Competition and Growth with Limited Commitment

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Discussion Comments of Stephen Parente

I. RESULTS

	Competitive Economy	Non-Competitive Economy
Commitment	(1) Growth rate = g*	(3)Growth rate = g*
No Commitment	(2)Growth rate >g*	(4)Growth rate =0

Limited Commitment is not a problem if there is competition.

Competition - Entrepreneur can always quit his current firm and work at a new firm should the investor reneg.

As long as he can do this, the Entrepreneur will be compensated for any investment in human capital.

Limited Commitment is actually beneficial for growth.

II. Virtues of Paper

a. Competition and Growth

- Overwhelming evidence that competition fosters growth.

  McKinsey Global Institute – comparison of productivity in a given industry across countries. Conclusion of these studies is that greater competition leads to higher productivity.

- A number of papers with a hold-up problem find that greater competition actually is bad for development.

b. Priority of Reforms

- Poor countries rate low in a number of policy related and institutional related dimensions - cost of contract enforcement and cost of start-up.

- What should be the first reform? - This paper says that if you had to choose, it is better to undergo policy reforms that lower barriers to entry.

III. Key Assumptions

1. Physical Capital is technology-specific;

   Obsolescence depends on the size of the investment made by the entrepreneur in human capital.

2. Human capital is neither technology nor firm-specific.

3. Externality in human capital accumulation.

4. Investor cannot “operate” multiple plants.- Is this important?

IV. Interpretation

A. Development and Growth

Pre-1700 constant living standard, followed by industrial revolution followed by modern economic growth

Cell (4) to (3) to (1)?

Or

Cell (4) to (2) to (1)? Productivity Slowdown?

B. Production Units

1. Investor and Entrepreneur – (Corporation and 1862 Joint Stock Act)

Avoid the hold-up problem - Sole Proprietor
Capital constraints or risk sharing as the core problem.
Poor countries have greater fraction of income generated by sole proprietors.

2. Employer and Worker (Factory)

Two types of agents that differ in managerial ability.
Manager – entire time endowment to manage a firm

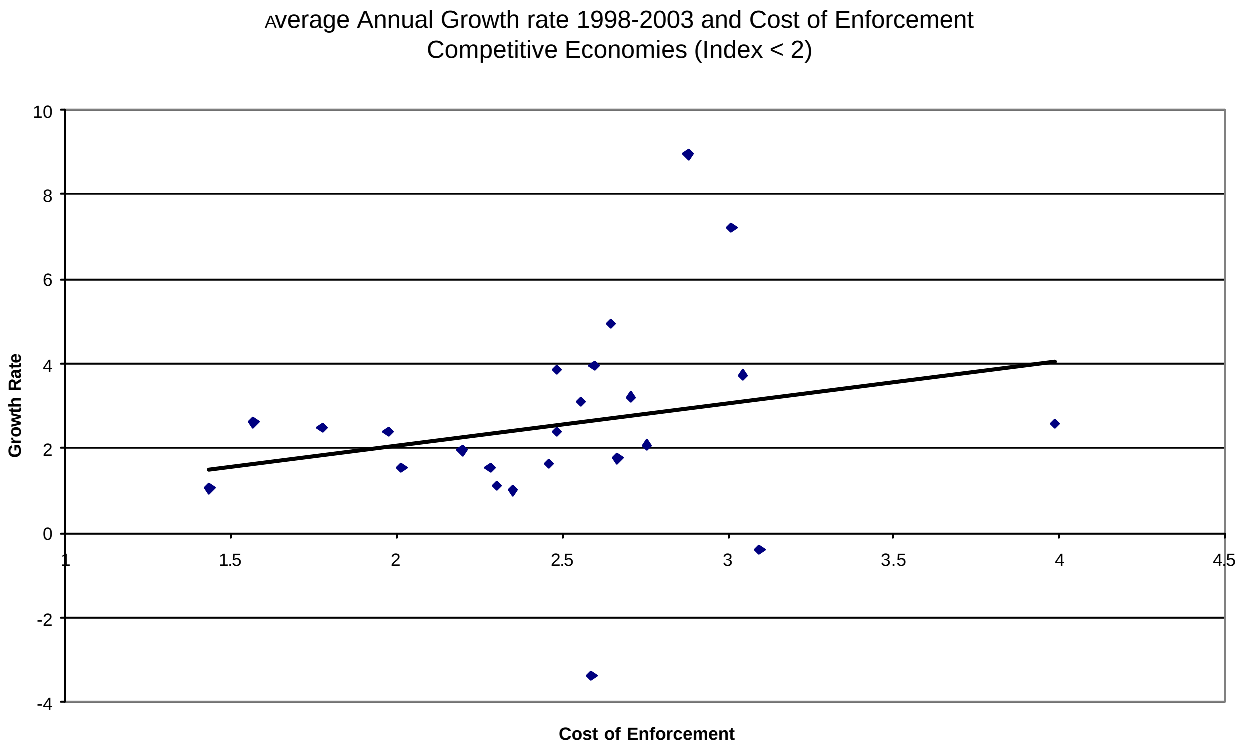
Worker reads a manual on a new technology. Next day, the worker cannot remember how to operate the old machines.
More realistic- worker's investment is unproductive unless new machines are purchased.

