Ownership Unbundling of Electricity Distribution Networks

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Abstract
Traditional restructuring of power markets has focused on legally separating monopolistic transmission and distribution infrastructure, with sufficient regulatory oversight to ensure non-discriminatory access to networks, and transparent and cost-reflective tariffs. There is consensus that ownership separation for transmission assets is beneficial for competition and transparency. However, at the distribution level the benefits are questionable. This paper reviews the theoretical arguments for ownership unbundling and summarises the findings from 23 academic papers and consulting reports. In addition, this paper empirically demonstrates that forced distribution ownership unbundling in New Zealand (from 1998) and the Netherlands (from 2009) did not increase retail competition (and reduced it in New Zealand), did not increase network quality, but did result in significant one-off and structural costs. The pros and cons of DSO ownership unbundling is topical given current policy discussions in Denmark and the more general changes to the operating environment of DSOs with increasingly active networks due to decentralised renewables production and bi-directional power flows. Policymakers should therefore consider alternative policy measures to increase retail competition and network quality.

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