SSA Components for Otsego County, New York vs the U.S.

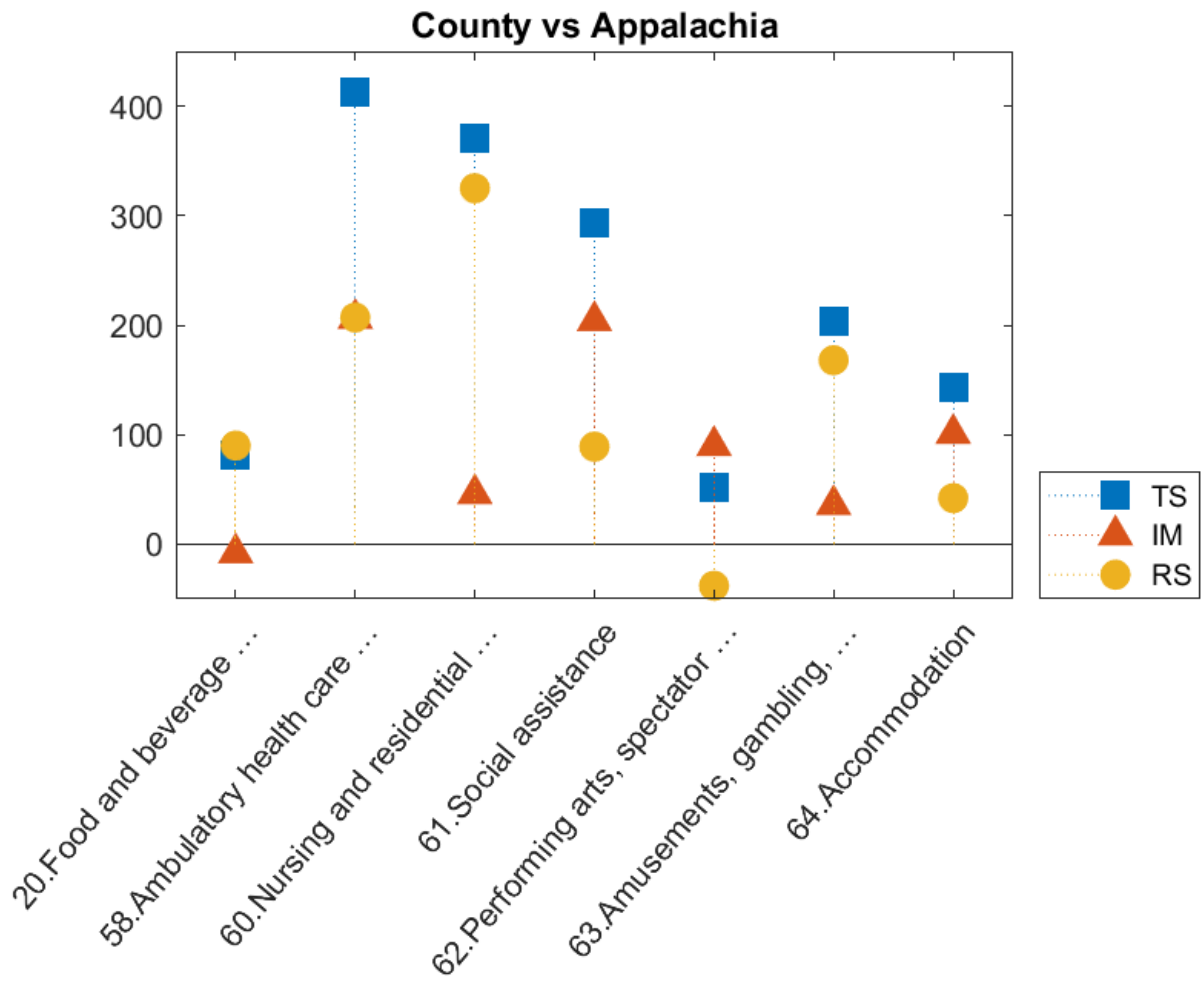


Chapter 9. Otsego County, New York

Otsego County, New York vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
20	Food and beverage ...	22	61	3	58	276
58	Ambulatory health care ...	72	343	224	119	1,054
60	Nursing and residential ...	82	292	32	260	1,097
61	Social assistance	73	222	427	-205	946
62	Performing arts, spectator ...	48	6	65	-59	482
63	Amusements, gambling, ...	26	177	18	159	439
64	Accommodation	56	88	11	77	639

Selected SSA Components for Otsego County, New York vs the Appalachian Region

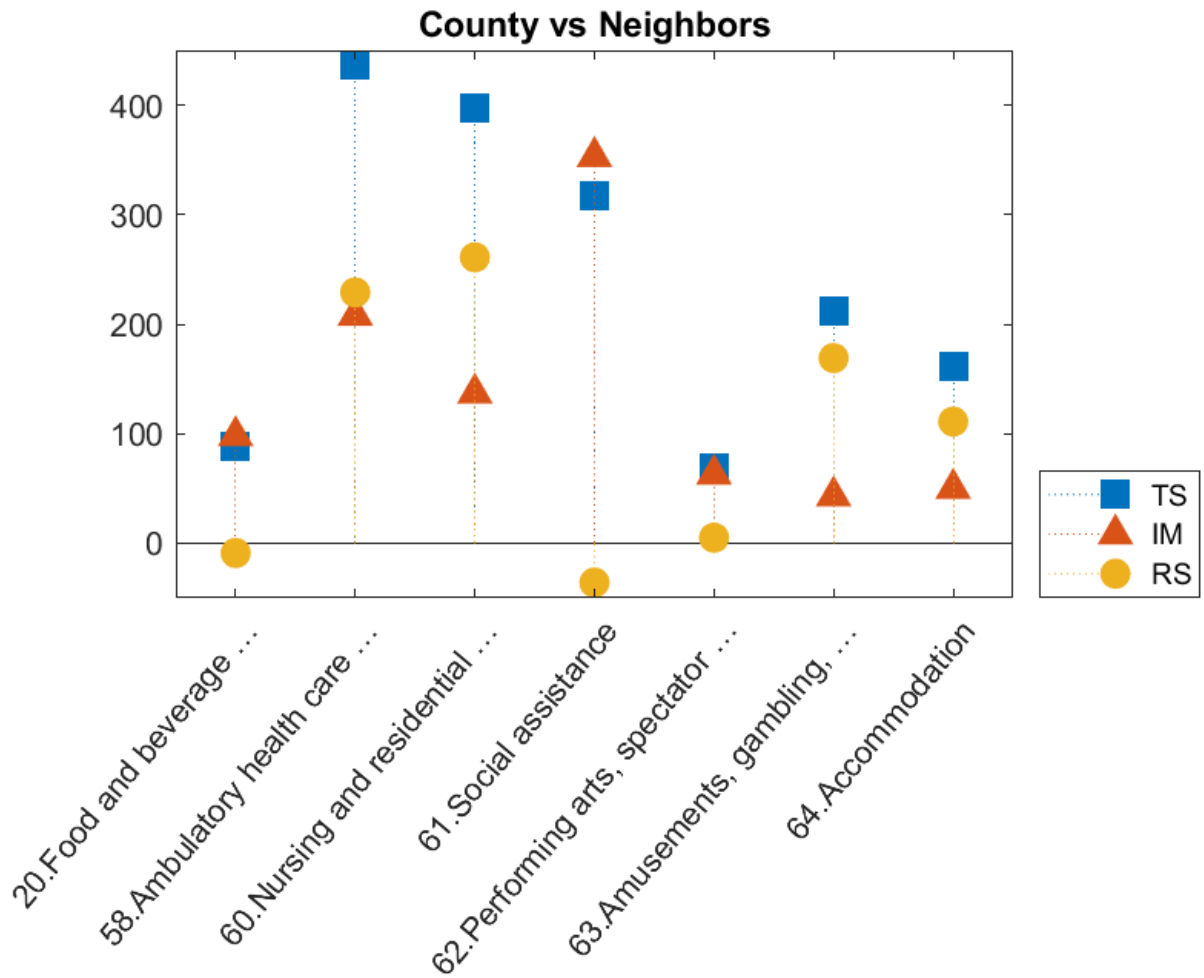


Chapter 9. Otsego County, New York

Selected SSA Components for Otsego County, New York vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
20	Food and beverage ...	1	82	-8	90	276
58	Ambulatory health care ...	2	413	206	207	1,054
60	Nursing and residential ...	2	371	46	325	1,097
61	Social assistance	2	293	204	89	946
62	Performing arts, spectator ...	1	52	90	-38	482
63	Amusements, gambling, ...	1	204	36	168	439
64	Accommodation	2	143	101	42	639

Selected SSA Components for Otsego County, New York vs Neighbors



Chapter 9. Otsego County, New York

Selected SSA Components for Otsego County, New York vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
20	Food and beverage ...	-7	89	98	-9	276
58	Ambulatory health care ...	-22	437	208	229	1,054
60	Nursing and residential ...	-25	398	137	261	1,097
61	Social assistance	-22	317	353	-36	946
62	Performing arts, spectator ...	-15	68	63	5	482
63	Amusements, gambling, ...	-8	212	43	169	439
64	Accommodation	-17	161	50	111	639

Chapter 10. Schoharie County, New York

Employment in Schoharie County, New York, declined from 9,343 in 2005 to 8,956 in 2018, for a change of -387, or -4.14%. Readers should compare the employment values in the tables below to total county employment.

The first table shows the referent region share (NS), the Total Share (TS), Industry Mix (IM), and Regional Shift (RS) job values for the county. The summary values shown represent sums of individual industry component values for all county industries. To be clear, the SSA components always refer to the county that is being compared to the referent region, and the NS label always refers to the county growth that would have taken place had it matched overall average growth in the referent region, which can be the United States, the Appalachian Region, or the county and its neighbors. The largest and smallest NS components in the summary table correspond to the fastest and slowest growing referent regions.

Summary Results for Schoharie County, New York

County Summary	NS	TS	IM	RS
vs. U.S.	1,055	-1,439	484	-1,923
vs. Appalachia	28	-422	213	-635
vs. Neighbors	-62	-316	483	-799

The next table displays the group membership categories for industries belonging to any of the first three categories (signifying a positive total share value) for the Appalachian Region or the county relative to the United States — i.e., A, B, C, I, II, or III — and for the county relative to the Appalachian Region or its neighboring counties — i.e., a, b, c, i, ii, or iii. These are the industries that have passed the first screening step, as they have proven to be positive contributors to either the Appalachian Region in comparison to the United States as a whole, or to Schoharie County, New York, in comparison to at least one of the three referent regions.

Chapter 10. Schoharie County, New York

Industry Group Membership for Schoharie County, New York

Industry	Name	Group Membership	Type A or B or C	Type I or II or III	Type a or b or c	Type i or ii or iii
01	Farms	F III a i	no	yes	yes	yes
26	Chemical products	F I a i	no	yes	yes	yes
56	Waste management and ...	A I a i	yes	yes	yes	yes
58	Ambulatory health care ...	B I a i	yes	yes	yes	yes
59	Hospitals	E I a i	no	yes	yes	yes
61	Social assistance	B V b ii	yes	no	yes	yes
64	Accommodation	A I a i	yes	yes	yes	yes
65	Food services and drinking ...	B I a i	yes	yes	yes	yes

Notes:

Groups A, B, and C are from Appalachia vs. the United States

Groups I, II, and III are from Schoharie County, New York vs. the United States

Groups a, b, and c are from Schoharie County, New York vs. Appalachia

Groups i, ii, and iii are from Schoharie County, New York vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Schoharie County, New York, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Schoharie County, New York, and its neighboring counties. The results for each of the three analyses are presented both visually and in tabular form.

