

# A Review of Logging Business Characteristics: Comparisons Across Time and Between Regions

---

Joe Conrad

Dale Greene

07-31-17

# Introduction

---

- Logger Demographics
- Harvesting systems
- Capital investment
- Annual production
- Consolidation

# Logging Business Owners

---

- Mostly baby boomers
- Median age:
- 1990s: 43-46 yrs
- 2000s: 46-50 yrs
- 2010s: 49-53 yrs



# Familial Attachment

---

- 77% of Midwestern loggers had a family attachment in 2004
- 72% of Wisconsin logging businesses were family businesses in 2011
- 60% of northern New England loggers had family attachment in 2012
- 27% of southern New England and New York loggers had family attachment in 2006
- 37% of Georgia loggers reported a family connection in 1997

# A Relative Will Take Over the Business...

---

- 54% of businesses in Midwest (2004)
- <30% of businesses in Minnesota (2011)
- 36% of businesses in Wisconsin (2010)
- 30% of NY loggers would encourage children to continue the business (2006)
- 14% of northern New England loggers would encourage children to continue the business (2000)





# How do Loggers View Their Profession?

---

- Enjoy independence
- Enjoy the work/working outdoors
- Enjoy the challenge
- Sense of accomplishment
- Perceived disrespect from the public



# Harvesting Systems

- South:
  - Coastal Plain & Piedmont = feller-buncher systems (~90% of firms)
  - Mountains = chainsaw systems (~90% of firms)
- Northeast
  - Chainsaws: 33%-71% of businesses
  - Feller-buncher: 46%-80% of volume harvested
  - Cut-to-length: 7-33% of businesses and 8-30% of harvest volume
- Midwest
  - MN harvest volume = 82% feller-buncher, 16% CTL
  - WI = Cut-to-Length most common
    - 49% of businesses, most productive systems

