Supplementary Document 9

Shift-Share Analysis: Pennsylvania, 2005 - 2018

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

Randall Jackson and Peter Jarosi

11-Jun-2020

Table of Contents

Chapter 1. Allegheny County, Pennsylvania	1
Chapter 2. Armstrong County, Pennsylvania	10
Chapter 3. Beaver County, Pennsylvania	19
Chapter 4. Bedford County, Pennsylvania	28
Chapter 5. Blair County, Pennsylvania	37
Chapter 6. Bradford County, Pennsylvania	46
Chapter 7. Butler County, Pennsylvania	55
Chapter 8. Cambria County, Pennsylvania	64
Chapter 9. Cameron County, Pennsylvania	73
Chapter 10. Carbon County, Pennsylvania	82
Chapter 11. Centre County, Pennsylvania	91
Chapter 12. Clarion County, Pennsylvania	100
Chapter 13. Clearfield County, Pennsylvania	109
Chapter 14. Clinton County, Pennsylvania	118
Chapter 15. Columbia County, Pennsylvania	127
Chapter 16. Crawford County, Pennsylvania	136
Chapter 17. Elk County, Pennsylvania	145
Chapter 18. Erie County, Pennsylvania	154
Chapter 19. Fayette County, Pennsylvania	163
Chapter 20. Forest County, Pennsylvania	172
Chapter 21. Fulton County, Pennsylvania	181
Chapter 22. Greene County, Pennsylvania	190
Chapter 23. Huntingdon County, Pennsylvania	199
Chapter 24. Indiana County, Pennsylvania	208
Chapter 25. Jefferson County, Pennsylvania	217
Chapter 26. Juniata County, Pennsylvania	226
Chapter 27. Lackawanna County, Pennsylvania	235
Chapter 28. Lawrence County, Pennsylvania	244
Chapter 29. Luzerne County, Pennsylvania	253
Chapter 30. Lycoming County, Pennsylvania	262
Chapter 31. McKean County, Pennsylvania	271
Chapter 32. Mercer County, Pennsylvania	280
Chapter 33. Mifflin County, Pennsylvania	289
Chapter 34. Monroe County, Pennsylvania	298
Chapter 35. Montour County, Pennsylvania	307
Chapter 36. Northumberland County, Pennsylvania	316
Chapter 37. Perry County, Pennsylvania	325

Chapter 38. Pike County, Pennsylvania	334
Chapter 39. Potter County, Pennsylvania	343
Chapter 40. Schuylkill County, Pennsylvania	352
Chapter 41. Snyder County, Pennsylvania	361
Chapter 42. Somerset County, Pennsylvania	370
Chapter 43. Sullivan County, Pennsylvania	379
Chapter 44. Susquehanna County, Pennsylvania	388
Chapter 45. Tioga County, Pennsylvania	397
Chapter 46. Union County, Pennsylvania	406
Chapter 47. Venango County, Pennsylvania	415
Chapter 48. Warren County, Pennsylvania	424
Chapter 49. Washington County, Pennsylvania	433
Chapter 50. Wayne County, Pennsylvania	442
Chapter 51. Westmoreland County, Pennsylvania	451
Chapter 52. Wyoming County, Pennsylvania	460

Chapter 1. Allegheny County, Pennsylvania

Employment in Allegheny County, Pennsylvania, grew from 688,582 in 2005 to 701,606 in 2018, for a change of 13,024, or 1.89%. 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 Allegheny County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	77,651	-64,632	14,253	-78,885
vs. Appalachia	2,344	10,693	18,508	-7,815
vs. Neighbors	13,921	-906	6,381	-7,287

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 Allegheny County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Allegheny County, Pennsylvania

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
52	Computer systems design	Blaii	yes	yes	yes	yes
53	Miscellaneous profession	BIIaii	yes	yes	yes	yes
54	Management of companies	Alaii	yes	yes	yes	yes
58	Ambulatory health care	BIIai	yes	yes	yes	yes
61	Social assistance	BIIai	yes	yes	yes	yes
63	Amusements, gambling,	Blai	yes	yes	yes	yes
65	Food services and drinking	BIIbi	yes	yes	yes	yes

Notes:

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

Groups I, II, and III are from Allegheny County, Pennsylvania vs. the United States

Groups a, b, and c are from Allegheny County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Allegheny County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Allegheny County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Allegheny County, Pennsylvania, 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 Allegheny County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Allegheny County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

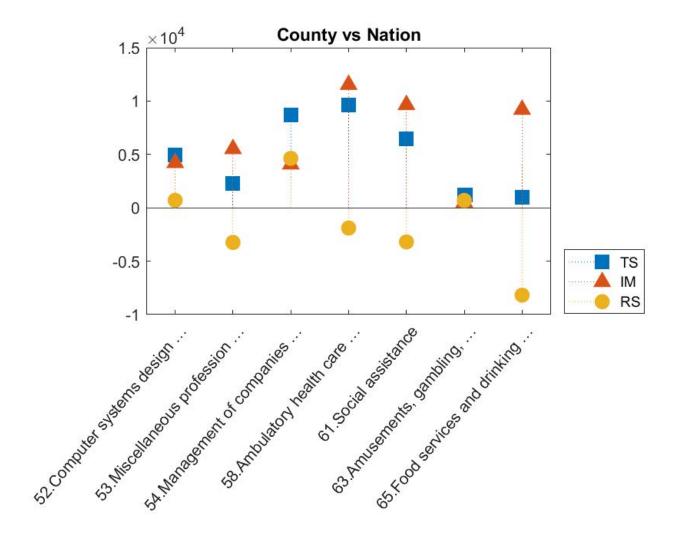
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Allegheny County, Pennsylvania, 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 Allegheny County, Pennsylvania vs the U.S.



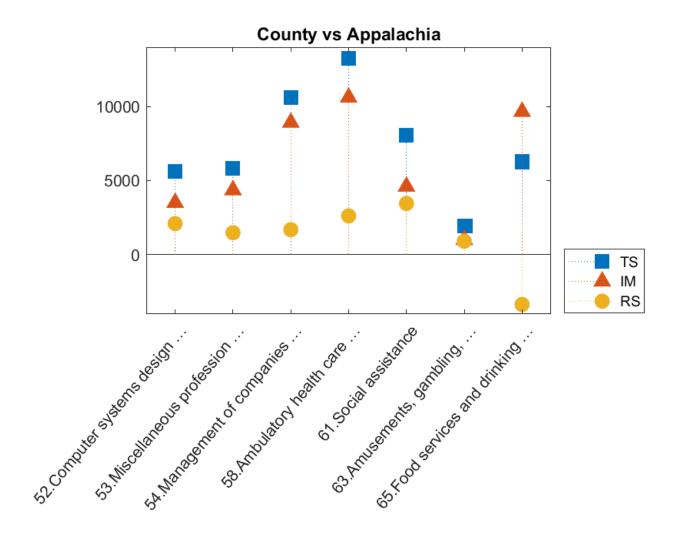
Chapter 1. Allegheny County, Pennsylvania

Allegheny County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
52	Computer systems design	720	4,916	4,215	701	12,017
53	Miscellaneous profession	3,682	2,271	5,517	-3,246	38,602
54	Management of companies	1,960	8,708	4,075	4,633	28,049
58	Ambulatory health care	3,707	9,638	11,532	-1,894	46,222
61	Social assistance	1,660	6,451	9,645	-3,194	22,826
63	Amusements, gambling,	740	1,205	514	691	8,503
65	Food services and drinking	5,444	1,019	9,202	-8,183	54,734

...

Selected SSA Components for Allegheny County, Pennsylvania vs the Appalachian Region

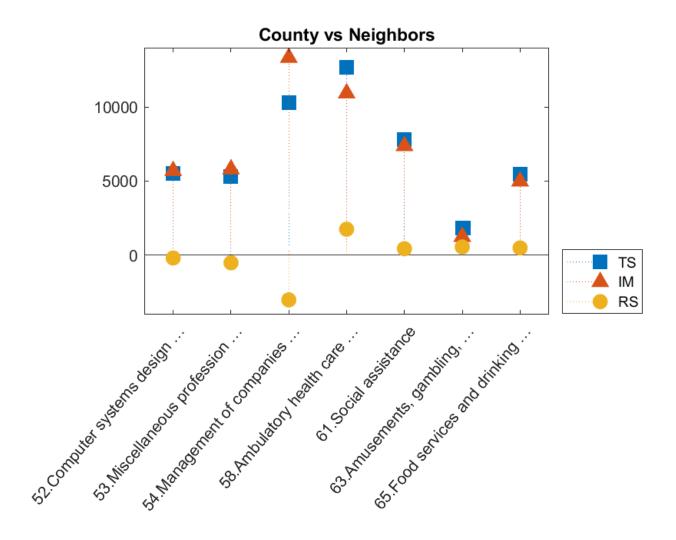


Selected SSA Components for Allegheny County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
52	Computer systems design	22	5,614	3,512	2,102	12,017
53	Miscellaneous profession	111	5,843	4,360	1,483	38,602
54	Management of companies	59	10,609	8,917	1,692	28,049
58	Ambulatory health care	112	13,234	10,614	2,620	46,222
61	Social assistance	50	8,061	4,604	3,457	22,826
63	Amusements, gambling,	22	1,922	1,007	915	8,503
65	Food services and drinking	164	6,299	9,651	-3,352	54,734

...

Selected SSA Components for Allegheny County, Pennsylvania vs Neighbors



Selected SSA Components for Allegheny County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
52	Computer systems design	129	5,506	5,694	-188	12,017
53	Miscellaneous profession	660	5,293	5,803	-510	38,602
54	Management of companies	351	10,316	13,327	-3,011	28,049
58	Ambulatory health care	665	12,681	10,927	1,754	46,222
61	Social assistance	298	7,813	7,373	440	22,826
63	Amusements, gambling,	133	1,812	1,249	563	8,503
65	Food services and drinking	976	5,486	4,991	495	54,734

...

Chapter 2. Armstrong County, Pennsylvania

Employment in Armstrong County, Pennsylvania, declined from 19,444 in 2005 to 16,505 in 2018, for a change of -2,939, or -15.12%. 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 Armstrong County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	2,192	-5,135	-254	-4,881
vs. Appalachia	63	-3,010	-306	-2,704
vs. Neighbors	130	-3,080	-712	-2,368

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 Armstrong County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Armstrong County, Pennsylvania

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
03	Oil and gas extraction	AVbii	yes	no	yes	yes
06	Support activities for	Alai	yes	yes	yes	yes
09	Wood products	F III c iii	no	yes	yes	yes
12	Fabricated metal products	FIIIci	no	yes	yes	yes
53	Miscellaneous profession	BVbii	yes	no	yes	yes
60	Nursing and residential	Elai	no	yes	yes	yes
61	Social assistance	BVbii	yes	no	yes	yes
65	Food services and drinking	BIIbi	yes	yes	yes	yes

Notes:

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

Groups I, II, and III are from Armstrong County, Pennsylvania vs. the United States

Groups a, b, and c are from Armstrong County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Armstrong County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Armstrong County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Armstrong County, Pennsylvania, 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 Armstrong County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Armstrong County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

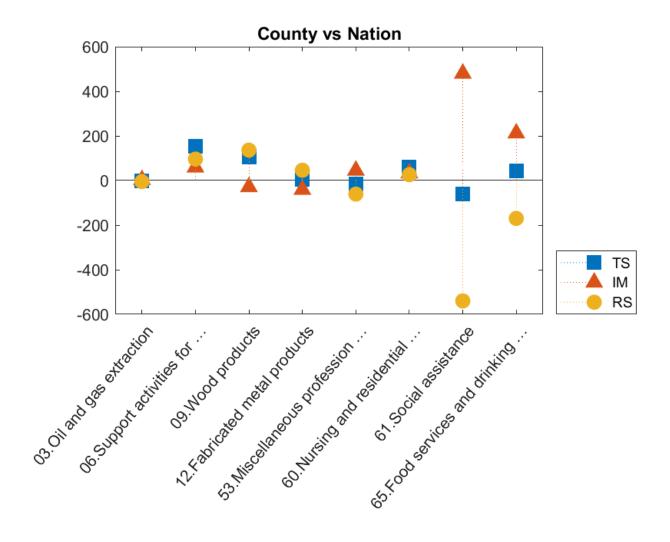
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Armstrong County, Pennsylvania, 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 Armstrong County, Pennsylvania vs the U.S.



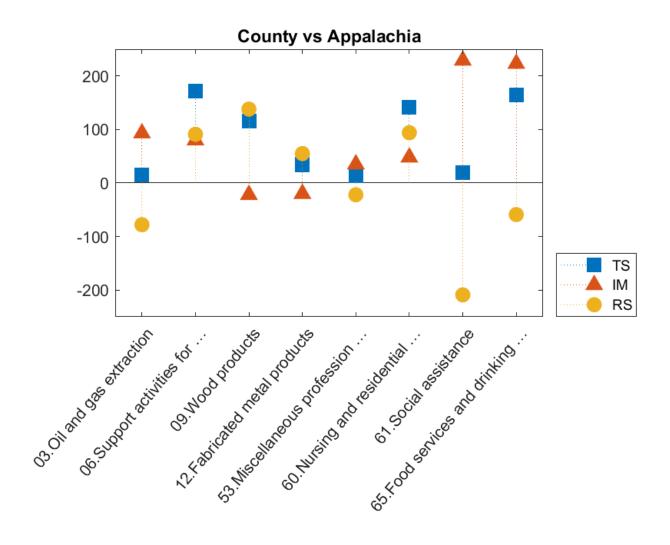
Chapter 2. Armstrong County, Pennsylvania

Armstrong County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
03	Oil and gas extraction	18	-2	3	-5	177
06	Support activities for 	16	155	59	96	314
09	Wood products	8	107	-29	136	189
12	Fabricated metal products	31	5	-41	46	313
53	Miscellaneous profession	30	-16	45	-61	278
60	Nursing and residential	84	59	33	26	893
61	Social assistance	83	-60	480	-540	755
65	Food services and drinking	126	42	212	-170	1,281

- - -

Selected SSA Components for Armstrong County, Pennsylvania vs the Appalachian Region

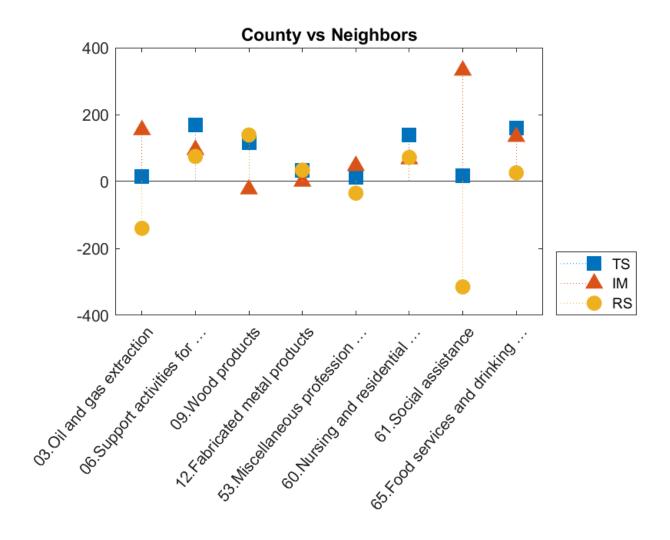


Selected SSA Components for Armstrong County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
03	Oil and gas extraction	1	15	93	-78	177
06	Support activities for 	0	171	80	91	314
09	Wood products	0	116	-22	138	189
12	Fabricated metal products	1	35	-20	55	313
53	Miscellaneous profession	1	13	35	-22	278
60	Nursing and residential	3	142	48	94	893
61	Social assistance	2	20	229	-209	755
65	Food services and drinking	4	164	223	-59	1,281

...

Selected SSA Components for Armstrong County, Pennsylvania vs Neighbors



Selected SSA Components for Armstrong County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
03	Oil and gas extraction	1	14	154	-140	177
06	Support activities for 	1	170	95	75	314
09	Wood products	1	116	-23	139	189
12	Fabricated metal products	2	34	0	34	313
53	Miscellaneous profession	2	12	47	-35	278
60	Nursing and residential	5	139	67	72	893
61	Social assistance	5	17	332	-315	755
65	Food services and drinking	8	160	134	26	1,281

. . .

Chapter 3. Beaver County, Pennsylvania

Employment in Beaver County, Pennsylvania, declined from 55,322 in 2005 to 53,042 in 2018, for a change of -2,280, or -4.12%. 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 Beaver County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	6,237	-8,527	-544	-7,983
vs. Appalachia	187	-2,468	213	-2,681
vs. Neighbors	1,185	-3,473	-1,178	-2,295

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 Beaver County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Beaver County, Pennsylvania

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
80	Construction	FIIIci	no	yes	yes	yes
12	Fabricated metal products	F III c iii	no	yes	yes	yes
36	Truck transportation	FIIIci	no	yes	yes	yes
39	Other transportation	EIIciii	no	yes	yes	yes
55	Administrative and	A V b iii	yes	no	yes	yes
58	Ambulatory health care	BIIbii	yes	yes	yes	yes
60	Nursing and residential	Elai	no	yes	yes	yes
61	Social assistance	BIIaii	yes	yes	yes	yes
65	Food services and drinking	BVbii	yes	no	yes	yes

Notes:

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

Groups I, II, and III are from Beaver County, Pennsylvania vs. the United States

Groups a, b, and c are from Beaver County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Beaver County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Beaver County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Beaver County, Pennsylvania, 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 Beaver County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Beaver County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

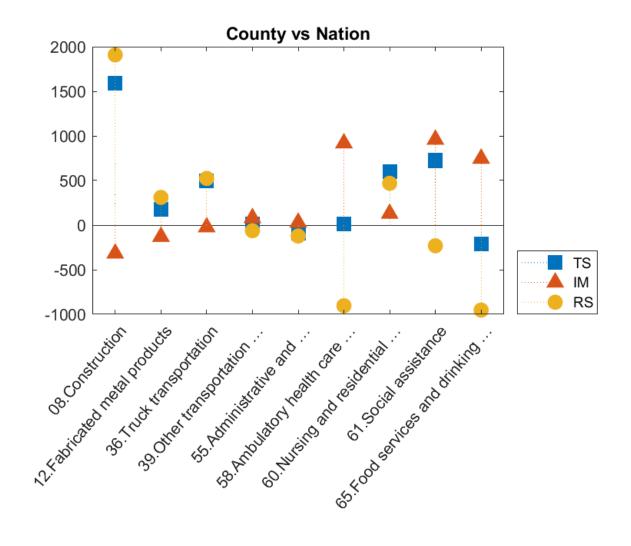
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Beaver County, Pennsylvania, 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 Beaver County, Pennsylvania vs the U.S.

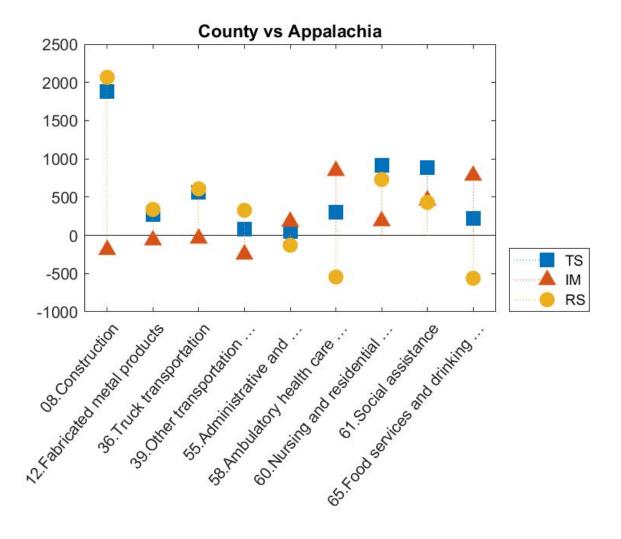


Beaver County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
08	Construction	295	1,591	-317	1,908	4,504
12	Fabricated metal products	99	180	-130	310	1,159
36	Truck transportation	70	500	-23	523	1,189
39	Other transportation 	64	17	80	-63	653
55	Administrative and	149	-93	29	-122	1,380
58	Ambulatory health care	295	14	918	-904	2,928
60	Nursing and residential	329	598	129	469	3,846
61	Social assistance	165	727	959	-232	2,356
65	Food services and drinking	441	-207	746	-953	4,150

• • •

Selected SSA Components for Beaver County, Pennsylvania vs the Appalachian Region

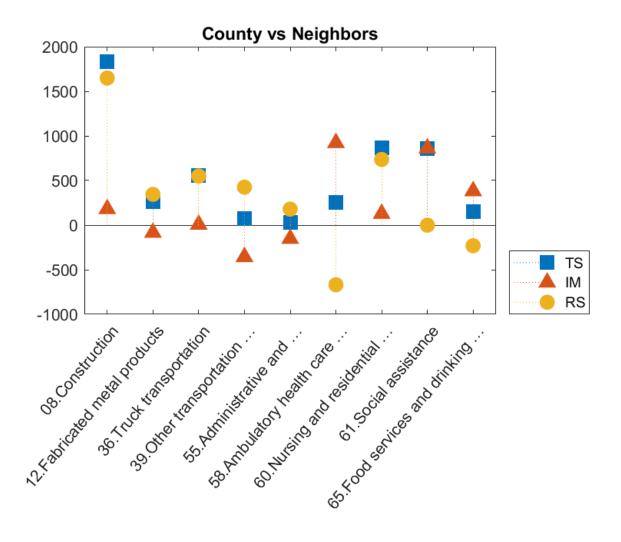


Selected SSA Components for Beaver County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
08	Construction	9	1,877	-189	2,066	4,504
12	Fabricated metal products	3	276	-63	339	1,159
36	Truck transportation	2	568	-40	608	1,189
39	Other transportation 	2	80	-248	328	653
55	Administrative and	5	51	180	-129	1,380
58	Ambulatory health care	9	300	845	-545	2,928
60	Nursing and residential	10	917	187	730	3,846
61	Social assistance	5	888	458	430	2,356
65	Food services and drinking	13	222	783	-561	4,150

...

Selected SSA Components for Beaver County, Pennsylvania vs Neighbors



Selected SSA Components for Beaver County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
80	Construction	56	1,830	181	1,649	4,504
12	Fabricated metal products	19	260	-84	344	1,159
36	Truck transportation	13	557	7	550	1,189
39	Other transportation 	12	69	-356	425	653
55	Administrative and	28	27	-152	179	1,380
58	Ambulatory health care	56	253	922	-669	2,928
60	Nursing and residential	63	864	128	736	3,846
61	Social assistance	31	861	862	-1	2,356
65	Food services and drinking	84	151	382	-231	4,150

...

Chapter 4. Bedford County, Pennsylvania

Employment in Bedford County, Pennsylvania, grew from 15,040 in 2005 to 15,580 in 2018, for a change of 540, or 3.59%. 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 Bedford County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	1,698	-1,155	28	-1,183
vs. Appalachia	47	491	-423	914
vs. Neighbors	-1,046	1,590	-258	1,848

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 Bedford County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Bedford County, Pennsylvania

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	FIIIai	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
13	Machinery	FIIIci	no	yes	yes	yes
36	Truck transportation	F III c iii	no	yes	yes	yes
37	Transit and ground	Elci	no	yes	yes	yes
40	Warehousing and storage	Elai	no	yes	yes	yes
55	Administrative and	A V b iii	yes	no	yes	yes
58	Ambulatory health care	BIIbii	yes	yes	yes	yes
61	Social assistance	Bllai	yes	yes	yes	yes
64	Accommodation	Alai	yes	yes	yes	yes
65	Food services and drinking	BVbii	yes	no	yes	yes

Notes:

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

Groups I, II, and III are from Bedford County, Pennsylvania vs. the United States

Groups a, b, and c are from Bedford County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Bedford County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Bedford County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Bedford County, Pennsylvania, 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 Bedford County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Bedford County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

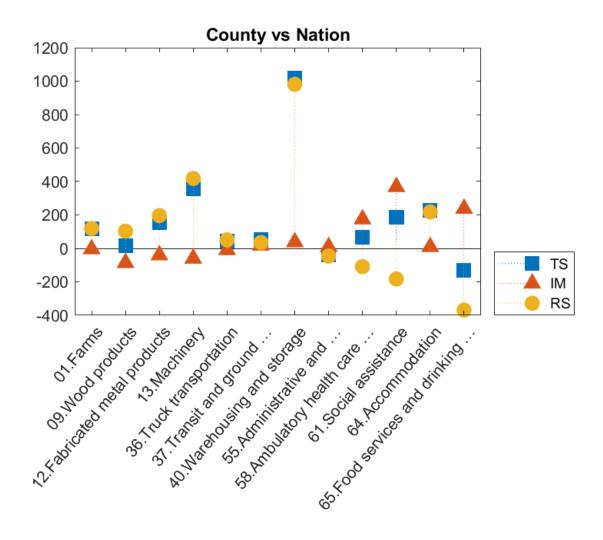
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Bedford County, Pennsylvania, 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 Bedford County, Pennsylvania vs the U.S.

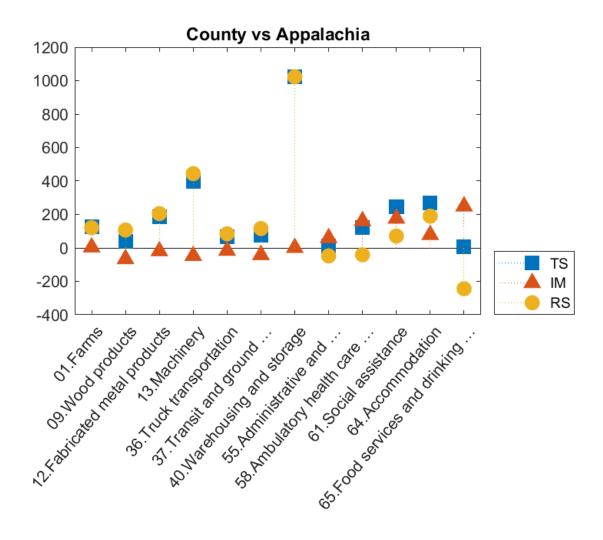


Chapter 4. Bedford County, Pennsylvania

Bedford County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	10	115	-4	119	217
09	Wood products	25	17	-86	103	263
12	Fabricated metal products	30	156	-40	196	456
13	Machinery	41	358	-60	418	761
36	Truck transportation	27	42	-9	51	310
37	Transit and ground	23	53	18	35	275
40	Warehousing and storage	5	1,019	38	981	1,069
55	Administrative and	49	-37	9	-46	442
58	Ambulatory health care	56	66	175	-109	620
61	Social assistance	63	185	368	-183	810
64	Accommodation	43	227	9	218	655
65	Food services and drinking	141	-131	238	-369	1,255

Selected SSA Components for Bedford County, Pennsylvania vs the Appalachian Region

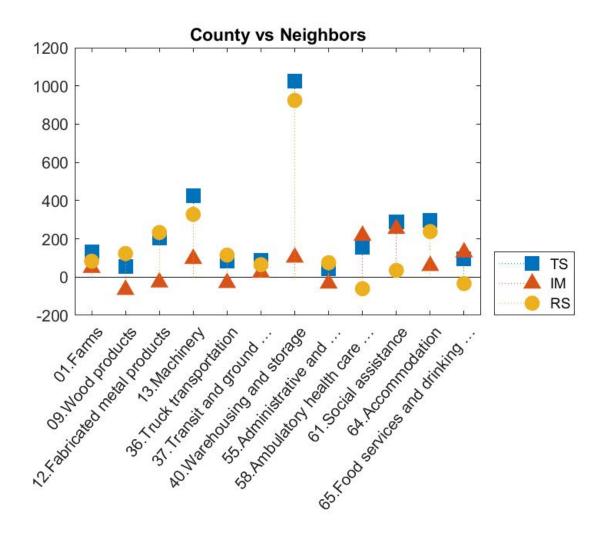


Chapter 4. Bedford County, Pennsylvania

Selected SSA Components for Bedford County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	0	125	4	121	217
09	Wood products	1	41	-66	107	263
12	Fabricated metal products	1	186	-19	205	456
13	Machinery	1	397	-47	444	761
36	Truck transportation	1	68	-16	84	310
37	Transit and ground	1	74	-42	116	275
40	Warehousing and storage	0	1,024	1	1,023	1,069
55	Administrative and	1	11	59	-48	442
58	Ambulatory health care	2	120	161	-41	620
61	Social assistance	2	247	176	71	810
64	Accommodation	1	268	78	190	655
65	Food services and drinking	4	5	249	-244	1,255

Selected SSA Components for Bedford County, Pennsylvania vs Neighbors



Chapter 4. Bedford County, Pennsylvania

Selected SSA Components for Bedford County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	-6	132	49	83	217
09	Wood products	-15	57	-66	123	263
12	Fabricated metal products	-19	206	-27	233	456
13	Machinery	-25	424	96	328	761
36	Truck transportation	-17	85	-30	115	310
37	Transit and ground	-14	89	24	65	275
40	Warehousing and storage	-3	1,027	103	924	1,069
55	Administrative and	-30	42	-33	75	442
58	Ambulatory health care	-35	156	217	-61	620
61	Social assistance	-39	288	253	35	810
64	Accommodation	-27	297	59	238	655
65	Food services and drinking	-87	96	130	-34	1,255

Chapter 5. Blair County, Pennsylvania

Employment in Blair County, Pennsylvania, declined from 61,080 in 2005 to 58,370 in 2018, for a change of -2,710, or -4.44%. 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 Blair County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	6,886	-9,597	213	-9,810
vs. Appalachia	204	-2,917	-695	-2,222
vs. Neighbors	1,453	-4,164	-1,495	-2,669

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 Blair County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Blair County, Pennsylvania

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	Elci	no	yes	yes	yes
29	Motor vehicle and parts	FIIIai	no	yes	yes	yes
39	Other transportation 	Elciii	no	yes	yes	yes
40	Warehousing and storage	Ellai	no	yes	yes	yes
54	Management of companies	Alai	yes	yes	yes	yes
55	Administrative and	Allbii	yes	yes	yes	yes
58	Ambulatory health care	Blai	yes	yes	yes	yes
61	Social assistance	BIIbi	yes	yes	yes	yes
65	Food services and drinking	BVbii	yes	no	yes	yes

Notes:

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

Groups I, II, and III are from Blair County, Pennsylvania vs. the United States

Groups a, b, and c are from Blair County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Blair County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Blair County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Blair County, Pennsylvania, 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 Blair County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Blair County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

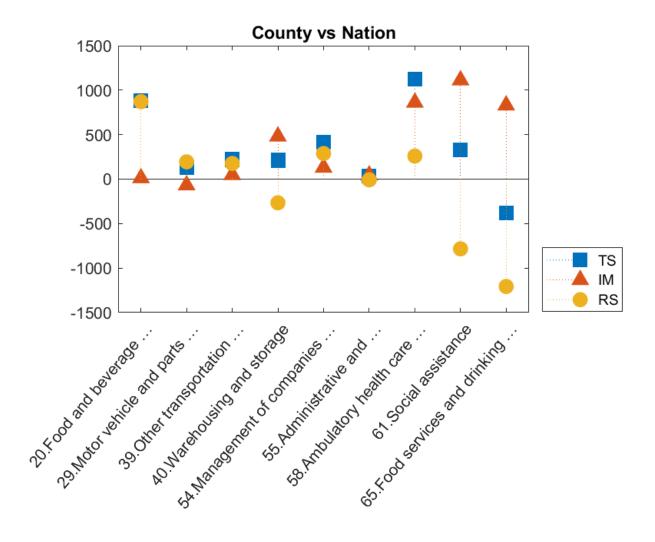
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Blair County, Pennsylvania, 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 Blair County, Pennsylvania vs the U.S.

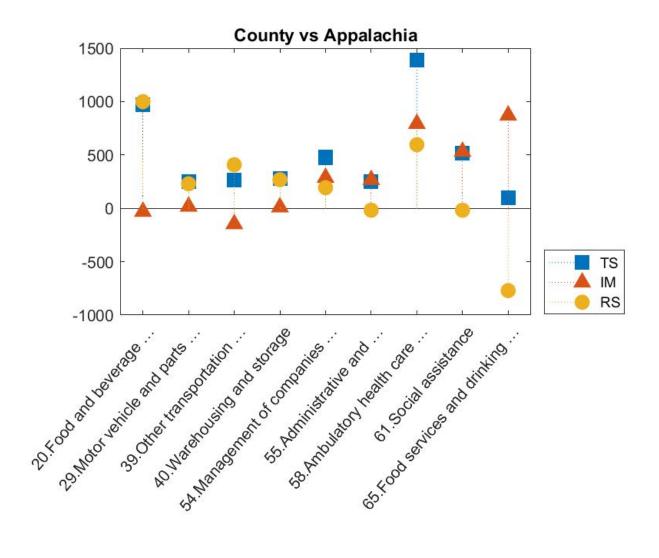


Blair County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
20	Food and beverage	88	883	12	871	1,750
29	Motor vehicle and parts	125	126	-68	194	1,357
39	Other transportation 	38	224	48	176	601
40	Warehousing and storage	65	215	481	-266	856
54	Management of companies	63	419	131	288	1,042
55	Administrative and	222	35	43	-8	2,220
58	Ambulatory health care	277	1,120	861	259	3,851
61	Social assistance	191	328	1,112	-784	2,215
65	Food services and drinking	491	-377	830	-1,207	4,468

...

Selected SSA Components for Blair County, Pennsylvania vs the Appalachian Region

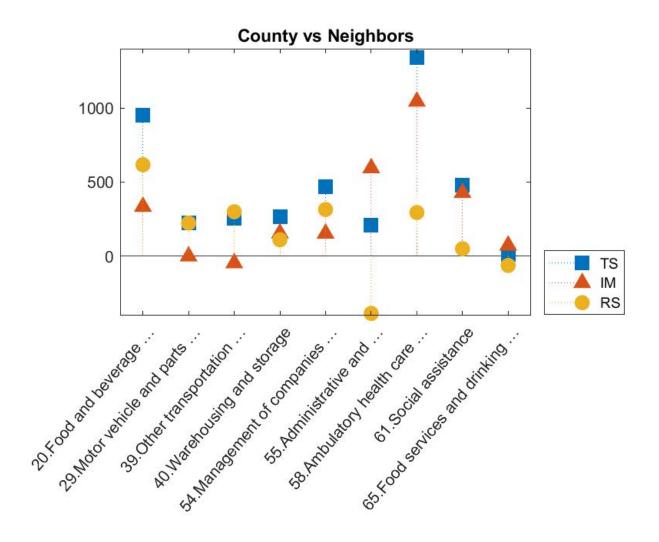


Selected SSA Components for Blair County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
20	Food and beverage	3	968	-31	999	1,750
29	Motor vehicle and parts	4	247	17	230	1,357
39	Other transportation 	1	261	-147	408	601
40	Warehousing and storage	2	279	11	268	856
54	Management of companies	2	480	287	193	1,042
55	Administrative and	7	249	267	-18	2,220
58	Ambulatory health care	8	1,388	792	596	3,851
61	Social assistance	6	513	531	-18	2,215
65	Food services and drinking	15	100	871	-771	4,468

...

Selected SSA Components for Blair County, Pennsylvania vs Neighbors



Selected SSA Components for Blair County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
20	Food and beverage	19	952	335	617	1,750
29	Motor vehicle and parts	26	224	0	224	1,357
39	Other transportation 	8	254	-46	300	601
40	Warehousing and storage	14	266	155	111	856
54	Management of companies	13	469	154	315	1,042
55	Administrative and	47	209	595	-386	2,220
58	Ambulatory health care	58	1,339	1,044	295	3,851
61	Social assistance	40	478	428	50	2,215
65	Food services and drinking	104	11	73	-62	4,468

...

Chapter 6. Bradford County, Pennsylvania

Employment in Bradford County, Pennsylvania, declined from 23,066 in 2005 to 22,992 in 2018, for a change of -74, or -0.32%. 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 Bradford County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	2,600	-2,676	-191	-2,485
vs. Appalachia	76	-156	-289	133
vs. Neighbors	-805	734	-333	1,067

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 Bradford County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Bradford County, Pennsylvania

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
06	Support activities for	Alai	yes	yes	yes	yes
80	Construction	FIIIci	no	yes	yes	yes
20	Food and beverage	Elci	no	yes	yes	yes
36	Truck transportation	FIIIci	no	yes	yes	yes
53	Miscellaneous profession	Blai	yes	yes	yes	yes
54	Management of companies	Alai	yes	yes	yes	yes
55	Administrative and	Alai	yes	yes	yes	yes
58	Ambulatory health care	BIIbii	yes	yes	yes	yes
60	Nursing and residential	Elai	no	yes	yes	yes
61	Social assistance	BIIai	yes	yes	yes	yes
64	Accommodation	Alai	yes	yes	yes	yes
65	Food services and drinking	B V e ii	yes	no	no	yes

Notes:

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

Groups I, II, and III are from Bradford County, Pennsylvania vs. the United States

Groups a, b, and c are from Bradford County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Bradford County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Bradford County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Bradford County, Pennsylvania, 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 Bradford County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Bradford County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

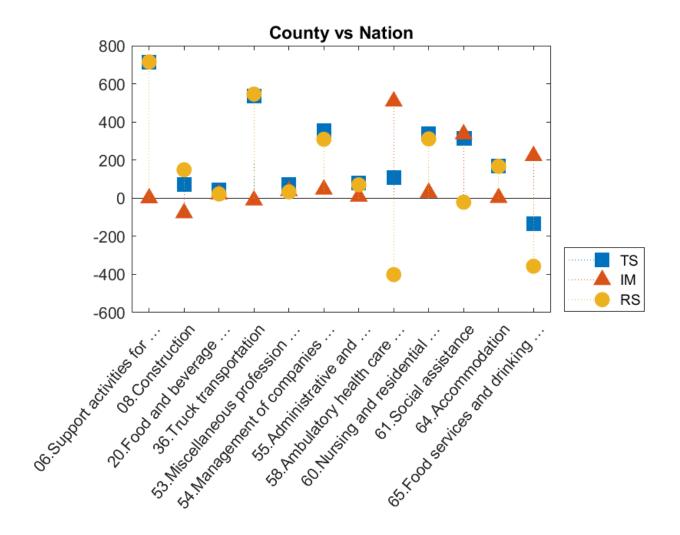
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Bradford County, Pennsylvania, 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 Bradford County, Pennsylvania vs the U.S.

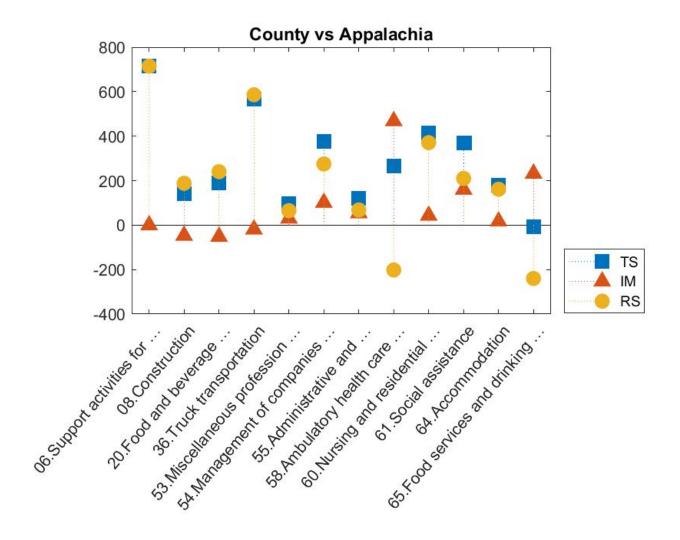


Chapter 6. Bradford County, Pennsylvania

Bradford County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
06	Support activities for	0	715	0	715	715
08	Construction	73	71	-78	149	790
20	Food and beverage	149	43	21	22	1,512
36	Truck transportation	33	535	-11	546	859
53	Miscellaneous profession	25	71	38	33	319
54	Management of companies	22	355	46	309	574
55	Administrative and	44	79	9	70	517
58	Ambulatory health care	163	107	508	-401	1,720
60	Nursing and residential	75	340	29	311	1,081
61	Social assistance	58	315	336	-21	884
64	Accommodation	9	169	2	167	260
65	Food services and drinking	131	-135	222	-357	1,158

Selected SSA Components for Bradford County, Pennsylvania vs the Appalachian Region

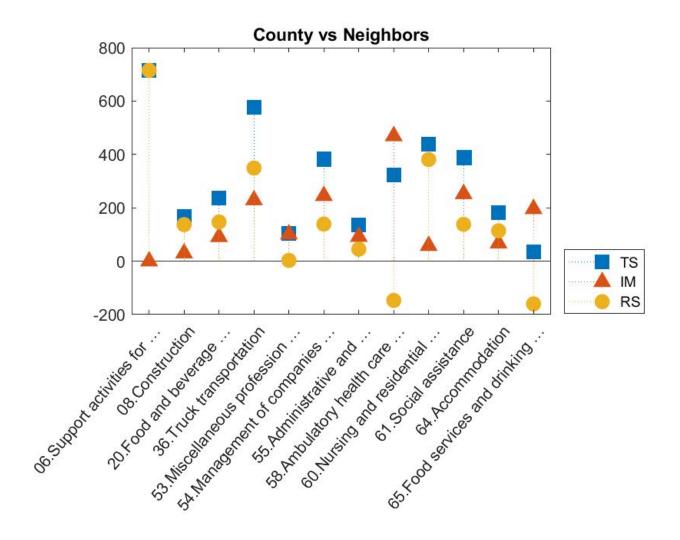


Chapter 6. Bradford County, Pennsylvania

Selected SSA Components for Bradford County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
06	Support activities for	0	715	0	715	715
08	Construction	2	141	-47	188	790
20	Food and beverage	4	188	-52	240	1,512
36	Truck transportation	1	567	-19	586	859
53	Miscellaneous profession	1	95	30	65	319
54	Management of companies	1	376	101	275	574
55	Administrative and	1	122	54	68	517
58	Ambulatory health care	5	266	468	-202	1,720
60	Nursing and residential	2	414	43	371	1,081
61	Social assistance	2	370	160	210	884
64	Accommodation	0	178	17	161	260
65	Food services and drinking	4	-8	232	-240	1,158

Selected SSA Components for Bradford County, Pennsylvania vs Neighbors



Chapter 6. Bradford County, Pennsylvania

Selected SSA Components for Bradford County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
06	Support activities for	-0	715	0	715	715
08	Construction	-23	167	30	137	790
20	Food and beverage	-46	238	91	147	1,512
36	Truck transportation	-10	578	229	349	859
53	Miscellaneous profession	-8	104	101	3	319
54	Management of companies	-7	384	245	139	574
55	Administrative and	-14	137	92	45	517
58	Ambulatory health care	-51	322	469	-147	1,720
60	Nursing and residential	-23	439	58	381	1,081
61	Social assistance	-18	390	252	138	884
64	Accommodation	-3	181	67	114	260
65	Food services and drinking	-41	36	196	-160	1,158

Chapter 7. Butler County, Pennsylvania

Employment in Butler County, Pennsylvania, grew from 76,861 in 2005 to 86,088 in 2018, for a change of 9,227, or 12%. 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 Butler County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	8,667	559	-800	1,359
vs. Appalachia	255	8,968	-659	9,627
vs. Neighbors	370	8,860	-2,733	11,593

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 Butler County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Butler County, Pennsylvania

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	FIIIciii	no	yes	yes	yes
37	Transit and ground	EIIciii	no	yes	yes	yes
52	Computer systems design	Blai	yes	yes	yes	yes
53	Miscellaneous profession	Blai	yes	yes	yes	yes
54	Management of companies	Alai	yes	yes	yes	yes
58	Ambulatory health care	Blai	yes	yes	yes	yes
59	Hospitals	Elai	no	yes	yes	yes
60	Nursing and residential	Ellai	no	yes	yes	yes
61	Social assistance	BIIbii	yes	yes	yes	yes
65	Food services and drinking	BIIbi	yes	yes	yes	yes
66	Other services, exc. gov	F III c iii	no	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 Butler County, Pennsylvania vs. the United States

Groups a, b, and c are from Butler County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Butler County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Butler County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Butler County, Pennsylvania, 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 Butler County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Butler County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

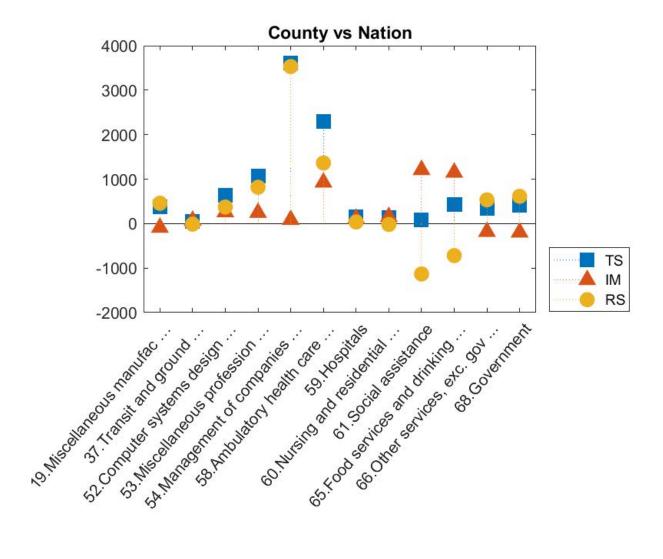
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Butler County, Pennsylvania, 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 Butler County, Pennsylvania vs the U.S.

