

**Shift Share Analyses** 

**Appalachian Regional Commission** 

6-11-2020

Shift-Share Analysis: North Carolina, 2005 - 2018

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## **Supplementary Document 7**

Shift-Share Analysis: North Carolina, 2005 - 2018

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

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### **Chapter 1. Alexander County, North Carolina**

Employment in Alexander County, North Carolina, declined from 10,690 in 2005 to 8,955 in 2018, for a change of -1,735, or -16.23%. 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 Alexander County, North Carolina**

County Summary	NS	TS	IM	RS
vs. U.S.	1,204	-2,943	-1,855	-1,088
vs. Appalachia	32	-1,774	-1,511	-263
vs. Neighbors	10	-1,750	-927	-823

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 Alexander County, North Carolina, in comparison to at least one of the three referent regions.

## **Industry Group Membership for Alexander County, North Carolina**

Industry	Name	Group Membership	Type A or B or C	Type I or II or III	Type a or b or c	Type i or ii or iii
01	Farms	F III a iii	no	yes	yes	yes
27	Plastics and rubber prod	DIIIai	no	yes	yes	yes
45	Federal Reserve banks,	F III c iii	no	yes	yes	yes
53	Miscellaneous profession	BIIaii	yes	yes	yes	yes
55	Administrative and	Alai	yes	yes	yes	yes
58	Ambulatory health care	BVnii	yes	no	no	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 Alexander County, North Carolina vs. the United States

Groups a, b, and c are from Alexander County, North Carolina vs. Appalachia

Groups i, ii, and iii are from Alexander County, North Carolina vs. its neighbors

### **Industry-Specific Results**

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

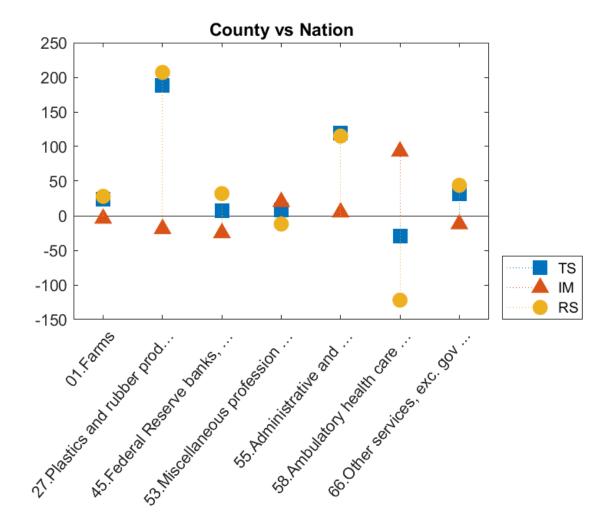
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry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

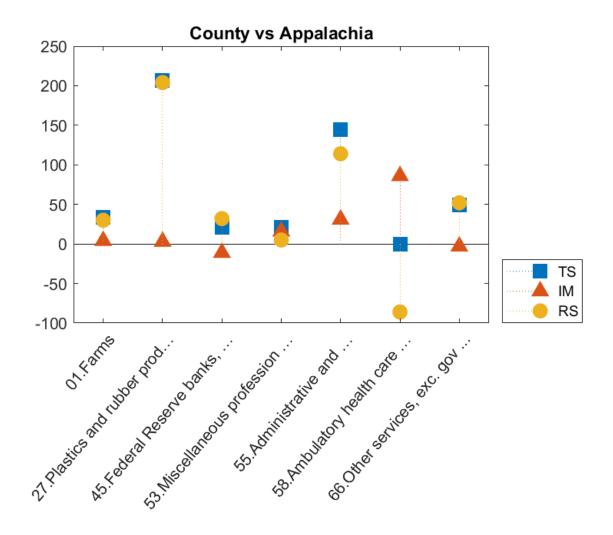


### **Chapter 1. Alexander County, North Carolina**

## Alexander County, North Carolina vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	10	24	-4	28	120
27	Plastics and rubber prod	19	188	-19	207	379
45	Federal Reserve banks,	15	7	-25	32	150
53	Miscellaneous profession	13	8	20	-12	140
55	Administrative and	26	120	5	115	375
58	Ambulatory health care	30	-29	93	-122	266
66	Other services, exc. gov	18	32	-12	44	206

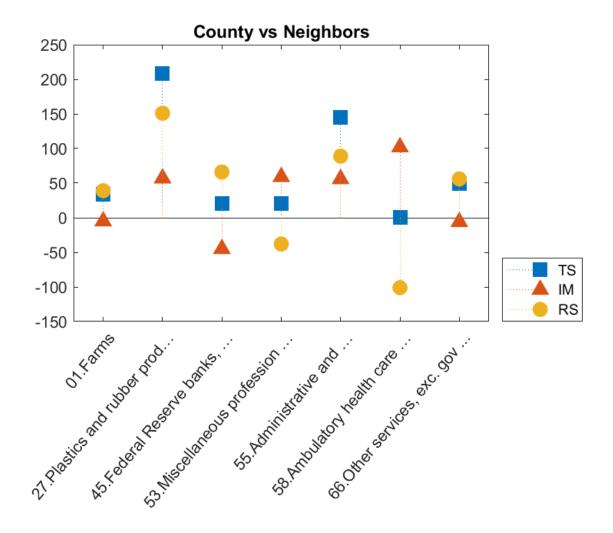
## Selected SSA Components for Alexander County, North Carolina vs the Appalachian Region



# Selected SSA Components for Alexander County, North Carolina vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	0	34	4	30	120
27	Plastics and rubber prod	1	207	3	204	379
45	Federal Reserve banks,	0	21	-11	32	150
53	Miscellaneous profession	0	21	16	5	140
55	Administrative and	1	145	31	114	375
58	Ambulatory health care	1	0	86	-86	266
66	Other services, exc. gov	1	49	-3	52	206

### Selected SSA Components for Alexander County, North Carolina vs Neighbors



## **Chapter 1. Alexander County, North Carolina**

# Selected SSA Components for Alexander County, North Carolina vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	0	34	-5	39	120
27	Plastics and rubber prod	0	208	57	151	379
45	Federal Reserve banks,	0	21	-45	66	150
53	Miscellaneous profession	0	21	59	-38	140
55	Administrative and	0	145	56	89	375
58	Ambulatory health care	0	1	102	-101	266
66	Other services, exc. gov	0	50	-6	56	206

### Chapter 2. Alleghany County, North Carolina

Employment in Alleghany County, North Carolina, declined from 4,061 in 2005 to 3,173 in 2018, for a change of -888, or -21.87%. Readers should compare the employment values in the tables below to total county employment.

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

### **Summary Results for Alleghany County, North Carolina**

County Summary	NS	TS	IM	RS
vs. U.S.	458	-1,346	-115	-1,231
vs. Appalachia	12	-898	-18	-880
vs. Neighbors	-565	-322	294	-616

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 Alleghany County, North Carolina, in comparison to at least one of the three referent regions.

## **Industry Group Membership for Alleghany County, North Carolina**

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
26	Chemical products	Flai	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
55	Administrative and	Alai	yes	yes	yes	yes
59	Hospitals	Elai	no	yes	yes	yes
63	Amusements, gambling,	Blai	yes	yes	yes	yes
65	Food services and drinking	B V e ii	yes	no	no	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 Alleghany County, North Carolina vs. the United States

Groups a, b, and c are from Alleghany County, North Carolina vs. Appalachia

Groups i, ii, and iii are from Alleghany County, North Carolina vs. its neighbors

### **Industry-Specific Results**

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

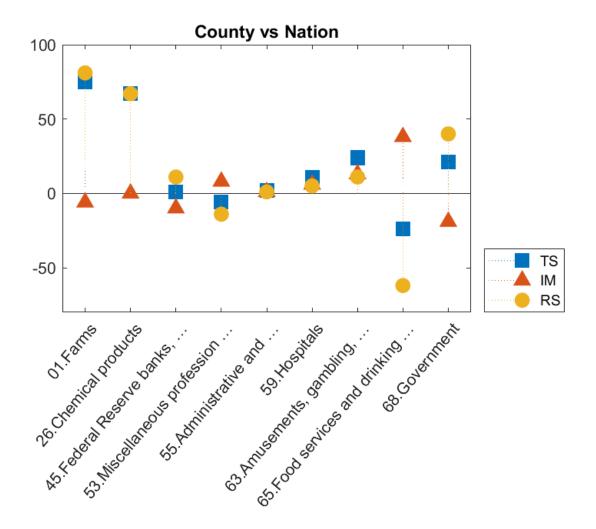
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry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

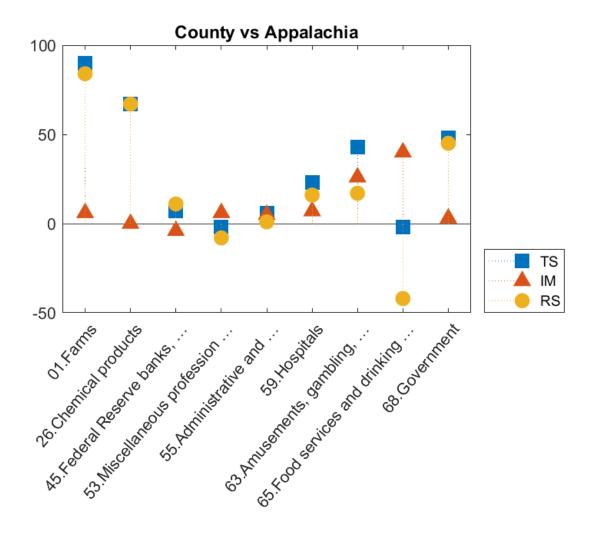


### **Chapter 2. Alleghany County, North Carolina**

## Alleghany County, North Carolina vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	15	75	-6	81	220
26	Chemical products	0	67	0	67	67
45	Federal Reserve banks,	6	1	-10	11	57
53	Miscellaneous profession	5	-6	8	-14	44
55	Administrative and	4	2	1	1	43
59	Hospitals	12	11	6	5	128
63	Amusements, gambling,	19	24	13	11	215
65	Food services and drinking	22	-24	38	-62	196
68	Government	28	21	-19	40	296

## Selected SSA Components for Alleghany County, North Carolina vs the Appalachian Region

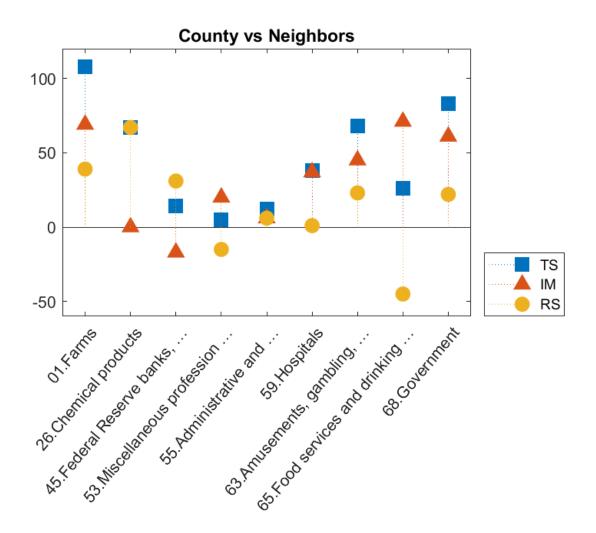


### **Chapter 2. Alleghany County, North Carolina**

# Selected SSA Components for Alleghany County, North Carolina vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	0	90	6	84	220
26	Chemical products	0	67	0	67	67
45	Federal Reserve banks,	0	7	-4	11	57
53	Miscellaneous profession	0	-2	6	-8	44
55	Administrative and	0	6	5	1	43
59	Hospitals	0	23	7	16	128
63	Amusements, gambling,	1	43	26	17	215
65	Food services and drinking	1	-2	40	-42	196
68	Government	1	48	3	45	296

### Selected SSA Components for Alleghany County, North Carolina vs Neighbors



### **Chapter 2. Alleghany County, North Carolina**

# Selected SSA Components for Alleghany County, North Carolina vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
01	Farms	-18	108	69	39	220
26	Chemical products	-0	67	0	67	67
45	Federal Reserve banks,	-7	14	-17	31	57
53	Miscellaneous profession	-6	5	20	-15	44
55	Administrative and	-5	12	6	6	43
59	Hospitals	-15	38	37	1	128
63	Amusements, gambling,	-24	68	45	23	215
65	Food services and drinking	-28	26	71	-45	196
68	Government	-34	83	61	22	296

### Chapter 3. Ashe County, North Carolina

Employment in Ashe County, North Carolina, declined from 8,552 in 2005 to 7,190 in 2018, for a change of -1,362, or -15.93%. 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 Ashe County, North Carolina**

County Summary	NS	TS	IM	RS
vs. U.S.	963	-2,324	-290	-2,034
vs. Appalachia	26	-1,391	108	-1,499
vs. Neighbors	-860	-497	-360	-137

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 Ashe County, North Carolina, in comparison to at least one of the three referent regions.

## **Industry Group Membership for Ashe County, North Carolina**

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
28	Wholesale trade	FIIIci	no	yes	yes	yes
30	Food and beverage stores	FIIIci	no	yes	yes	yes
54	Management of companies	Alaiii	yes	yes	yes	yes
55	Administrative and	Alai	yes	yes	yes	yes
61	Social assistance	B V e ii	yes	no	no	yes
65	Food services and drinking	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 Ashe County, North Carolina vs. the United States

Groups a, b, and c are from Ashe County, North Carolina vs. Appalachia

Groups i, ii, and iii are from Ashe County, North Carolina vs. its neighbors

### **Industry-Specific Results**

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

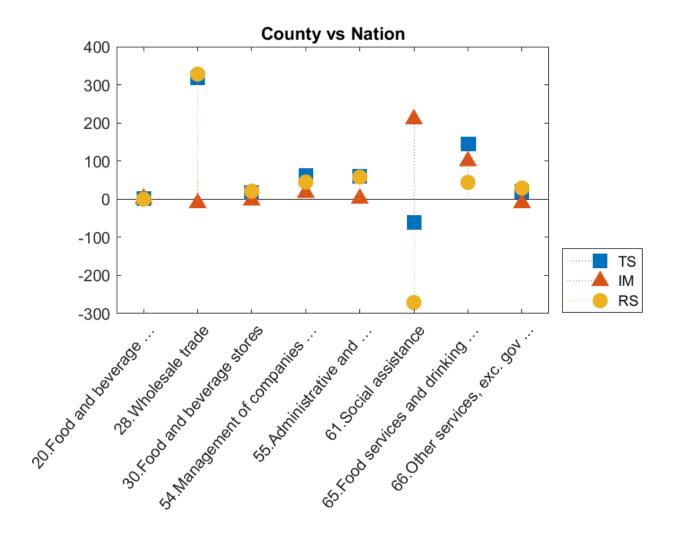
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry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

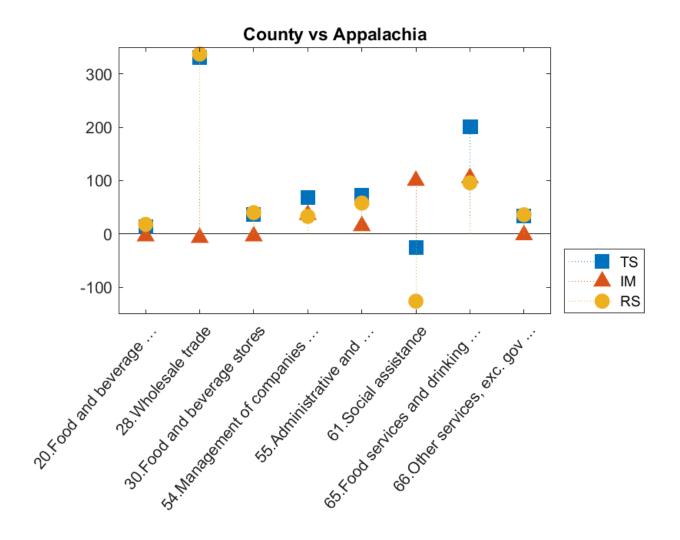


### **Chapter 3. Ashe County, North Carolina**

## Ashe County, North Carolina vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
20	Food and beverage	13	2	2	-0	125
28	Wholesale trade	11	318	-10	328	430
30	Food and beverage stores	19	18	-3	21	208
54	Management of companies	8	62	17	45	140
55	Administrative and	13	60	2	58	186
61	Social assistance	36	-61	210	-271	295
65	Food services and drinking	59	144	100	44	728
66	Other services, exc. gov	15	19	-10	29	164

# Selected SSA Components for Ashe County, North Carolina vs the Appalachian Region

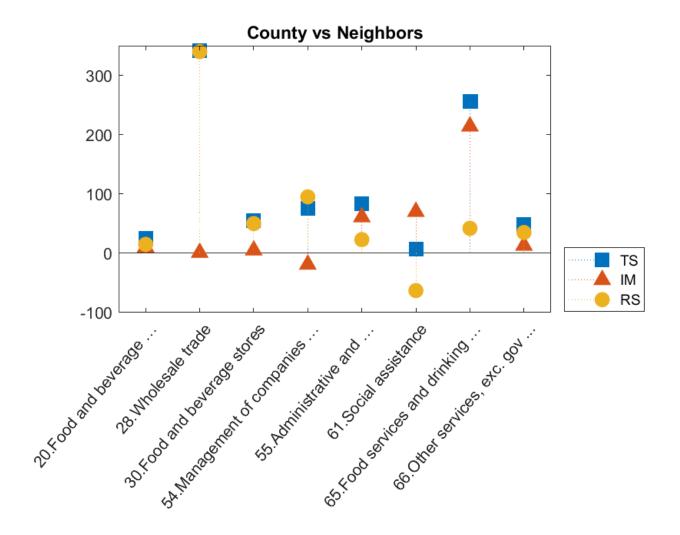


### Chapter 3. Ashe County, North Carolina

# Selected SSA Components for Ashe County, North Carolina vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
20	Food and beverage	0	14	-4	18	125
28	Wholesale trade	0	330	-7	337	430
30	Food and beverage stores	1	36	-4	40	208
54	Management of companies	0	69	36	33	140
55	Administrative and	0	73	15	58	186
61	Social assistance	1	-26	100	-126	295
65	Food services and drinking	2	201	105	96	728
66	Other services, exc. gov	0	34	-2	36	164

## **Selected SSA Components for Ashe County, North Carolina vs Neighbors**



### **Chapter 3. Ashe County, North Carolina**

# Selected SSA Components for Ashe County, North Carolina vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
20	Food and beverage	-11	25	10	15	125
28	Wholesale trade	-10	341	1	340	430
30	Food and beverage stores	-17	55	5	50	208
54	Management of companies	-7	76	-19	95	140
55	Administrative and	-11	84	61	23	186
61	Social assistance	-32	7	70	-63	295
65	Food services and drinking	-53	256	214	42	728
66	Other services, exc. gov	-13	48	13	35	164

### Chapter 4. Avery County, North Carolina

Employment in Avery County, North Carolina, declined from 7,376 in 2005 to 6,857 in 2018, for a change of -519, or -7.04%. 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 Avery County, North Carolina**

County Summary	NS	TS	IM	RS
vs. U.S.	830	-1,349	131	-1,480
vs. Appalachia	20	-543	315	-858
vs. Neighbors	-780	259	515	-256

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 Avery County, North Carolina, in comparison to at least one of the three referent regions.

## **Industry Group Membership for Avery County, North Carolina**

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
30	Food and beverage stores	FIIIci	no	yes	yes	yes
55	Administrative and	Alai	yes	yes	yes	yes
60	Nursing and residential	Elai	no	yes	yes	yes
62	Performing arts, spectator	Blai	yes	yes	yes	yes
63	Amusements, gambling,	Blai	yes	yes	yes	yes
65	Food services and drinking	BIIbii	yes	yes	yes	yes
66	Other services, exc. gov	FIIIci	no	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 Avery County, North Carolina vs. the United States

Groups a, b, and c are from Avery County, North Carolina vs. Appalachia

Groups i, ii, and iii are from Avery County, North Carolina vs. its neighbors

### **Industry-Specific Results**

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

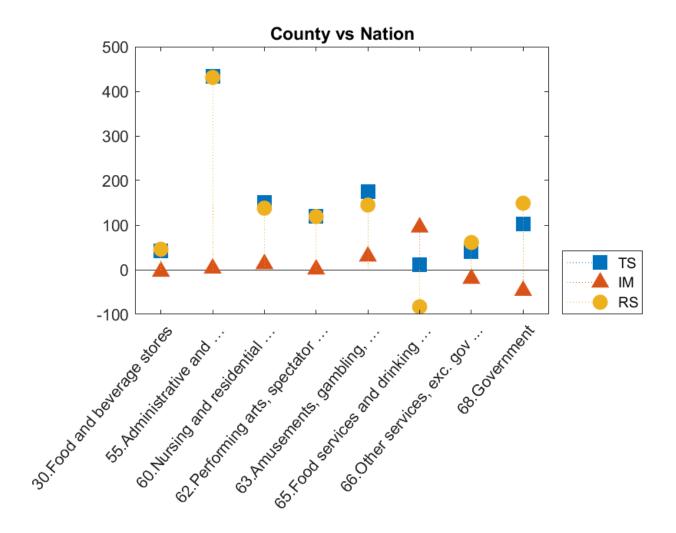
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry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

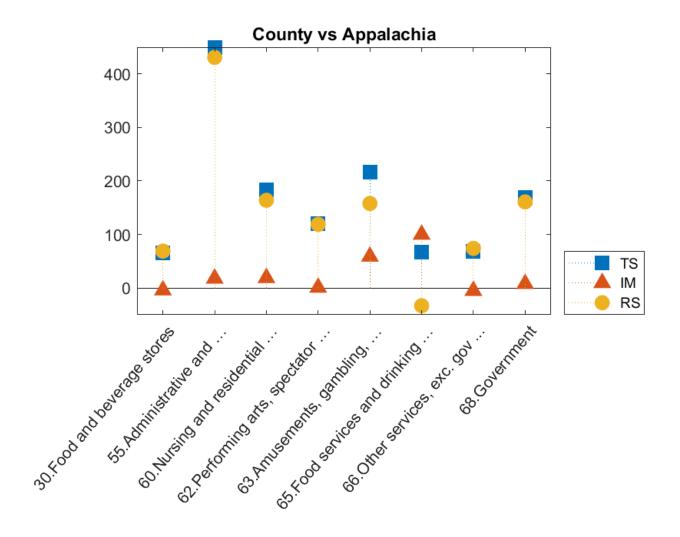


### **Chapter 4. Avery County, North Carolina**

## Avery County, North Carolina vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
30	Food and beverage stores	24	42	-4	46	276
55	Administrative and	15	434	3	431	579
60	Nursing and residential	33	151	13	138	475
62	Performing arts, spectator	1	120	1	119	126
63	Amusements, gambling,	43	175	30	145	601
65	Food services and drinking	56	12	95	-83	566
66	Other services, exc. gov	29	41	-20	61	324
68	Government	70	102	-47	149	788

## Selected SSA Components for Avery County, North Carolina vs the Appalachian Region

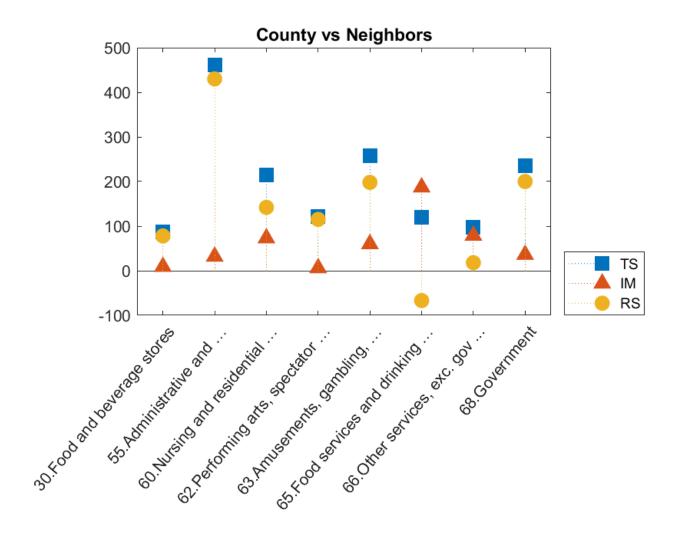


### **Chapter 4. Avery County, North Carolina**

# Selected SSA Components for Avery County, North Carolina vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
30	Food and beverage stores	1	65	-4	69	276
55	Administrative and	0	449	18	431	579
60	Nursing and residential	1	183	19	164	475
62	Performing arts, spectator	0	120	1	119	126
63	Amusements, gambling,	1	217	59	158	601
65	Food services and drinking	2	67	100	-33	566
66	Other services, exc. gov	1	69	-5	74	324
68	Government	2	169	8	161	788

### **Selected SSA Components for Avery County, North Carolina vs Neighbors**



#### **Chapter 4. Avery County, North Carolina**

# Selected SSA Components for Avery County, North Carolina vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
30	Food and beverage stores	-22	87	9	78	276
55	Administrative and	-14	462	32	430	579
60	Nursing and residential	-31	215	73	142	475
62	Performing arts, spectator	-1	121	6	115	126
63	Amusements, gambling,	-40	258	60	198	601
65	Food services and drinking	-53	120	187	-67	566
66	Other services, exc. gov	-27	97	79	18	324
68	Government	-65	236	36	200	788

#### **Chapter 5. Buncombe County, North Carolina**

Employment in Buncombe County, North Carolina, grew from 109,816 in 2005 to 132,593 in 2018, for a change of 22,777, or 20.74%. 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 Buncombe County, North Carolina**

County Summary	NS	TS	IM	RS
vs. U.S.	12,384	10,388	1,930	8,458
vs. Appalachia	374	22,405	3,421	18,984
vs. Neighbors	10,448	12,333	3,358	8,975

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 Buncombe County, North Carolina, in comparison to at least one of the three referent regions.