3. Investor and Scientist (Modern Research Laboratory)

V. Aggregate Tests of the Theory

A KEY PREDICTION: Limited Commitment is **Beneficial** if Competition

- Incumbent will desire a lower human capital than a new firm because of the obsolescence of physical capital.
- Ex-ante, investor must promise a handsome compensation so as to convince entrepreneur to stay and make a smaller investment in human capital than he would make if he left and went to work for a new firm.
- Ex-post, the investor will want to renegotiate downward the payment to entrepreneur after the investment is made as the entrepreneur's human capital is less than what is optimal for a new firm.
- To avoid this, the entrepreneur makes a larger investment in human capital, equal to the optimal level for a new firm.
- Higher growth when there is no commitment, but competition.


Average Annual Growth rate 1998-2003 and Cost of Enforcement
Competitive Economies (Index < 2)
10
8
6
4
2
0
-2
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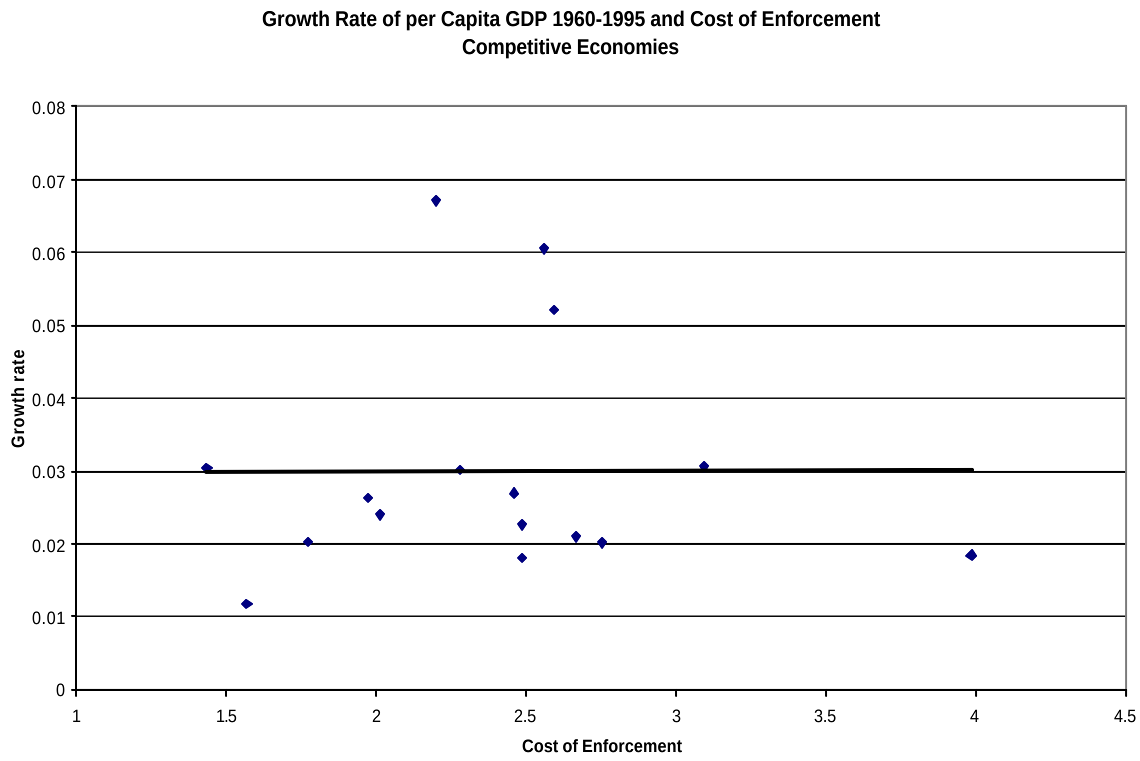
1
1.5
2
2.5
3
3.5
4
4.5
Growth Rate
Cost of Enforcement


Growth Rate of per Capita GDP 1960-1995 and Cost of Enforcement
Competitive Economies
Growth rate
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
1
1.5
2
2.5
3
3.5
4
4.5
Cost of Enforcement

Another Prediction: With Commitment, NO COMPETITION reduces growth.