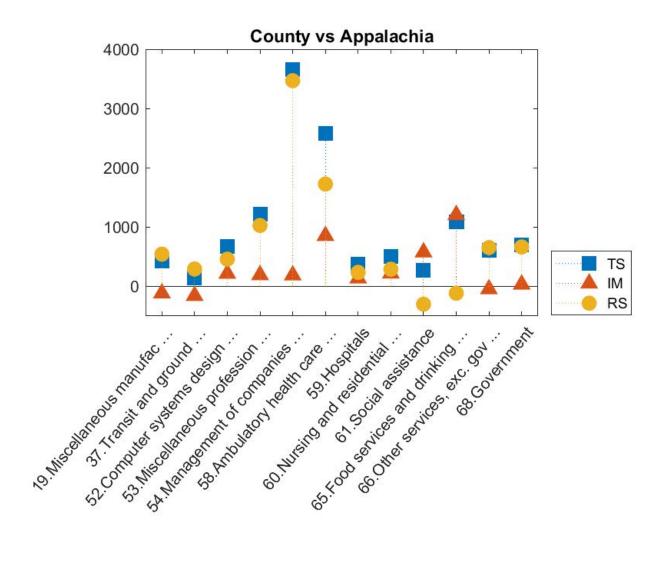


Chapter 7. Butler County, Pennsylvania

Butler County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
19	Miscellaneous manufac	62	369	-89	458	979
37	Transit and ground	84	54	67	-13	886
52	Computer systems design	44	632	259	373	1,068
53	Miscellaneous profession	163	1,063	245	818	2,675
54	Management of companies	41	3,617	86	3,531	4,027
58	Ambulatory health care	298	2,290	927	1,363	5,232
59	Hospitals	231	150	114	36	2,428
60	Nursing and residential	388	133	152	-19	3,959
61	Social assistance	208	75	1,208	-1,133	2,126
65	Food services and drinking	680	431	1,150	-719	7,142
66	Other services, exc. gov	267	351	-183	534	2,985
68	Government	291	417	-196	613	3,286

Selected SSA Components for Butler County, Pennsylvania vs the Appalachian Region

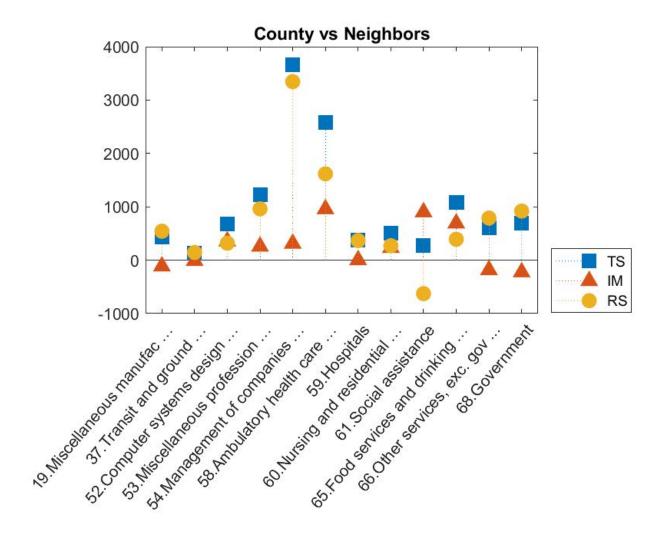


Chapter 7. Butler County, Pennsylvania

Selected SSA Components for Butler County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
19	Miscellaneous manufac	2	429	-115	544	979
37	Transit and ground	3	136	-157	293	886
52	Computer systems design	1	675	216	459	1,068
53	Miscellaneous profession	5	1,221	193	1,028	2,675
54	Management of companies	1	3,658	189	3,469	4,027
58	Ambulatory health care	9	2,580	854	1,726	5,232
59	Hospitals	7	374	137	237	2,428
60	Nursing and residential	12	510	220	290	3,959
61	Social assistance	6	277	577	-300	2,126
65	Food services and drinking	21	1,091	1,206	-115	7,142
66	Other services, exc. gov	8	610	-45	655	2,985
68	Government	9	699	34	665	3,286

Selected SSA Components for Butler County, Pennsylvania vs Neighbors



Chapter 7. Butler County, Pennsylvania

Selected SSA Components for Butler County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
19	Miscellaneous manufac	3	429	-114	543	979
37	Transit and ground	4	134	-11	145	886
52	Computer systems design	2	674	355	319	1,068
53	Miscellaneous profession	7	1,220	258	962	2,675
54	Management of companies	2	3,657	312	3,345	4,027
58	Ambulatory health care	13	2,576	958	1,618	5,232
59	Hospitals	10	371	4	367	2,428
60	Nursing and residential	17	505	234	271	3,959
61	Social assistance	9	274	901	-627	2,126
65	Food services and drinking	29	1,082	691	391	7,142
66	Other services, exc. gov	11	606	-183	789	2,985
68	Government	12	696	-224	920	3,286

Chapter 8. Cambria County, Pennsylvania

Employment in Cambria County, Pennsylvania, declined from 57,894 in 2005 to 50,742 in 2018, for a change of -7,152, or -12.35%. 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 Cambria County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	6,527	-13,678	1,079	-14,757
vs. Appalachia	199	-7,345	1,026	-8,371
vs. Neighbors	-3,909	-3,242	312	-3,554

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 Cambria County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Cambria County, Pennsylvania

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
14	Computer and electronic	F III c iii	no	yes	yes	yes
58	Ambulatory health care 	BIIbi	yes	yes	yes	yes
61	Social assistance	BIIbi	yes	yes	yes	yes
65	Food services and drinking	B V e ii	yes	no	no	yes

Notes:

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

Groups I, II, and III are from Cambria County, Pennsylvania vs. the United States

Groups a, b, and c are from Cambria County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Cambria County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Cambria County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Cambria County, Pennsylvania, 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 Cambria County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Cambria County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

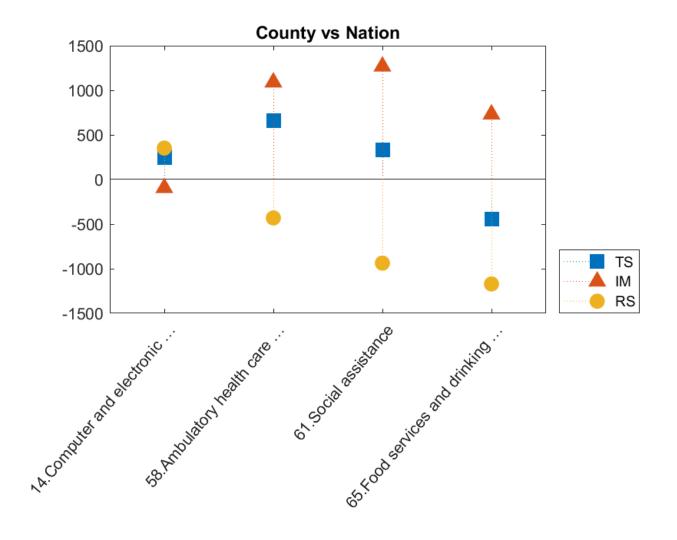
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Cambria County, Pennsylvania, 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 Cambria County, Pennsylvania vs the U.S.

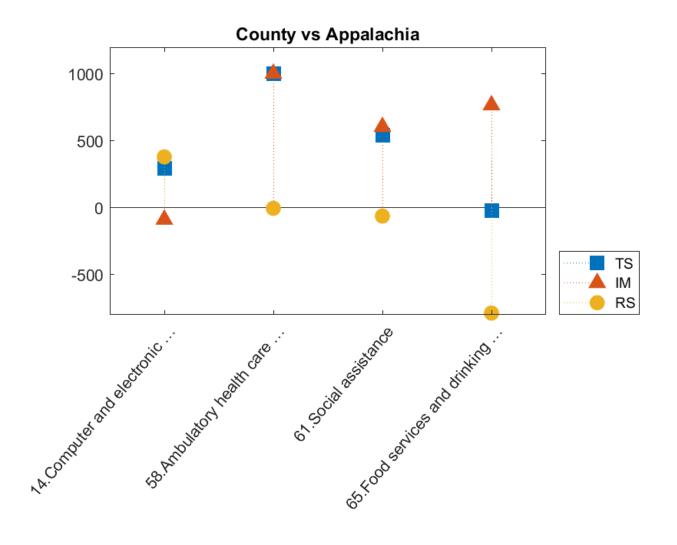


Chapter 8. Cambria County, Pennsylvania

Cambria County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
14	Computer and electronic	36	258	-94	352	608
58	Ambulatory health care 	350	659	1,090	-431	4,117
61	Social assistance	218	331	1,268	-937	2,484
65	Food services and drinking	432	-440	731	-1,171	3,828

Selected SSA Components for Cambria County, Pennsylvania vs the Appalachian Region

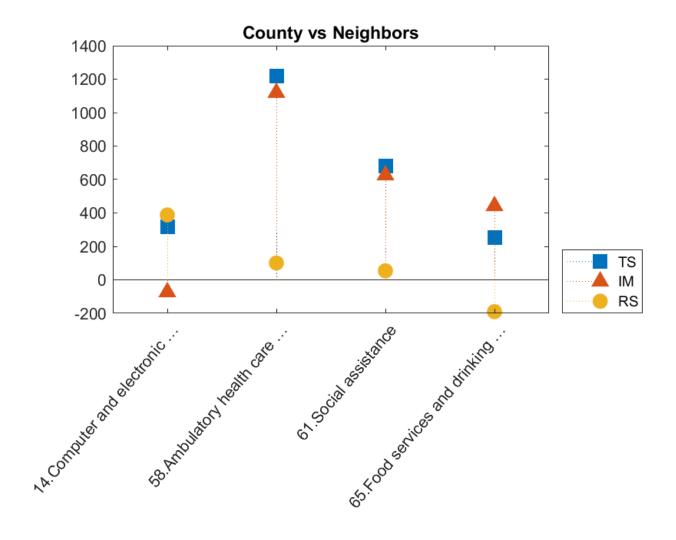


Chapter 8. Cambria County, Pennsylvania

Selected SSA Components for Cambria County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
14	Computer and electronic	1	292	-88	380	608
58	Ambulatory health care 	11	999	1,003	-4	4,117
61	Social assistance	7	543	605	-62	2,484
65	Food services and drinking …	13	-20	767	-787	3,828

Selected SSA Components for Cambria County, Pennsylvania vs Neighbors



Chapter 8. Cambria County, Pennsylvania

Selected SSA Components for Cambria County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
14	Computer and electronic	-21	315	-73	388	608
58	Ambulatory health care 	-210	1,220	1,119	101	4,117
61	Social assistance	-131	680	626	54	2,484
65	Food services and drinking	-259	252	442	-190	3,828

Chapter 9. Cameron County, Pennsylvania

Employment in Cameron County, Pennsylvania, declined from 2,690 in 2005 to 1,938 in 2018, for a change of -752, or -27.96%. 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 Cameron County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	304	-1,052	-208	-844
vs. Appalachia	6	-758	-97	-661
vs. Neighbors	-259	-495	107	-602

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 Cameron County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Cameron County, Pennsylvania

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
07	Utilities	FIIIci	no	yes	yes	yes
11	Primary metals	Flai	no	yes	yes	yes
37	Transit and ground	Elciii	no	yes	yes	yes
47	Insurance carriers and	Flai	no	yes	yes	yes
58	Ambulatory health care 	Blai	yes	yes	yes	yes
65	Food services and drinking	BVeii	yes	no	no	yes

Notes:

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

Groups I, II, and III are from Cameron County, Pennsylvania vs. the United States

Groups a, b, and c are from Cameron County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Cameron County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Cameron County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Cameron County, Pennsylvania, 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 Cameron County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Cameron County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

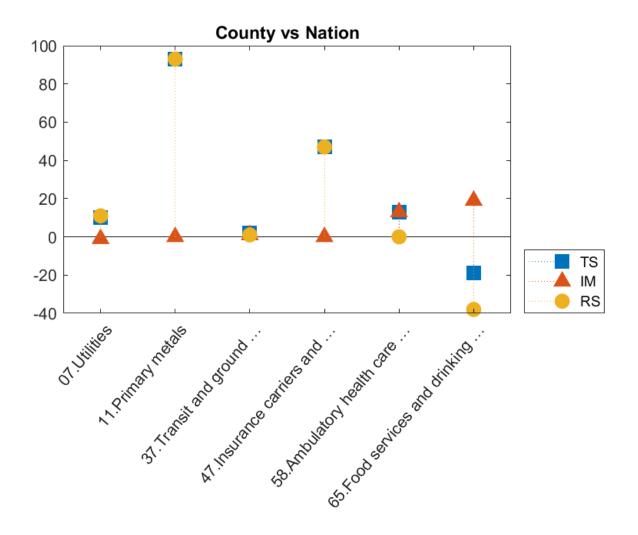
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Cameron County, Pennsylvania, 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 Cameron County, Pennsylvania vs the U.S.

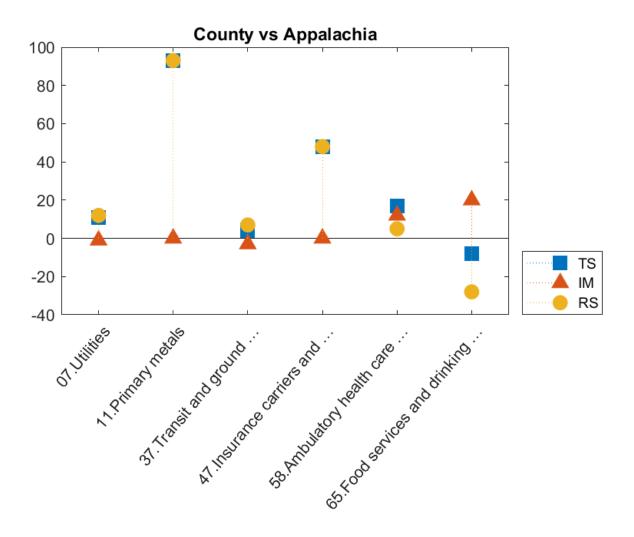


Chapter 9. Cameron County, Pennsylvania

Cameron County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
07	Utilities	1	10	-1	11	22
11	Primary metals	0	93	0	93	93
37	Transit and ground	2	2	1	1	20
47	Insurance carriers and 	0	47	-0	47	49
58	Ambulatory health care 	4	13	13	-0	54
65	Food services and drinking	11	-19	19	-38	92

Selected SSA Components for Cameron County, Pennsylvania vs the Appalachian Region

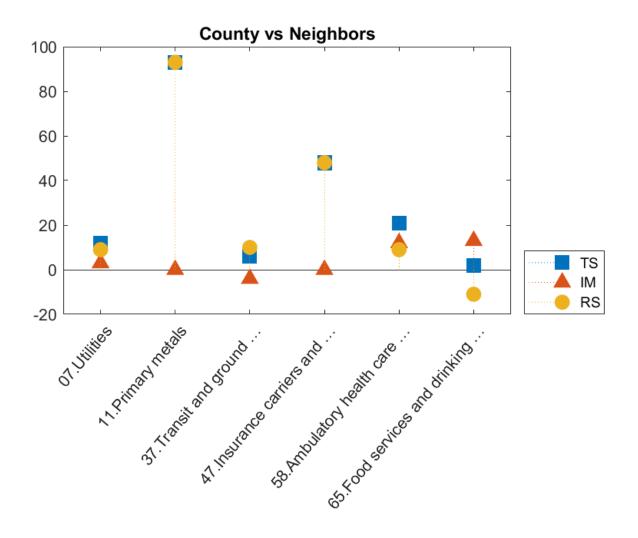


Chapter 9. Cameron County, Pennsylvania

Selected SSA Components for Cameron County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
07	Utilities	0	11	-1	12	22
11	Primary metals	0	93	0	93	93
37	Transit and ground	0	4	-3	7	20
47	Insurance carriers and 	0	48	-0	48	49
58	Ambulatory health care 	0	17	12	5	54
65	Food services and drinking	0	-8	20	-28	92

Selected SSA Components for Cameron County, Pennsylvania vs Neighbors



Chapter 9. Cameron County, Pennsylvania

Selected SSA Components for Cameron County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
07	Utilities	-1	12	3	9	22
11	Primary metals	-0	93	0	93	93
37	Transit and ground	-2	6	-4	10	20
47	Insurance carriers and 	-0	48	-0	48	49
58	Ambulatory health care 	-4	21	12	9	54
65	Food services and drinking	-9	2	13	-11	92

Chapter 10. Carbon County, Pennsylvania

Employment in Carbon County, Pennsylvania, declined from 17,182 in 2005 to 16,509 in 2018, for a change of -673, or -3.92%. 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 Carbon County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	1,938	-2,605	-402	-2,203
vs. Appalachia	57	-731	-79	-652
vs. Neighbors	1,072	-1,742	-24	-1,718

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 Carbon County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Carbon County, Pennsylvania

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
10	Nonmetallic mineral prod 	F III c iii	no	yes	yes	yes
11	Primary metals	F III c iii	no	yes	yes	yes
12	Fabricated metal products	F III c iii	no	yes	yes	yes
28	Wholesale trade	F III c iii	no	yes	yes	yes
31	General merchandise 	F III c iii	no	yes	yes	yes
41	Publishing industries,	F III c iii	no	yes	yes	yes
58	Ambulatory health care 	Bllai	yes	yes	yes	yes
61	Social assistance	Blai	yes	yes	yes	yes
63	Amusements, gambling,	Blai	yes	yes	yes	yes
65	Food services and drinking	BIIbi	yes	yes	yes	yes

Notes:

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

Groups I, II, and III are from Carbon County, Pennsylvania vs. the United States

Groups a, b, and c are from Carbon County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Carbon County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Carbon County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Carbon County, Pennsylvania, 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 Carbon County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Carbon County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

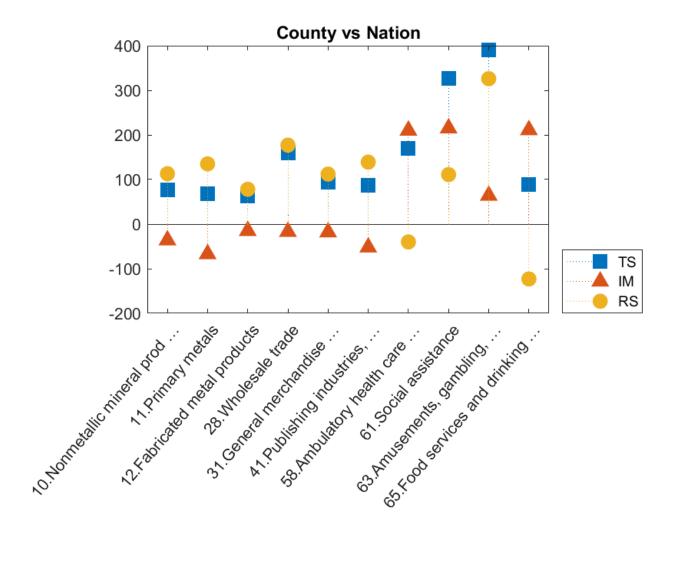
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Carbon County, Pennsylvania, 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 Carbon County, Pennsylvania vs the U.S.

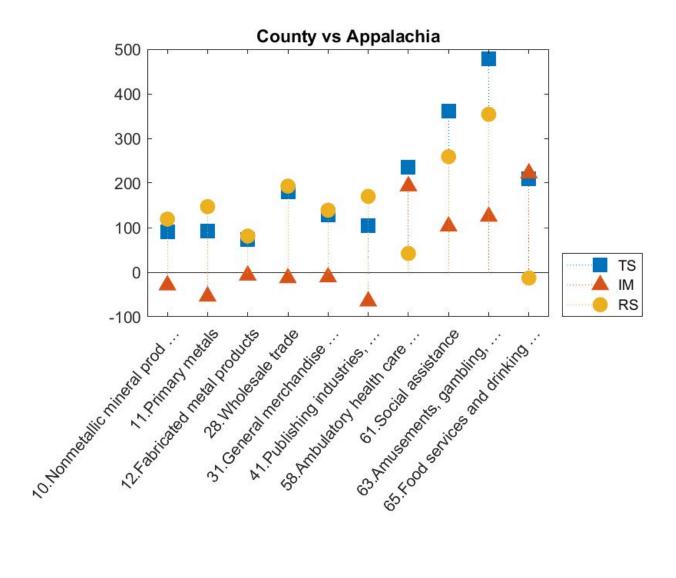


Chapter 10. Carbon County, Pennsylvania

Carbon County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
10	Nonmetallic mineral prod 	14	77	-36	113	216
11	Primary metals	25	68	-67	135	319
12	Fabricated metal products	11	63	-15	78	175
28	Wholesale trade	21	160	-17	177	363
31	General merchandise 	35	94	-18	112	441
41	Publishing industries,	19	87	-52	139	276
58	Ambulatory health care 	67	170	210	-40	834
61	Social assistance	37	326	215	111	692
63	Amusements, gambling,	92	390	64	326	1,296
65	Food services and drinking	125	88	211	-123	1,322

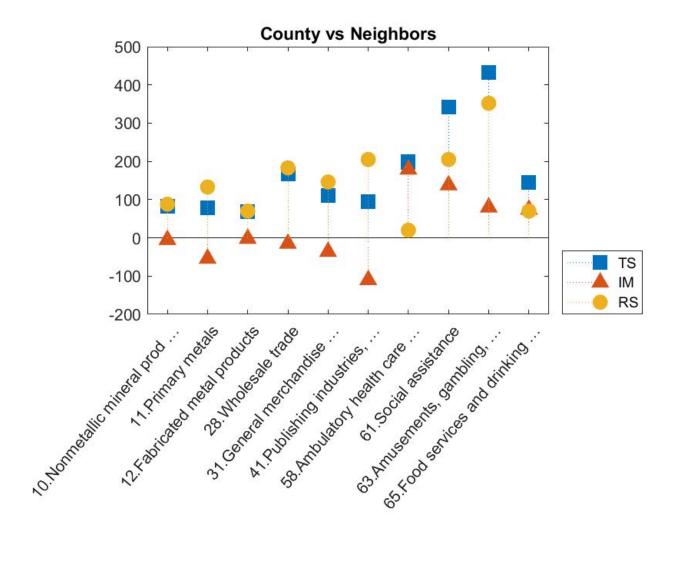
Selected SSA Components for Carbon County, Pennsylvania vs the Appalachian Region



Selected SSA Components for Carbon County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
10	Nonmetallic mineral prod 	0	90	-29	119	216
11	Primary metals	1	93	-54	147	319
12	Fabricated metal products	0	74	-7	81	175
28	Wholesale trade	1	180	-13	193	363
31	General merchandise 	1	128	-11	139	441
41	Publishing industries,	1	105	-65	170	276
58	Ambulatory health care 	2	235	193	42	834
61	Social assistance	1	362	103	259	692
63	Amusements, gambling,	3	479	125	354	1,296
65	Food services and drinking	4	209	222	-13	1,322

Selected SSA Components for Carbon County, Pennsylvania vs Neighbors



Chapter 10. Carbon County, Pennsylvania

Selected SSA Components for Carbon County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
10	Nonmetallic mineral prod 	8	83	-5	88	216
11	Primary metals	14	79	-54	133	319
12	Fabricated metal products	6	68	-2	70	175
28	Wholesale trade	11	168	-15	183	363
31	General merchandise 	19	110	-36	146	441
41	Publishing industries,	11	95	-110	205	276
58	Ambulatory health care 	37	199	179	20	834
61	Social assistance	20	343	138	205	692
63	Amusements, gambling,	51	432	80	352	1,296
65	Food services and drinking	69	144	74	70	1,322

Chapter 11. Centre County, Pennsylvania

Employment in Centre County, Pennsylvania, grew from 50,732 in 2005 to 68,861 in 2018, for a change of 18,129, or 35.73%. 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 Centre County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	5,719	12,406	927	11,479
vs. Appalachia	171	17,953	1,356	16,597
vs. Neighbors	3,009	15,122	1,486	13,636

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 Centre County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Centre County, Pennsylvania

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	FIIIciii	no	yes	yes	yes
14	Computer and electronic	F III c iii	no	yes	yes	yes
30	Food and beverage stores	FIIIci	no	yes	yes	yes
49	Real estate	FIIIai	no	yes	yes	yes
53	Miscellaneous profession	B V b iii	yes	no	yes	yes
55	Administrative and	Alai	yes	yes	yes	yes
57	Educational services	FIIIai	no	yes	yes	yes
58	Ambulatory health care	Blai	yes	yes	yes	yes
59	Hospitals	Elai	no	yes	yes	yes
60	Nursing and residential	Elai	no	yes	yes	yes
61	Social assistance	BIIbii	yes	yes	yes	yes
63	Amusements, gambling,	B V b iii	yes	no	yes	yes
64	Accommodation	AVbv	yes	no	yes	no
65	Food services and drinking	BVbii	yes	no	yes	yes
66	Other services, exc. gov	FIIIci	no	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 Centre County, Pennsylvania vs. the United States

Groups a, b, and c are from Centre County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Centre County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Centre County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Centre County, Pennsylvania, 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 Centre County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Centre County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

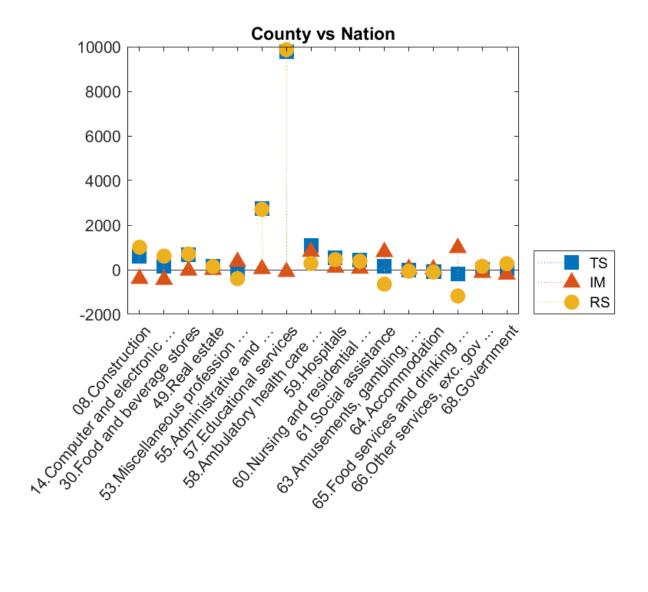
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Centre County, Pennsylvania, 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 Centre County, Pennsylvania vs the U.S.

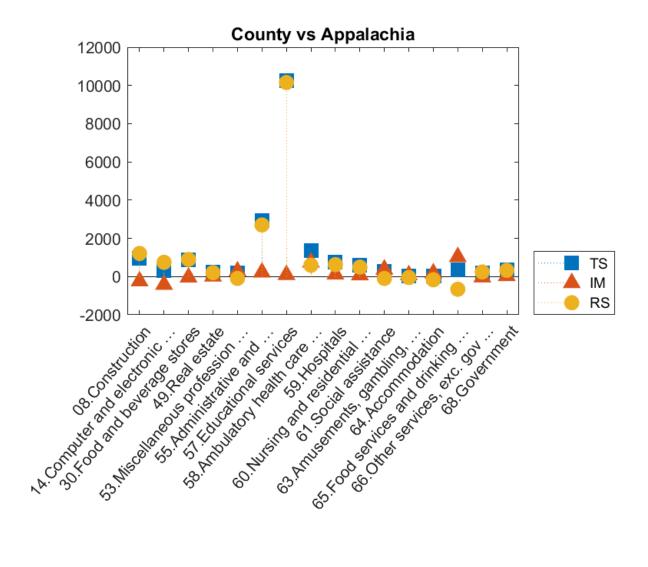


Chapter 11. Centre County, Pennsylvania

Centre County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
08	Construction	375	606	-403	1,009	4,308
14	Computer and electronic	169	161	-449	610	1,828
30	Food and beverage stores	192	674	-34	708	2,568
49	Real estate	75	141	-2	143	885
53	Miscellaneous profession	238	-44	357	-401	2,303
55	Administrative and	186	2,745	36	2,709	4,579
57	Educational services	485	9,776	-91	9,867	14,566
58	Ambulatory health care	261	1,087	810	277	3,658
59	Hospitals	199	551	98	453	2,520
60	Nursing and residential	141	437	55	382	1,831
61	Social assistance	137	150	797	-647	1,505
63	Amusements, gambling,	59	-25	41	-66	561
64	Accommodation	99	-85	20	-105	888
65	Food services and drinking	580	-196	981	-1,177	5,529
66	Other services, exc. gov	195	19	-134	153	1,947
68	Government	312	60	-210	270	3,141

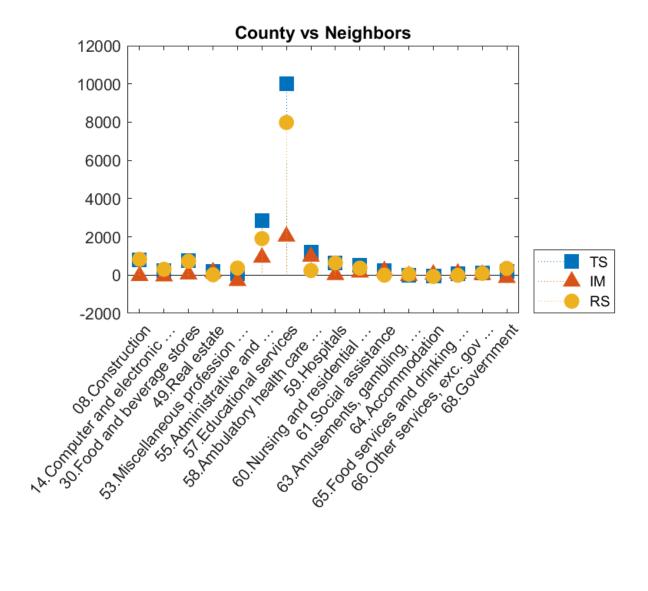
Selected SSA Components for Centre County, Pennsylvania vs the Appalachian Region



Selected SSA Components for Centre County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
08	Construction	11	970	-240	1,210	4,308
14	Computer and electronic	5	325	-420	745	1,828
30	Food and beverage stores	6	860	-36	896	2,568
49	Real estate	2	215	12	203	885
53	Miscellaneous profession	7	186	282	-96	2,303
55	Administrative and	6	2,925	224	2,701	4,579
57	Educational services	15	10,247	94	10,153	14,566
58	Ambulatory health care	8	1,340	746	594	3,658
59	Hospitals	6	745	118	627	2,520
60	Nursing and residential	4	575	80	495	1,831
61	Social assistance	4	284	381	-97	1,505
63	Amusements, gambling,	2	33	81	-48	561
64	Accommodation	3	12	178	-166	888
65	Food services and drinking	17	366	1,029	-663	5,529
66	Other services, exc. gov	6	208	-33	241	1,947
68	Government	9	363	37	326	3,141

Selected SSA Components for Centre County, Pennsylvania vs Neighbors



Selected SSA Components for Centre County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
08	Construction	197	784	-39	823	4,308
14	Computer and electronic	89	241	-60	301	1,828
30	Food and beverage stores	101	765	41	724	2,568
49	Real estate	40	177	161	16	885
53	Miscellaneous profession	125	68	-299	367	2,303
55	Administrative and	98	2,833	922	1,911	4,579
57	Educational services	255	10,006	2,024	7,982	14,566
58	Ambulatory health care	137	1,211	972	239	3,658
59	Hospitals	105	646	11	635	2,520
60	Nursing and residential	74	505	143	362	1,831
61	Social assistance	72	215	221	-6	1,505
63	Amusements, gambling,	31	4	-38	42	561
64	Accommodation	52	-38	34	-72	888
65	Food services and drinking	305	79	90	-11	5,529
66	Other services, exc. gov	103	111	21	90	1,947
68	Government	164	208	-141	349	3,141

Chapter 12. Clarion County, Pennsylvania

Employment in Clarion County, Pennsylvania, declined from 15,973 in 2005 to 13,205 in 2018, for a change of -2,768, or -17.33%. 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 Clarion County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	1,802	-4,571	-499	-4,072
vs. Appalachia	50	-2,820	-294	-2,526
vs. Neighbors	-111	-2,654	-540	-2,114

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 Clarion County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Clarion County, Pennsylvania

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
07	Utilities	F III c iii	no	yes	yes	yes
27	Plastics and rubber prod	Dlai	no	yes	yes	yes
37	Transit and ground	Elci	no	yes	yes	yes
53	Miscellaneous profession	BIIaii	yes	yes	yes	yes
55	Administrative and	Alaiii	yes	yes	yes	yes
60	Nursing and residential	Elai	no	yes	yes	yes
61	Social assistance	BIIai	yes	yes	yes	yes
65	Food services and drinking	BVbii	yes	no	yes	yes
66	Other services, exc. gov	FIIIci	no	yes	yes	yes

Notes:

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

Groups I, II, and III are from Clarion County, Pennsylvania vs. the United States

Groups a, b, and c are from Clarion County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Clarion County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Clarion County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Clarion County, Pennsylvania, 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 Clarion County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Clarion County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

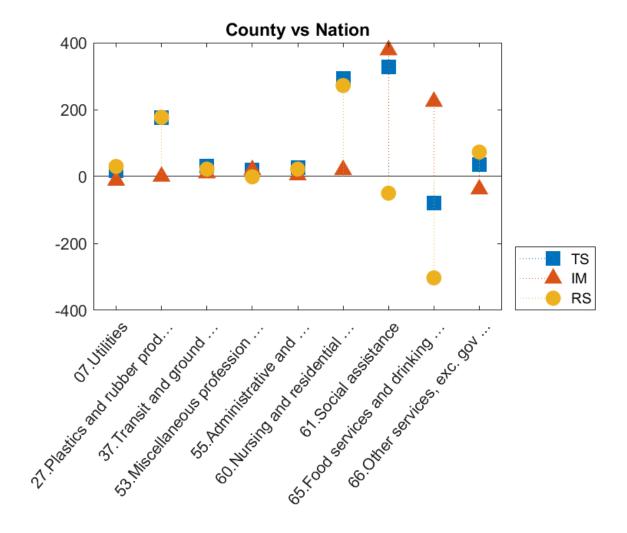
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Clarion County, Pennsylvania, 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 Clarion County, Pennsylvania vs the U.S.

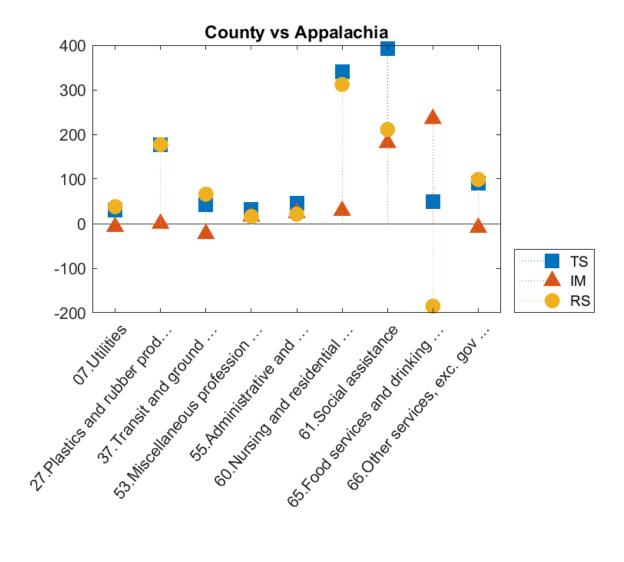


Chapter 12. Clarion County, Pennsylvania

Clarion County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
07	Utilities	13	18	-12	30	143
27	Plastics and rubber prod	0	177	0	177	177
37	Transit and ground	12	32	10	22	152
53	Miscellaneous profession	13	19	20	-1	150
55	Administrative and	20	26	4	22	218
60	Nursing and residential	51	292	20	272	797
61	Social assistance	65	328	378	-50	971
65	Food services and drinking	133	-79	224	-303	1,230
66	Other services, exc. gov	56	35	-38	73	587

Selected SSA Components for Clarion County, Pennsylvania vs the Appalachian Region

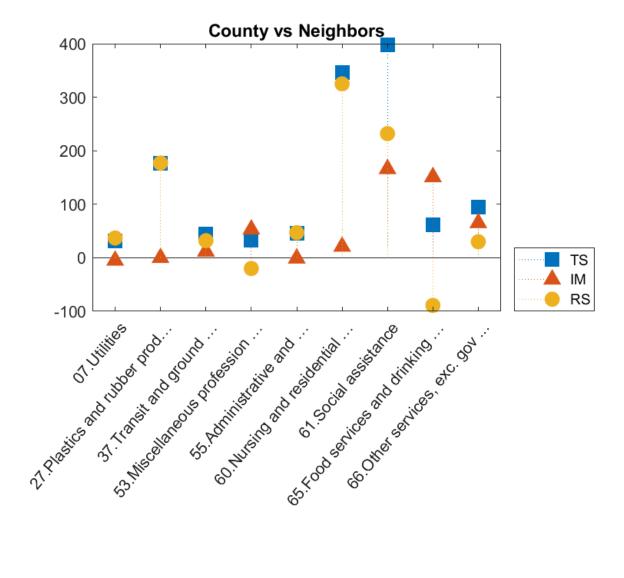


Chapter 12. Clarion County, Pennsylvania

Selected SSA Components for Clarion County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
07	Utilities	0	31	-7	38	143
27	Plastics and rubber prod	0	177	0	177	177
37	Transit and ground	0	43	-23	66	152
53	Miscellaneous profession	0	32	16	16	150
55	Administrative and	1	45	24	21	218
60	Nursing and residential	2	341	29	312	797
61	Social assistance	2	392	181	211	971
65	Food services and drinking	4	50	235	-185	1,230
66	Other services, exc. gov	2	90	-9	99	587

Selected SSA Components for Clarion County, Pennsylvania vs Neighbors



Chapter 12. Clarion County, Pennsylvania

Selected SSA Components for Clarion County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
07	Utilities	-1	32	-5	37	143
27	Plastics and rubber prod	-0	177	0	177	177
37	Transit and ground	-1	44	12	32	152
53	Miscellaneous profession	-1	33	53	-20	150
55	Administrative and	-1	46	-1	47	218
60	Nursing and residential	-3	346	21	325	797
61	Social assistance	-4	398	166	232	971
65	Food services and drinking	-8	62	151	-89	1,230
66	Other services, exc. gov	-4	95	65	30	587

Chapter 13. Clearfield County, Pennsylvania

Employment in Clearfield County, Pennsylvania, declined from 32,639 in 2005 to 29,966 in 2018, for a change of -2,673, or -8.19%. 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 Clearfield County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	3,681	-6,353	951	-7,304
vs. Appalachia	110	-2,782	-754	-2,028
vs. Neighbors	130	-2,802	-1,472	-1,330

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 Clearfield County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Clearfield County, Pennsylvania

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
	Other					
39	transportation 	Elci	no	yes	yes	yes
	Administrative	A 1 ~ ::				
55	and	Alaii	yes	yes	yes	yes
58	Ambulatory	BIIaii	yes	yes	yes	yes
	health care	Dilaii	y c s		yes	
60	Nursing and residential	Ellai	no	yes	yes	yes
61	Social assistance	BVbii	yes	no	yes	yes
64	Accommodation	Alai	yes	yes	yes	yes
65	Food services and drinking	BVbii	yes	no	yes	yes
66	Other services, exc. gov	FIIIci	no	yes	yes	yes

Notes:

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

Groups I, II, and III are from Clearfield County, Pennsylvania vs. the United States

Groups a, b, and c are from Clearfield County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Clearfield County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Clearfield County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Clearfield County, Pennsylvania, 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 Clearfield County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Clearfield County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

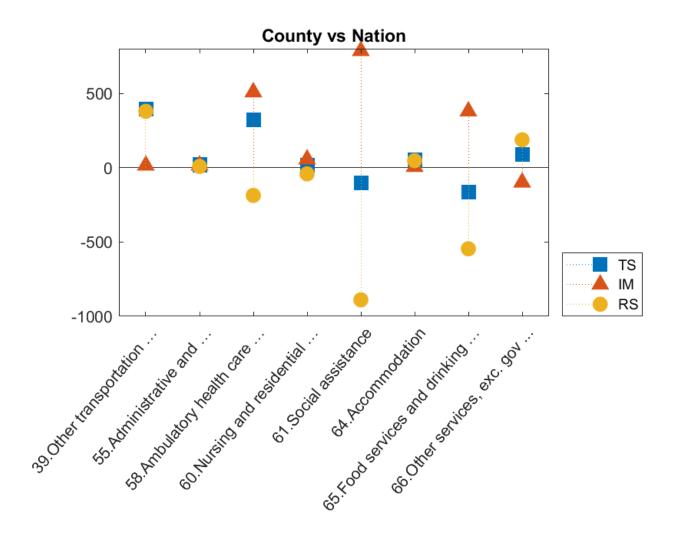
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Clearfield County, Pennsylvania, 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 Clearfield County, Pennsylvania vs the U.S.

