Discussion of Can Foreign Competition Spur Productivity? by Dunne, Klimek and Schmitz

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Gary Stern Conference
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Basic Story Line of the US Cement Industry

1947-1965: Labor productivity grows at 5% per year.

1965-1982: Union forms, productivity growth drops to 0.

1983 on: Foreign producers enter, union is broken, productivity growth is roughly 6% per year.

Outline for Discussion

1. Link this paper to a broader literature

2. Raise some concerns about the consistency of the broader message

3. Suggest some possibility for taking the analysis further

Context for the Current Paper

Big Question: Why are some countries so much richer than others?

Partial Answer: TFP, not accumulation.

This leads to only more questions:

- What is the proximate source of low aggregate TFP: low adoption of technology, inefficient use of technology at the establishment level, misallocation.....
- What factors are influencing adoption, efficient use, misallocation etc...

Progress in this area requires measurement and theory.

Ideally, we want to have measures of some factor across countries and across time, and then use theory to assess the quantitative effects of these measured differences.

In previous work, Jim and coauthors have explored the possibility that a lack of competition is an important factor in leading to low productivity.

Problem: We neither have good ways to measure competition, nor do we have established theories about the mechanisms that link competition and productivity.

Faced with this difficulty, Jim and coauthors have looked to case studies to build a case for the potential importance of competition.

Today's paper presents one more case study.

Mechanism in today's paper:

- lack of (foreign) competition lead to a strong union
- union demands lead to bad outcomes
- entry of foreign producers lead to increased competition
- increased competition from abroad made the union demands unsustainable
- union was broken and outcomes improved

Key message: openness is an important source of competition

Nice feature of the paper: it examines specific actions that unions take and so helps us understand exactly what types of “distortions” or restrictive practicies are quantitatively important.

It points to employment protection types of measures.

Questions

1. What was happening with prices, wages, profits, investment from 1947 on?

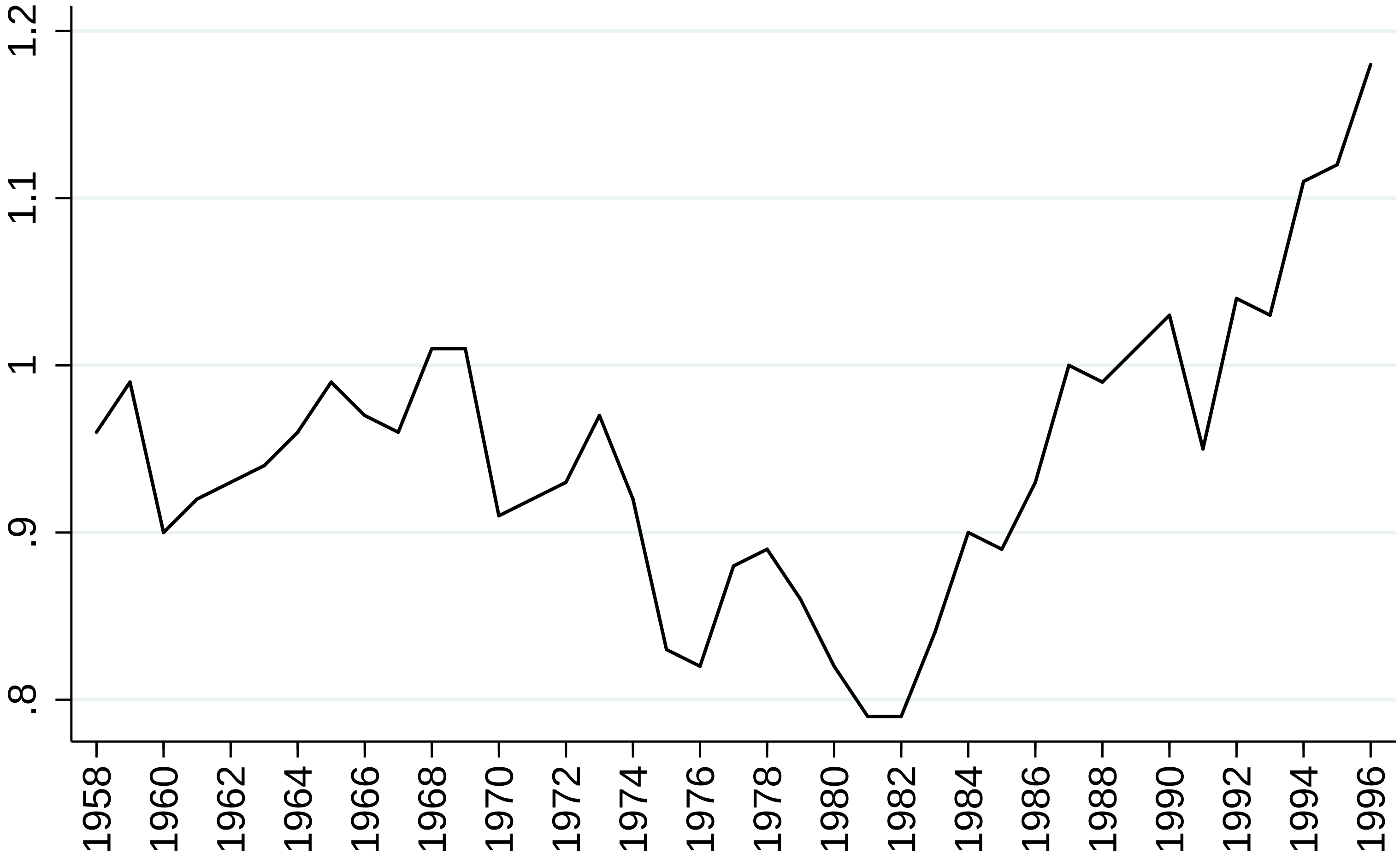
2. How well does the story fit the pre union period?