The chart provides a visual display of the Total Share (TS), Industry Mix (IM), and Regional Shift (RS) components of change. The IM indicates the change in industry employment that would have occurred had the industry grown at a rate equal to the difference between the industry-specific growth rate in the referent region and the overall referent-region growth rate. So, a positive value here also means that the industry is growing more rapidly than the overall growth rate for the referent region. The RS component measures the actual employment change in the industry in Schoharie County, New York, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Schoharie County, New York, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

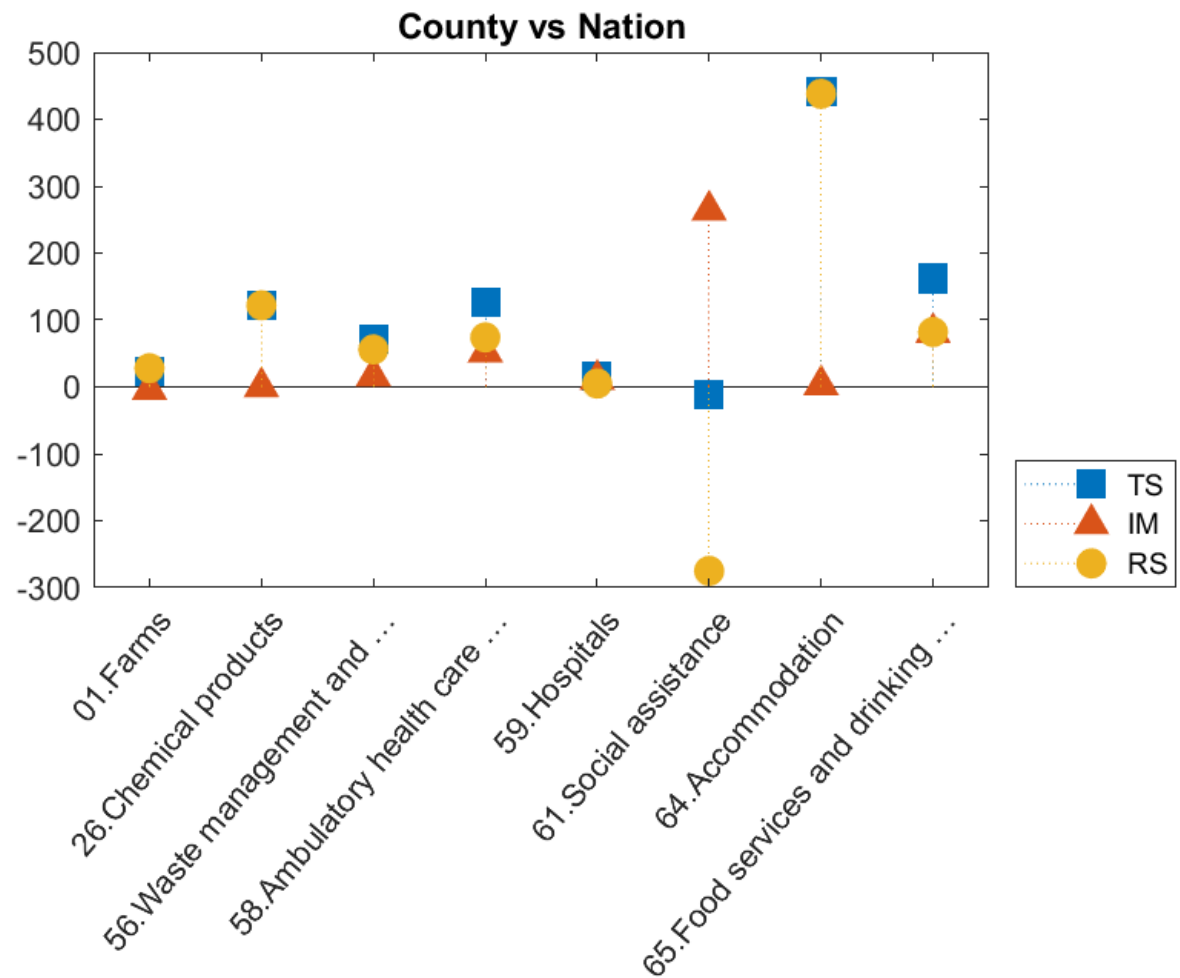
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Schoharie County, New York, is still growing at a faster rate than the overall referent region average. Likewise, when IM is negative and RS is positive, the implication is that the regional comparative advantage is sufficiently strong to overcome the slower than average industry growth rate.

Interpreting Different Referent Region Results

The three SSA are conducted relative to three different referent regions: (1) the United States as a whole, (2) the Appalachian Region, and (3) the region defined by the county and its neighboring counties. As such, the IM component indicates the change in industry employment that would have occurred had the industry grown at a rate equal to the difference between the industry-specific growth rate in the referent region and the overall referent-region growth rate. Likewise, the regional shift components, RS, reflect county-specific industry comparative (dis)advantages relative to those same industries in each of the three referent regions. As before, the NS label always refers to county growth that would have occurred had the county industry grown at the overall average rate of growth in the referent region.

Reporting the results for each of three referent regions enables readers to compare county performance to the United States, the Appalachian Region, and the region defined by the county and its neighboring counties. Although economic growth in Appalachia overall and by industry generally lags the rest of the United States, positive SSA components can still be useful for identifying industries that are positive contributors relative to Appalachian Region and to the more localized economy.

Selected SSA Components for Schoharie County, New York vs the U.S.

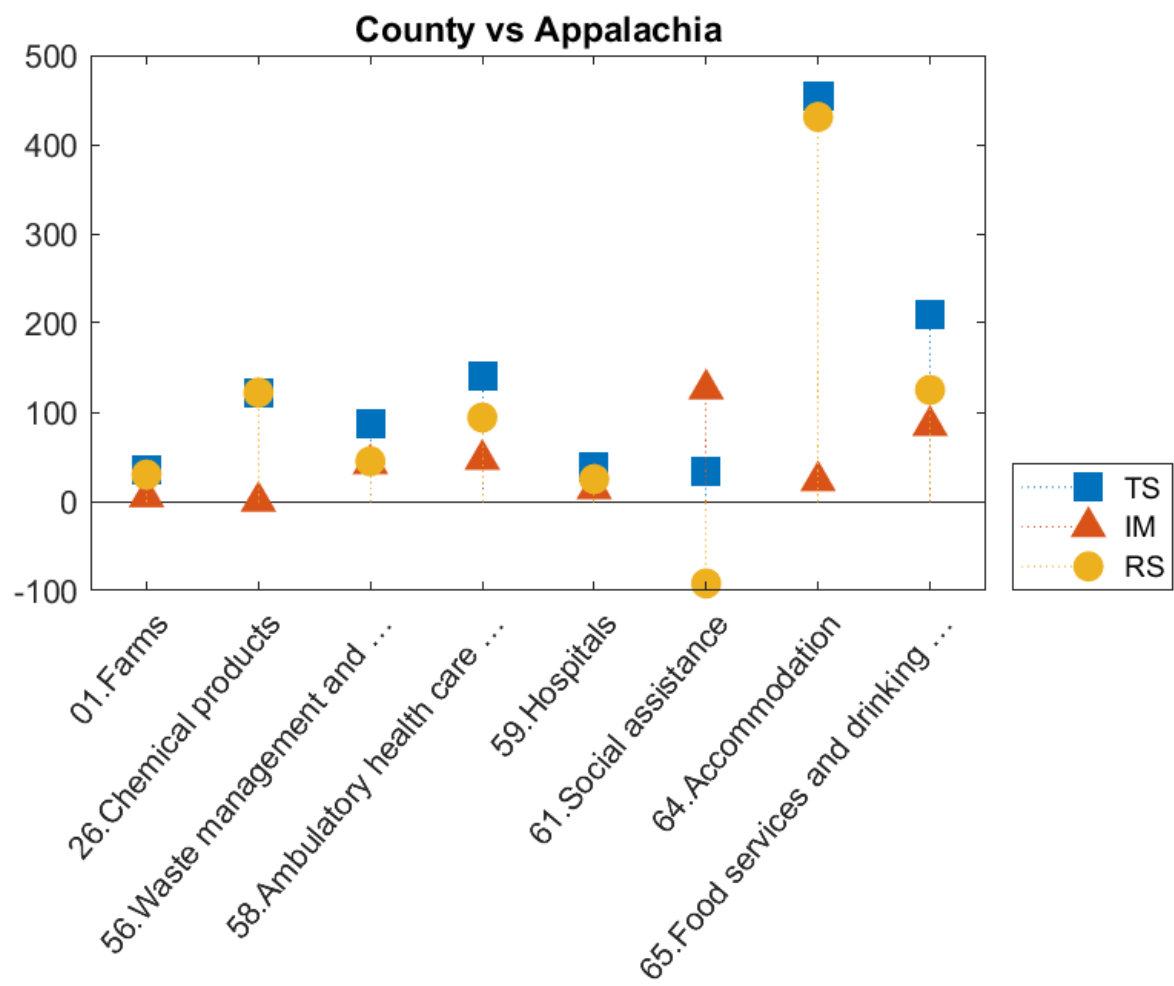


Chapter 10. Schoharie County, New York

Schoharie County, New York vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	12	24	-4	28	138
26	Chemical products	0	122	0	122	122
56	Waste management and ...	16	72	16	56	229
58	Ambulatory health care ...	17	126	52	74	289
59	Hospitals	23	16	11	5	243
61	Social assistance	45	-11	264	-275	438
64	Accommodation	13	441	3	438	565
65	Food services and drinking ...	48	163	81	82	638

Selected SSA Components for Schoharie County, New York vs the Appalachian Region

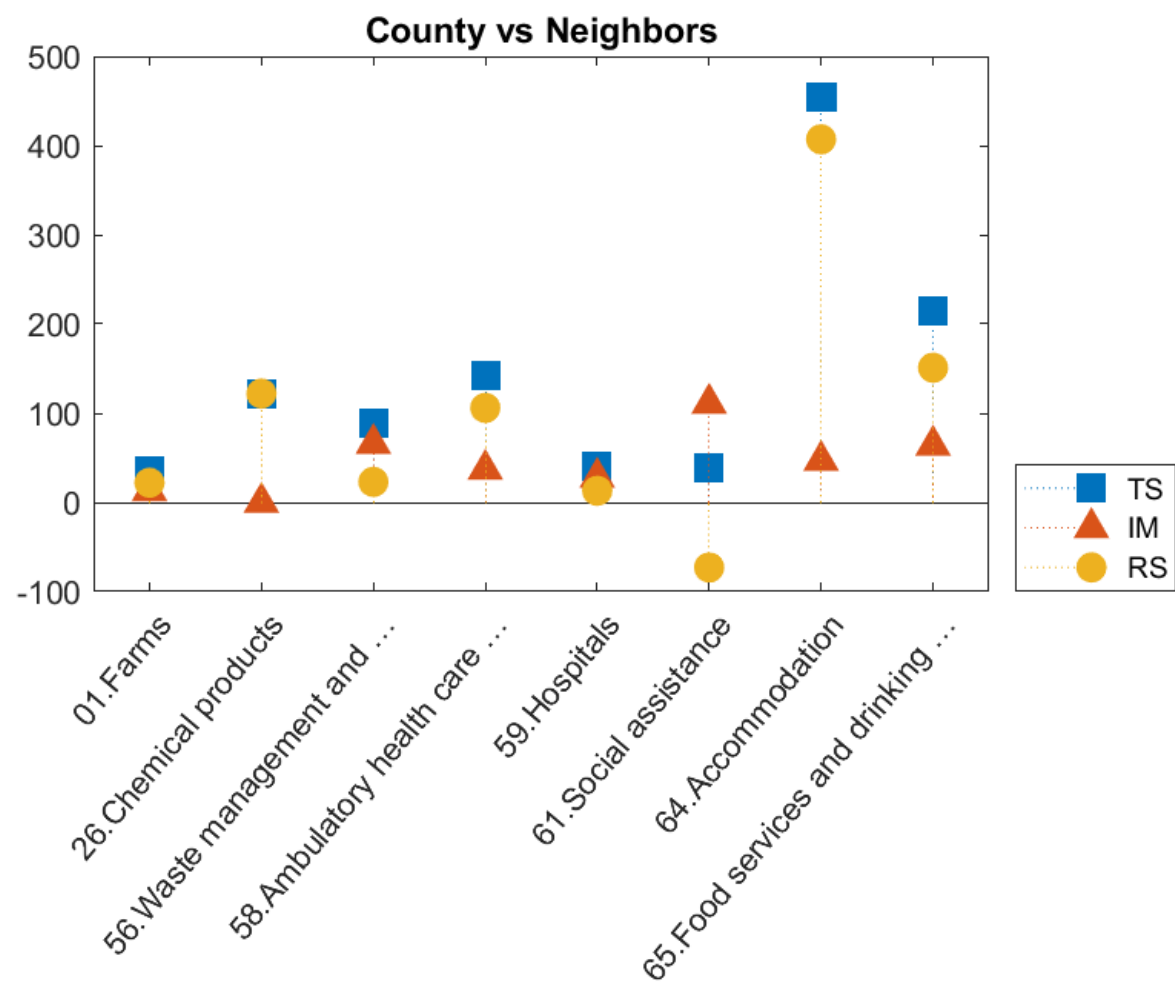


Chapter 10. Schoharie County, New York

Selected SSA Components for Schoharie County, New York vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	0	35	5	30	138
26	Chemical products	0	122	0	122	122
56	Waste management and ...	0	87	42	45	229
58	Ambulatory health care ...	0	141	47	94	289
59	Hospitals	1	39	14	25	243
61	Social assistance	1	34	126	-92	438
64	Accommodation	0	454	23	431	565
65	Food services and drinking ...	1	210	85	125	638

