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Comments on

Pricing twice the cost? The Impact of Forward Contracts on the Pass-Through of Emissions Allowance Prices. Empirical Evidence from the Spanish Electricity Market

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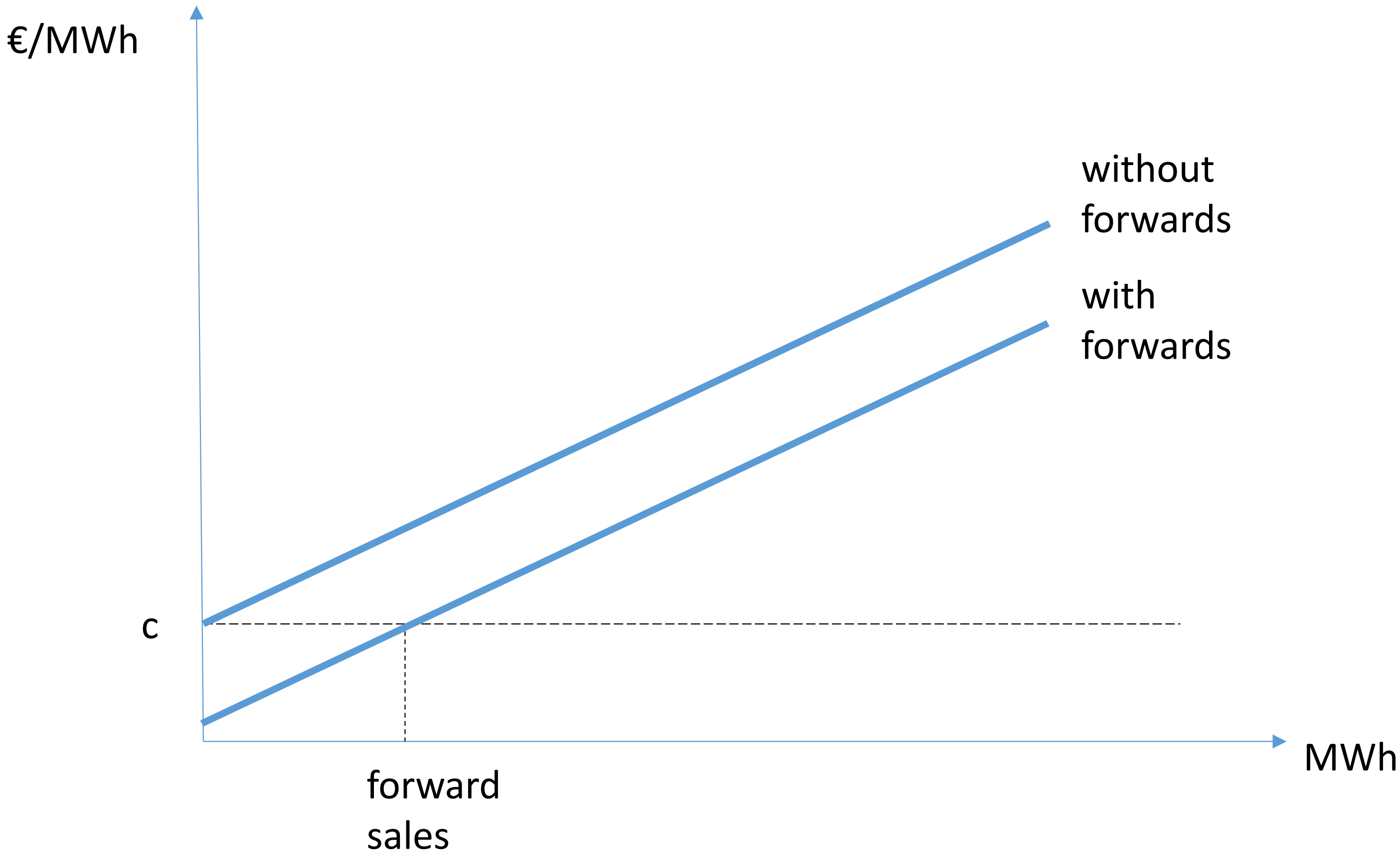
The Johanndeiter-Wölfing's cocktail