3. How well does the story fit the evolution in non-coastal areas?

4. How well do the various productivity measures fit with the story?

5. How compelling is the story about workforce restrictions?

Figure 1.
Total Factor Productivity
U.S. Cement Industry
(NBER Manufacturing Database, 1987=1)



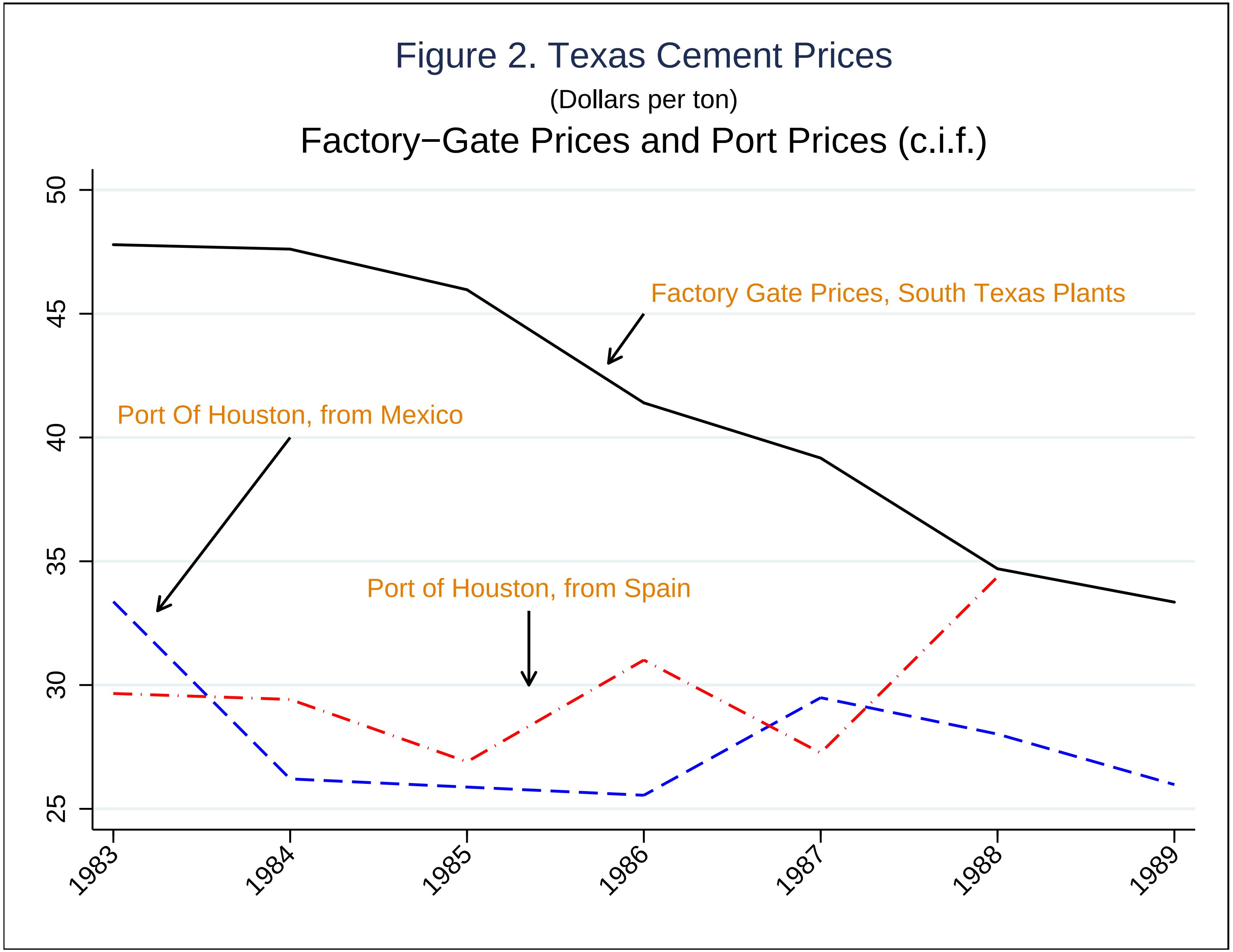


Figure 2. Texas Cement Prices
(Dollars per ton)
Factory−Gate Prices and Port Prices (c.i.f.)
Factory Gate Prices, South Texas Plants
Port Of Houston, from Mexico
Port of Houston, from Spain
50
45
40
35
30
25
1983
1984
1985
1986
1987
1988
1989