Selected SSA Components for Schoharie County, New York vs Neighbors



Chapter 10. Schoharie County, New York

Selected SSA Components for Schoharie County, New York vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	-1	35	13	22	138
26	Chemical products	-0	122	0	122	122
56	Waste management and ...	-1	89	66	23	229
58	Ambulatory health care ...	-1	143	37	106	289
59	Hospitals	-1	41	28	13	243
61	Social assistance	-3	38	111	-73	438
64	Accommodation	-1	454	47	407	565
65	Food services and drinking ...	-3	215	64	151	638

Chapter 11. Schuyler County, New York

Employment in Schuyler County, New York, grew from 4,875 in 2005 to 5,014 in 2018, for a change of 139, or 2.85%. Readers should compare the employment values in the tables below to total county employment.

The first table shows the referent region share (NS), the Total Share (TS), Industry Mix (IM), and Regional Shift (RS) job values for the county. The summary values shown represent sums of individual industry component values for all county industries. To be clear, the SSA components always refer to the county that is being compared to the referent region, and the NS label always refers to the county growth that would have taken place had it matched overall average growth in the referent region, which can be the United States, the Appalachian Region, or the county and its neighbors. The largest and smallest NS components in the summary table correspond to the fastest and slowest growing referent regions.

Summary Results for Schuyler County, New York

County Summary	NS	TS	IM	RS
vs. U.S.	547	-411	-33	-378
vs. Appalachia	11	125	117	8
vs. Neighbors	-89	230	266	-36

The next table displays the group membership categories for industries belonging to any of the first three categories (signifying a positive total share value) for the Appalachian Region or the county relative to the United States — i.e., A, B, C, I, II, or III – and for the county relative to the Appalachian Region or its neighboring counties — i.e., a, b, c, i, ii, or iii. These are the industries that have passed the first screening step, as they have proven to be positive contributors to either the Appalachian Region in comparison to the United States as a whole, or to Schuyler County, New York, in comparison to at least one of the three referent regions.

Chapter 11. Schuyler County, New York

Industry Group Membership for Schuyler County, New York

Industry	Name	Group Membership	Type A or B or C	Type I or II or III	Type a or b or c	Type i or ii or iii
01	Farms	F III a ii	no	yes	yes	yes
08	Construction	F III c iii	no	yes	yes	yes
09	Wood products	F III c i	no	yes	yes	yes
17	Other transportation	F I a i	no	yes	yes	yes
20	Food and beverage ...	E I c i	no	yes	yes	yes
37	Transit and ground ...	E I a i	no	yes	yes	yes
54	Management of companies ...	A I a i	yes	yes	yes	yes
58	Ambulatory health care ...	B I a i	yes	yes	yes	yes
61	Social assistance	B II b ii	yes	yes	yes	yes
64	Accommodation	A I a i	yes	yes	yes	yes
65	Food services and drinking ...	B II a i	yes	yes	yes	yes
66	Other services, exc. gov ...	F III c iii	no	yes	yes	yes

Notes:

Groups A, B, and C are from Appalachia vs. the United States

Groups I, II, and III are from Schuyler County, New York vs. the United States

Groups a, b, and c are from Schuyler County, New York vs. Appalachia

Groups i, ii, and iii are from Schuyler County, New York vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Schuyler County, New York, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Schuyler County, New York, and its neighboring counties. The results for each of the three analyses are presented both visually and in tabular form.

The chart provides a visual display of the Total Share (TS), Industry Mix (IM), and Regional Shift (RS) components of change. The IM indicates the change in industry employment that would have occurred had the industry grown at a rate equal to the difference between the industry-specific growth rate in the referent region and the overall referent-region growth rate. So, a positive value here also means that the industry is growing more rapidly than the overall growth rate for the referent region. The RS component measures the actual employment change in the industry in Schuyler County, New York, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Schuyler County, New York, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

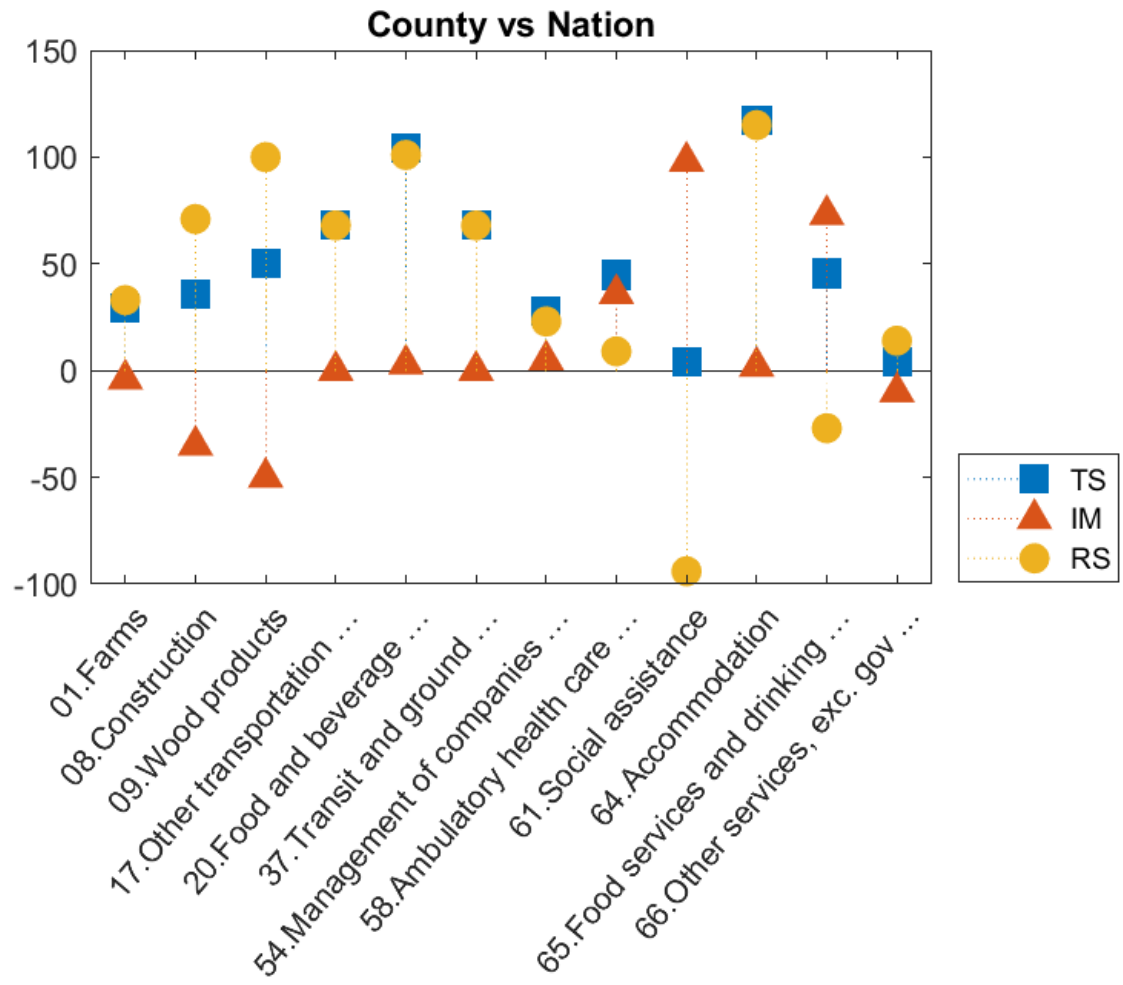
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Schuyler County, New York, is still growing at a faster rate than the overall referent region average. Likewise, when IM is negative and RS is positive, the implication is that the regional comparative advantage is sufficiently strong to overcome the slower than average industry growth rate.

Interpreting Different Referent Region Results

The three SSA are conducted relative to three different referent regions: (1) the United States as a whole, (2) the Appalachian Region, and (3) the region defined by the county and its neighboring counties. As such, the IM component indicates the change in industry employment that would have occurred had the industry grown at a rate equal to the difference between the industry-specific growth rate in the referent region and the overall referent-region growth rate. Likewise, the regional shift components, RS, reflect county-specific industry comparative (dis)advantages relative to those same industries in each of the three referent regions. As before, the NS label always refers to county growth that would have occurred had the county industry grown at the overall average rate of growth in the referent region.

Reporting the results for each of three referent regions enables readers to compare county performance to the United States, the Appalachian Region, and the region defined by the county and its neighboring counties. Although economic growth in Appalachia overall and by industry generally lags the rest of the United States, positive SSA components can still be useful for identifying industries that are positive contributors relative to Appalachian Region and to the more localized economy.

Selected SSA Components for Schuyler County, New York vs the U.S.