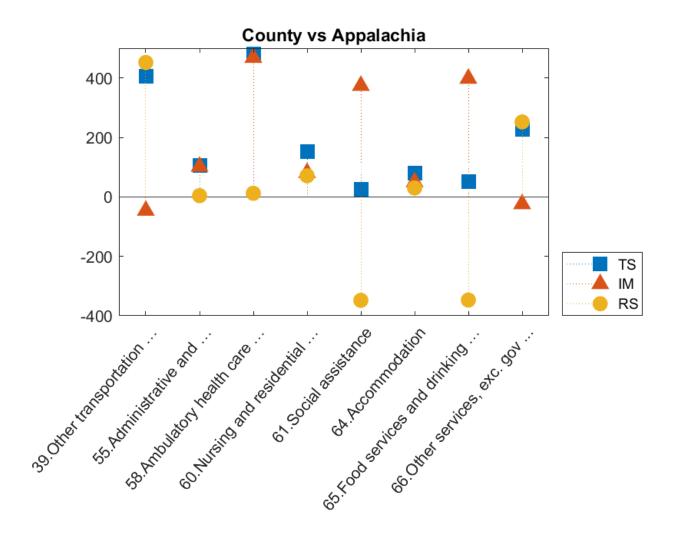


Chapter 13. Clearfield County, Pennsylvania

Clearfield County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
39	Other transportation	12	394	15	379	513
55	Administrative and	84	24	16	8	855
58	Ambulatory health care	163	321	508	-187	1,933
60	Nursing and residential	142	14	56	-42	1,417
61	Social assistance	135	-104	785	-889	1,228
64	Accommodation	28	53	6	47	324
65	Food services and drinking	224	-167	379	-546	2,048
66	Other services, exc. gov	144	88	-99	187	1,509

Selected SSA Components for Clearfield County, Pennsylvania vs the Appalachian Region

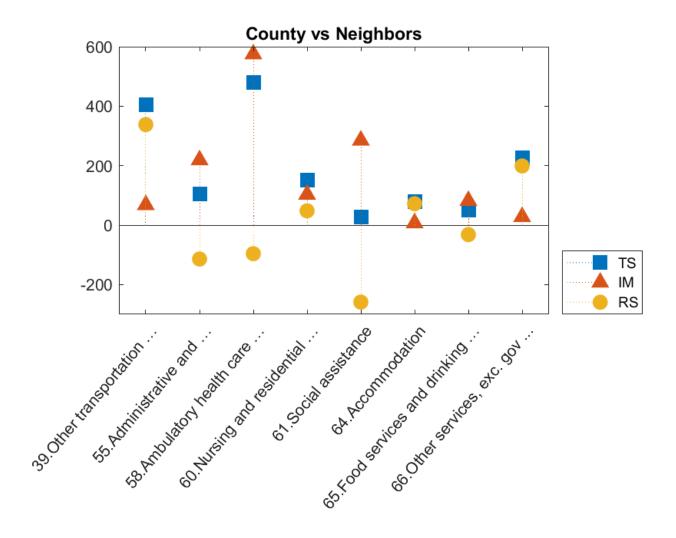


Chapter 13. Clearfield County, Pennsylvania

Selected SSA Components for Clearfield County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
39	Other transportation	0	406	-46	452	513
55	Administrative and	3	106	102	4	855
58	Ambulatory health care	5	480	468	12	1,933
60	Nursing and residential	4	152	81	71	1,417
61	Social assistance	4	26	374	-348	1,228
64	Accommodation	1	80	50	30	324
65	Food services and drinking	7	51	398	-347	2,048
66	Other services, exc. gov	4	228	-24	252	1,509

Selected SSA Components for Clearfield County, Pennsylvania vs Neighbors



Chapter 13. Clearfield County, Pennsylvania

Selected SSA Components for Clearfield County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
39	Other transportation	0	406	68	338	513
55	Administrative and	3	105	219	-114	855
58	Ambulatory health care	6	479	575	-96	1,933
60	Nursing and residential	5	151	103	48	1,417
61	Social assistance	5	26	285	-259	1,228
64	Accommodation	1	79	7	72	324
65	Food services and drinking	8	50	82	-32	2,048
66	Other services, exc. gov	5	227	28	199	1,509

Chapter 14. Clinton County, Pennsylvania

Employment in Clinton County, Pennsylvania, grew from 13,092 in 2005 to 13,356 in 2018, for a change of 264, or 2.02%. 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 Clinton County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	1,478	-1,214	-626	-588
vs. Appalachia	41	217	-223	440
vs. Neighbors	984	-718	-91	-627

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 Clinton County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Clinton County, Pennsylvania

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	FIIIaii	no	yes	yes	yes
06	Support activities for	Alai	yes	yes	yes	yes
07	Utilities	FIIIci	no	yes	yes	yes
08	Construction	FIIIci	no	yes	yes	yes
11	Primary metals	FIIIciii	no	yes	yes	yes
23	Paper products	DIIIci	no	yes	yes	yes
26	Chemical products	FIIIci	no	yes	yes	yes
28	Wholesale trade	FIIIciii	no	yes	yes	yes
37	Transit and ground	Elciii	no	yes	yes	yes
49	Real estate	Flaii	no	yes	yes	yes
58	Ambulatory health care 	BIIaii	yes	yes	yes	yes
60	Nursing and residential	Elai	no	yes	yes	yes
61	Social assistance	BIIbii	yes	yes	yes	yes
66	Other services, exc. gov	FIIIci	no	yes	yes	yes

Notes:

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

Groups I, II, and III are from Clinton County, Pennsylvania vs. the United States

Groups a, b, and c are from Clinton County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Clinton County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Clinton County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Clinton County, Pennsylvania, 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 Clinton County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Clinton County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

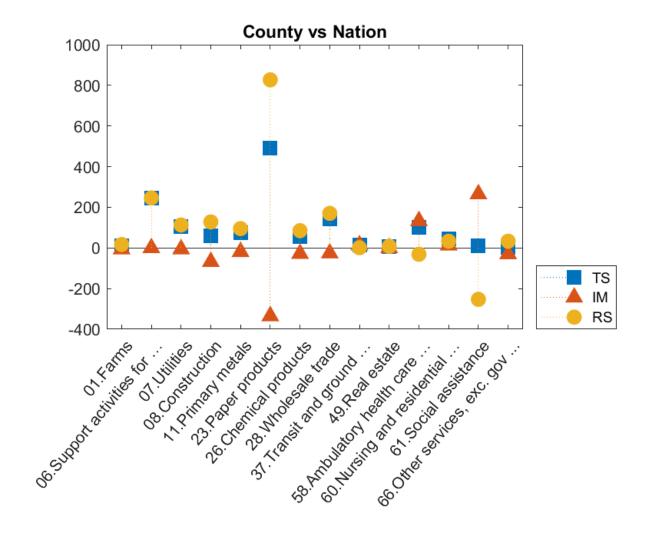
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Clinton County, Pennsylvania, 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 Clinton County, Pennsylvania vs the U.S.

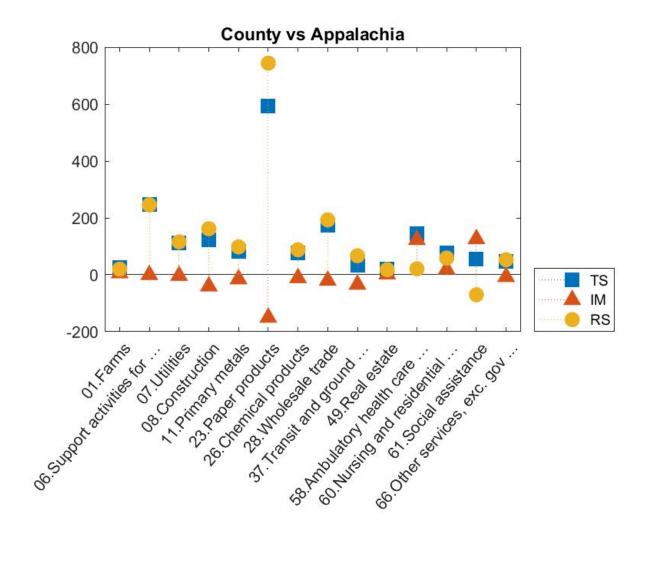


Chapter 14. Clinton County, Pennsylvania

Clinton County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	15	11	-6	17	155
06	Support activities for 	0	246	0	246	246
07	Utilities	6	107	-6	113	166
08	Construction	63	60	-68	128	684
11	Primary metals	7	76	-19	95	146
23	Paper products	106	492	-335	827	1,533
26	Chemical products	20	57	-28	85	251
28	Wholesale trade	31	144	-26	170	448
37	Transit and ground	18	15	14	1	195
49	Real estate	14	8	-0	8	142
58	Ambulatory health care 	43	102	133	-31	525
60	Nursing and residential	33	46	13	33	371
61	Social assistance	46	12	265	-253	462
66	Other services, exc. gov	43	3	-30	33	431

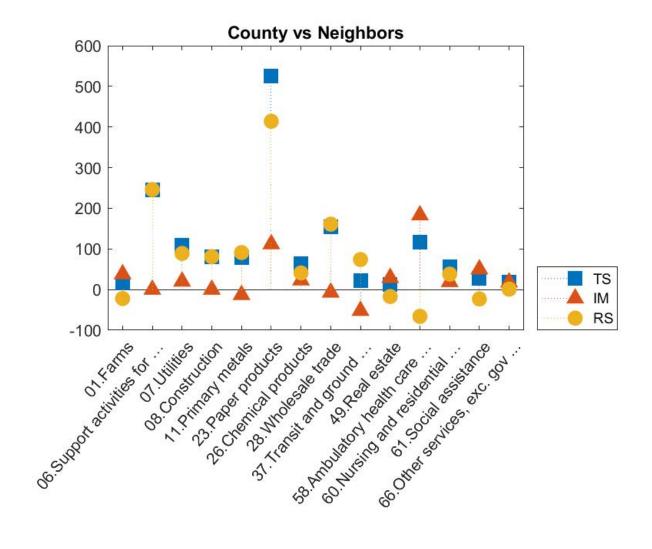
Selected SSA Components for Clinton County, Pennsylvania vs the Appalachian Region



Selected SSA Components for Clinton County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	0	26	6	20	155
06	Support activities for 	0	246	0	246	246
07	Utilities	0	113	-3	116	166
08	Construction	2	122	-40	162	684
11	Primary metals	0	83	-15	98	146
23	Paper products	3	594	-150	744	1,533
26	Chemical products	1	77	-11	88	251
28	Wholesale trade	1	173	-20	193	448
37	Transit and ground	1	33	-34	67	195
49	Real estate	0	20	2	18	142
58	Ambulatory health care 	1	144	123	21	525
60	Nursing and residential	1	78	19	59	371
61	Social assistance	1	56	126	-70	462
66	Other services, exc. gov	1	46	-7	53	431

Selected SSA Components for Clinton County, Pennsylvania vs Neighbors



Selected SSA Components for Clinton County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	10	16	38	-22	155
06	Support activities for	0	246	0	246	246
07	Utilities	4	109	20	89	166
80	Construction	42	81	-0	81	684
11	Primary metals	5	78	-13	91	146
23	Paper products	70	526	112	414	1,533
26	Chemical products	13	64	23	41	251
28	Wholesale trade	21	154	-7	161	448
37	Transit and ground	12	22	-52	74	195
49	Real estate	9	12	29	-17	142
58	Ambulatory health care 	29	117	183	-66	525
60	Nursing and residential	22	57	19	38	371
61	Social assistance	30	27	50	-23	462
66	Other services, exc. gov	29	19	18	1	431

Chapter 15. Columbia County, Pennsylvania

Employment in Columbia County, Pennsylvania, declined from 25,317 in 2005 to 24,845 in 2018, for a change of -472, or -1.86%. 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 Columbia County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	2,852	-3,328	-817	-2,511
vs. Appalachia	82	-556	-556	0
vs. Neighbors	-543	74	-383	457

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 Columbia County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Columbia County, Pennsylvania

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
13	Machinery	F III c iii	no	yes	yes	yes
28	Wholesale trade	F III c iii	no	yes	yes	yes
36	Truck transportation	FIIIci	no	yes	yes	yes
40	Warehousing and storage	Ellaii	no	yes	yes	yes
54	Management of companies	Alai	yes	yes	yes	yes
58	Ambulatory health care	Blai	yes	yes	yes	yes
60	Nursing and residential	Elai	no	yes	yes	yes
61	Social assistance	BIIbii	yes	yes	yes	yes
64	Accommodation	Alai	yes	yes	yes	yes
65	Food services and drinking	BIIai	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 Columbia County, Pennsylvania vs. the United States

Groups a, b, and c are from Columbia County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Columbia County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Columbia County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Columbia County, Pennsylvania, 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 Columbia County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Columbia County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

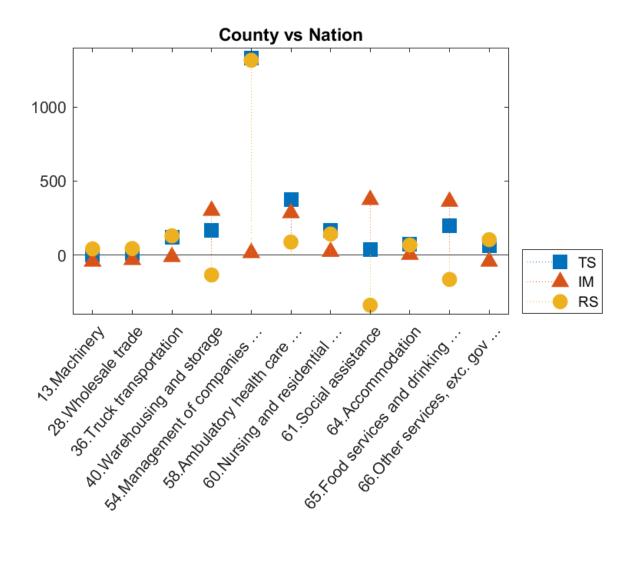
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Columbia County, Pennsylvania, 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 Columbia County, Pennsylvania vs the U.S.

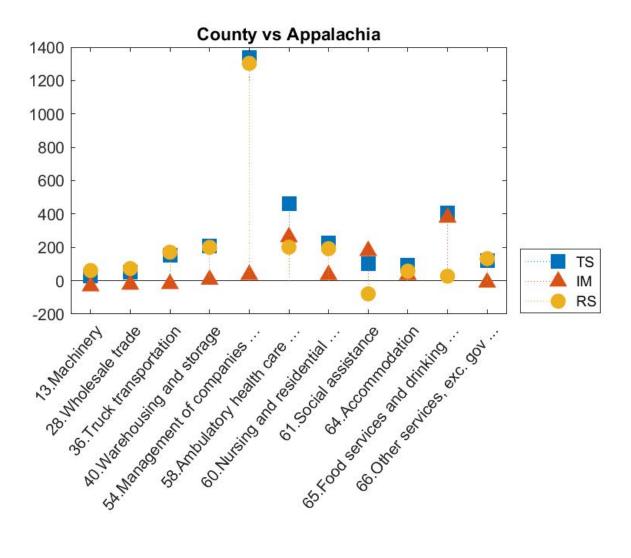


Chapter 15. Columbia County, Pennsylvania

Columbia County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
13	Machinery	28	1	-42	43	280
28	Wholesale trade	36	14	-31	45	372
36	Truck transportation	32	120	-11	131	440
40	Warehousing and storage	41	168	301	-133	568
54	Management of companies	8	1,331	16	1,315	1,409
58	Ambulatory health care	92	374	285	89	1,279
60	Nursing and residential	62	167	24	143	776
61	Social assistance	64	37	374	-337	672
64	Accommodation	19	73	4	69	263
65	Food services and drinking	214	199	362	-163	2,310
66	Other services, exc. gov	61	63	-42	105	666

Selected SSA Components for Columbia County, Pennsylvania vs the Appalachian Region

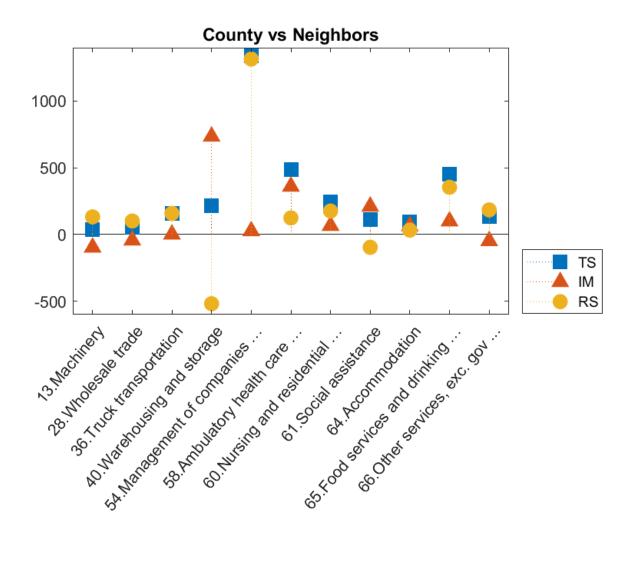


Chapter 15. Columbia County, Pennsylvania

Selected SSA Components for Columbia County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
13	Machinery	1	28	-33	61	280
28	Wholesale trade	1	50	-23	73	372
36	Truck transportation	1	152	-19	171	440
40	Warehousing and storage	1	207	7	200	568
54	Management of companies	0	1,339	36	1,303	1,409
58	Ambulatory health care	3	463	262	201	1,279
60	Nursing and residential	2	227	35	192	776
61	Social assistance	2	100	179	-79	672
64	Accommodation	1	92	35	57	263
65	Food services and drinking	6	406	379	27	2,310
66	Other services, exc. gov	2	122	-10	132	666

Selected SSA Components for Columbia County, Pennsylvania vs Neighbors



Chapter 15. Columbia County, Pennsylvania

Selected SSA Components for Columbia County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
13	Machinery	-5	35	-97	132	280
28	Wholesale trade	-7	57	-44	101	372
36	Truck transportation	-6	159	1	158	440
40	Warehousing and storage	-8	216	735	-519	568
54	Management of companies	-2	1,341	26	1,315	1,409
58	Ambulatory health care	-17	484	360	124	1,279
60	Nursing and residential	-12	242	66	176	776
61	Social assistance	-12	114	210	-96	672
64	Accommodation	-4	96	63	33	263
65	Food services and drinking	-41	454	100	354	2,310
66	Other services, exc. gov	-12	136	-48	184	666

Chapter 16. Crawford County, Pennsylvania

Employment in Crawford County, Pennsylvania, declined from 30,929 in 2005 to 30,167 in 2018, for a change of -762, or -2.46%. 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 Crawford County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	3,487	-4,250	-780	-3,470
vs. Appalachia	103	-865	37	-902
vs. Neighbors	-3,209	2,443	993	1,450

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 Crawford County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Crawford County, Pennsylvania

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
	Support					
06	activities for	Alai	yes	yes	yes	yes
			•	•	•	•
20	Food and	Fla:				
20	beverage	Elci	no	yes	yes	yes
07	Plastics and	D.III - ""				
27	rubber prod	D III a iii	no	yes	yes	yes
	Miscellaneous	D.II - ""	yes		yes	yes
53	profession	B II a iii		yes		
	Ambulatory	DUL:				yes
58	health care	BIIbi	yes	yes	yes	
59	Hospitals	Ellai	no	yes	yes	yes
0.4	Social	D.H'				
61	assistance	BIIai	yes	yes	yes	yes
	Food services					
65	and drinking	BVbii	yes	no	yes	yes
			•		•	•
	Other					
66	services, exc.	FIIIci	no	yes	yes	yes
	gov			•	•	•

Notes:

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

Groups I, II, and III are from Crawford County, Pennsylvania vs. the United States

Groups a, b, and c are from Crawford County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Crawford County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Crawford County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Crawford County, Pennsylvania, 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 Crawford County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Crawford County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

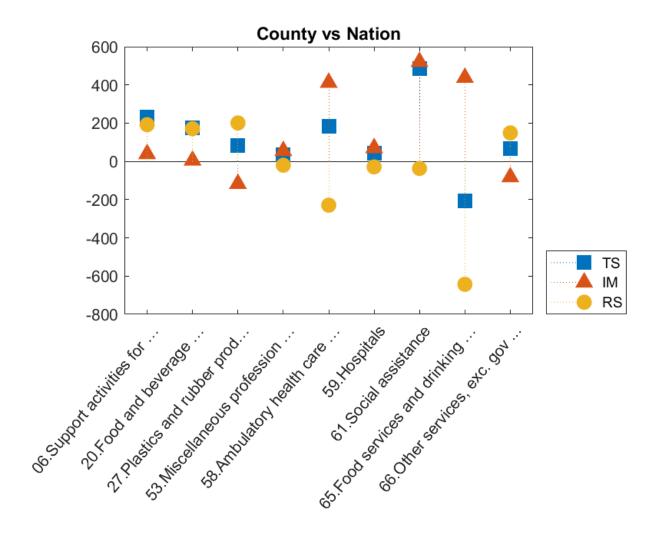
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Crawford County, Pennsylvania, 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 Crawford County, Pennsylvania vs the U.S.

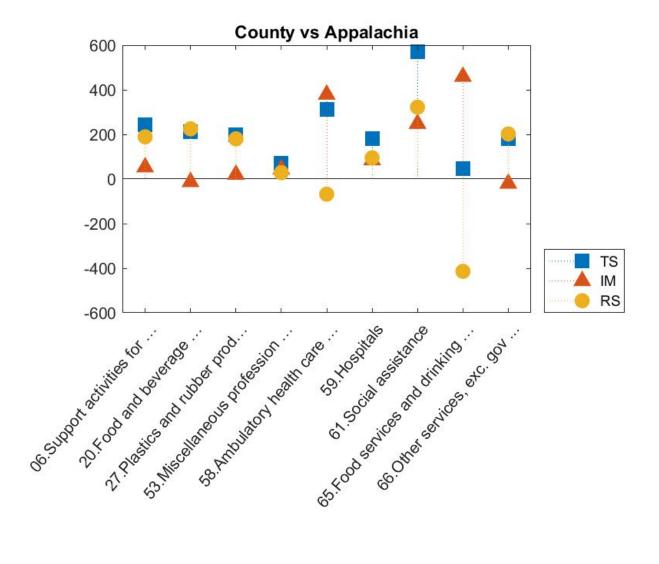


Chapter 16. Crawford County, Pennsylvania

Crawford County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
06	Support activities for 	11	231	39	192	337
20	Food and beverage	37	176	5	171	543
27	Plastics and rubber prod	120	84	-117	201	1,270
53	Miscellaneous profession	37	35	55	-20	400
58	Ambulatory health care	132	183	412	-229	1,489
59	Hospitals	143	41	70	-29	1,450
61	Social assistance	90	484	521	-37	1,368
65	Food services and drinking	259	-205	438	-643	2,349
66	Other services, exc. gov	119	67	-82	149	1,242

Selected SSA Components for Crawford County, Pennsylvania vs the Appalachian Region

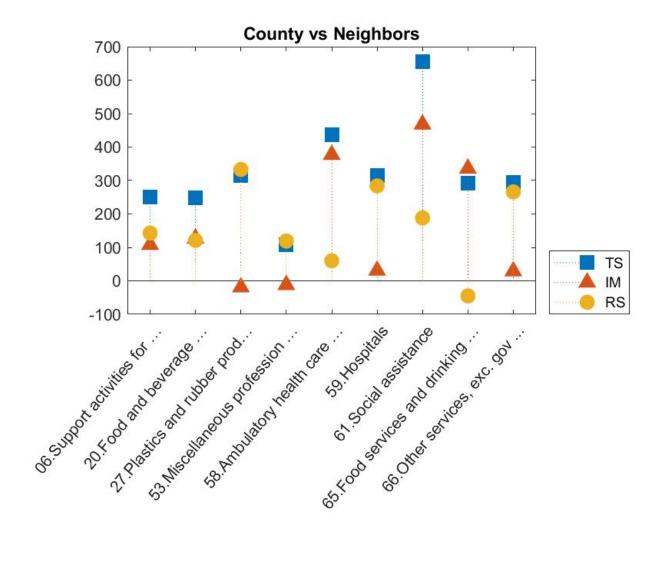


Chapter 16. Crawford County, Pennsylvania

Selected SSA Components for Crawford County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
06	Support activities for 	0	242	53	189	337
20	Food and beverage	1	212	-13	225	543
27	Plastics and rubber prod	4	200	20	180	1,270
53	Miscellaneous profession	1	72	44	28	400
58	Ambulatory health care	4	311	379	-68	1,489
59	Hospitals	4	180	85	95	1,450
61	Social assistance	3	570	248	322	1,368
65	Food services and drinking	8	45	459	-414	2,349
66	Other services, exc. gov	4	182	-20	202	1,242

Selected SSA Components for Crawford County, Pennsylvania vs Neighbors



Chapter 16. Crawford County, Pennsylvania

Selected SSA Components for Crawford County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
06	Support activities for 	-10	251	108	143	337
20	Food and beverage	-34	248	127	121	543
27	Plastics and rubber prod	-111	314	-19	333	1,270
53	Miscellaneous profession	-34	107	-12	119	400
58	Ambulatory health care	-122	437	377	60	1,489
59	Hospitals	-131	315	31	284	1,450
61	Social assistance	-82	656	468	188	1,368
65	Food services and drinking	-238	291	336	-45	2,349
66	Other services, exc. gov	-110	295	29	266	1,242

Chapter 17. Elk County, Pennsylvania

Employment in Elk County, Pennsylvania, declined from 16,061 in 2005 to 15,001 in 2018, for a change of -1,060, or -6.6%. 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 Elk County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	1,808	-2,869	-704	-2,165
vs. Appalachia	53	-1,115	-265	-850
vs. Neighbors	-1,332	268	902	-634

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 Elk County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Elk County, Pennsylvania

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	FIIIci	no	yes	yes	yes
12	Fabricated metal products	FIIIci	no	yes	yes	yes
29	Motor vehicle and parts	FIIIai	no	yes	yes	yes
53	Miscellaneous profession	Blai	yes	yes	yes	yes
61	Social assistance	B V e ii	yes	no	no	yes
65	Food services and drinking	Bllai	yes	yes	yes	yes

Notes:

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

Groups I, II, and III are from Elk County, Pennsylvania vs. the United States

Groups a, b, and c are from Elk County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Elk County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Elk County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Elk County, Pennsylvania, 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 Elk County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Elk County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

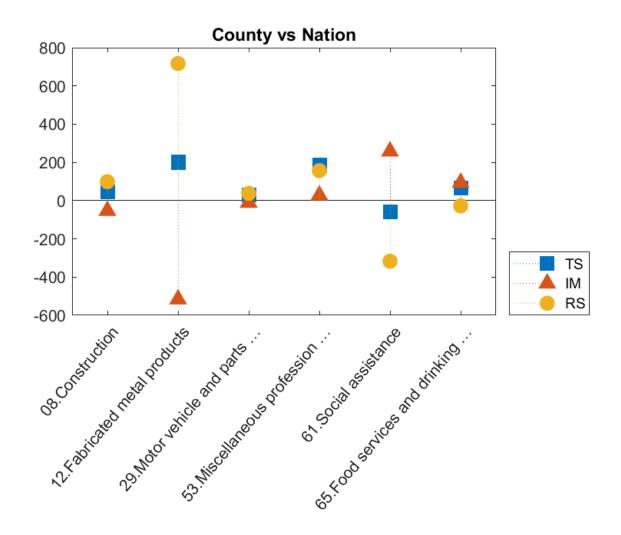
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Elk County, Pennsylvania, 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 Elk County, Pennsylvania vs the U.S.

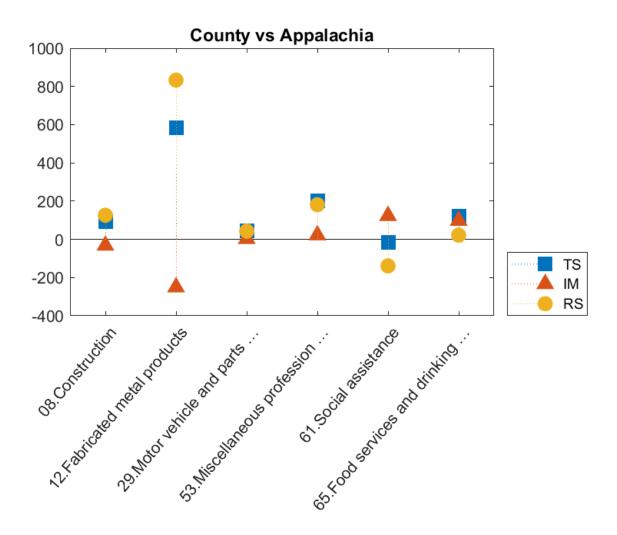


Elk County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
08	Construction	50	46	-53	99	535
12	Fabricated metal products	394	201	-516	717	4,092
29	Motor vehicle and parts	18	28	-10	38	210
53	Miscellaneous profession	19	185	28	157	369
61	Social assistance	44	-59	258	-317	379
65	Food services and drinking	55	67	94	-27	614

. . .

Selected SSA Components for Elk County, Pennsylvania vs the Appalachian Region

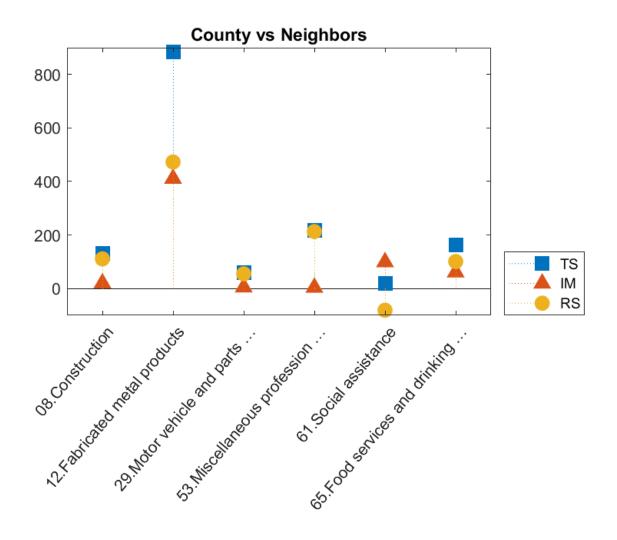


Selected SSA Components for Elk County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
08	Construction	1	94	-32	126	535
12	Fabricated metal products	12	583	-250	833	4,092
29	Motor vehicle and parts	1	46	3	43	210
53	Miscellaneous profession	1	203	22	181	369
61	Social assistance	1	-16	123	-139	379
65	Food services and drinking	2	120	98	22	614

. . .

Selected SSA Components for Elk County, Pennsylvania vs Neighbors



Selected SSA Components for Elk County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
08	Construction	-36	131	20	111	535
12	Fabricated metal products	-289	884	411	473	4,092
29	Motor vehicle and parts	-14	60	5	55	210
53	Miscellaneous profession	-14	217	4	213	369
61	Social assistance	-33	18	99	-81	379
65	Food services and drinking	-41	162	61	101	614

...

Chapter 18. Erie County, Pennsylvania

Employment in Erie County, Pennsylvania, declined from 129,149 in 2005 to 122,054 in 2018, for a change of -7,095, or -5.49%. 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 Erie County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	14,565	-21,661	-841	-20,820
vs. Appalachia	439	-7,537	1,344	-8,881
vs. Neighbors	-9,132	2,035	-325	2,360

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 Erie County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Erie County, Pennsylvania

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	Elci	no	yes	yes	yes
58	Ambulatory health care	BIIbi	yes	yes	yes	yes
61	Social assistance	Blai	yes	yes	yes	yes
63	Amusements, gambling,	Blai	yes	yes	yes	yes
64	Accommodation	Alai	yes	yes	yes	yes
65	Food services and drinking	BVbi	yes	no	yes	yes

Notes:

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

Groups I, II, and III are from Erie County, Pennsylvania vs. the United States

Groups a, b, and c are from Erie County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Erie County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Erie County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Erie County, Pennsylvania, 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 Erie County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Erie County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

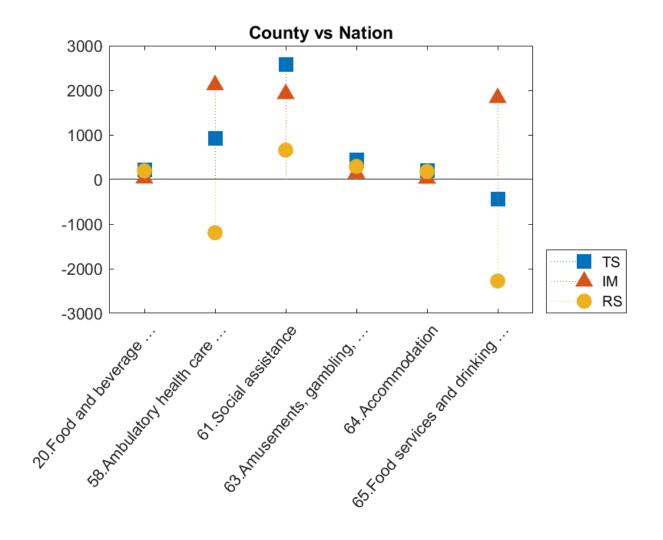
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Erie County, Pennsylvania, 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 Erie County, Pennsylvania vs the U.S.

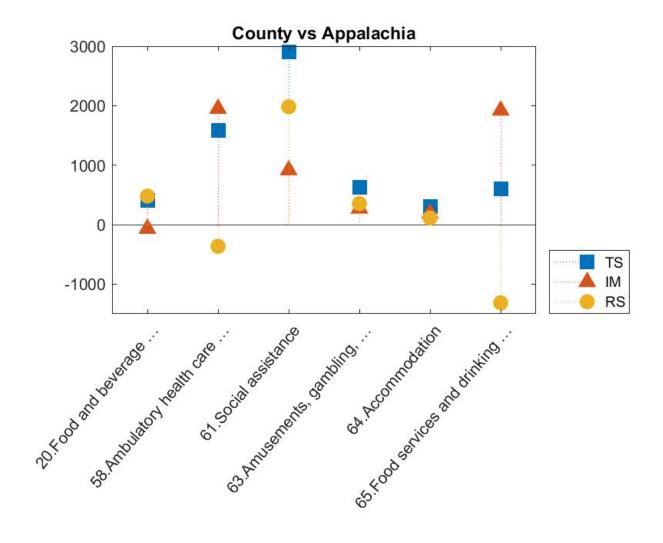


Chapter 18. Erie County, Pennsylvania

Erie County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
20	Food and beverage	195	222	27	195	2,144
58	Ambulatory health care	681	924	2,118	-1,194	7,641
61	Social assistance	330	2,577	1,919	658	5,835
63	Amusements, gambling,	200	432	139	293	2,405
64	Accommodation	107	200	22	178	1,254
65	Food services and drinking	1,083	-445	1,831	-2,276	10,242

Selected SSA Components for Erie County, Pennsylvania vs the Appalachian Region

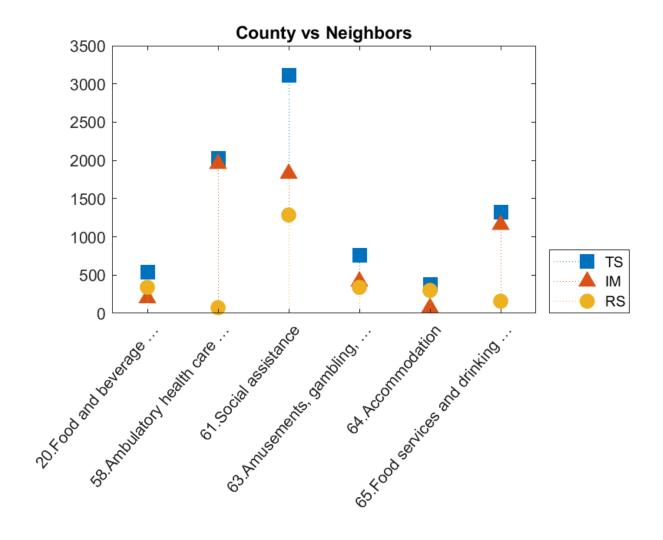


Chapter 18. Erie County, Pennsylvania

Selected SSA Components for Erie County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
20	Food and beverage	6	411	-68	479	2,144
58	Ambulatory health care	21	1,584	1,949	-365	7,641
61	Social assistance	10	2,897	916	1,981	5,835
63	Amusements, gambling,	6	626	272	354	2,405
64	Accommodation	3	303	192	111	1,254
65	Food services and drinking	33	605	1,920	-1,315	10,242

Selected SSA Components for Erie County, Pennsylvania vs Neighbors



Chapter 18. Erie County, Pennsylvania

Selected SSA Components for Erie County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
20	Food and beverage	-122	539	199	340	2,144
58	Ambulatory health care	-427	2,031	1,957	74	7,641
61	Social assistance	-207	3,114	1,828	1,286	5,835
63	Amusements, gambling,	-125	758	419	339	2,405
64	Accommodation	-67	374	74	300	1,254
65	Food services and drinking	-679	1,318	1,159	159	10,242

Chapter 19. Fayette County, Pennsylvania

Employment in Fayette County, Pennsylvania, declined from 41,139 in 2005 to 39,237 in 2018, for a change of -1,902, or -4.62%. 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 Fayette County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	4,642	-6,544	469	-7,013
vs. Appalachia	138	-2,042	722	-2,764
vs. Neighbors	1,822	-3,721	271	-3,992

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 Fayette County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Fayette County, Pennsylvania

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
06	Support activities for	Alai	yes	yes	yes	yes
14	Computer and electronic	F III c iii	no	yes	yes	yes
36	Truck transportation	FIIIci	no	yes	yes	yes
55	Administrative and	Alai	yes	yes	yes	yes
58	Ambulatory health care	BIIbi	yes	yes	yes	yes
61	Social assistance	Blai	yes	yes	yes	yes
63	Amusements, gambling,	Blai	yes	yes	yes	yes
65	Food services and drinking	BVbv	yes	no	yes	no

Notes:

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

Groups I, II, and III are from Fayette County, Pennsylvania vs. the United States

Groups a, b, and c are from Fayette County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Fayette County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Fayette County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Fayette County, Pennsylvania, 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 Fayette County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Fayette County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

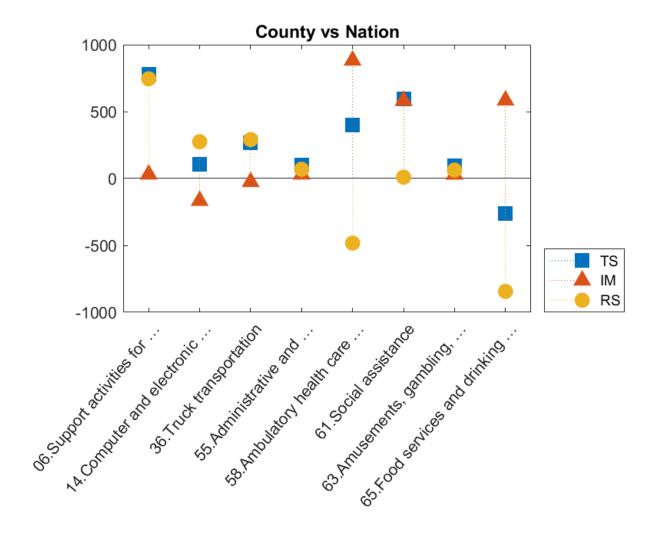
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Fayette County, Pennsylvania, 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 Fayette County, Pennsylvania vs the U.S.



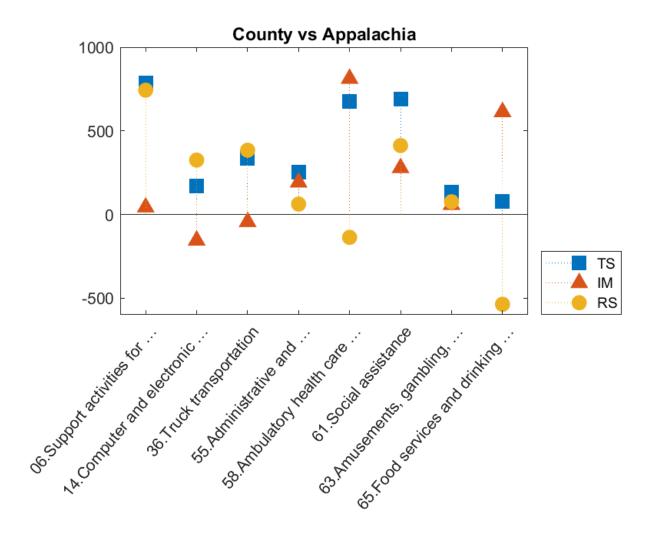
Chapter 19. Fayette County, Pennsylvania

Fayette County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
06	Support activities for 	9	776	31	745	862
14	Computer and electronic 	62	109	-166	275	724
36	Truck transportation	76	266	-25	291	1,020
55	Administrative and	159	100	31	69	1,668
58	Ambulatory health care	284	399	882	-483	3,197
61	Social assistance	100	592	582	10	1,581
63	Amusements, gambling,	43	93	30	63	516
65	Food services and drinking	346	-260	584	-844	3,150

. . .

Selected SSA Components for Fayette County, Pennsylvania vs the Appalachian Region

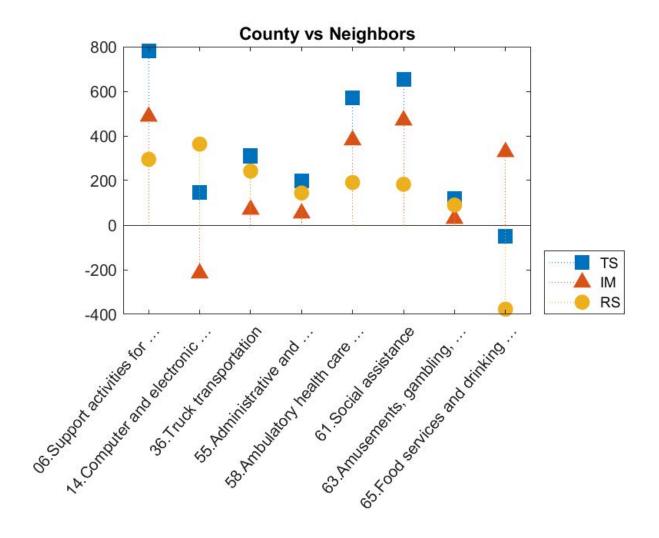


Selected SSA Components for Fayette County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
06	Support activities for 	0	786	43	743	862
14	Computer and electronic	2	170	-155	325	724
36	Truck transportation	2	340	-44	384	1,020
55	Administrative and	5	254	192	62	1,668
58	Ambulatory health care	9	675	812	-137	3,197
61	Social assistance	3	690	278	412	1,581
63	Amusements, gambling,	1	134	58	76	516
65	Food services and drinking	10	76	613	-537	3,150

...

Selected SSA Components for Fayette County, Pennsylvania vs Neighbors



Selected SSA Components for Fayette County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
06	Support activities for 	3	782	487	295	862
14	Computer and electronic	24	147	-216	363	724
36	Truck transportation	30	312	70	242	1,020
55	Administrative and	62	197	53	144	1,668
58	Ambulatory health care	111	572	381	191	3,197
61	Social assistance	39	653	470	183	1,581
63	Amusements, gambling,	17	119	29	90	516
65	Food services and drinking	136	-49	328	-377	3,150

...