### **Industry Group Membership for Buncombe County, North Carolina**

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
15	Electrical equipment,	DIIIci	no	yes	yes	yes
20	Food and beverage	Elci	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
30	Food and beverage stores	FIIIci	no	yes	yes	yes
32	Other retail	F III c iii	no	yes	yes	yes
53	Miscellaneous profession	BIIaii	yes	yes	yes	yes
55	Administrative and	Allbii	yes	yes	yes	yes
57	Educational services	F III a iii	no	yes	yes	yes
58	Ambulatory health care	Bllai	yes	yes	yes	yes
59	Hospitals	Elai	no	yes	yes	yes
61	Social assistance	Bllai	yes	yes	yes	yes
62	Performing arts, spectator	Blai	yes	yes	yes	yes
64	Accommodation	Albii	yes	yes	yes	yes
65	Food services and drinking	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 Buncombe County, North Carolina vs. the United States

Groups a, b, and c are from Buncombe County, North Carolina vs. Appalachia

Groups i, ii, and iii are from Buncombe County, North Carolina vs. its neighbors

#### **Industry-Specific Results**

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

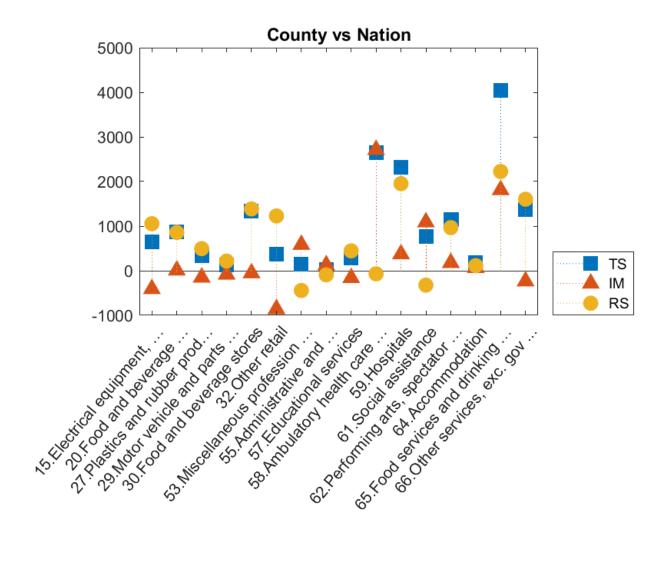
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry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

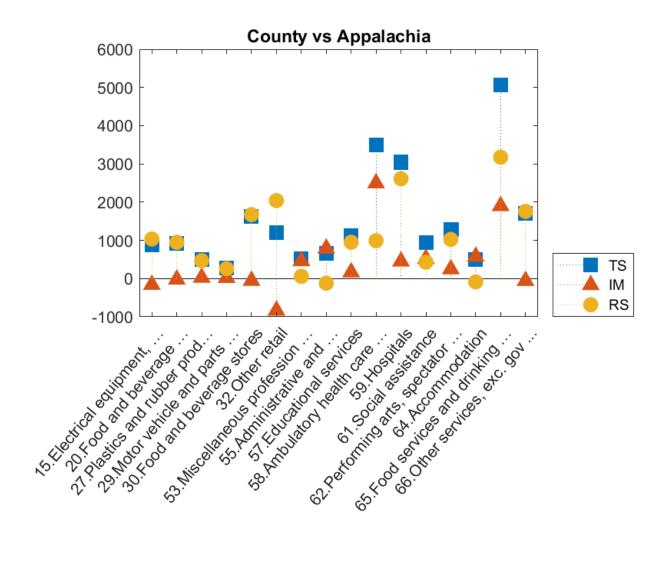


### **Chapter 5. Buncombe County, North Carolina**

## **Buncombe County, North Carolina vs U.S. for Selected Industries**

Industry	Name	NS	TS	IM	RS	Employment 2018
15	Electrical equipment,	233	647	-408	1,055	2,950
20	Food and beverage	63	867	9	858	1,485
27	Plastics and rubber prod	154	344	-150	494	1,864
29	Motor vehicle and parts	155	131	-84	215	1,656
30	Food and beverage stores	294	1,332	-53	1,385	4,233
32	Other retail	863	369	-859	1,228	8,890
53	Miscellaneous profession	390	142	584	-442	3,989
55	Administrative and	654	34	126	-92	6,488
57	Educational services	859	285	-160	445	8,757
58	Ambulatory health care	871	2,641	2,711	-70	11,239
59	Hospitals	759	2,326	374	1,952	9,818
61	Social assistance	187	765	1,088	-323	2,613
62	Performing arts, spectator	133	1,144	178	966	2,458
64	Accommodation	320	179	65	114	3,334
65	Food services and drinking	1,071	4,036	1,811	2,225	14,606
66	Other services, exc. gov	341	1,369	-234	1,603	4,732

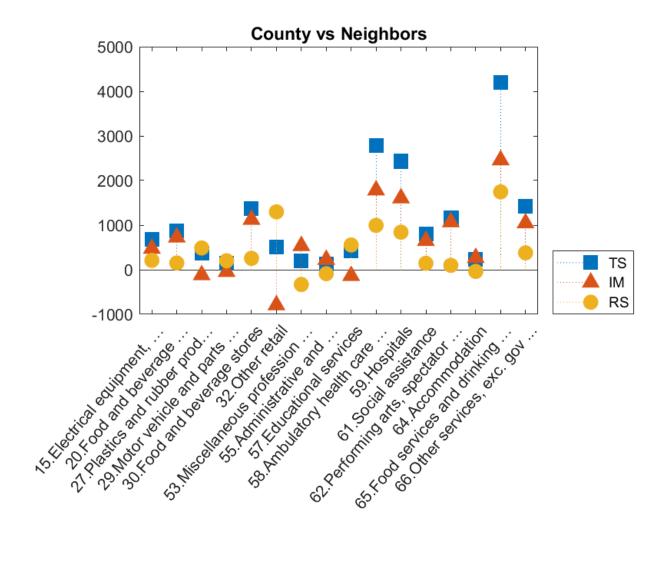
## Selected SSA Components for Buncombe County, North Carolina vs the Appalachian Region



# Selected SSA Components for Buncombe County, North Carolina vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
15	Electrical equipment,	7	874	-161	1,035	2,950
20	Food and beverage	2	927	-22	949	1,485
27	Plastics and rubber prod	5	494	26	468	1,864
29	Motor vehicle and parts	5	280	21	259	1,656
30	Food and beverage stores	9	1,618	-55	1,673	4,233
32	Other retail	26	1,207	-833	2,040	8,890
53	Miscellaneous profession	12	521	462	59	3,989
55	Administrative and	20	668	789	-121	6,488
57	Educational services	26	1,117	166	951	8,757
58	Ambulatory health care	26	3,486	2,495	991	11,239
59	Hospitals	23	3,063	451	2,612	9,818
61	Social assistance	6	947	519	428	2,613
62	Performing arts, spectator	4	1,273	248	1,025	2,458
64	Accommodation	10	490	576	-86	3,334
65	Food services and drinking	32	5,074	1,899	3,175	14,606
66	Other services, exc. gov	10	1,700	-57	1,757	4,732

#### Selected SSA Components for Buncombe County, North Carolina vs Neighbors



## Selected SSA Components for Buncombe County, North Carolina vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
15	Electrical equipment,	197	684	475	209	2,950
20	Food and beverage	53	877	726	151	1,485
27	Plastics and rubber prod	130	368	-119	487	1,864
29	Motor vehicle and parts	130	155	-46	201	1,656
30	Food and beverage stores	248	1,379	1,124	255	4,233
32	Other retail	728	504	-793	1,297	8,890
53	Miscellaneous profession	329	203	535	-332	3,989
55	Administrative and	552	136	225	-89	6,488
57	Educational services	724	419	-135	554	8,757
58	Ambulatory health care	735	2,777	1,783	994	11,239
59	Hospitals	641	2,445	1,604	841	9,818
61	Social assistance	158	794	650	144	2,613
62	Performing arts, spectator	112	1,165	1,067	98	2,458
64	Accommodation	270	229	267	-38	3,334
65	Food services and drinking	904	4,203	2,458	1,745	14,606
66	Other services, exc. gov	288	1,423	1,045	378	4,732

#### Chapter 6. Burke County, North Carolina

Employment in Burke County, North Carolina, declined from 34,639 in 2005 to 29,146 in 2018, for a change of -5,493, or -15.86%. 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 Burke County, North Carolina**

County Summary	NS	TS	IM	RS
vs. U.S.	3,909	-9,406	-2,223	-7,183
vs. Appalachia	112	-5,611	-1,498	-4,113
vs. Neighbors	-1,711	-3,774	-559	-3,215

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 Burke County, North Carolina, in comparison to at least one of the three referent regions.

### **Industry Group Membership for Burke County, North Carolina**

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	Ellci	no	yes	yes	yes
31	General merchandise 	FIIIci	no	yes	yes	yes
58	Ambulatory health care	Bllbi	yes	yes	yes	yes
61	Social assistance	B V e iii	yes	no	no	yes
65	Food services and drinking	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 Burke County, North Carolina vs. the United States

Groups a, b, and c are from Burke County, North Carolina vs. Appalachia

Groups i, ii, and iii are from Burke County, North Carolina vs. its neighbors

#### **Industry-Specific Results**

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

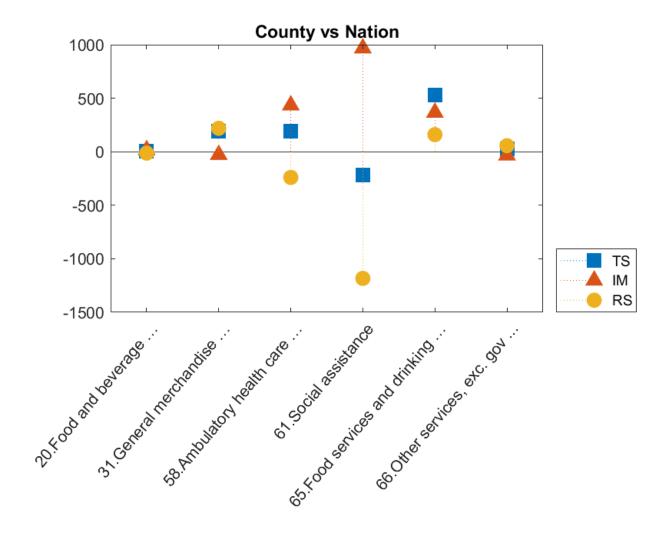
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry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

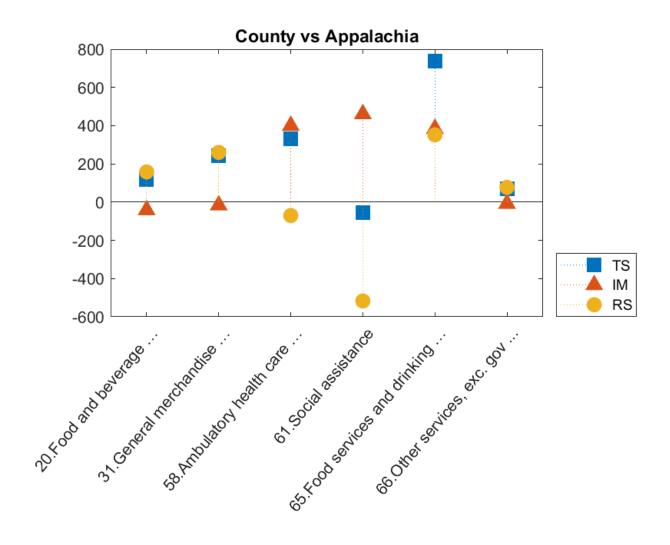


### **Chapter 6. Burke County, North Carolina**

## Burke County, North Carolina vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
20	Food and beverage	117	3	16	-13	1,160
31	General merchandise 	53	191	-28	219	719
58	Ambulatory health care 	140	194	434	-240	1,572
61	Social assistance	166	-216	967	-1,183	1,424
65	Food services and drinking	217	526	366	160	2,664
66	Other services, exc. gov	48	23	-33	56	492

## Selected SSA Components for Burke County, North Carolina vs the Appalachian Region

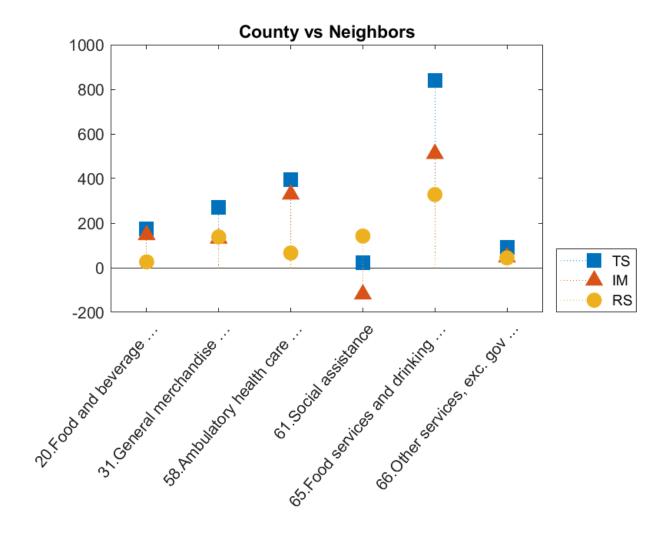


### **Chapter 6. Burke County, North Carolina**

# Selected SSA Components for Burke County, North Carolina vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
20	Food and beverage	4	117	-41	158	1,160
31	General merchandise 	2	244	-16	260	719
58	Ambulatory health care 	4	330	400	-70	1,572
61	Social assistance	5	-56	461	-517	1,424
65	Food services and drinking	7	736	384	352	2,664
66	Other services, exc. gov	1	69	-8	77	492

### Selected SSA Components for Burke County, North Carolina vs Neighbors



### **Chapter 6. Burke County, North Carolina**

# Selected SSA Components for Burke County, North Carolina vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
20	Food and beverage	-51	173	147	26	1,160
31	General merchandise 	-23	269	131	138	719
58	Ambulatory health care 	-61	395	329	66	1,572
61	Social assistance	-73	23	-119	142	1,424
65	Food services and drinking	-95	839	511	328	2,664
66	Other services, exc. gov	-21	91	47	44	492

### Chapter 7. Caldwell County, North Carolina

Employment in Caldwell County, North Carolina, declined from 30,083 in 2005 to 25,220 in 2018, for a change of -4,863, or -16.17%. 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 Caldwell County, North Carolina**

County Summary	NS	TS	IM	RS
vs. U.S.	3,392	-8,257	-3,107	-5,150
vs. Appalachia	96	-4,964	-2,959	-2,005
vs. Neighbors	-2,426	-2,439	-1,010	-1,429

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 Caldwell County, North Carolina, in comparison to at least one of the three referent regions.

### **Industry Group Membership for Caldwell County, North Carolina**

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
12	Fabricated metal products	FIIIci	no	yes	yes	yes
26	Chemical products	FIIIci	no	yes	yes	yes
27	Plastics and rubber prod	DIIIai	no	yes	yes	yes
31	General merchandise 	FIIIci	no	yes	yes	yes
54	Management of companies	A V e iii	yes	no	no	yes
57	Educational services	FIIIai	no	yes	yes	yes
58	Ambulatory health care	Bllbi	yes	yes	yes	yes
60	Nursing and residential	Elai	no	yes	yes	yes
65	Food services and drinking	Blai	yes	yes	yes	yes
66	Other services, exc. gov	FIIIci	no	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 Caldwell County, North Carolina vs. the United States

Groups a, b, and c are from Caldwell County, North Carolina vs. Appalachia

Groups i, ii, and iii are from Caldwell County, North Carolina vs. its neighbors

#### **Industry-Specific Results**

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

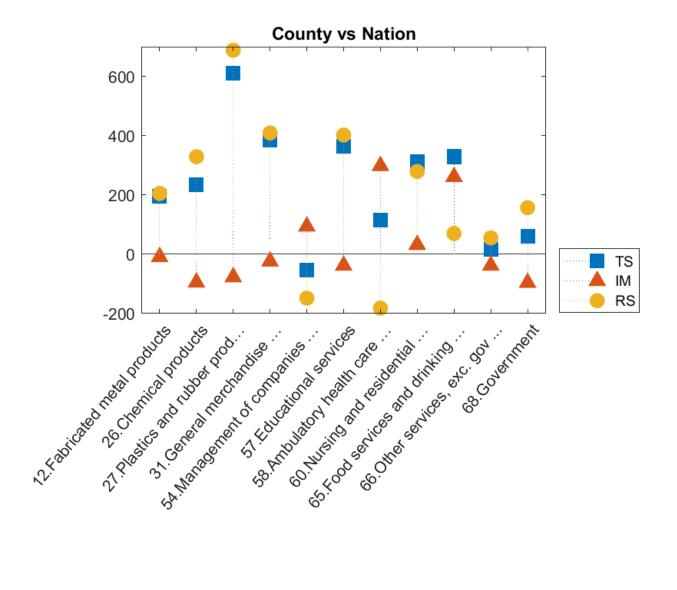
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry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

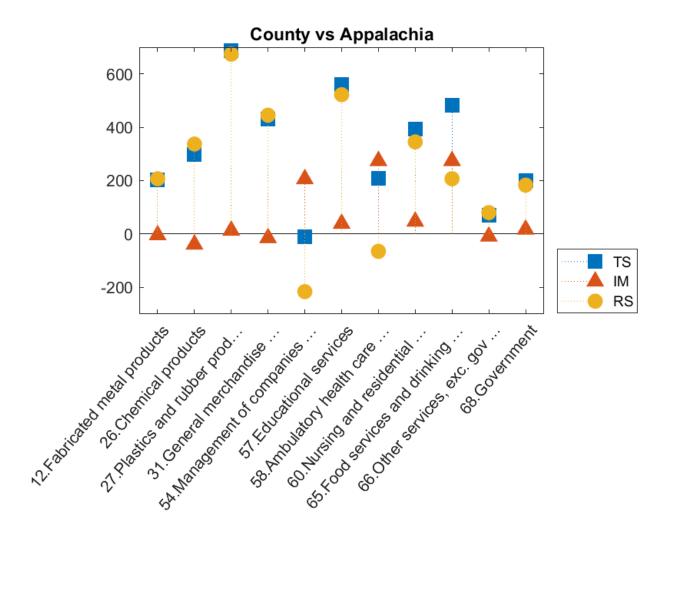


### **Chapter 7. Caldwell County, North Carolina**

## Caldwell County, North Carolina vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
12	Fabricated metal products	7	196	-9	205	262
26	Chemical products	67	234	-95	329	893
27	Plastics and rubber prod	79	611	-77	688	1,387
31	General merchandise 	47	385	-24	409	853
54	Management of companies	45	-54	94	-148	393
57	Educational services	203	364	-38	402	2,366
58	Ambulatory health care 	96	116	298	-182	1,062
60	Nursing and residential	83	311	32	279	1,128
65	Food services and drinking	154	331	261	70	1,853
66	Other services, exc. gov	55	17	-38	55	562
68	Government	142	61	-96	157	1,466

## Selected SSA Components for Caldwell County, North Carolina vs the Appalachian Region

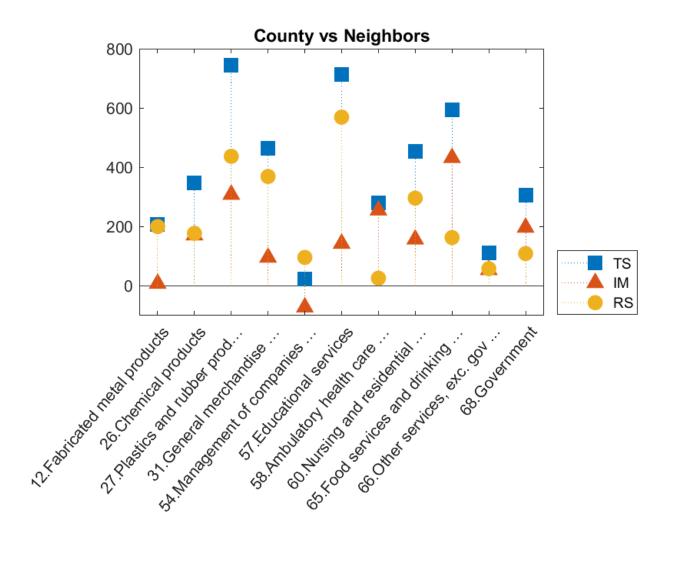


### **Chapter 7. Caldwell County, North Carolina**

# Selected SSA Components for Caldwell County, North Carolina vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
12	Fabricated metal products	0	203	-4	207	262
26	Chemical products	2	298	-39	337	893
27	Plastics and rubber prod	2	687	13	674	1,387
31	General merchandise 	1	430	-15	445	853
54	Management of companies	1	-10	206	-216	393
57	Educational services	6	561	39	522	2,366
58	Ambulatory health care 	3	209	274	-65	1,062
60	Nursing and residential	2	392	47	345	1,128
65	Food services and drinking	5	481	274	207	1,853
66	Other services, exc. gov	2	71	-9	80	562
68	Government	4	200	17	183	1,466

## Selected SSA Components for Caldwell County, North Carolina vs Neighbors



### **Chapter 7. Caldwell County, North Carolina**

# Selected SSA Components for Caldwell County, North Carolina vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
12	Fabricated metal	-5	208	8	200	262
26	products Chemical products	-48	348	171	177	893
27	Plastics and rubber prod	-56	745	308	437	1,387
31	General merchandise 	-34	465	96	369	853
54	Management of companies	-32	24	-72	96	393
57	Educational services	-145	712	143	569	2,366
58	Ambulatory health care 	-69	281	255	26	1,062
60	Nursing and residential	-59	453	157	296	1,128
65	Food services and drinking	-110	595	432	163	1,853
66	Other services, exc. gov	-40	112	54	58	562
68	Government	-102	306	197	109	1,466

#### **Chapter 8. Cherokee County, North Carolina**

Employment in Cherokee County, North Carolina, declined from 9,489 in 2005 to 8,090 in 2018, for a change of -1,399, or -14.74%. 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 Cherokee County, North Carolina**

County Summary	NS	TS	IM	RS
vs. U.S.	1,071	-2,470	-395	-2,075
vs. Appalachia	27	-1,438	-87	-1,351
vs. Neighbors	-168	-1,231	-119	-1,112

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 Cherokee County, North Carolina, in comparison to at least one of the three referent regions.