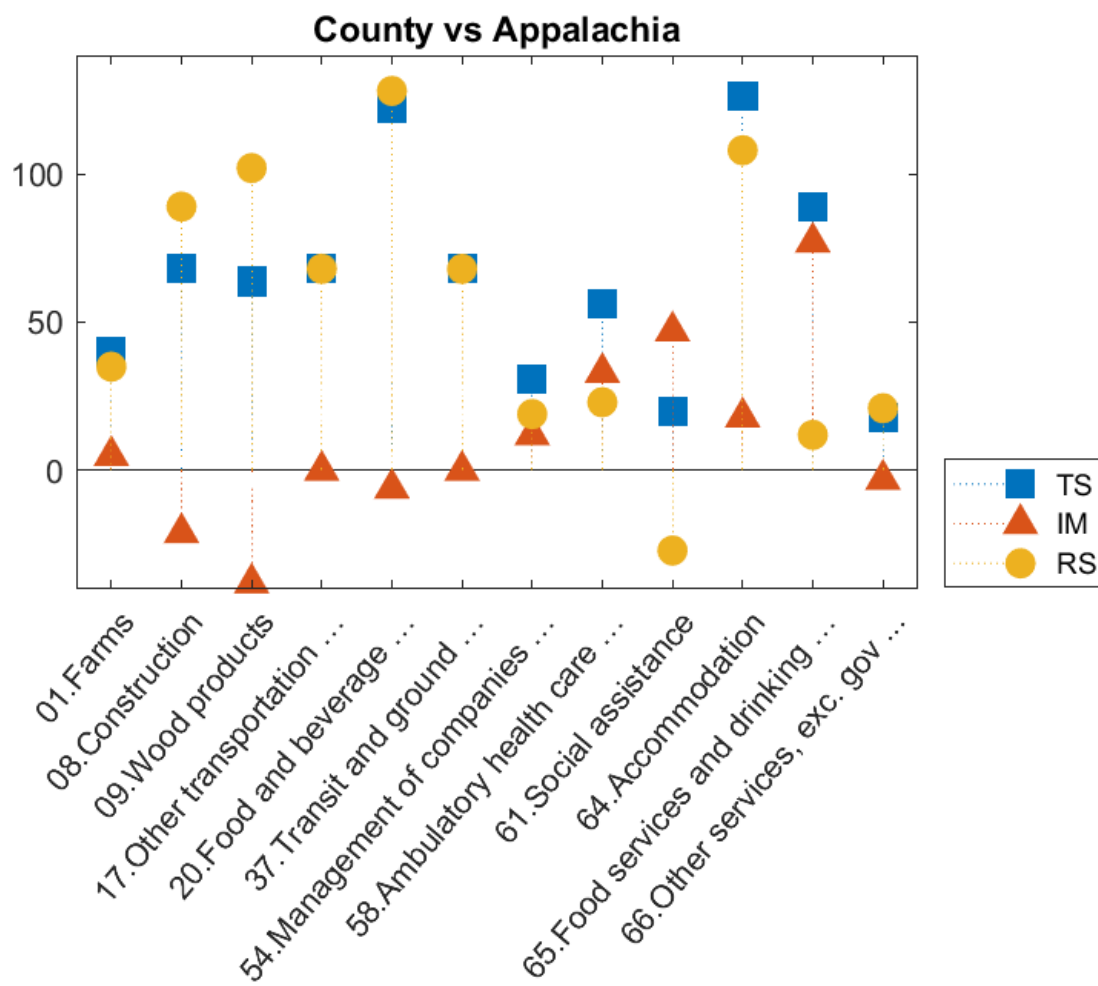


Chapter 11. Schuyler County, New York

Schuyler County, New York vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	12	29	-4	33	143
08	Construction	32	36	-35	71	355
09	Wood products	14	50	-50	100	191
17	Other transportation ...	0	68	0	68	68
20	Food and beverage ...	18	104	3	101	284
37	Transit and ground ...	0	68	0	68	68
54	Management of companies ...	3	28	5	23	54
58	Ambulatory health care ...	12	45	36	9	158
61	Social assistance	17	4	98	-94	169
64	Accommodation	10	117	2	115	217
65	Food services and drinking ...	43	46	73	-27	474
66	Other services, exc. gov ...	15	4	-10	14	152

Selected SSA Components for Schuyler County, New York vs the Appalachian Region

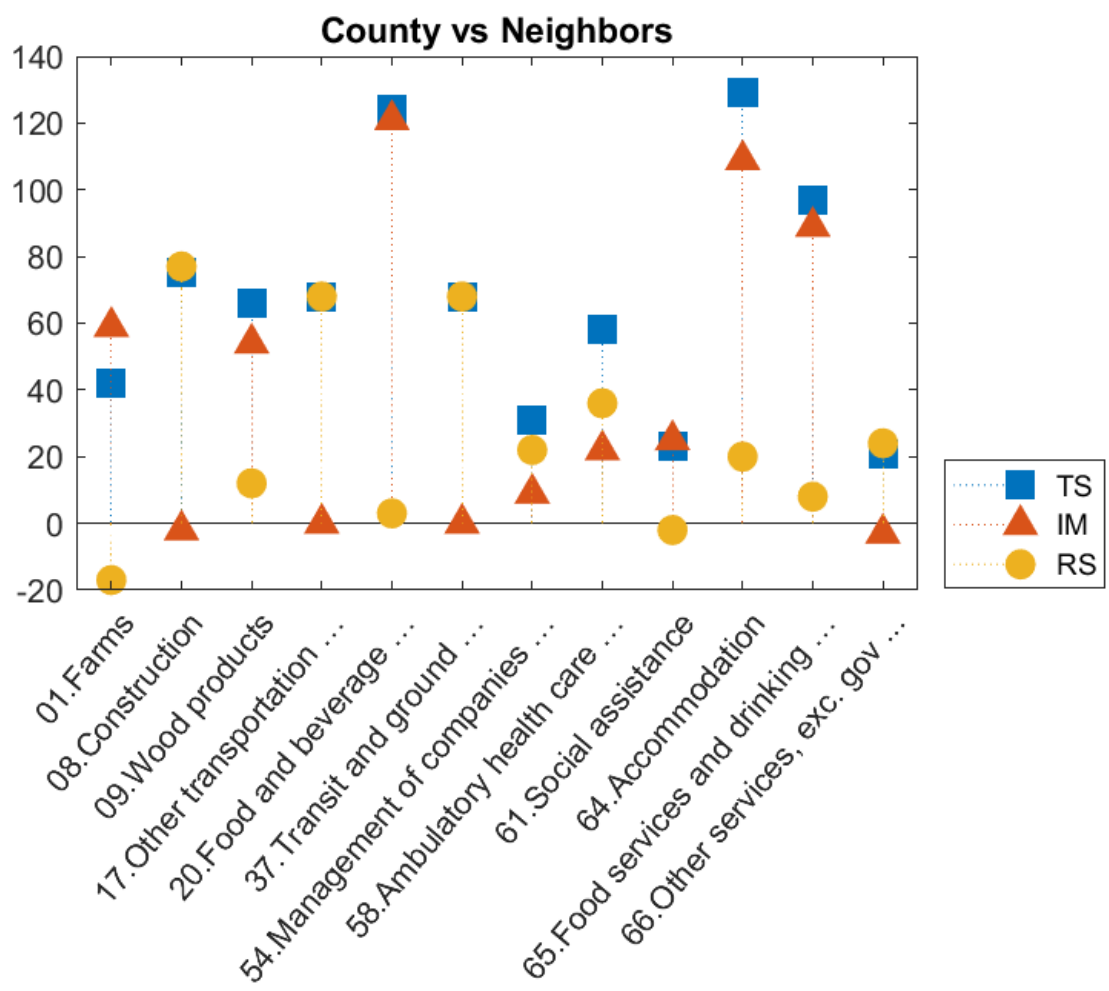


Chapter 11. Schuyler County, New York

Selected SSA Components for Schuyler County, New York vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	0	40	5	35	143
08	Construction	1	68	-21	89	355
09	Wood products	0	64	-38	102	191
17	Other transportation ...	0	68	0	68	68
20	Food and beverage ...	1	122	-6	128	284
37	Transit and ground ...	0	68	0	68	68
54	Management of companies ...	0	31	12	19	54
58	Ambulatory health care ...	0	56	33	23	158
61	Social assistance	1	20	47	-27	169
64	Accommodation	0	126	18	108	217
65	Food services and drinking ...	1	89	77	12	474
66	Other services, exc. gov ...	0	18	-3	21	152

Selected SSA Components for Schuyler County, New York vs Neighbors



Chapter 11. Schuyler County, New York

Selected SSA Components for Schuyler County, New York vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	-2	42	59	-17	143
08	Construction	-5	75	-2	77	355
09	Wood products	-2	66	54	12	191
17	Other transportation ...	-0	68	0	68	68
20	Food and beverage ...	-3	124	121	3	284
37	Transit and ground ...	-0	68	0	68	68
54	Management of companies ...	-0	31	9	22	54
58	Ambulatory health care ...	-2	58	22	36	158
61	Social assistance	-3	23	25	-2	169
64	Accommodation	-2	129	109	20	217
65	Food services and drinking ...	-7	97	89	8	474
66	Other services, exc. gov ...	-2	21	-3	24	152

Chapter 12. Steuben County, New York

Employment in Steuben County, New York, grew from 36,605 in 2005 to 37,097 in 2018, for a change of 492, or 1.34%. Readers should compare the employment values in the tables below to total county employment.

The first table shows the referent region share (NS), the Total Share (TS), Industry Mix (IM), and Regional Shift (RS) job values for the county. The summary values shown represent sums of individual industry component values for all county industries. To be clear, the SSA components always refer to the county that is being compared to the referent region, and the NS label always refers to the county growth that would have taken place had it matched overall average growth in the referent region, which can be the United States, the Appalachian Region, or the county and its neighbors. The largest and smallest NS components in the summary table correspond to the fastest and slowest growing referent regions.

Summary Results for Steuben County, New York

County Summary	NS	TS	IM	RS
vs. U.S.	4,124	-3,639	4	-3,643
vs. Appalachia	123	369	1,012	-643
vs. Neighbors	-780	1,275	754	521

The next table displays the group membership categories for industries belonging to any of the first three categories (signifying a positive total share value) for the Appalachian Region or the county relative to the United States — i.e., A, B, C, I, II, or III — and for the county relative to the Appalachian Region or its neighboring counties — i.e., a, b, c, i, ii, or iii. These are the industries that have passed the first screening step, as they have proven to be positive contributors to either the Appalachian Region in comparison to the United States as a whole, or to Steuben County, New York, in comparison to at least one of the three referent regions.

Chapter 12. Steuben County, New York

Industry Group Membership for Steuben County, New York

Industry	Name	Group Membership	Type A or B or C	Type I or II or III	Type a or b or c	Type i or ii or iii
01	Farms	F III a i	no	yes	yes	yes
16	Motor vehicles, bodies ...	C III b iii	yes	yes	yes	yes
28	Wholesale trade	F III c i	no	yes	yes	yes
52	Computer systems design ...	B I a i	yes	yes	yes	yes
53	Miscellaneous profession ...	B I a i	yes	yes	yes	yes
54	Management of companies ...	A V b ii	yes	no	yes	yes
55	Administrative and ...	A V b ii	yes	no	yes	yes
58	Ambulatory health care ...	B II b i	yes	yes	yes	yes
61	Social assistance	B II a i	yes	yes	yes	yes
63	Amusements, gambling, ...	B I a i	yes	yes	yes	yes
64	Accommodation	A I b ii	yes	yes	yes	yes
65	Food services and drinking ...	B II b ii	yes	yes	yes	yes

Notes:

Groups A, B, and C are from Appalachia vs. the United States

Groups I, II, and III are from Steuben County, New York vs. the United States

Groups a, b, and c are from Steuben County, New York vs. Appalachia

Groups i, ii, and iii are from Steuben County, New York vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Steuben County, New York, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Steuben County, New York, and its neighboring counties. The results for each of the three analyses are presented both visually and in tabular form.