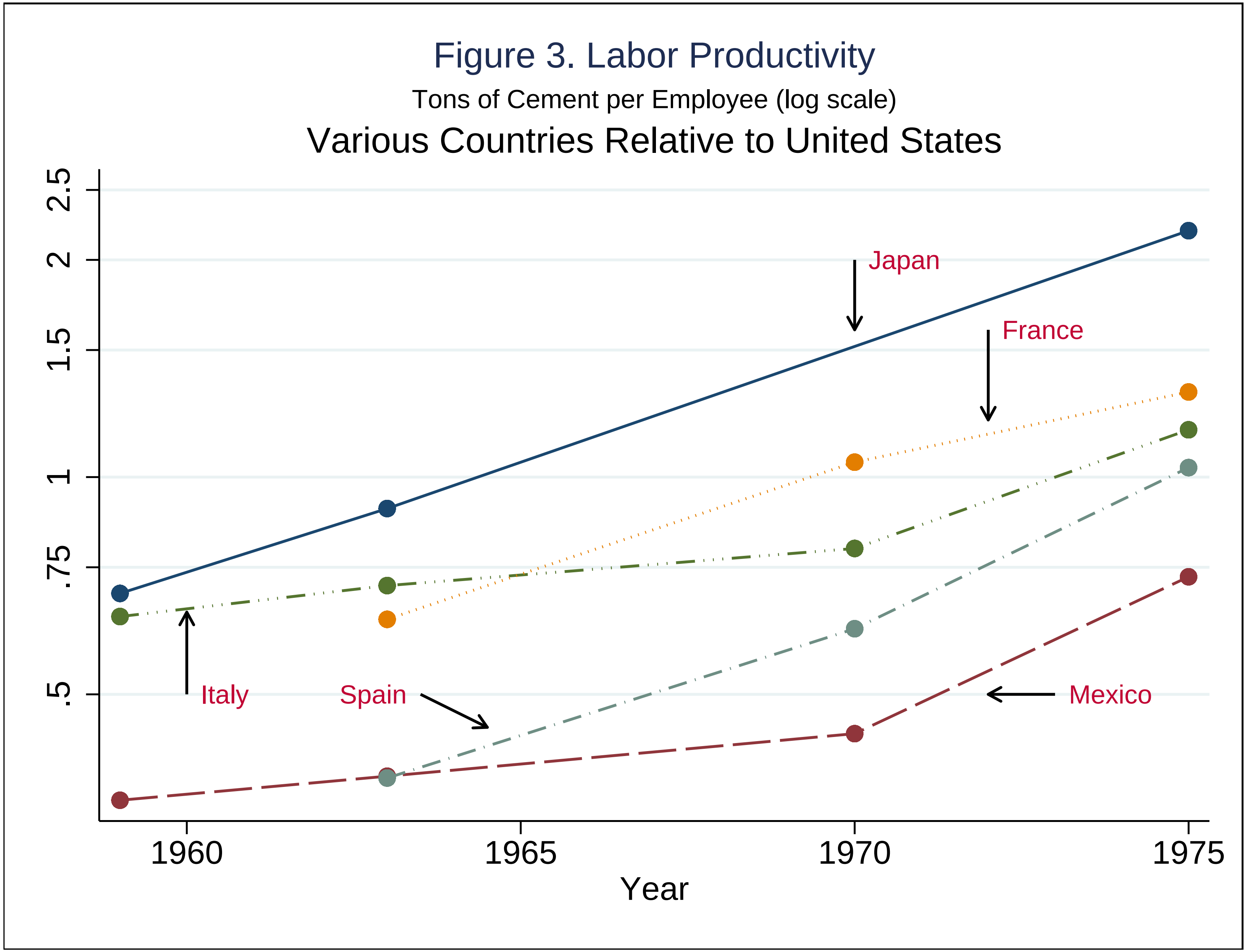


Figure 3. Labor Productivity
Tons of Cement per Employee (log scale)
Various Countries Relative to United States
2.5
2
1.5
1
.75
.5
Japan
France