## **Industry Group Membership for Cherokee County, North Carolina**

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	FIIIcii	no	yes	yes	yes
30	Food and beverage stores	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	BVbii	yes	no	yes	yes
61	Social assistance	BIIai	yes	yes	yes	yes
64	Accommodation	AVbii	yes	no	yes	yes
65	Food services and drinking	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 Cherokee County, North Carolina vs. the United States

Groups a, b, and c are from Cherokee County, North Carolina vs. Appalachia

Groups i, ii, and iii are from Cherokee County, North Carolina vs. its neighbors

#### **Industry-Specific Results**

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

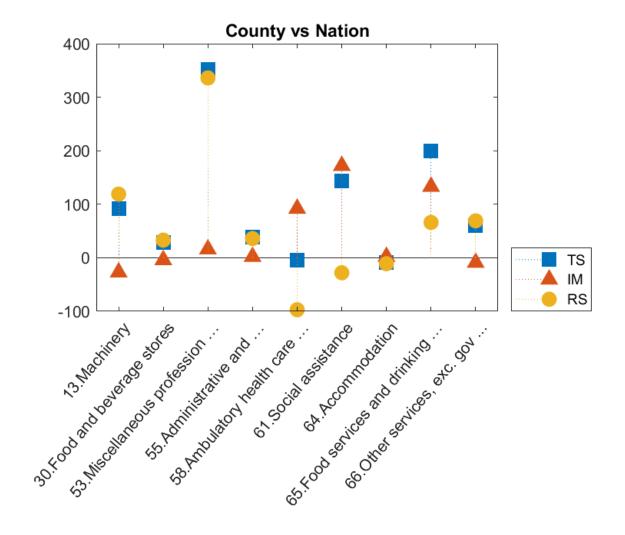
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry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

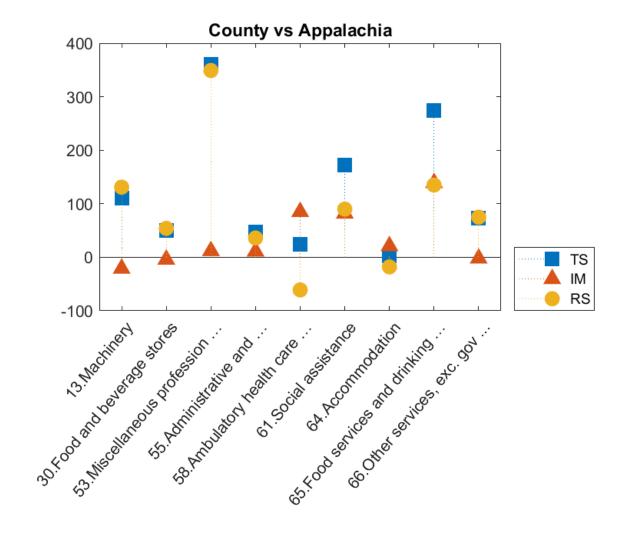


### **Chapter 8. Cherokee County, North Carolina**

## Cherokee County, North Carolina vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
13	Machinery	18	92	-27	119	273
30	Food and beverage stores	22	29	-4	33	244
53	Miscellaneous profession	10	352	16	336	454
55	Administrative and	9	38	2	36	129
58	Ambulatory health care	30	-5	92	-97	286
61	Social assistance	30	144	172	-28	435
64	Accommodation	12	-9	2	-11	107
65	Food services and drinking	79	199	133	66	974
66	Other services, exc. gov	13	60	-9	69	192

## Selected SSA Components for Cherokee County, North Carolina vs the Appalachian Region

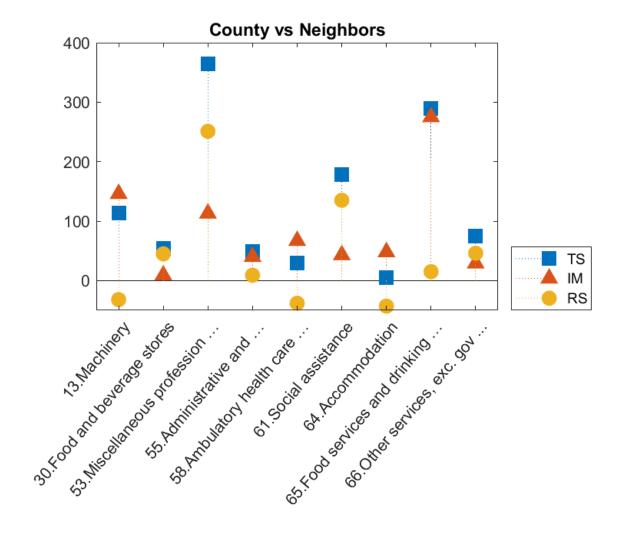


#### **Chapter 8. Cherokee County, North Carolina**

# Selected SSA Components for Cherokee County, North Carolina vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
13	Machinery	1	110	-21	131	273
30	Food and beverage stores	1	50	-4	54	244
53	Miscellaneous profession	0	361	12	349	454
55	Administrative and	0	47	11	36	129
58	Ambulatory health care	1	24	85	-61	286
61	Social assistance	1	172	82	90	435
64	Accommodation	0	3	21	-18	107
65	Food services and drinking	2	274	139	135	974
66	Other services, exc. gov	0	73	-2	75	192

## Selected SSA Components for Cherokee County, North Carolina vs Neighbors



## **Chapter 8. Cherokee County, North Carolina**

# Selected SSA Components for Cherokee County, North Carolina vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
13	Machinery	-3	114	146	-32	273
30	Food and beverage stores	-3	54	9	45	244
53	Miscellaneous profession	-2	364	113	251	454
55	Administrative and	-1	49	40	9	129
58	Ambulatory health care	-5	29	67	-38	286
61	Social assistance	-5	178	43	135	435
64	Accommodation	-2	5	48	-43	107
65	Food services and drinking	-12	290	275	15	974
66	Other services, exc. gov	-2	75	29	46	192

#### Chapter 9. Clay County, North Carolina

Employment in Clay County, North Carolina, declined from 2,144 in 2005 to 2,046 in 2018, for a change of -98, or -4.57%. 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 Clay County, North Carolina**

County Summary	NS	TS	IM	RS
vs. U.S.	242	-340	-77	-263
vs. Appalachia	6	-106	-8	-98
vs. Neighbors	-145	46	109	-63

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 Clay County, North Carolina, in comparison to at least one of the three referent regions.

## **Industry Group Membership for Clay County, North Carolina**

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
15	Electrical equipment,	D III c iii	no	yes	yes	yes
45	Federal Reserve banks,	F III c iii	no	yes	yes	yes
55	Administrative and	Alai	yes	yes	yes	yes
58	Ambulatory health care	Blai	yes	yes	yes	yes
60	Nursing and residential	Elaiii	no	yes	yes	yes
65	Food services and drinking	Blai	yes	yes	yes	yes
66	Other services, exc. gov	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 Clay County, North Carolina vs. the United States

Groups a, b, and c are from Clay County, North Carolina vs. Appalachia

Groups i, ii, and iii are from Clay County, North Carolina vs. its neighbors

#### **Industry-Specific Results**

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

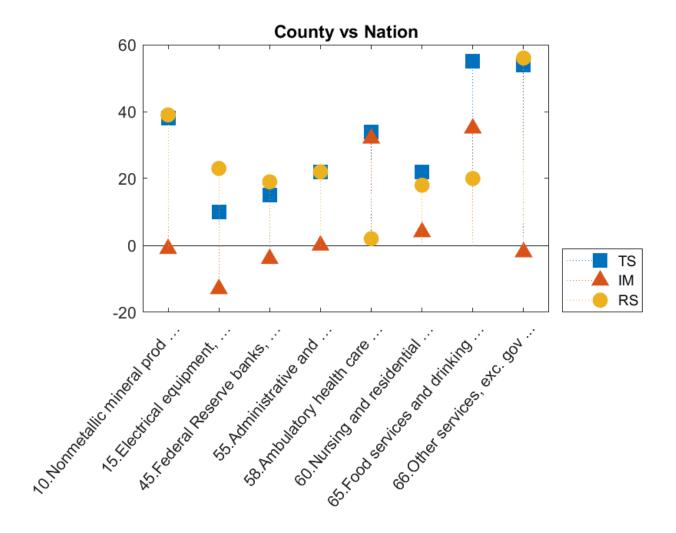
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry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

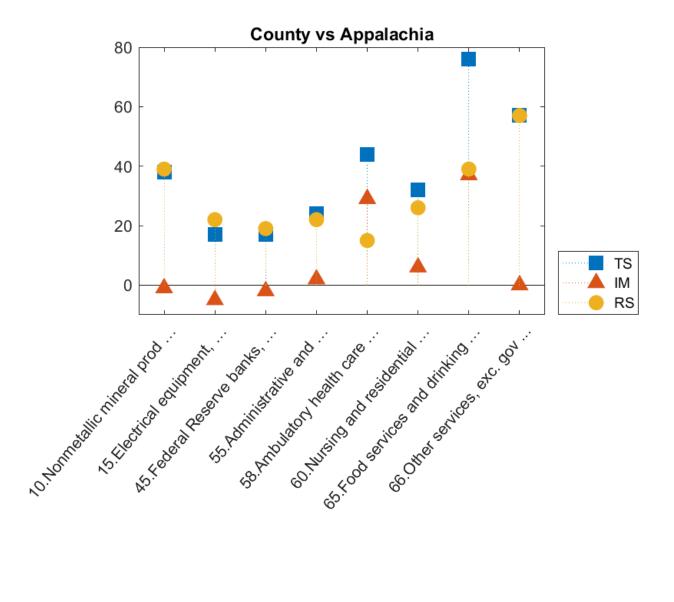


## **Chapter 9. Clay County, North Carolina**

# Clay County, North Carolina vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
10	Nonmetallic mineral prod 	0	38	-1	39	41
15	Electrical equipment,	7	10	-13	23	83
45	Federal Reserve banks,	2	15	-4	19	36
55	Administrative and	2	22	0	22	43
58	Ambulatory health care	10	34	32	2	134
60	Nursing and residential	10	22	4	18	123
65	Food services and drinking	21	55	35	20	260
66	Other services, exc. gov	3	54	-2	56	81

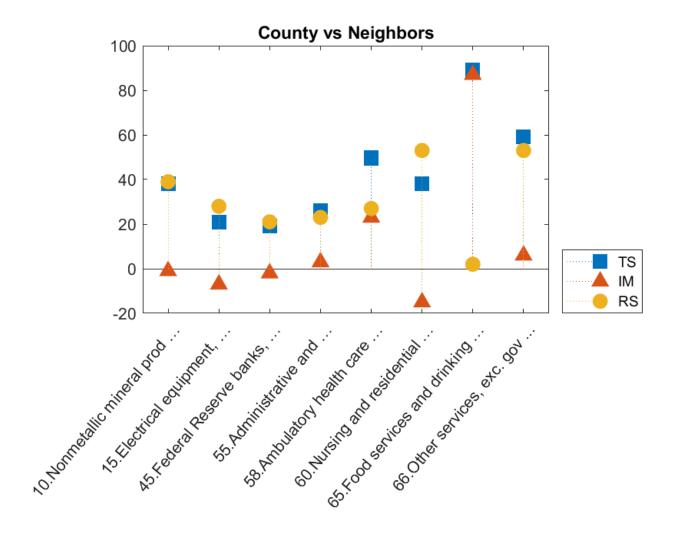
# Selected SSA Components for Clay County, North Carolina vs the Appalachian Region



# Selected SSA Components for Clay County, North Carolina vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
10	Nonmetallic mineral prod 	0	38	-1	39	41
15	Electrical equipment,	0	17	-5	22	83
45	Federal Reserve banks,	0	17	-2	19	36
55	Administrative and	0	24	2	22	43
58	Ambulatory health care	0	44	29	15	134
60	Nursing and residential	0	32	6	26	123
65	Food services and drinking	1	76	37	39	260
66	Other services, exc. gov	0	57	-0	57	81

## **Selected SSA Components for Clay County, North Carolina vs Neighbors**



#### **Chapter 9. Clay County, North Carolina**

# Selected SSA Components for Clay County, North Carolina vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
10	Nonmetallic mineral prod 	-0	38	-1	39	41
15	Electrical equipment,	-4	21	-7	28	83
45	Federal Reserve banks,	-1	19	-2	21	36
55	Administrative and	-1	26	3	23	43
58	Ambulatory health care	-6	50	23	27	134
60	Nursing and residential	-6	38	-15	53	123
65	Food services and drinking	-13	89	87	2	260
66	Other services, exc. gov	-2	59	6	53	81

#### Chapter 10. Davie County, North Carolina

Employment in Davie County, North Carolina, grew from 11,155 in 2005 to 12,855 in 2018, for a change of 1,700, or 15.24%. 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 Davie County, North Carolina

County Summary	NS	TS	IM	RS
vs. U.S.	1,256	448	-741	1,189
vs. Appalachia	37	1,663	-725	2,388
vs. Neighbors	329	1,372	-310	1,682

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 Davie County, North Carolina, in comparison to at least one of the three referent regions.

## **Industry Group Membership for Davie County, North Carolina**

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
12	Fabricated metal products	F III c iii	no	yes	yes	yes
14	Computer and electronic	Flai	no	yes	yes	yes
16	Motor vehicles, bodies	Clai	yes	yes	yes	yes
18	Furniture and related	F III c iii	no	yes	yes	yes
20	Food and beverage	Elciii	no	yes	yes	yes
27	Plastics and rubber prod	Dlai	no	yes	yes	yes
30	Food and beverage stores	FIIIcii	no	yes	yes	yes
31	General merchandise 	F III c iii	no	yes	yes	yes
40	Warehousing and storage	Ellaii	no	yes	yes	yes
53	Miscellaneous profession	BIIaii	yes	yes	yes	yes
55	Administrative and	Alai	yes	yes	yes	yes
57	Educational services	F III a iii	no	yes	yes	yes
58	Ambulatory health care	Blai	yes	yes	yes	yes
59	Hospitals	Elaii	no	yes	yes	yes
60	Nursing and residential	Elaiii	no	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 Davie County, North Carolina vs. the United States

Groups a, b, and c are from Davie County, North Carolina vs. Appalachia

#### **Chapter 10. Davie County, North Carolina**

Groups i, ii, and iii are from Davie County, North Carolina vs. its neighbors

#### **Industry-Specific Results**

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

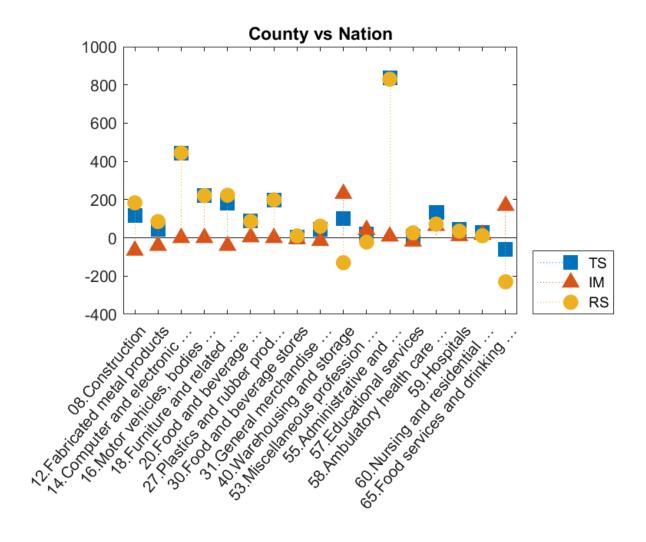
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry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

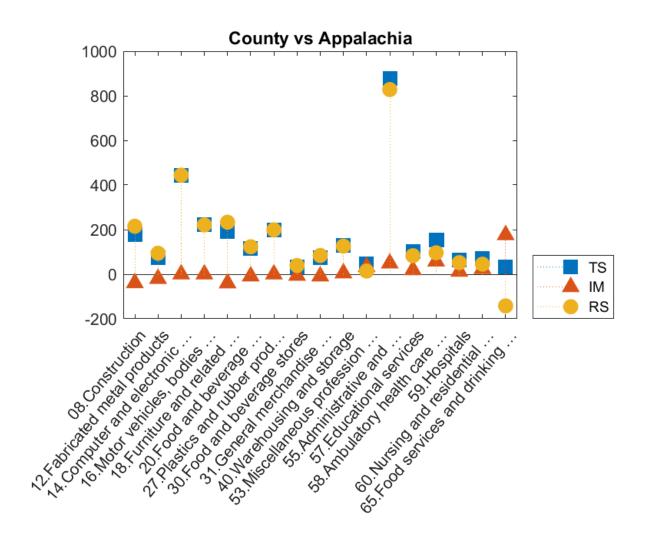


# Davie County, North Carolina vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
08	Construction	62	117	-66	183	724
12	Fabricated metal products	31	44	-41	85	350
14	Computer and electronic	0	444	0	444	444
16	Motor vehicles, bodies	0	221	0	221	221
18	Furniture and related	11	182	-41	223	292
20	Food and beverage	26	90	4	86	343
27	Plastics and rubber prod	0	199	0	199	199
30	Food and beverage stores	30	5	-5	10	299
31	General merchandise 	30	46	-15	61	342
40	Warehousing and storage	31	101	231	-130	408
53	Miscellaneous profession	28	20	42	-22	298
55	Administrative and	41	838	8	830	1,243
57	Educational services	97	8	-18	26	963
58	Ambulatory health care	20	135	63	72	335
59	Hospitals	20	45	10	35	241
60	Nursing and residential	43	28	17	11	452
65	Food services and drinking	99	-62	168	-230	916

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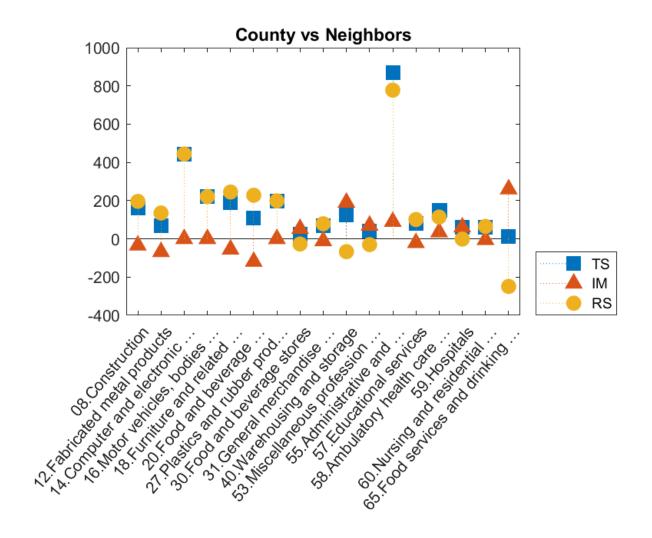
# Selected SSA Components for Davie County, North Carolina vs the Appalachian Region



Selected SSA Components for Davie County, North Carolina vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
08	Construction	2	176	-39	215	724
12	Fabricated metal products	1	74	-20	94	350
14	Computer and electronic	0	444	0	444	444
16	Motor vehicles, bodies	0	221	0	221	221
18	Furniture and related	0	193	-40	233	292
20	Food and beverage	1	114	-9	123	343
27	Plastics and rubber prod	0	199	0	199	199
30	Food and beverage stores	1	33	-6	39	299
31	General merchandise 	1	75	-9	84	342
40	Warehousing and storage	1	131	5	126	408
53	Miscellaneous profession	1	47	33	14	298
55	Administrative and	1	877	49	828	1,243
57	Educational services	3	102	19	83	963
58	Ambulatory health care	1	154	58	96	335
59	Hospitals	1	64	12	52	241
60	Nursing and residential	1	69	24	45	452
65	Food services and drinking	3	34	176	-142	916

## **Selected SSA Components for Davie County, North Carolina vs Neighbors**



Selected SSA Components for Davie County, North Carolina vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
08	Construction	16	162	-34	196	724
12	Fabricated metal products	8	67	-68	135	350
14	Computer and electronic	0	444	0	444	444
16	Motor vehicles, bodies	0	221	0	221	221
18	Furniture and related	3	190	-55	245	292
20	Food and beverage	7	109	-119	228	343
27	Plastics and rubber prod	0	199	0	199	199
30	Food and beverage stores	8	26	53	-27	299
31	General merchandise 	8	68	-11	79	342
40	Warehousing and storage	8	123	190	-67	408
53	Miscellaneous profession	7	40	70	-30	298
55	Administrative and	11	868	90	778	1,243
57	Educational services	25	80	-21	101	963
58	Ambulatory health care	5	149	35	114	335
59	Hospitals	5	60	61	-1	241
60	Nursing and residential	11	60	-5	65	452
65	Food services and drinking	26	11	260	-249	916

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#### Chapter 11. Forsyth County, North Carolina

Employment in Forsyth County, North Carolina, grew from 185,925 in 2005 to 186,607 in 2018, for a change of 682, or 0.37%. 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 Forsyth County, North Carolina**

County Summary	NS	TS	IM	RS
vs. U.S.	20,967	-20,287	-1,209	-19,078
vs. Appalachia	630	49	-1,409	1,458
vs. Neighbors	-2,410	3,097	2,454	643

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 Forsyth County, North Carolina, in comparison to at least one of the three referent regions.

## **Industry Group Membership for Forsyth County, North Carolina**

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
30	Food and beverage stores	FIIIci	no	yes	yes	yes
51	Legal services	FIIIci	no	yes	yes	yes
53	Miscellaneous profession	BIIai	yes	yes	yes	yes
54	Management of companies	Alai	yes	yes	yes	yes
55	Administrative and	AVbii	yes	no	yes	yes
58	Ambulatory health care	BIIbii	yes	yes	yes	yes
59	Hospitals	Elai	no	yes	yes	yes
60	Nursing and residential	Ellai	no	yes	yes	yes
61	Social assistance	BIIai	yes	yes	yes	yes
65	Food services and drinking	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 Forsyth County, North Carolina vs. the United States

Groups a, b, and c are from Forsyth County, North Carolina vs. Appalachia

Groups i, ii, and iii are from Forsyth County, North Carolina vs. its neighbors

#### **Industry-Specific Results**

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

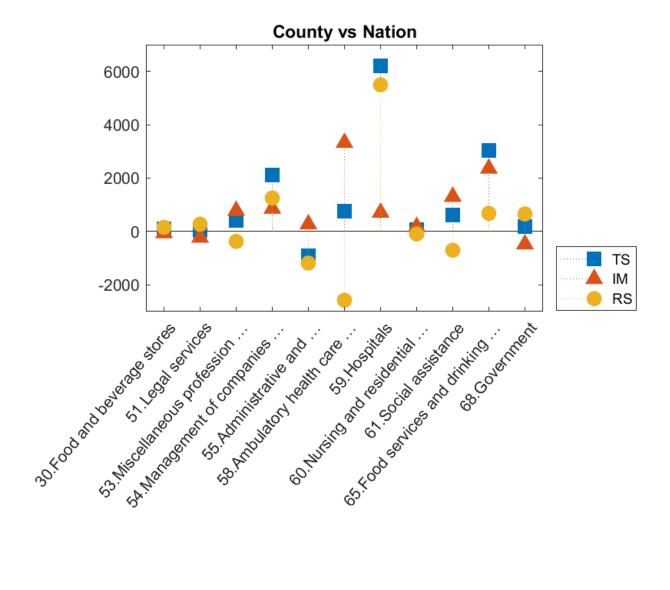
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry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

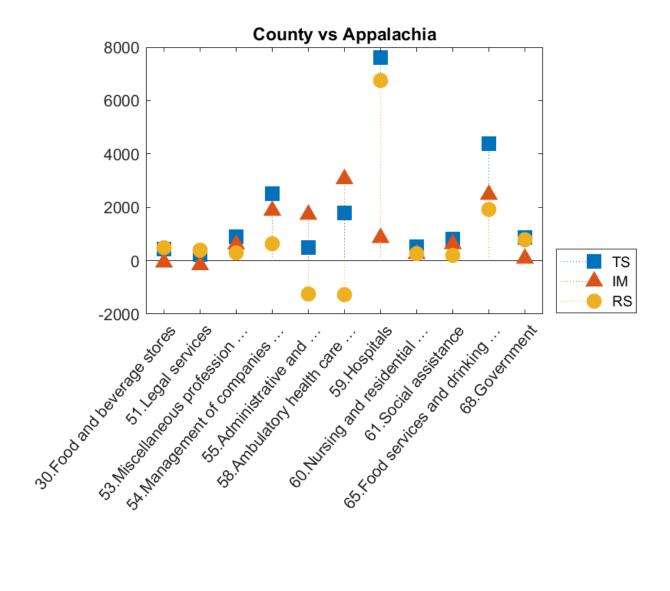


## **Chapter 11. Forsyth County, North Carolina**

# Forsyth County, North Carolina vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
30	Food and beverage stores	337	96	-60	156	3,423
51	Legal services	188	46	-226	272	1,896
53	Miscellaneous profession	520	407	779	-372	5,534
54	Management of companies	413	2,112	858	1,254	6,186
55	Administrative and	1,432	-910	275	-1,185	13,219
58	Ambulatory health care	1,069	749	3,325	-2,576	11,297
59	Hospitals	1,445	6,207	712	5,495	20,469
60	Nursing and residential	452	81	177	-96	4,543
61	Social assistance	225	604	1,307	-703	2,822
65	Food services and drinking	1,396	3,041	2,361	680	16,820
68	Government	709	181	-477	658	7,174

## Selected SSA Components for Forsyth County, North Carolina vs the Appalachian Region

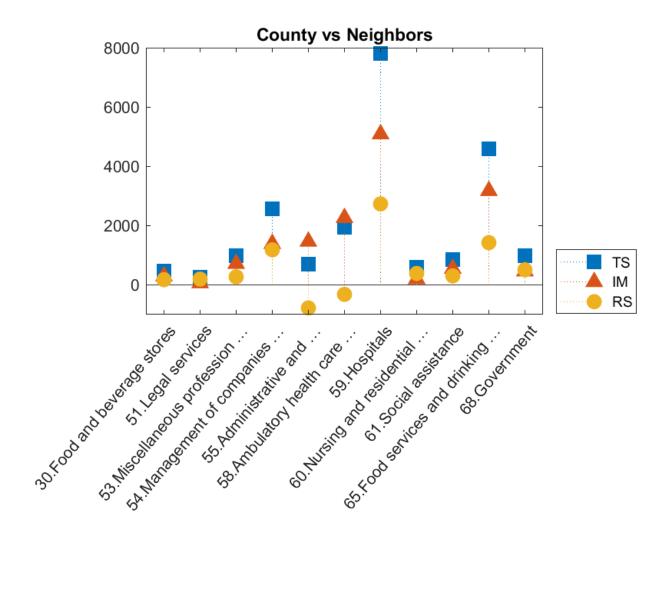


#### **Chapter 11. Forsyth County, North Carolina**

# Selected SSA Components for Forsyth County, North Carolina vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
30	Food and beverage stores	10	423	-63	486	3,423
51	Legal services	6	228	-164	392	1,896
53	Miscellaneous profession	16	910	615	295	5,534
54	Management of companies	12	2,512	1,878	634	6,186
55	Administrative and	43	479	1,728	-1,249	13,219
58	Ambulatory health care	32	1,785	3,060	-1,275	11,297
59	Hospitals	44	7,609	858	6,751	20,469
60	Nursing and residential	14	519	256	263	4,543
61	Social assistance	7	822	624	198	2,822
65	Food services and drinking	42	4,395	2,476	1,919	16,820
68	Government	21	868	83	785	7,174

## Selected SSA Components for Forsyth County, North Carolina vs Neighbors



#### **Chapter 11. Forsyth County, North Carolina**

# Selected SSA Components for Forsyth County, North Carolina vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
30	Food and beverage stores	-39	472	297	175	3,423
51	Legal services	-22	255	60	195	1,896
53	Miscellaneous profession	-60	986	715	271	5,534
54	Management of companies	-47	2,573	1,390	1,183	6,186
55	Administrative and	-165	686	1,463	-777	13,219
58	Ambulatory health care	-123	1,941	2,261	-320	11,297
59	Hospitals	-166	7,818	5,086	2,732	20,469
60	Nursing and residential	-52	585	198	387	4,543
61	Social assistance	-26	855	550	305	2,822
65	Food services and drinking	-161	4,597	3,173	1,424	16,820
68	Government	-81	972	464	508	7,174

#### Chapter 12. Graham County, North Carolina

Employment in Graham County, North Carolina, declined from 2,594 in 2005 to 2,080 in 2018, for a change of -514, or -19.81%. 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 Graham County, North Carolina

County Summary	NS	TS	IM	RS
vs. U.S.	292	-806	-132	-674
vs. Appalachia	5	-524	-45	-479
vs. Neighbors	251	-764	-221	-543

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 Graham County, North Carolina, in comparison to at least one of the three referent regions.