The chart provides a visual display of the Total Share (TS), Industry Mix (IM), and Regional Shift (RS) components of change. The IM indicates the change in industry employment that would have occurred had the industry grown at a rate equal to the difference between the industry-specific growth rate in the referent region and the overall referent-region growth rate. So, a positive value here also means that the industry is growing more rapidly than the overall growth rate for the referent region. The RS component measures the actual employment change in the industry in Steuben County, New York, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Steuben County, New York, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

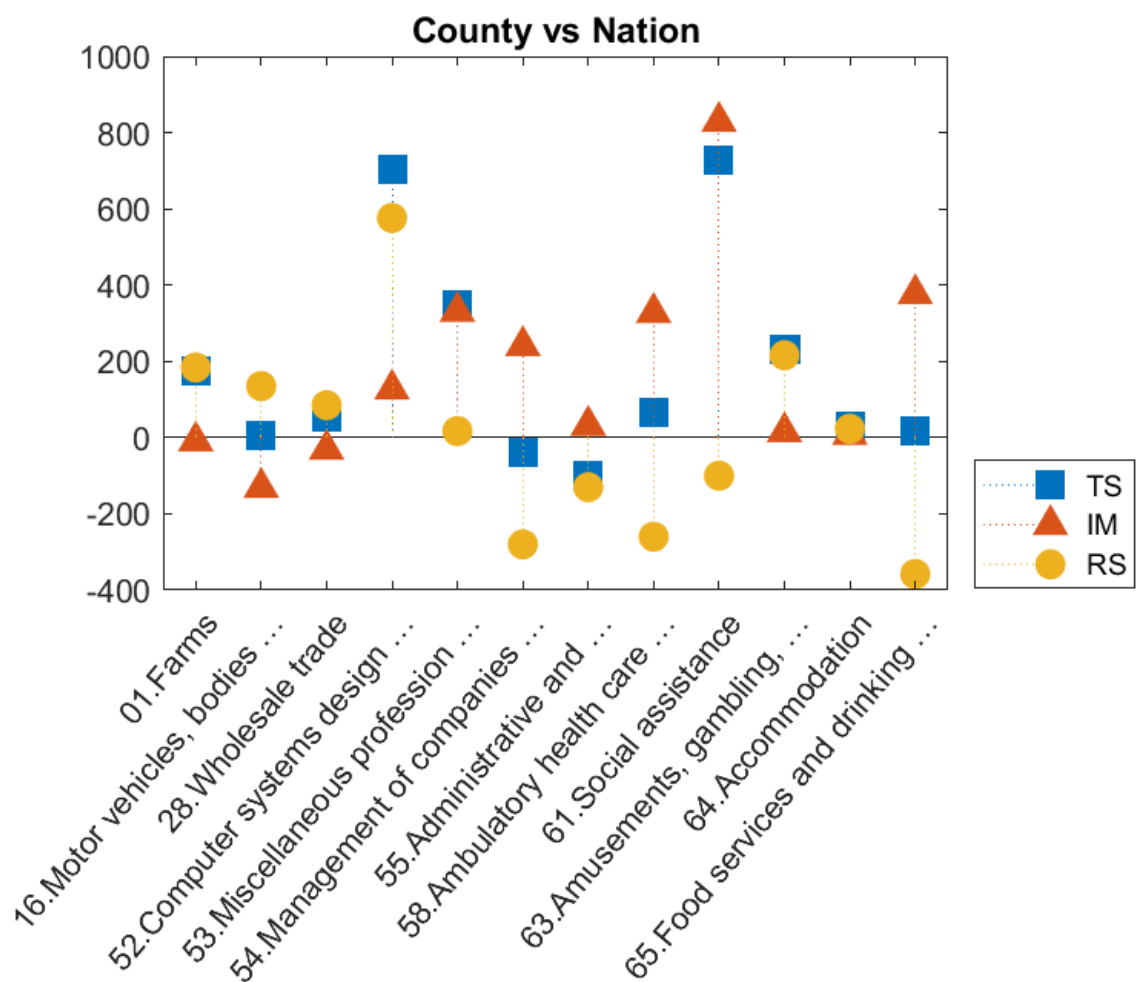
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Steuben County, New York, is still growing at a faster rate than the overall referent region average. Likewise, when IM is negative and RS is positive, the implication is that the regional comparative advantage is sufficiently strong to overcome the slower than average industry growth rate.

Interpreting Different Referent Region Results

The three SSA are conducted relative to three different referent regions: (1) the United States as a whole, (2) the Appalachian Region, and (3) the region defined by the county and its neighboring counties. As such, the IM component indicates the change in industry employment that would have occurred had the industry grown at a rate equal to the difference between the industry-specific growth rate in the referent region and the overall referent-region growth rate. Likewise, the regional shift components, RS, reflect county-specific industry comparative (dis)advantages relative to those same industries in each of the three referent regions. As before, the NS label always refers to county growth that would have occurred had the county industry grown at the overall average rate of growth in the referent region.

Reporting the results for each of three referent regions enables readers to compare county performance to the United States, the Appalachian Region, and the region defined by the county and its neighboring counties. Although economic growth in Appalachia overall and by industry generally lags the rest of the United States, positive SSA components can still be useful for identifying industries that are positive contributors relative to Appalachian Region and to the more localized economy.

Selected SSA Components for Steuben County, New York vs the U.S.

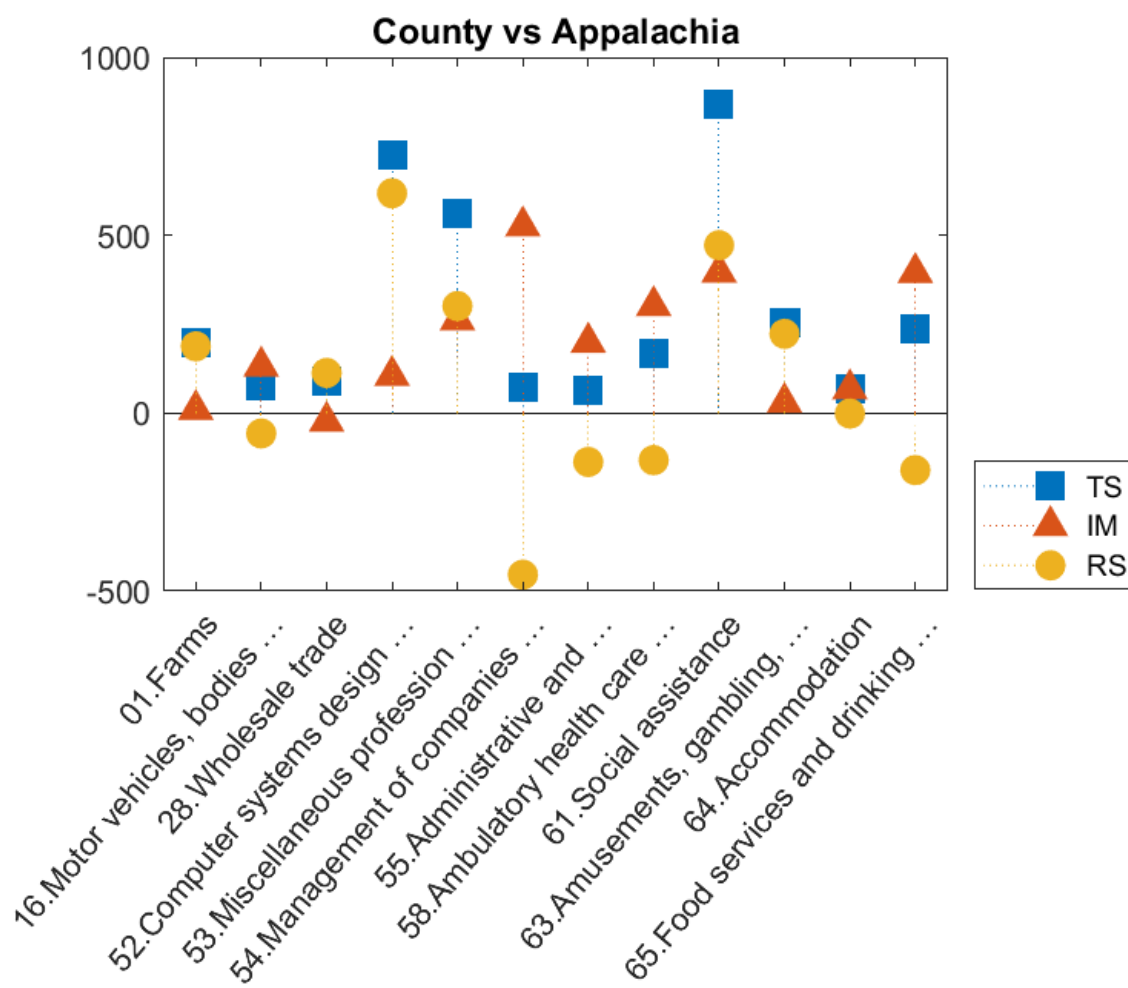


Chapter 12. Steuben County, New York

Steuben County, New York vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	25	175	-9	184	418
16	Motor vehicles, bodies ...	73	4	-131	135	725
28	Wholesale trade	36	54	-31	85	413
52	Computer systems design ...	22	703	127	576	916
53	Miscellaneous profession ...	221	348	331	17	2,531
54	Management of companies ...	116	-39	241	-280	1,102
55	Administrative and ...	165	-98	32	-130	1,528
58	Ambulatory health care ...	105	68	328	-260	1,107
61	Social assistance	143	729	829	-100	2,136
63	Amusements, gambling, ...	22	231	15	216	451
64	Accommodation	38	31	8	23	406
65	Food services and drinking ...	223	19	377	-358	2,219

Selected SSA Components for Steuben County, New York vs the Appalachian Region

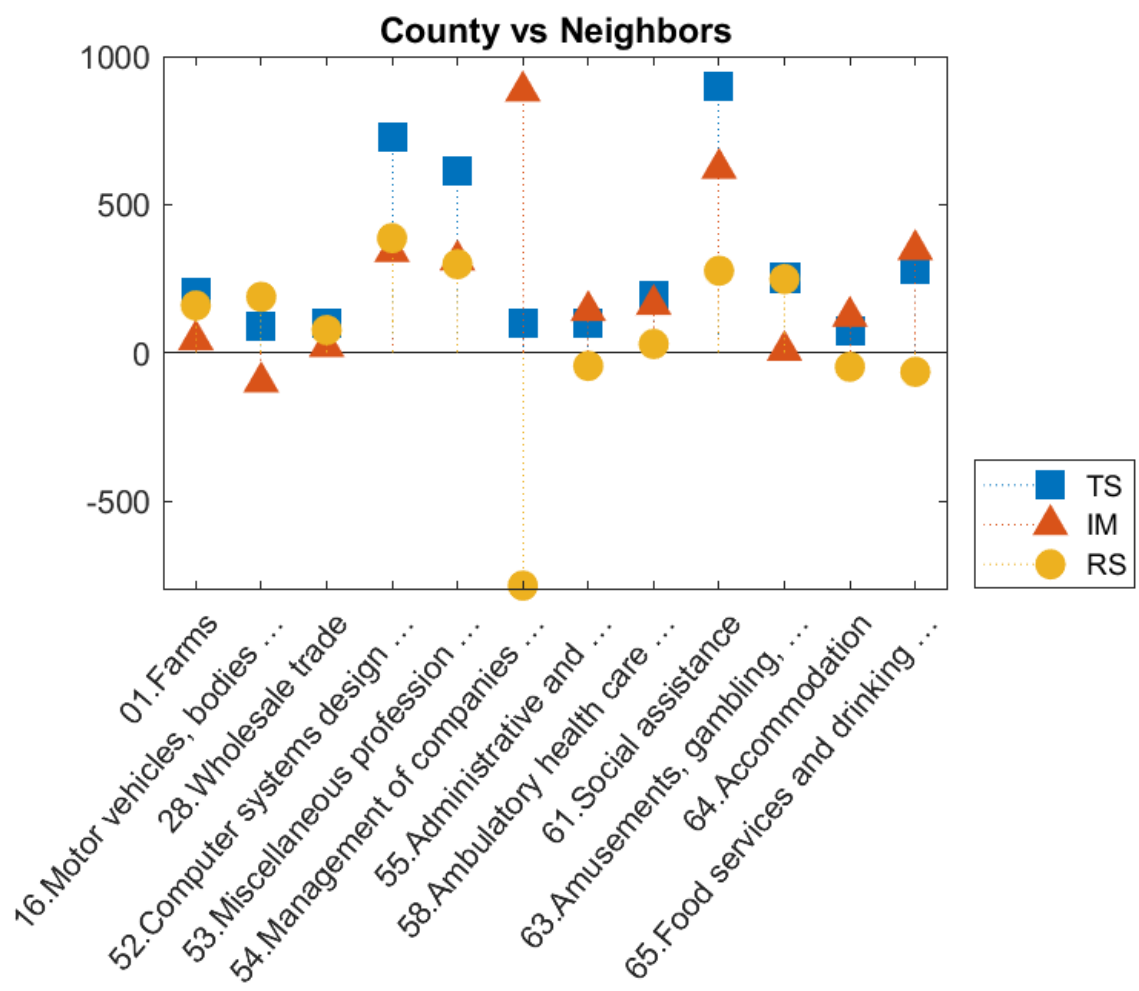


Chapter 12. Steuben County, New York

Selected SSA Components for Steuben County, New York vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	1	198	10	188	418
16	Motor vehicles, bodies ...	2	75	132	-57	725
28	Wholesale trade	1	90	-23	113	413
52	Computer systems design ...	1	724	106	618	916
53	Miscellaneous profession ...	7	563	262	301	2,531
54	Management of companies ...	3	72	526	-454	1,102
55	Administrative and ...	5	62	199	-137	1,528
58	Ambulatory health care ...	3	170	302	-132	1,107
61	Social assistance	4	868	396	472	2,136
63	Amusements, gambling, ...	1	253	30	223	451
64	Accommodation	1	67	68	-1	406
65	Food services and drinking ...	7	235	395	-160	2,219

Selected SSA Components for Steuben County, New York vs Neighbors



Chapter 12. Steuben County, New York

Selected SSA Components for Steuben County, New York vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	-5	204	44	160	418
16	Motor vehicles, bodies ...	-14	91	-98	189	725
28	Wholesale trade	-7	98	21	77	413
52	Computer systems design ...	-4	728	341	387	916
53	Miscellaneous profession ...	-42	612	313	299	2,531
54	Management of companies ...	-22	98	883	-785	1,102
55	Administrative and ...	-31	98	142	-44	1,528
58	Ambulatory health care ...	-20	193	163	30	1,107
61	Social assistance	-27	899	622	277	2,136
63	Amusements, gambling, ...	-4	257	8	249	451
64	Accommodation	-7	76	123	-47	406
65	Food services and drinking ...	-42	284	348	-64	2,219

Chapter 13. Tioga County, New York

Employment in Tioga County, New York, declined from 13,815 in 2005 to 13,372 in 2018, for a change of -443, or -3.21%. Readers should compare the employment values in the tables below to total county employment.