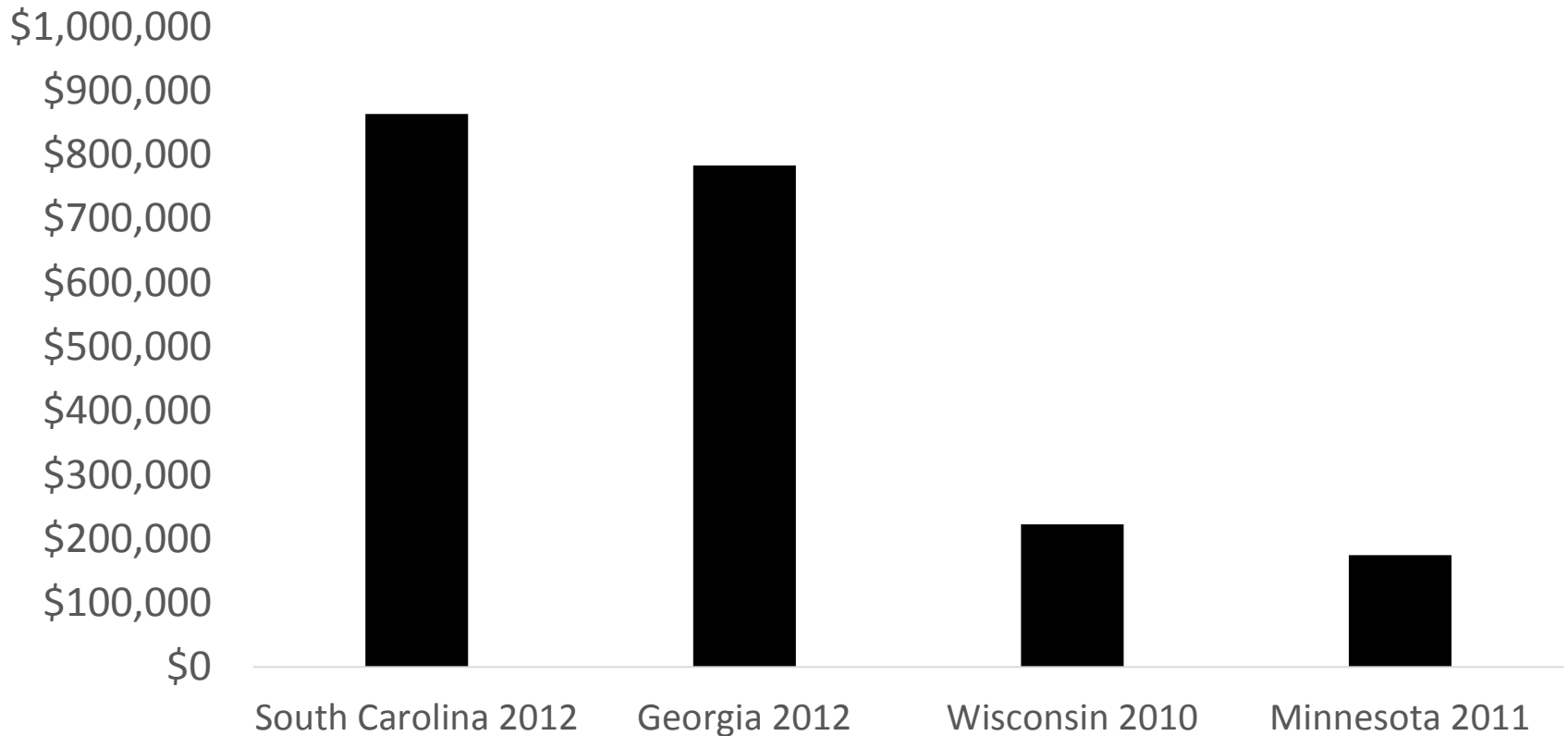


tigercat.com



07.31.2018 12:37

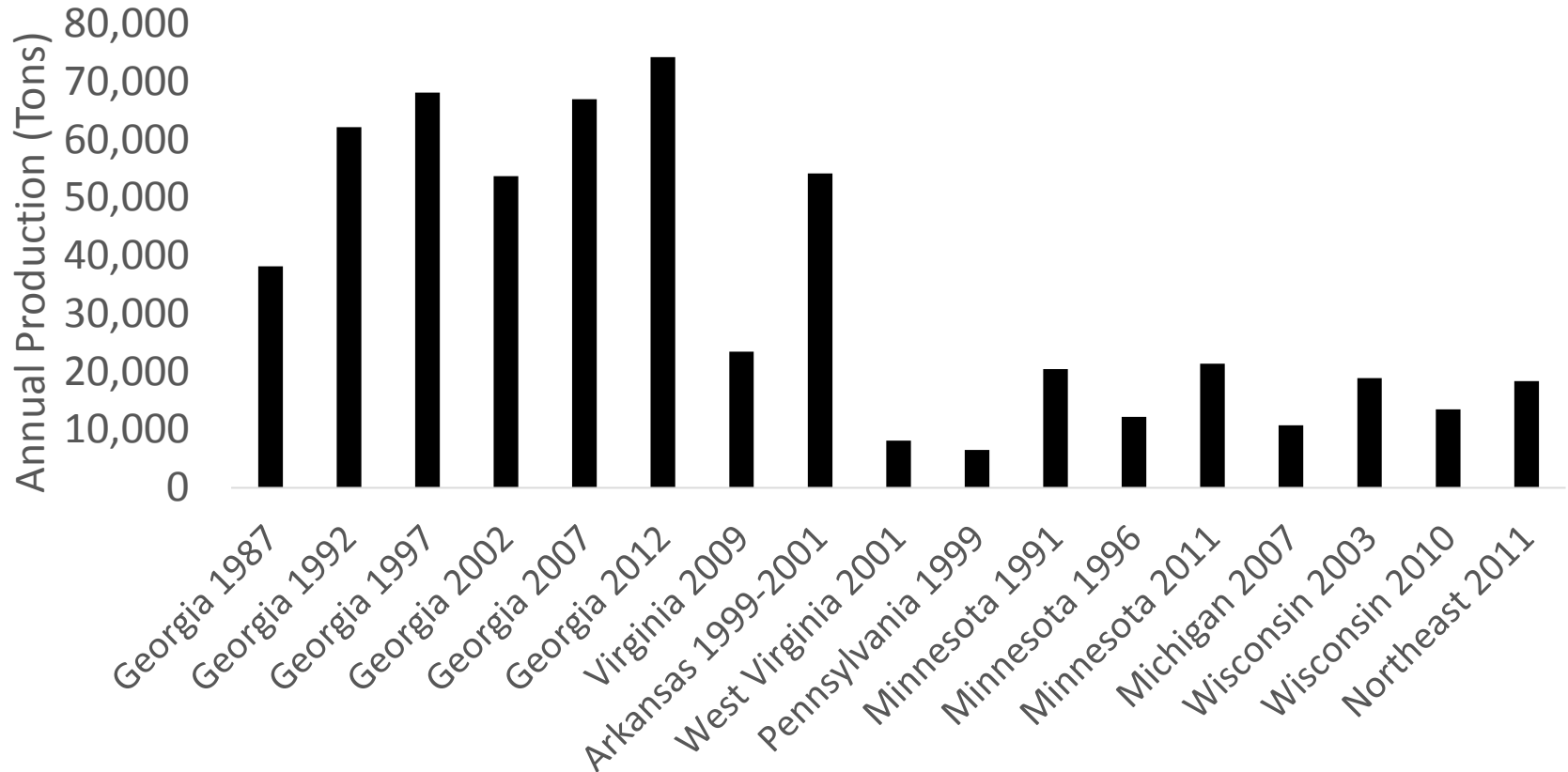
# Capital Investment



Median capital investment by loggers



# Annual Production



Median annual production for the system producing the most volume in each state.