Italy
Spain
Mexico
1960
1965
1970
1975
Year

Figure 4.
U.S. Cement Imports

(Relative to U.S. Production)

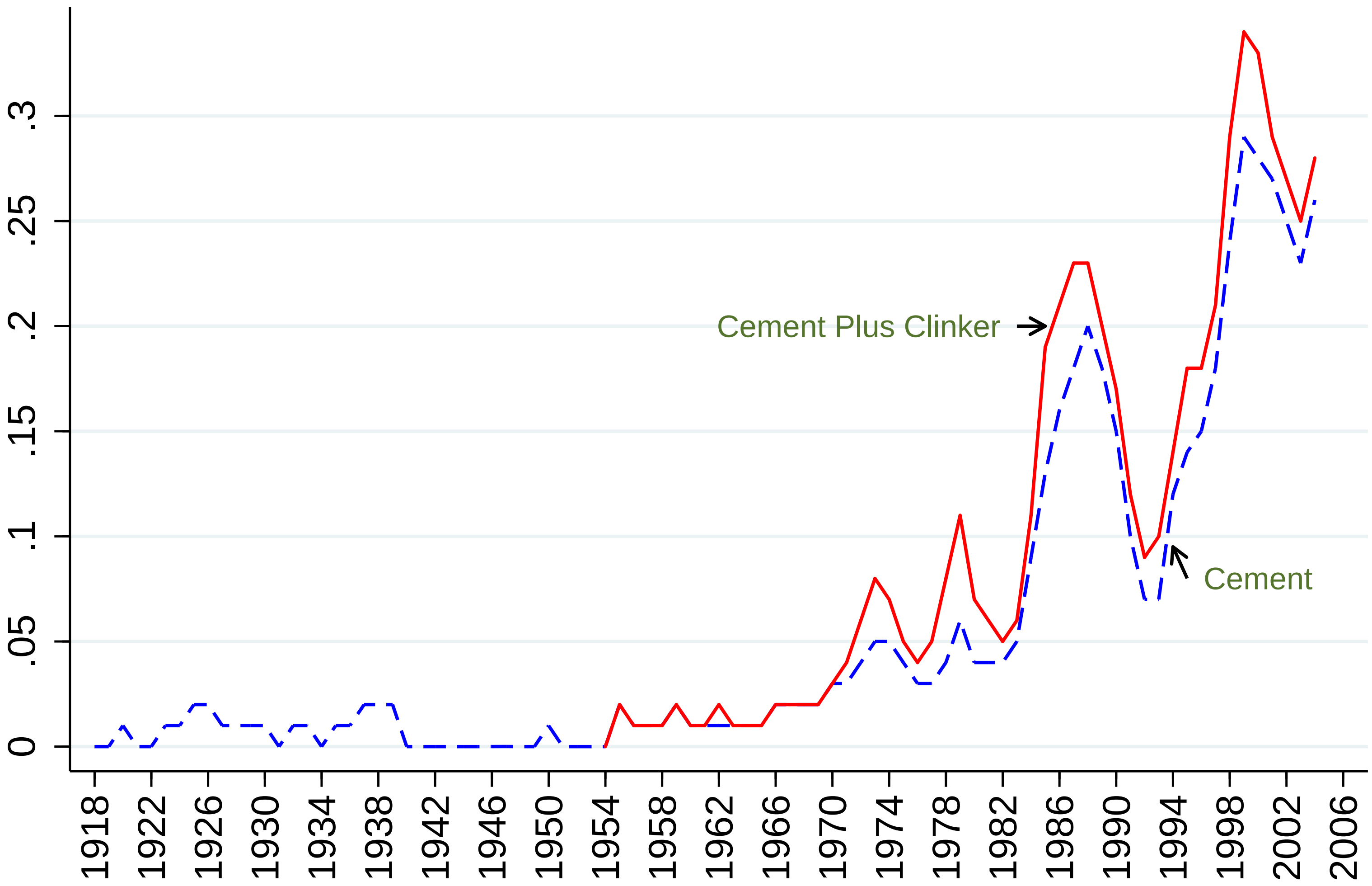
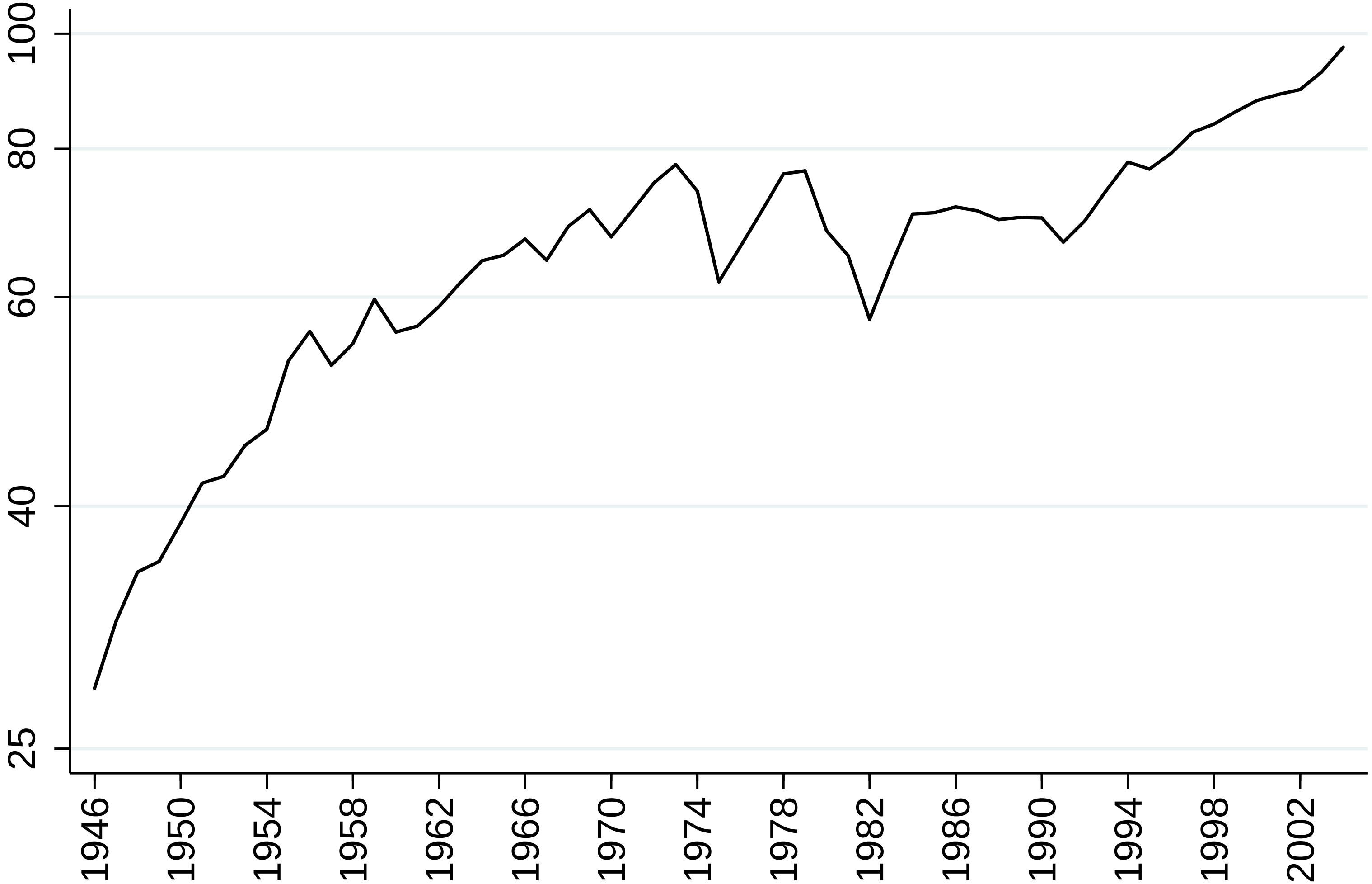