The first table shows the referent region share (NS), the Total Share (TS), Industry Mix (IM), and Regional Shift (RS) job values for the county. The summary values shown represent sums of individual industry component values for all county industries. To be clear, the SSA components always refer to the county that is being compared to the referent region, and the NS label always refers to the county growth that would have taken place had it matched overall average growth in the referent region, which can be the United States, the Appalachian Region, or the county and its neighbors. The largest and smallest NS components in the summary table correspond to the fastest and slowest growing referent regions.

Summary Results for Tioga County, New York

County Summary	NS	TS	IM	RS
vs. U.S.	1,556	-2,000	-1,214	-786
vs. Appalachia	43	-491	-1,046	555
vs. Neighbors	-590	143	-1,354	1,497

The next table displays the group membership categories for industries belonging to any of the first three categories (signifying a positive total share value) for the Appalachian Region or the county relative to the United States — i.e., A, B, C, I, II, or III — and for the county relative to the Appalachian Region or its neighboring counties — i.e., a, b, c, i, ii, or iii. These are the industries that have passed the first screening step, as they have proven to be positive contributors to either the Appalachian Region in comparison to the United States as a whole, or to Tioga County, New York, in comparison to at least one of the three referent regions.

Chapter 13. Tioga County, New York

Industry Group Membership for Tioga County, New York

Industry	Name	Group Membership	Type A or B or C	Type I or II or III	Type a or b or c	Type i or ii or iii
01	Farms	F III a i	no	yes	yes	yes
09	Wood products	F III c iii	no	yes	yes	yes
12	Fabricated metal products	F III c iii	no	yes	yes	yes
29	Motor vehicle and parts ...	F III a iii	no	yes	yes	yes
40	Warehousing and storage	E I a iii	no	yes	yes	yes
52	Computer systems design ...	B I a i	yes	yes	yes	yes
53	Miscellaneous profession ...	B V e ii	yes	no	no	yes
55	Administrative and ...	A II b iii	yes	yes	yes	yes
60	Nursing and residential ...	E I a i	no	yes	yes	yes
61	Social assistance	B V b ii	yes	no	yes	yes
64	Accommodation	A I a i	yes	yes	yes	yes
65	Food services and drinking ...	B I a i	yes	yes	yes	yes

Notes:

Groups A, B, and C are from Appalachia vs. the United States

Groups I, II, and III are from Tioga County, New York vs. the United States

Groups a, b, and c are from Tioga County, New York vs. Appalachia

Groups i, ii, and iii are from Tioga County, New York vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Tioga County, New York, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Tioga County, New York, and its neighboring counties. The results for each of the three analyses are presented both visually and in tabular form.

The chart provides a visual display of the Total Share (TS), Industry Mix (IM), and Regional Shift (RS) components of change. The IM indicates the change in industry employment that would have occurred had the industry grown at a rate equal to the difference between the industry-specific growth rate in the referent region and the overall referent-region growth rate. So, a positive value here also means that the industry is growing more rapidly than the overall growth rate for the referent region. The RS component measures the actual employment change in the industry in Tioga County, New York, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Tioga County, New York, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

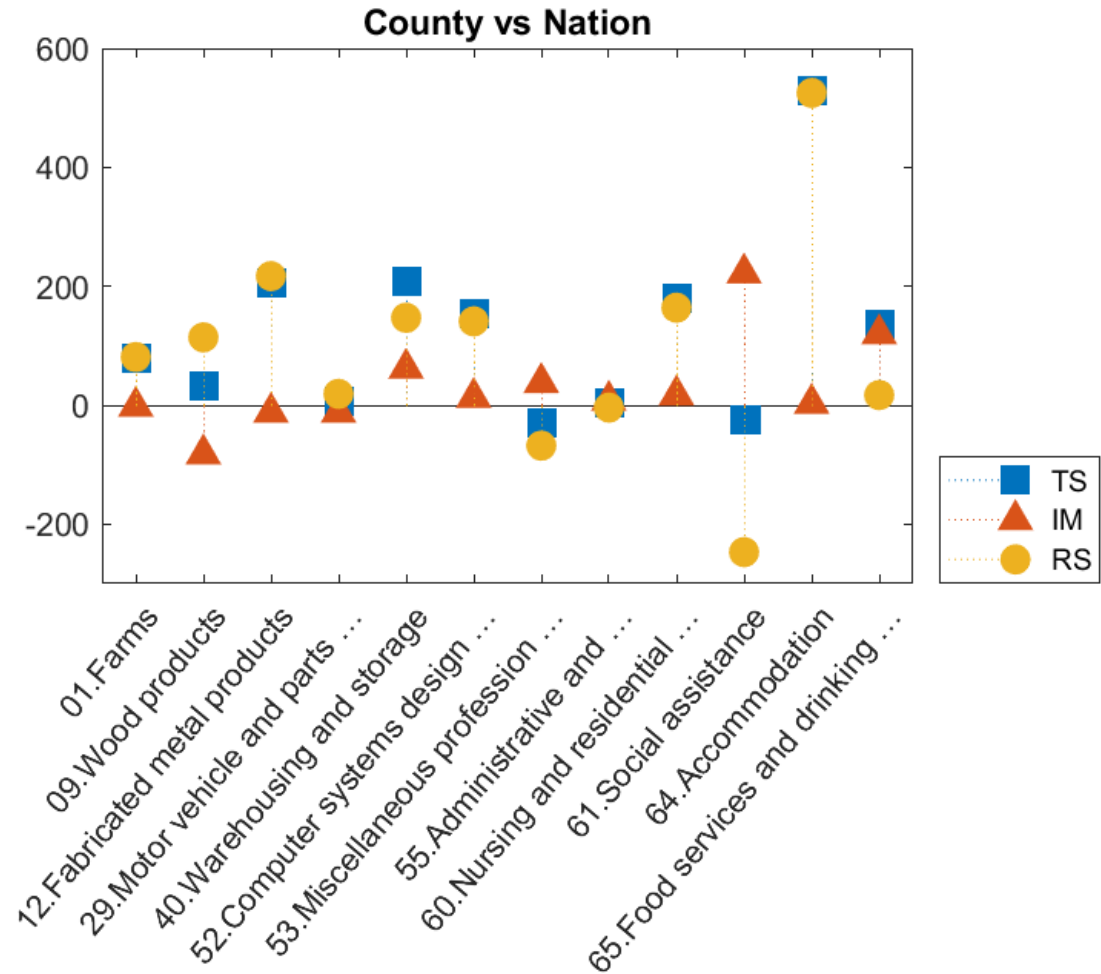
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Tioga County, New York, is still growing at a faster rate than the overall referent region average. Likewise, when IM is negative and RS is positive, the implication is that the regional comparative advantage is sufficiently strong to overcome the slower than average industry growth rate.

Interpreting Different Referent Region Results

The three SSA are conducted relative to three different referent regions: (1) the United States as a whole, (2) the Appalachian Region, and (3) the region defined by the county and its neighboring counties. As such, the IM component indicates the change in industry employment that would have occurred had the industry grown at a rate equal to the difference between the industry-specific growth rate in the referent region and the overall referent-region growth rate. Likewise, the regional shift components, RS, reflect county-specific industry comparative (dis)advantages relative to those same industries in each of the three referent regions. As before, the NS label always refers to county growth that would have occurred had the county industry grown at the overall average rate of growth in the referent region.

Reporting the results for each of three referent regions enables readers to compare county performance to the United States, the Appalachian Region, and the region defined by the county and its neighboring counties. Although economic growth in Appalachia overall and by industry generally lags the rest of the United States, positive SSA components can still be useful for identifying industries that are positive contributors relative to Appalachian Region and to the more localized economy.

Selected SSA Components for Tioga County, New York vs the U.S.

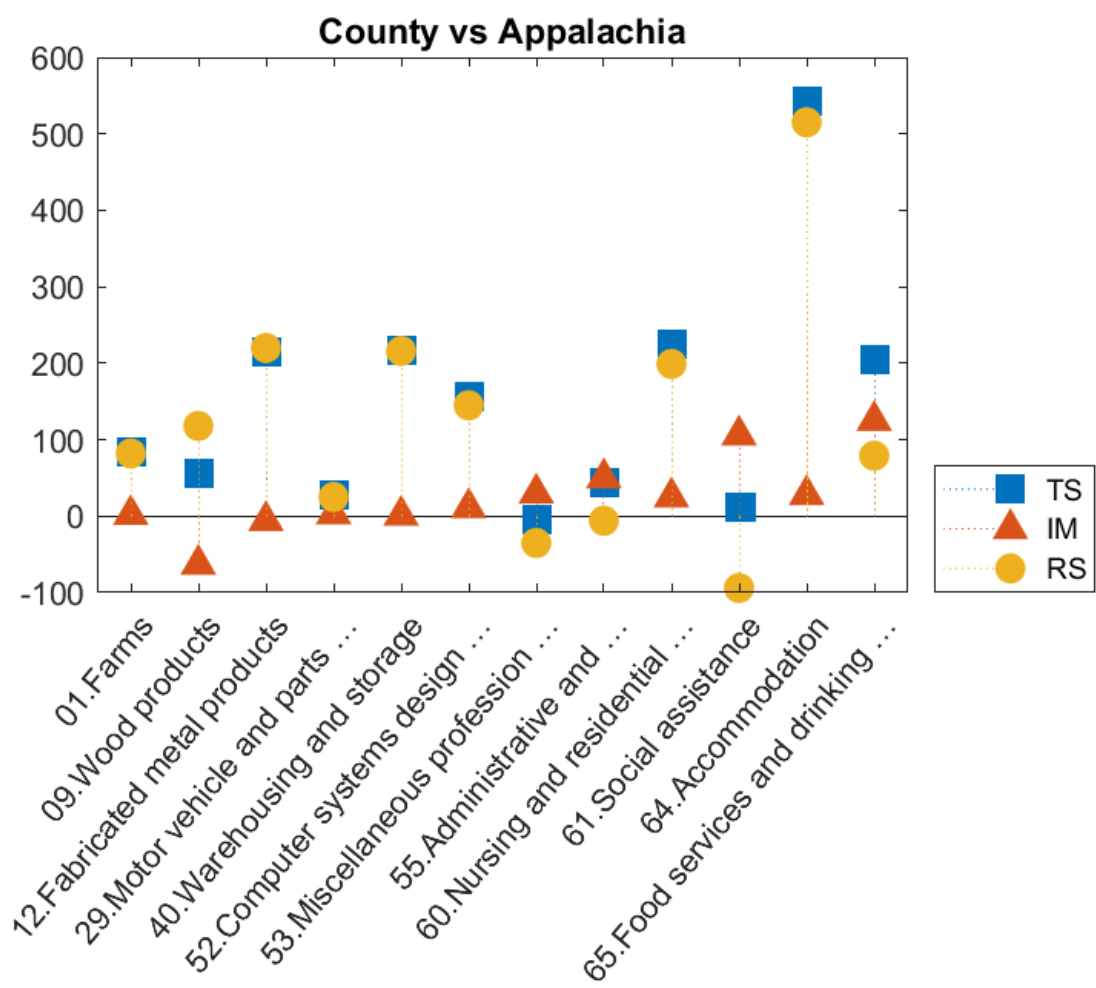


Chapter 13. Tioga County, New York

Tioga County, New York vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	6	79	-2	81	136
09	Wood products	24	32	-82	114	266
12	Fabricated metal products	9	205	-12	217	297
29	Motor vehicle and parts ...	22	7	-12	19	223
40	Warehousing and storage	8	209	62	147	292
52	Computer systems design ...	2	154	13	141	175
53	Miscellaneous profession ...	25	-30	38	-68	219
55	Administrative and ...	41	4	8	-4	413
60	Nursing and residential ...	44	181	17	164	620
61	Social assistance	38	-25	222	-247	351
64	Accommodation	15	528	3	525	679
65	Food services and drinking ...	71	137	120	17	834

