# Quantifying Financing Needs in the Belt and Road Countries and Industries

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## Summary

There has been a lot of discussion recently about the financing opportunities in Belt and Road regions. However, very little is known about the financing needs of the industries and countries in Belt and Road regions. This study quantifies these financing needs by constructing a Financing Needs Index based on the empirical results obtained from investment-to-cash flow sensitivity, and cashflow sensitivity of cash models. Data are drawn from two million private firms in the Orbis database covering 78 industries and 36 Belt and Road countries in the period between 2009 and 2014. This is the first comprehensive index of financing needs in the Belt and Road countries using detailed firm-level information. The paper also constructs an Augmented Financing Needs Index that further incorporates four additional dimensions of data from the World Bank Enterprise Survey, namely, perception of financial obstacles, availability of credit facility, difficulty in loan application and

requirements for collaterals, which provides quantitative measures in greater granularity for both revealed and perceived financing needs.

This paper documents three facts based on the comparative statistics of the Financing Needs Index. First, there is considerable heterogeneity of financing needs across the Belt and Road countries. Second, the financing needs of an industry are contingent on the institutional environment of a country, thus a financially-constrained industry in one country may be unconstrained in another. Third, the extent of financing needs changes over time within each specific country.

Our Financing Needs Index is negatively associated with financial liberalization and cumulative investment growth within our sample of countries. As investment is a driving force of economic growth, the results suggest that a relaxation of financing constraints can play a critical role in promoting investment and stimulating economic growth in the Belt and Road countries, which in turn provides policy implications for the design of the Belt and Road Initiative.