Do Energy Efficient Firms Have Better Access to Finance?

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Improving energy efficiency quickly is key to mitigating climate change and a large part of such improvements has to be implemented in firms. But since most energy efficiency improvements require upfront investments, good access to external finance is important. Theory suggests that information asymmetries may prevent lenders from including energy efficiency into their lending assessment, even though higher energy efficiency makes a firm more cost-competitive and its collateral worth more, especially if stringent climate change mitigation plans are implemented.

Empirically, little is known about the impact of energy efficiency on access to external finance. Here we examine for the first time empirically the effect of a firm's higher energy efficiency on its ability to obtain loans in European Union countries. We exploit a unique firm-level dataset that links a survey from the European Investment Bank on energy efficiency of firms' building stock and on access to external finance with the ORBIS firm database for firms in all EU countries.

We find that energy efficiency has no effect on the ability of a firm to obtain external financing compared to other indicators and characteristics of the firm. These include whether the firm is foreign-owned, its size, and its age. Indicators on the financial health of the firm are its current ratio, return on assets, and financial leverage, whereas those on its operational health are innovation, labour productivity, state-of-the-art machinery, investment in R&D, and whether the firm is operating at full capacity. Thanks to the rich dataset, these variables are included in the empirical estimation. Additional analysis using information on past energy audit, the firm's regional location and whether it is in the eurozone confirms the result.

The results have important policy implications, as they reveal an unexploited potential for energy efficiency policy to signal when firms are energy efficient. If energy efficiency does not lead to better access to finance, or if firms that want to implement such measures cannot finance them cheaply, this can slow down overall progress on energy efficiency. Whereas energy efficiency assessment as part of the lending process and compulsory energy audits are already in place, we find that currently, these audits seem to have no signalling effect on granting firms better access to finance, and that firms that are likely to be under scrutiny when banks lend to them are large firms, which tend to have better access to finance anyway. Scope therefore exists for policies focusing on facilitating energy efficiency financing, which are currently implemented only by 10 out of 28 countries in the EU, and which, if implemented successfully, could lead to a "triple win situation": for the banks, firms, and the effort at mitigating climate change.

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