Two Necessary Conditions:

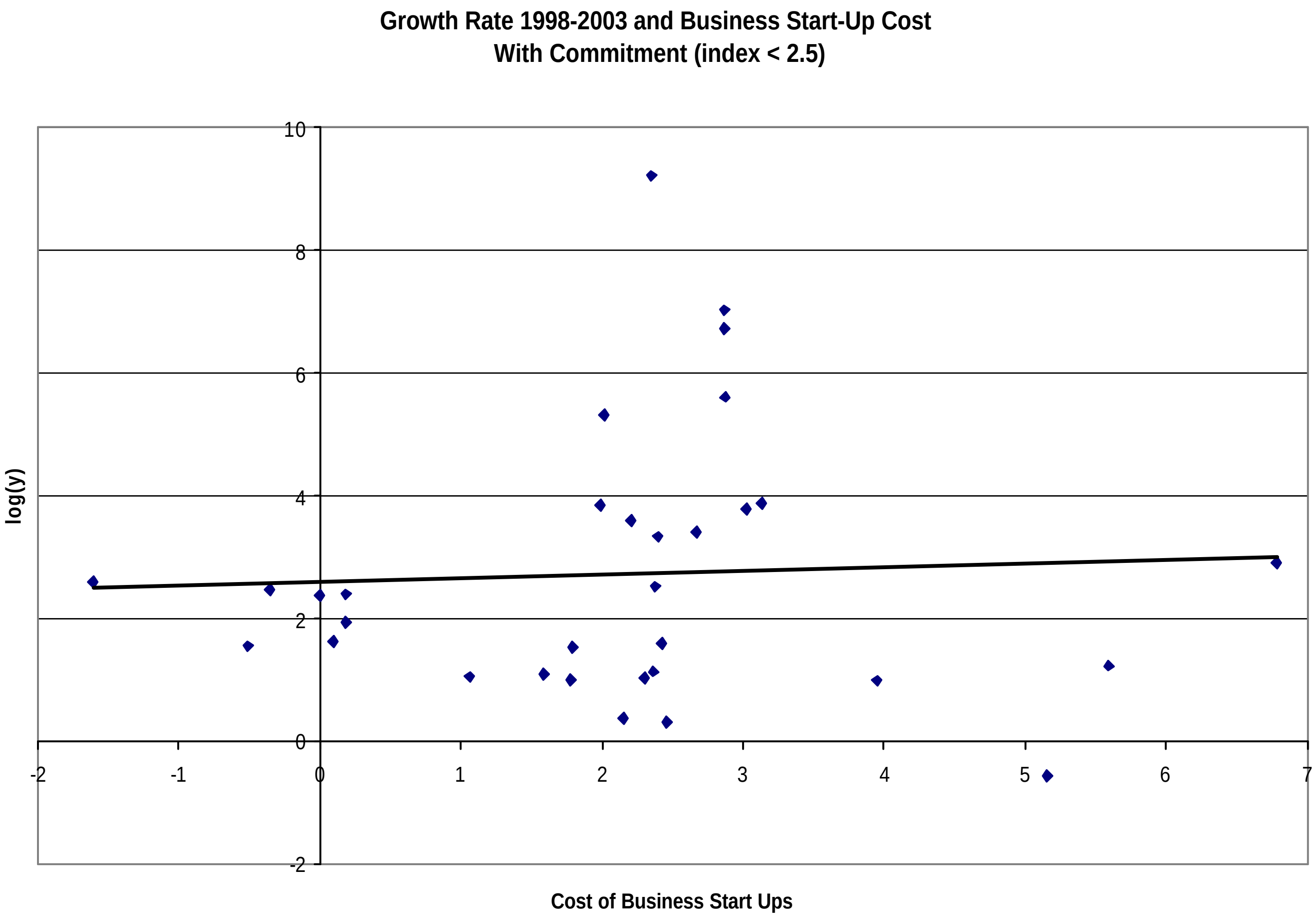
1. Externality in human capital accumulation.

2. New firms are initially “constrained” – investor does not break even negative payments to entrepreneurs are ruled out.

(2) is really a quantitative question.

New firms may make larger initial investment in human capital in competitive economy. (This saves on the future obsolescence of the investor’s capital.)