Figure 5.
U.S. Cement Production

(Million Metric Tons, log scale)



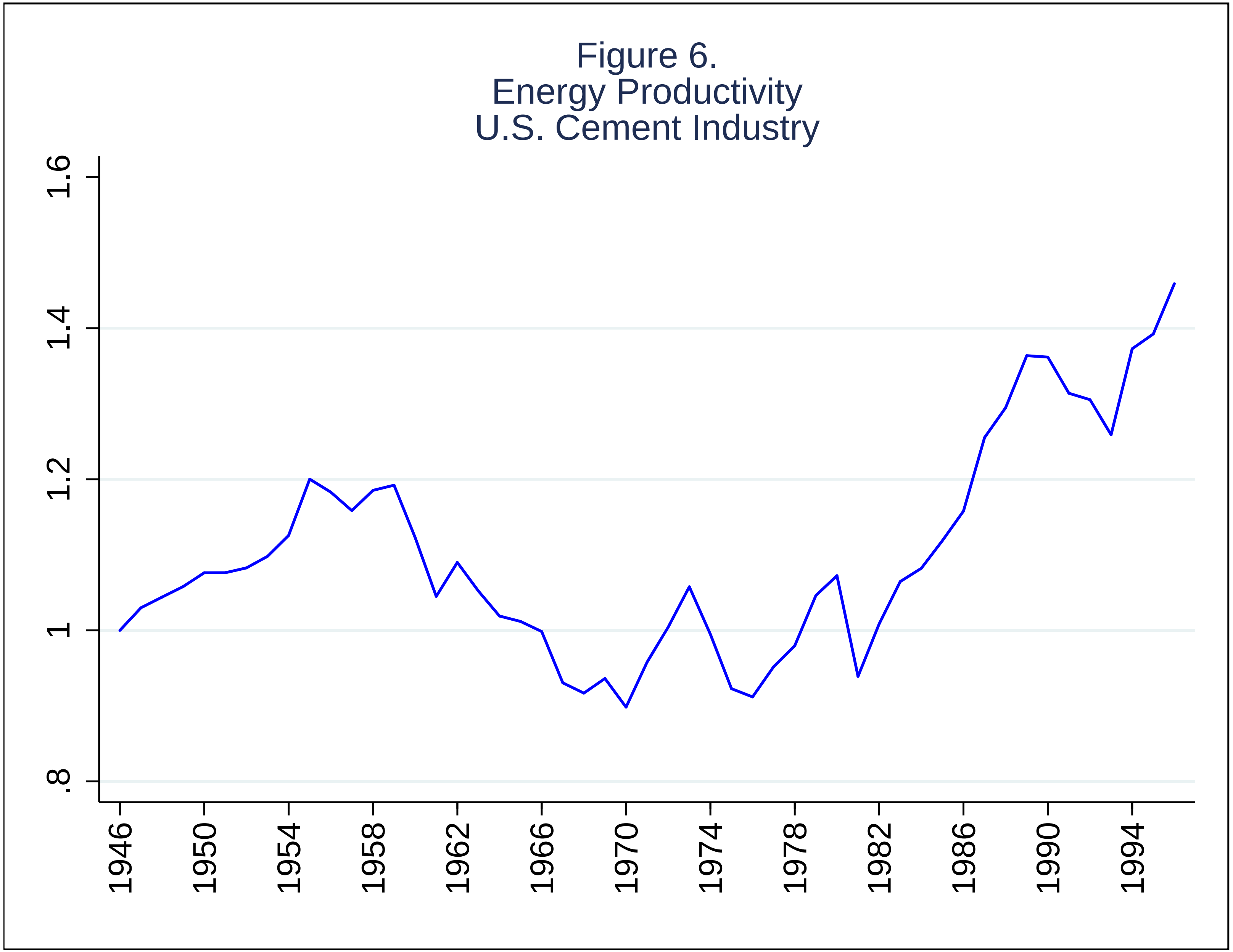
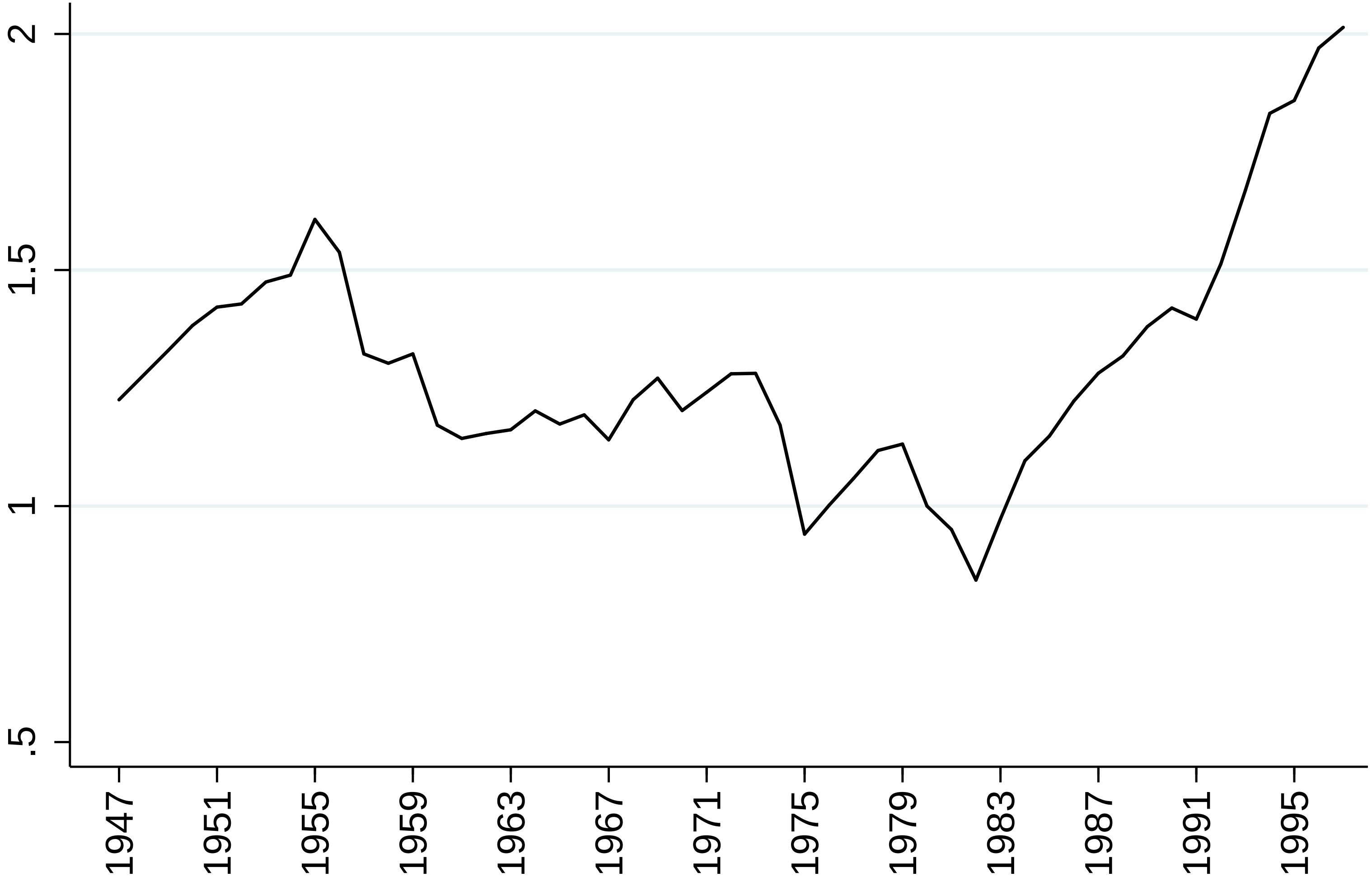


Figure 6.
Energy Productivity
U.S. Cement Industry
1.6
1.4
1.2
1
.8
1946
1950
1954
1958
1962
1966
1970
1974
1978
1982
1986
1990
1994