Chapter 20. Forest County, Pennsylvania

Employment in Forest County, Pennsylvania, declined from 2,124 in 2005 to 2,081 in 2018, for a change of -43, or -2.02%. 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 Forest County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	238	-280	41	-321
vs. Appalachia	3	-49	64	-113
vs. Neighbors	-232	188	111	77

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 Forest County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Forest County, Pennsylvania

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
03	Oil and gas extraction	Albi	yes	yes	yes	yes
08	Construction	FIIIci	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
37	Transit and ground	Elai	no	yes	yes	yes
58	Ambulatory health care 	Blai	yes	yes	yes	yes
68	Government	FIIIai	no	yes	yes	yes

Notes:

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

Groups I, II, and III are from Forest County, Pennsylvania vs. the United States

Groups a, b, and c are from Forest County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Forest County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Forest County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Forest County, Pennsylvania, 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 Forest County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Forest County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

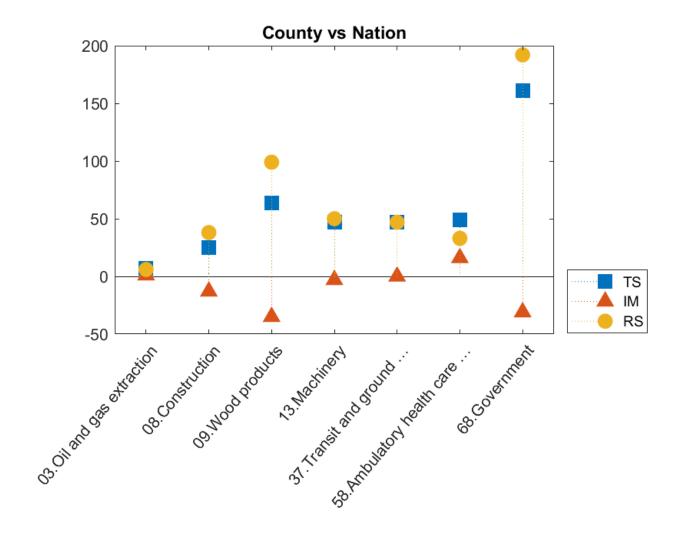
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Forest County, Pennsylvania, 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 Forest County, Pennsylvania vs the U.S.

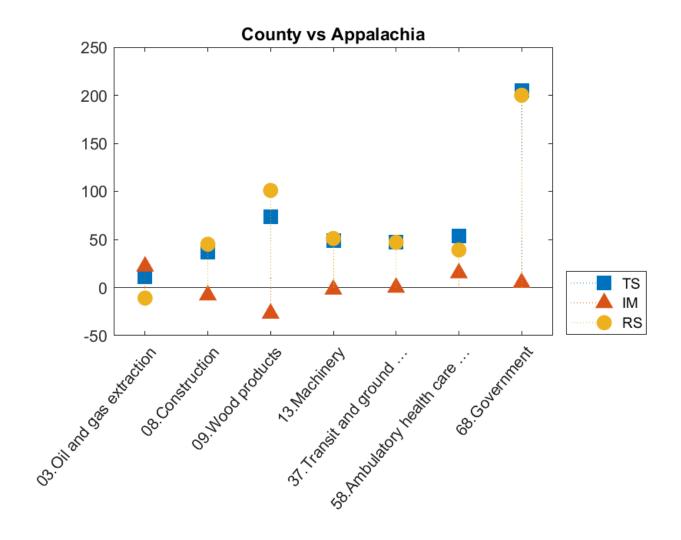


Chapter 20. Forest County, Pennsylvania

Forest County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
03	Oil and gas extraction	4	7	1	6	49
80	Construction	12	25	-13	38	144
09	Wood products	10	64	-35	99	164
13	Machinery	2	47	-3	50	65
37	Transit and ground	0	47	0	47	47
58	Ambulatory health care 	5	49	16	33	100
68	Government	46	161	-31	192	619

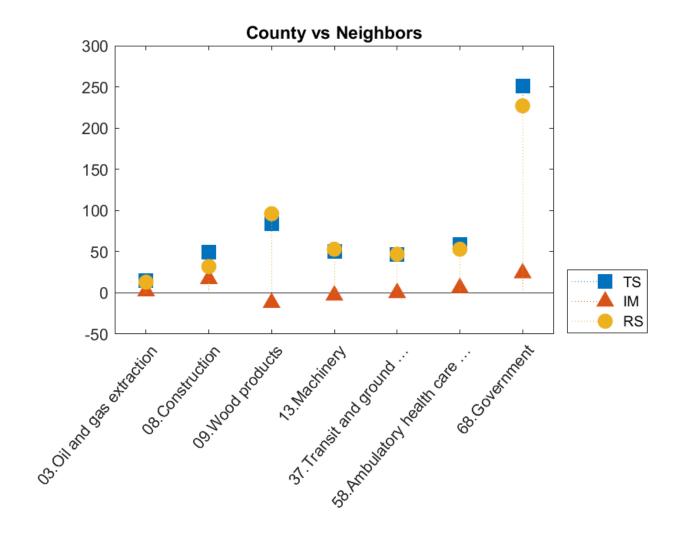
Selected SSA Components for Forest County, Pennsylvania vs the Appalachian Region



Selected SSA Components for Forest County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
03	Oil and gas extraction	0	11	22	-11	49
08	Construction	0	37	-8	45	144
09	Wood products	0	74	-27	101	164
13	Machinery	0	49	-2	51	65
37	Transit and ground	0	47	0	47	47
58	Ambulatory health care 	0	54	15	39	100
68	Government	1	205	5	200	619

Selected SSA Components for Forest County, Pennsylvania vs Neighbors



Chapter 20. Forest County, Pennsylvania

Selected SSA Components for Forest County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
03	Oil and gas extraction	-4	15	2	13	49
08	Construction	-12	49	17	32	144
09	Wood products	-10	84	-12	96	164
13	Machinery	-2	50	-3	53	65
37	Transit and ground	-0	47	0	47	47
58	Ambulatory health care 	-5	59	6	53	100
68	Government	-45	251	24	227	619

Chapter 21. Fulton County, Pennsylvania

Employment in Fulton County, Pennsylvania, grew from 5,683 in 2005 to 5,939 in 2018, for a change of 256, or 4.5%. 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 Fulton County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	638	-381	-409	28
vs. Appalachia	14	237	-301	538
vs. Neighbors	66	191	90	101

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 Fulton County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Fulton County, Pennsylvania

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	FIIIai	no	yes	yes	yes
05	Mining, except coal, oil	F III c iii	no	yes	yes	yes
07	Utilities	FIIIci	no	yes	yes	yes
09	Wood products	F III c iii	no	yes	yes	yes
13	Machinery	FIIIci	no	yes	yes	yes
58	Ambulatory health care	Blai	yes	yes	yes	yes
65	Food services and drinking	BIIbi	yes	yes	yes	yes

Notes:

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

Groups I, II, and III are from Fulton County, Pennsylvania vs. the United States

Groups a, b, and c are from Fulton County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Fulton County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Fulton County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Fulton County, Pennsylvania, 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 Fulton County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Fulton County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

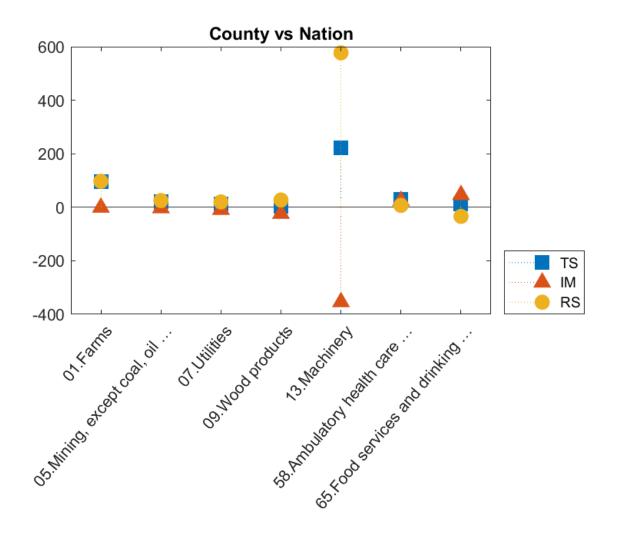
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Fulton County, Pennsylvania, 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 Fulton County, Pennsylvania vs the U.S.

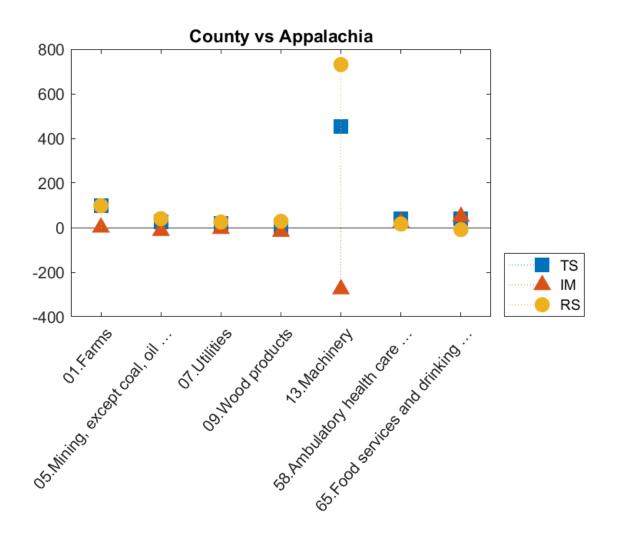


Chapter 21. Fulton County, Pennsylvania

Fulton County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	3	96	-1	97	128
05	Mining, except coal, oil	4	22	-3	25	61
07	Utilities	10	11	-9	20	108
09	Wood products	7	3	-24	27	71
13	Machinery	239	223	-354	577	2,585
58	Ambulatory health care 	8	31	24	7	107
65	Food services and drinking	27	12	46	-34	283

Selected SSA Components for Fulton County, Pennsylvania vs the Appalachian Region

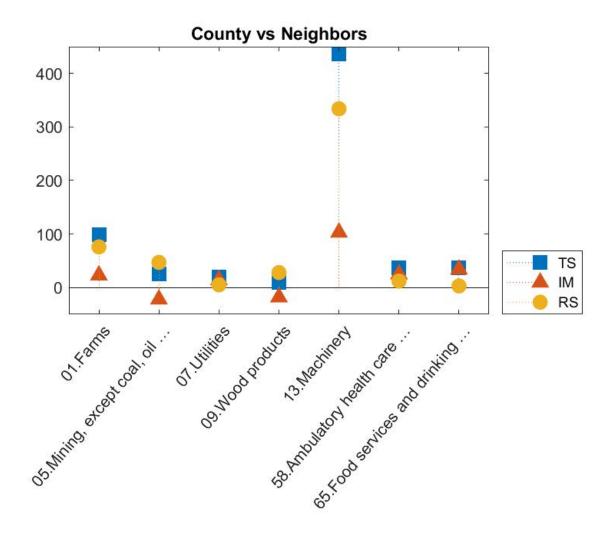


Chapter 21. Fulton County, Pennsylvania

Selected SSA Components for Fulton County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	0	99	1	98	128
05	Mining, except coal, oil	0	26	-14	40	61
07	Utilities	0	20	-5	25	108
09	Wood products	0	10	-18	28	71
13	Machinery	7	455	-276	731	2,585
58	Ambulatory health care 	0	38	22	16	107
65	Food services and drinking	1	40	49	-9	283

Selected SSA Components for Fulton County, Pennsylvania vs Neighbors



Chapter 21. Fulton County, Pennsylvania

Selected SSA Components for Fulton County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	0	99	23	76	128
05	Mining, except coal, oil	0	25	-22	47	61
07	Utilities	1	19	14	5	108
09	Wood products	1	10	-18	28	71
13	Machinery	26	437	103	334	2,585
58	Ambulatory health care 	1	37	25	12	107
65	Food services and drinking …	3	37	34	3	283

Chapter 22. Greene County, Pennsylvania

Employment in Greene County, Pennsylvania, grew from 12,295 in 2005 to 12,886 in 2018, for a change of 591, or 4.81%. 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 Greene County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	1,386	-794	-948	154
vs. Appalachia	39	546	-820	1,366
vs. Neighbors	1,815	-1,224	915	-2,139

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 Greene County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Greene County, Pennsylvania

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
06	Support activities for	Alaii	yes	yes	yes	yes
07	Utilities	F III c iii	no	yes	yes	yes
08	Construction	FIIIci	no	yes	yes	yes
27	Plastics and rubber prod	D III a ii	no	yes	yes	yes
31	General merchandise 	F III c iii	no	yes	yes	yes
36	Truck transportation	FIIIci	no	yes	yes	yes
53	Miscellaneous profession	BVbv	yes	no	yes	no
58	Ambulatory health care	BIIbi	yes	yes	yes	yes
59	Hospitals	Elai	no	yes	yes	yes
61	Social assistance	BIIaii	yes	yes	yes	yes
65	Food services and drinking	Blai	yes	yes	yes	yes
68	Government	F III a iv	no	yes	yes	no

Notes:

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

Groups I, II, and III are from Greene County, Pennsylvania vs. the United States

Groups a, b, and c are from Greene County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Greene County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Greene County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Greene County, Pennsylvania, 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 Greene County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Greene County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

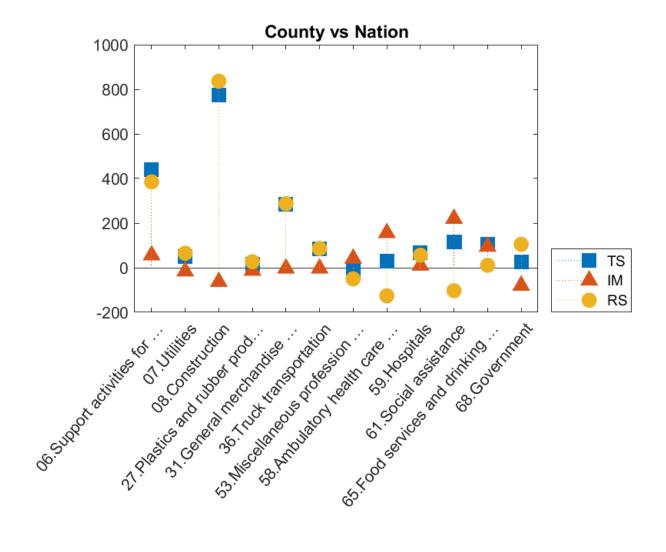
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Greene County, Pennsylvania, 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 Greene County, Pennsylvania vs the U.S.

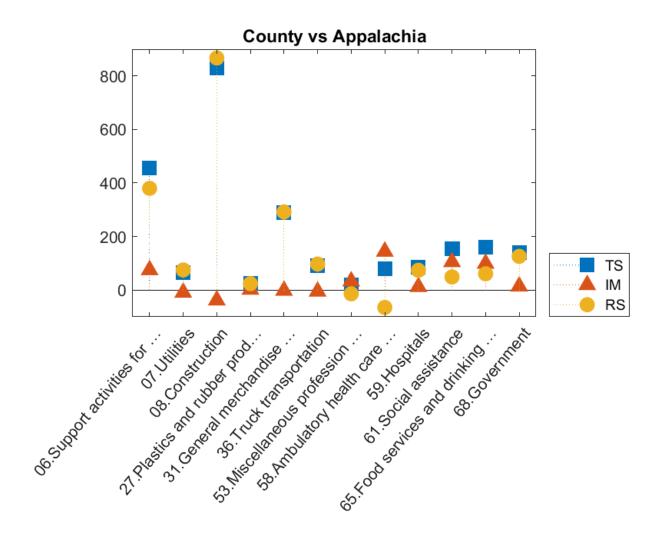


Chapter 22. Greene County, Pennsylvania

Greene County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
06	Support activities for 	15	441	56	385	591
07	Utilities	17	49	-16	65	219
08	Construction	59	773	-63	836	1,355
27	Plastics and rubber prod	13	14	-13	27	141
31	General merchandise 	7	284	-3	287	349
36	Truck transportation	9	83	-3	86	169
53	Miscellaneous profession	28	-9	41	-50	264
58	Ambulatory health care	50	30	156	-126	526
59	Hospitals	21	66	10	56	268
61	Social assistance	38	117	220	-103	490
65	Food services and drinking	56	106	95	11	659
68	Government	119	25	-80	105	1,199

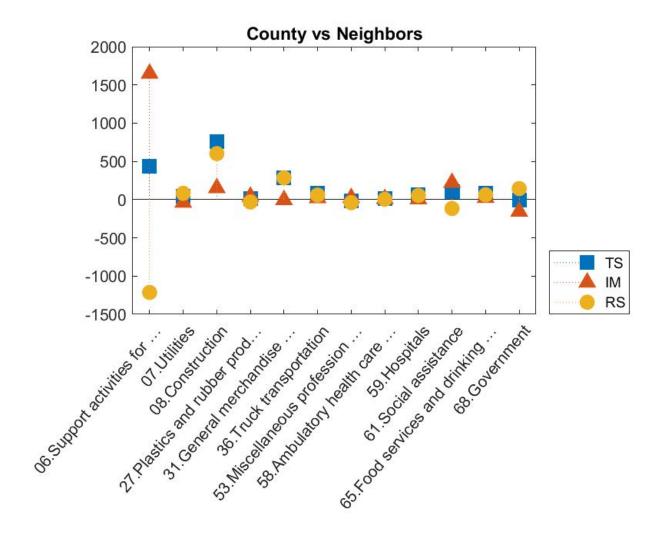
Selected SSA Components for Greene County, Pennsylvania vs the Appalachian Region



Selected SSA Components for Greene County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
06	Support activities for 	0	455	75	380	591
07	Utilities	1	66	-9	75	219
08	Construction	2	829	-38	867	1,355
27	Plastics and rubber prod	0	26	2	24	141
31	General merchandise 	0	290	-2	292	349
36	Truck transportation	0	92	-5	97	169
53	Miscellaneous profession	1	19	33	-14	264
58	Ambulatory health care	2	79	144	-65	526
59	Hospitals	1	86	12	74	268
61	Social assistance	1	154	105	49	490
65	Food services and drinking	2	160	99	61	659
68	Government	4	140	14	126	1,199

Selected SSA Components for Greene County, Pennsylvania vs Neighbors



Chapter 22. Greene County, Pennsylvania

Selected SSA Components for Greene County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
06	Support activities for 	20	436	1,650	-1,214	591
07	Utilities	23	44	-38	82	219
08	Construction	77	754	152	602	1,355
27	Plastics and rubber prod	17	10	41	-31	141
31	General merchandise 	9	281	-4	285	349
36	Truck transportation	11	80	21	59	169
53	Miscellaneous profession	36	-17	23	-40	264
58	Ambulatory health care	66	15	10	5	526
59	Hospitals	27	60	6	54	268
61	Social assistance	49	105	221	-116	490
65	Food services and drinking	73	88	25	63	659
68	Government	156	-11	-155	144	1,199

Chapter 23. Huntingdon County, Pennsylvania

Employment in Huntingdon County, Pennsylvania, declined from 13,207 in 2005 to 12,557 in 2018, for a change of -650, or -4.92%. 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 Huntingdon County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	1,488	-2,134	-670	-1,464
vs. Appalachia	40	-699	-317	-382
vs. Neighbors	1,092	-1,747	-127	-1,620

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 Huntingdon County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Huntingdon County, Pennsylvania

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	FIII a ii	no	yes	yes	yes
31	General merchandise	F III c iii	no	yes	yes	yes
53	Miscellaneous profession	B V b iv	yes	no	yes	no
55	Administrative and	Alaii	yes	yes	yes	yes
57	Educational services	FIII a ii	no	yes	yes	yes
58	Ambulatory health care	Blai	yes	yes	yes	yes
61	Social assistance	Blai	yes	yes	yes	yes
64	Accommodation	Alai	yes	yes	yes	yes
65	Food services and drinking	BIIbi	yes	yes	yes	yes

Notes:

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

Groups I, II, and III are from Huntingdon County, Pennsylvania vs. the United States

Groups a, b, and c are from Huntingdon County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Huntingdon County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Huntingdon County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Huntingdon County, Pennsylvania, 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 Huntingdon County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Huntingdon County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

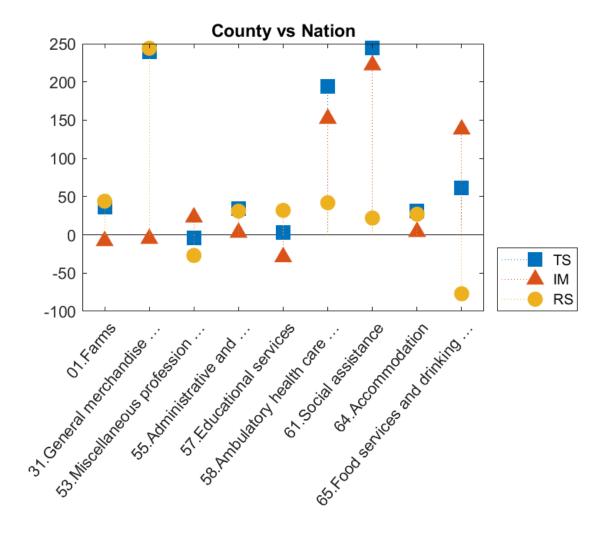
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Huntingdon County, Pennsylvania, 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 Huntingdon County, Pennsylvania vs the U.S.

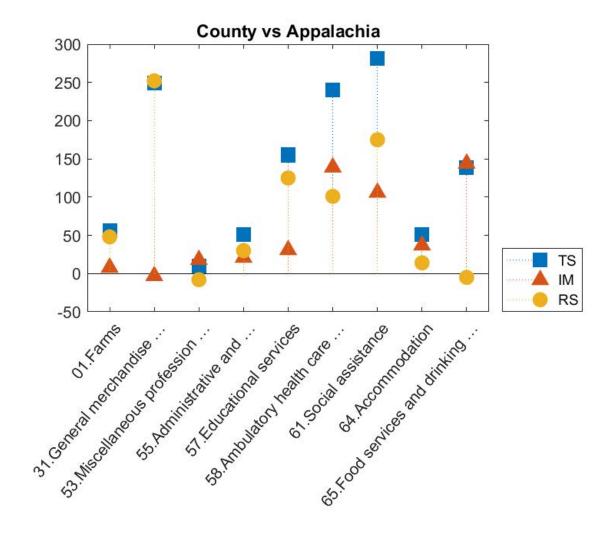


Chapter 23. Huntingdon County, Pennsylvania

Huntingdon County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	21	36	-8	44	239
31	General merchandise	10	239	-5	244	340
53	Miscellaneous profession	15	-4	23	-27	145
55	Administrative and	17	34	3	31	206
57	Educational services	158	3	-29	32	1,560
58	Ambulatory health care	49	194	152	42	674
61	Social assistance	38	244	222	22	620
64	Accommodation	21	31	4	27	235
65	Food services and drinking	81	61	138	-77	864

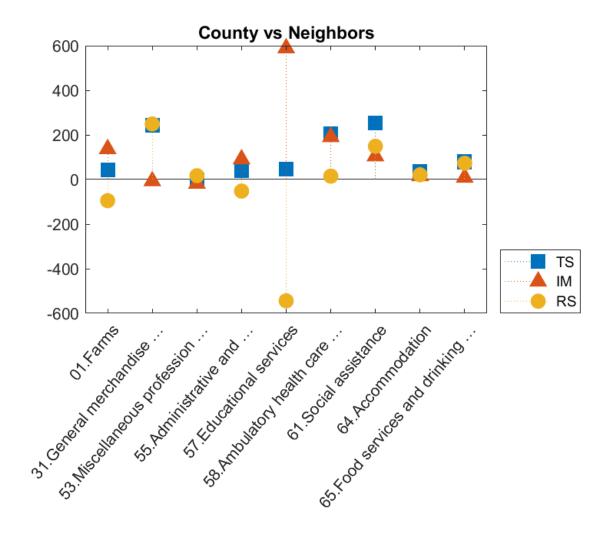
Selected SSA Components for Huntingdon County, Pennsylvania vs the Appalachian Region



Selected SSA Components for Huntingdon County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	1	56	8	48	239
31	General merchandise	0	249	-3	252	340
53	Miscellaneous profession	0	10	18	-8	145
55	Administrative and	1	51	21	30	206
57	Educational services	5	156	31	125	1,560
58	Ambulatory health care	1	240	139	101	674
61	Social assistance	1	281	106	175	620
64	Accommodation	1	51	37	14	235
65	Food services and drinking	2	139	144	-5	864

Selected SSA Components for Huntingdon County, Pennsylvania vs Neighbors



Selected SSA Components for Huntingdon County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	15	42	137	-95	239
31	General merchandise	8	242	-7	249	340
53	Miscellaneous profession	11	-1	-18	17	145
55	Administrative and	13	39	91	-52	206
57	Educational services	116	45	589	-544	1,560
58	Ambulatory health care	36	206	191	15	674
61	Social assistance	28	254	105	149	620
64	Accommodation	15	37	16	21	235
65	Food services and drinking	60	82	9	73	864

Chapter 24. Indiana County, Pennsylvania

Employment in Indiana County, Pennsylvania, declined from 32,546 in 2005 to 29,583 in 2018, for a change of -2,963, or -9.1%. 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 Indiana County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	3,673	-6,633	449	-7,082
vs. Appalachia	108	-3,076	998	-4,074
vs. Neighbors	-2,437	-522	834	-1,356

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 Indiana County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Indiana County, Pennsylvania

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
28	Wholesale trade	FIIIci	no	yes	yes	yes
53	Miscellaneous profession	BVbiii	yes	no	yes	yes
54	Management of companies	Alai	yes	yes	yes	yes
55	Administrative and	A V e iii	yes	no	no	yes
58	Ambulatory health care	BIIai	yes	yes	yes	yes
61	Social assistance	BVbii	yes	no	yes	yes
65	Food services and drinking	BVbi	yes	no	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 Indiana County, Pennsylvania vs. the United States

Groups a, b, and c are from Indiana County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Indiana County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Indiana County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Indiana County, Pennsylvania, 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 Indiana County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Indiana County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

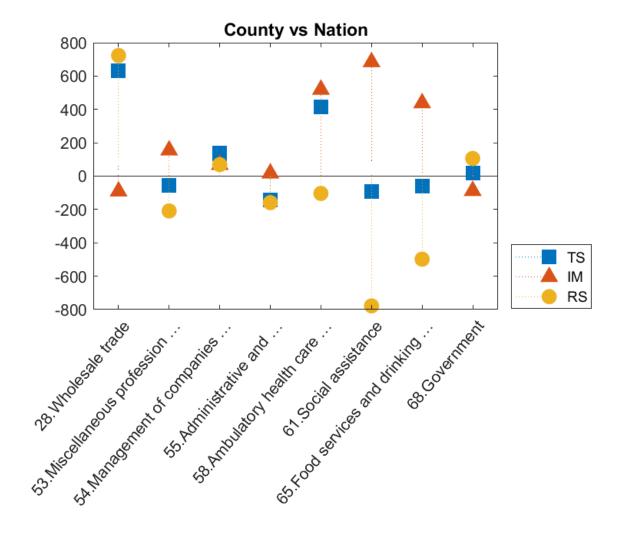
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Indiana County, Pennsylvania, 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 Indiana County, Pennsylvania vs the U.S.

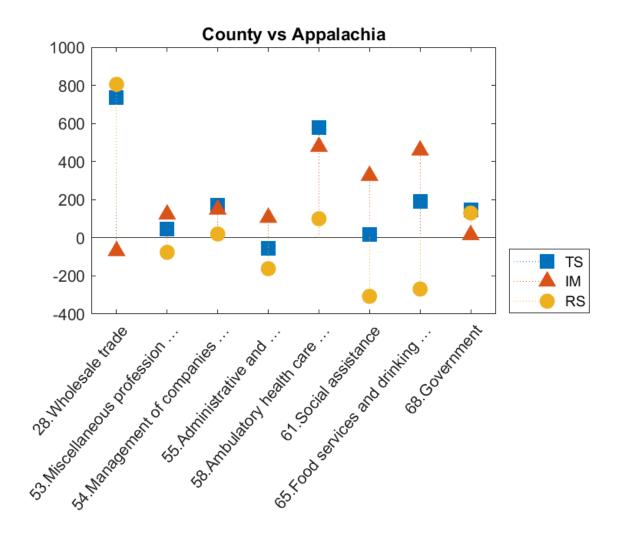


Chapter 24. Indiana County, Pennsylvania

Indiana County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
28	Wholesale trade	107	632	-91	723	1,688
53	Miscellaneous profession	104	-54	155	-209	970
54	Management of companies	33	137	68	69	460
55	Administrative and	88	-142	17	-159	725
58	Ambulatory health care	167	415	519	-104	2,062
61	Social assistance	118	-94	684	-778	1,066
65	Food services and drinking	259	-60	438	-498	2,494
68	Government	131	18	-88	106	1,314

Selected SSA Components for Indiana County, Pennsylvania vs the Appalachian Region

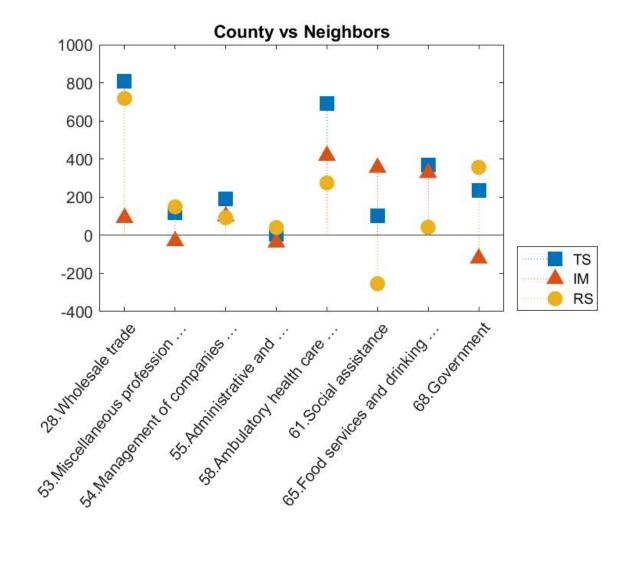


Chapter 24. Indiana County, Pennsylvania

Selected SSA Components for Indiana County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
28	Wholesale trade	3	736	-69	805	1,688
53	Miscellaneous profession	3	47	123	-76	970
54	Management of companies	1	169	149	20	460
55	Administrative and	3	-56	106	-162	725
58	Ambulatory health care	5	578	478	100	2,062
61	Social assistance	4	19	326	-307	1,066
65	Food services and drinking	8	190	459	-269	2,494
68	Government	4	145	15	130	1,314

Selected SSA Components for Indiana County, Pennsylvania vs Neighbors



Chapter 24. Indiana County, Pennsylvania

Selected SSA Components for Indiana County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
28	Wholesale trade	-71	810	92	718	1,688
53	Miscellaneous profession	-69	119	-30	149	970
54	Management of companies	-22	192	100	92	460
55	Administrative and	-58	4	-37	41	725
58	Ambulatory health care	-111	693	418	275	2,062
61	Social assistance	-78	101	355	-254	1,066
65	Food services and drinking	-172	370	328	42	2,494
68	Government	-87	236	-121	357	1,314

Chapter 25. Jefferson County, Pennsylvania

Employment in Jefferson County, Pennsylvania, grew from 15,795 in 2005 to 15,852 in 2018, for a change of 57, or 0.36%. 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 Jefferson County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	1,784	-1,718	-63	-1,655
vs. Appalachia	46	4	-19	23
vs. Neighbors	-1,455	1,510	-104	1,614

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 Jefferson County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Jefferson County, Pennsylvania

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
06	Support activities for	Allbi	yes	yes	yes	yes
12	Fabricated metal products	FIIIci	no	yes	yes	yes
53	Miscellaneous profession	Blai	yes	yes	yes	yes
55	Administrative and	Alai	yes	yes	yes	yes
58	Ambulatory health care	BIIbi	yes	yes	yes	yes
60	Nursing and residential	Elai	no	yes	yes	yes
61	Social assistance	Blai	yes	yes	yes	yes
65	Food services and drinking	BVbi	yes	no	yes	yes

Notes:

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

Groups I, II, and III are from Jefferson County, Pennsylvania vs. the United States

Groups a, b, and c are from Jefferson County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Jefferson County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Jefferson County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Jefferson County, Pennsylvania, 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 Jefferson County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Jefferson County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

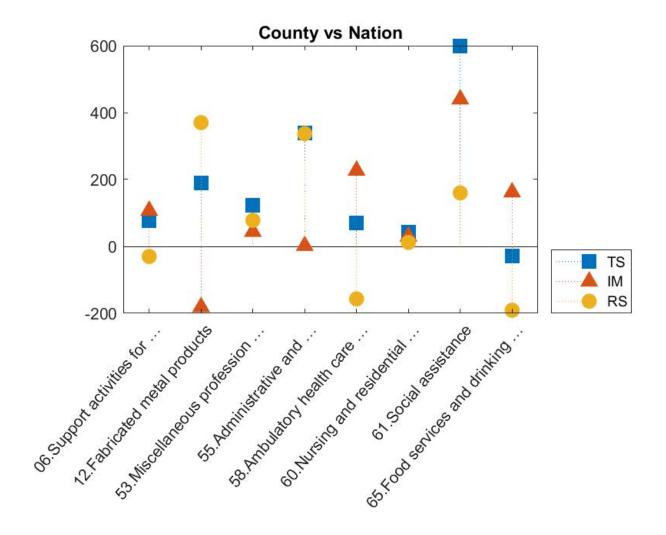
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Jefferson County, Pennsylvania, 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 Jefferson County, Pennsylvania vs the U.S.



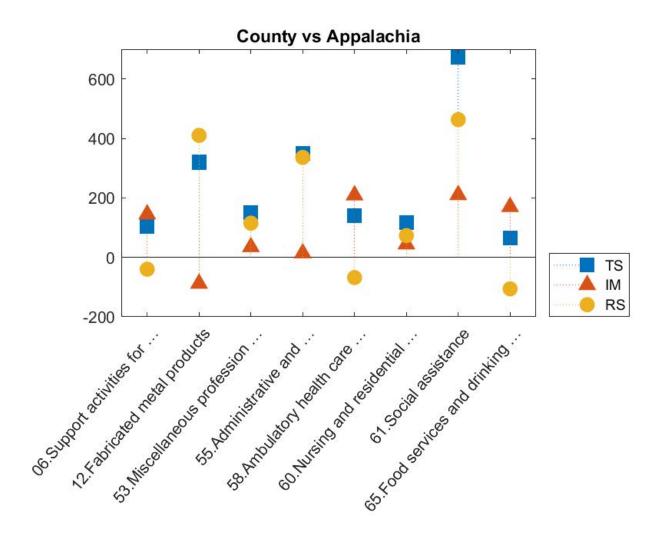
Chapter 25. Jefferson County, Pennsylvania

Jefferson County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
06	Support activities for 	29	77	107	-30	366
12	Fabricated metal products	138	189	-181	370	1,555
53	Miscellaneous profession	29	122	44	78	410
55	Administrative and	11	339	2	337	449
58	Ambulatory health care	73	70	227	-157	788
60	Nursing and residential	78	42	30	12	808
61	Social assistance	76	600	440	160	1,346
65	Food services and drinking	96	-29	162	-191	917

...

Selected SSA Components for Jefferson County, Pennsylvania vs the Appalachian Region

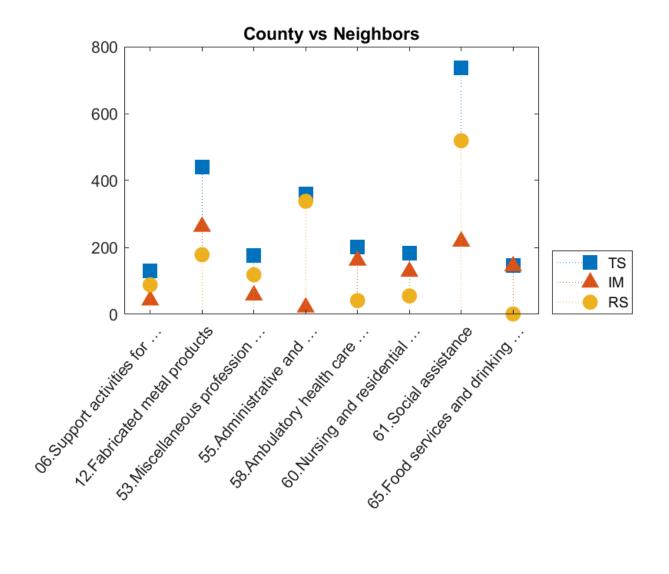


Selected SSA Components for Jefferson County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
06	Support activities for 	1	105	145	-40	366
12	Fabricated metal products	4	322	-88	410	1,555
53	Miscellaneous profession	1	150	35	115	410
55	Administrative and	0	350	14	336	449
58	Ambulatory health care	2	141	209	-68	788
60	Nursing and residential	2	117	44	73	808
61	Social assistance	2	673	210	463	1,346
65	Food services and drinking	3	64	170	-106	917

...

Selected SSA Components for Jefferson County, Pennsylvania vs Neighbors



Selected SSA Components for Jefferson County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
06	Support activities for 	-24	130	42	88	366
12	Fabricated metal products	-113	440	262	178	1,555
53	Miscellaneous profession	-24	175	57	118	410
55	Administrative and	-9	359	21	338	449
58	Ambulatory health care	-59	202	161	41	788
60	Nursing and residential	-63	183	128	55	808
61	Social assistance	-62	737	218	519	1,346
65	Food services and drinking	-78	145	144	1	917

...

Chapter 26. Juniata County, Pennsylvania

Employment in Juniata County, Pennsylvania, declined from 7,578 in 2005 to 6,827 in 2018, for a change of -751, or -9.91%. 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 Juniata County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	857	-1,604	-516	-1,088
vs. Appalachia	24	-777	-746	-31
vs. Neighbors	53	-810	-566	-244

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 Juniata County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Juniata County, Pennsylvania

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	FIIIai	no	yes	yes	yes
18	Furniture and related	F III c iii	no	yes	yes	yes
37	Transit and ground	Elci	no	yes	yes	yes
45	Federal Reserve banks,	FIIIcii	no	yes	yes	yes
55	Administrative and	Alai	yes	yes	yes	yes
58	Ambulatory health care	ВІаіі	yes	yes	yes	yes

Notes:

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

Groups I, II, and III are from Juniata County, Pennsylvania vs. the United States

Groups a, b, and c are from Juniata County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Juniata County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Juniata County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Juniata County, Pennsylvania, 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 Juniata County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Juniata County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

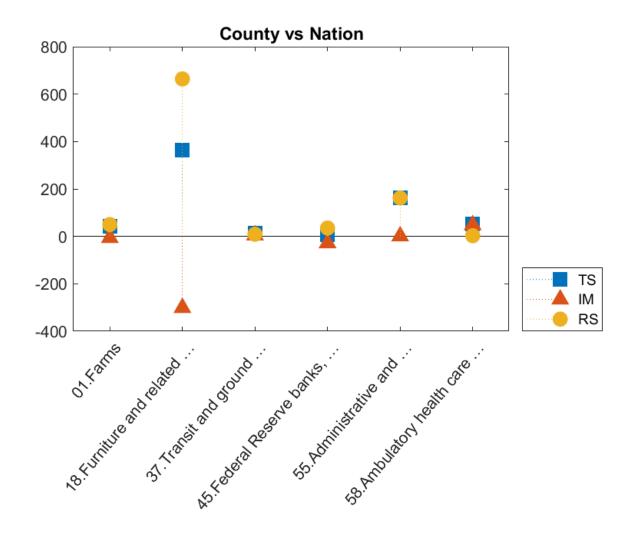
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Juniata County, Pennsylvania, 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 Juniata County, Pennsylvania vs the U.S.

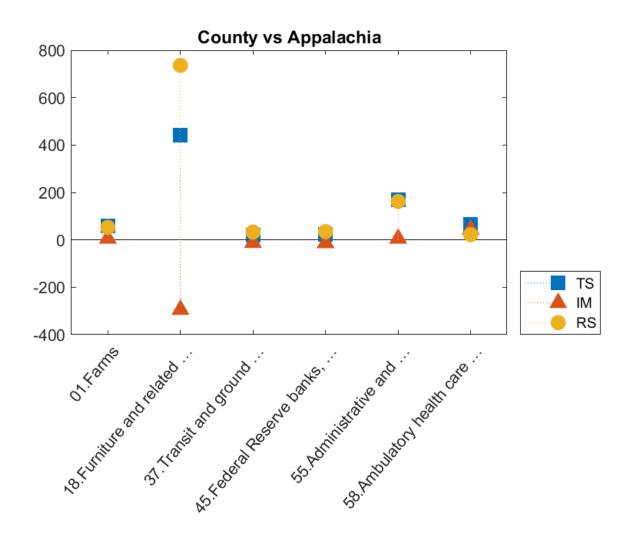


Chapter 26. Juniata County, Pennsylvania

Juniata County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	15	44	-6	50	189
18	Furniture and related	82	363	-301	664	1,169
37	Transit and ground	7	14	5	9	80
45	Federal Reserve banks,	16	7	-28	35	169
55	Administrative and	5	163	1	162	211
58	Ambulatory health care	15	51	48	3	202

Selected SSA Components for Juniata County, Pennsylvania vs the Appalachian Region

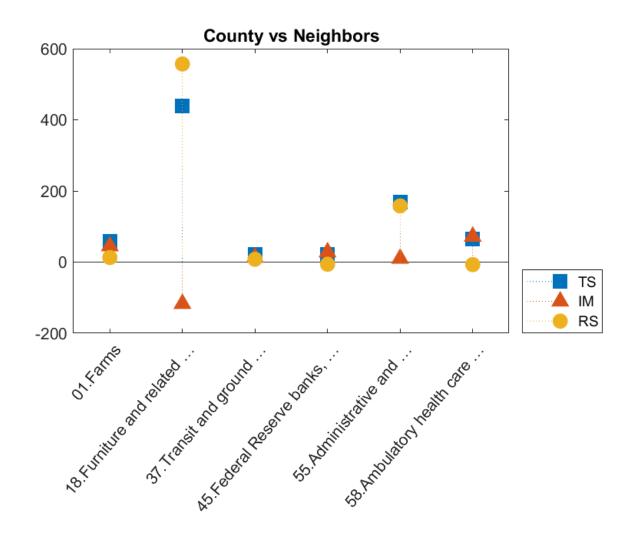


Chapter 26. Juniata County, Pennsylvania

Selected SSA Components for Juniata County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	0	59	6	53	189
18	Furniture and related	2	442	-294	736	1,169
37	Transit and ground	0	21	-12	33	80
45	Federal Reserve banks,	0	22	-13	35	169
55	Administrative and	0	168	6	162	211
58	Ambulatory health care	0	66	44	22	202

Selected SSA Components for Juniata County, Pennsylvania vs Neighbors



Chapter 26. Juniata County, Pennsylvania

Selected SSA Components for Juniata County, Pennsylvania vs Neighbors for Selected Industries

	Industry	Name	NS	TS	IM	RS	Employment 2018
-	01	Farms	1	58	45	13	189
	18	Furniture and related	5	440	-117	557	1,169
	37	Transit and ground	0	21	13	8	80
_	45	Federal Reserve banks,	1	22	28	-6	169
	55	Administrative and	0	168	10	158	211
_	58	Ambulatory health care	1	65	72	-7	202

Chapter 27. Lackawanna County, Pennsylvania

Employment in Lackawanna County, Pennsylvania, declined from 101,036 in 2005 to 98,107 in 2018, for a change of -2,929, or -2.9%. 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 Lackawanna County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	11,393	-14,322	-124	-14,198
vs. Appalachia	341	-3,276	497	-3,773
vs. Neighbors	-1,152	-1,771	-2,770	999

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 Lackawanna County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Lackawanna County, Pennsylvania

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	FIIIciii	no	yes	yes	yes
28	Wholesale trade	F III c iii	no	yes	yes	yes
36	Truck transportation	F III c iii	no	yes	yes	yes
40	Warehousing and storage	Elai	no	yes	yes	yes
53	Miscellaneous profession	BVbiii	yes	no	yes	yes
54	Management of companies	Alai	yes	yes	yes	yes
55	Administrative and	Alai	yes	yes	yes	yes
58	Ambulatory health care	BIIbii	yes	yes	yes	yes
61	Social assistance	Blai	yes	yes	yes	yes
63	Amusements, gambling,	Blaiii	yes	yes	yes	yes
65	Food services and drinking	BIIbi	yes	yes	yes	yes

Notes:

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

Groups I, II, and III are from Lackawanna County, Pennsylvania vs. the United States

Groups a, b, and c are from Lackawanna County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Lackawanna County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Lackawanna County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Lackawanna County, Pennsylvania, 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 Lackawanna County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Lackawanna County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

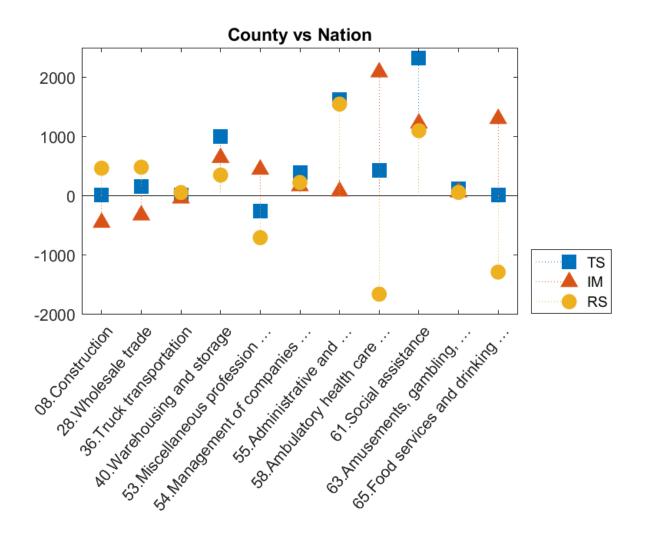
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Lackawanna County, Pennsylvania, 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 Lackawanna County, Pennsylvania vs the U.S.