With higher investment, next period’s average level of human capital is higher in the competitive economy, and investment of all firms increases.


Growth Rate 1998-2003 and Business Start-Up Cost
With Commitment (index < 2.5)
log(y)
Cost of Business Start Ups
10
8
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-2
-1
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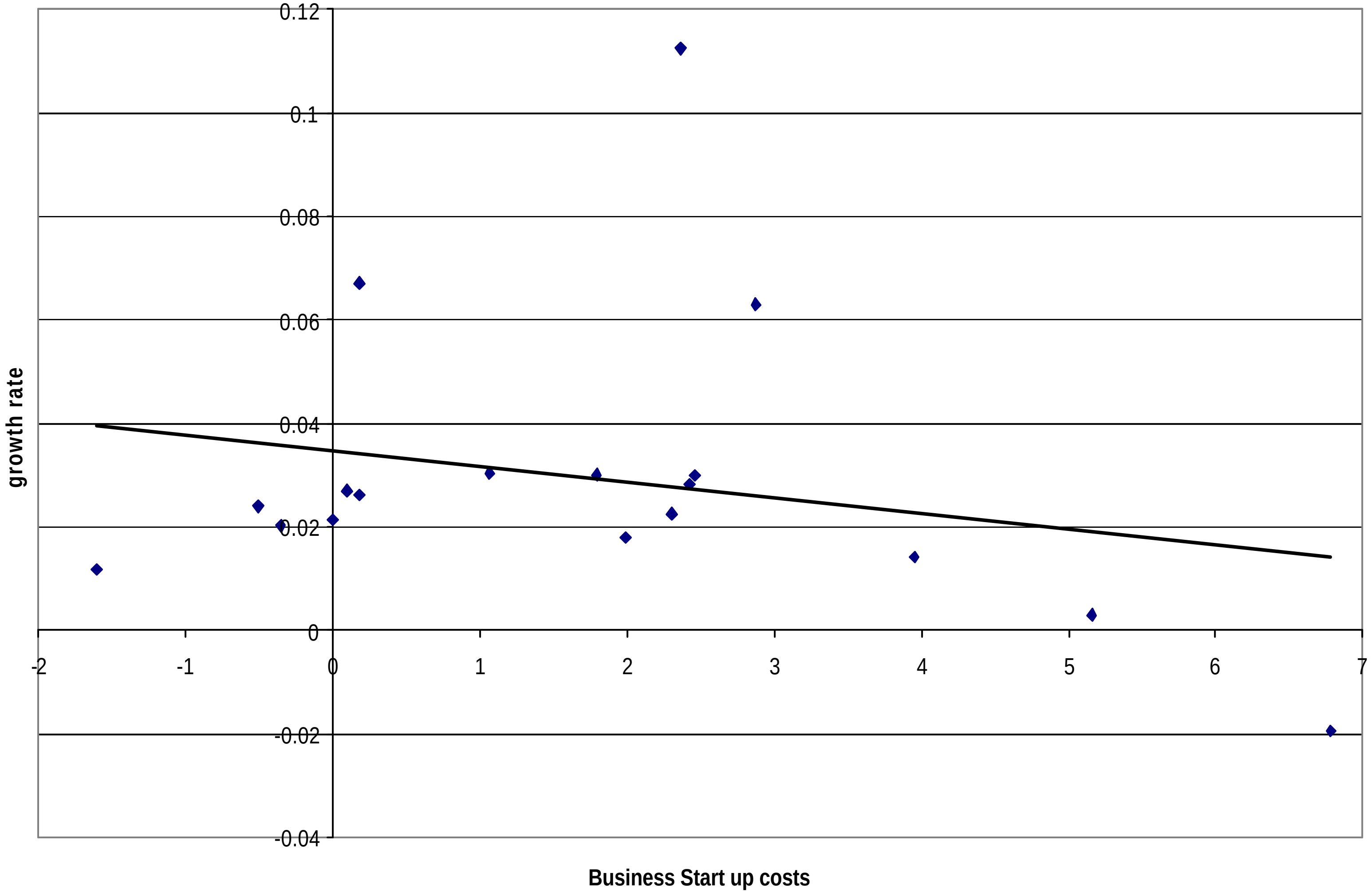
5
6
7

Growth Rate 1960-1995 and Business Start up Costs with Commitment (Index < 2.5)



VI. Summary

- Very interesting paper with important policy prescriptions.

- More support for the theory needed.

  i. Cross-Section Data Analysis
  ii. Histororical Accounts – empirical counterparts of the investor and Entrepreneur.