# Observations on Regional Differences in Productivity

---

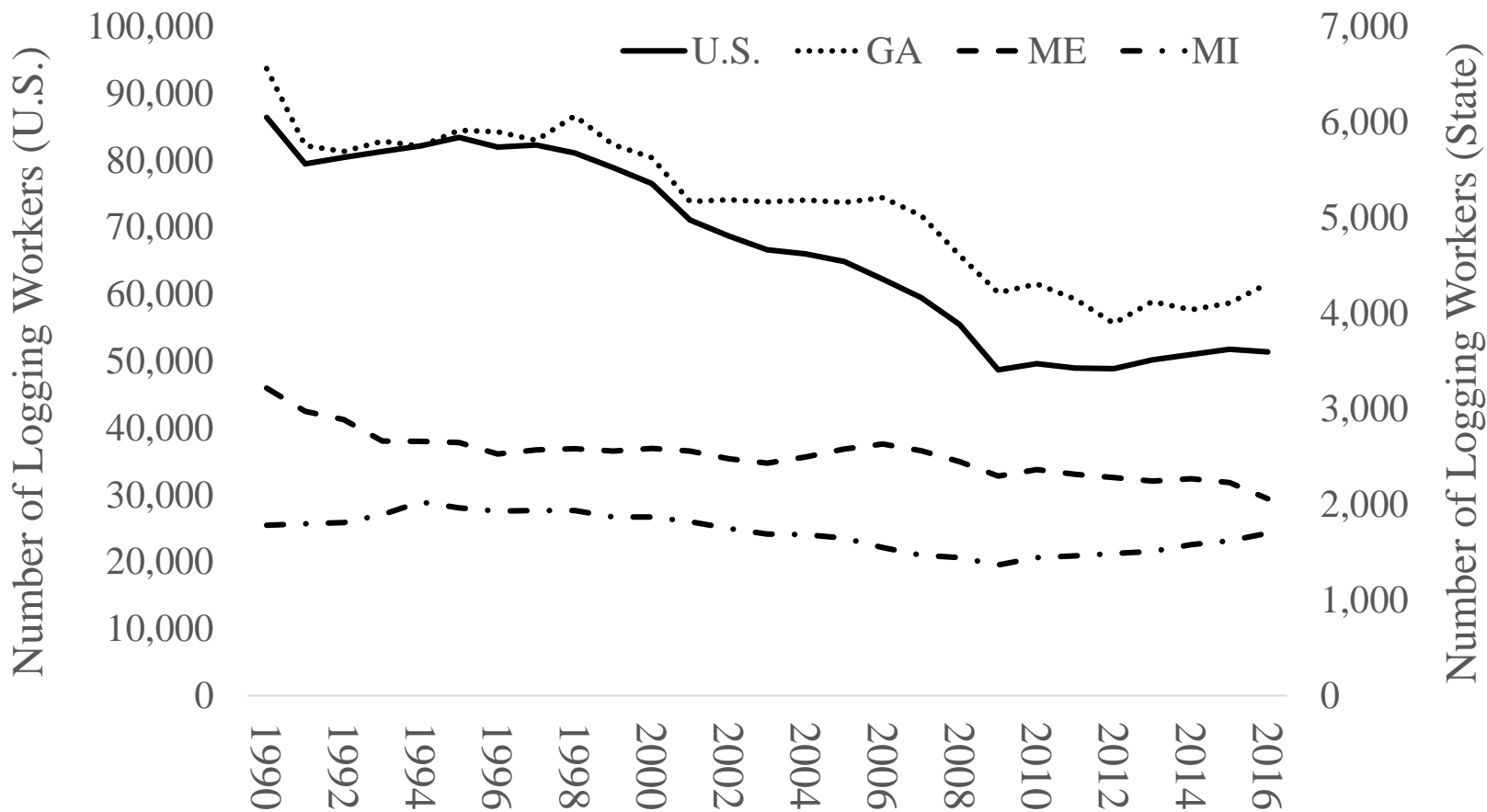
- South was most productive in 1990, still most productive
- Year-round logging in the South
- Productive pine plantations
- Larger parcel sizes
- Coalescence around most productive harvesting system

# Observations on Changes in Productivity over Time

---

- Major increases in production after mechanization, modest improvements since
  - 1987-1997: 98% increase in avg. annual production (GA)
  - 1997-2012: 14% increase in avg. annual production (GA)
- Production per man-hour increased by 1.94% per year in Georgia (1987-2012)

# Consolidation



Source: Bureau of Labor Statistics (2017)

# Consolidation

---

- GA – Lost 36% of logging businesses 1990-2016
  - 20% of firms produce 51% of timber
- MN – Lost 1% of businesses, workers up 50% 1990-2016
  - 15% of firms produce 57% of timber
- WI – Lost 40% of businesses 1990-2016
  - 10% of firms produce 40% of timber
- ME – Lost 9% of businesses 1990-2016
  - 37% of firms produce 80% of timber



# Seasonality of Harvesting

---

- Trend toward fewer working days per year
- Trend toward greater % of production during winter in Northeast and Midwest

Percent of timber harvest by season in Minnesota (1991-2011).

Season of Harvest	Percent of Volume Harvested		
	1991	1996	2011
Winter	43	47	51
Spring	9	9	8
Summer	23	21	20
Fall	25	23	21

# Consistent Findings Across Regions

---

1. Feller-buncher/grapple skidder systems most productive and harvest majority of timber volume
2. Consolidation in the logging industry
3. Aging logging business owners
4. Aging equipment
5. Reduced number of working days per year

# Regional Differences

---

1. Greater diversity of harvesting systems in Northeast and Midwest
2. Southern loggers most productive
3. Southern loggers have larger capital investments
4. More available working days in South

# Recommendations For Future Surveys

---

- State logger surveys are valuable and should continue
- Consistency is helpful
  - Questions asked
  - Intervals between surveys
- Collaboration may be beneficial