Figure 7.
Capital Productivity

U.S. Cement Industy



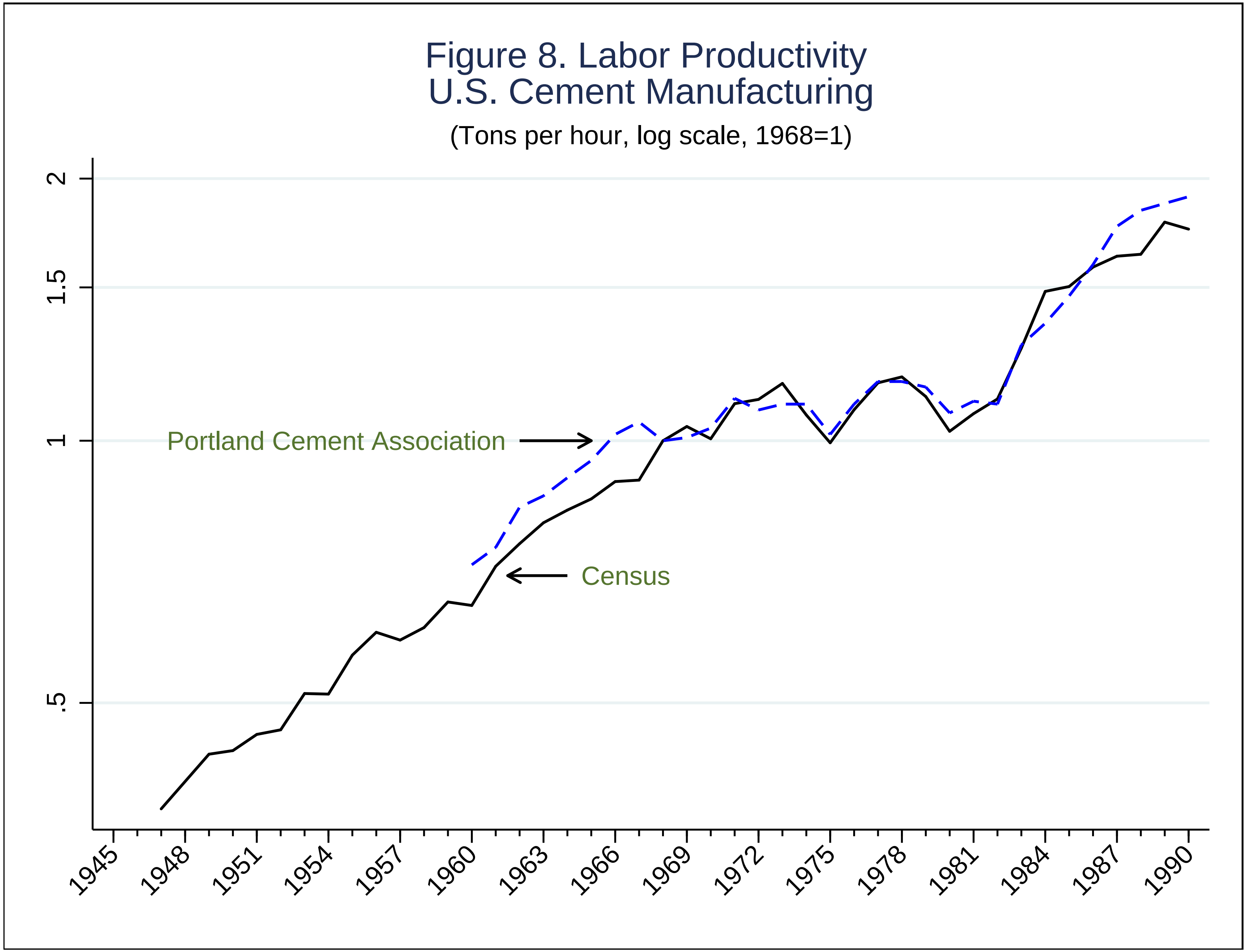


Figure 8. Labor Productivity
U.S. Cement Manufacturing
(Tons per hour, log scale, 1968=1)
2
1.5
1
.5
Portland Cement Association
Census
1945
1948
1951
1954
1957
1960
1963
1966
1969
1972
1975
1978
1981
1984
1987
1990

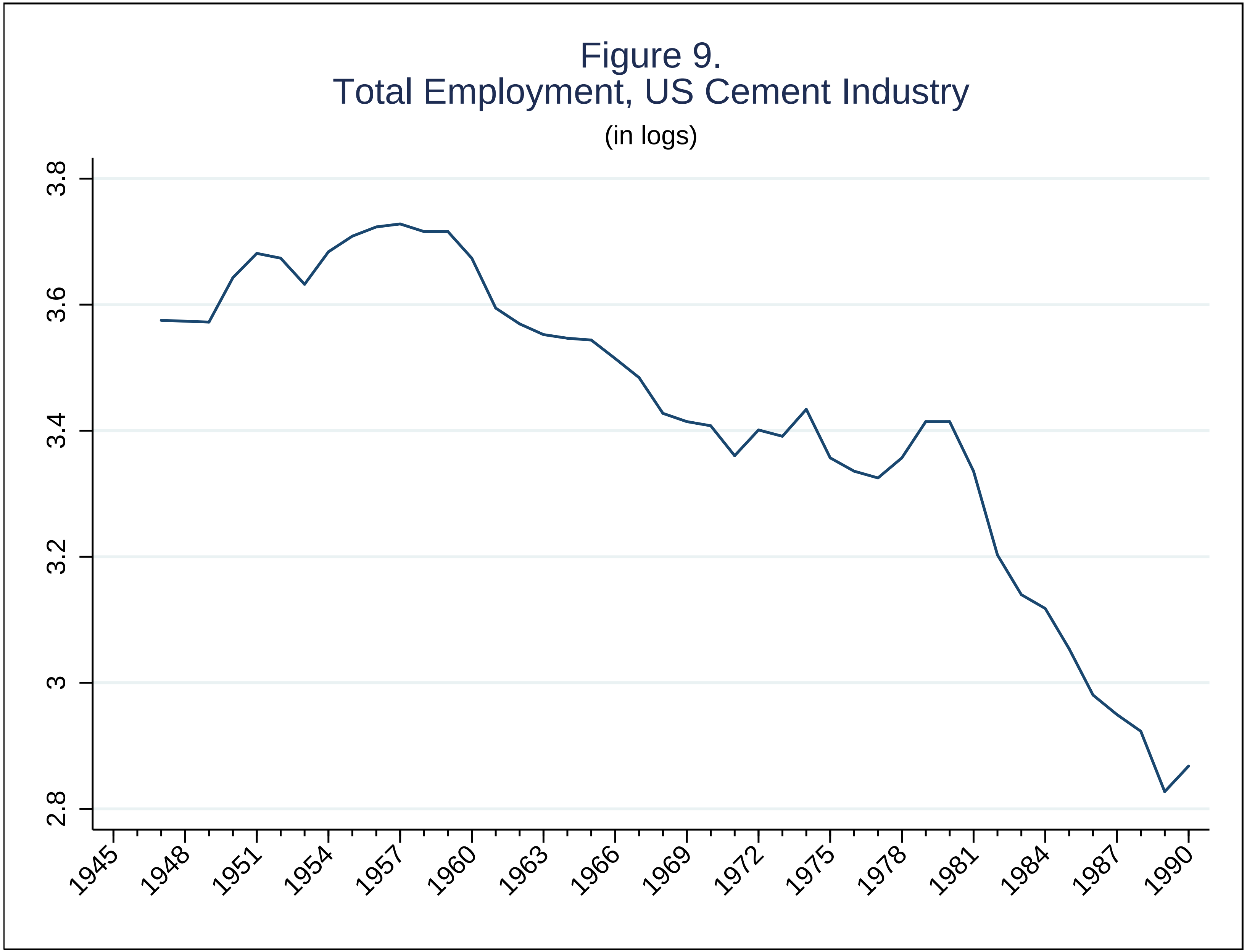


Figure 9.
Total Employment, US Cement Industry
(in logs)
3.8
3.6
3.4
3.2
3
2.8
1945
1948
1951
1954
1957
1960
1963
1966
1969
1972
1975
1978
1981
1984
1987
1990

