Investment

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## Introduction

The objective of this analysis was to see whether there has been any effect of PLI on physical investment undertaken by beneficiary firms. To understand the same a regression analysis was performed.

The data consists of consolidated annual financial statements of firms wherever available. If firms do not prepare a consolidated statement, the standalone statement was considered.

Only beneficiaries of Category 1 are considered. This is because they were incentivised by the scheme to undertake greater investment. The selection criteria was based on investment plans, with those pledging greater investment being ranked higher.

The time period considered is FY15-FY23. Of these FY 22 and FY 23 are the years when the PLISFPI was implemented.

## Regression

In order to correct for endogeneity, GMM method is used in the literature[[1]](#footnote-21).

Therefore, GMM method was used for estimation.

Two models were estimated as given below:

The annual measure of uncertainty was taken by taken the average of the monthly Economic Policy Uncertainty Index by Scott Baker, Nicholos Bloom and Steven J. Davis. The annual repo rate series was generated by averaging for quarterly figures available at the Database on Indian Economy maintained by the RBI. Here, represents investment, represents capital stock, represents cash flows, represents sales, represents debt and represents change in a variable. Year fixed effects other than PLI were sought to be captured through repo rate and uncertainty.

##   
## GMM Panel Regression Models of effect of PLI scheme on Category 1 beneficiary investment  
## ==========================================  
## Dependent variable:   
## ----------------------------  
## i.by.k   
## (1) (2)   
## ------------------------------------------  
## i\_1.by.k\_1 0.258 0.759\*\*\*   
## (0.187) (0.268)   
##   
## cf\_1.by.k\_1 -0.005 0.059\*\*\*   
## (0.036) (0.012)   
##   
## s\_1.by.k\_1 0.014\*\*\*   
## (0.005)   
##   
## ds.by.k 0.008\*\*\*   
## (0.002)   
##   
## d\_1.by.k\_1 0.093\*\* 0.073\*\*   
## (0.046) (0.031)   
##   
## uncertainty\_1 -0.0003 -0.0001   
## (0.0004) (0.001)   
##   
## repo\_rate 0.013   
## (0.008)   
##   
## d.repo\_rate -0.015   
## (0.019)   
##   
## pli 0.008 0.050   
## (0.019) (0.035)   
##   
## ------------------------------------------  
## Observations 46 46   
## ==========================================  
## Note: \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

The results indicate that PLI has had no significant effect on the investment levels of the beneficiaries.

## References

Gezici, Armağan, Özgür Orhangazi, and Cihan Yalçın. 2019. “Determinants of Investment in Turkey: A Firm-Level Investigation.” *Emerging Markets Finance and Trade* 55 (6): 1405–16. <https://doi.org/10.1080/1540496X.2018.1473247>.

Panagiotidis, Theodore, and Panagiotis Printzis. 2021. “Investment and Uncertainty: Are Large Firms Different from Small Ones?” *Journal of Economic Behavior & Organization* 184 (April): 302–17. <https://doi.org/10.1016/j.jebo.2021.01.011>.

Poncet, Sandra, Walter Steingress, and Hylke Vandenbussche. 2010. “Financial Constraints in China: Firm-Level Evidence.” *China Economic Review* 21 (3): 411–22. <https://doi.org/10.1016/j.chieco.2010.03.001>.

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1. See for example Panagiotidis and Printzis (2021), Rashid and Saeed (2017), Poncet, Steingress, and Vandenbussche (2010), Gezici, Orhangazi, and Yalçın (2019), Saeed and Vincent (2012) [↑](#footnote-ref-21)