## **Industry Group Membership for Graham County, North Carolina**

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
09	Wood 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 a iii	no	yes	yes	yes
36	Truck transportation	Flaiii	no	yes	yes	yes
47	Insurance carriers and	Flci	no	yes	yes	yes
55	Administrative and	Alaii	yes	yes	yes	yes
64	Accommodation	Alaii	yes	yes	yes	yes
65	Food services and drinking	Blaii	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 Graham County, North Carolina vs. the United States

Groups a, b, and c are from Graham County, North Carolina vs. Appalachia

Groups i, ii, and iii are from Graham County, North Carolina vs. its neighbors

#### **Industry-Specific Results**

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

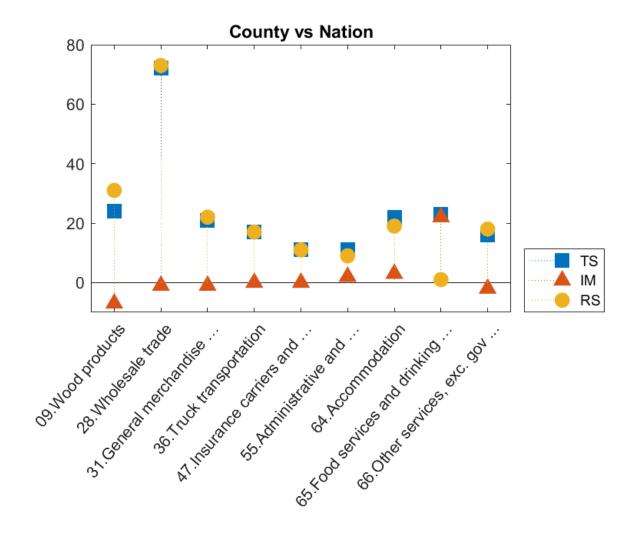
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry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

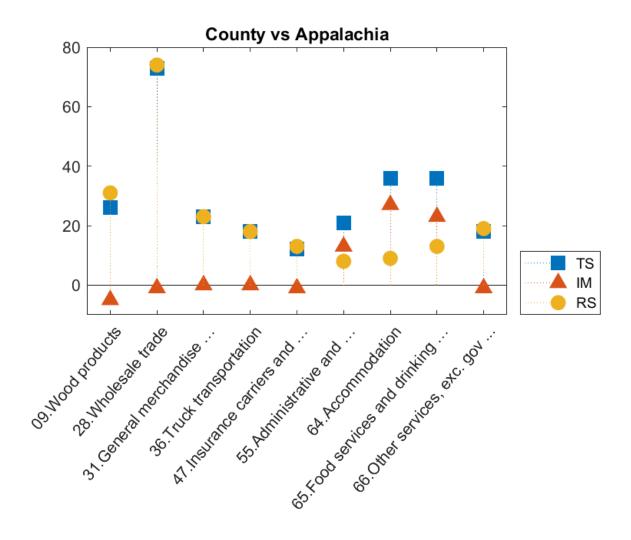


#### **Chapter 12. Graham County, North Carolina**

# **Graham County, North Carolina vs U.S. for Selected Industries**

Industry	Name	NS	TS	IM	RS	Employment 2018
09	Wood products	2	24	-7	31	43
28	Wholesale trade	1	72	-1	73	82
31	General merchandise	1	21	-1	22	34
36	Truck transportation	1	17	-0	17	25
47	Insurance carriers and	2	11	-0	11	26
55	Administrative and	10	11	2	9	114
64	Accommodation	15	22	3	19	172
65	Food services and drinking	13	23	22	1	153
66	Other services, exc. gov	4	16	-2	18	51

## Selected SSA Components for Graham County, North Carolina vs the Appalachian Region

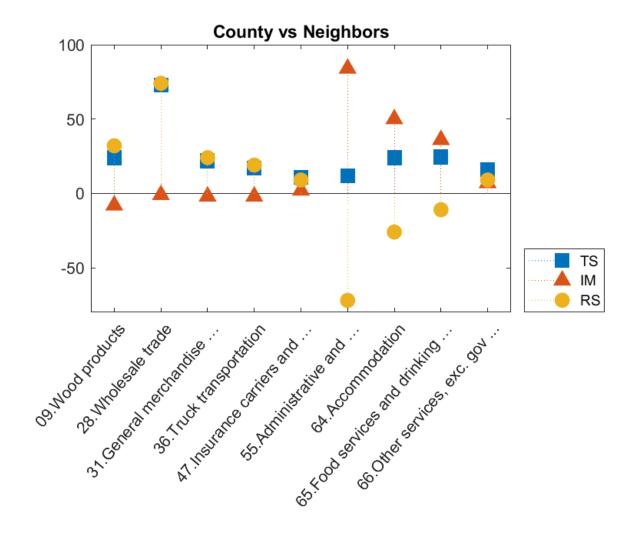


### **Chapter 12. Graham County, North Carolina**

# Selected SSA Components for Graham County, North Carolina vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
09	Wood products	0	26	-5	31	43
28	Wholesale trade	0	73	-1	74	82
31	General merchandise	0	23	-0	23	34
36	Truck transportation	0	18	-0	18	25
47	Insurance carriers and	0	12	-1	13	26
55	Administrative and	0	21	13	8	114
64	Accommodation	0	36	27	9	172
65	Food services and drinking	0	36	23	13	153
66	Other services, exc. gov	0	18	-1	19	51

## Selected SSA Components for Graham County, North Carolina vs Neighbors



### **Chapter 12. Graham County, North Carolina**

# Selected SSA Components for Graham County, North Carolina vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
09	Wood products	2	24	-8	32	43
28	Wholesale trade	1	73	-1	74	82
31	General merchandise	1	22	-2	24	34
36	Truck transportation	1	17	-2	19	25
47	Insurance carriers and	1	11	2	9	26
55	Administrative and	9	12	84	-72	114
64	Accommodation	13	24	50	-26	172
65	Food services and drinking	11	25	36	-11	153
66	Other services, exc. gov	3	16	7	9	51

### Chapter 13. Haywood County, North Carolina

Employment in Haywood County, North Carolina, grew from 16,797 in 2005 to 17,648 in 2018, for a change of 851, or 5.07%. 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 Haywood County, North Carolina**

County Summary	NS	TS	IM	RS
vs. U.S.	1,894	-1,044	-336	-708
vs. Appalachia	50	793	307	486
vs. Neighbors	2,432	-1,582	-289	-1,293

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 Haywood County, North Carolina, in comparison to at least one of the three referent regions.

## **Industry Group Membership for Haywood County, North Carolina**

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
27	Plastics and rubber prod	D III a iii	no	yes	yes	yes
30	Food and beverage stores	F III c ii	no	yes	yes	yes
31	General merchandise 	F III c iv	no	yes	yes	no
53	Miscellaneous profession	BVbv	yes	no	yes	no
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,	BVbv	yes	no	yes	no
65	Food services and drinking	BIIbii	yes	yes	yes	yes
66	Other services, exc. gov	FIIIcii	no	yes	yes	yes

#### Notes:

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

Groups I, II, and III are from Haywood County, North Carolina vs. the United States

Groups a, b, and c are from Haywood County, North Carolina vs. Appalachia

Groups i, ii, and iii are from Haywood County, North Carolina vs. its neighbors

### **Industry-Specific Results**

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

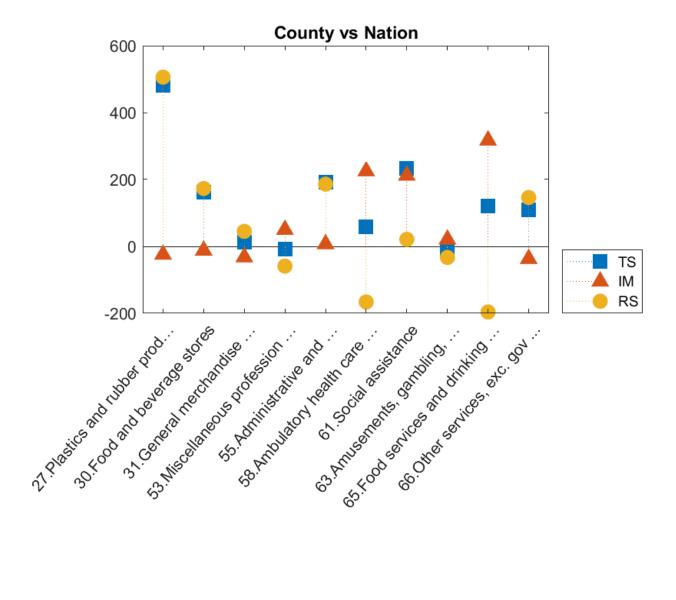
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry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

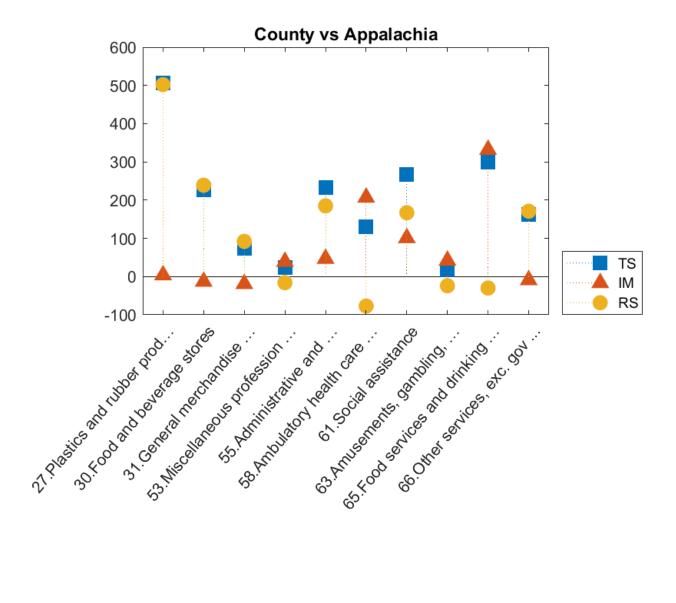


### **Chapter 13. Haywood County, North Carolina**

# **Haywood County, North Carolina vs U.S. for Selected Industries**

Industry	Name	NS	TS	IM	RS	Employment 2018
27	Plastics and rubber prod	25	482	-24	506	725
30	Food and beverage stores	67	161	-12	173	825
31	General merchandise 	63	13	-32	45	632
53	Miscellaneous profession	33	-9	50	-59	317
55	Administrative and	39	193	7	186	576
58	Ambulatory health care	72	59	225	-166	774
61	Social assistance	37	233	212	21	593
63	Amusements, gambling,	31	-12	21	-33	293
65	Food services and drinking	187	121	317	-196	1,970
66	Other services, exc. gov	54	109	-37	146	645

# Selected SSA Components for Haywood County, North Carolina vs the Appalachian Region

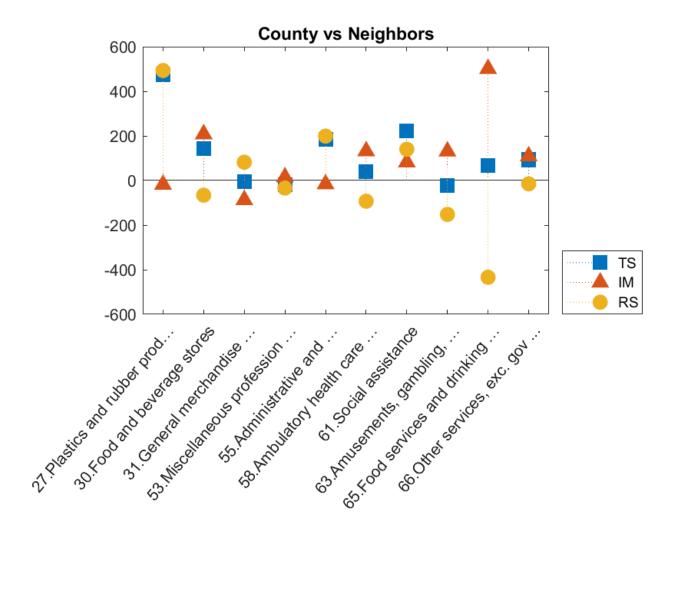


### **Chapter 13. Haywood County, North Carolina**

# Selected SSA Components for Haywood County, North Carolina vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
27	Plastics and rubber prod	1	506	4	502	725
30	Food and beverage stores	2	226	-13	239	825
31	General merchandise 	2	73	-19	92	632
53	Miscellaneous profession	1	23	39	-16	317
55	Administrative and	1	232	47	185	576
58	Ambulatory health care	2	130	207	-77	774
61	Social assistance	1	268	101	167	593
63	Amusements, gambling,	1	18	42	-24	293
65	Food services and drinking	6	302	332	-30	1,970
66	Other services, exc. gov	2	162	-9	171	645

## Selected SSA Components for Haywood County, North Carolina vs Neighbors



### **Chapter 13. Haywood County, North Carolina**

# Selected SSA Components for Haywood County, North Carolina vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
27	Plastics and rubber prod	32	475	-18	493	725
30	Food and beverage stores	86	142	208	-66	825
31	General merchandise 	81	-5	-87	82	632
53	Miscellaneous profession	42	-19	15	-34	317
55	Administrative and	50	183	-16	199	576
58	Ambulatory health care	93	39	132	-93	774
61	Social assistance	47	222	82	140	593
63	Amusements, gambling,	40	-21	131	-152	293
65	Food services and drinking	241	67	501	-434	1,970
66	Other services, exc. gov	70	94	109	-15	645

### **Chapter 14. Henderson County, North Carolina**

Employment in Henderson County, North Carolina, grew from 36,248 in 2005 to 38,806 in 2018, for a change of 2,558, or 7.06%. 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 Henderson County, North Carolina**

County Summary	NS	TS	IM	RS
vs. U.S.	4,088	-1,527	-881	-646
vs. Appalachia	119	2,436	739	1,697
vs. Neighbors	5,623	-3,074	346	-3,420

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 Henderson County, North Carolina, in comparison to at least one of the three referent regions.

## **Industry Group Membership for Henderson County, North Carolina**

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
12	Fabricated metal products	FIII c iii	no	yes	yes	yes
20	Food and beverage	Elcii	no	yes	yes	yes
28	Wholesale trade	FIIIci	no	yes	yes	yes
29	Motor vehicle and parts	F III a iii	no	yes	yes	yes
30	Food and beverage stores	FIIIci	no	yes	yes	yes
53	Miscellaneous profession	Blai	yes	yes	yes	yes
58	Ambulatory health care	BIIbv	yes	yes	yes	no
59	Hospitals	Elaii	no	yes	yes	yes
61	Social assistance	BIIbii	yes	yes	yes	yes
64	Accommodation	Alai	yes	yes	yes	yes
65	Food services and drinking	BIIbii	yes	yes	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 Henderson County, North Carolina vs. the United States

Groups a, b, and c are from Henderson County, North Carolina vs. Appalachia

Groups i, ii, and iii are from Henderson County, North Carolina vs. its neighbors

### **Industry-Specific Results**

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

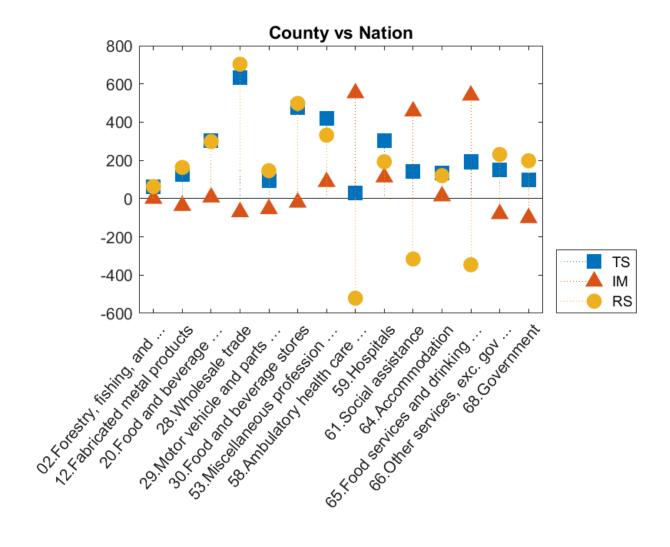
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry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

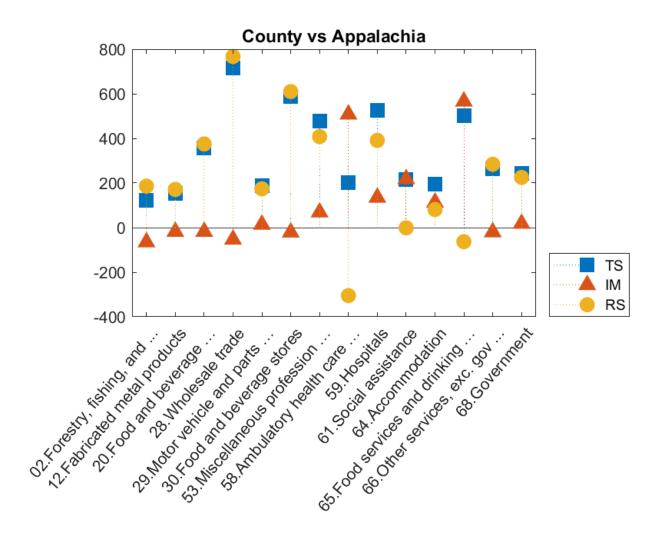


### **Chapter 14. Henderson County, North Carolina**

# Henderson County, North Carolina vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
02	Forestry, fishing, and	60	63	0	63	651
12	Fabricated metal products	28	126	-37	163	403
20	Food and beverage	53	305	7	298	826
28	Wholesale trade	82	633	-70	703	1,446
29	Motor vehicle and parts	100	92	-54	146	1,075
30	Food and beverage stores	115	478	-20	498	1,609
53	Miscellaneous profession	59	420	88	332	999
58	Ambulatory health care	178	31	552	-521	1,783
59	Hospitals	227	305	112	193	2,549
61	Social assistance	79	141	457	-316	917
64	Accommodation	62	133	13	120	749
65	Food services and drinking	319	194	540	-346	3,345
66	Other services, exc. gov	117	151	-80	231	1,308
68	Government	150	97	-101	198	1,581

## Selected SSA Components for Henderson County, North Carolina vs the Appalachian Region

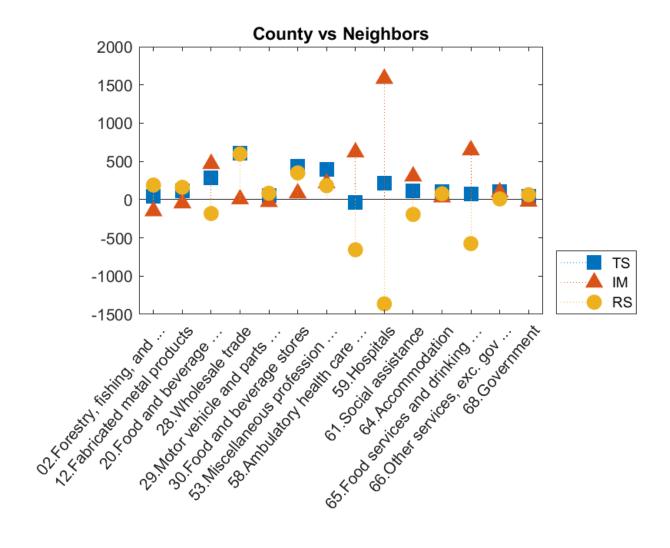


### **Chapter 14. Henderson County, North Carolina**

# Selected SSA Components for Henderson County, North Carolina vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
02	Forestry, fishing, and	2	121	-65	186	651
12	Fabricated metal products	1	153	-18	171	403
20	Food and beverage	2	357	-18	375	826
28	Wholesale trade	2	714	-53	767	1,446
29	Motor vehicle and parts	3	188	14	174	1,075
30	Food and beverage stores	3	589	-21	610	1,609
53	Miscellaneous profession	2	477	69	408	999
58	Ambulatory health care	5	203	508	-305	1,783
59	Hospitals	7	526	135	391	2,549
61	Social assistance	2	217	218	-1	917
64	Accommodation	2	194	113	81	749
65	Food services and drinking	10	503	566	-63	3,345
66	Other services, exc. gov	4	264	-20	284	1,308
68	Government	5	243	18	225	1,581

## Selected SSA Components for Henderson County, North Carolina vs Neighbors



### **Chapter 14. Henderson County, North Carolina**

# Selected SSA Components for Henderson County, North Carolina vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
02	Forestry, fishing, and	82	41	-149	190	651
12	Fabricated metal products	39	115	-46	161	403
20	Food and beverage	73	286	468	-182	826
28	Wholesale trade	113	603	6	597	1,446
29	Motor vehicle and parts	137	54	-29	83	1,075
30	Food and beverage stores	158	434	84	350	1,609
53	Miscellaneous profession	81	398	216	182	999
58	Ambulatory health care	244	-36	620	-656	1,783
59	Hospitals	313	219	1,582	-1,363	2,549
61	Social assistance	108	111	305	-194	917
64	Accommodation	86	109	32	77	749
65	Food services and drinking	440	73	648	-575	3,345
66	Other services, exc. gov	161	106	97	9	1,308
68	Government	207	40	-24	64	1,581

### Chapter 15. Jackson County, North Carolina

Employment in Jackson County, North Carolina, declined from 14,008 in 2005 to 13,822 in 2018, for a change of -186, or -1.33%. 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 Jackson County, North Carolina

County Summary	NS	TS	IM	RS
vs. U.S.	1,577	-1,767	332	-2,099
vs. Appalachia	43	-236	560	-796
vs. Neighbors	321	-504	579	-1,083

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 Jackson County, North Carolina, in comparison to at least one of the three referent regions.