Selected SSA Components for Tioga County, New York vs the Appalachian Region

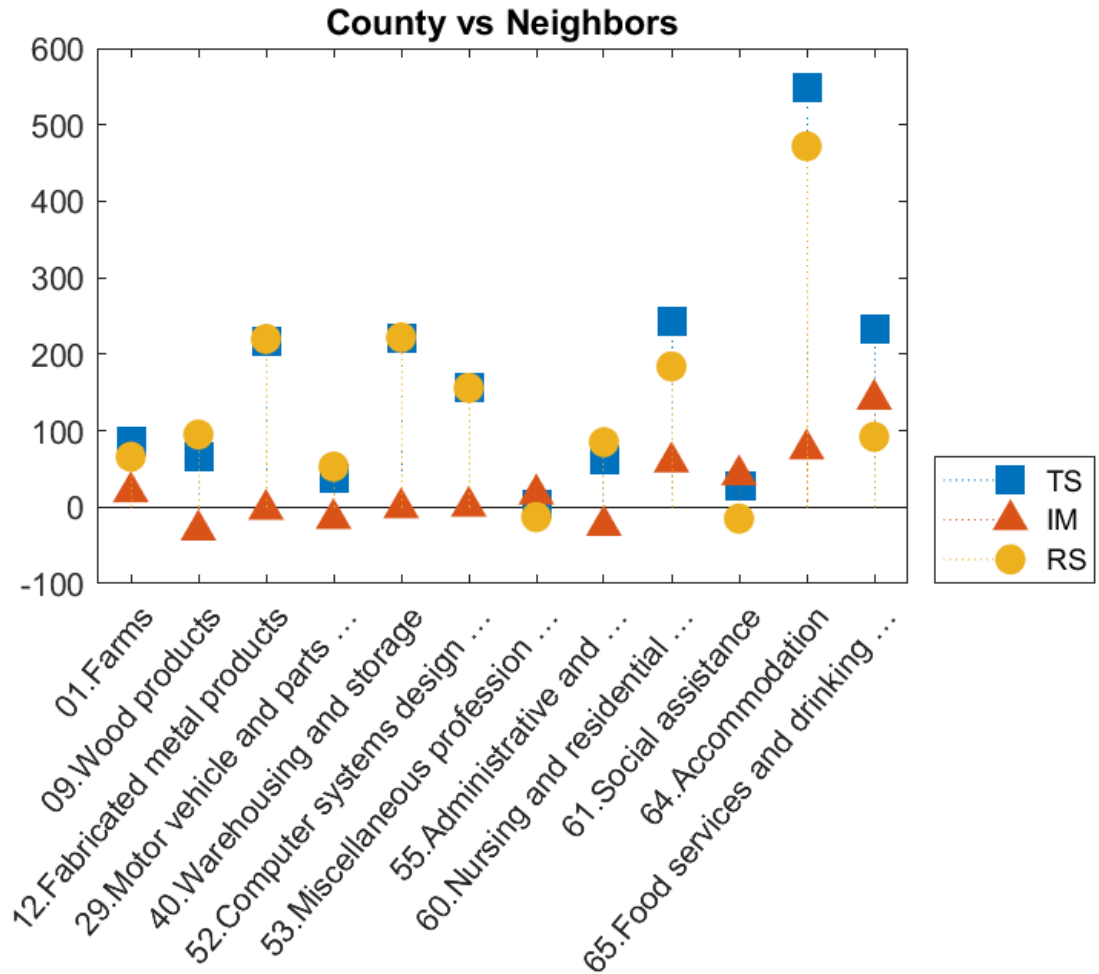


Chapter 13. Tioga County, New York

Selected SSA Components for Tioga County, New York vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	0	84	2	82	136
09	Wood products	1	55	-63	118	266
12	Fabricated metal products	0	214	-6	220	297
29	Motor vehicle and parts ...	1	28	3	25	223
40	Warehousing and storage	0	217	1	216	292
52	Computer systems design ...	0	156	11	145	175
53	Miscellaneous profession ...	1	-5	30	-35	219
55	Administrative and ...	1	44	50	-6	413
60	Nursing and residential ...	1	224	25	199	620
61	Social assistance	1	12	106	-94	351
64	Accommodation	0	543	28	515	679
65	Food services and drinking ...	2	204	125	79	834

Selected SSA Components for Tioga County, New York vs Neighbors



Chapter 13. Tioga County, New York

Selected SSA Components for Tioga County, New York vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	-2	86	20	66	136
09	Wood products	-9	65	-30	95	266
12	Fabricated metal products	-4	217	-3	220	297
29	Motor vehicle and parts ...	-8	38	-15	53	223
40	Warehousing and storage	-3	221	-1	222	292
52	Computer systems design ...	-1	157	1	156	175
53	Miscellaneous profession ...	-10	4	17	-13	219
55	Administrative and ...	-16	61	-24	85	413
60	Nursing and residential ...	-17	243	59	184	620
61	Social assistance	-14	27	42	-15	351
64	Accommodation	-6	548	76	472	679
65	Food services and drinking ...	-27	233	141	92	834

Chapter 14. Tompkins County, New York

Employment in Tompkins County, New York, grew from 49,850 in 2005 to 50,586 in 2018, for a change of 736, or 1.48%. Readers should compare the employment values in the tables below to total county employment.

The first table shows the referent region share (NS), the Total Share (TS), Industry Mix (IM), and Regional Shift (RS) job values for the county. The summary values shown represent sums of individual industry component values for all county industries. To be clear, the SSA components always refer to the county that is being compared to the referent region, and the NS label always refers to the county growth that would have taken place had it matched overall average growth in the referent region, which can be the United States, the Appalachian Region, or the county and its neighbors. The largest and smallest NS components in the summary table correspond to the fastest and slowest growing referent regions.

Summary Results for Tompkins County, New York

County Summary	NS	TS	IM	RS
vs. U.S.	5,620	-4,887	200	-5,087
vs. Appalachia	168	568	1,443	-875
vs. Neighbors	-911	1,651	-42	1,693

The next table displays the group membership categories for industries belonging to any of the first three categories (signifying a positive total share value) for the Appalachian Region or the county relative to the United States — i.e., A, B, C, I, II, or III — and for the county relative to the Appalachian Region or its neighboring counties — i.e., a, b, c, i, ii, or iii. These are the industries that have passed the first screening step, as they have proven to be positive contributors to either the Appalachian Region in comparison to the United States as a whole, or to Tompkins County, New York, in comparison to at least one of the three referent regions.

Chapter 14. Tompkins County, New York

Industry Group Membership for Tompkins County, New York

Industry	Name	Group Membership	Type A or B or C	Type I or II or III	Type a or b or c	Type i or ii or iii
31	General merchandise ...	F III c i	no	yes	yes	yes
52	Computer systems design ...	B II b i	yes	yes	yes	yes
53	Miscellaneous profession ...	B V b i	yes	no	yes	yes
55	Administrative and ...	A I a iii	yes	yes	yes	yes
58	Ambulatory health care ...	B II b i	yes	yes	yes	yes
60	Nursing and residential ...	E II a i	no	yes	yes	yes
64	Accommodation	A I a ii	yes	yes	yes	yes
65	Food services and drinking ...	B I a i	yes	yes	yes	yes
66	Other services, exc. gov ...	F III c i	no	yes	yes	yes

Notes:

Groups A, B, and C are from Appalachia vs. the United States

Groups I, II, and III are from Tompkins County, New York vs. the United States

Groups a, b, and c are from Tompkins County, New York vs. Appalachia

Groups i, ii, and iii are from Tompkins County, New York vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Tompkins County, New York, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Tompkins County, New York, and its neighboring counties. The results for each of the three analyses are presented both visually and in tabular form.

The chart provides a visual display of the Total Share (TS), Industry Mix (IM), and Regional Shift (RS) components of change. The IM indicates the change in industry employment that would have occurred had the industry grown at a rate equal to the difference between the industry-specific growth rate in the referent region and the overall referent-region growth rate. So, a positive value here also means that the industry is growing more rapidly than the overall growth rate for the referent region. The RS component measures the actual employment change in the industry in Tompkins County, New York, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Tompkins County, New York, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

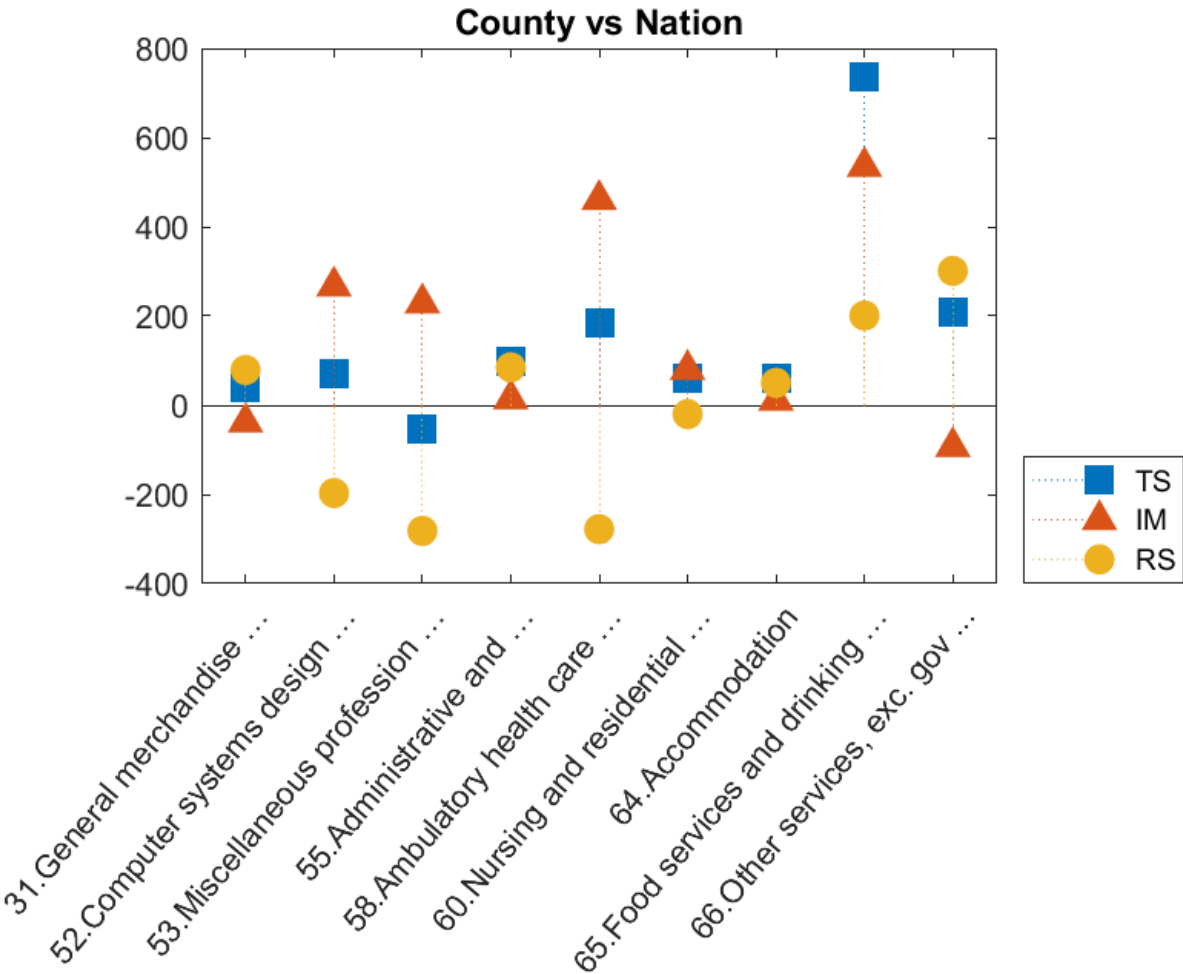
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Tompkins County, New York, is still growing at a faster rate than the overall referent region average. Likewise, when IM is negative and RS is positive, the implication is that the regional comparative advantage is sufficiently strong to overcome the slower than average industry growth rate.