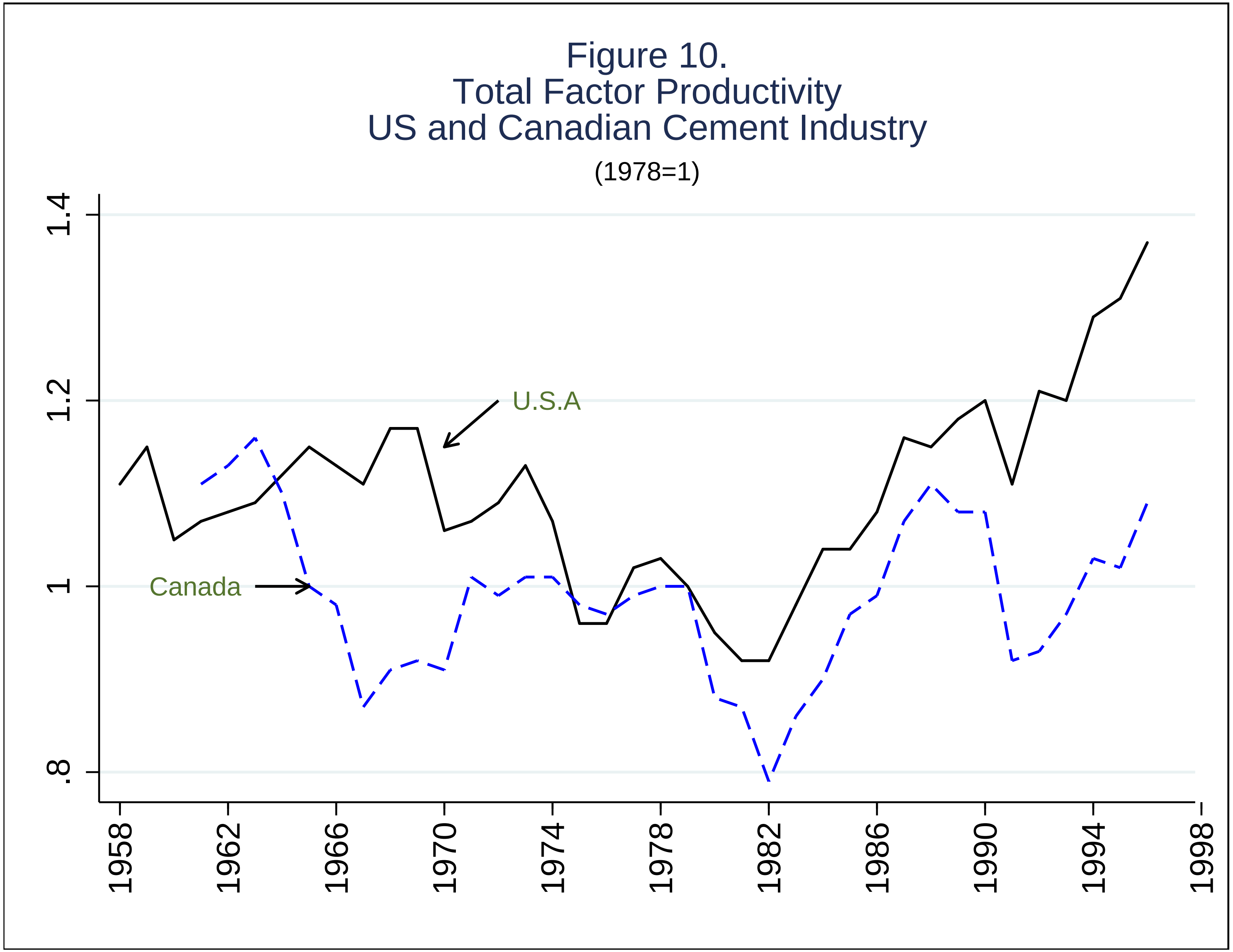
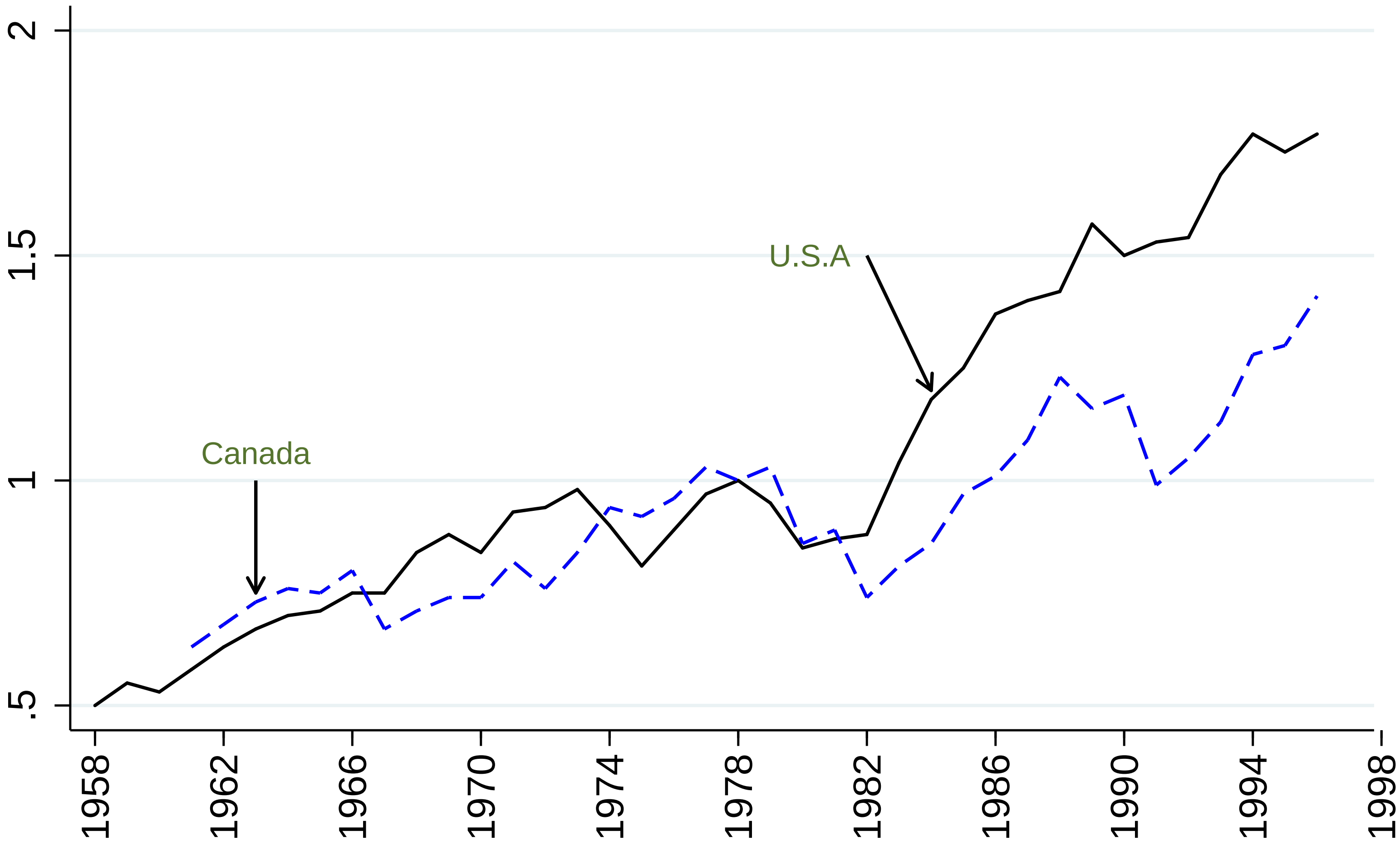


