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Market Power and Price Exposure: Learning from Changes in Renewables Regulation

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Abstract In many regulatory settings, regulators often debate whether to pay producers at fixed prices or at market-based prices. In this paper, we assess how firms' price exposure affects the degree of market power. We find that fixed prices mitigate market power by directly affecting the dominant firms' incentives to exert market power, while market-based prices do so indirectly by promoting the fringe firms' incentives to engage in arbitrage. To empirically identify these effects, we exploit a natural experiment that took place in the Spanish electricity market, where the regulator switched back and forth from paying renewable energies according to fixed or to market-based prices. Overall, we find that fixed prices were relatively more effective in weakening firms' market power, even though the market-based price regime led to more active price arbitrage.

Keywords market power, forward contracts, arbitrage, renewables.

JEL Classification L13, L51, Q41

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