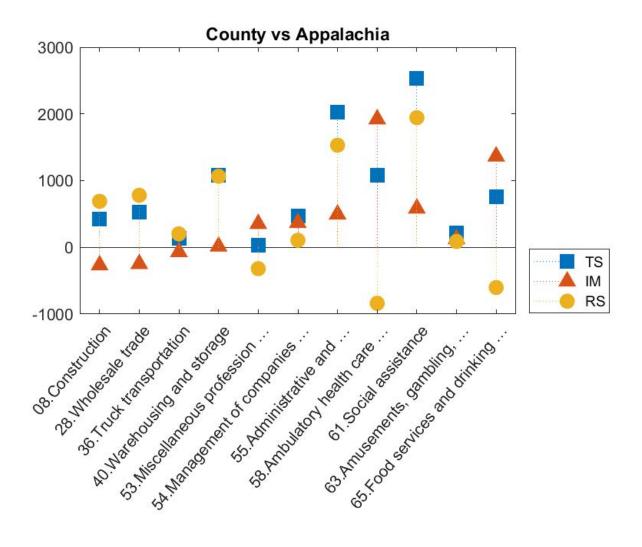


Lackawanna County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
08	Construction	418	18	-449	467	4,141
28	Wholesale trade	384	160	-325	485	3,950
36	Truck transportation	120	17	-40	57	1,201
40	Warehousing and storage	87	996	644	352	1,852
53	Miscellaneous profession	298	-256	447	-703	2,687
54	Management of companies	81	395	168	227	1,192
55	Administrative and	410	1,628	79	1,549	5,673
58	Ambulatory health care	671	431	2,087	-1,656	7,053
61	Social assistance	211	2,324	1,224	1,100	4,401
63	Amusements, gambling,	92	124	64	60	1,031
65	Food services and drinking	770	17	1,301	-1,284	7,610

...

Selected SSA Components for Lackawanna County, Pennsylvania vs the Appalachian Region

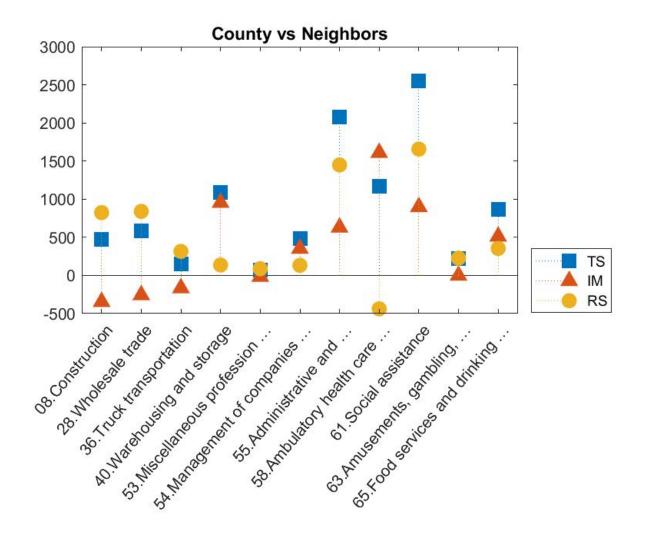


Selected SSA Components for Lackawanna County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
08	Construction	13	423	-267	690	4,141
28	Wholesale trade	12	532	-248	780	3,950
36	Truck transportation	4	133	-69	202	1,201
40	Warehousing and storage	3	1,079	14	1,065	1,852
53	Miscellaneous profession	9	33	353	-320	2,687
54	Management of companies	2	473	367	106	1,192
55	Administrative and	12	2,025	495	1,530	5,673
58	Ambulatory health care	20	1,082	1,921	-839	7,053
61	Social assistance	6	2,528	584	1,944	4,401
63	Amusements, gambling,	3	213	125	88	1,031
65	Food services and drinking	23	762	1,364	-602	7,610

. . .

Selected SSA Components for Lackawanna County, Pennsylvania vs Neighbors



Selected SSA Components for Lackawanna County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
80	Construction	-42	478	-346	824	4,141
28	Wholesale trade	-39	583	-257	840	3,950
36	Truck transportation	-12	149	-166	315	1,201
40	Warehousing and storage	-9	1,091	955	136	1,852
53	Miscellaneous profession	-30	72	-16	88	2,687
54	Management of companies	-8	485	353	132	1,192
55	Administrative and	-42	2,079	630	1,449	5,673
58	Ambulatory health care	-68	1,171	1,609	-438	7,053
61	Social assistance	-21	2,556	899	1,657	4,401
63	Amusements, gambling,	-9	225	-1	226	1,031
65	Food services and drinking	-78	865	511	354	7,610

• • •

Chapter 28. Lawrence County, Pennsylvania

Employment in Lawrence County, Pennsylvania, declined from 31,284 in 2005 to 28,611 in 2018, for a change of -2,673, or -8.54%. 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 Lawrence County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	3,526	-6,204	-114	-6,090
vs. Appalachia	104	-2,779	192	-2,971
vs. Neighbors	-1,189	-1,488	196	-1,684

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 Lawrence County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Lawrence County, Pennsylvania

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	FIIIci	no	yes	yes	yes
13	Machinery	F III c iii	no	yes	yes	yes
20	Food and beverage	Elci	no	yes	yes	yes
53	Miscellaneous profession	BVbii	yes	no	yes	yes
54	Management of companies	Alaii	yes	yes	yes	yes
58	Ambulatory health care	BVbii	yes	no	yes	yes
61	Social assistance	Blai	yes	yes	yes	yes
65	Food services and drinking	BVbii	yes	no	yes	yes

Notes:

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

Groups I, II, and III are from Lawrence County, Pennsylvania vs. the United States

Groups a, b, and c are from Lawrence County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Lawrence County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Lawrence County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Lawrence County, Pennsylvania, 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 Lawrence County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Lawrence County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

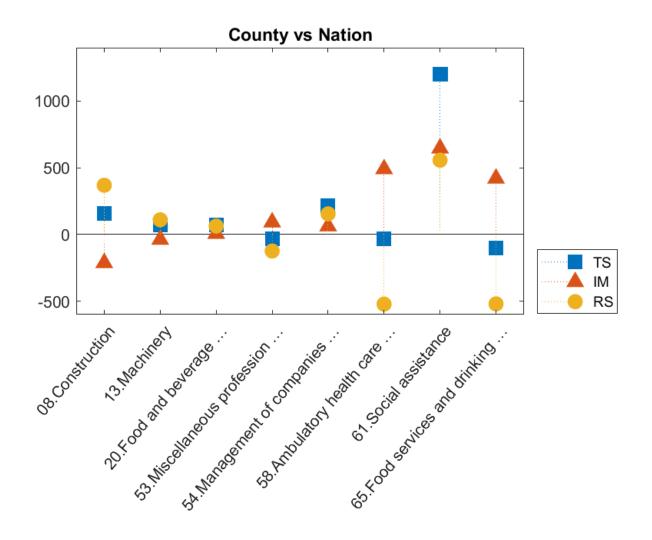
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Lawrence County, Pennsylvania, 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.

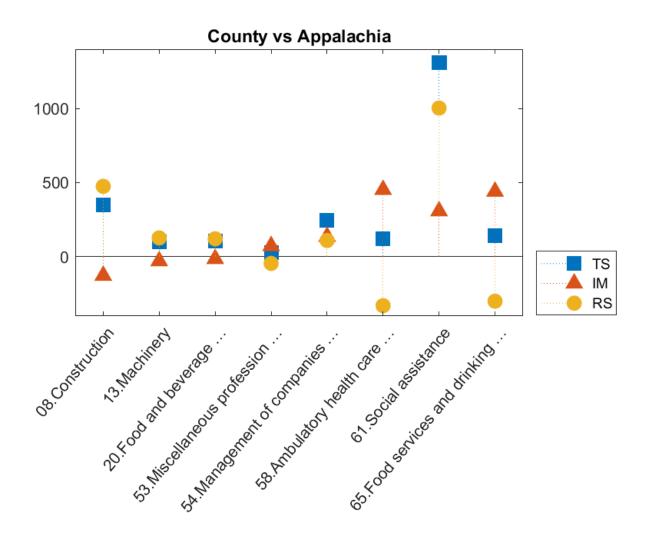
Selected SSA Components for Lawrence County, Pennsylvania vs the U.S.



Lawrence County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
80	Construction	198	156	-213	369	2,111
13	Machinery	26	72	-38	110	325
20	Food and beverage	40	69	6	63	459
53	Miscellaneous profession	61	-32	92	-124	575
54	Management of companies	30	217	62	155	512
58	Ambulatory health care	158	-31	491	-522	1,527
61	Social assistance	111	1,203	646	557	2,299
65	Food services and drinking	248	-100	420	-520	2,349

Selected SSA Components for Lawrence County, Pennsylvania vs the Appalachian Region

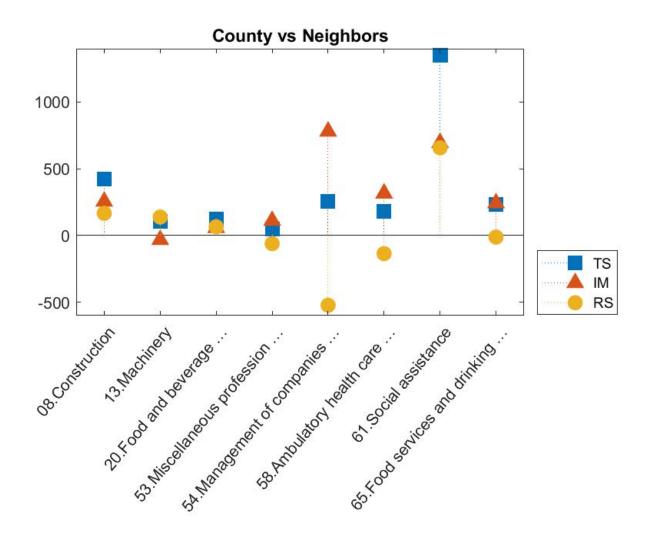


Selected SSA Components for Lawrence County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
08	Construction	6	348	-127	475	2,111
13	Machinery	1	98	-29	127	325
20	Food and beverage	1	107	-14	121	459
53	Miscellaneous profession	2	28	73	-45	575
54	Management of companies	1	246	136	110	512
58	Ambulatory health care	5	122	452	-330	1,527
61	Social assistance	3	1,311	308	1,003	2,299
65	Food services and drinking	7	140	440	-300	2,349

...

Selected SSA Components for Lawrence County, Pennsylvania vs Neighbors



Selected SSA Components for Lawrence County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
80	Construction	-67	421	255	166	2,111
13	Machinery	-9	106	-32	138	325
20	Food and beverage	-13	122	57	65	459
53	Miscellaneous profession	-21	50	111	-61	575
54	Management of companies	-10	257	780	-523	512
58	Ambulatory health care	-53	180	316	-136	1,527
61	Social assistance	-37	1,352	695	657	2,299
65	Food services and drinking	-83	231	243	-12	2,349

...

Chapter 29. Luzerne County, Pennsylvania

Employment in Luzerne County, Pennsylvania, declined from 145,913 in 2005 to 144,997 in 2018, for a change of -916, or -0.63%. 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 Luzerne County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	16,456	-17,368	1,491	-18,859
vs. Appalachia	494	-1,414	-605	-809
vs. Neighbors	-2,213	1,295	-197	1,492

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 Luzerne County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Luzerne County, Pennsylvania

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
07	Utilities	FIIIci	no	yes	yes	yes
20	Food and beverage	Elci	no	yes	yes	yes
40	Warehousing and storage	Elai	no	yes	yes	yes
54	Management of companies	Allbii	yes	yes	yes	yes
55	Administrative and	Allbii	yes	yes	yes	yes
58	Ambulatory health care	BIIbii	yes	yes	yes	yes
61	Social assistance	BIIbii	yes	yes	yes	yes
64	Accommodation	Alaii	yes	yes	yes	yes

Notes:

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

Groups I, II, and III are from Luzerne County, Pennsylvania vs. the United States

Groups a, b, and c are from Luzerne County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Luzerne County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Luzerne County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Luzerne County, Pennsylvania, 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 Luzerne County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Luzerne County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

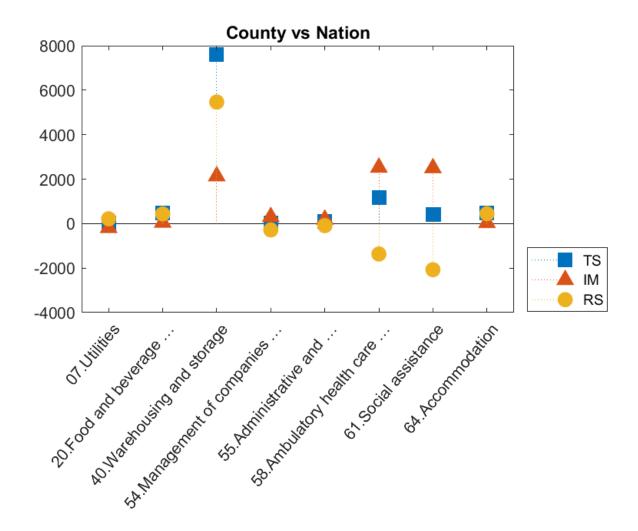
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Luzerne County, Pennsylvania, 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 Luzerne County, Pennsylvania vs the U.S.

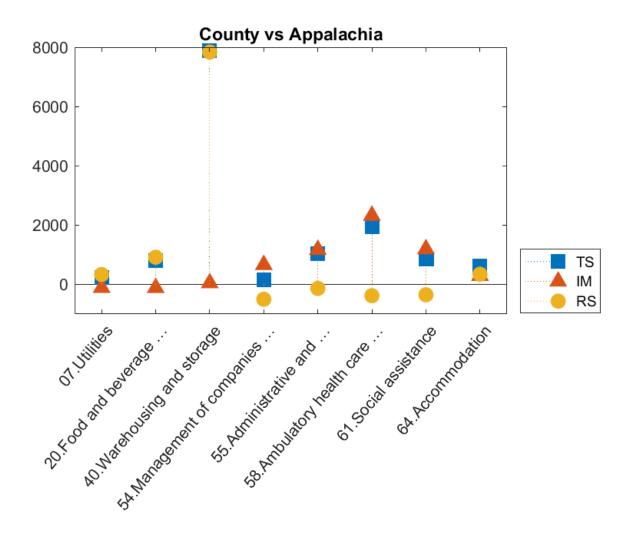


Chapter 29. Luzerne County, Pennsylvania

Luzerne County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
07	Utilities	204	24	-191	215	2,035
20	Food and beverage	329	481	46	435	3,730
40	Warehousing and storage	288	7,600	2,136	5,464	10,445
54	Management of companies	146	20	303	-283	1,456
55	Administrative and	969	94	186	-92	9,657
58	Ambulatory health care	811	1,155	2,523	-1,368	9,159
61	Social assistance	430	425	2,498	-2,073	4,666
64	Accommodation	162	477	33	444	2,073

Selected SSA Components for Luzerne County, Pennsylvania vs the Appalachian Region

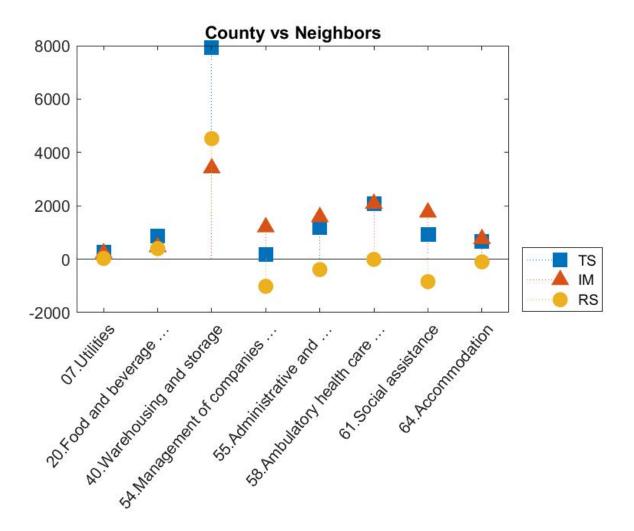


Chapter 29. Luzerne County, Pennsylvania

Selected SSA Components for Luzerne County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
07	Utilities	6	221	-111	332	2,035
20	Food and beverage	10	800	-115	915	3,730
40	Warehousing and storage	9	7,881	47	7,834	10,445
54	Management of companies	4	160	662	-502	1,456
55	Administrative and	29	1,034	1,169	-135	9,657
58	Ambulatory health care	24	1,941	2,322	-381	9,159
61	Social assistance	13	842	1,192	-350	4,666
64	Accommodation	5	634	291	343	2,073

Selected SSA Components for Luzerne County, Pennsylvania vs Neighbors



Chapter 29. Luzerne County, Pennsylvania

Selected SSA Components for Luzerne County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
07	Utilities	-27	255	228	27	2,035
20	Food and beverage	-44	854	457	397	3,730
40	Warehousing and storage	-39	7,928	3,410	4,518	10,445
54	Management of companies	-20	184	1,202	-1,018	1,456
55	Administrative and	-130	1,194	1,583	-389	9,657
58	Ambulatory health care	-109	2,075	2,083	-8	9,159
61	Social assistance	-58	913	1,755	-842	4,666
64	Accommodation	-22	661	761	-100	2,073

Chapter 30. Lycoming County, Pennsylvania

Employment in Lycoming County, Pennsylvania, declined from 52,112 in 2005 to 51,389 in 2018, for a change of -723, or -1.39%. 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 Lycoming County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	5,873	-6,602	-1,501	-5,101
vs. Appalachia	176	-899	-1,101	202
vs. Neighbors	-1,780	1,057	-1,328	2,385

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 Lycoming County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Lycoming County, Pennsylvania

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
06	Support activities for	Alai	yes	yes	yes	yes
28	Wholesale trade	FIIIci	no	yes	yes	yes
36	Truck transportation	FIIIci	no	yes	yes	yes
53	Miscellaneous profession	Blai	yes	yes	yes	yes
55	Administrative and	Alai	yes	yes	yes	yes
58	Ambulatory health care	Blai	yes	yes	yes	yes
61	Social assistance	BIIai	yes	yes	yes	yes
65	Food services and drinking	BIIbi	yes	yes	yes	yes

Notes:

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

Groups I, II, and III are from Lycoming County, Pennsylvania vs. the United States

Groups a, b, and c are from Lycoming County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Lycoming County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Lycoming County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Lycoming County, Pennsylvania, 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 Lycoming County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Lycoming County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

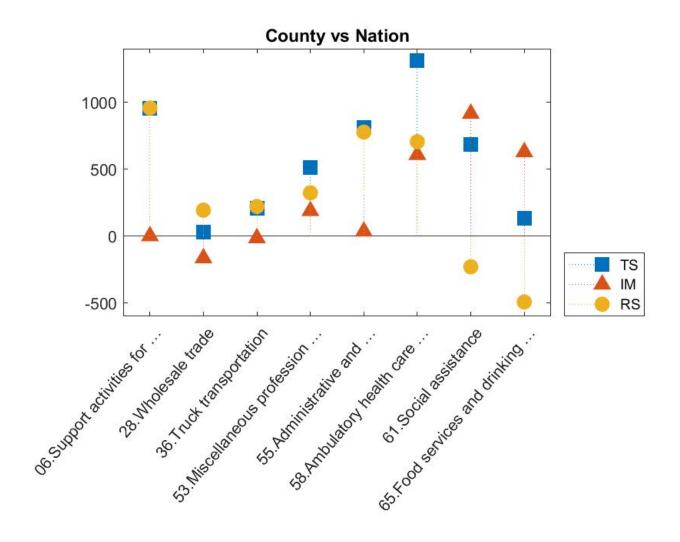
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Lycoming County, Pennsylvania, 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 Lycoming County, Pennsylvania vs the U.S.

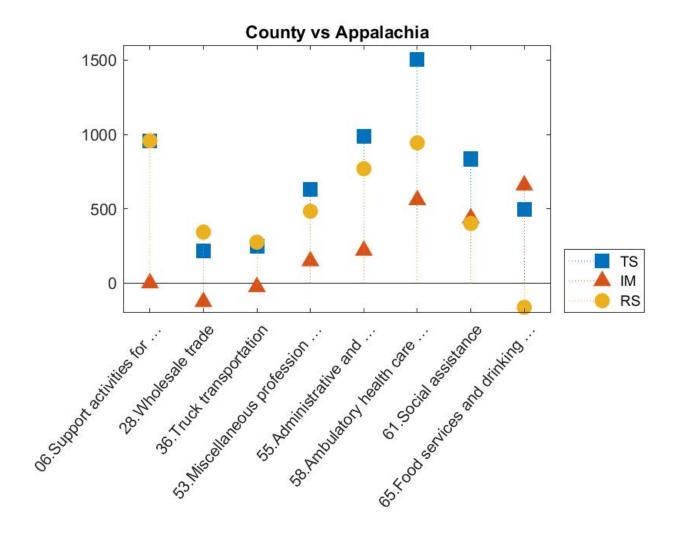


Lycoming County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
06	Support activities for 	0	957	0	957	957
28	Wholesale trade	195	28	-165	193	1,956
36	Truck transportation	44	206	-15	221	644
53	Miscellaneous profession	125	511	188	323	1,745
55	Administrative and	181	812	35	777	2,600
58	Ambulatory health care	195	1,312	607	705	3,237
61	Social assistance	158	685	915	-230	2,239
65	Food services and drinking	371	135	628	-493	3,798

...

Selected SSA Components for Lycoming County, Pennsylvania vs the Appalachian Region

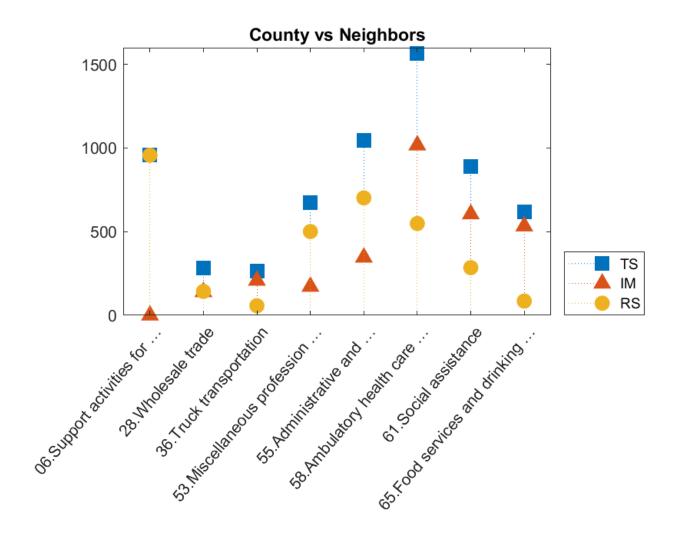


Selected SSA Components for Lycoming County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
06	Support activities for 	0	957	0	957	957
28	Wholesale trade	6	217	-126	343	1,956
36	Truck transportation	1	249	-26	275	644
53	Miscellaneous profession	4	631	148	483	1,745
55	Administrative and	5	988	219	769	2,600
58	Ambulatory health care	6	1,502	559	943	3,237
61	Social assistance	5	838	437	401	2,239
65	Food services and drinking	11	495	658	-163	3,798

. . .

Selected SSA Components for Lycoming County, Pennsylvania vs Neighbors



Selected SSA Components for Lycoming County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
06	Support activities for 	-0	957	0	957	957
28	Wholesale trade	-59	283	140	143	1,956
36	Truck transportation	-13	265	208	57	644
53	Miscellaneous profession	-38	673	172	501	1,745
55	Administrative and	-55	1,048	346	702	2,600
58	Ambulatory health care	-59	1,566	1,017	549	3,237
61	Social assistance	-48	890	605	285	2,239
65	Food services and drinking	-112	618	533	85	3,798

...

Chapter 31. McKean County, Pennsylvania

Employment in McKean County, Pennsylvania, declined from 18,157 in 2005 to 15,187 in 2018, for a change of -2,970, or -16.36%. 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 McKean County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	2,046	-5,020	-561	-4,459
vs. Appalachia	57	-3,036	-183	-2,853
vs. Neighbors	-1,940	-1,037	-767	-270

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 McKean County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for McKean County, Pennsylvania

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
06	Support activities for	AVbi	yes	no	yes	yes
15	Electrical equipment,	DIIIci	no	yes	yes	yes
54	Management of companies	Alai	yes	yes	yes	yes
55	Administrative and	A V e ii	yes	no	no	yes
57	Educational services	FIIIai	no	yes	yes	yes
58	Ambulatory health care	BIIbi	yes	yes	yes	yes
61	Social assistance	BIIbi	yes	yes	yes	yes
64	Accommodation	Alaii	yes	yes	yes	yes
65	Food services and drinking	B V e ii	yes	no	no	yes

Notes:

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

Groups I, II, and III are from McKean County, Pennsylvania vs. the United States

Groups a, b, and c are from McKean County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from McKean County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing McKean County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by McKean County, Pennsylvania, 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 McKean County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that McKean County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

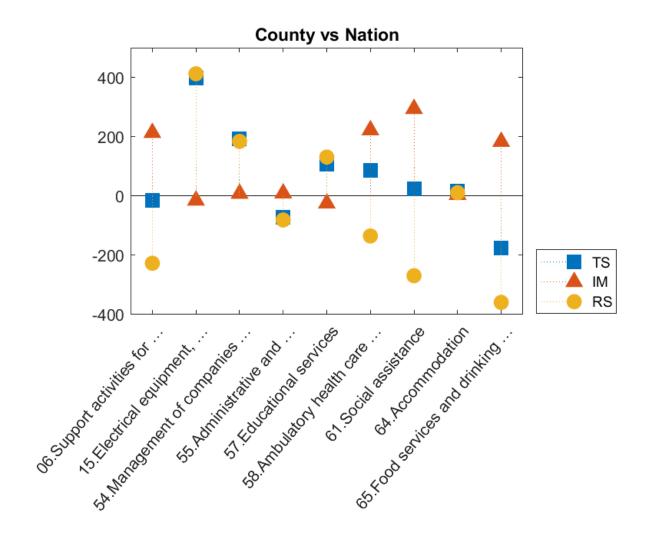
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in McKean County, Pennsylvania, 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 McKean County, Pennsylvania vs the U.S.

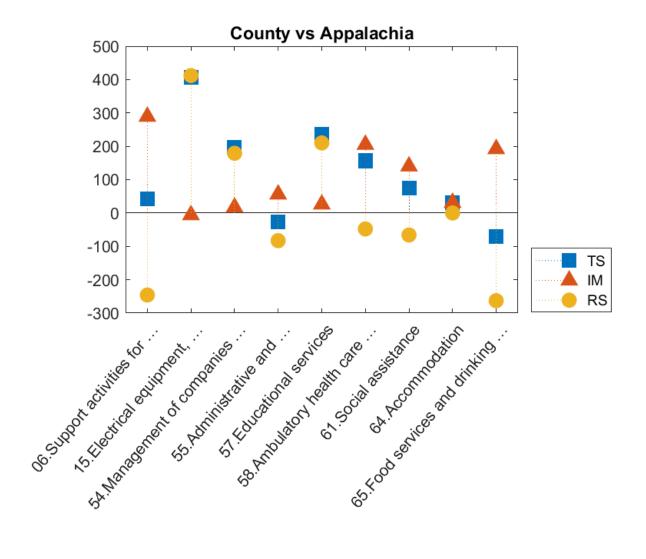


Chapter 31. McKean County, Pennsylvania

McKean County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
06	Support activities for	58	-14	213	-227	563
15	Electrical equipment,	8	397	-15	412	480
54	Management of companies	4	192	8	184	229
55	Administrative and	46	-72	9	-81	387
57	Educational services	135	106	-25	131	1,433
58	Ambulatory health care	71	87	222	-135	793
61	Social assistance	51	25	294	-269	524
64	Accommodation	17	15	4	11	187
65	Food services and drinking	108	-176	183	-359	895

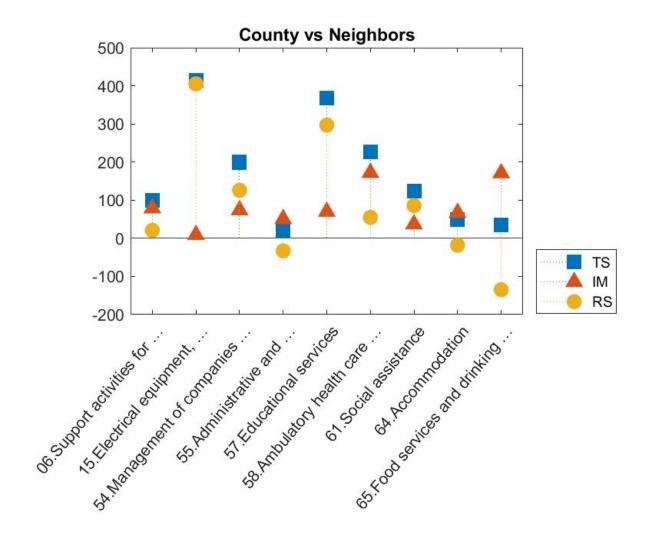
Selected SSA Components for McKean County, Pennsylvania vs the Appalachian Region



Selected SSA Components for McKean County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
06	Support activities for	2	43	289	-246	563
15	Electrical equipment,	0	406	-6	412	480
54	Management of companies	0	196	17	179	229
55	Administrative and	1	-27	56	-83	387
57	Educational services	4	236	26	210	1,433
58	Ambulatory health care	2	157	205	-48	793
61	Social assistance	2	74	140	-66	524
64	Accommodation	1	31	31	-0	187
65	Food services and drinking	3	-71	192	-263	895

Selected SSA Components for McKean County, Pennsylvania vs Neighbors



Selected SSA Components for McKean County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
06	Support activities for	-55	100	79	21	563
15	Electrical equipment,	-8	414	9	405	480
54	Management of companies	-4	200	74	126	229
55	Administrative and	-44	18	51	-33	387
57	Educational services	-127	367	70	297	1,433
58	Ambulatory health care	-68	227	172	55	793
61	Social assistance	-48	123	37	86	524
64	Accommodation	-17	49	67	-18	187
65	Food services and drinking	-103	36	171	-135	895

Chapter 32. Mercer County, Pennsylvania

Employment in Mercer County, Pennsylvania, declined from 48,582 in 2005 to 46,268 in 2018, for a change of -2,314, or -4.76%. 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 Mercer County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	5,477	-7,794	305	-8,099
vs. Appalachia	164	-2,487	900	-3,387
vs. Neighbors	-3,788	1,470	59	1,411

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 Mercer County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Mercer County, Pennsylvania

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	FIIIci	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
16	Motor vehicles, bodies	C IV e iii	yes	no	no	yes
36	Truck transportation	FIII c iii	no	yes	yes	yes
45	Federal Reserve banks,	F III c iii	no	yes	yes	yes
53	Miscellaneous profession	B V e ii	yes	no	no	yes
54	Management of companies	Alai	yes	yes	yes	yes
58	Ambulatory health care	BIIbii	yes	yes	yes	yes
60	Nursing and residential	Ellai	no	yes	yes	yes
61	Social assistance	BVeii	yes	no	no	yes
65	Food services and drinking	BVeii	yes	no	no	yes

Notes:

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

Groups I, II, and III are from Mercer County, Pennsylvania vs. the United States

Groups a, b, and c are from Mercer County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Mercer County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Mercer County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Mercer County, Pennsylvania, 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 Mercer County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Mercer County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

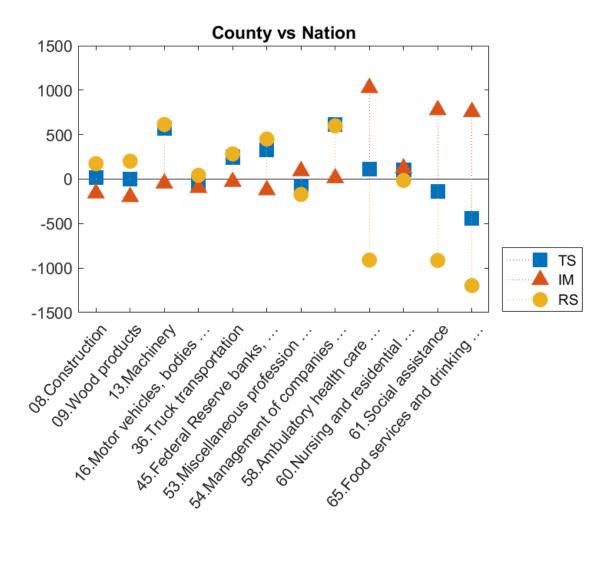
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Mercer County, Pennsylvania, 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 Mercer County, Pennsylvania vs the U.S.

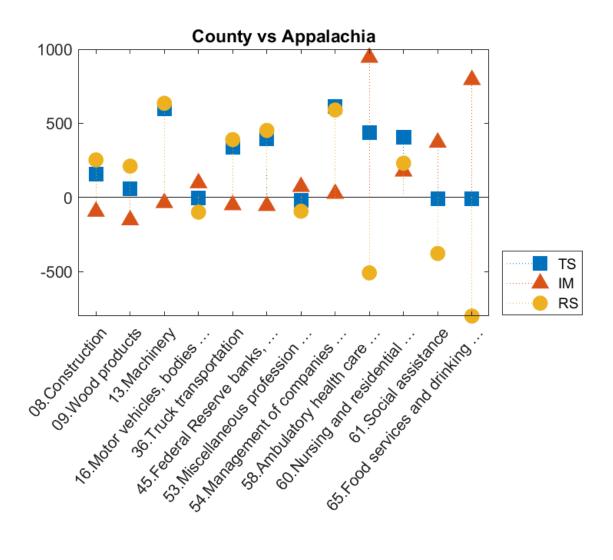


Mercer County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
08	Construction	148	14	-159	173	1,479
09	Wood products	58	2	-200	202	572
13	Machinery	32	567	-47	614	883
16	Motor vehicles, bodies	54	-54	-97	43	478
36	Truck transportation	88	254	-29	283	1,125
45	Federal Reserve banks,	71	327	-123	450	1,031
53	Miscellaneous profession	61	-81	91	-172	520
54	Management of companies	6	611	12	599	666
58	Ambulatory health care	330	116	1,026	-910	3,369
60	Nursing and residential	310	106	121	-15	3,162
61	Social assistance	134	-137	777	-914	1,183
65	Food services and drinking	447	-441	756	-1,197	3,974

...

Selected SSA Components for Mercer County, Pennsylvania vs the Appalachian Region

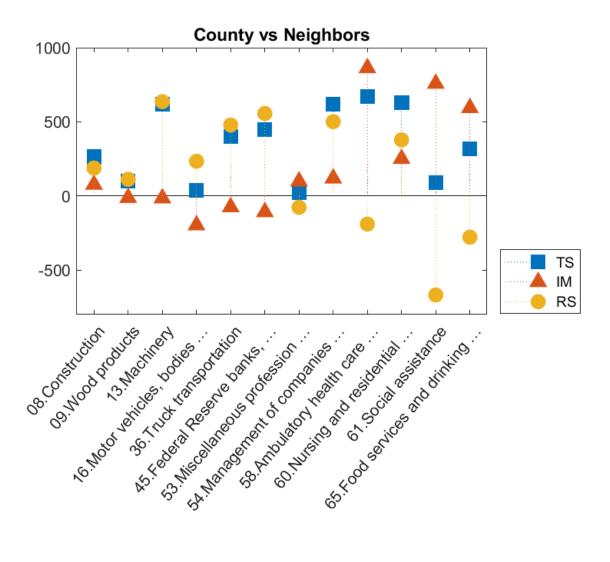


Selected SSA Components for Mercer County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
08	Construction	4	158	-95	253	1,479
09	Wood products	2	58	-153	211	572
13	Machinery	1	598	-37	635	883
16	Motor vehicles, bodies	2	-2	97	-99	478
36	Truck transportation	3	339	-51	390	1,125
45	Federal Reserve banks,	2	396	-56	452	1,031
53	Miscellaneous profession	2	-21	72	-93	520
54	Management of companies	0	616	26	590	666
58	Ambulatory health care	10	435	944	-509	3,369
60	Nursing and residential	9	407	176	231	3,162
61	Social assistance	4	-7	371	-378	1,183
65	Food services and drinking	13	-7	793	-800	3,974

...

Selected SSA Components for Mercer County, Pennsylvania vs Neighbors



Selected SSA Components for Mercer County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
08	Construction	-103	265	77	188	1,479
09	Wood products	-40	100	-12	112	572
13	Machinery	-22	621	-15	636	883
16	Motor vehicles, bodies	-37	37	-197	234	478
36	Truck transportation	-61	403	-75	478	1,125
45	Federal Reserve banks,	-49	448	-108	556	1,031
53	Miscellaneous profession	-42	22	99	-77	520
54	Management of companies	-4	620	119	501	666
58	Ambulatory health care	-228	673	863	-190	3,369
60	Nursing and residential	-214	629	251	378	3,162
61	Social assistance	-92	90	758	-668	1,183
65	Food services and drinking	-309	316	594	-278	3,974

. . .

Chapter 33. Mifflin County, Pennsylvania

Employment in Mifflin County, Pennsylvania, declined from 16,279 in 2005 to 15,813 in 2018, for a change of -466, or -2.86%. 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 Mifflin County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	1,831	-2,297	-422	-1,875
vs. Appalachia	49	-524	-402	-122
vs. Neighbors	2,093	-2,558	-834	-1,724

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 Mifflin County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Mifflin County, Pennsylvania

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
23	Paper products	D III c iii	no	yes	yes	yes
26	Chemical products	FIIIci	no	yes	yes	yes
27	Plastics and rubber prod	D III a iii	no	yes	yes	yes
29	Motor vehicle and parts	F III a iii	no	yes	yes	yes
58	Ambulatory health care	BIIbii	yes	yes	yes	yes
59	Hospitals	Elaii	no	yes	yes	yes
60	Nursing and residential	Elaiii	no	yes	yes	yes
61	Social assistance	BIIai	yes	yes	yes	yes
65	Food services and drinking	B II a iii	yes	yes	yes	yes

Notes:

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

Groups I, II, and III are from Mifflin County, Pennsylvania vs. the United States

Groups a, b, and c are from Mifflin County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Mifflin County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Mifflin County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Mifflin County, Pennsylvania, 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 Mifflin County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Mifflin County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

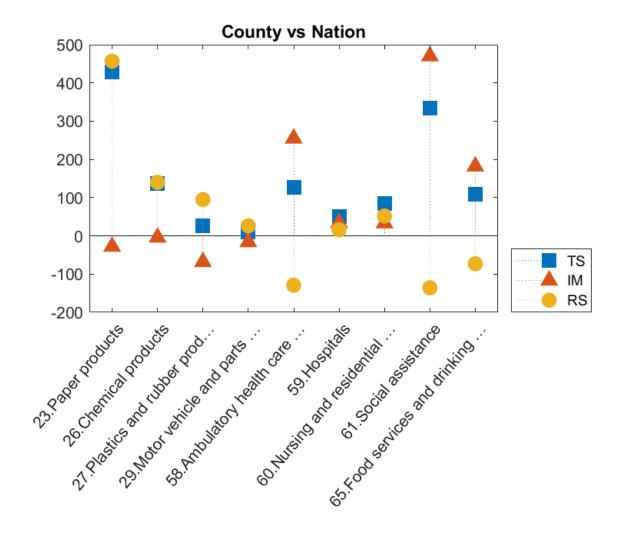
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Mifflin County, Pennsylvania, 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 Mifflin County, Pennsylvania vs the U.S.