## **Industry Group Membership for Jackson County, North Carolina**

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
30	Food and beverage	FIIIcii	no	yes	yes	yes
	stores	•		, , ,	,,,,	
32	Other retail	F III c iii	no	yes	yes	yes
61	Social assistance	BVbii	yes	no	yes	yes
63	Amusements, gambling,	Blai	yes	yes	yes	yes
64	Accommodation	Alaiii	yes	yes	yes	yes
65	Food services and drinking	Blai	yes	yes	yes	yes
66	Other services, exc. gov	FIIIcii	no	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 Jackson County, North Carolina vs. the United States

Groups a, b, and c are from Jackson County, North Carolina vs. Appalachia

Groups i, ii, and iii are from Jackson County, North Carolina vs. its neighbors

### **Industry-Specific Results**

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

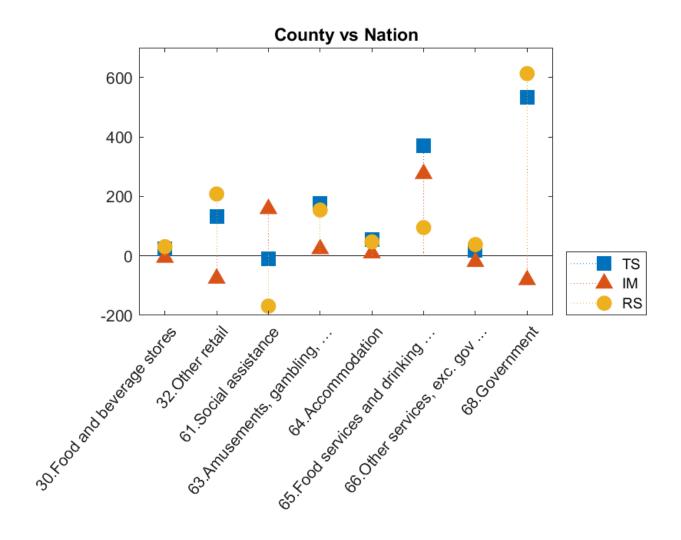
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry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

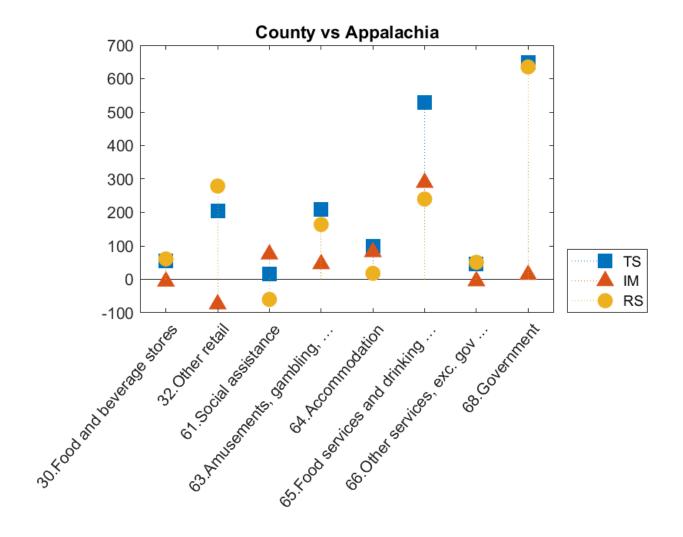


### **Chapter 15. Jackson County, North Carolina**

# **Jackson County, North Carolina vs U.S. for Selected Industries**

Industry	Name	NS	TS	IM	RS	Employment 2018
30	Food and beverage stores	31	25	-6	31	330
32	Other retail	76	132	-76	208	885
61	Social assistance	27	-11	158	-169	257
63	Amusements, gambling,	34	177	23	154	510
64	Accommodation	46	56	9	47	507
65	Food services and drinking	163	371	276	95	1,981
66	Other services, exc. gov	28	18	-20	38	299
68	Government	121	532	-81	613	1,722

## Selected SSA Components for Jackson County, North Carolina vs the Appalachian Region

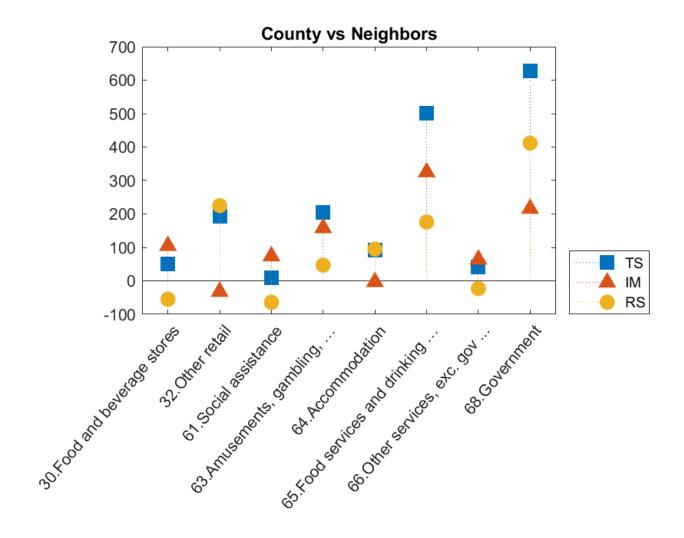


### **Chapter 15. Jackson County, North Carolina**

# Selected SSA Components for Jackson County, North Carolina vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018		
	Food and							
30	beverage	1	55	-6	61	330		
	stores							
32	Other retail	2	205	-74	279	885		
61	Social	1	15	75	-60	257		
	assistance	ı	13					
63	Amusements,	1	210	46	164	510		
	gambling,	Į.	210	40				
64	Accommodation	1	100	82	18	507		
65	Food services			5	529	200	240	4.004
	and drinking	5	529	289	240	1,981		
66	Other services,	1	1 46	-5	51	200		
66	exc. gov	I				299		
68	Government	4	649	14	635	1,722		

## Selected SSA Components for Jackson County, North Carolina vs Neighbors



### **Chapter 15. Jackson County, North Carolina**

# Selected SSA Components for Jackson County, North Carolina vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018	
_	Food and						
30	beverage	6	50	105	-55	330	
	stores						
32	Other retail	16	193	-32	225	885	
61	Social	6	10	74	-64	257	
	assistance	0	10	7-4		251	
63	Amusements,	7	205	158	47	510	
	gambling,	, , , , , , , , , , , , , , , , , , ,	203	130	47	310	
64	Accommodation	9	92	-3	95	507	
65	Food services	33 501	22	22 501	325	176	1,981
65	and drinking		301	323	170	1,901	
66	Other services,	6	41	64	-23	299	
	exc. gov		0 41			299	
68	Government	25	628	216	412	1,722	

### Chapter 16. McDowell County, North Carolina

Employment in McDowell County, North Carolina, declined from 17,382 in 2005 to 16,293 in 2018, for a change of -1,089, or -6.27%. 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 McDowell County, North Carolina

County Summary	NS	TS	IM	RS
vs. U.S.	1,961	-3,056	-2,507	-549
vs. Appalachia	53	-1,150	-1,476	326
vs. Neighbors	892	-1,985	-1,160	-825

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 McDowell County, North Carolina, in comparison to at least one of the three referent regions.

## **Industry Group Membership for McDowell County, North Carolina**

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
12	Fabricated metal products	F III c iii	no	yes	yes	yes
23	Paper products	DIIIci	no	yes	yes	yes
26	Chemical products	FIIIci	no	yes	yes	yes
31	General merchandise	FIII c iii	no	yes	yes	yes
55	Administrative and	Alai	yes	yes	yes	yes
57	Educational services	FIIIai	no	yes	yes	yes
58	Ambulatory health care	BIIbii	yes	yes	yes	yes
61	Social assistance	Blai	yes	yes	yes	yes
64	Accommodation	Alai	yes	yes	yes	yes
65	Food services and drinking	BVbii	yes	no	yes	yes
66	Other services, exc. gov	F III c ii	no	yes	yes	yes

#### Notes:

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

Groups I, II, and III are from McDowell County, North Carolina vs. the United States

Groups a, b, and c are from McDowell County, North Carolina vs. Appalachia

Groups i, ii, and iii are from McDowell County, North Carolina vs. its neighbors

### **Industry-Specific Results**

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

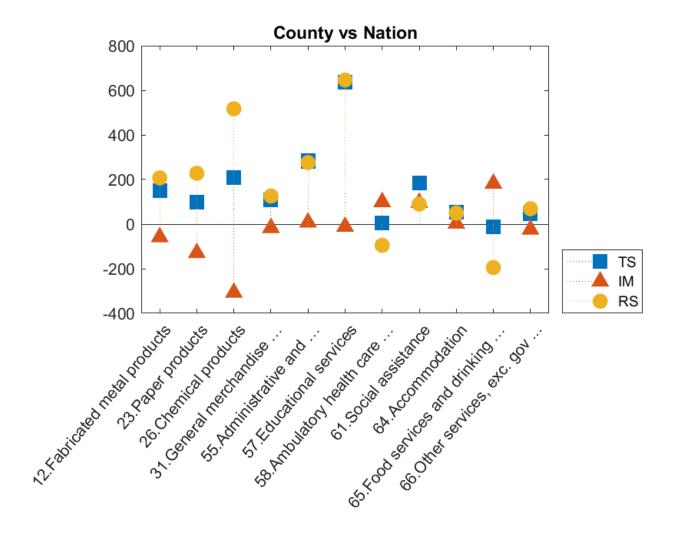
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry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

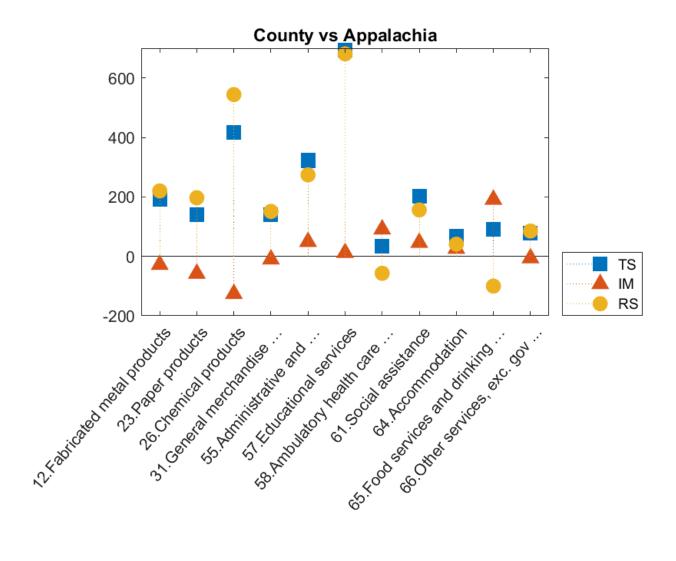


### **Chapter 16. McDowell County, North Carolina**

# **McDowell County, North Carolina vs U.S. for Selected Industries**

Industry	Name	NS	TS	IM	RS	Employment 2018
12	Fabricated metal products	44	149	-58	207	584
23	Paper products	41	99	-129	228	500
26	Chemical products	215	210	-307	517	2,332
31	General merchandise	33	109	-17	126	432
55	Administrative and	41	284	8	276	684
57	Educational services	60	635	-11	646	1,225
58	Ambulatory health care	32	4	99	-95	316
61	Social assistance	16	186	96	90	349
64	Accommodation	15	53	3	50	197
65	Food services and drinking	108	-13	182	-195	1,048
66	Other services, exc. gov	34	45	-24	69	385

## Selected SSA Components for McDowell County, North Carolina vs the Appalachian Region

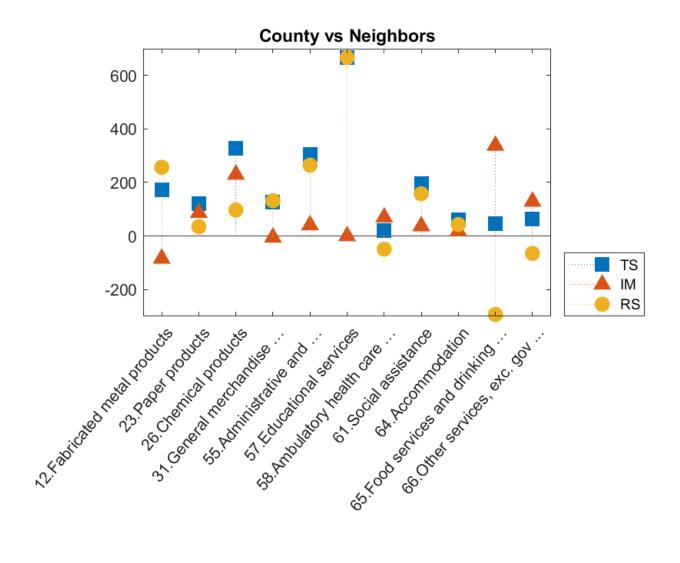


### **Chapter 16. McDowell County, North Carolina**

# Selected SSA Components for McDowell County, North Carolina vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
12	Fabricated metal products	1	192	-28	220	584
23	Paper products	1	139	-58	197	500
26	Chemical products	6	418	-126	544	2,332
31	General merchandise	1	141	-10	151	432
55	Administrative and	1	323	49	274	684
57	Educational services	2	693	12	681	1,225
58	Ambulatory health care	1	34	91	-57	316
61	Social assistance	0	202	46	156	349
64	Accommodation	0	67	26	41	197
65	Food services and drinking	3	91	191	-100	1,048
66	Other services, exc. gov	1	79	-6	85	385

### Selected SSA Components for McDowell County, North Carolina vs Neighbors



### **Chapter 16. McDowell County, North Carolina**

## Selected SSA Components for McDowell County, North Carolina vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
12	Fabricated metal products	20	173	-84	257	584
23	Paper products	18	122	87	35	500
26	Chemical products	98	327	230	97	2,332
31	General merchandise	15	127	-5	132	432
55	Administrative and	18	306	41	265	684
57	Educational services	27	667	0	667	1,225
58	Ambulatory health care	14	21	70	-49	316
61	Social assistance	8	195	37	158	349
64	Accommodation	7	61	18	43	197
65	Food services and drinking	49	45	338	-293	1,048
66	Other services, exc. gov	16	64	129	-65	385

### Chapter 17. Macon County, North Carolina

Employment in Macon County, North Carolina, declined from 11,228 in 2005 to 11,168 in 2018, for a change of -60, or -0.53%. 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 Macon County, North Carolina**

County Summary	NS	TS	IM	RS
vs. U.S.	1,269	-1,326	19	-1,345
vs. Appalachia	36	-100	228	-328
vs. Neighbors	-110	54	-5	59

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 Macon County, North Carolina, in comparison to at least one of the three referent regions.

### **Industry Group Membership for Macon County, North Carolina**

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
	Food and					
30	beverage stores	FIIIci	no	yes	yes	yes
•	Federal					
45	Reserve banks,	FIIIci	no	yes	yes	yes
53	Miscellaneous profession	Blai	yes	yes	yes	yes
55	Administrative and	A V b ii	yes	no	yes	yes
57	Educational services	FIII a ii	no	yes	yes	yes
61	Social assistance	BIIbii	yes	yes	yes	yes
64	Accommodation	Alai	yes	yes	yes	yes
65	Food services and drinking	Blai	yes	yes	yes	yes
68	Government	F III a ii	no	yes	yes	yes

#### Notes:

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

Groups I, II, and III are from Macon County, North Carolina vs. the United States

Groups a, b, and c are from Macon County, North Carolina vs. Appalachia

Groups i, ii, and iii are from Macon County, North Carolina vs. its neighbors

### **Industry-Specific Results**

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

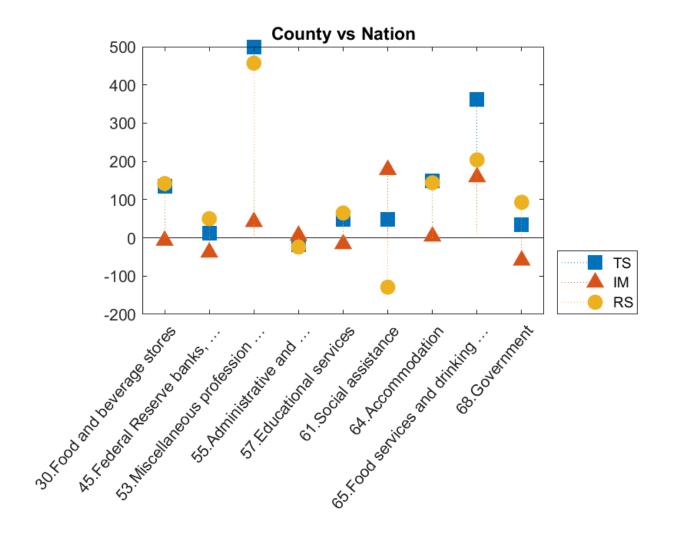
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry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

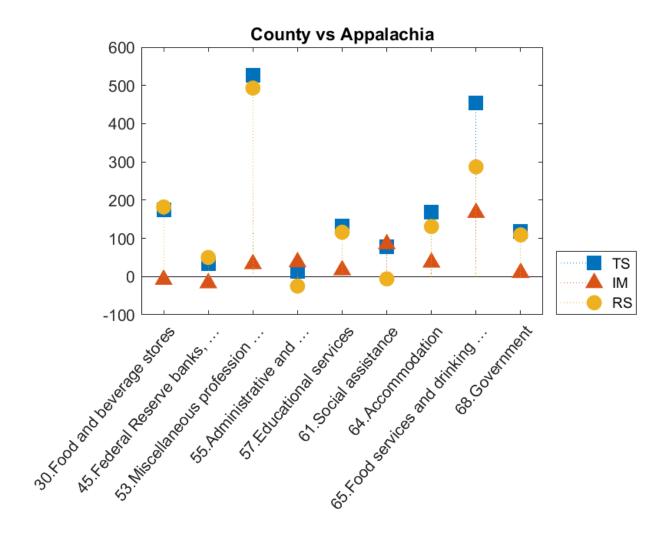


### **Chapter 17. Macon County, North Carolina**

## **Macon County, North Carolina vs U.S. for Selected Industries**

Industry	Name	NS	TS	IM	RS	Employment 2018
30	Food and beverage stores	41	135	-7	142	539
45	Federal Reserve banks, 	22	12	-38	50	229
53	Miscellaneous profession	28	499	42	457	772
55	Administrative and	31	-18	6	-24	292
57	Educational services	87	49	-16	65	904
61	Social assistance	31	49	178	-129	351
64	Accommodation	21	148	4	144	351
65	Food services and drinking	94	363	159	204	1,291
68	Government	87	34	-59	93	895

## Selected SSA Components for Macon County, North Carolina vs the Appalachian Region

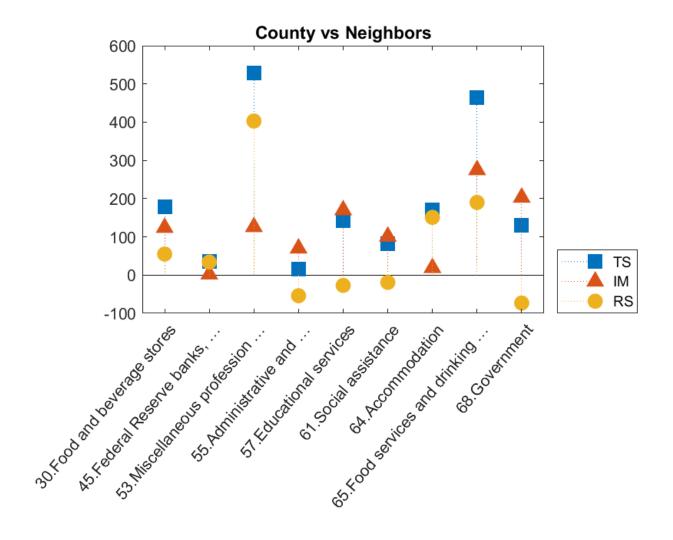


### **Chapter 17. Macon County, North Carolina**

# Selected SSA Components for Macon County, North Carolina vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
30	Food and beverage stores	1	174	-8	182	539
45	Federal Reserve banks, 	1	33	-17	50	229
53	Miscellaneous profession	1	526	33	493	772
55	Administrative and	1	13	38	-25	292
57	Educational services	3	133	17	116	904
61	Social assistance	1	79	85	-6	351
64	Accommodation	1	168	37	131	351
65	Food services and drinking	3	454	167	287	1,291
68	Government	3	119	10	109	895

### **Selected SSA Components for Macon County, North Carolina vs Neighbors**



### **Chapter 17. Macon County, North Carolina**

## Selected SSA Components for Macon County, North Carolina vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
30	Food and beverage stores	-4	179	124	55	539
45	Federal Reserve banks, 	-2	36	2	34	229
53	Miscellaneous profession	-2	529	126	403	772
55	Administrative and	-3	16	70	-54	292
57	Educational services	-8	143	170	-27	904
61	Social assistance	-3	82	101	-19	351
64	Accommodation	-2	170	19	151	351
65	Food services and drinking	-8	465	275	190	1,291
68	Government	-8	130	203	-73	895

### **Chapter 18. Madison County, North Carolina**

Employment in Madison County, North Carolina, declined from 4,180 in 2005 to 3,799 in 2018, for a change of -381, or -9.11%. 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 Madison County, North Carolina**

County Summary	NS	TS	IM	RS
vs. U.S.	472	-853	-68	-785
vs. Appalachia	11	-396	82	-478
vs. Neighbors	393	-775	-142	-633

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 Madison County, North Carolina, in comparison to at least one of the three referent regions.

### **Industry Group Membership for Madison County, North Carolina**

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
20	Food and beverage	Elai	no	yes	yes	yes
27	Plastics and rubber prod	DIIIai	no	yes	yes	yes
30	Food and beverage stores	FIIIci	no	yes	yes	yes
61	Social assistance	Blai	yes	yes	yes	yes
64	Accommodation	Alai	yes	yes	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 Madison County, North Carolina vs. the United States

Groups a, b, and c are from Madison County, North Carolina vs. Appalachia

Groups i, ii, and iii are from Madison County, North Carolina vs. its neighbors

### **Industry-Specific Results**

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

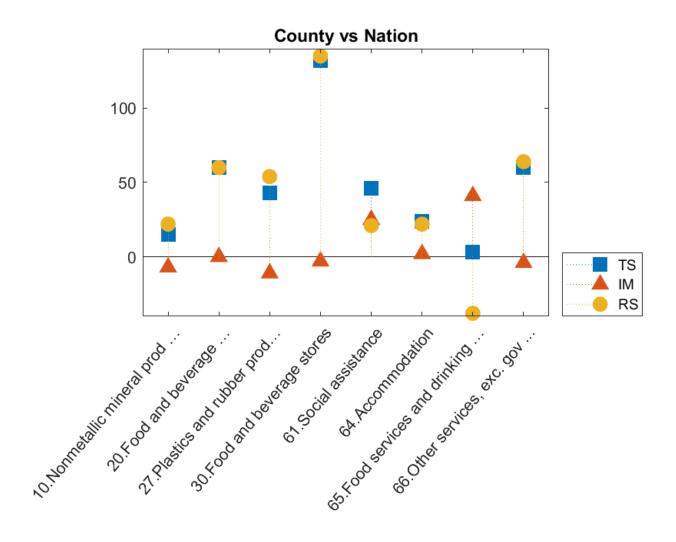
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry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

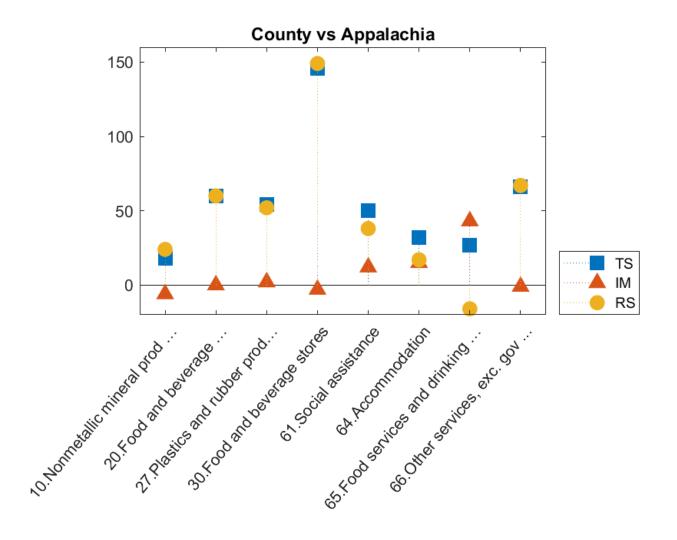


### **Chapter 18. Madison County, North Carolina**

## Madison County, North Carolina vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
10	Nonmetallic mineral prod	3	15	-7	22	43
20	Food and beverage	0	60	0	60	60
27	Plastics and rubber prod	11	43	-11	54	151
30	Food and beverage stores	15	132	-3	135	277
61	Social assistance	4	46	25	21	88
64	Accommodation	8	24	2	22	104
65	Food services and drinking	24	3	41	-38	245
66	Other services, exc. gov	6	60	-4	64	119

## Selected SSA Components for Madison County, North Carolina vs the Appalachian Region

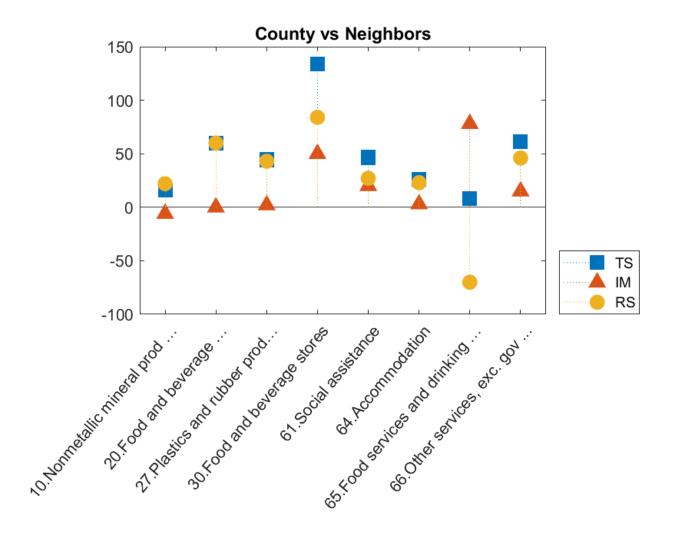


### **Chapter 18. Madison County, North Carolina**

# Selected SSA Components for Madison County, North Carolina vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
10	Nonmetallic mineral prod	0	18	-6	24	43
20	Food and beverage	0	60	0	60	60
27	Plastics and rubber prod	0	54	2	52	151
30	Food and beverage stores	0	146	-3	149	277
61	Social assistance	0	50	12	38	88
64	Accommodation	0	32	15	17	104
65	Food services and drinking	1	27	43	-16	245
66	Other services, exc. gov	0	66	-1	67	119

### **Selected SSA Components for Madison County, North Carolina vs Neighbors**



### Chapter 18. Madison County, North Carolina

## Selected SSA Components for Madison County, North Carolina vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
10	Nonmetallic mineral prod	2	16	-6	22	43
20	Food and beverage	0	60	0	60	60
27	Plastics and rubber prod	9	45	2	43	151
30	Food and beverage stores	12	134	50	84	277
61	Social assistance	4	47	20	27	88
64	Accommodation	7	26	3	23	104
65	Food services and drinking	20	8	78	-70	245
66	Other services, exc. gov	5	61	15	46	119

### Chapter 19. Mitchell County, North Carolina

Employment in Mitchell County, North Carolina, declined from 6,216 in 2005 to 4,648 in 2018, for a change of -1,568, or -25.23%. 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 Mitchell County, North Carolina**

County Summary	NS	TS	IM	RS
vs. U.S.	699	-2,269	-303	-1,966
vs. Appalachia	17	-1,585	-273	-1,312
vs. Neighbors	-501	-1,073	-63	-1,010

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 Mitchell County, North Carolina, in comparison to at least one of the three referent regions.