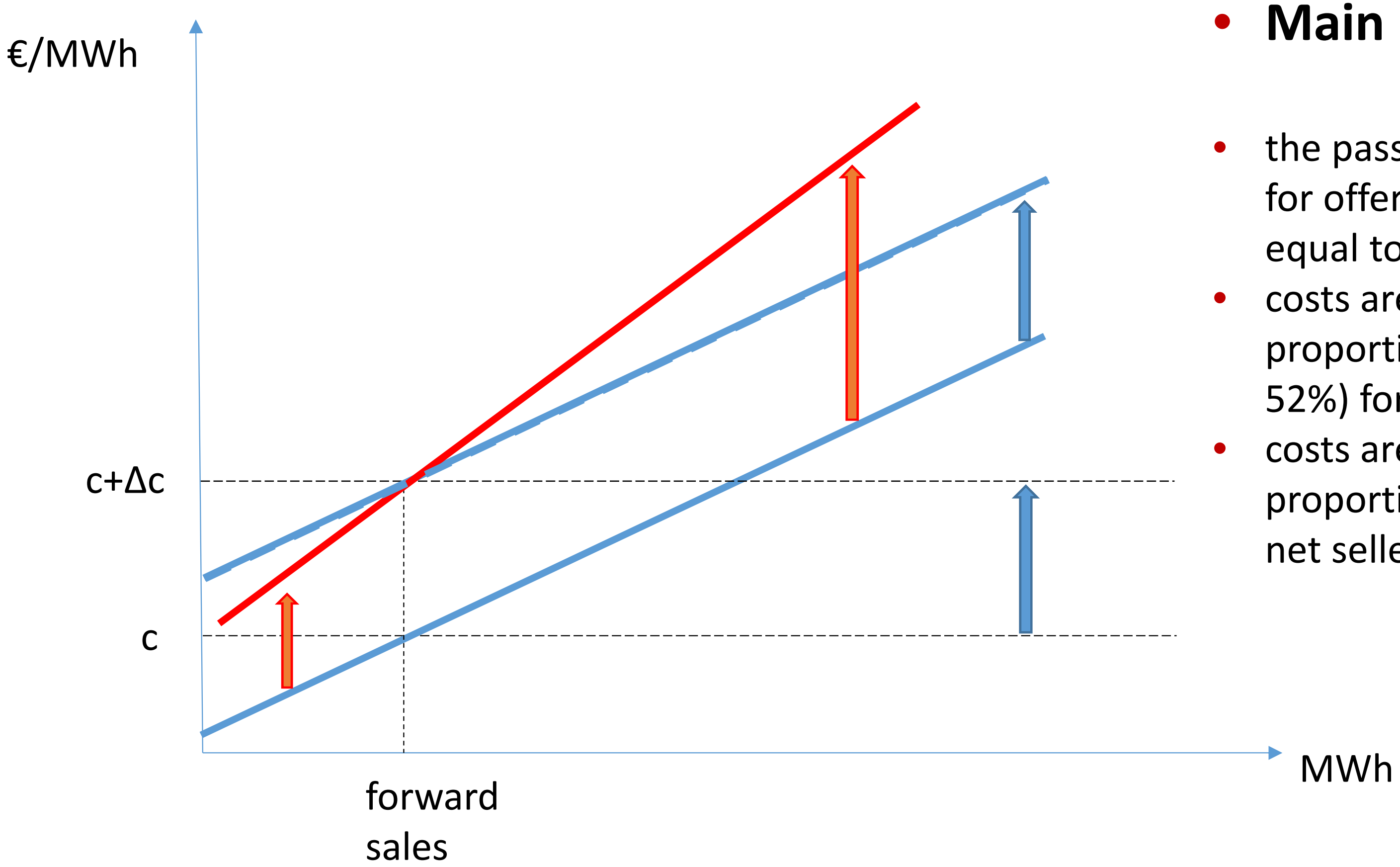
- Pour a large dose of **supply functions** in an IO model
- Garnish with slices of **forward contracts**
- Add a zest of **cost pass-through**
- Aromatize with **ETS** liquor
- Shake energetically
- Serve on fresh **Spanish data**

- Enjoy!

Supply function



Pass-through of a cost variation



- **Main result of the paper**

- the pass-through rate is equal to 1 for offered quantities close or equal to the forward;
- costs are passed through under-proportionally (at rates around 52%) for net buyers;
- costs are passed through over-proportionally (around 200%) for net sellers.