Interpreting Different Referent Region Results

The three SSA are conducted relative to three different referent regions: (1) the United States as a whole, (2) the Appalachian Region, and (3) the region defined by the county and its neighboring counties. As such, the IM component indicates the change in industry employment that would have occurred had the industry grown at a rate equal to the difference between the industry-specific growth rate in the referent region and the overall referent-region growth rate. Likewise, the regional shift components, RS, reflect county-specific industry comparative (dis)advantages relative to those same industries in each of the three referent regions. As before, the NS label always refers to county growth that would have occurred had the county industry grown at the overall average rate of growth in the referent region.

Reporting the results for each of three referent regions enables readers to compare county performance to the United States, the Appalachian Region, and the region defined by the county and its neighboring counties. Although economic growth in Appalachia overall and by industry generally lags the rest of the United States, positive SSA components can still be useful for identifying industries that are positive contributors relative to Appalachian Region and to the more localized economy.

Selected SSA Components for Tompkins County, New York vs the U.S.

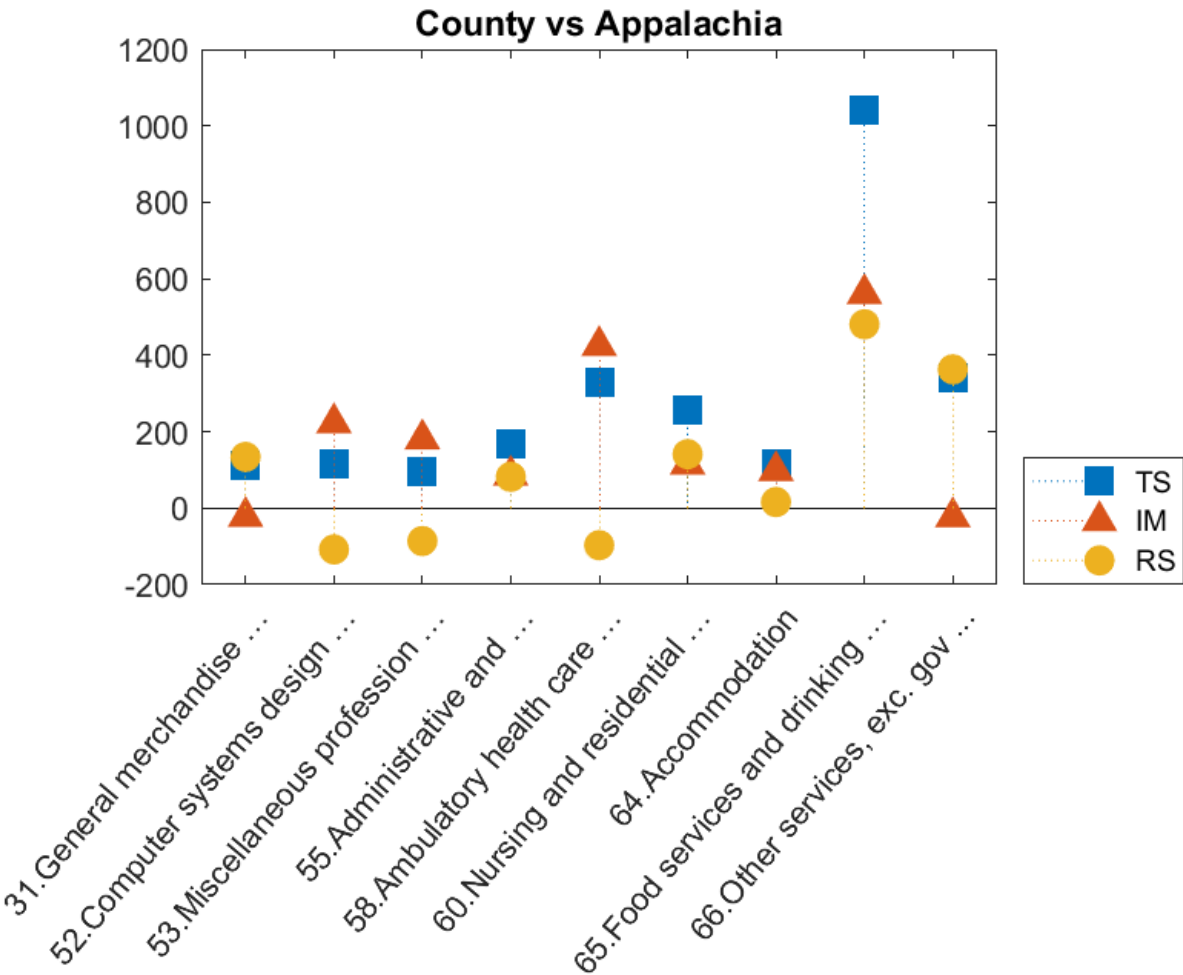


Chapter 14. Tompkins County, New York

Tompkins County, New York vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
31	General merchandise ...	73	41	-38	79	762
52	Computer systems design ...	46	70	267	-197	521
53	Miscellaneous profession ...	153	-53	229	-282	1,456
55	Administrative and ...	71	99	14	85	800
58	Ambulatory health care ...	148	183	461	-278	1,647
60	Nursing and residential ...	203	60	80	-20	2,063
64	Accommodation	55	61	11	50	600
65	Food services and drinking ...	316	736	535	201	3,858
66	Other services, exc. gov ...	136	208	-93	301	1,551

Selected SSA Components for Tompkins County, New York vs the Appalachian Region

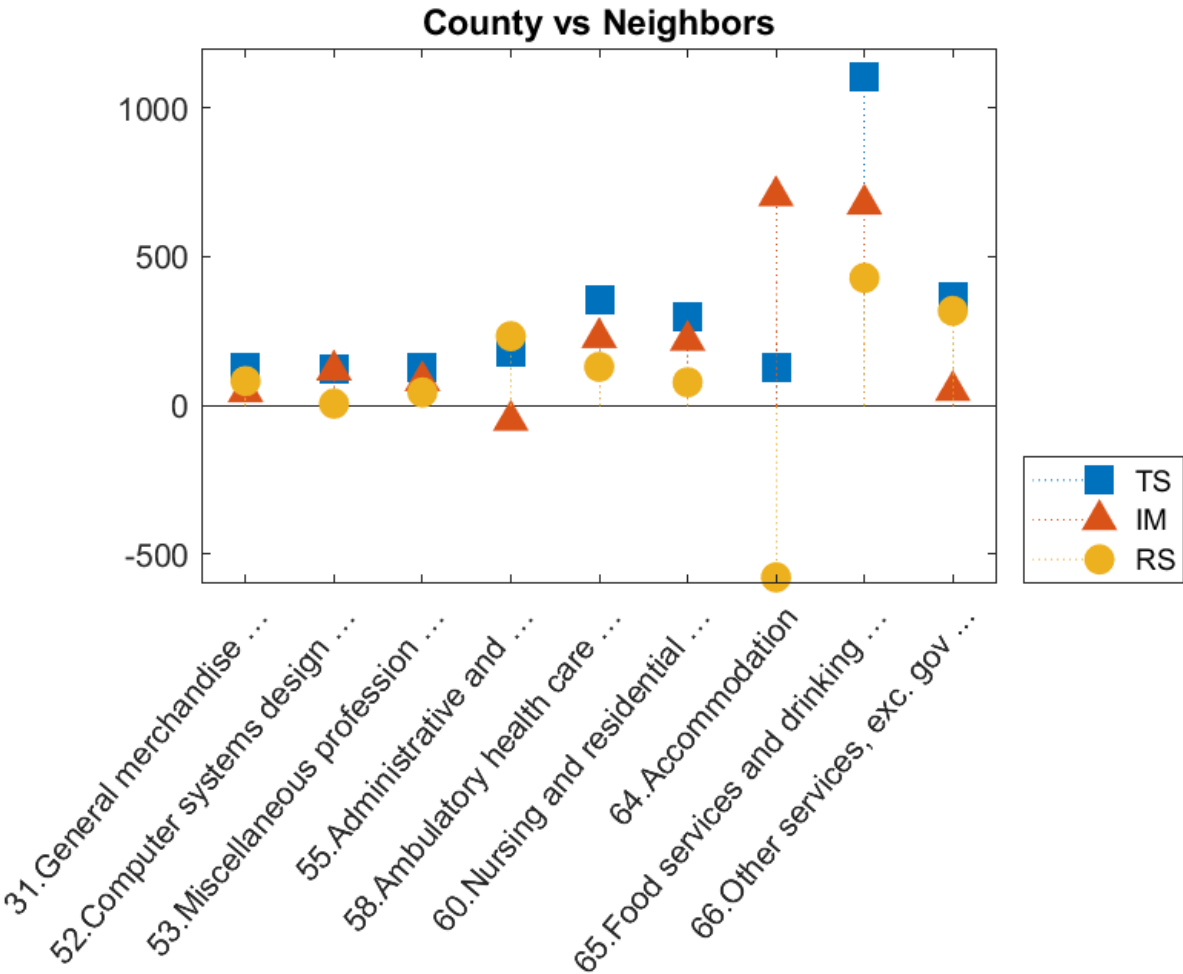


Chapter 14. Tompkins County, New York

Selected SSA Components for Tompkins County, New York vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
31	General merchandise ...	2	112	-22	134	762
52	Computer systems design ...	1	115	223	-108	521
53	Miscellaneous profession ...	5	95	181	-86	1,456
55	Administrative and ...	2	168	86	82	800
58	Ambulatory health care ...	4	328	425	-97	1,647
60	Nursing and residential ...	6	256	115	141	2,063
64	Accommodation	2	114	98	16	600
65	Food services and drinking ...	10	1,042	561	481	3,858
66	Other services, exc. gov ...	4	340	-23	363	1,551

Selected SSA Components for Tompkins County, New York vs Neighbors



Chapter 14. Tompkins County, New York

Selected SSA Components for Tompkins County, New York vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
31	General merchandise ...	-12	126	45	81	762
52	Computer systems design ...	-7	123	118	5	521
53	Miscellaneous profession ...	-25	125	82	43	1,456
55	Administrative and ...	-12	181	-51	232	800
58	Ambulatory health care ...	-24	356	227	129	1,647
60	Nursing and residential ...	-33	295	218	77	2,063
64	Accommodation	-9	125	704	-579	600
65	Food services and drinking ...	-51	1,104	676	428	3,858
66	Other services, exc. gov ...	-22	366	49	317	1,551