## **Industry Group Membership for Mitchell County, North Carolina**

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	F III c iii	no	yes	yes	yes
53	Miscellaneous profession	BIIai	yes	yes	yes	yes
55	Administrative and	A V e ii	yes	no	no	yes
58	Ambulatory health care	Blai	yes	yes	yes	yes
61	Social assistance	BVbii	yes	no	yes	yes
64	Accommodation	Alai	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 Mitchell County, North Carolina vs. the United States

Groups a, b, and c are from Mitchell County, North Carolina vs. Appalachia

Groups i, ii, and iii are from Mitchell County, North Carolina vs. its neighbors

### **Industry-Specific Results**

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

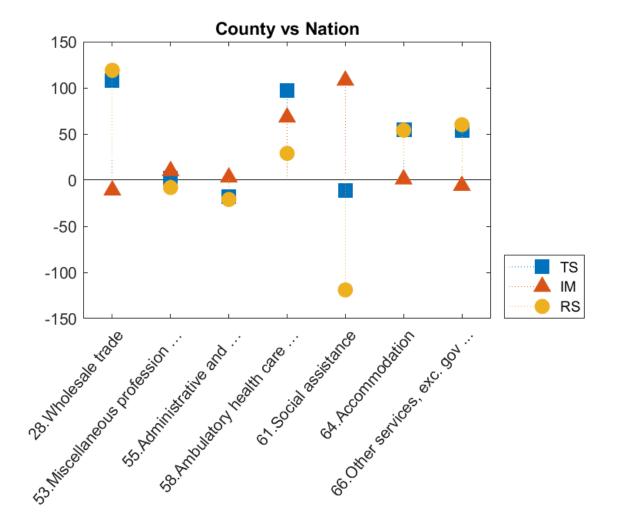
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry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

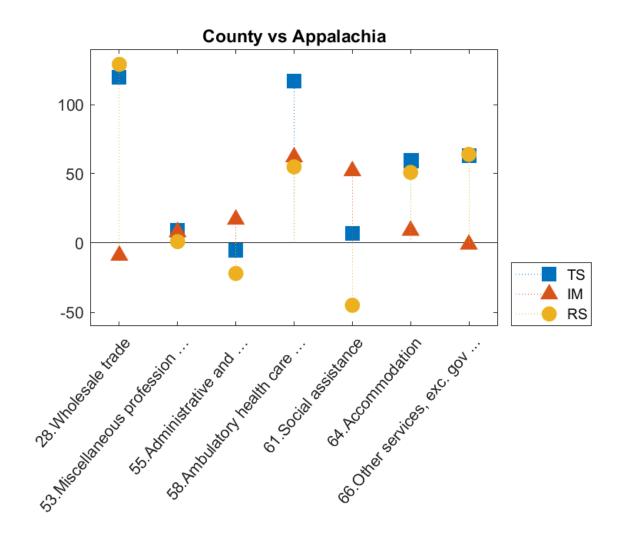


### **Chapter 19. Mitchell County, North Carolina**

## Mitchell County, North Carolina vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
28	Wholesale trade	13	108	-11	119	240
53	Miscellaneous profession	7	2	10	-8	71
55	Administrative and	14	-18	3	-21	118
58	Ambulatory health care	22	97	68	29	311
61	Social assistance	19	-11	108	-119	173
64	Accommodation	5	55	1	54	101
66	Other services, exc. gov	8	54	-6	60	138

## Selected SSA Components for Mitchell County, North Carolina vs the Appalachian Region

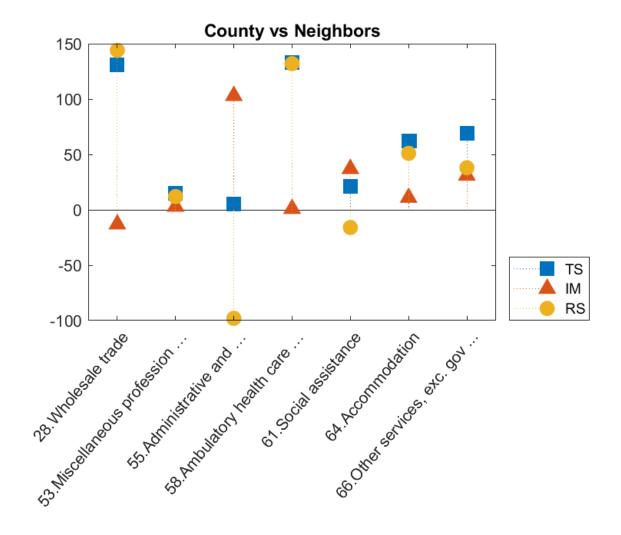


### **Chapter 19. Mitchell County, North Carolina**

# Selected SSA Components for Mitchell County, North Carolina vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
28	Wholesale trade	0	120	-9	129	240
53	Miscellaneous profession	0	9	8	1	71
55	Administrative and	0	-5	17	-22	118
58	Ambulatory health care	1	117	62	55	311
61	Social assistance	1	7	52	-45	173
64	Accommodation	0	60	9	51	101
66	Other services, exc. gov	0	63	-1	64	138

### Selected SSA Components for Mitchell County, North Carolina vs Neighbors



### **Chapter 19. Mitchell County, North Carolina**

## Selected SSA Components for Mitchell County, North Carolina vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
28	Wholesale trade	-10	131	-13	144	240
53	Miscellaneous profession	-5	15	3	12	71
55	Administrative and	-10	5	103	-98	118
58	Ambulatory health care	-16	133	1	132	311
61	Social assistance	-13	21	37	-16	173
64	Accommodation	-3	62	11	51	101
66	Other services, exc. gov	-6	69	31	38	138

### Chapter 20. Polk County, North Carolina

Employment in Polk County, North Carolina, declined from 4,963 in 2005 to 4,952 in 2018, for a change of -11, or -0.22%. 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 Polk County, North Carolina

County Summary	NS	TS	IM	RS
vs. U.S.	560	-568	-185	-383
vs. Appalachia	14	-22	-30	8
vs. Neighbors	828	-836	24	-860

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 Polk County, North Carolina, in comparison to at least one of the three referent regions.

## **Industry Group Membership for Polk County, North Carolina**

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
28	Wholesale trade	FIIIci	no	yes	yes	yes
29	Motor vehicle and parts	F III a iv	no	yes	yes	no
53	Miscellaneous profession	Blai	yes	yes	yes	yes
55	Administrative and	Alai	yes	yes	yes	yes
59	Hospitals	Elaii	no	yes	yes	yes
60	Nursing and residential	Elaii	no	yes	yes	yes
62	Performing arts, spectator	Blai	yes	yes	yes	yes
63	Amusements, gambling,	Blai	yes	yes	yes	yes
65	Food services and drinking	Blai	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 Polk County, North Carolina vs. the United States

Groups a, b, and c are from Polk County, North Carolina vs. Appalachia

Groups i, ii, and iii are from Polk County, North Carolina vs. its neighbors

### **Industry-Specific Results**

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

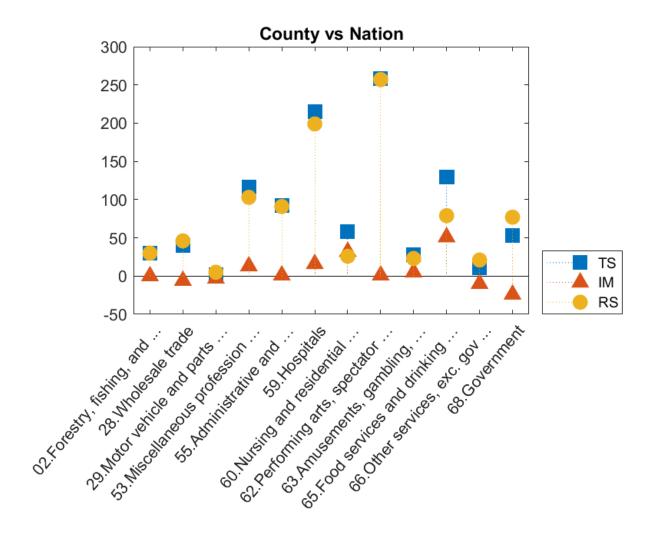
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry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

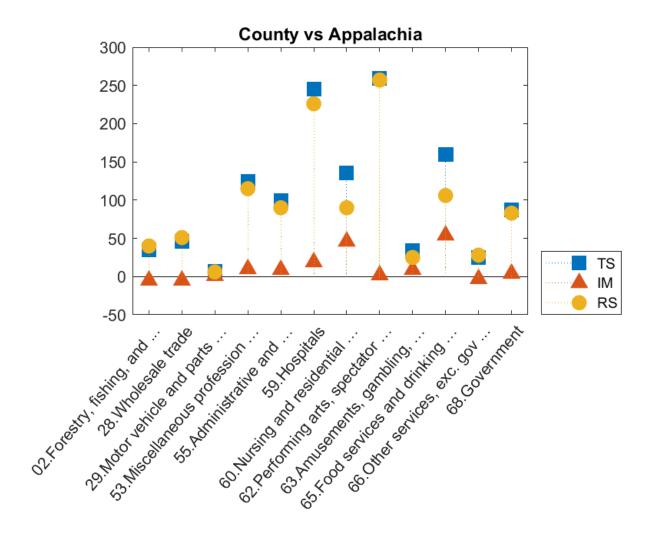


### **Chapter 20. Polk County, North Carolina**

## Polk County, North Carolina vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
02	Forestry, fishing, and	5	30	0	30	75
28	Wholesale trade	7	40	-6	46	109
29	Motor vehicle and parts	5	2	-3	5	54
53	Miscellaneous profession	9	116	13	103	201
55	Administrative and	7	92	1	91	162
59	Hospitals	32	215	16	199	530
60	Nursing and residential	80	58	32	26	851
62	Performing arts, spectator	1	258	1	257	268
63	Amusements, gambling,	7	28	5	23	92
65	Food services and drinking	30	130	51	79	428
66	Other services, exc. gov	15	11	-10	21	158
68	Government	35	53	-24	77	401

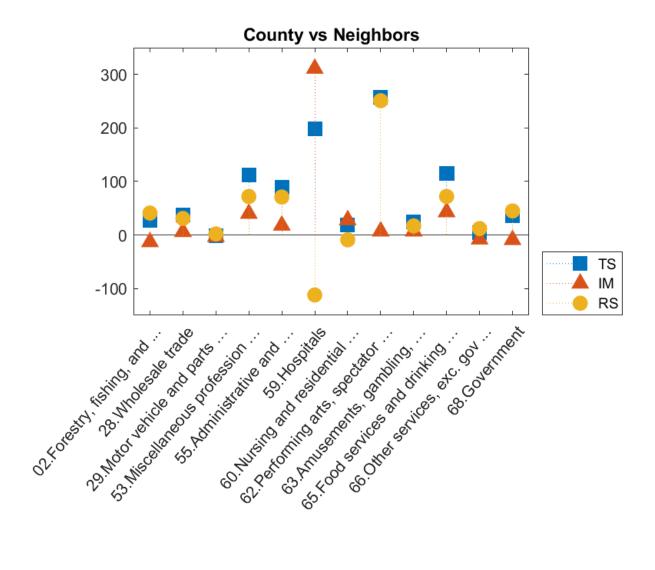
## Selected SSA Components for Polk County, North Carolina vs the Appalachian Region



# Selected SSA Components for Polk County, North Carolina vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
02	Forestry, fishing, and	0	35	-5	40	75
28	Wholesale trade	0	46	-5	51	109
29	Motor vehicle and parts	0	7	1	6	54
53	Miscellaneous profession	0	125	10	115	201
55	Administrative and	0	99	9	90	162
59	Hospitals	1	245	19	226	530
60	Nursing and residential	2	136	46	90	851
62	Performing arts, spectator	0	259	2	257	268
63	Amusements, gambling,	0	34	9	25	92
65	Food services and drinking	1	160	54	106	428
66	Other services, exc. gov	0	25	-3	28	158
68	Government	1	87	4	83	401

### Selected SSA Components for Polk County, North Carolina vs Neighbors



### **Chapter 20. Polk County, North Carolina**

## Selected SSA Components for Polk County, North Carolina vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
02	Forestry, fishing, and	7	28	-13	41	75
28	Wholesale trade	10	37	6	31	109
29	Motor vehicle and parts	8	-1	-3	2	54
53	Miscellaneous profession	13	112	40	72	201
55	Administrative and	10	89	18	71	162
59	Hospitals	47	199	311	-112	530
60	Nursing and residential	119	19	28	-9	851
62	Performing arts, spectator	2	258	7	251	268
63	Amusements, gambling,	10	24	7	17	92
65	Food services and drinking	45	115	43	72	428
66	Other services, exc. gov	22	4	-8	12	158
68	Government	52	36	-9	45	401

### **Chapter 21. Rutherford County, North Carolina**

Employment in Rutherford County, North Carolina, declined from 22,086 in 2005 to 18,325 in 2018, for a change of -3,761, or -17.03%. 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 Rutherford County, North Carolina

County Summary	NS	TS	IM	RS
vs. U.S.	2,492	-6,249	-1,351	-4,898
vs. Appalachia	73	-3,832	-982	-2,850
vs. Neighbors	2,375	-6,137	-1,869	-4,268

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

## **Industry Group Membership for Rutherford County, North Carolina**

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
09	Wood products	F III c iii	no	yes	yes	yes
13	Machinery	F III c iii	no	yes	yes	yes
30	Food and beverage stores	FIIIci	no	yes	yes	yes
36	Truck transportation	FIIIcii	no	yes	yes	yes
44	Data processing, internet	Elai	no	yes	yes	yes
53	Miscellaneous profession	BIIbii	yes	yes	yes	yes
55	Administrative and	Alaii	yes	yes	yes	yes
61	Social assistance	Bllai	yes	yes	yes	yes
64	Accommodation	Alai	yes	yes	yes	yes
65	Food services and drinking	BVbv	yes	no	yes	no
66	Other services, exc. gov	FIIIcii	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 Rutherford County, North Carolina vs. the United States

Groups a, b, and c are from Rutherford County, North Carolina vs. Appalachia

Groups i, ii, and iii are from Rutherford County, North Carolina vs. its neighbors

### **Industry-Specific Results**

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

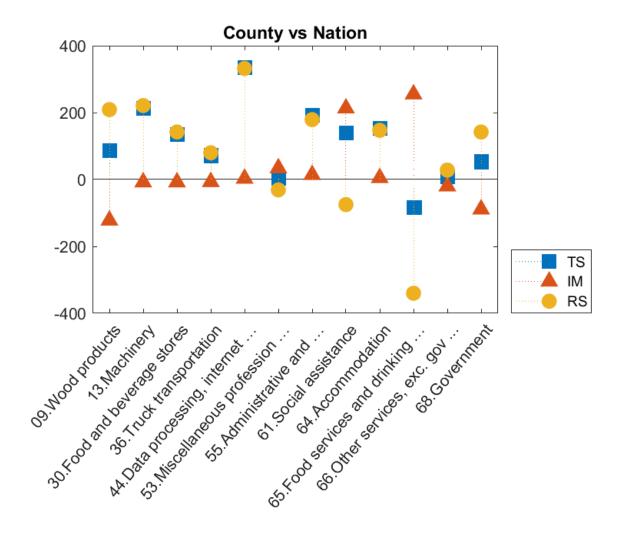
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry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

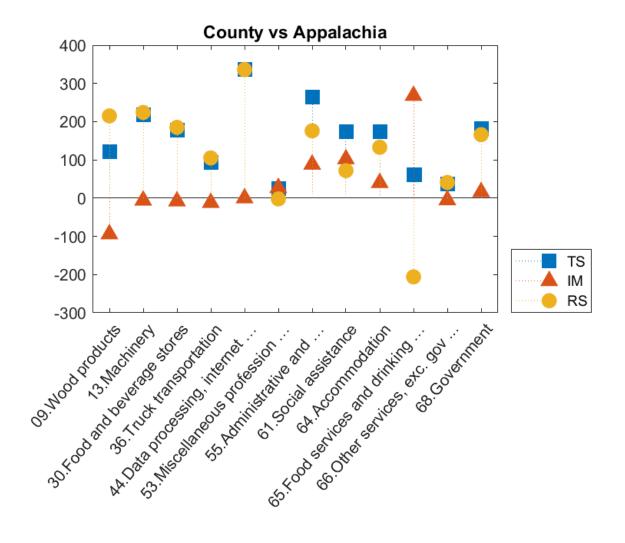


### **Chapter 21. Rutherford County, North Carolina**

## Rutherford County, North Carolina vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
09	Wood products	35	87	-122	209	435
13	Machinery	5	213	-8	221	265
30	Food and beverage stores	43	134	-8	142	563
36	Truck transportation	21	73	-7	80	276
44	Data processing, internet	1	335	3	332	343
53	Miscellaneous profession	22	3	34	-31	225
55	Administrative and	73	193	14	179	911
61	Social assistance	37	138	213	-75	500
64	Accommodation	22	152	5	147	371
65	Food services and drinking	151	-85	255	-340	1,404
66	Other services, exc. gov	29	8	-20	28	297
68	Government	133	53	-89	142	1,361

## Selected SSA Components for Rutherford County, North Carolina vs the Appalachian Region

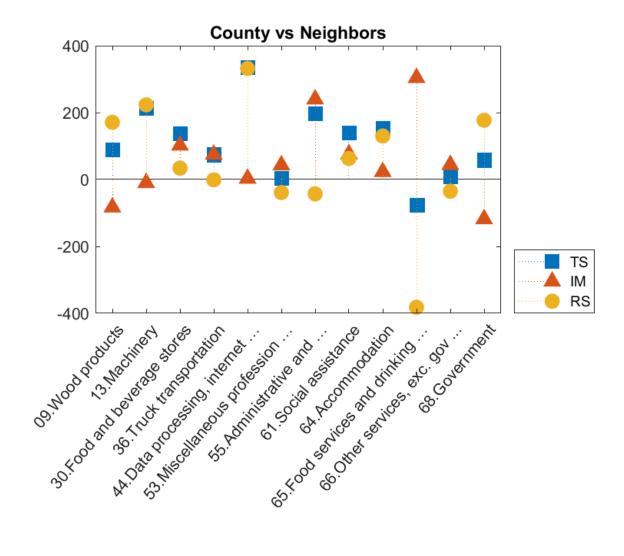


### **Chapter 21. Rutherford County, North Carolina**

# Selected SSA Components for Rutherford County, North Carolina vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
09	Wood products	1	121	-94	215	435
13	Machinery	0	218	-6	224	265
30	Food and beverage stores	1	177	-8	185	563
36	Truck transportation	1	93	-12	105	276
44	Data processing, internet	0	336	-0	336	343
53	Miscellaneous profession	1	25	27	-2	225
55	Administrative and	2	264	88	176	911
61	Social assistance	1	174	102	72	500
64	Accommodation	1	173	40	133	371
65	Food services and drinking	5	62	268	-206	1,404
66	Other services, exc. gov	1	36	-5	41	297
68	Government	4	182	16	166	1,361

### Selected SSA Components for Rutherford County, North Carolina vs Neighbors



### **Chapter 21. Rutherford County, North Carolina**

## Selected SSA Components for Rutherford County, North Carolina vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
09	Wood products	34	88	-83	171	435
13	Machinery	5	213	-10	223	265
30	Food and beverage stores	41	136	102	34	563
36	Truck transportation	20	74	75	-1	276
44	Data processing, internet	1	335	3	332	343
53	Miscellaneous profession	21	4	43	-39	225
55	Administrative and	69	197	240	-43	911
61	Social assistance	35	139	76	63	500
64	Accommodation	21	153	23	130	371
65	Food services and drinking	144	-78	304	-382	1,404
66	Other services, exc. gov	28	9	44	-35	297
68	Government	126	59	-118	177	1,361

### Chapter 22. Stokes County, North Carolina

Employment in Stokes County, North Carolina, declined from 7,585 in 2005 to 7,492 in 2018, for a change of -93, or -1.23%. 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 Stokes County, North Carolina

County Summary	NS	TS	IM	RS
vs. U.S.	855	-942	-278	-664
vs. Appalachia	21	-120	-71	-49
vs. Neighbors	-170	74	276	-202

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 Stokes County, North Carolina, in comparison to at least one of the three referent regions.

## **Industry Group Membership for Stokes County, North Carolina**

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	FIIIci	no	yes	yes	yes
30	Food and beverage stores	FIIIci	no	yes	yes	yes
31	General merchandise 	FIIIci	no	yes	yes	yes
37	Transit and ground	Elciii	no	yes	yes	yes
55	Administrative and	Alai	yes	yes	yes	yes
58	Ambulatory health care	BIIbii	yes	yes	yes	yes
61	Social assistance	BVbii	yes	no	yes	yes
65	Food services and drinking	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 Stokes County, North Carolina vs. the United States

Groups a, b, and c are from Stokes County, North Carolina vs. Appalachia

Groups i, ii, and iii are from Stokes County, North Carolina vs. its neighbors

### **Industry-Specific Results**

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

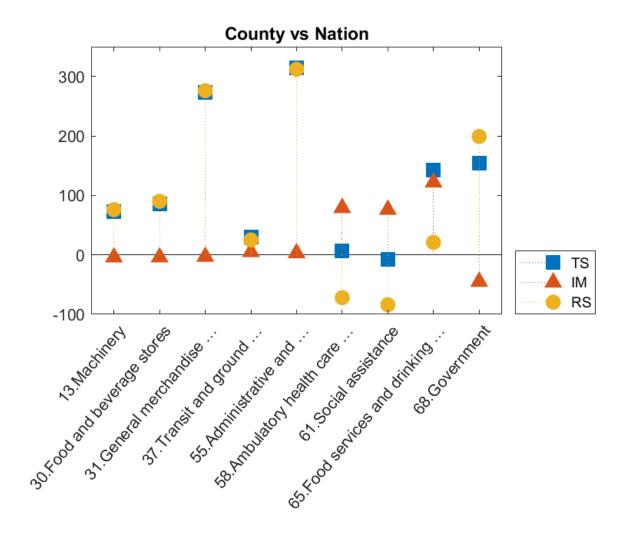
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry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

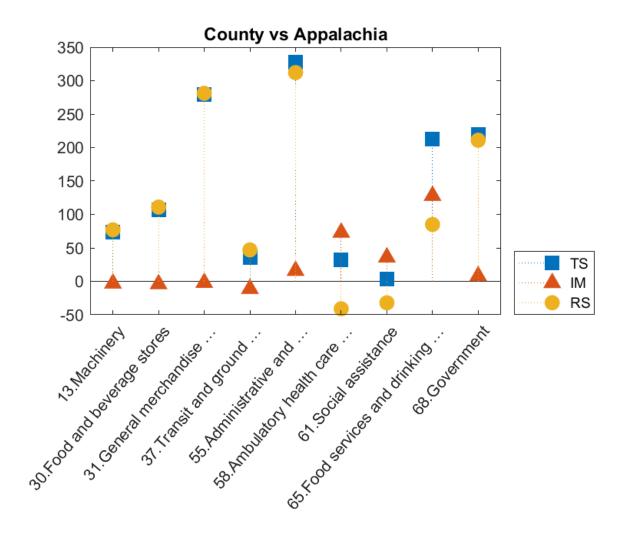


### **Chapter 22. Stokes County, North Carolina**

## Stokes County, North Carolina vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
13	Machinery	3	72	-4	76	98
30	Food and beverage stores	22	86	-4	90	302
31	General merchandise 	7	273	-3	276	339
37	Transit and ground	6	30	5	25	89
55	Administrative and	13	315	3	312	444
58	Ambulatory health care	25	7	79	-72	259
61	Social assistance	13	-8	76	-84	121
65	Food services and drinking	72	143	122	21	857
68	Government	66	154	-45	199	808

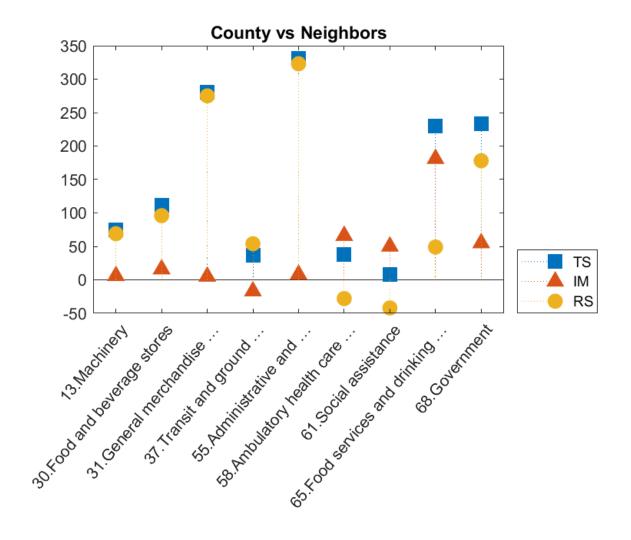
## Selected SSA Components for Stokes County, North Carolina vs the Appalachian Region



# Selected SSA Components for Stokes County, North Carolina vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
13	Machinery	0	74	-3	77	98
30	Food and beverage stores	1	107	-4	111	302
31	General merchandise 	0	279	-2	281	339
37	Transit and ground	0	36	-11	47	89
55	Administrative and	0	328	16	312	444
58	Ambulatory health care	1	32	73	-41	259
61	Social assistance	0	4	36	-32	121
65	Food services and drinking	2	213	128	85	857
68	Government	2	219	8	211	808

### **Selected SSA Components for Stokes County, North Carolina vs Neighbors**



## Selected SSA Components for Stokes County, North Carolina vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
13	Machinery	-1	75	6	69	98
30	Food and beverage stores	-4	112	16	96	302
31	General merchandise 	-1	280	5	275	339
37	Transit and ground	-1	37	-17	54	89
55	Administrative and	-3	331	8	323	444
58	Ambulatory health care	-5	38	66	-28	259
61	Social assistance	-3	8	50	-42	121
65	Food services and drinking	-14	230	181	49	857
68	Government	-13	233	55	178	808

### Chapter 23. Surry County, North Carolina

Employment in Surry County, North Carolina, declined from 33,457 in 2005 to 29,247 in 2018, for a change of -4,210, or -12.58%. 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 Surry County, North Carolina**

County Summary	NS	TS	IM	RS
vs. U.S.	3,770	-7,980	-2,309	-5,671
vs. Appalachia	109	-4,320	-2,575	-1,745
vs. Neighbors	-1,453	-2,761	-2,345	-416

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 Surry County, North Carolina, in comparison to at least one of the three referent regions.