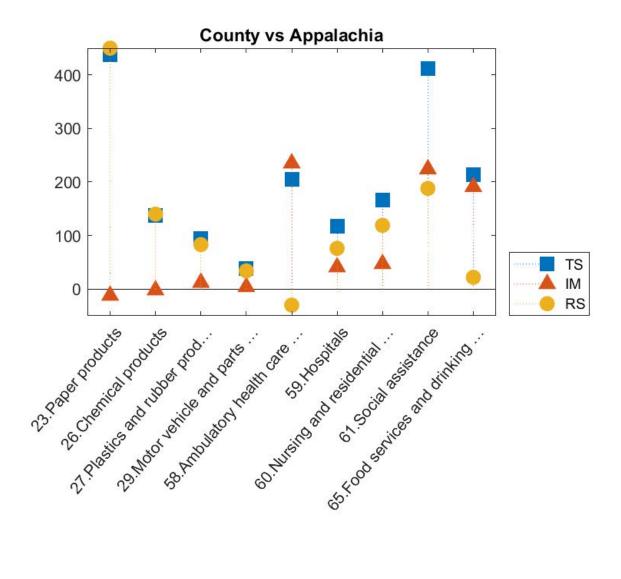


Chapter 33. Mifflin County, Pennsylvania

Mifflin County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
23	Paper products	9	429	-28	457	515
26	Chemical products	3	136	-4	140	165
27	Plastics and rubber prod	70	27	-68	95	713
29	Motor vehicle and parts	29	10	-16	26	300
58	Ambulatory health care 	82	126	255	-129	936
59	Hospitals	69	50	34	16	734
60	Nursing and residential	84	85	33	52	912
61	Social assistance	81	334	470	-136	1,131
65	Food services and drinking	108	109	182	-73	1,172

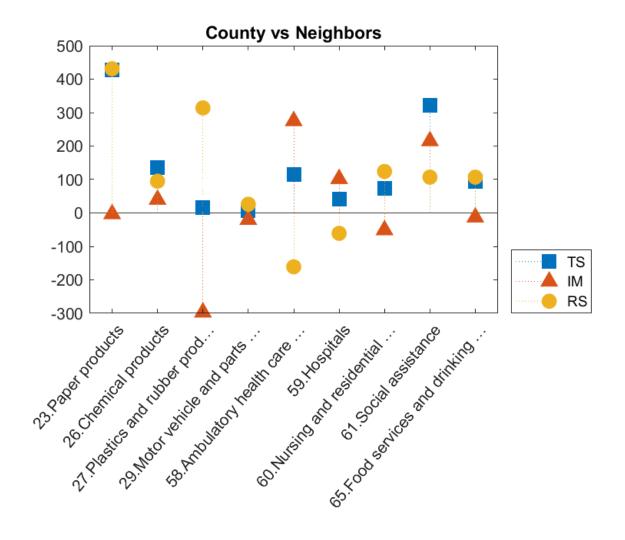
Selected SSA Components for Mifflin County, Pennsylvania vs the Appalachian Region



Selected SSA Components for Mifflin County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
23	Paper products	0	438	-12	450	515
26	Chemical products	0	138	-2	140	165
27	Plastics and rubber prod	2	95	12	83	713
29	Motor vehicle and parts	1	38	4	34	300
58	Ambulatory health care 	2	205	235	-30	936
59	Hospitals	2	117	41	76	734
60	Nursing and residential	3	166	47	119	912
61	Social assistance	2	412	224	188	1,131
65	Food services and drinking	3	213	191	22	1,172

Selected SSA Components for Mifflin County, Pennsylvania vs Neighbors



Selected SSA Components for Mifflin County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
23	Paper products	10	428	-3	431	515
26	Chemical products	3	135	40	95	165
27	Plastics and rubber prod	79	17	-297	314	713
29	Motor vehicle and parts	34	6	-20	26	300
58	Ambulatory health care 	94	114	275	-161	936
59	Hospitals	79	41	102	-61	734
60	Nursing and residential	96	73	-51	124	912
61	Social assistance	92	322	215	107	1,131
65	Food services and drinking	123	94	-13	107	1,172

Chapter 34. Monroe County, Pennsylvania

Employment in Monroe County, Pennsylvania, grew from 56,322 in 2005 to 56,505 in 2018, for a change of 183, or 0.32%. 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 Monroe County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	6,351	-6,168	2,139	-8,307
vs. Appalachia	188	-13	1,499	-1,512
vs. Neighbors	1,906	-1,720	4,905	-6,625

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 Monroe County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Monroe County, Pennsylvania

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
26	Chemical products	FIIIci	no	yes	yes	yes
29	Motor vehicle and parts	F III a iii	no	yes	yes	yes
30	Food and beverage stores	FIIIciii	no	yes	yes	yes
58	Ambulatory health care	Blai	yes	yes	yes	yes
59	Hospitals	Elaiii	no	yes	yes	yes
60	Nursing and residential	Elai	no	yes	yes	yes
64	Accommodation	Alai	yes	yes	yes	yes
65	Food services and drinking	BIIai	yes	yes	yes	yes

Notes:

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

Groups I, II, and III are from Monroe County, Pennsylvania vs. the United States

Groups a, b, and c are from Monroe County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Monroe County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Monroe County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Monroe County, Pennsylvania, 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 Monroe County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Monroe County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

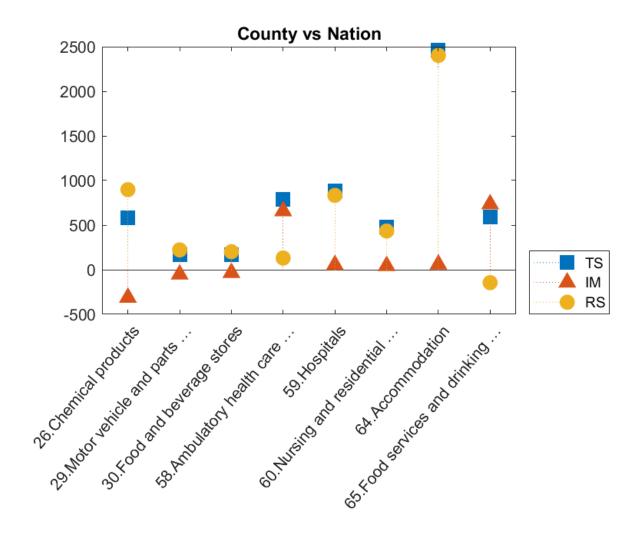
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Monroe County, Pennsylvania, 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 Monroe County, Pennsylvania vs the U.S.

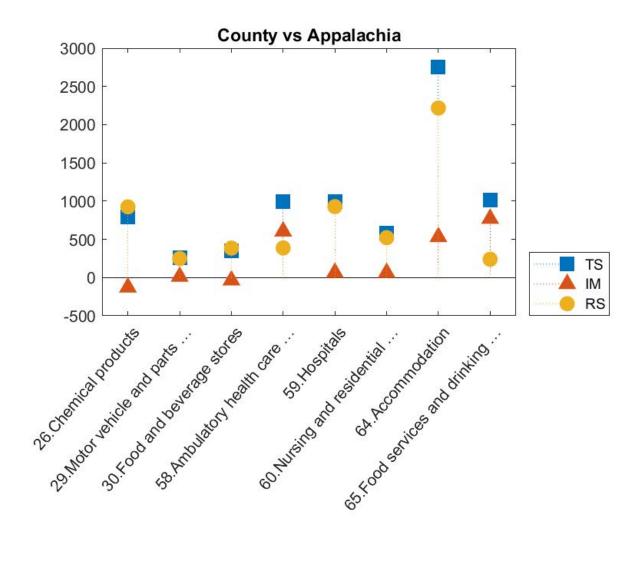


Chapter 34. Monroe County, Pennsylvania

Monroe County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
26	Chemical products	219	585	-312	897	2,742
29	Motor vehicle and parts	95	170	-52	222	1,109
30	Food and beverage stores	189	168	-34	202	2,029
58	Ambulatory health care	211	789	658	131	2,874
59	Hospitals	109	887	54	833	1,963
60	Nursing and residential	111	477	43	434	1,573
64	Accommodation	295	2,462	60	2,402	5,378
65	Food services and drinking	435	590	735	-145	4,878

Selected SSA Components for Monroe County, Pennsylvania vs the Appalachian Region

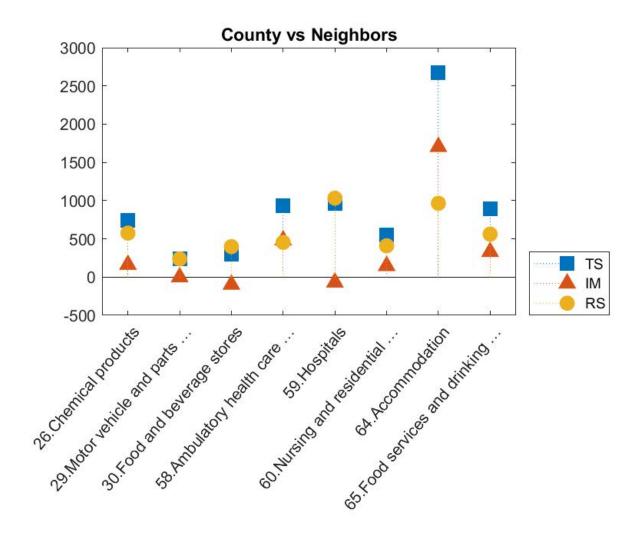


Chapter 34. Monroe County, Pennsylvania

Selected SSA Components for Monroe County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
26	Chemical products	7	797	-128	925	2,742
29	Motor vehicle and parts	3	262	13	249	1,109
30	Food and beverage stores	6	351	-35	386	2,029
58	Ambulatory health care	6	993	605	388	2,874
59	Hospitals	3	993	65	928	1,963
60	Nursing and residential	3	585	63	522	1,573
64	Accommodation	9	2,749	532	2,217	5,378
65	Food services and drinking	13	1,011	771	240	4,878

Selected SSA Components for Monroe County, Pennsylvania vs Neighbors



Chapter 34. Monroe County, Pennsylvania

Selected SSA Components for Monroe County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
26	Chemical products	66	738	163	575	2,742
29	Motor vehicle and parts	29	237	-1	238	1,109
30	Food and beverage stores	57	300	-98	398	2,029
58	Ambulatory health care	63	936	482	454	2,874
59	Hospitals	33	963	-69	1,032	1,963
60	Nursing and residential	33	556	147	409	1,573
64	Accommodation	89	2,669	1,704	965	5,378
65	Food services and drinking	130	893	331	562	4,878

Chapter 35. Montour County, Pennsylvania

Employment in Montour County, Pennsylvania, grew from 14,432 in 2005 to 15,609 in 2018, for a change of 1,177, or 8.16%. 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 Montour County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	1,627	-451	921	-1,372
vs. Appalachia	48	1,125	1,701	-576
vs. Neighbors	-551	1,726	1,256	470

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 Montour County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Montour County, Pennsylvania

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
47	Insurance carriers and 	FIIIci	no	yes	yes	yes
53	Miscellaneous profession	Blai	yes	yes	yes	yes
58	Ambulatory health care	Blai	yes	yes	yes	yes
59	Hospitals	Elai	no	yes	yes	yes
61	Social assistance	BIIaii	yes	yes	yes	yes
65	Food services and drinking	BVbii	yes	no	yes	yes
66	Other services, exc. gov	FIIIci	no	yes	yes	yes

Notes:

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

Groups I, II, and III are from Montour County, Pennsylvania vs. the United States

Groups a, b, and c are from Montour County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Montour County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Montour County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Montour County, Pennsylvania, 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 Montour County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Montour County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

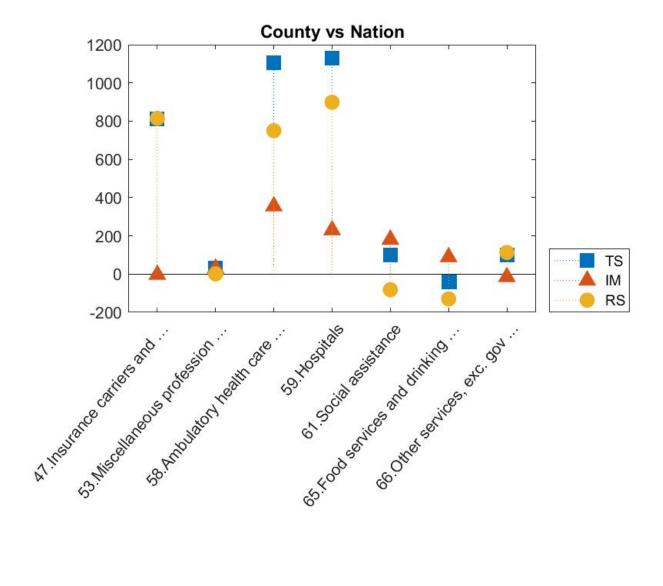
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Montour County, Pennsylvania, 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 Montour County, Pennsylvania vs the U.S.

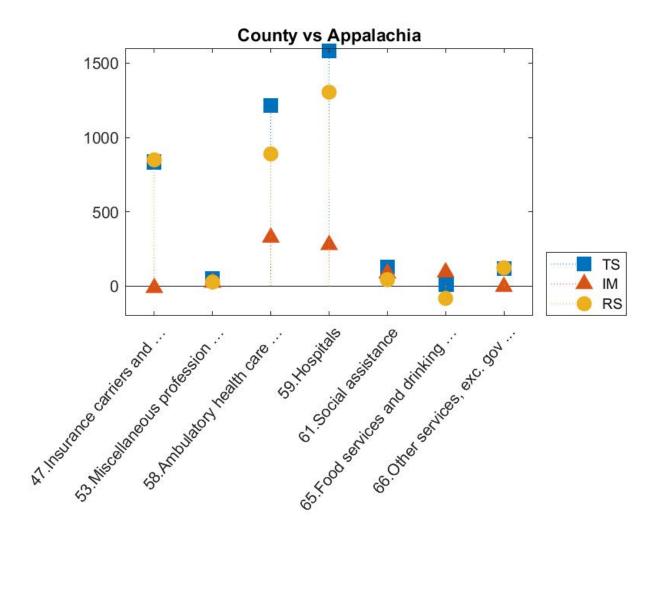


Chapter 35. Montour County, Pennsylvania

Montour County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
47	Insurance carriers and 	25	812	-3	815	1,063
53	Miscellaneous profession	20	31	30	1	230
58	Ambulatory health care	114	1,105	355	750	2,232
59	Hospitals	467	1,129	230	899	5,733
61	Social assistance	31	99	181	-82	406
65	Food services and drinking	53	-41	89	-130	479
66	Other services, exc.	21	98	-15	113	309

Selected SSA Components for Montour County, Pennsylvania vs the Appalachian Region

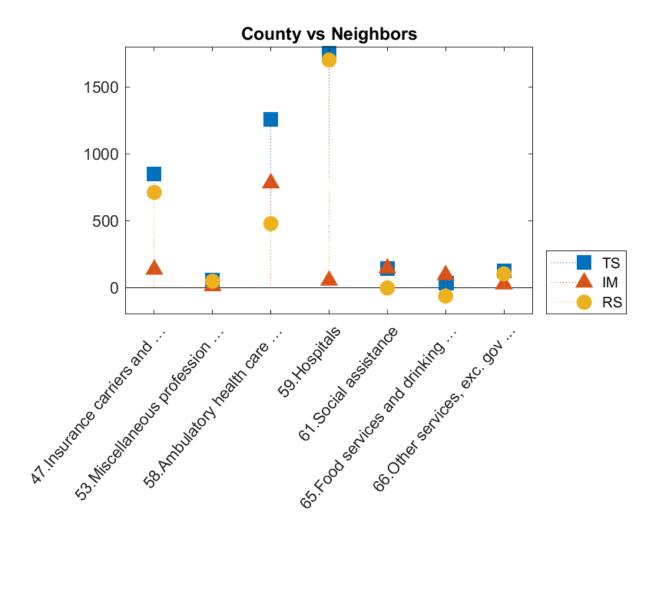


Chapter 35. Montour County, Pennsylvania

Selected SSA Components for Montour County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
47	Insurance carriers and 	1	837	-12	849	1,063
53	Miscellaneous profession	1	51	24	27	230
58	Ambulatory health care	3	1,216	327	889	2,232
59	Hospitals	14	1,581	277	1,304	5,733
61	Social assistance	1	129	86	43	406
65	Food services and drinking	2	10	93	-83	479
66	Other services, exc. gov	1	119	-4	123	309

Selected SSA Components for Montour County, Pennsylvania vs Neighbors



Chapter 35. Montour County, Pennsylvania

Selected SSA Components for Montour County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
47	Insurance carriers and 	-9	846	135	711	1,063
53	Miscellaneous profession	-7	58	11	47	230
58	Ambulatory health care	-39	1,258	780	478	2,232
59	Hospitals	-158	1,753	53	1,700	5,733
61	Social assistance	-11	141	144	-3	406
65	Food services and drinking	-18	30	94	-64	479
66	Other services, exc. gov	-7	127	25	102	309

Chapter 36. Northumberland County, Pennsylvania

Employment in Northumberland County, Pennsylvania, declined from 32,460 in 2005 to 27,744 in 2018, for a change of -4,716, or -14.53%. 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 Northumberland County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	3,661	-8,379	-596	-7,783
vs. Appalachia	106	-4,825	-546	-4,279
vs. Neighbors	-123	-4,594	-75	-4,519

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 Northumberland County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Northumberland County, Pennsylvania

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
	Fabricated	-				
12	metal	F III c iii	no	yes	yes	yes
	products					
	Plastics and					
27	rubber	D III a i	no	yes	yes	yes
	prod					
36	Truck	FIIIci	no	yes	yes	yes
	transportation	1 111 0 1	110	yes	y 00	
40	Warehousing	Ellaii	no	yes	yes	yes
	and storage		110			
	Management					
54	of companies	Alai	yes	yes	yes	yes
50	Ambulatory	D. II				
58	health care	BIIbii	yes	yes	yes	yes
60	Nursing and	Elaiii	no	yes	yes	yes
	residential					
61	Social	BIIaii	yes	yes	yes	yes
	assistance					
63	Amusements,	Blai	yes	yes	yes	yes
	gambling,		<u> </u>	-		
CE	Food	DII.k.:				
65	services and	BIIbi	yes	yes	yes	yes
	drinking					

Notes:

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

Groups I, II, and III are from Northumberland County, Pennsylvania vs. the United States

Groups a, b, and c are from Northumberland County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Northumberland County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Northumberland County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Northumberland County, Pennsylvania, 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 Northumberland County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Northumberland County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

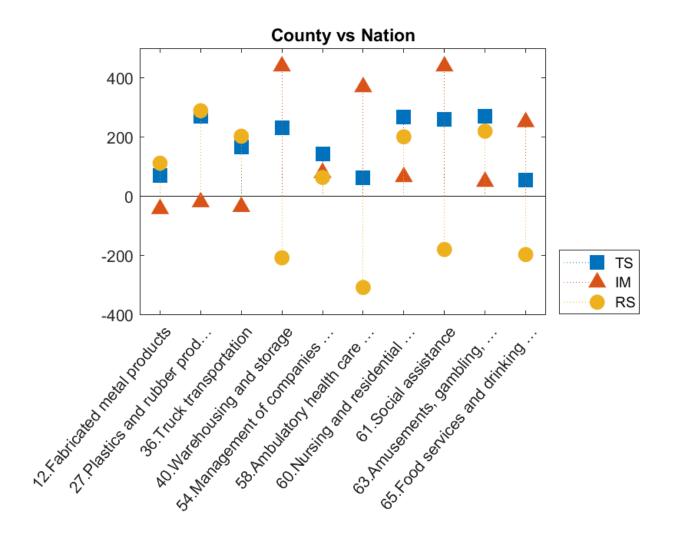
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Northumberland County, Pennsylvania, 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 Northumberland County, Pennsylvania vs the U.S.

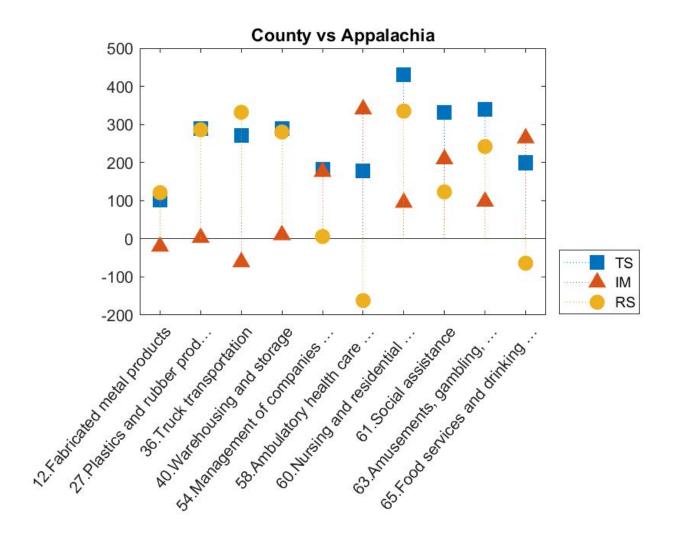


Chapter 36. Northumberland County, Pennsylvania

Northumberland County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
12	Fabricated metal products	32	70	-42	112	386
27	Plastics and rubber prod	20	270	-19	289	464
36	Truck transportation	107	168	-35	203	1,219
40	Warehousing and storage	59	232	439	-207	816
54	Management of companies	39	144	80	64	526
58	Ambulatory health care 	119	62	369	-307	1,235
60	Nursing and residential	168	267	66	201	1,930
61	Social assistance	76	260	439	-179	1,005
63	Amusements, gambling,	72	270	50	220	979
65	Food services and drinking	149	55	251	-196	1,523

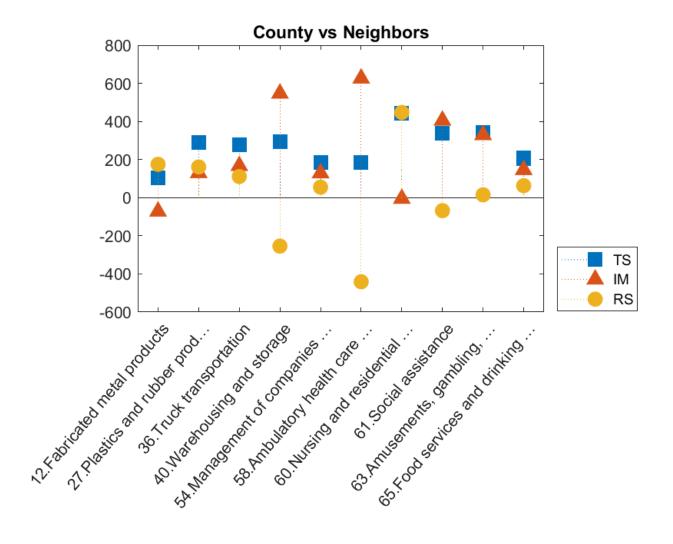
Selected SSA Components for Northumberland County, Pennsylvania vs the Appalachian Region



Selected SSA Components for Northumberland County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
12	Fabricated metal products	1	101	-20	121	386
27	Plastics and rubber prod	1	289	3	286	464
36	Truck transportation	3	271	-61	332	1,219
40	Warehousing and storage	2	290	10	280	816
54	Management of companies	1	182	176	6	526
58	Ambulatory health care 	4	178	340	-162	1,235
60	Nursing and residential	5	430	95	335	1,930
61	Social assistance	2	332	209	123	1,005
63	Amusements, gambling,	2	340	98	242	979
65	Food services and drinking	4	200	264	-64	1,523

Selected SSA Components for Northumberland County, Pennsylvania vs Neighbors



Selected SSA Components for Northumberland County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
12	Fabricated metal products	-1	103	-72	175	386
27	Plastics and rubber prod	-1	291	130	161	464
36	Truck transportation	-4	278	167	111	1,219
40	Warehousing and storage	-2	293	547	-254	816
54	Management of companies	-1	184	129	55	526
58	Ambulatory health care 	-4	185	626	-441	1,235
60	Nursing and residential	-6	442	-5	447	1,930
61	Social assistance	-3	337	405	-68	1,005
63	Amusements, gambling,	-2	344	329	15	979
65	Food services and drinking	-5	209	146	63	1,523

Chapter 37. Perry County, Pennsylvania

Employment in Perry County, Pennsylvania, declined from 8,434 in 2005 to 7,792 in 2018, for a change of -642, or -7.61%. 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 Perry County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	947	-1,592	-11	-1,581
vs. Appalachia	27	-673	-119	-554
vs. Neighbors	160	-807	322	-1,129

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 Perry County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Perry County, Pennsylvania

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	FIIIai	no	yes	yes	yes
09	Wood products	F III c iii	no	yes	yes	yes
37	Transit and ground	Elcii	no	yes	yes	yes
53	Miscellaneous profession	BVbii	yes	no	yes	yes
55	Administrative and	Alai	yes	yes	yes	yes
58	Ambulatory health care	BIIbii	yes	yes	yes	yes
61	Social assistance	Blai	yes	yes	yes	yes
66	Other services, exc. gov	FIIIci	no	yes	yes	yes

Notes:

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

Groups I, II, and III are from Perry County, Pennsylvania vs. the United States

Groups a, b, and c are from Perry County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Perry County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Perry County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Perry County, Pennsylvania, 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 Perry County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Perry County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

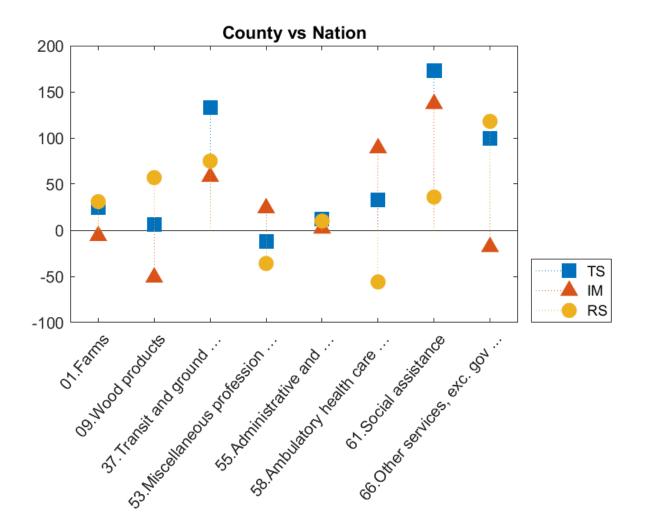
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Perry County, Pennsylvania, 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 Perry County, Pennsylvania vs the U.S.

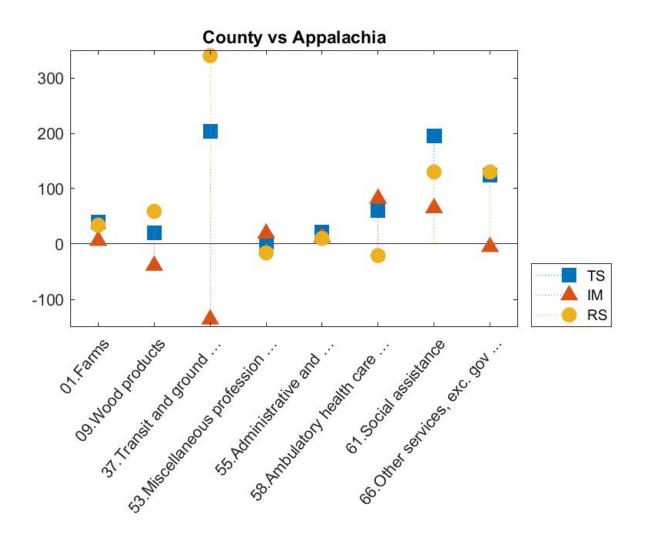


Chapter 37. Perry County, Pennsylvania

Perry County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	16	25	-6	31	183
09	Wood products	15	6	-51	57	151
37	Transit and ground	73	133	58	75	854
53	Miscellaneous profession	16	-12	24	-36	147
55	Administrative and	10	12	2	10	111
58	Ambulatory health care	29	33	89	-56	317
61	Social assistance	24	173	137	36	405
66	Other services, exc. gov	27	100	-18	118	365

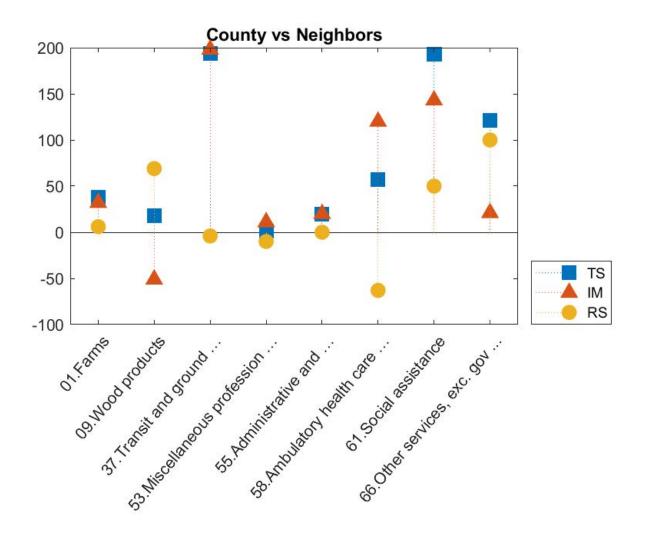
Selected SSA Components for Perry County, Pennsylvania vs the Appalachian Region



Selected SSA Components for Perry County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	0	40	6	34	183
09	Wood products	0	20	-39	59	151
37	Transit and ground	2	204	-136	340	854
53	Miscellaneous profession	0	3	19	-16	147
55	Administrative and	0	22	12	10	111
58	Ambulatory health care	1	61	82	-21	317
61	Social assistance	1	195	65	130	405
66	Other services, exc. gov	1	125	-5	130	365

Selected SSA Components for Perry County, Pennsylvania vs Neighbors



Chapter 37. Perry County, Pennsylvania

Selected SSA Components for Perry County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	3	38	32	6	183
09	Wood products	2	18	-51	69	151
37	Transit and ground	12	194	198	-4	854
53	Miscellaneous profession	3	1	11	-10	147
55	Administrative and	2	20	20	0	111
58	Ambulatory health care	5	57	120	-63	317
61	Social assistance	4	193	143	50	405
66	Other services, exc. gov	5	121	21	100	365

Chapter 38. Pike County, Pennsylvania

Employment in Pike County, Pennsylvania, declined from 11,739 in 2005 to 11,502 in 2018, for a change of -237, or -2.02%. 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 Pike County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	1,319	-1,561	69	-1,630
vs. Appalachia	36	-272	545	-817
vs. Neighbors	911	-1,152	227	-1,379

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 Pike County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Pike County, Pennsylvania

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
37	Transit and ground	Elci	no	yes	yes	yes
55	Administrative and	Alai	yes	yes	yes	yes
58	Ambulatory health care	BIIbii	yes	yes	yes	yes
60	Nursing and residential	Elai	no	yes	yes	yes
61	Social assistance	Blai	yes	yes	yes	yes
63	Amusements, gambling,	B V b iv	yes	no	yes	no
64	Accommodation	AVbii	yes	no	yes	yes
65	Food services and drinking	BIIbii	yes	yes	yes	yes
66	Other services, exc. gov	FIIIci	no	yes	yes	yes

Notes:

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

Groups I, II, and III are from Pike County, Pennsylvania vs. the United States

Groups a, b, and c are from Pike County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Pike County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Pike County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Pike County, Pennsylvania, 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 Pike County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Pike County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

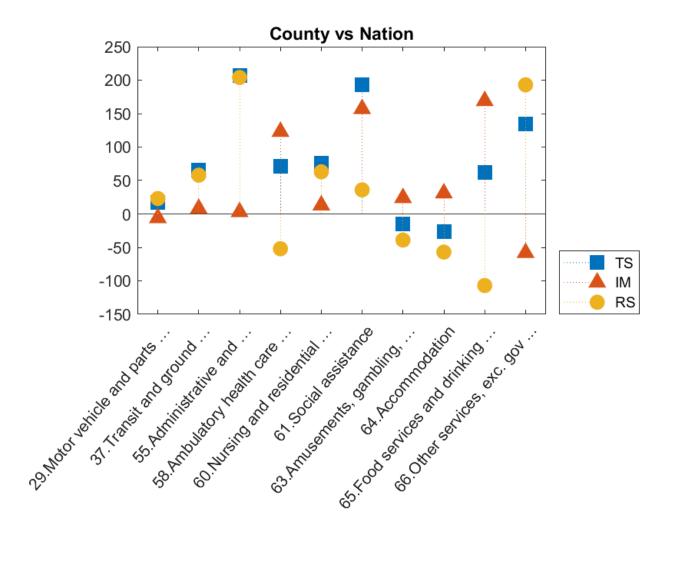
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Pike County, Pennsylvania, 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 Pike County, Pennsylvania vs the U.S.

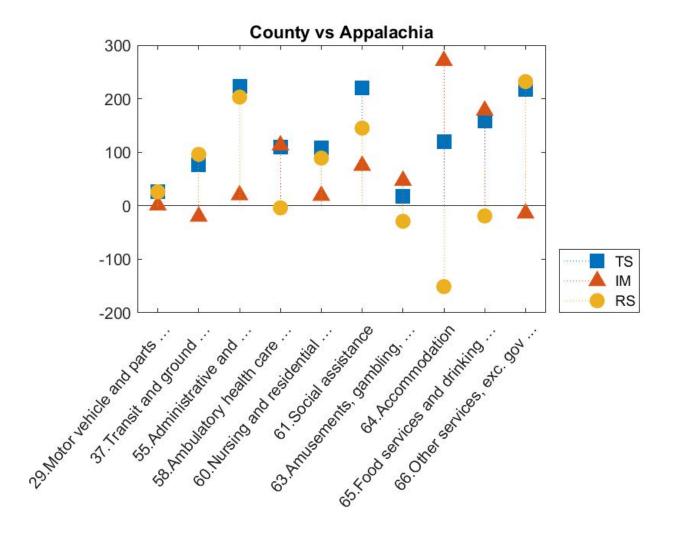


Chapter 38. Pike County, Pennsylvania

Pike County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
29	Motor vehicle and parts	10	17	-6	23	118
37	Transit and ground	10	66	8	58	170
55	Administrative and	16	207	3	204	369
58	Ambulatory health care	40	71	123	-52	462
60	Nursing and residential	33	76	13	63	399
61	Social assistance	27	193	157	36	460
63	Amusements, gambling,	34	-15	24	-39	324
64	Accommodation	150	-26	31	-57	1,456
65	Food services and drinking	100	62	169	-107	1,050
66	Other services, exc. gov	85	135	-58	193	975

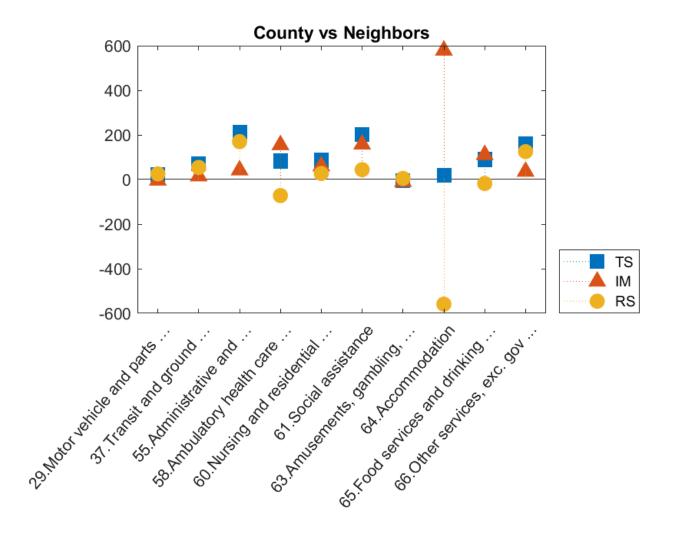
Selected SSA Components for Pike County, Pennsylvania vs the Appalachian Region



Selected SSA Components for Pike County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
29	Motor vehicle and parts	0	27	1	26	118
37	Transit and ground	0	76	-20	96	170
55	Administrative and	0	223	20	203	369
58	Ambulatory health care	1	109	113	-4	462
60	Nursing and residential	1	108	19	89	399
61	Social assistance	1	220	75	145	460
63	Amusements, gambling,	1	18	47	-29	324
64	Accommodation	5	120	271	-151	1,456
65	Food services and drinking	3	159	178	-19	1,050
66	Other services, exc. gov	3	218	-14	232	975

Selected SSA Components for Pike County, Pennsylvania vs Neighbors



Selected SSA Components for Pike County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
29	Motor vehicle and parts	7	21	-4	25	118
37	Transit and ground	7	69	15	54	170
55	Administrative and	11	212	42	170	369
58	Ambulatory health care	27	83	155	-72	462
60	Nursing and residential	23	87	60	27	399
61	Social assistance	19	202	158	44	460
63	Amusements, gambling,	24	-5	-10	5	324
64	Accommodation	104	20	579	-559	1,456
65	Food services and drinking	69	93	111	-18	1,050
66	Other services, exc. gov	59	161	36	125	975

Chapter 39. Potter County, Pennsylvania

Employment in Potter County, Pennsylvania, declined from 6,756 in 2005 to 5,460 in 2018, for a change of -1,296, or -19.18%. 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 Potter County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	759	-2,060	-354	-1,706
vs. Appalachia	16	-1,316	-490	-826
vs. Neighbors	-310	-990	-950	-40

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 Potter County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Potter County, Pennsylvania

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
07	Utilities	FIIIci	no	yes	yes	yes
08	Construction	FIIIci	no	yes	yes	yes
09	Wood products	F III c iii	no	yes	yes	yes
13	Machinery	Flai	no	yes	yes	yes
28	Wholesale trade	FIIIci	no	yes	yes	yes
36	Truck transportation	FIIIci	no	yes	yes	yes
38	Pipeline transportation	E II c iii	no	yes	yes	yes
53	Miscellaneous profession	Blai	yes	yes	yes	yes
55	Administrative and	Alai	yes	yes	yes	yes
58	Ambulatory health care	BIIbii	yes	yes	yes	yes
65	Food services and drinking	Blai	yes	yes	yes	yes

Notes:

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

Groups I, II, and III are from Potter County, Pennsylvania vs. the United States

Groups a, b, and c are from Potter County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Potter County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Potter County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Potter County, Pennsylvania, 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 Potter County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Potter County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

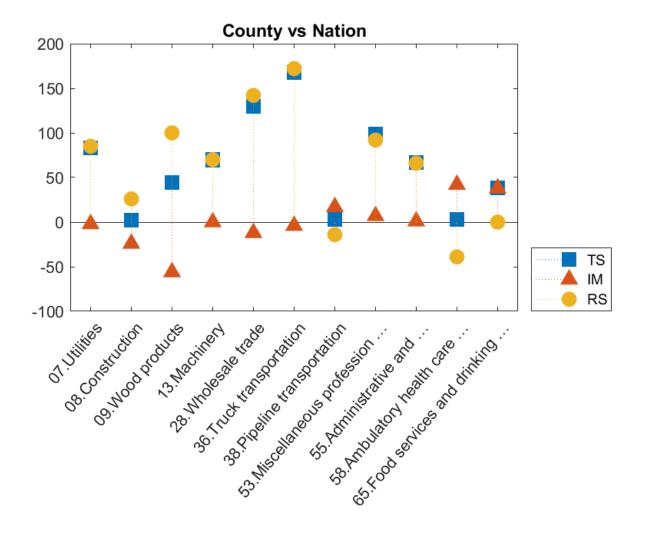
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Potter County, Pennsylvania, 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 Potter County, Pennsylvania vs the U.S.

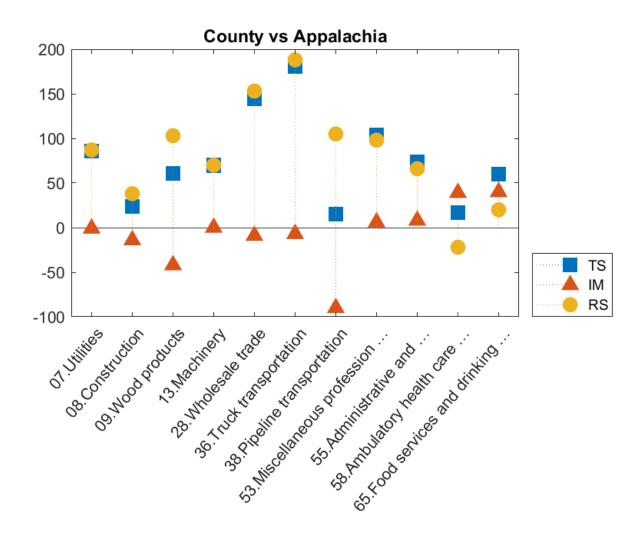


Potter County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
07	Utilities	2	83	-2	85	104
80	Construction	22	2	-24	26	224
09	Wood products	16	44	-56	100	203
13	Machinery	0	70	0	70	70
28	Wholesale trade	15	130	-12	142	274
36	Truck transportation	13	168	-4	172	294
38	Pipeline transportation	12	3	17	-14	121
53	Miscellaneous profession	5	99	7	92	148
55	Administrative and	6	67	1	66	129
58	Ambulatory health care	13	3	42	-39	136
65	Food services and drinking	22	38	38	0	258

...

Selected SSA Components for Potter County, Pennsylvania vs the Appalachian Region

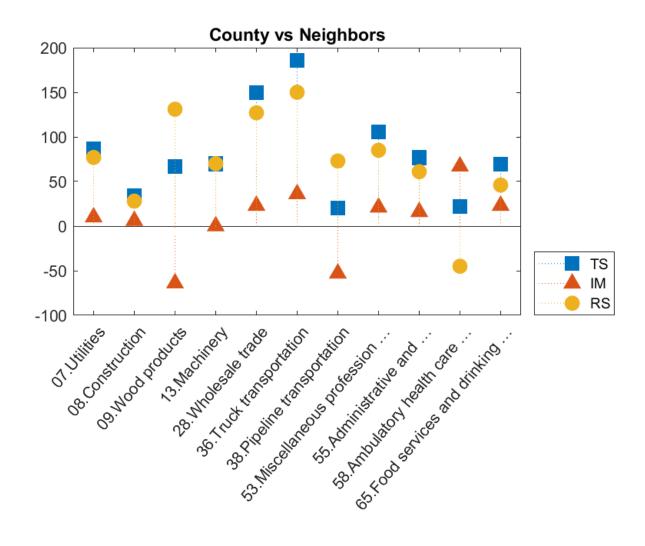


Selected SSA Components for Potter County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
07	Utilities	0	86	-1	87	104
08	Construction	1	24	-14	38	224
09	Wood products	0	61	-42	103	203
13	Machinery	0	70	0	70	70
28	Wholesale trade	0	144	-9	153	274
36	Truck transportation	0	181	-7	188	294
38	Pipeline transportation	0	15	-90	105	121
53	Miscellaneous profession	0	104	6	98	148
55	Administrative and	0	74	8	66	129
58	Ambulatory health care	0	17	39	-22	136
65	Food services and drinking	1	60	40	20	258

...

Selected SSA Components for Potter County, Pennsylvania vs Neighbors



Selected SSA Components for Potter County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
07	Utilities	-1	87	10	77	104
80	Construction	-9	34	6	28	224
09	Wood products	-6	67	-64	131	203
13	Machinery	-0	70	0	70	70
28	Wholesale trade	-6	150	23	127	274
36	Truck transportation	-5	186	36	150	294
38	Pipeline transportation	-5	20	-53	73	121
53	Miscellaneous profession	-2	106	21	85	148
55	Administrative and	-3	77	16	61	129
58	Ambulatory health care	-5	22	67	-45	136
65	Food services and drinking	-9	69	23	46	258

• • •

Chapter 40. Schuylkill County, Pennsylvania

Employment in Schuylkill County, Pennsylvania, declined from 50,507 in 2005 to 49,400 in 2018, for a change of -1,107, or -2.19%. 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 Schuylkill County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	5,696	-6,804	-1,046	-5,758
vs. Appalachia	170	-1,278	-1,436	158
vs. Neighbors	1,537	-2,643	769	-3,412

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 Schuylkill County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Schuylkill County, Pennsylvania

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	FIIIai	no	yes	yes	yes
20	Food and beverage	Elciii	no	yes	yes	yes
27	Plastics and rubber prod	DIIIai	no	yes	yes	yes
40	Warehousing and storage	Elaii	no	yes	yes	yes
55	Administrative and	Alai	yes	yes	yes	yes
58	Ambulatory health care	BIIbii	yes	yes	yes	yes
60	Nursing and residential	Elai	no	yes	yes	yes
61	Social assistance	BIIaii	yes	yes	yes	yes

Notes:

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

Groups I, II, and III are from Schuylkill County, Pennsylvania vs. the United States

Groups a, b, and c are from Schuylkill County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Schuylkill County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Schuylkill County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Schuylkill County, Pennsylvania, 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 Schuylkill County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Schuylkill County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

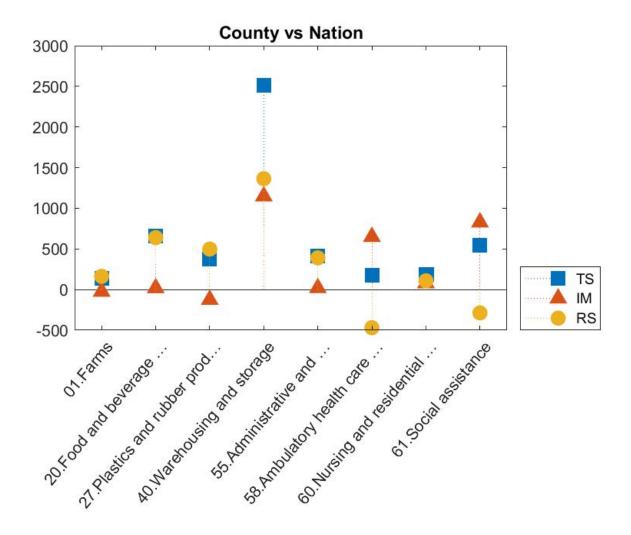
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Schuylkill County, Pennsylvania, 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 Schuylkill County, Pennsylvania vs the U.S.

