
State-level equity and the demise of the Agreement on Textiles and Clothing

Soamiely Andriamananjara*

Edward J. Balistreri*

Martin T. Ross**

*** U.S. International Trade Commission, Office of Economics, Research Division.**

**** Research Triangle Institute (RTI) International.**

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Background

- State-level analysis
 - Political relevance
 - USITC report on Significant U.S. Import Restraints: #4 (forthcoming)
- Dynamic general-equilibrium policy simulation at the state level
 - Balistreri and Rutherford (2001): Climate-change policy application.
 - Trade applications?
- USITC project to estimate ad valorem equivalents of the ATC quotas
- ATC removal is a timely topic
- Country analyses are likely to mask important (geographic) distributional effects of ATC removal.

Model Features

- “***n+1***” strategy (versus hierarchical strategy of Balistreri and Rutherford 2001)
 - Multi-region/state equilibrium is computed for each state (versus top-down sharing).
 - 4 fixed regions (East, Great Lakes, Plains, and West) + ***focus state***.
 - “on the fly”: regional aggregation, calibration, and policy simulation.
- Forward-looking (neoclassical) dynamics
 - Infinite horizon approximation
 - Optimal capital accumulation with putty-clay adjustment
 - Equilibrium unemployment (Balistreri 2002) in each regional labor market
- Nested Armington
 - Aggregation of the foreign and national varieties
 - Aggregation of the local and foreign-national varieties