## **Industry Group Membership for Surry County, North Carolina**

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	FIIIci	no	yes	yes	yes
	products					
29	Motor vehicle and parts	FIIIai	no	yes	yes	yes
	General					
31	merchandise	FIIIci	no	yes	yes	yes
	•••					
53	Miscellaneous	Blai	yes	yes	yes	yes
	profession				,,,,	
_,	Management					
54	of companies	Alai	yes	yes	yes	yes
	A mbulatanı					
58	Ambulatory health care	BIIbi	yes	yes	yes	yes
59	Hospitals	Elaii	no	yes	yes	yes
	Food services					
65	and drinking	BIIbii	yes	yes	yes	yes
	Other					
66	services, exc.	FIIIci	no	VAS	VAS	VAS
00	gov	1 111 61	110	yes	yes	yes
	gov					

#### Notes:

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

Groups I, II, and III are from Surry County, North Carolina vs. the United States

Groups a, b, and c are from Surry County, North Carolina vs. Appalachia

Groups i, ii, and iii are from Surry County, North Carolina vs. its neighbors

### **Industry-Specific Results**

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

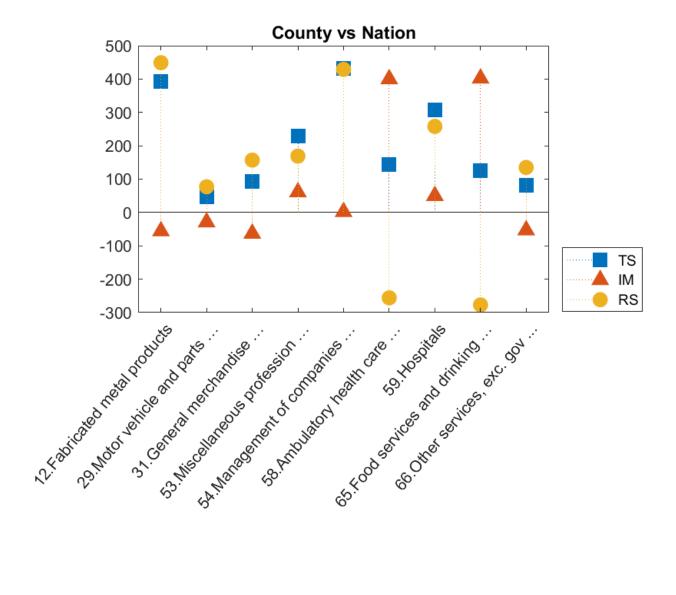
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry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

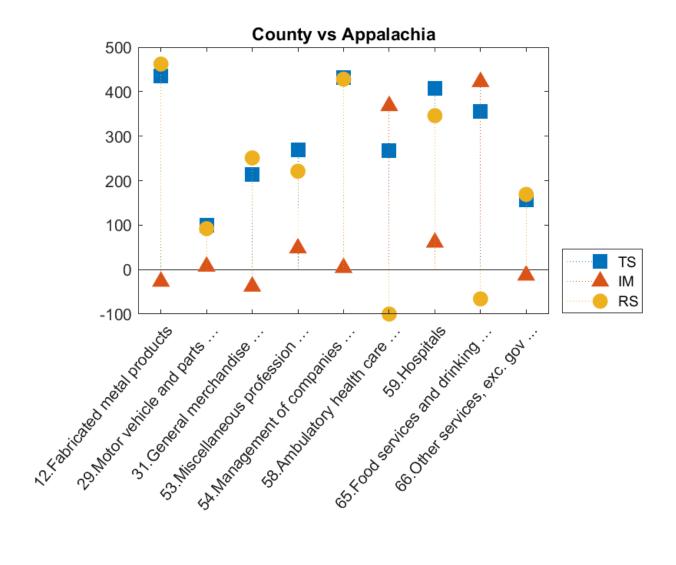


### **Chapter 23. Surry County, North Carolina**

## Surry County, North Carolina vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
12	Fabricated metal products	43	393	-56	449	814
29	Motor vehicle and parts	53	48	-29	77	568
31	General merchandise 	123	94	-63	157	1,310
53	Miscellaneous profession	41	230	61	169	631
54	Management of companies	1	431	2	429	440
58	Ambulatory health care	129	144	400	-256	1,412
59	Hospitals	102	308	50	258	1,315
65	Food services and drinking	238	125	402	-277	2,473
66	Other services, exc. gov	77	82	-53	135	842

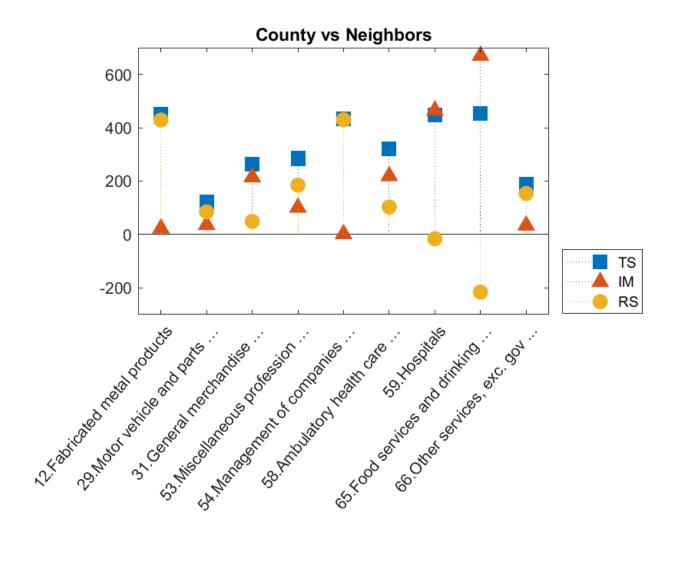
## Selected SSA Components for Surry County, North Carolina vs the Appalachian Region



# Selected SSA Components for Surry County, North Carolina vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
12	Fabricated metal products	1	435	-27	462	814
29	Motor vehicle and parts	2	99	7	92	568
31	General merchandise 	4	213	-38	251	1,310
53	Miscellaneous profession	1	269	48	221	631
54	Management of companies	0	432	4	428	440
58	Ambulatory health care	4	268	368	-100	1,412
59	Hospitals	3	407	61	346	1,315
65	Food services and drinking	7	356	422	-66	2,473
66	Other services, exc. gov	2	156	-13	169	842

### Selected SSA Components for Surry County, North Carolina vs Neighbors



### **Chapter 23. Surry County, North Carolina**

## Selected SSA Components for Surry County, North Carolina vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
12	Fabricated metal products	-16	452	23	429	814
29	Motor vehicle and parts	-20	121	36	85	568
31	General merchandise 	-48	264	215	49	1,310
53	Miscellaneous profession	-16	286	101	185	631
54	Management of companies	-0	432	2	430	440
58	Ambulatory health care	-50	322	219	103	1,412
59	Hospitals	-39	449	465	-16	1,315
65	Food services and drinking	-92	454	670	-216	2,473
66	Other services, exc. gov	-30	188	34	154	842

### Chapter 24. Swain County, North Carolina

Employment in Swain County, North Carolina, grew from 8,046 in 2005 to 10,086 in 2018, for a change of 2,040, or 25.35%. 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 Swain County, North Carolina

County Summary	NS	TS	IM	RS
vs. U.S.	907	1,132	314	818
vs. Appalachia	26	2,010	617	1,393
vs. Neighbors	1,170	868	1,555	-687

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 Swain County, North Carolina, in comparison to at least one of the three referent regions.

## **Industry Group Membership for Swain County, North Carolina**

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	F III c iv	no	yes	yes	no
30	Food and beverage stores	FIIIci	no	yes	yes	yes
40	Warehousing and storage	Elai	no	yes	yes	yes
55	Administrative and	Alaii	yes	yes	yes	yes
59	Hospitals	Elaiii	no	yes	yes	yes
63	Amusements, gambling,	Blai	yes	yes	yes	yes
65	Food services and drinking	BVbv	yes	no	yes	no
66	Other services, exc. gov	FIIIci	no	yes	yes	yes
68	Government	F III a ii	no	yes	yes	yes

#### Notes:

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

Groups I, II, and III are from Swain County, North Carolina vs. the United States

Groups a, b, and c are from Swain County, North Carolina vs. Appalachia

Groups i, ii, and iii are from Swain County, North Carolina vs. its neighbors

### **Industry-Specific Results**

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

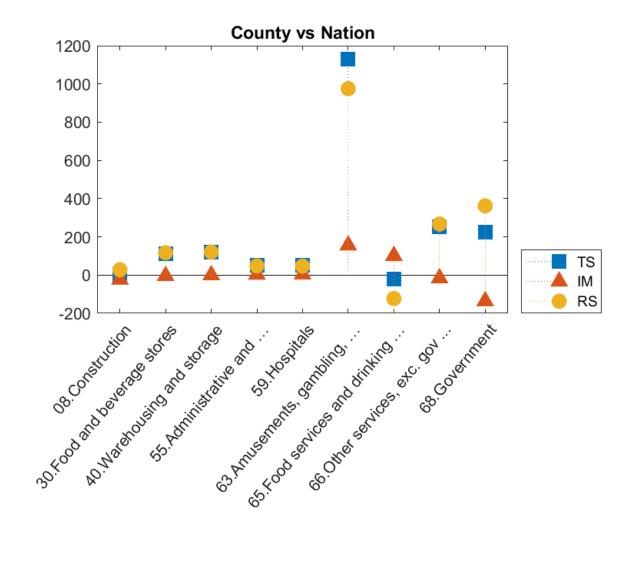
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry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

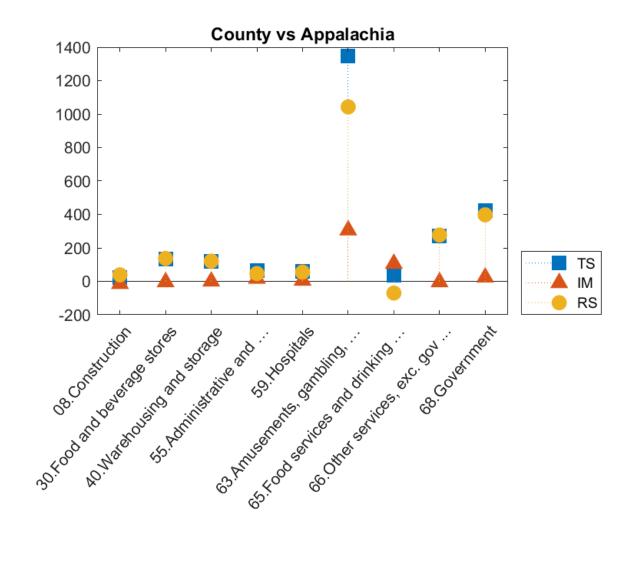


### **Chapter 24. Swain County, North Carolina**

## Swain County, North Carolina vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
08	Construction	22	5	-23	28	218
30	Food and beverage stores	20	113	-4	117	311
40	Warehousing and storage	0	121	0	121	121
55	Administrative and	14	51	3	48	191
59	Hospitals	9	51	4	47	141
63	Amusements, gambling,	224	1,131	156	975	3,346
65	Food services and drinking	60	-22	101	-123	567
66	Other services, exc. gov	23	251	-16	267	474
68	Government	202	226	-136	362	2,222

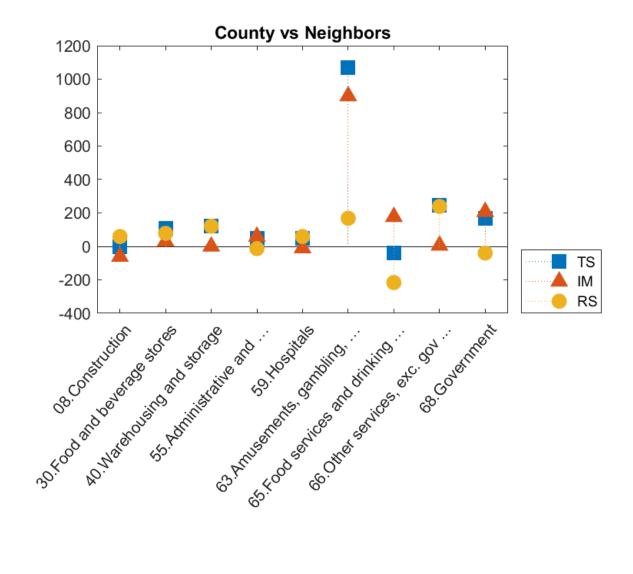
# Selected SSA Components for Swain County, North Carolina vs the Appalachian Region



# Selected SSA Components for Swain County, North Carolina vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
08	Construction	1	25	-14	39	218
30	Food and beverage stores	1	133	-4	137	311
40	Warehousing and storage	0	121	0	121	121
55	Administrative and	0	64	17	47	191
59	Hospitals	0	60	5	55	141
63	Amusements, gambling,	7	1,349	306	1,043	3,346
65	Food services and drinking	2	36	106	-70	567
66	Other services, exc. gov	1	273	-4	277	474
68	Government	6	422	24	398	2,222

## **Selected SSA Components for Swain County, North Carolina vs Neighbors**



### **Chapter 24. Swain County, North Carolina**

# Selected SSA Components for Swain County, North Carolina vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
08	Construction	28	-2	-61	59	218
30	Food and beverage stores	26	108	30	78	311
40	Warehousing and storage	0	121	0	121	121
55	Administrative and	18	46	59	-13	191
59	Hospitals	12	49	-10	59	141
63	Amusements, gambling,	290	1,067	899	168	3,346
65	Food services and drinking	77	-39	177	-216	567
66	Other services, exc. gov	29	245	6	239	474
68	Government	261	167	207	-40	2,222

### Chapter 25. Transylvania County, North Carolina

Employment in Transylvania County, North Carolina, declined from 9,092 in 2005 to 9,043 in 2018, for a change of -49, or -0.54%. 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 Transylvania County, North Carolina**

County Summary	NS	TS	IM	RS
vs. U.S.	1,024	-1,077	49	-1,126
vs. Appalachia	26	-79	248	-327
vs. Neighbors	1,373	-1,419	256	-1,675

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 Transylvania County, North Carolina, in comparison to at least one of the three referent regions.

## **Industry Group Membership for Transylvania County, North Carolina**

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	FIIIci	no	yes	yes	yes
20	Food and beverage	Elci	no	yes	yes	yes
26	Chemical products	FIII c iii	no	yes	yes	yes
30	Food and beverage stores	FIIIci	no	yes	yes	yes
49	Real estate	Flaiii	no	yes	yes	yes
53	Miscellaneous profession	Blai	yes	yes	yes	yes
55	Administrative and	AVbv	yes	no	yes	no
57	Educational services	F III a iii	no	yes	yes	yes
60	Nursing and residential	Elaiii	no	yes	yes	yes
63	Amusements, gambling,	BVbv	yes	no	yes	no
65	Food services and drinking	BVbv	yes	no	yes	no
66	Other services, exc. gov	FIIIcii	no	yes	yes	yes

#### Notes:

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

Groups I, II, and III are from Transylvania County, North Carolina vs. the United States

Groups a, b, and c are from Transylvania County, North Carolina vs. Appalachia

Groups i, ii, and iii are from Transylvania County, North Carolina vs. its neighbors

### **Industry-Specific Results**

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

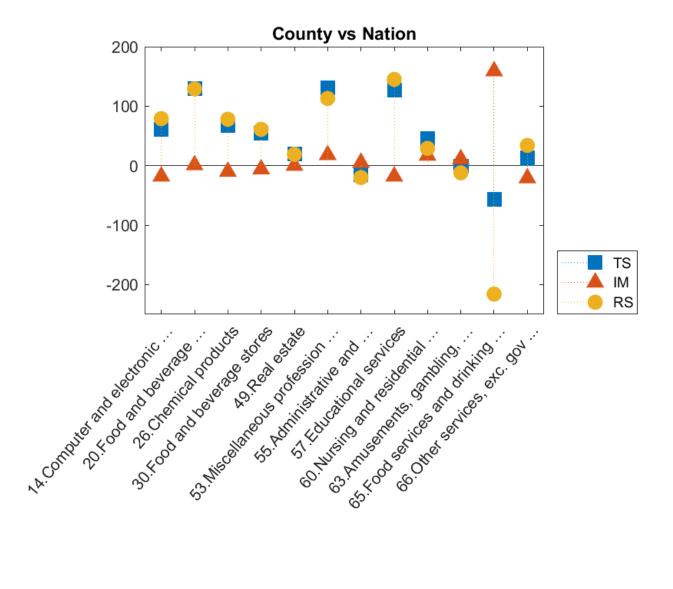
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry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

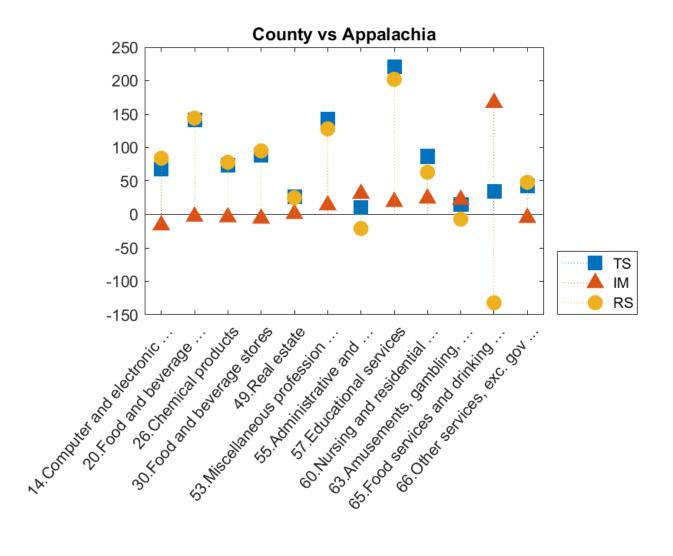


# Chapter 25. Transylvania County, North Carolina

# Transylvania County, North Carolina vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
14	Computer and electronic	7	61	-18	79	127
20	Food and beverage	10	130	1	129	229
26	Chemical products	7	68	-10	78	135
30	Food and beverage stores	35	55	-6	61	397
49	Real estate	8	19	-0	19	100
53	Miscellaneous profession	12	131	18	113	247
55	Administrative and	25	-15	5	-20	235
57	Educational services	97	127	-18	145	1,081
60	Nursing and residential	42	46	17	29	462
63	Amusements, gambling,	17	-1	11	-12	162
65	Food services and drinking	94	-57	159	-216	870
66	Other services, exc. gov	31	13	-21	34	319

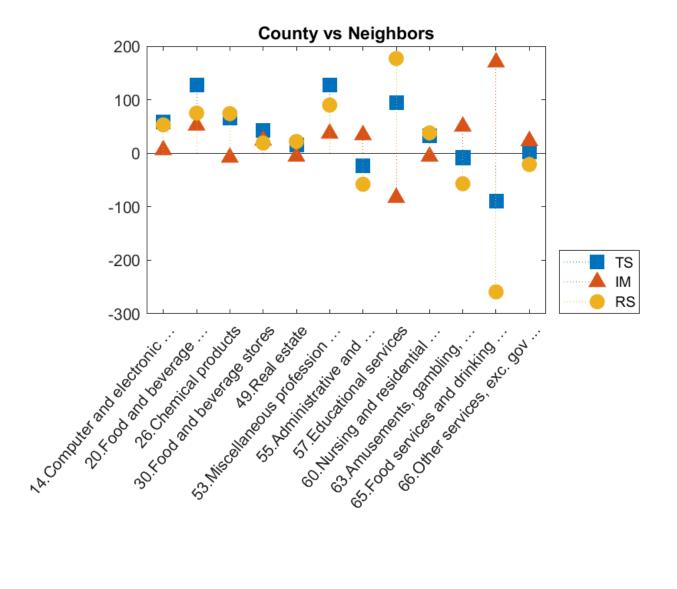
# Selected SSA Components for Transylvania County, North Carolina vs the Appalachian Region



# Selected SSA Components for Transylvania County, North Carolina vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
14	Computer and electronic	0	68	-16	84	127
20	Food and beverage	0	141	-3	144	229
26	Chemical products	0	74	-4	78	135
30	Food and beverage stores	1	89	-6	95	397
49	Real estate	0	26	1	25	100
53	Miscellaneous profession	0	142	14	128	247
55	Administrative and	1	10	31	-21	235
57	Educational services	3	221	19	202	1,081
60	Nursing and residential	1	87	24	63	462
63	Amusements, gambling,	0	15	22	-7	162
65	Food services and drinking	3	35	167	-132	870
66	Other services, exc. gov	1	43	-5	48	319

# Selected SSA Components for Transylvania County, North Carolina vs Neighbors



# Selected SSA Components for Transylvania County, North Carolina vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
14	Computer and electronic	9	59	6	53	127
20	Food and beverage	13	127	52	75	229
26	Chemical products	9	66	-8	74	135
30	Food and beverage stores	46	43	24	19	397
49	Real estate	11	16	-6	22	100
53	Miscellaneous profession	16	127	37	90	247
55	Administrative and	34	-24	34	-58	235
57	Educational services	129	94	-83	177	1,081
60	Nursing and residential	56	32	-6	38	462
63	Amusements, gambling,	22	-7	50	-57	162
65	Food services and drinking	126	-89	170	-259	870
66	Other services, exc. gov	42	2	23	-21	319

### Chapter 26. Watauga County, North Carolina

Employment in Watauga County, North Carolina, grew from 21,784 in 2005 to 21,825 in 2018, for a change of 41, or 0.19%. 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 Watauga County, North Carolina**

County Summary	NS	TS	IM	RS
vs. U.S.	2,457	-2,418	889	-3,307
vs. Appalachia	67	-36	690	-726
vs. Neighbors	-2,586	2,630	1,501	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 Watauga County, North Carolina, in comparison to at least one of the three referent regions.

