Private Activity Bonds as Investments Subsidy: Evidence from the 1986 Cap on Bond Volumes
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Discussion by
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This Paper

• The paper investigates the effects of Private Activity Bonds (PABs) on firms' investment and employment decisions.

• Hypotheses:
  – PABs can have a scale effect, lowering the cost of capital, which reduces the marginal cost of production. This encourages firms to increase output and hire more employees.
  – PABs can also have a substitution effect, as the lower cost of capital may incentivize firms to increase their use of capital and decrease their use of other inputs, particularly labor.

• Identification Challenges: PAB beneficiaries are not randomly assigned. For example, labor-intensive companies might be more likely to receive PAB funding.
This Paper

– Identification Strategy:
  • The paper utilizes the 1986 Tax Reform, which imposed limits on PAB issuance by state, as a quasi-experimental setting.
  
  \[
  \text{Per Cap PAB supply}_{1988} = \begin{cases} 
  \$150 \text{ M/Population if Pop} < 3\text{M} \\
  \$50 \text{ if Pop} \geq 3\text{M} 
  \end{cases}
  \]

  • The cap on PABs resulted in interesting distortions:
    – Vermont: PAB per capita - $210 (For a total of $150 M)
    – Massachusetts: PAB per capita - $50 (For a total of $293M)
    – The author examines the variation in PAB availability to firms and compares firms in bordering counties such as counties in Vermont and Massachusetts.
This Paper

![Graph showing the Log(PAB issuance volume) over years from 1983 to 1990. The graph includes a DiD coefficient estimate and 90% CI. The y-axis represents the log of PAB issuance volume, and the x-axis represents the year. The data points are connected by a line, with error bars indicating the 90% confidence interval. The graph highlights a significant increase in PAB issuance volume in 1987 compared to the previous years.]
This Paper

![Graph showing log(employment) over years with 90% CI intervals.](image-url)
Summary of comments

• Research question/Contribution
• Economic Magnitudes/PAB Details
• Identification
Research Questions

• The overarching research question is: Should the government provide subsidized credit to companies?

  – Arguments in favor:
    • Stimulate the local economy
    • Address Market Failures
    • Promote strategic industries
  
  – Arguments against:
    • Can generate market distortions
    • Moral Hazard / Cronyism
    • Crowding out of Private Investments
Research Question

• The paper primarily focuses on the impact of subsidized credit on investment, with limited exploration of unintended consequences.

• Strengths:
  – Provides partial support for the continuation and potential expansion of the subsidized credit program.
  – Raises questions that warrant further investigation.
Research question - Suggestions

– Explore the specific firms and industries that receive funding through subsidized credit.

– Examine whether these funded projects would have secured financing in the absence of the subsidized credit program.

– Investigate the potential influence of political factors, such as campaign contributions or political connections, on the decision-making process.

– Assess whether less efficient industries are disproportionately benefiting from the subsidized credit program.

– Consider incorporating county X Year fixed effects to understand the effects on other firms within the same county. Analyze multiplier effects or potential crowding out dynamics.
A one standard deviation increase in the availability of Private Activity Bonds (PABs) is linked to a significant 10% increase in investments and a 5% increase in employment.

Notably, the effects are even more pronounced, approximately 2 to 3 times larger, when the analysis is limited to PAB beneficiaries.

The results become more intriguing when considering states like California, Florida, and Texas, where housing projects were prioritized as the main use of PABs.
The magnitudes of the observed effects appear to be remarkably large, bordering on the realm of being unrealistic. If the effects are indeed this substantial, it raises questions about the underutilization of Private Activity Bonds (PABs) in current practices.

I strongly urge the author to dig deeper to gain a deeper understanding of the underlying factors driving such significant effects. Is the magnitude influenced by a severe financial constraint, with numerous projects awaiting financing? Additionally, it is essential to investigate why these projects are not being funded through conventional financial markets.
Economic Magnitudes/More details on PAB - Suggestions

• The striking impact of a relatively small interest rate subsidy on firms' decision-making processes warrants detailed investigation. Exploring the mechanisms through which this subsidy influences firms to such a significant extent will provide valuable insights and help clarify the dynamics at play.

• I also encourage the author to delve deeper into the variations in the priorities of different states. Are the effects stronger in places in states where industrial development was a priority? This further investigation will shed light on the driving factors behind such substantial effects.
Identification

• There are several levels of measurement error present in the analysis.
  – The variation in the study occurs at the state level, while the analysis is conducted at the county level.
  – The focus of the study is on investment, which is examined at the firm level.

• It is crucial to consider the various intermediate steps that occur between the increase in the PAB cap and the actual investment.
Identification

• The results are better identified when analyzed at the firm level using beneficiary firms.

• The use of the lottery provides the most well-identified result.

• I encourage the author to further explore the results by specifically examining firms that have directly benefited from the PAB program.

• It is important to include additional firm-level controls to enhance the robustness of the analysis.
Conclusions

• This paper provides significant insights into the effects of subsidized credit on firms' investment and employment decisions through Private Activity Bonds (PABs).

• Further research is warranted in three key areas:
  – Explore other potential unintended consequences of PABs beyond employment, broadening our understanding of the overall impact.
  – Investigate the magnitude of the observed effects to determine their realistic implications and assess their significance in the broader context.
  – Enhance identification strategies and focus on firm-level analysis to strengthen causal inference.

• I look forward to the next version of the paper!