Distribution of State-level Welfare Changes from Simulated ATC Removal

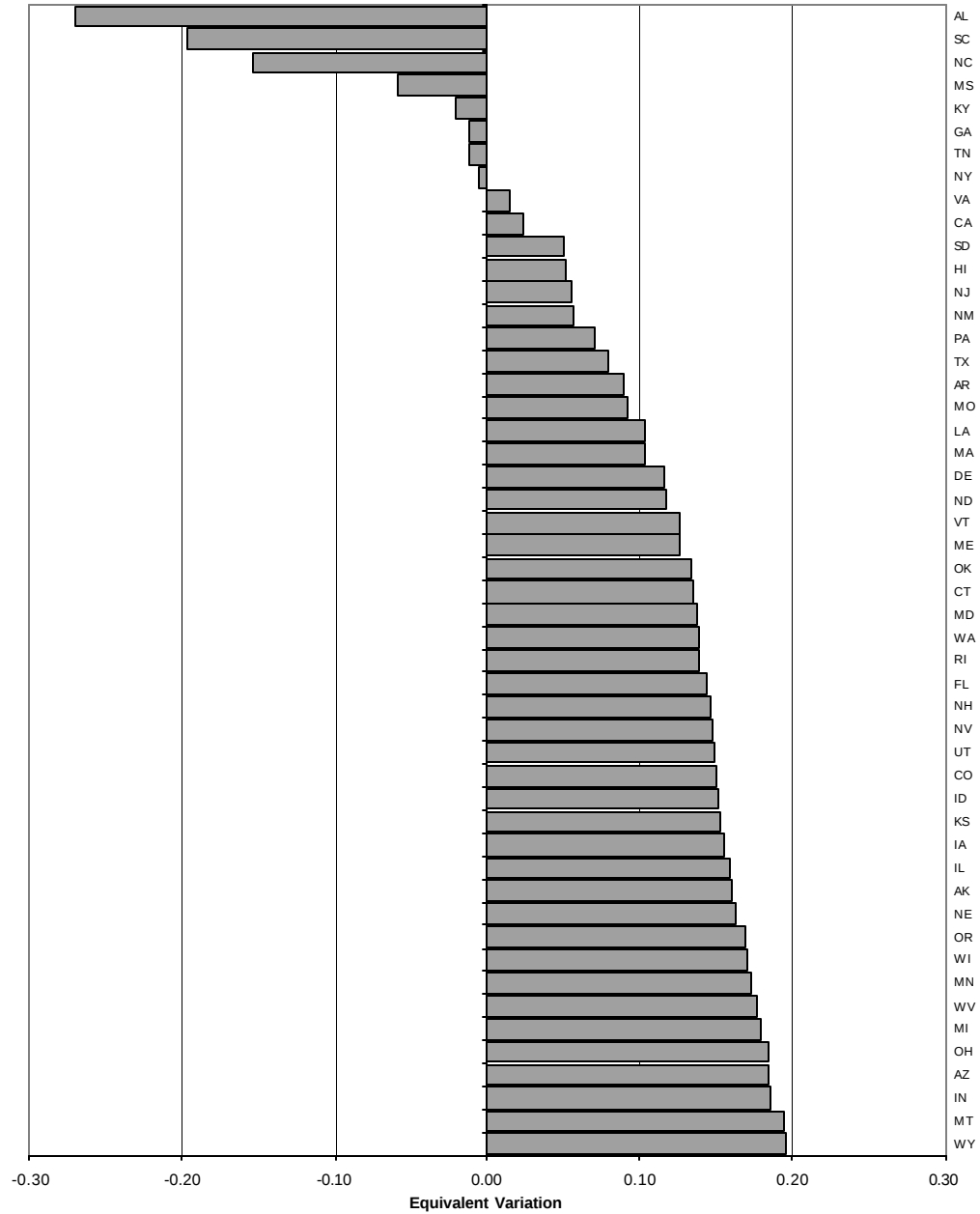


Table 2
State-level changes in Welfare and Unemployment Rates, and selected benchmark data

State	Welfare Change (%)	Benchmark Gross-product Share (%)	Benchmark Foreign-import Share (%)	Unemployment Rate Change in 2005 (%)
(1)	(2)	(3)	(4)	(5)
AL	-0.27	1.90	2.35	0.14
SC	-0.20	4.00	4.61	0.35
NC	-0.15	3.24	0.38	0.19
MS	-0.06	1.16	11.18	0.04
KY	-0.02	1.01	11.51	0.00
GA	-0.01	2.20	9.32	0.07
TN	-0.01	0.99	8.98	0.01
NY	-0.01	0.59	21.61	0.02
VA	0.01	0.69	22.49	0.05
CA	0.02	0.49	26.06	0.01
SD	0.05	0.20	56.52	-0.02
HI	0.05	0.17	55.44	-0.04
NJ	0.05	0.43	41.45	0.01
NM	0.06	0.13	63.48	-0.01
PA	0.07	0.56	27.40	0.04
TX	0.08	0.27	42.46	0.03
AR	0.09	0.59	32.57	0.05
MO	0.09	0.33	41.00	0.01
LA	0.10	0.24	50.68	0.03
MA	0.10	0.49	46.94	-0.02
DE	0.12	0.42	50.98	-0.04
ND	0.12	0.07	73.10	-0.03
VT	0.13	0.35	46.61	0.00
ME	0.13	0.79	44.24	0.00
OK	0.13	0.22	46.99	0.04
CT	0.13	0.24	59.37	-0.03
MD	0.14	0.17	64.15	-0.01
WA	0.14	0.17	60.20	-0.01
RI	0.14	1.19	42.20	0.05
FL	0.14	0.20	59.15	0.03
NH	0.15	0.75	50.40	0.01
NV	0.15	0.06	72.65	-0.03
UT	0.15	0.19	60.63	-0.02
CO	0.15	0.10	66.25	-0.02
ID	0.15	0.05	73.78	0.00
KS	0.15	0.15	60.91	0.00
IA	0.15	0.19	56.98	0.02
IL	0.16	0.15	64.41	-0.01
AK	0.16	0.02	79.92	-0.06
NE	0.16	0.11	66.51	0.00
OR	0.17	0.16	61.98	0.00
WI	0.17	0.25	57.64	-0.01
MN	0.17	0.16	65.15	-0.02
WV	0.18	0.19	63.17	0.05
MI	0.18	0.32	59.58	-0.04
OH	0.18	0.21	62.00	-0.02
AZ	0.18	0.11	70.13	0.00
IN	0.19	0.20	61.48	-0.02
MT	0.19	0.10	73.91	0.03
WY	0.20	0.05	75.63	0.03