Figure 10.
Total Factor Productivity
US and Canadian Cement Industry
(1978=1)
1.4
1.2
1
.8
U.S.A
Canada
1958
1962
1966
1970
1974
1978
1982
1986
1990
1994
1998

Figure 11.
Labor Productivity
US and Canadian Cement Industry
(1978=1)



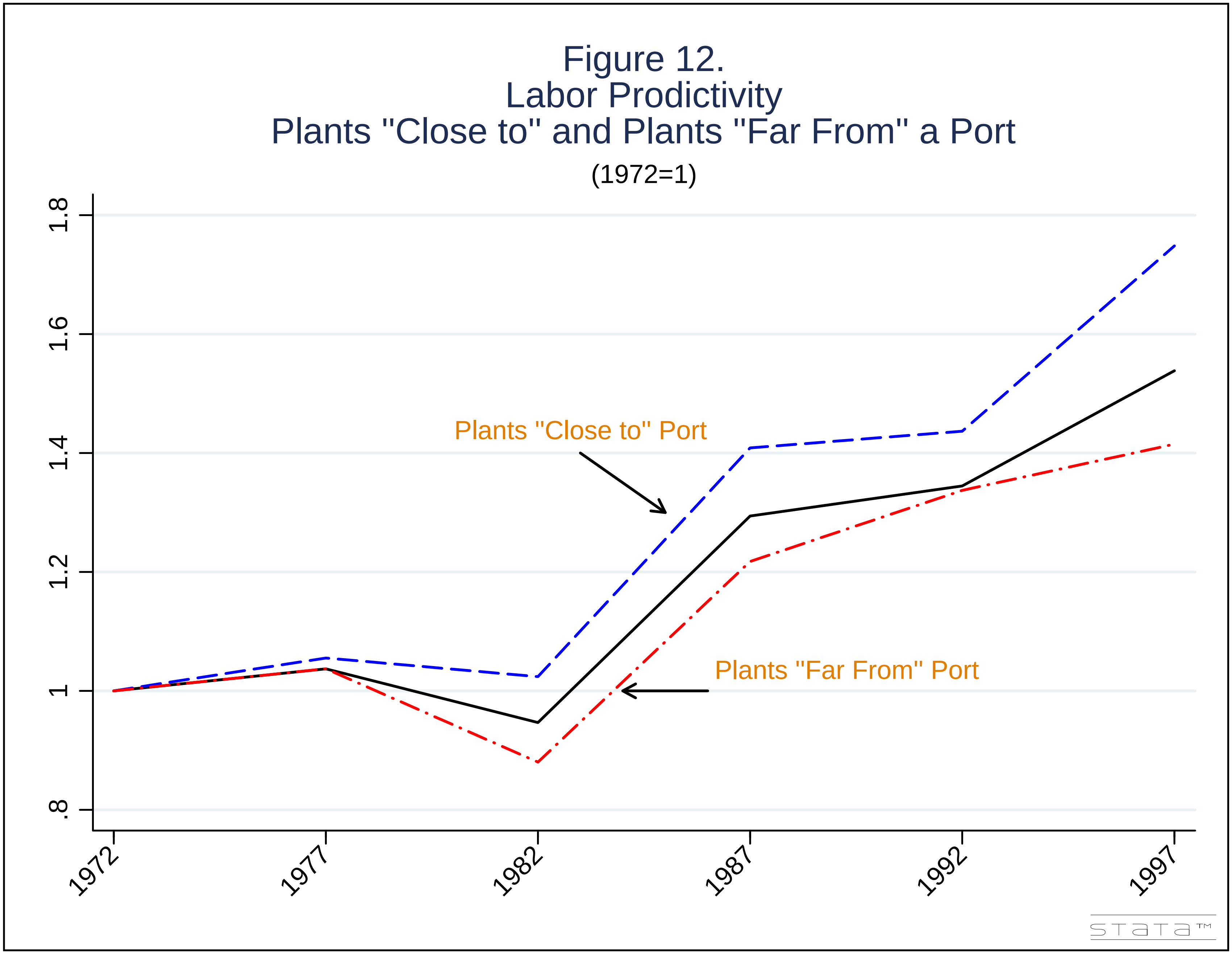


Figure 12.
Labor Prodictivity
Plants "Close to" and Plants "Far From" a Port
(1972=1)
Plants "Close to" Port
Plants "Far From" Port
.8
1
1.2
1.4
1.6
1.8
1972
1977
1982
1987
1992
1997
stata™