## **Industry Group Membership for Watauga County, North Carolina**

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
30	Food and beverage stores	F III c iii	no	yes	yes	yes
31	General merchandise	FIIIcii	no	yes	yes	yes
49	Real estate	FIIIai	no	yes	yes	yes
54	Management of companies	Alaiii	yes	yes	yes	yes
55	Administrative and	Alai	yes	yes	yes	yes
57	Educational services	FIIIai	no	yes	yes	yes
58	Ambulatory health care	B V b iii	yes	no	yes	yes
60	Nursing and residential	Ellaii	no	yes	yes	yes
61	Social assistance	B V b iii	yes	no	yes	yes
63	Amusements, gambling,	BIIbii	yes	yes	yes	yes
64	Accommodation	AVbi	yes	no	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 Watauga County, North Carolina vs. the United States

Groups a, b, and c are from Watauga County, North Carolina vs. Appalachia

Groups i, ii, and iii are from Watauga County, North Carolina vs. its neighbors

### **Industry-Specific Results**

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

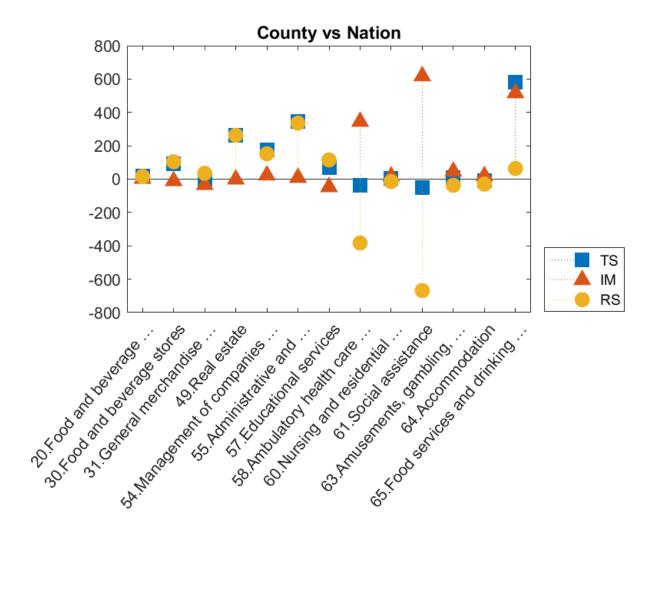
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry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

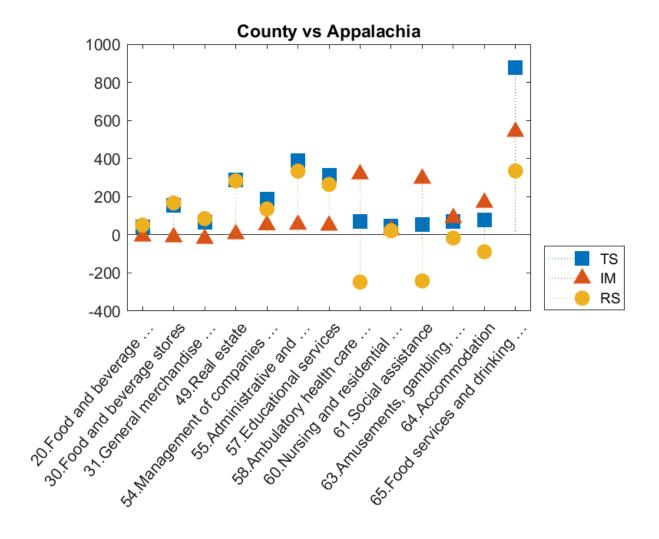


### Chapter 26. Watauga County, North Carolina

# Watauga County, North Carolina vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
20	Food and beverage	24	19	3	16	255
30	Food and beverage stores	64	93	-11	104	727
31	General merchandise	66	1	-34	35	650
49	Real estate	25	262	-1	263	509
54	Management of companies	11	175	23	152	287
55	Administrative and	45	345	9	336	788
57	Educational services	254	68	-47	115	2,574
58	Ambulatory health care	111	-38	345	-383	1,057
60	Nursing and residential	44	3	17	-14	438
61	Social assistance	106	-50	618	-668	1,000
63	Amusements, gambling,	66	9	46	-37	655
64	Accommodation	94	-11	19	-30	915
65	Food services and drinking	305	580	516	64	3,590

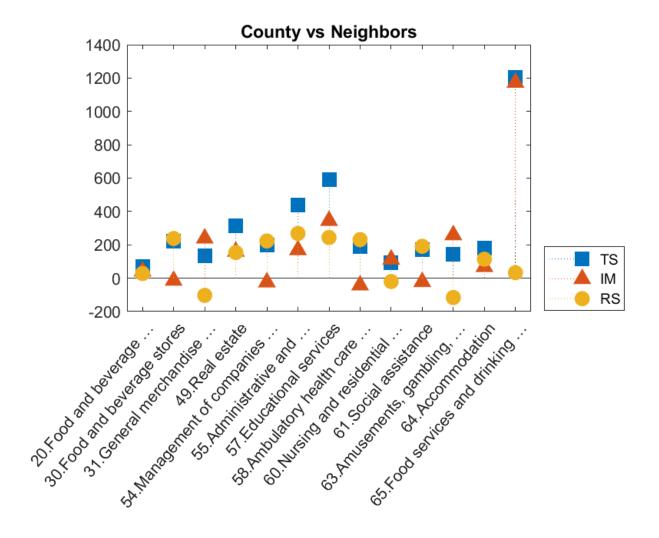
## Selected SSA Components for Watauga County, North Carolina vs the Appalachian Region



# Selected SSA Components for Watauga County, North Carolina vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
20	Food and beverage	1	43	-8	51	255
30	Food and beverage stores	2	155	-12	167	727
31	General merchandise	2	65	-20	85	650
49	Real estate	1	287	4	283	509
54	Management of companies	0	186	51	135	287
55	Administrative and	1	388	54	334	788
57	Educational services	8	313	49	264	2,574
58	Ambulatory health care	3	70	318	-248	1,057
60	Nursing and residential	1	46	25	21	438
61	Social assistance	3	53	295	-242	1,000
63	Amusements, gambling,	2	72	89	-17	655
64	Accommodation	3	80	169	-89	915
65	Food services and drinking	9	876	541	335	3,590

### Selected SSA Components for Watauga County, North Carolina vs Neighbors



# Selected SSA Components for Watauga County, North Carolina vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
20	Food and beverage	-25	69	41	28	255
30	Food and beverage stores	-68	224	-14	238	727
31	General merchandise	-69	136	239	-103	650
49	Real estate	-26	314	160	154	509
54	Management of companies	-12	199	-24	223	287
55	Administrative and	-47	437	169	268	788
57	Educational services	-267	589	345	244	2,574
58	Ambulatory health care	-117	189	-42	231	1,057
60	Nursing and residential	-46	93	113	-20	438
61	Social assistance	-112	169	-22	191	1,000
63	Amusements, gambling,	-69	143	259	-116	655
64	Accommodation	-99	182	68	114	915
65	Food services and drinking	-321	1,206	1,173	33	3,590

### Chapter 27. Wilkes County, North Carolina

Employment in Wilkes County, North Carolina, declined from 26,265 in 2005 to 21,928 in 2018, for a change of -4,337, or -16.51%. 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 Wilkes County, North Carolina**

County Summary	NS	TS	IM	RS
vs. U.S.	2,960	-7,302	252	-7,554
vs. Appalachia	88	-4,426	982	-5,408
vs. Neighbors	-766	-3,568	2,194	-5,762

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 Wilkes County, North Carolina, in comparison to at least one of the three referent regions.

# **Industry Group Membership for Wilkes County, North Carolina**

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 	FIIIci	no	yes	yes	yes
21	Textile mills and	D III c iii	no	yes	yes	yes
31	General merchandise 	FIIIci	no	yes	yes	yes
53	Miscellaneous profession	B V e ii	yes	no	no	yes
55	Administrative and	Alaii	yes	yes	yes	yes
61	Social assistance	BIIbi	yes	yes	yes	yes
63	Amusements, gambling,	Blai	yes	yes	yes	yes
65	Food services and drinking	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 Wilkes County, North Carolina vs. the United States

Groups a, b, and c are from Wilkes County, North Carolina vs. Appalachia

Groups i, ii, and iii are from Wilkes County, North Carolina vs. its neighbors

### **Industry-Specific Results**

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

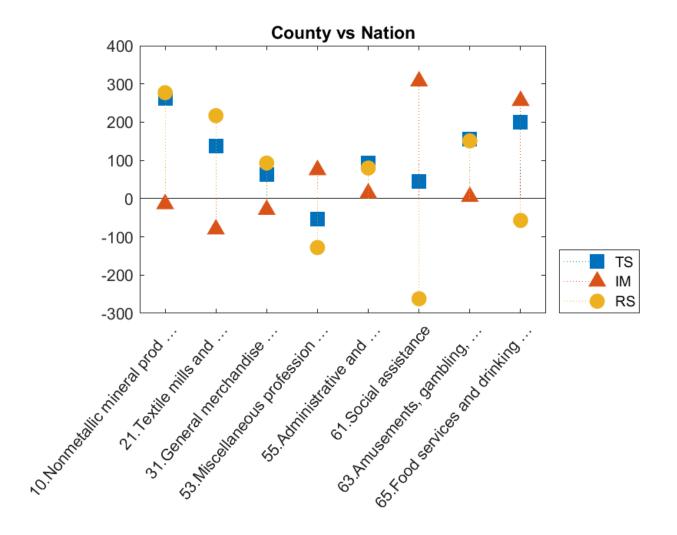
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry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



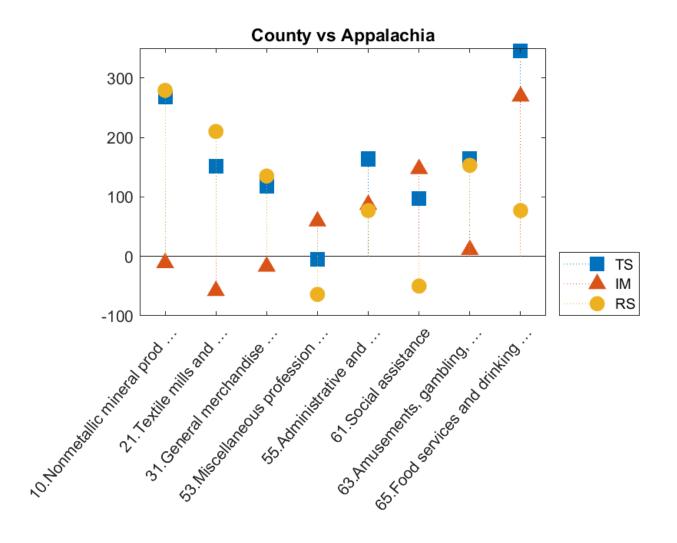
### **Chapter 27. Wilkes County, North Carolina**

# Wilkes County, North Carolina vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
10	Nonmetallic mineral prod 	6	263	-14	277	318
21	Textile mills and	15	137	-80	217	290
31	General merchandise 	56	64	-29	93	616
53	Miscellaneous profession	50	-53	75	-128	440
55	Administrative and	72	94	14	80	804
61	Social assistance	53	45	307	-262	567
63	Amusements, gambling,	8	156	5	151	233
65	Food services and drinking	151	199	256	-57	1,693

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# Selected SSA Components for Wilkes County, North Carolina vs the Appalachian Region

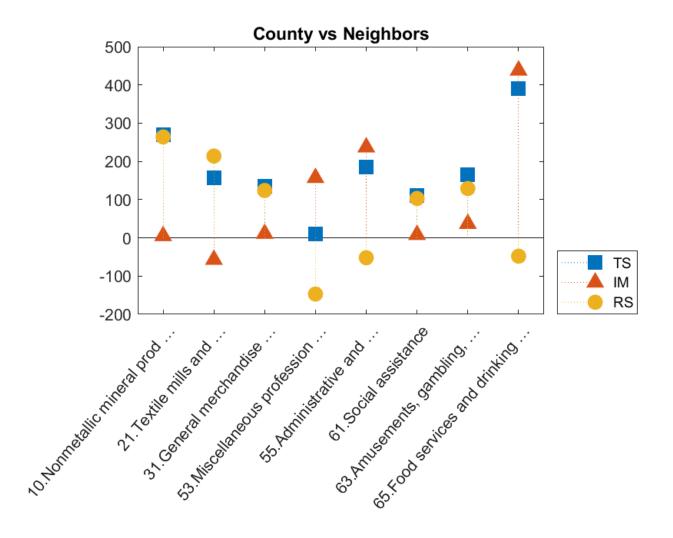


# Selected SSA Components for Wilkes County, North Carolina vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
10	Nonmetallic mineral prod 	0	268	-11	279	318
21	Textile mills and	0	152	-58	210	290
31	General merchandise 	2	118	-17	135	616
53	Miscellaneous profession	2	-5	59	-64	440
55	Administrative and	2	164	87	77	804
61	Social assistance	2	97	147	-50	567
63	Amusements, gambling,	0	164	11	153	233
65	Food services and drinking	5	346	269	77	1,693

. . .

## Selected SSA Components for Wilkes County, North Carolina vs Neighbors



Selected SSA Components for Wilkes County, North Carolina vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
10	Nonmetallic mineral prod 	-1	269	5	264	318
21	Textile mills and	-4	157	-57	214	290
31	General merchandise 	-14	135	11	124	616
53	Miscellaneous profession	-13	10	157	-147	440
55	Administrative and	-19	185	237	-52	804
61	Social assistance	-14	111	8	103	567
63	Amusements, gambling,	-2	166	37	129	233
65	Food services and drinking	-39	390	438	-48	1,693

. . .

### Chapter 28. Yadkin County, North Carolina

Employment in Yadkin County, North Carolina, declined from 10,681 in 2005 to 9,899 in 2018, for a change of -782, or -7.32%. 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 Yadkin County, North Carolina

County Summary	NS	TS	IM	RS
vs. U.S.	1,202	-1,981	-593	-1,388
vs. Appalachia	31	-817	-468	-349
vs. Neighbors	167	-943	-159	-784

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 Yadkin County, North Carolina, in comparison to at least one of the three referent regions.

## **Industry Group Membership for Yadkin County, North Carolina**

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
15	Electrical equipment,	D III c iii	no	yes	yes	yes
20	Food and beverage	Elciii	no	yes	yes	yes
27	Plastics and rubber prod	DIIIai	no	yes	yes	yes
36	Truck transportation	F III c iii	no	yes	yes	yes
40	Warehousing and storage	Ellai	no	yes	yes	yes
53	Miscellaneous profession	BIIaii	yes	yes	yes	yes
55	Administrative and	Alai	yes	yes	yes	yes

#### Notes:

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

Groups I, II, and III are from Yadkin County, North Carolina vs. the United States

Groups a, b, and c are from Yadkin County, North Carolina vs. Appalachia

Groups i, ii, and iii are from Yadkin County, North Carolina vs. its neighbors

### **Industry-Specific Results**

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

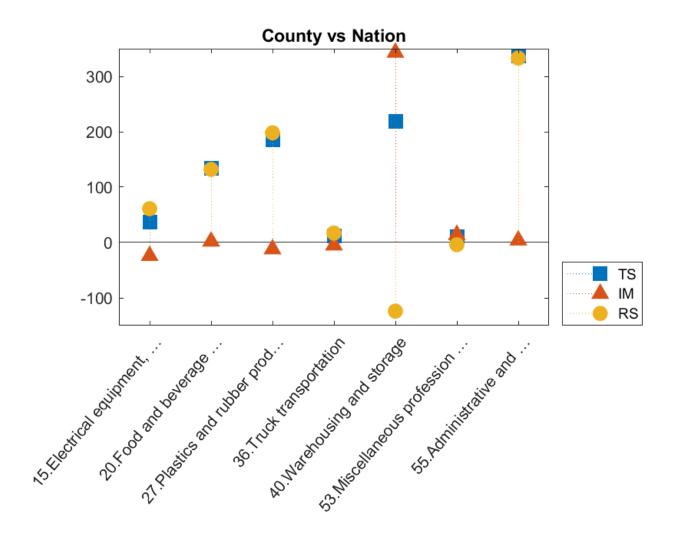
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry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

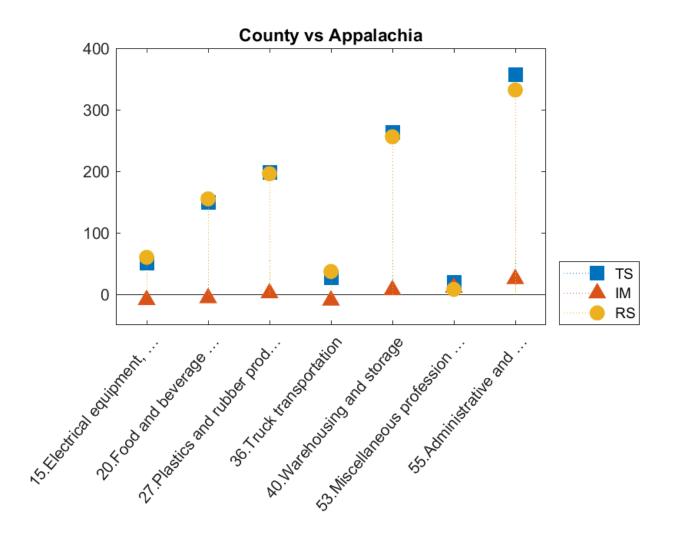


### **Chapter 28. Yadkin County, North Carolina**

# Yadkin County, North Carolina vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
15	Electrical equipment,	14	37	-24	61	172
20	Food and beverage	16	134	2	132	294
27	Plastics and rubber prod	12	186	-12	198	307
36	Truck transportation	17	12	-5	17	175
40	Warehousing and storage	46	219	343	-124	675
53	Miscellaneous profession	9	10	14	-4	102
55	Administrative and	20	337	4	333	538

## Selected SSA Components for Yadkin County, North Carolina vs the Appalachian Region

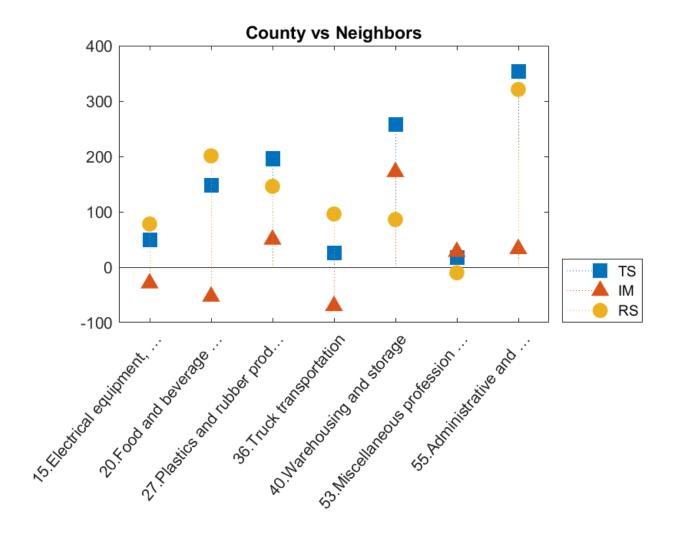


### **Chapter 28. Yadkin County, North Carolina**

# Selected SSA Components for Yadkin County, North Carolina vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
15	Electrical equipment,	0	51	-9	60	172
20	Food and beverage	0	149	-6	155	294
27	Plastics and rubber prod	0	198	2	196	307
36	Truck transportation	0	27	-10	37	175
40	Warehousing and storage	1	263	7	256	675
53	Miscellaneous profession	0	19	11	8	102
55	Administrative and	1	357	25	332	538

## Selected SSA Components for Yadkin County, North Carolina vs Neighbors



### **Chapter 28. Yadkin County, North Carolina**

## Selected SSA Components for Yadkin County, North Carolina vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
15	Electrical equipment,	2	49	-29	78	172
20	Food and beverage	2	148	-53	201	294
27	Plastics and rubber prod	2	196	50	146	307
36	Truck transportation	2	26	-70	96	175
40	Warehousing and storage	6	258	172	86	675
53	Miscellaneous profession	1	18	28	-10	102
55	Administrative and	3	354	33	321	538

#### Chapter 29. Yancey County, North Carolina

Employment in Yancey County, North Carolina, grew from 4,393 in 2005 to 4,418 in 2018, for a change of 25, or 0.57%. 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 Yancey County, North Carolina**

County Summary	NS	TS	IM	RS
vs. U.S.	495	-473	-377	-96
vs. Appalachia	10	10	-266	276
vs. Neighbors	551	-525	-448	-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 Yancey County, North Carolina, in comparison to at least one of the three referent regions.

## **Industry Group Membership for Yancey County, North Carolina**

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 products	F III c iii	no	yes	yes	yes
13	Machinery	Flai	no	yes	yes	yes
20	Food and beverage	Elci	no	yes	yes	yes
30	Food and beverage stores	FIIIci	no	yes	yes	yes
31	General merchandise 	F III c iii	no	yes	yes	yes
37	Transit and ground	Elci	no	yes	yes	yes
53	Miscellaneous profession	BVbv	yes	no	yes	no
58	Ambulatory health care	BIIaii	yes	yes	yes	yes
59	Hospitals	Elai	no	yes	yes	yes
60	Nursing and residential	E II a iii	no	yes	yes	yes
65	Food services and drinking	BIIaii	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 Yancey County, North Carolina vs. the United States

Groups a, b, and c are from Yancey County, North Carolina vs. Appalachia

Groups i, ii, and iii are from Yancey County, North Carolina vs. its neighbors

#### **Industry-Specific Results**

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

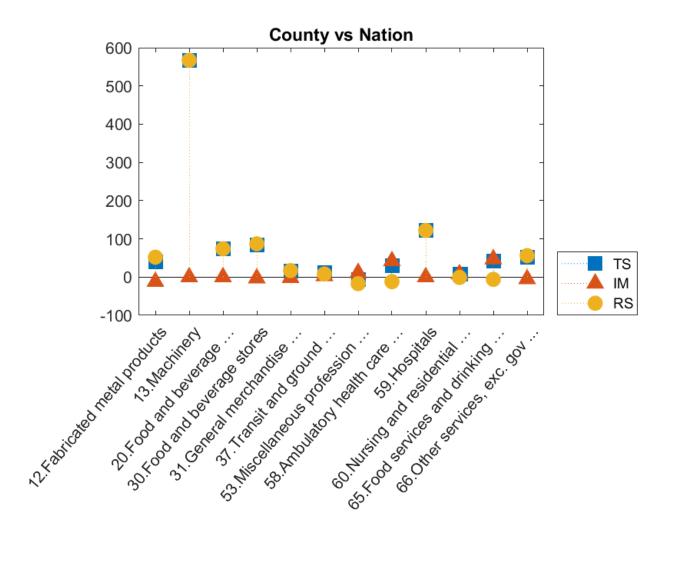
The TS component is the sum of the IM and RS components. A positive TS value also conveys a positive message, especially when both IM and RS are positive. When IM is positive but RS is negative, a positive TS indicates that although the county might not enjoy a regional comparative advantage, the industry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

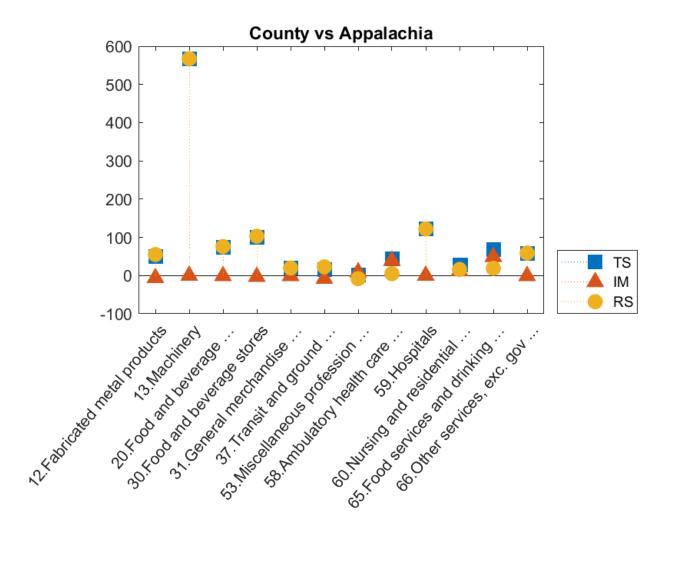


## **Chapter 29. Yancey County, North Carolina**

## Yancey County, North Carolina vs U.S. for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
12	Fabricated metal products	9	40	-12	52	132
13	Machinery	0	567	0	567	567
20	Food and beverage	2	74	0	74	91
30	Food and beverage stores	16	84	-3	87	242
31	General merchandise 	5	15	-2	17	62
37	Transit and ground	4	11	3	8	51
53	Miscellaneous profession	7	-6	11	-17	66
58	Ambulatory health care	14	30	42	-12	165
59	Hospitals	0	122	0	122	122
60	Nursing and residential	21	7	8	-1	210
65	Food services and drinking	28	41	47	-6	316
66	Other services, exc. gov	7	51	-5	56	124

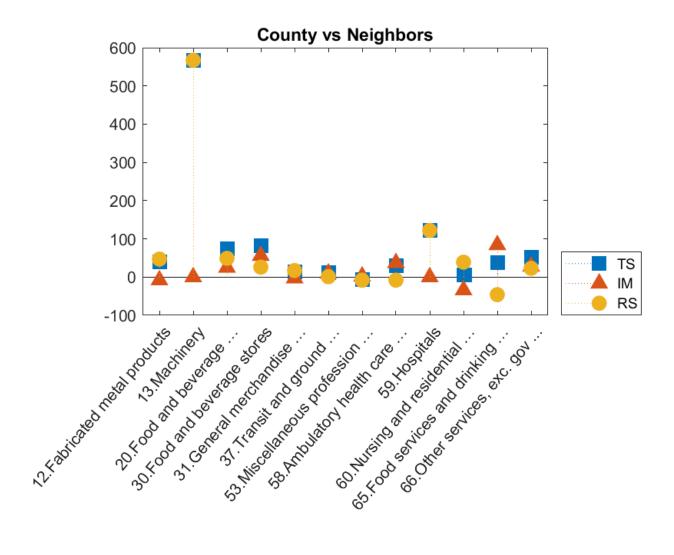
## Selected SSA Components for Yancey County, North Carolina vs the Appalachian Region



# Selected SSA Components for Yancey County, North Carolina vs the Appalachian Region

Industry	Name	NS	TS	IM	RS	Employment 2018
	Fabricated					
12	metal products	0	49	-6	55	132
13	Machinery	0	567	0	567	567
20	Food and beverage	0	75	-1	76	91
30	Food and beverage stores	0	100	-3	103	242
31	General merchandise 	0	19	-1	20	62
37	Transit and ground	0	15	-8	23	51
53	Miscellaneous profession	0	1	9	-8	66
58	Ambulatory health care	0	44	39	5	165
59	Hospitals	0	122	0	122	122
60	Nursing and residential	1	28	12	16	210
65	Food services and drinking	1	68	49	19	316
66	Other services, exc. gov	0	58	-1	59	124

## **Selected SSA Components for Yancey County, North Carolina vs Neighbors**



## Selected SSA Components for Yancey County, North Carolina vs Neighbors for Selected Industries

Industry	Name	NS	TS	IM	RS	Employment 2018
12	Fabricated metal products	10	39	-8	47	132
13	Machinery	0	567	0	567	567
20	Food and beverage	2	74	25	49	91
30	Food and beverage stores	18	82	56	26	242
31	General merchandise 	5	14	-3	17	62
37	Transit and ground	5	11	10	1	51
53	Miscellaneous profession	8	-6	2	-8	66
58	Ambulatory health care	15	29	37	-8	165
59	Hospitals	0	122	0	122	122
60	Nursing and residential	23	5	-34	39	210
65	Food services and drinking	31	38	84	-46	316
66	Other services, exc. gov	8	51	28	23	124