Correlations:

$$r_{(2),(3)} = -0.81$$

$$r_{(2),(4)} = 0.87$$

$$r_{(2),(5)} = -0.71$$

Figure 2

Macroeconomic Effects in South Carolina

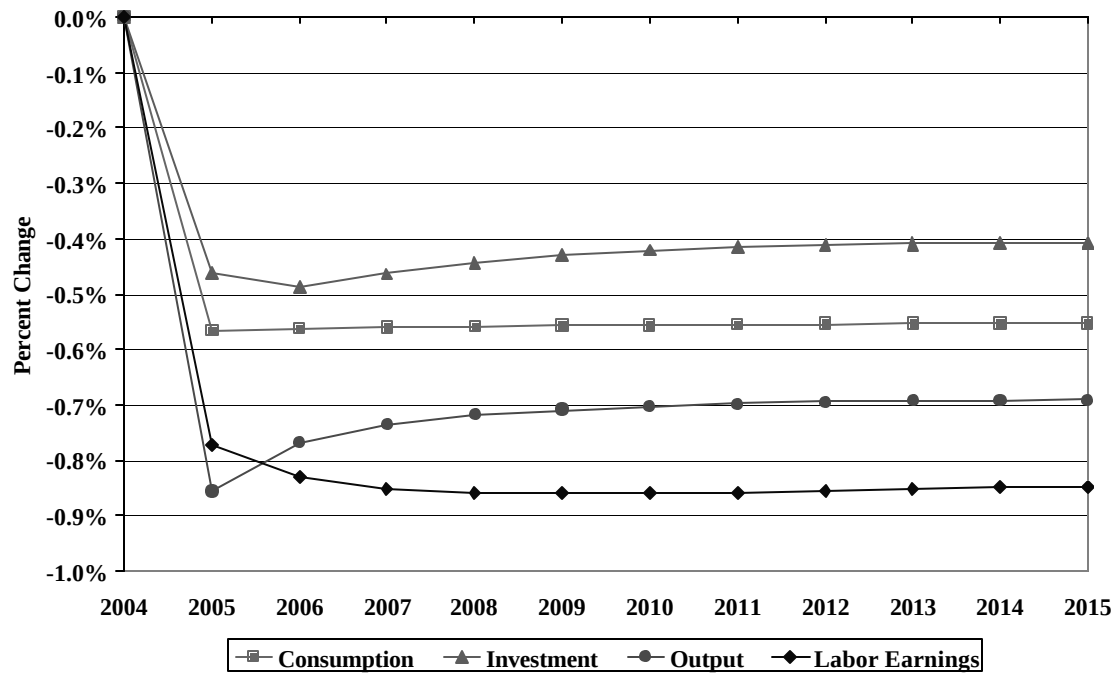


Figure 3

Changes in the South Carolina Unemployment Rate

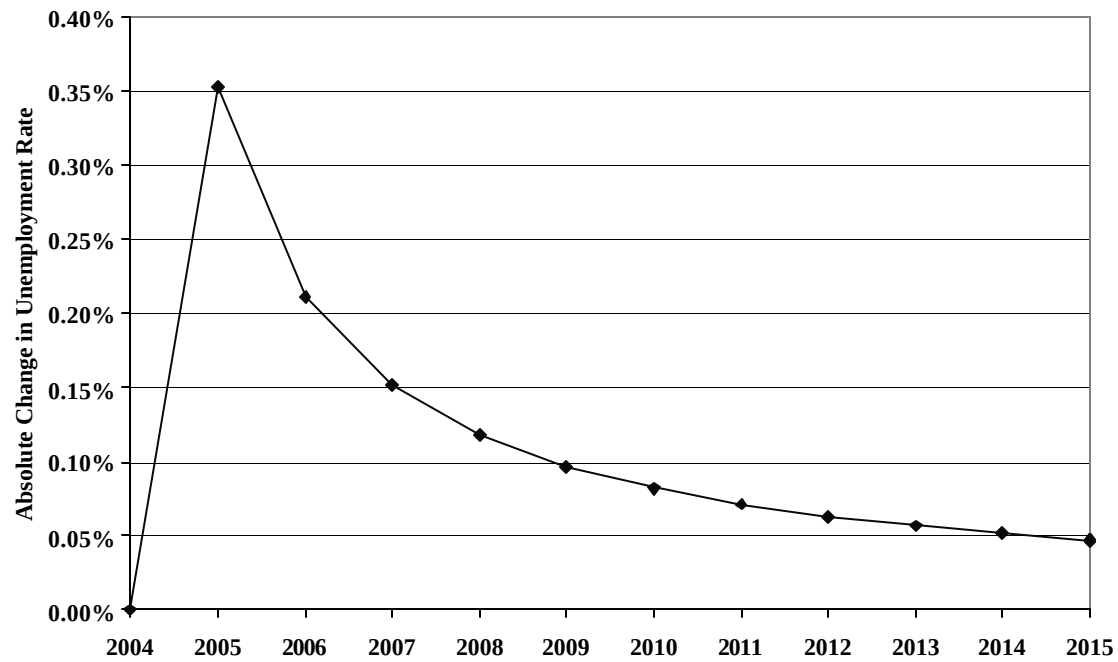
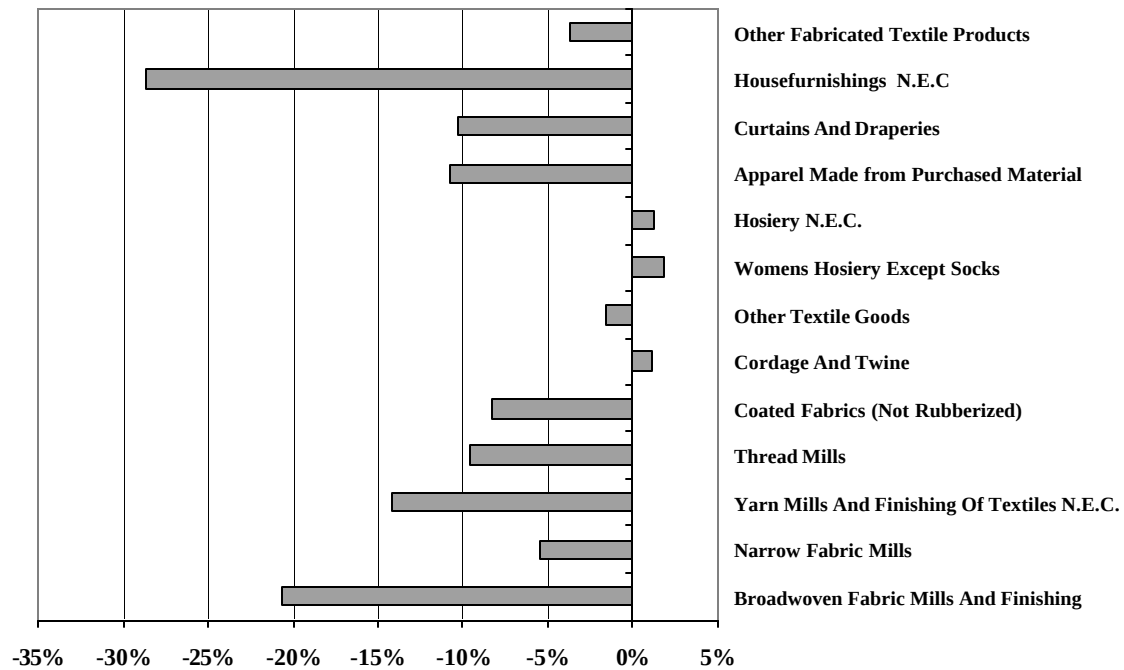


Figure 4

Textile and Apparel Revenue in South Carolina (2010)



Conclusion

- Accomplishments
 - Demonstration of a state-level dynamic simulation model
 - Outlined implied distribution of ATC impacts across the states
 - Used the most recent empirical estimates of the ATC distortion
- Future work
 - Explore the Implan data and identify problems (foreign-import shares, for example)
 - Develop bilateral state trade matrix
 - Calibrate to a reputable forecast
 - Find new applications