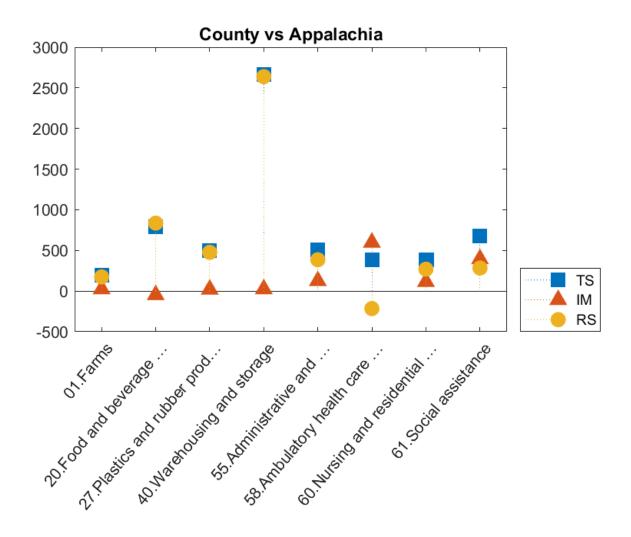


Chapter 40. Schuylkill County, Pennsylvania

Schuylkill County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	62	139	-24	163	753
20	Food and beverage	135	658	19	639	1,989
27	Plastics and rubber prod	127	374	-124	498	1,630
40	Warehousing and storage	155	2,513	1,149	1,364	4,043
55	Administrative and	105	410	20	390	1,442
58	Ambulatory health care	209	181	650	-469	2,241
60	Nursing and residential	203	187	79	108	2,188
61	Social assistance	142	541	828	-287	1,946

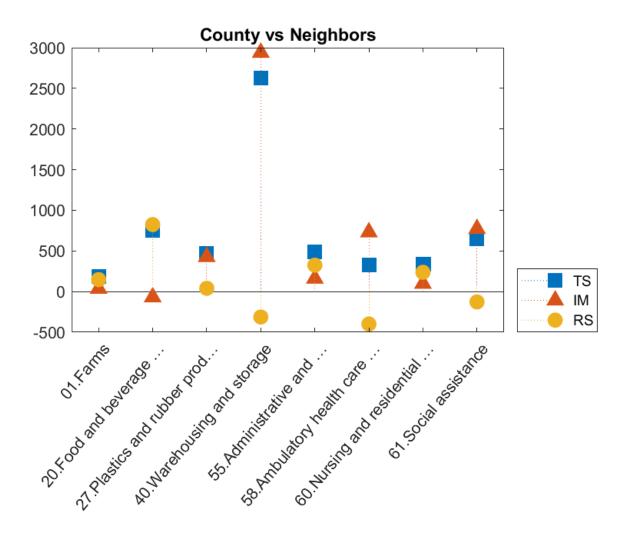
Selected SSA Components for Schuylkill County, Pennsylvania vs the Appalachian Region



Selected SSA Components for Schuylkill County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	2	199	25	174	753
20	Food and beverage	4	789	-47	836	1,989
27	Plastics and rubber prod	4	497	21	476	1,630
40	Warehousing and storage	5	2,663	25	2,638	4,043
55	Administrative and	3	511	126	385	1,442
58	Ambulatory health care	6	383	598	-215	2,241
60	Nursing and residential	6	384	115	269	2,188
61	Social assistance	4	679	395	284	1,946

Selected SSA Components for Schuylkill County, Pennsylvania vs Neighbors



Selected SSA Components for Schuylkill County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	17	184	37	147	753
20	Food and beverage	36	756	-68	824	1,989
27	Plastics and rubber prod	34	467	427	40	1,630
40	Warehousing and storage	42	2,627	2,940	-313	4,043
55	Administrative and	28	486	161	325	1,442
58	Ambulatory health care	56	332	731	-399	2,241
60	Nursing and residential	55	335	98	237	2,188
61	Social assistance	39	645	772	-127	1,946

Chapter 41. Snyder County, Pennsylvania

Employment in Snyder County, Pennsylvania, declined from 17,184 in 2005 to 16,435 in 2018, for a change of -749, or -4.36%. 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 Snyder County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	1,940	-2,690	-1,765	-925
vs. Appalachia	51	-812	-1,187	375
vs. Neighbors	-1,219	469	-545	1,014

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 Snyder County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Snyder County, Pennsylvania

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	FIIIci	no	yes	yes	yes
10	Nonmetallic mineral prod 	FIIIci	no	yes	yes	yes
20	Food and beverage	Elciii	no	yes	yes	yes
30	Food and beverage stores	FIIIci	no	yes	yes	yes
32	Other retail	FIIIciii	no	yes	yes	yes
53	Miscellaneous profession	Blai	yes	yes	yes	yes
58	Ambulatory health care	Blai	yes	yes	yes	yes
61	Social assistance	Blai	yes	yes	yes	yes
65	Food services and drinking	BIIbi	yes	yes	yes	yes

Notes:

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

Groups I, II, and III are from Snyder County, Pennsylvania vs. the United States

Groups a, b, and c are from Snyder County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Snyder County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Snyder County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Snyder County, Pennsylvania, 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 Snyder County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Snyder County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

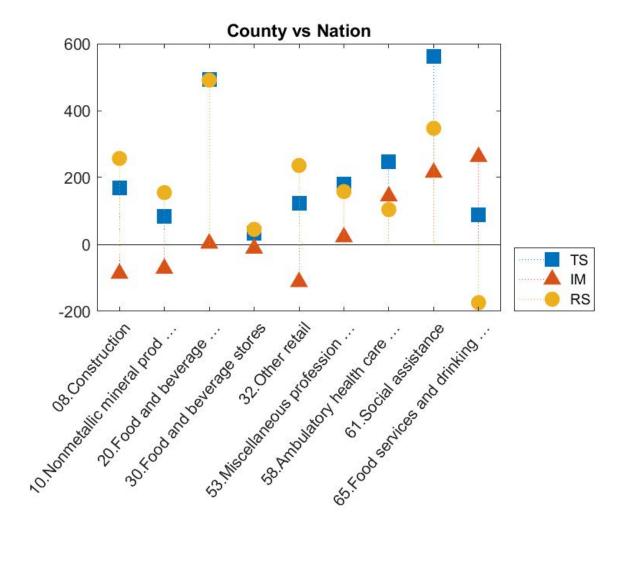
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Snyder County, Pennsylvania, 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.

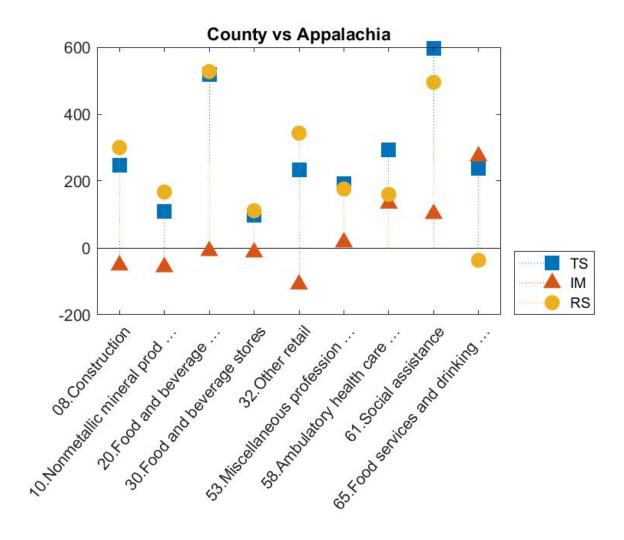
Selected SSA Components for Snyder County, Pennsylvania vs the U.S.



Snyder County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
08	Construction	81	170	-87	257	967
10	Nonmetallic mineral prod 	28	83	-72	155	359
20	Food and beverage	25	494	3	491	738
30	Food and beverage stores	67	33	-12	45	695
32	Other retail	113	124	-112	236	1,238
53	Miscellaneous profession	15	180	22	158	324
58	Ambulatory health care	46	248	144	104	706
61	Social assistance	37	562	215	347	926
65	Food services and drinking	155	88	262	-174	1,614

Selected SSA Components for Snyder County, Pennsylvania vs the Appalachian Region

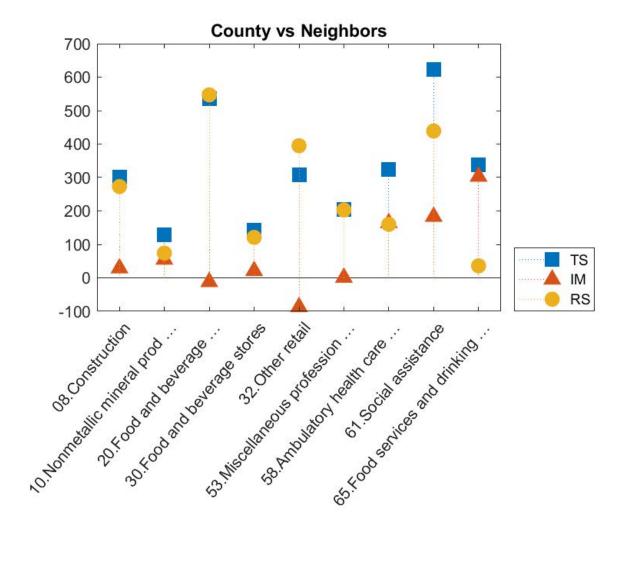


Selected SSA Components for Snyder County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
08	Construction	2	248	-52	300	967
10	Nonmetallic mineral prod 	1	110	-57	167	359
20	Food and beverage	1	518	-9	527	738
30	Food and beverage stores	2	98	-13	111	695
32	Other retail	3	234	-109	343	1,238
53	Miscellaneous profession	0	193	17	176	324
58	Ambulatory health care	1	293	133	160	706
61	Social assistance	1	597	102	495	926
65	Food services and drinking	5	237	274	-37	1,614

...

Selected SSA Components for Snyder County, Pennsylvania vs Neighbors



Selected SSA Components for Snyder County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
80	Construction	-51	302	29	273	967
10	Nonmetallic mineral prod 	-18	129	55	74	359
20	Food and beverage	-15	535	-12	547	738
30	Food and beverage stores	-42	142	21	121	695
32	Other retail	-71	308	-87	395	1,238
53	Miscellaneous profession	-9	204	1	203	324
58	Ambulatory health care	-29	324	164	160	706
61	Social assistance	-23	622	183	439	926
65	Food services and drinking	-97	339	303	36	1,614

...

Chapter 42. Somerset County, Pennsylvania

Employment in Somerset County, Pennsylvania, declined from 27,370 in 2005 to 24,268 in 2018, for a change of -3,102, or -11.33%. 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 Somerset County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	3,083	-6,185	-856	-5,329
vs. Appalachia	91	-3,192	-196	-2,996
vs. Neighbors	-1,751	-1,352	-336	-1,016

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 Somerset County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Somerset County, Pennsylvania

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
11	Primary metals	F III c iii	no	yes	yes	yes
40	Warehousing and storage	Elai	no	yes	yes	yes
45	Federal Reserve banks, 	F III c iii	no	yes	yes	yes
53	Miscellaneous profession	B II a iii	yes	yes	yes	yes
55	Administrative and	Alaiii	yes	yes	yes	yes
58	Ambulatory health care	Blai	yes	yes	yes	yes
61	Social assistance	BIIaii	yes	yes	yes	yes
64	Accommodation	AVeii	yes	no	no	yes
65	Food services and drinking	BVeii	yes	no	no	yes

Notes:

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

Groups I, II, and III are from Somerset County, Pennsylvania vs. the United States

Groups a, b, and c are from Somerset County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Somerset County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Somerset County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Somerset County, Pennsylvania, 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 Somerset County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Somerset County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

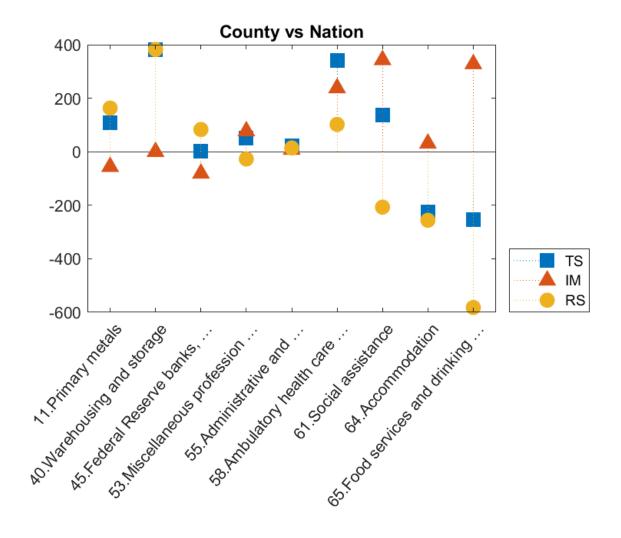
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Somerset County, Pennsylvania, 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 Somerset County, Pennsylvania vs the U.S.

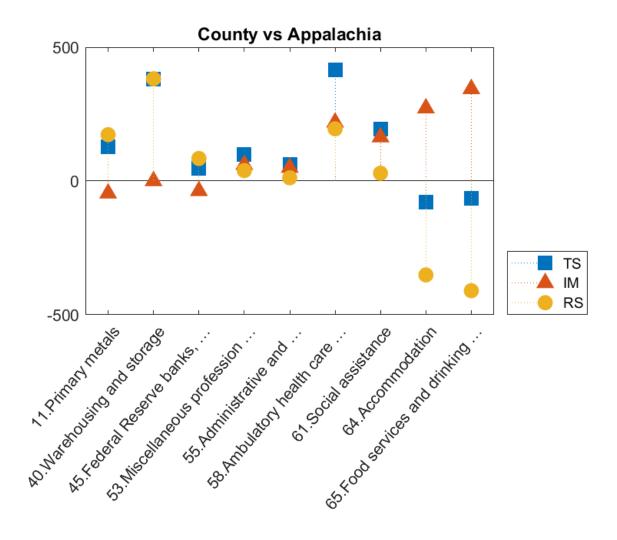


Chapter 42. Somerset County, Pennsylvania

Somerset County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
11	Primary metals	21	107	-56	163	318
40	Warehousing and storage	0	382	0	382	382
45	Federal Reserve banks, 	47	2	-81	83	466
53	Miscellaneous profession	51	50	77	-27	555
55	Administrative and	41	22	8	14	429
58	Ambulatory health care	76	340	238	102	1,093
61	Social assistance	59	136	343	-207	718
64	Accommodation	151	-225	31	-256	1,267
65	Food services and drinking	194	-254	328	-582	1,662

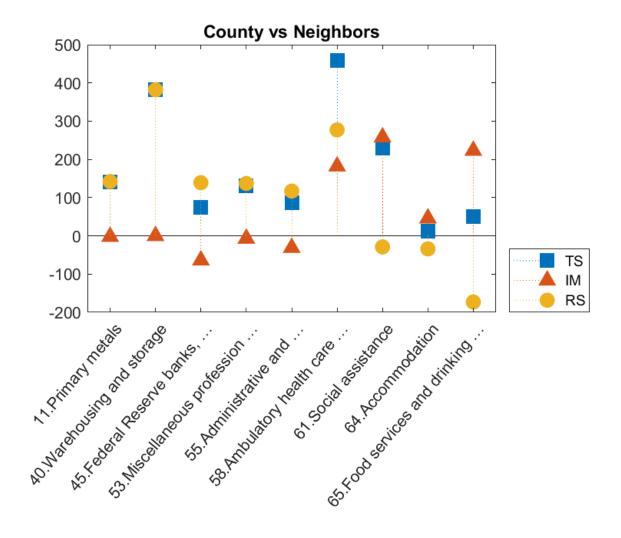
Selected SSA Components for Somerset County, Pennsylvania vs the Appalachian Region



Selected SSA Components for Somerset County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
11	Primary metals	1	127	-46	173	318
40	Warehousing and storage	0	382	0	382	382
45	Federal Reserve banks, 	1	47	-37	84	466
53	Miscellaneous profession	2	100	61	39	555
55	Administrative and	1	62	50	12	429
58	Ambulatory health care	2	414	219	195	1,093
61	Social assistance	2	193	164	29	718
64	Accommodation	5	-79	272	-351	1,267
65	Food services and drinking	6	-66	344	-410	1,662

Selected SSA Components for Somerset County, Pennsylvania vs Neighbors



Selected SSA Components for Somerset County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
11	Primary metals	-12	140	-2	142	318
40	Warehousing and storage	-0	382	0	382	382
45	Federal Reserve banks, 	-27	75	-64	139	466
53	Miscellaneous profession	-29	130	-7	137	555
55	Administrative and	-23	86	-31	117	429
58	Ambulatory health care	-43	459	182	277	1,093
61	Social assistance	-33	229	258	-29	718
64	Accommodation	-86	12	46	-34	1,267
65	Food services and drinking	-110	50	223	-173	1,662

Chapter 43. Sullivan County, Pennsylvania

Employment in Sullivan County, Pennsylvania, declined from 1,730 in 2005 to 1,570 in 2018, for a change of -160, or -9.25%. 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 Sullivan County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	194	-353	41	-394
vs. Appalachia	3	-164	17	-181
vs. Neighbors	-12	-140	-23	-117

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 Sullivan County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Sullivan County, Pennsylvania

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 iii	no	yes	yes	yes
28	Wholesale trade	F III c iii	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
53	Miscellaneous profession	Blai	yes	yes	yes	yes
54	Management of companies	Alai	yes	yes	yes	yes
58	Ambulatory health care	Blai	yes	yes	yes	yes
60	Nursing and residential	Ellai	no	yes	yes	yes
63	Amusements, gambling,	Blaiii	yes	yes	yes	yes
64	Accommodation	Alaii	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 Sullivan County, Pennsylvania vs. the United States

Groups a, b, and c are from Sullivan County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Sullivan County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Sullivan County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Sullivan County, Pennsylvania, 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 Sullivan County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Sullivan County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

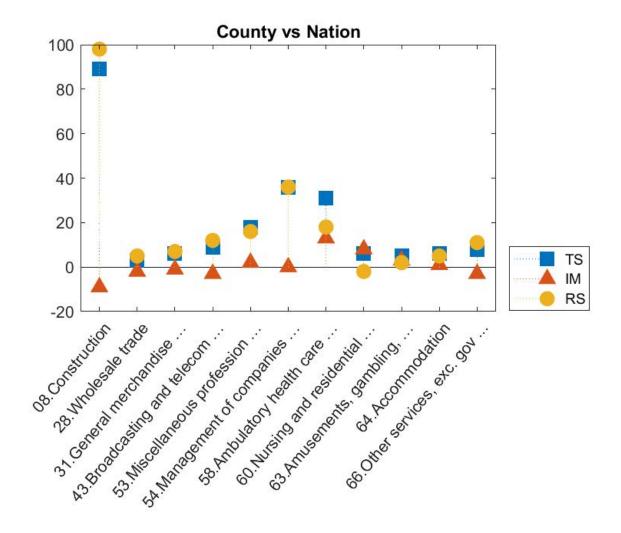
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Sullivan County, Pennsylvania, 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 Sullivan County, Pennsylvania vs the U.S.

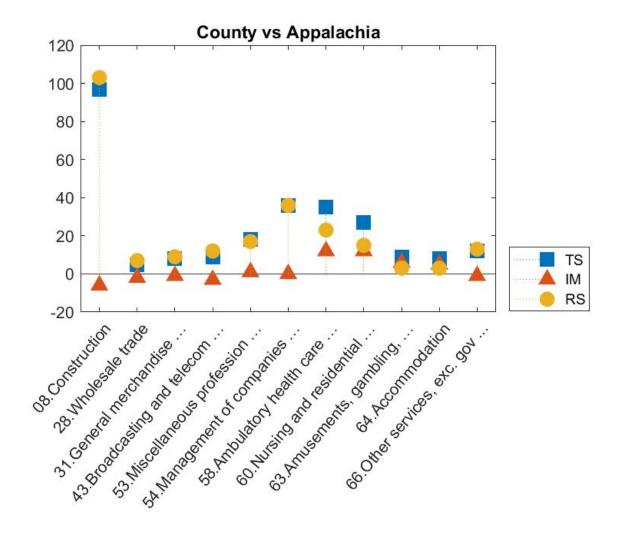


Chapter 43. Sullivan County, Pennsylvania

Sullivan County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
08	Construction	9	89	-9	98	175
28	Wholesale trade	2	3	-2	5	28
31	General merchandise	3	6	-1	7	31
43	Broadcasting and telecom	1	9	-3	12	18
53	Miscellaneous profession	1	18	2	16	28
54	Management of companies	0	36	0	36	36
58	Ambulatory health care	4	31	13	18	72
60	Nursing and residential	21	6	8	-2	211
63	Amusements, gambling,	4	5	3	2	45
64	Accommodation	3	6	1	5	31
66	Other services, exc. gov	4	8	-3	11	50

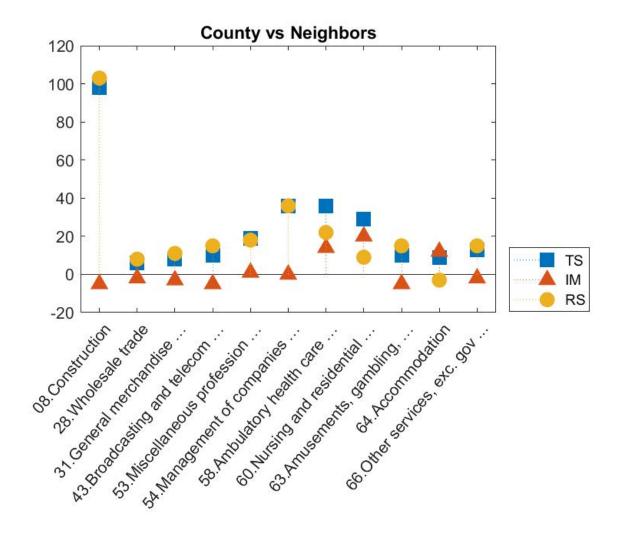
Selected SSA Components for Sullivan County, Pennsylvania vs the Appalachian Region



Selected SSA Components for Sullivan County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
08	Construction	0	97	-6	103	175
28	Wholesale trade	0	5	-2	7	28
31	General merchandise	0	8	-1	9	31
43	Broadcasting and telecom	0	9	-3	12	18
53	Miscellaneous profession	0	18	1	17	28
54	Management of companies	0	36	0	36	36
58	Ambulatory health care	0	35	12	23	72
60	Nursing and residential	1	27	12	15	211
63	Amusements, gambling,	0	9	6	3	45
64	Accommodation	0	8	5	3	31
66	Other services, exc. gov	0	12	-1	13	50

Selected SSA Components for Sullivan County, Pennsylvania vs Neighbors



Selected SSA Components for Sullivan County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
08	Construction	-1	98	-5	103	175
28	Wholesale trade	-0	6	-2	8	28
31	General merchandise	-0	8	-3	11	31
43	Broadcasting and telecom	-0	10	-5	15	18
53	Miscellaneous profession	-0	19	1	18	28
54	Management of companies	-0	36	0	36	36
58	Ambulatory health care	-0	36	14	22	72
60	Nursing and residential	-2	29	20	9	211
63	Amusements, gambling,	-0	10	-5	15	45
64	Accommodation	-0	9	12	-3	31
66	Other services, exc. gov	-0	13	-2	15	50

Chapter 44. Susquehanna County, Pennsylvania

Employment in Susquehanna County, Pennsylvania, declined from 9,089 in 2005 to 9,071 in 2018, for a change of -18, or -0.2%. 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 Susquehanna County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	1,025	-1,039	-65	-974
vs. Appalachia	27	-45	-83	38
vs. Neighbors	-406	396	780	-384

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 Susquehanna County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Susquehanna County, Pennsylvania

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
03	Oil and gas extraction	Alai	yes	yes	yes	yes
07	Utilities	F III c iii	no	yes	yes	yes
10	Nonmetallic mineral prod	FIIIci	no	yes	yes	yes
36	Truck transportation	FIIIci	no	yes	yes	yes
40	Warehousing and storage	Ellai	no	yes	yes	yes
53	Miscellaneous profession	Blai	yes	yes	yes	yes
54	Management of companies	Alai	yes	yes	yes	yes
55	Administrative and	Alai	yes	yes	yes	yes
58	Ambulatory health care	BVbii	yes	no	yes	yes
61	Social assistance	BIIbii	yes	yes	yes	yes
64	Accommodation	Alai	yes	yes	yes	yes
65	Food services and drinking	BVbii	yes	no	yes	yes

Notes:

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

Groups I, II, and III are from Susquehanna County, Pennsylvania vs. the United States

Groups a, b, and c are from Susquehanna County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Susquehanna County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Susquehanna County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Susquehanna County, Pennsylvania, 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 Susquehanna County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Susquehanna County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

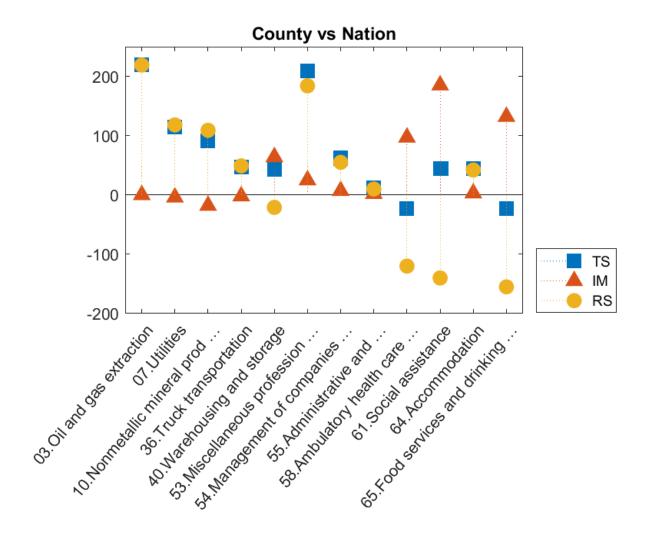
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Susquehanna County, Pennsylvania, 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 Susquehanna County, Pennsylvania vs the U.S.

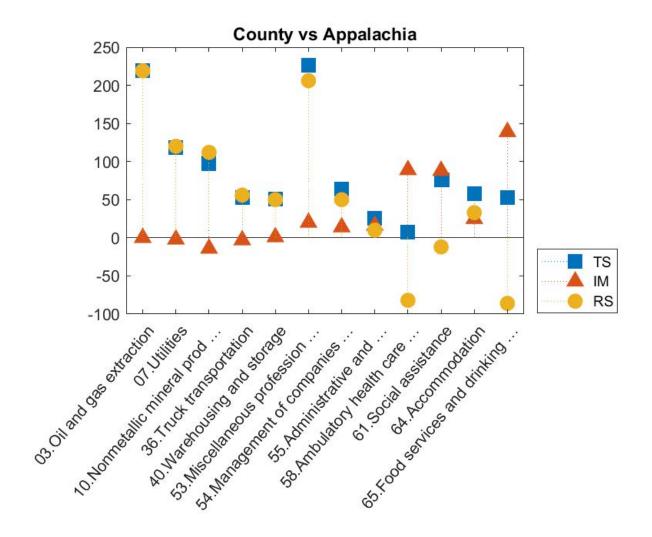


Chapter 44. Susquehanna County, Pennsylvania

Susquehanna County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
03	Oil and gas extraction	0	219	0	219	219
07	Utilities	4	114	-4	118	157
10	Nonmetallic mineral prod	7	91	-18	109	161
36	Truck transportation	6	47	-2	49	103
40	Warehousing and storage	9	43	64	-21	128
53	Miscellaneous profession	17	209	25	184	374
54	Management of companies	3	62	7	55	93
55	Administrative and	13	12	2	10	140
58	Ambulatory health care	31	-23	97	-120	284
61	Social assistance	32	45	185	-140	360
64	Accommodation	14	45	3	42	184
65	Food services and drinking	78	-23	132	-155	748

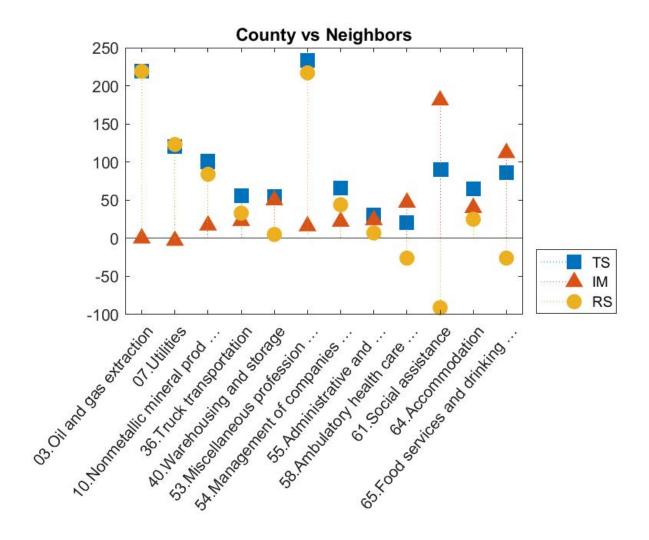
Selected SSA Components for Susquehanna County, Pennsylvania vs the Appalachian Region



Selected SSA Components for Susquehanna County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
03	Oil and gas extraction	0	219	0	219	219
07	Utilities	0	118	-2	120	157
10	Nonmetallic mineral prod	0	98	-14	112	161
36	Truck transportation	0	53	-3	56	103
40	Warehousing and storage	0	51	1	50	128
53	Miscellaneous profession	1	226	20	206	374
54	Management of companies	0	64	14	50	93
55	Administrative and	0	26	16	10	140
58	Ambulatory health care	1	7	89	-82	284
61	Social assistance	1	76	88	-12	360
64	Accommodation	0	58	25	33	184
65	Food services and drinking	2	53	139	-86	748

Selected SSA Components for Susquehanna County, Pennsylvania vs Neighbors



Selected SSA Components for Susquehanna County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
03	Oil and gas extraction	-0	219	0	219	219
07	Utilities	-2	120	-3	123	157
10	Nonmetallic mineral prod	-3	101	17	84	161
36	Truck transportation	-2	56	23	33	103
40	Warehousing and storage	-3	55	50	5	128
53	Miscellaneous profession	-7	233	16	217	374
54	Management of companies	-1	66	22	44	93
55	Administrative and	-5	31	24	7	140
58	Ambulatory health care	-12	21	47	-26	284
61	Social assistance	-13	90	181	-91	360
64	Accommodation	-6	65	40	25	184
65	Food services and drinking	-31	86	112	-26	748

Chapter 45. Tioga County, Pennsylvania

Employment in Tioga County, Pennsylvania, declined from 13,611 in 2005 to 12,548 in 2018, for a change of -1,063, or -7.81%. 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, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	1,532	-2,597	-581	-2,016
vs. Appalachia	45	-1,106	-236	-870
vs. Neighbors	-456	-603	-299	-304

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, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Tioga County, Pennsylvania

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
06	Support activities for	Alai	yes	yes	yes	yes
07	Utilities	FIIIci	no	yes	yes	yes
8	Construction	FIIIci	no	yes	yes	yes
16	Motor vehicles, bodies	C IV e ii	yes	no	no	yes
29	Motor vehicle and parts	F III a iii	no	yes	yes	yes
36	Truck transportation	F III c ii	no	yes	yes	yes
37	Transit and ground	Ellcii	no	yes	yes	yes
45	Federal Reserve banks, 	F III c iii	no	yes	yes	yes
53	Miscellaneous profession	Blai	yes	yes	yes	yes
58	Ambulatory health care	BIIai	yes	yes	yes	yes
61	Social assistance	Blai	yes	yes	yes	yes
64	Accommodation	AVbii	yes	no	yes	yes
65	Food services and drinking	BVbii	yes	no	yes	yes

Notes:

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

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

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

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

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Tioga County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Tioga County, Pennsylvania, 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, Pennsylvania, 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, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

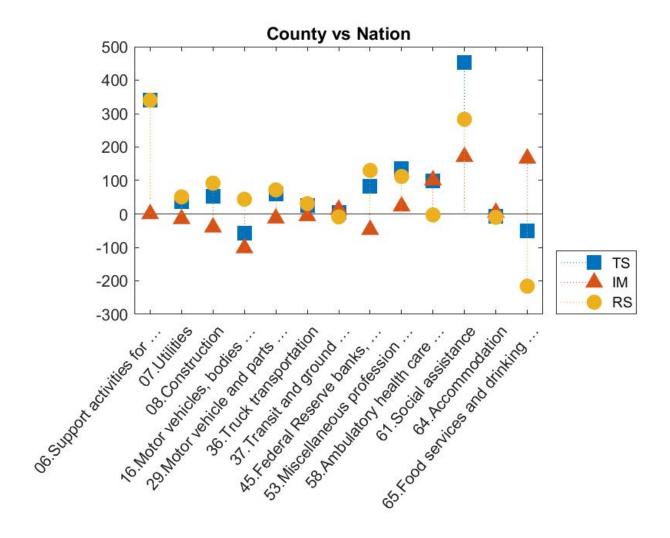
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Tioga County, Pennsylvania, 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, Pennsylvania vs the U.S.

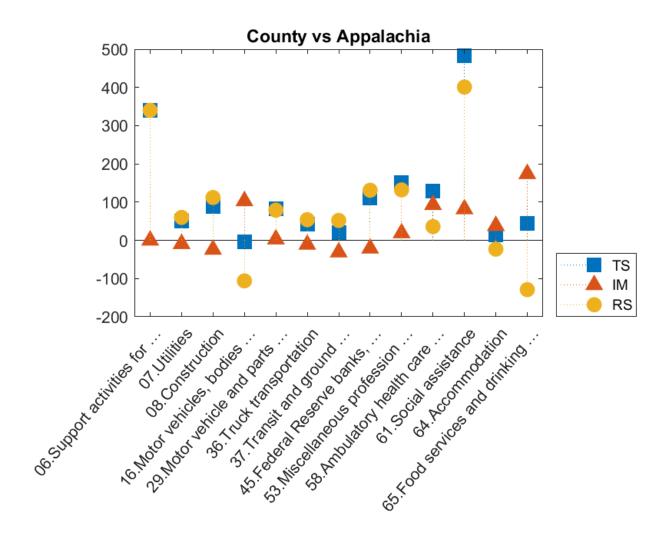


Chapter 45. Tioga County, Pennsylvania

Tioga County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
06	Support activities for	0	340	0	340	340
07	Utilities	16	36	-15	51	193
08	Construction	38	52	-40	92	422
16	Motor vehicles, bodies	57	-58	-102	44	504
29	Motor vehicle and parts	24	59	-13	72	300
36	Truck transportation	19	25	-6	31	214
37	Transit and ground	17	4	13	-9	169
45	Federal Reserve banks, 	27	83	-47	130	354
53	Miscellaneous profession	16	135	23	112	290
58	Ambulatory health care	32	98	101	-3	417
61	Social assistance	29	454	171	283	744
64	Accommodation	21	-6	4	-10	205
65	Food services and drinking	98	-50	166	-216	918

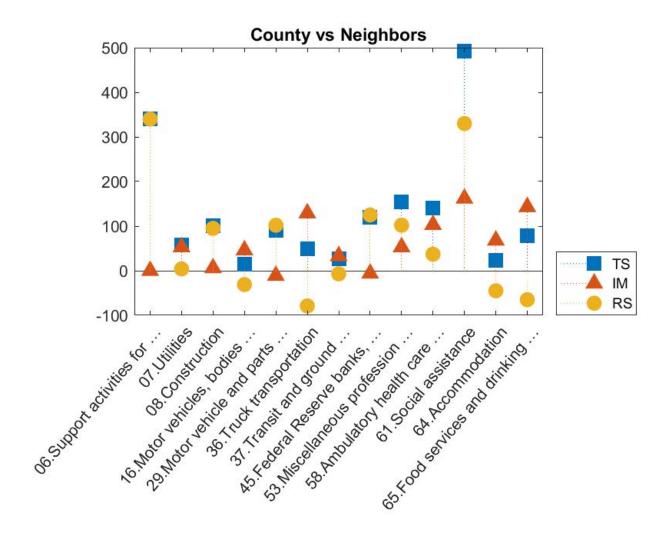
Selected SSA Components for Tioga County, Pennsylvania vs the Appalachian Region



Selected SSA Components for Tioga County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
06	Support activities for	0	340	0	340	340
07	Utilities	0	51	-9	60	193
08	Construction	1	88	-24	112	422
16	Motor vehicles, bodies	2	-3	103	-106	504
29	Motor vehicle and parts	1	82	3	79	300
36	Truck transportation	1	43	-11	54	214
37	Transit and ground	1	21	-31	52	169
45	Federal Reserve banks, 	1	110	-21	131	354
53	Miscellaneous profession	0	151	19	132	290
58	Ambulatory health care	1	129	93	36	417
61	Social assistance	1	483	82	401	744
64	Accommodation	1	15	38	-23	205
65	Food services and drinking	3	45	174	-129	918

Selected SSA Components for Tioga County, Pennsylvania vs Neighbors



Chapter 45. Tioga County, Pennsylvania

Selected SSA Components for Tioga County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
06	Support activities for	-0	340	0	340	340
07	Utilities	-5	57	53	4	193
08	Construction	-11	101	6	95	422
16	Motor vehicles, bodies	-17	15	46	-31	504
29	Motor vehicle and parts	-7	91	-11	102	300
36	Truck transportation	-6	50	129	-79	214
37	Transit and ground	-5	26	33	-7	169
45	Federal Reserve banks, 	-8	119	-6	125	354
53	Miscellaneous profession	-5	155	53	102	290
58	Ambulatory health care	-10	140	103	37	417
61	Social assistance	-9	492	162	330	744
64	Accommodation	-6	23	68	-45	205
65	Food services and drinking	-29	78	143	-65	918

Chapter 46. Union County, Pennsylvania

Employment in Union County, Pennsylvania, grew from 17,507 in 2005 to 17,742 in 2018, for a change of 235, 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 Union County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	1,971	-1,734	-225	-1,509
vs. Appalachia	57	179	131	48
vs. Neighbors	1,052	-823	558	-1,381

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 Union County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Union County, Pennsylvania

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
13	Machinery	F III c iii	no	yes	yes	yes
20	Food and beverage	Elciii	no	yes	yes	yes
29	Motor vehicle and parts	F III a iii	no	yes	yes	yes
45	Federal Reserve banks, 	F III c iii	no	yes	yes	yes
54	Management of companies	Albi	yes	yes	yes	yes
55	Administrative and	Alai	yes	yes	yes	yes
58	Ambulatory health care	BIIaii	yes	yes	yes	yes
59	Hospitals	Elaiii	no	yes	yes	yes
60	Nursing and residential	Ellai	no	yes	yes	yes
64	Accommodation	Alai	yes	yes	yes	yes
65	Food services and drinking	Bllai	yes	yes	yes	yes
66	Other services, exc. gov	FIIIci	no	yes	yes	yes

Notes:

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

Groups I, II, and III are from Union County, Pennsylvania vs. the United States

Groups a, b, and c are from Union County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Union County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Union County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Union County, Pennsylvania, 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 Union County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Union County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

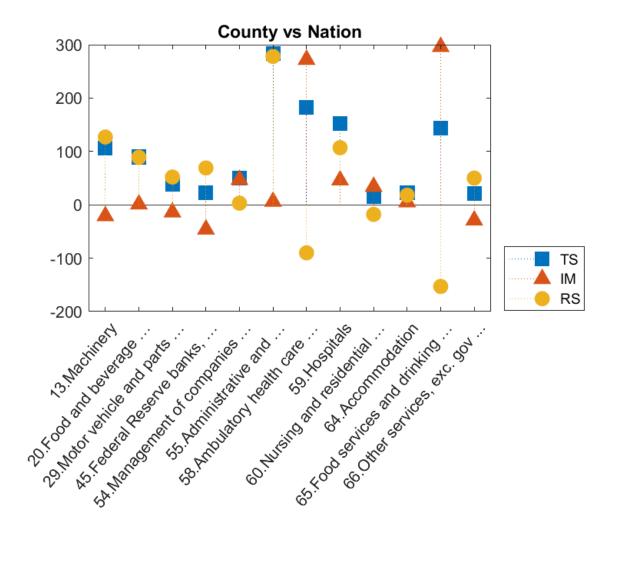
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Union County, Pennsylvania, 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 Union County, Pennsylvania vs the U.S.

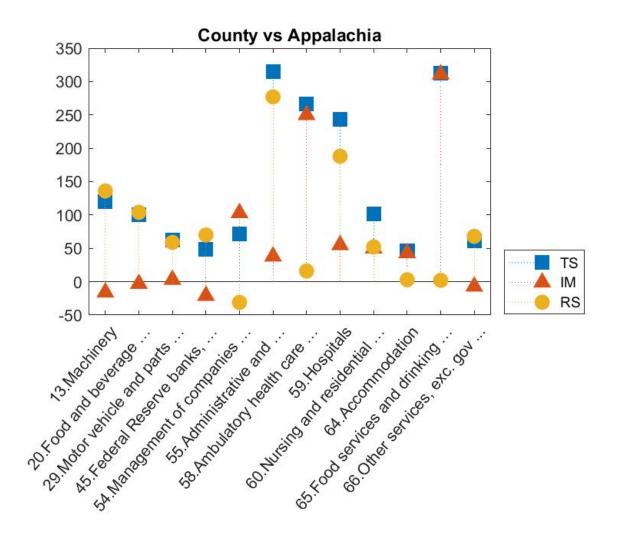


Chapter 46. Union County, Pennsylvania

Union County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
13	Machinery	14	106	-21	127	246
20	Food and beverage	10	90	1	89	188
29	Motor vehicle and parts	25	38	-14	52	283
45	Federal Reserve banks, 	27	23	-46	69	287
54	Management of companies	23	50	47	3	274
55	Administrative and	31	284	6	278	594
58	Ambulatory health care	87	182	272	-90	1,044
59	Hospitals	93	153	46	107	1,073
60	Nursing and residential	88	16	34	-18	881
64	Accommodation	24	23	5	18	261
65	Food services and drinking	175	143	296	-153	1,871
66	Other services, exc. gov	42	21	-29	50	432

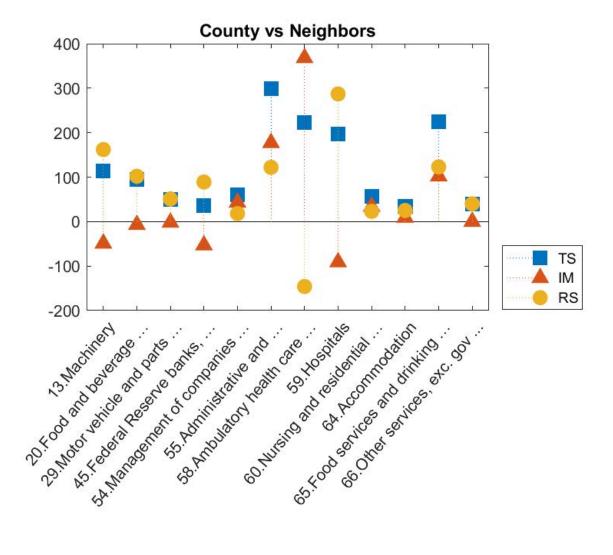
Selected SSA Components for Union County, Pennsylvania vs the Appalachian Region



Selected SSA Components for Union County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
13	Machinery	0	120	-16	136	246
20	Food and beverage	0	101	-3	104	188
29	Motor vehicle and parts	1	62	3	59	283
45	Federal Reserve banks, 	1	49	-21	70	287
54	Management of companies	1	72	103	-31	274
55	Administrative and	1	315	38	277	594
58	Ambulatory health care	3	266	250	16	1,044
59	Hospitals	3	243	55	188	1,073
60	Nursing and residential	3	102	50	52	881
64	Accommodation	1	46	43	3	261
65	Food services and drinking	5	313	311	2	1,871
66	Other services, exc. gov	1	61	-7	68	432

Selected SSA Components for Union County, Pennsylvania vs Neighbors



Chapter 46. Union County, Pennsylvania

Selected SSA Components for Union County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
13	Machinery	8	113	-49	162	246
20	Food and beverage	5	95	-7	102	188
29	Motor vehicle and parts	13	49	-2	51	283
45	Federal Reserve banks, 	14	36	-53	89	287
54	Management of companies	12	61	43	18	274
55	Administrative and	17	299	177	122	594
58	Ambulatory health care	47	222	368	-146	1,044
59	Hospitals	50	196	-91	287	1,073
60	Nursing and residential	47	57	34	23	881
64	Accommodation	13	34	9	25	261
65	Food services and drinking	93	225	102	123	1,871
66	Other services, exc. gov	22	40	0	40	432

Chapter 47. Venango County, Pennsylvania

Employment in Venango County, Pennsylvania, declined from 22,513 in 2005 to 17,881 in 2018, for a change of -4,632, or -20.57%. 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 Venango County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	2,540	-7,168	128	-7,296
vs. Appalachia	71	-4,707	-119	-4,588
vs. Neighbors	-248	-4,384	-380	-4,004

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 Venango County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Venango County, Pennsylvania

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
11	Primary metals	FIIIci	no	yes	yes	yes
12	Fabricated metal products	F III c iii	no	yes	yes	yes
15	Electrical equipment,	DIIIci	no	yes	yes	yes
25	Petroleum and coal prod	FIIIci	no	yes	yes	yes
57	Educational services	F III a iii	no	yes	yes	yes
58	Ambulatory health care 	BVbii	yes	no	yes	yes

Notes:

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

Groups I, II, and III are from Venango County, Pennsylvania vs. the United States

Groups a, b, and c are from Venango County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Venango County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Venango County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Venango County, Pennsylvania, 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 Venango County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Venango County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

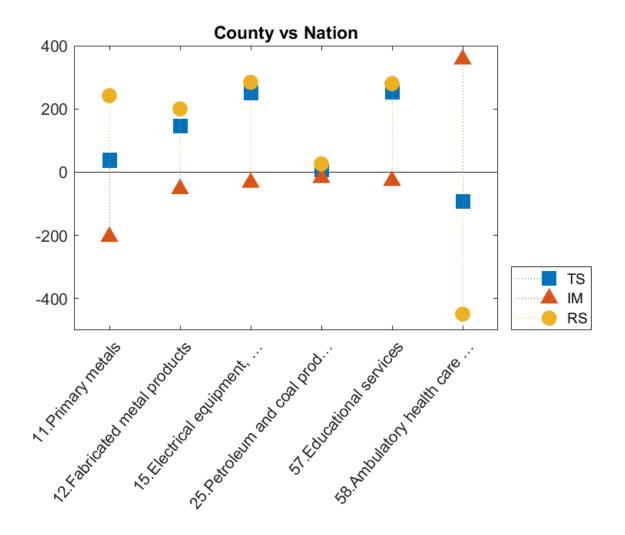
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Venango County, Pennsylvania, 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 Venango County, Pennsylvania vs the U.S.

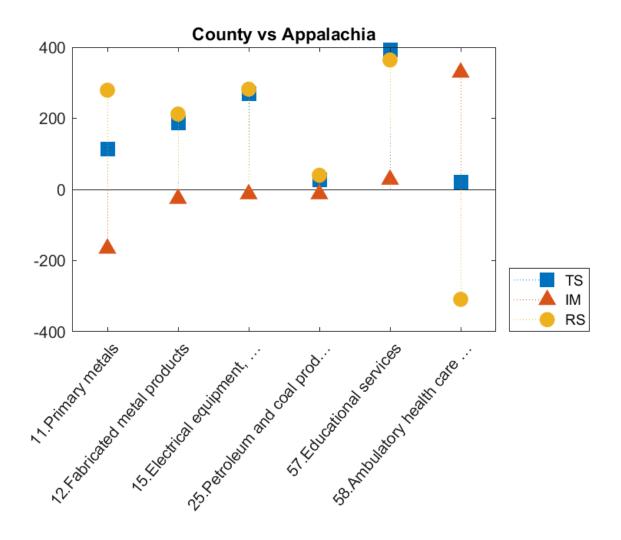


Venango County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
11	Primary metals	78	38	-204	242	804
12	Fabricated metal products	41	147	-53	200	549
15	Electrical equipment, 	19	251	-33	284	438
25	Petroleum and coal prod…	19	8	-18	26	192
57	Educational services	143	253	-27	280	1,661
58	Ambulatory health care	115	-92	357	-449	1,043

. . .

Selected SSA Components for Venango County, Pennsylvania vs the Appalachian Region

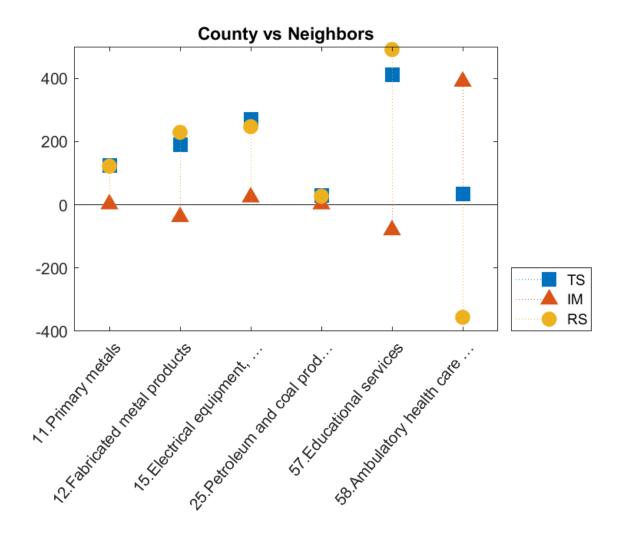


Selected SSA Components for Venango County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
11	Primary metals	2	113	-166	279	804
12	Fabricated metal products	1	186	-26	212	549
15	Electrical equipment, 	1	269	-13	282	438
25	Petroleum and coal prod	1	27	-13	40	192
57	Educational services	4	392	28	364	1,661
58	Ambulatory health care	3	20	329	-309	1,043

. . .

Selected SSA Components for Venango County, Pennsylvania vs Neighbors



Selected SSA Components for Venango County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
11	Primary metals	-8	124	2	122	804
12	Fabricated metal products	-4	191	-38	229	549
15	Electrical equipment, 	-2	271	24	247	438
25	Petroleum and coal prod…	-2	29	2	27	192
57	Educational services	-14	411	-80	491	1,661
58	Ambulatory health care	-11	34	390	-356	1,043

...

Chapter 48. Warren County, Pennsylvania

Employment in Warren County, Pennsylvania, declined from 15,601 in 2005 to 14,520 in 2018, for a change of -1,081, or -6.93%. 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 Warren County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	1,755	-2,843	89	-2,932
vs. Appalachia	49	-1,133	194	-1,327
vs. Neighbors	-1,318	237	252	-15

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 Warren County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Warren County, Pennsylvania

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	Elci	no	yes	yes	yes
25	Petroleum and coal prod	FIIIci	no	yes	yes	yes
31	General merchandise 	FIIIci	no	yes	yes	yes
36	Truck transportation	F III c iii	no	yes	yes	yes
40	Warehousing and storage	Elaiii	no	yes	yes	yes
45	Federal Reserve banks,	F III c iii	no	yes	yes	yes
54	Management of companies	Alai	yes	yes	yes	yes
55	Administrative and	Alaiii	yes	yes	yes	yes
58	Ambulatory health care	BIIai	yes	yes	yes	yes
61	Social assistance	BVeii	yes	no	no	yes
65	Food services and drinking	BIIbi	yes	yes	yes	yes

Notes:

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

Groups I, II, and III are from Warren County, Pennsylvania vs. the United States

Groups a, b, and c are from Warren County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Warren County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Warren County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Warren County, Pennsylvania, 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 Warren County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Warren County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

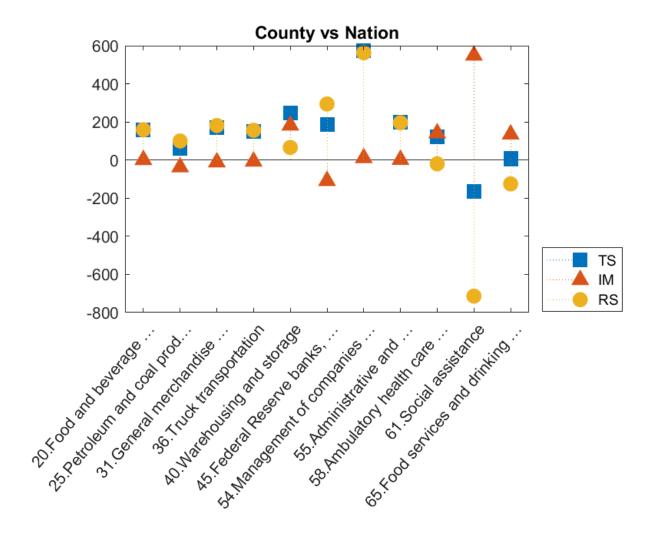
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Warren County, Pennsylvania, 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 Warren County, Pennsylvania vs the U.S.

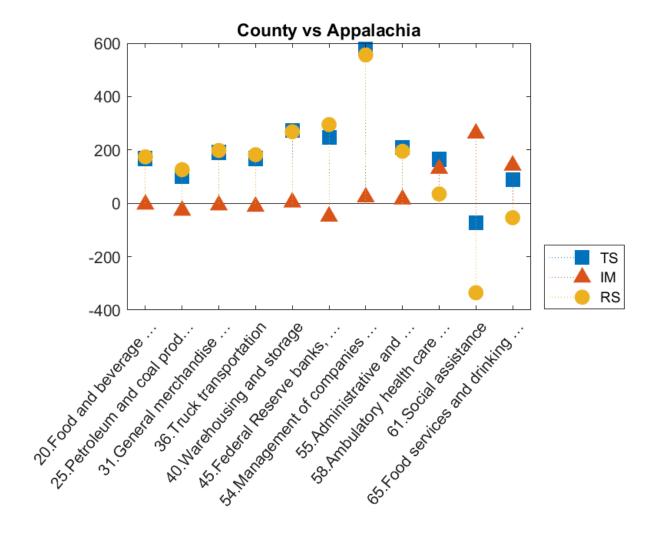


Warren County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
20	Food and beverage	11	160	1	159	266
25	Petroleum and coal prod	38	63	-37	100	434
31	General merchandise 	22	170	-11	181	388
36	Truck transportation	21	149	-7	156	358
40	Warehousing and storage	25	248	182	66	490
45	Federal Reserve banks,	63	185	-109	294	808
54	Management of companies	5	574	11	563	624
55	Administrative and	12	198	2	196	319
58	Ambulatory health care	45	121	141	-20	568
61	Social assistance	94	-165	549	-714	767
65	Food services and drinking	80	10	135	-125	800

...

Selected SSA Components for Warren County, Pennsylvania vs the Appalachian Region

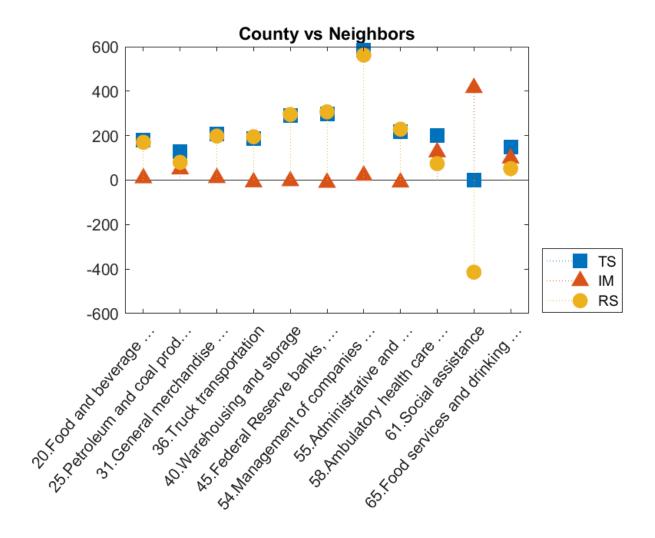


Selected SSA Components for Warren County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
20	Food and beverage	0	170	-4	174	266
25	Petroleum and coal prod…	1	99	-27	126	434
31	General merchandise 	1	191	-7	198	388
36	Truck transportation	1	170	-12	182	358
40	Warehousing and storage	1	272	4	268	490
45	Federal Reserve banks,	2	246	-49	295	808
54	Management of companies	0	579	23	556	624
55	Administrative and	0	210	15	195	319
58	Ambulatory health care	1	165	130	35	568
61	Social assistance	3	-73	262	-335	767
65	Food services and drinking	2	88	142	-54	800

. . .

Selected SSA Components for Warren County, Pennsylvania vs Neighbors



Selected SSA Components for Warren County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
20	Food and beverage	-8	179	9	170	266
25	Petroleum and coal prod…	-28	129	49	80	434
31	General merchandise 	-17	208	10	198	388
36	Truck transportation	-16	186	-9	195	358
40	Warehousing and storage	-18	291	-4	295	490
45	Federal Reserve banks,	-47	296	-11	307	808
54	Management of companies	-4	583	21	562	624
55	Administrative and	-9	219	-10	229	319
58	Ambulatory health care	-34	200	126	74	568
61	Social assistance	-71	1	415	-414	767
65	Food services and drinking	-60	150	98	52	800

• • •

Chapter 49. Washington County, Pennsylvania

Employment in Washington County, Pennsylvania, grew from 76,948 in 2005 to 88,043 in 2018, for a change of 11,095, or 14.42%. 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 Washington County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	8,675	2,414	-477	2,891
vs. Appalachia	264	10,831	-278	11,109
vs. Neighbors	775	10,320	-290	10,610

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 Washington County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Washington County, Pennsylvania

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
03	Oil and gas extraction	Alai	yes	yes	yes	yes
06	Support activities for	Alai	yes	yes	yes	yes
08	Construction	FIIIci	no	yes	yes	yes
15	Electrical equipment,	D III c ii	no	yes	yes	yes
36	Truck transportation	FIIIci	no	yes	yes	yes
50	Rental and leasing services	D III c i	no	yes	yes	yes
53	Miscellaneous profession	Blai	yes	yes	yes	yes
54	Management of companies	Alai	yes	yes	yes	yes
55	Administrative and	Alaiii	yes	yes	yes	yes
58	Ambulatory health care	BIIbii	yes	yes	yes	yes
61	Social assistance	Blai	yes	yes	yes	yes
63	Amusements, gambling,	Blai	yes	yes	yes	yes
65	Food services and drinking	BVbii	yes	no	yes	yes

Notes:

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

Groups I, II, and III are from Washington County, Pennsylvania vs. the United States

Groups a, b, and c are from Washington County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Washington County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Washington County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Washington County, Pennsylvania, 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 Washington County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Washington County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

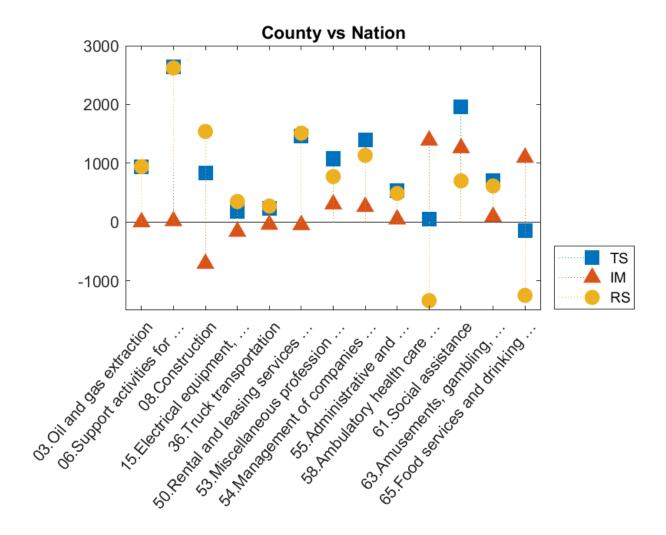
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Washington County, Pennsylvania, 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 Washington County, Pennsylvania vs the U.S.

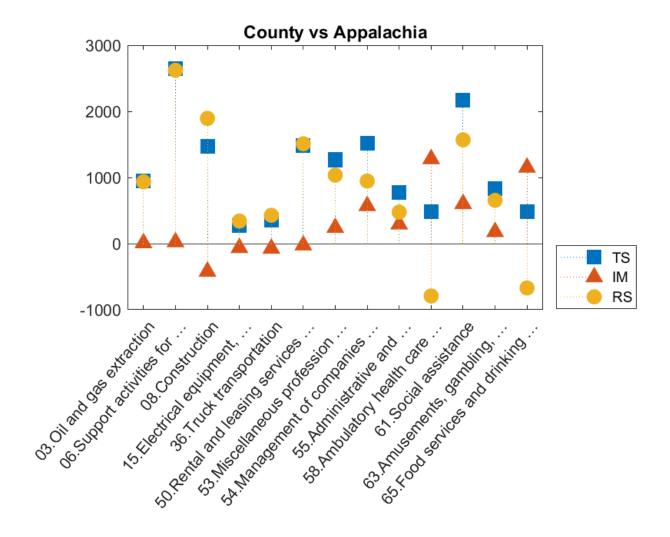


Washington County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
03	Oil and gas extraction	2	942	0	942	959
06	Support activities for	5	2,639	18	2,621	2,687
08	Construction	658	834	-707	1,541	7,330
15	Electrical equipment,	93	187	-162	349	1,103
36	Truck transportation	129	229	-43	272	1,504
50	Rental and leasing services	23	1,462	-49	1,511	1,691
53	Miscellaneous profession	203	1,078	304	774	3,083
54	Management of companies	125	1,395	261	1,134	2,632
55	Administrative and	242	534	47	487	2,924
58	Ambulatory health care	447	53	1,389	-1,336	4,461
61	Social assistance	217	1,959	1,259	700	4,098
63	Amusements, gambling,	130	705	91	614	1,993
65	Food services and drinking	649	-150	1,097	-1,247	6,256

. . .

Selected SSA Components for Washington County, Pennsylvania vs the Appalachian Region

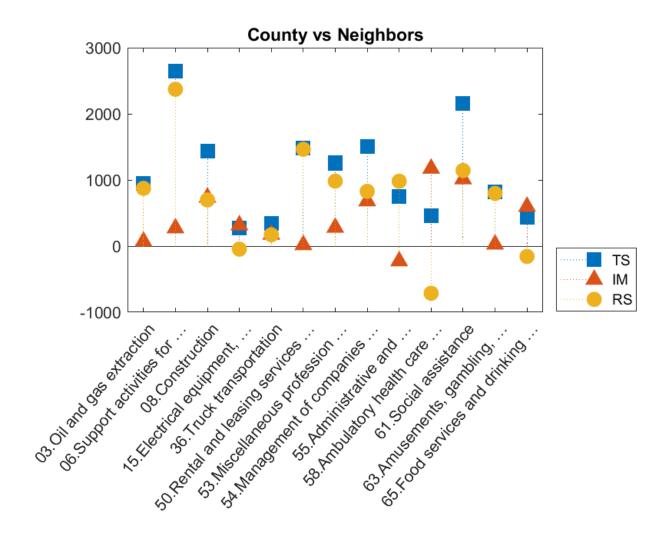


Selected SSA Components for Washington County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
03	Oil and gas extraction	0	944	9	935	959
06	Support activities for	0	2,644	24	2,620	2,687
08	Construction	20	1,472	-421	1,893	7,330
15	Electrical equipment,	3	277	-64	341	1,103
36	Truck transportation	4	354	-74	428	1,504
50	Rental and leasing services	1	1,484	-25	1,509	1,691
53	Miscellaneous profession	6	1,276	241	1,035	3,083
54	Management of companies	4	1,516	570	946	2,632
55	Administrative and	7	768	292	476	2,924
58	Ambulatory health care	13	487	1,279	-792	4,461
61	Social assistance	7	2,170	601	1,569	4,098
63	Amusements, gambling,	4	832	178	654	1,993
65	Food services and drinking	20	480	1,151	-671	6,256

...

Selected SSA Components for Washington County, Pennsylvania vs Neighbors



Selected SSA Components for Washington County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
03	Oil and gas extraction	0	944	71	873	959
06	Support activities for 	0	2,643	272	2,371	2,687
08	Construction	59	1,434	736	698	7,330
15	Electrical equipment,	8	271	317	-46	1,103
36	Truck transportation	12	346	175	171	1,504
50	Rental and leasing services	2	1,483	18	1,465	1,691
53	Miscellaneous profession	18	1,263	281	982	3,083
54	Management of companies	11	1,509	681	828	2,632
55	Administrative and	22	754	-227	981	2,924
58	Ambulatory health care	40	460	1,173	-713	4,461
61	Social assistance	19	2,157	1,014	1,143	4,098
63	Amusements, gambling,	12	824	27	797	1,993
65	Food services and drinking	58	441	597	-156	6,256

...

Chapter 50. Wayne County, Pennsylvania

Employment in Wayne County, Pennsylvania, declined from 15,175 in 2005 to 15,102 in 2018, for a change of -73, or -0.48%. 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 Wayne County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	1,712	-1,787	-120	-1,667
vs. Appalachia	48	-121	238	-359
vs. Neighbors	-548	468	257	211

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 Wayne County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Wayne County, Pennsylvania

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	BIIbi	yes	yes	yes	yes
58	Ambulatory health care	Bllai	yes	yes	yes	yes
61	Social assistance	Blai	yes	yes	yes	yes
64	Accommodation	Albii	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 Wayne County, Pennsylvania vs. the United States

Groups a, b, and c are from Wayne County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Wayne County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Wayne County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Wayne County, Pennsylvania, 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 Wayne County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Wayne County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

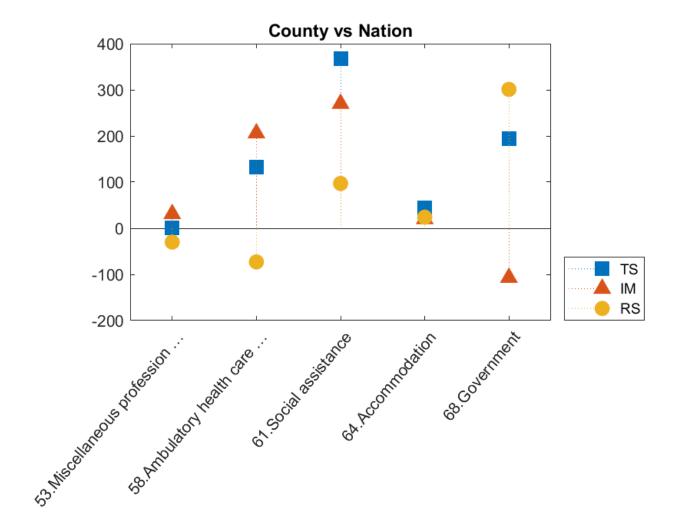
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Wayne County, Pennsylvania, 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 Wayne County, Pennsylvania vs the U.S.

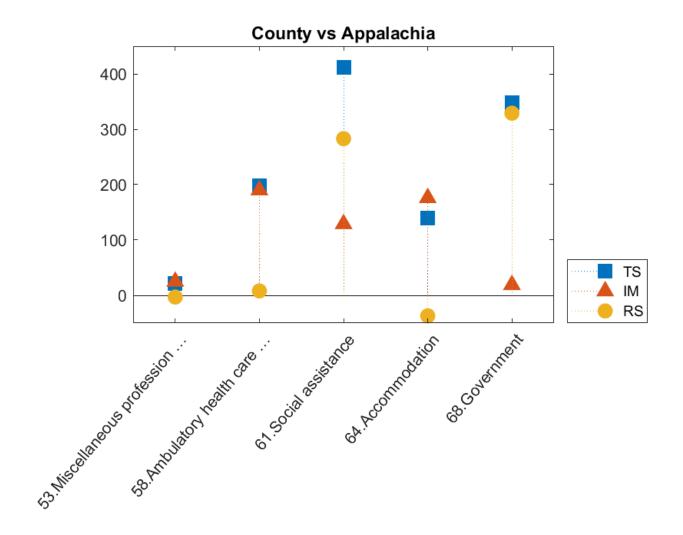


Chapter 50. Wayne County, Pennsylvania

Wayne County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
53	Miscellaneous profession	21	1	31	-30	207
58	Ambulatory health care	66	133	206	-73	788
61	Social assistance	46	367	270	97	824
64	Accommodation	98	44	20	24	1,010
68	Government	159	194	-107	301	1,758

Selected SSA Components for Wayne County, Pennsylvania vs the Appalachian Region

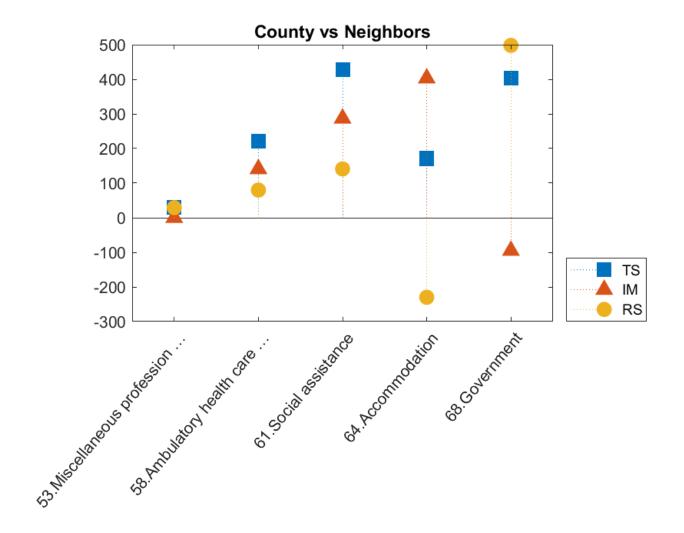


Chapter 50. Wayne County, Pennsylvania

Selected SSA Components for Wayne County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
53	Miscellaneous profession	1	22	25	-3	207
58	Ambulatory health care	2	198	190	8	788
61	Social assistance	1	412	129	283	824
64	Accommodation	3	139	176	-37	1,010
68	Government	5	348	19	329	1.758

Selected SSA Components for Wayne County, Pennsylvania vs Neighbors



Chapter 50. Wayne County, Pennsylvania

Selected SSA Components for Wayne County, Pennsylvania vs Neighbors for Selected Industries

	Industry	Name	NS	TS	IM	RS	Employment 2018
	53	Miscellaneous profession	-7	29	-0	29	207
-	58	Ambulatory health care	-21	221	141	80	788
-	61	Social assistance	-15	428	287	141	824
	64	Accommodation	-31	173	403	-230	1,010
	68	Government	-51	403	-95	498	1,758

Chapter 51. Westmoreland County, Pennsylvania

Employment in Westmoreland County, Pennsylvania, declined from 140,443 in 2005 to 133,703 in 2018, for a change of -6,740, or -4.8%. 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 Westmoreland County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	15,838	-22,576	648	-23,224
vs. Appalachia	476	-7,214	441	-7,655
vs. Neighbors	-84	-6,651	-2,593	-4,058

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 Westmoreland County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Westmoreland County, Pennsylvania

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
40	Warehousing and storage	Ellai	no	yes	yes	yes
54	Management of companies	Allbii	yes	yes	yes	yes
58	Ambulatory health care 	BVbii	yes	no	yes	yes
60	Nursing and residential	Elai	no	yes	yes	yes
61	Social assistance	BIIaii	yes	yes	yes	yes
65	Food services and drinking	BVbii	yes	no	yes	yes

Notes:

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

Groups I, II, and III are from Westmoreland County, Pennsylvania vs. the United States

Groups a, b, and c are from Westmoreland County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Westmoreland County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Westmoreland County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Westmoreland County, Pennsylvania, 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 Westmoreland County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Westmoreland County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

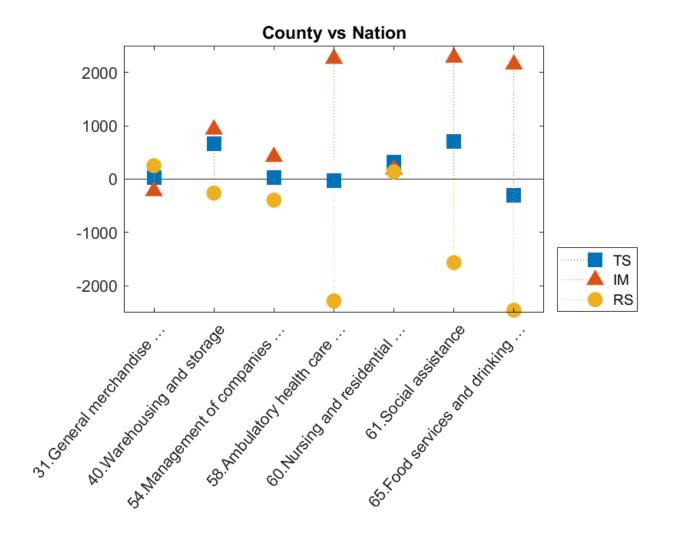
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Westmoreland County, Pennsylvania, 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 Westmoreland County, Pennsylvania vs the U.S.

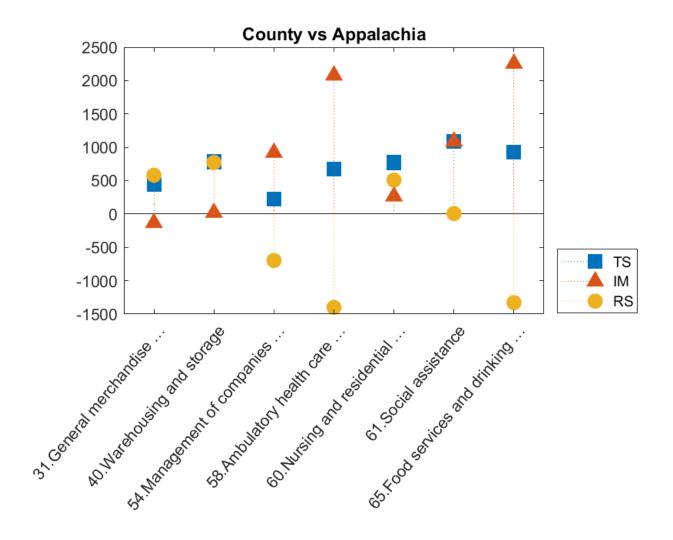


Chapter 51. Westmoreland County, Pennsylvania

Westmoreland County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
31	General merchandise 	433	28	-223	251	4,302
40	Warehousing and storage	126	670	932	-262	1,911
54	Management of companies	202	26	420	-394	2,020
58	Ambulatory health care 	726	-26	2,258	-2,284	7,137
60	Nursing and residential	469	321	184	137	4,944
61	Social assistance	392	713	2,278	-1,565	4,582
65	Food services and drinking	1,272	-307	2,150	-2,457	12,245

Selected SSA Components for Westmoreland County, Pennsylvania vs the Appalachian Region

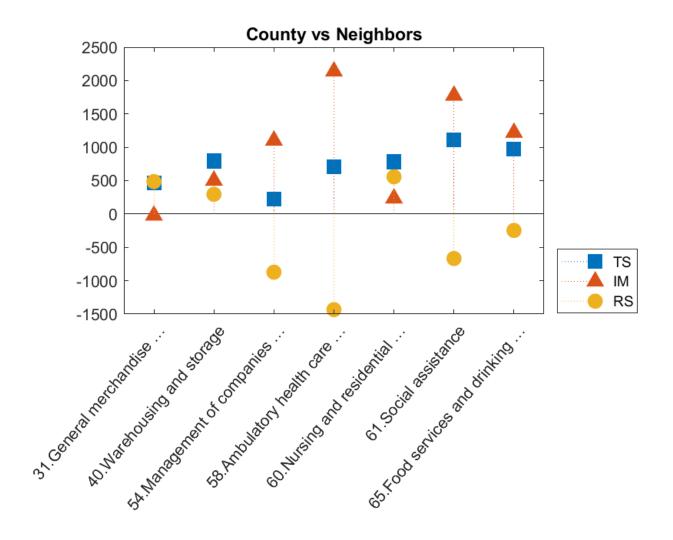


Chapter 51. Westmoreland County, Pennsylvania

Selected SSA Components for Westmoreland County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
31	General merchandise 	13	448	-133	581	4,302
40	Warehousing and storage	4	792	20	772	1,911
54	Management of companies	6	222	919	-697	2,020
58	Ambulatory health care 	22	678	2,078	-1,400	7,137
60	Nursing and residential	14	775	266	509	4,944
61	Social assistance	12	1,093	1,087	6	4,582
65	Food services and drinking	38	926	2,255	-1,329	12,245

Selected SSA Components for Westmoreland County, Pennsylvania vs Neighbors



Chapter 51. Westmoreland County, Pennsylvania

Selected SSA Components for Westmoreland County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
31	General merchandise 	-2	463	-22	485	4,302
40	Warehousing and storage	-1	797	502	295	1,911
54	Management of companies	-1	229	1,102	-873	2,020
58	Ambulatory health care 	-4	704	2,138	-1,434	7,137
60	Nursing and residential	-3	792	235	557	4,944
61	Social assistance	-2	1,108	1,776	-668	4,582
65	Food services and drinking	-7	972	1,219	-247	12,245

Chapter 52. Wyoming County, Pennsylvania

Employment in Wyoming County, Pennsylvania, declined from 9,701 in 2005 to 9,596 in 2018, for a change of -105, or -1.08%. 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 Wyoming County, Pennsylvania

County Summary	NS	TS	IM	RS
vs. U.S.	1,093	-1,197	-662	-535
vs. Appalachia	29	-143	-330	187
vs. Neighbors	-140	33	-85	118

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 Wyoming County, Pennsylvania, in comparison to at least one of the three referent regions.

Industry Group Membership for Wyoming County, Pennsylvania

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
02	Forestry, fishing, and	Elciii	no	yes	yes	yes
03	Oil and gas extraction	Alai	yes	yes	yes	yes
06	Support activities for	Alai	yes	yes	yes	yes
20	Food and beverage	Elci	no	yes	yes	yes
26	Chemical products	Flai	no	yes	yes	yes
29	Motor vehicle and parts	F III a iii	no	yes	yes	yes
36	Truck transportation	FIIIci	no	yes	yes	yes
40	Warehousing and storage	Ellaii	no	yes	yes	yes
53	Miscellaneous profession	Blai	yes	yes	yes	yes
54	Management of companies	Alai	yes	yes	yes	yes
55	Administrative and	Alai	yes	yes	yes	yes
61	Social assistance	BVbii	yes	no	yes	yes
64	Accommodation	Albii	yes	yes	yes	yes
65	Food services and drinking	BVbi	yes	no	yes	yes

Notes:

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

Groups I, II, and III are from Wyoming County, Pennsylvania vs. the United States

Groups a, b, and c are from Wyoming County, Pennsylvania vs. Appalachia

Groups i, ii, and iii are from Wyoming County, Pennsylvania vs. its neighbors

Industry-Specific Results

Below we report the results for the three shift-share analyses comparing Wyoming County, Pennsylvania, to each of three referent regions: the United States as a whole, the Appalachian Region, and the region defined by Wyoming County, Pennsylvania, 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 Wyoming County, Pennsylvania, after adjusting for overall referent-region and industry-specific growth rates. A positive value here reflects better than expected industry performance, which implies that Wyoming County, Pennsylvania, might have a comparative advantage as a location for this industry. The tables also include the 2018 employment estimates for each reported industry.

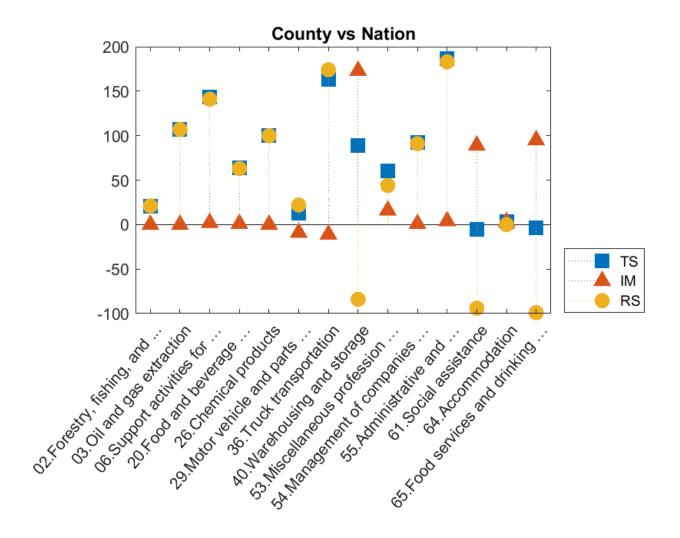
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry in Wyoming County, Pennsylvania, 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 Wyoming County, Pennsylvania vs the U.S.

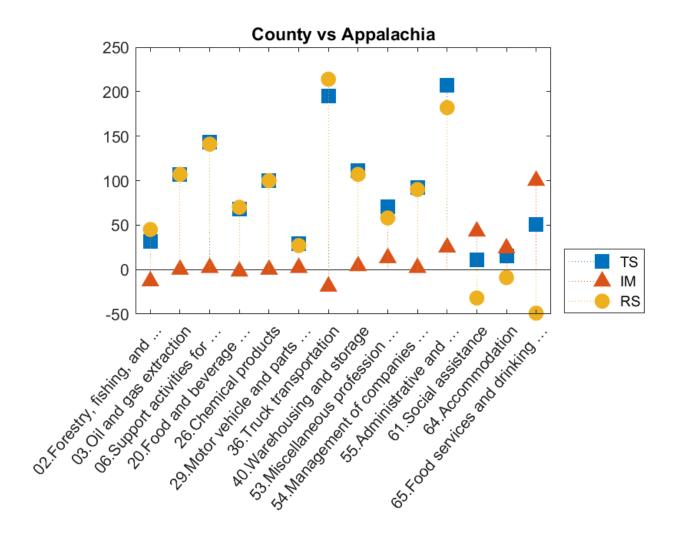


Chapter 52. Wyoming County, Pennsylvania

Wyoming County, Pennsylvania vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
02	Forestry, fishing, and	12	21	0	21	136
03	Oil and gas extraction	0	107	0	107	107
06	Support activities for	0	143	2	141	147
20	Food and beverage	5	64	1	63	112
26	Chemical products	0	100	0	100	100
29	Motor vehicle and parts	17	13	-9	22	182
36	Truck transportation	33	163	-11	174	493
40	Warehousing and storage	23	89	173	-84	318
53	Miscellaneous profession	11	60	16	44	169
54	Management of companies	0	92	1	91	96
55	Administrative and	21	187	4	183	390
61	Social assistance	15	-5	89	-94	147
64	Accommodation	14	3	3	-0	136
65	Food services and drinking	56	-4	95	-99	553

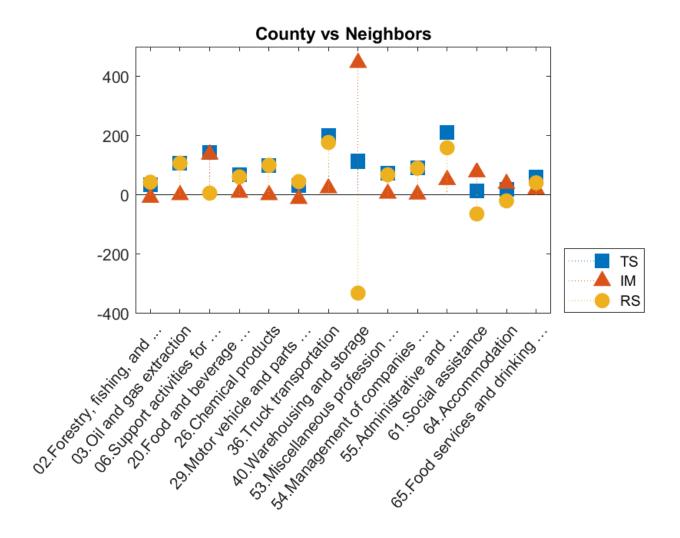
Selected SSA Components for Wyoming County, Pennsylvania vs the Appalachian Region



Selected SSA Components for Wyoming County, Pennsylvania vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
02	Forestry, fishing, and	0	32	-13	45	136
03	Oil and gas extraction	0	107	0	107	107
06	Support activities for	0	143	2	141	147
20	Food and beverage	0	68	-2	70	112
26	Chemical products	0	100	0	100	100
29	Motor vehicle and parts	1	29	2	27	182
36	Truck transportation	1	195	-19	214	493
40	Warehousing and storage	1	111	4	107	318
53	Miscellaneous profession	0	71	13	58	169
54	Management of companies	0	92	2	90	96
55	Administrative and	1	207	25	182	390
61	Social assistance	0	11	43	-32	147
64	Accommodation	0	15	24	-9	136
65	Food services and drinking	2	51	100	-49	553

Selected SSA Components for Wyoming County, Pennsylvania vs Neighbors



Selected SSA Components for Wyoming County, Pennsylvania vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
02	Forestry, fishing, and	-1	34	-9	43	136
03	Oil and gas extraction	-0	107	0	107	107
06	Support activities for	-0	143	137	6	147
20	Food and beverage	-1	69	8	61	112
26	Chemical products	-0	100	0	100	100
29	Motor vehicle and parts	-2	32	-13	45	182
36	Truck transportation	-4	200	23	177	493
40	Warehousing and storage	-3	115	446	-331	318
53	Miscellaneous profession	-1	73	5	68	169
54	Management of companies	-0	92	2	90	96
55	Administrative and	-3	210	51	159	390
61	Social assistance	-2	13	77	-64	147
64	Accommodation	-2	18	38	-20	136
65	Food services and drinking	-7	60	19	41	553