Two questions

1. On forwards purchase

2. On ramping rates

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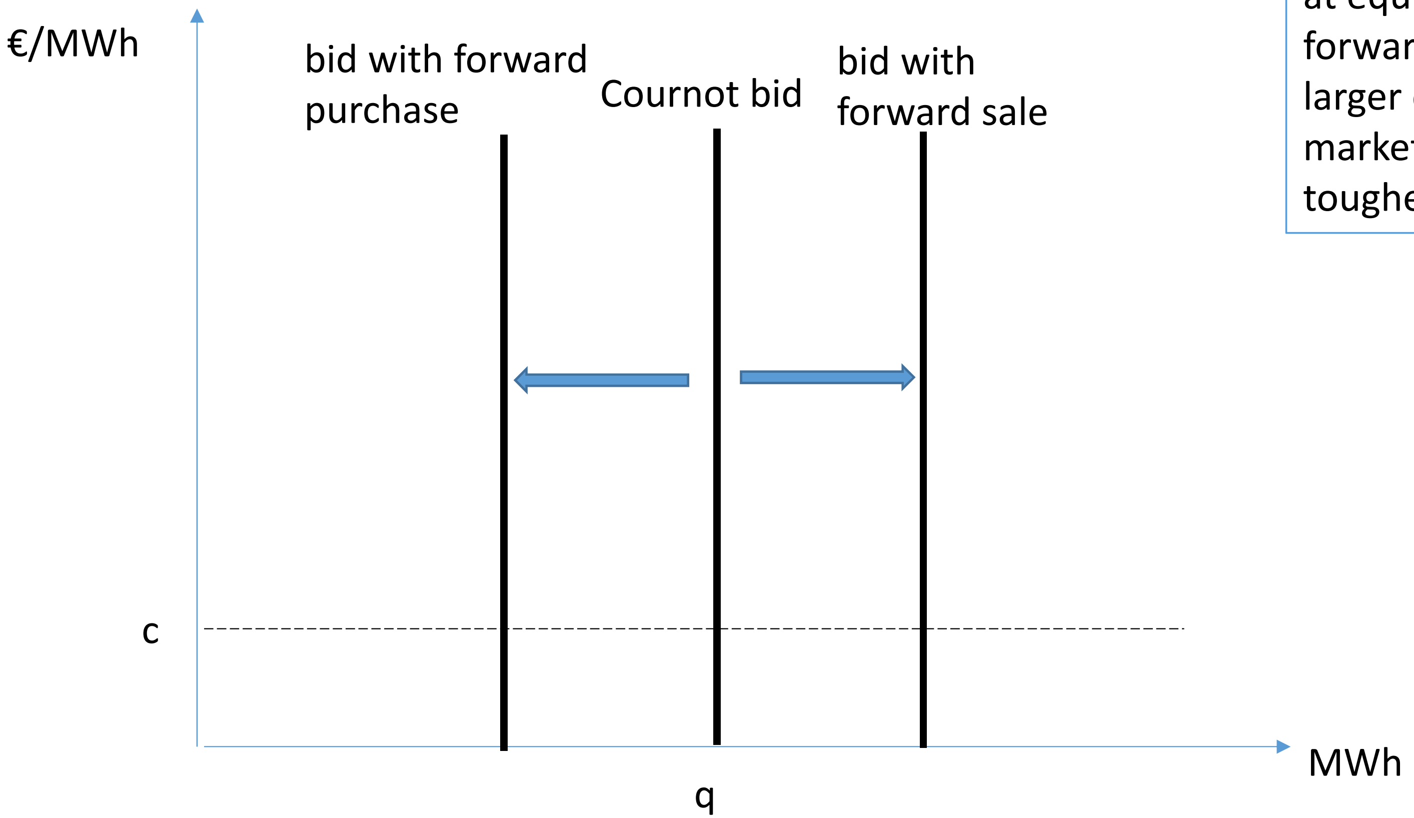
1. On forwards purchase

- Allaz and Vila (JET 1993)
  - In a duopoly where firms compete in **quantities**, producers **sell** forward and spot prices are **lowered** below the levels reached in the absence of forward trading: forwards are **good** for competition.
- Mahenc and Salanie (JET 2004)
  - In a duopoly where firms compete in **prices**, producers **buy** forward and spot prices are **raised** above the levels reached in the absence of forward trading: forwards are **bad** for competition.

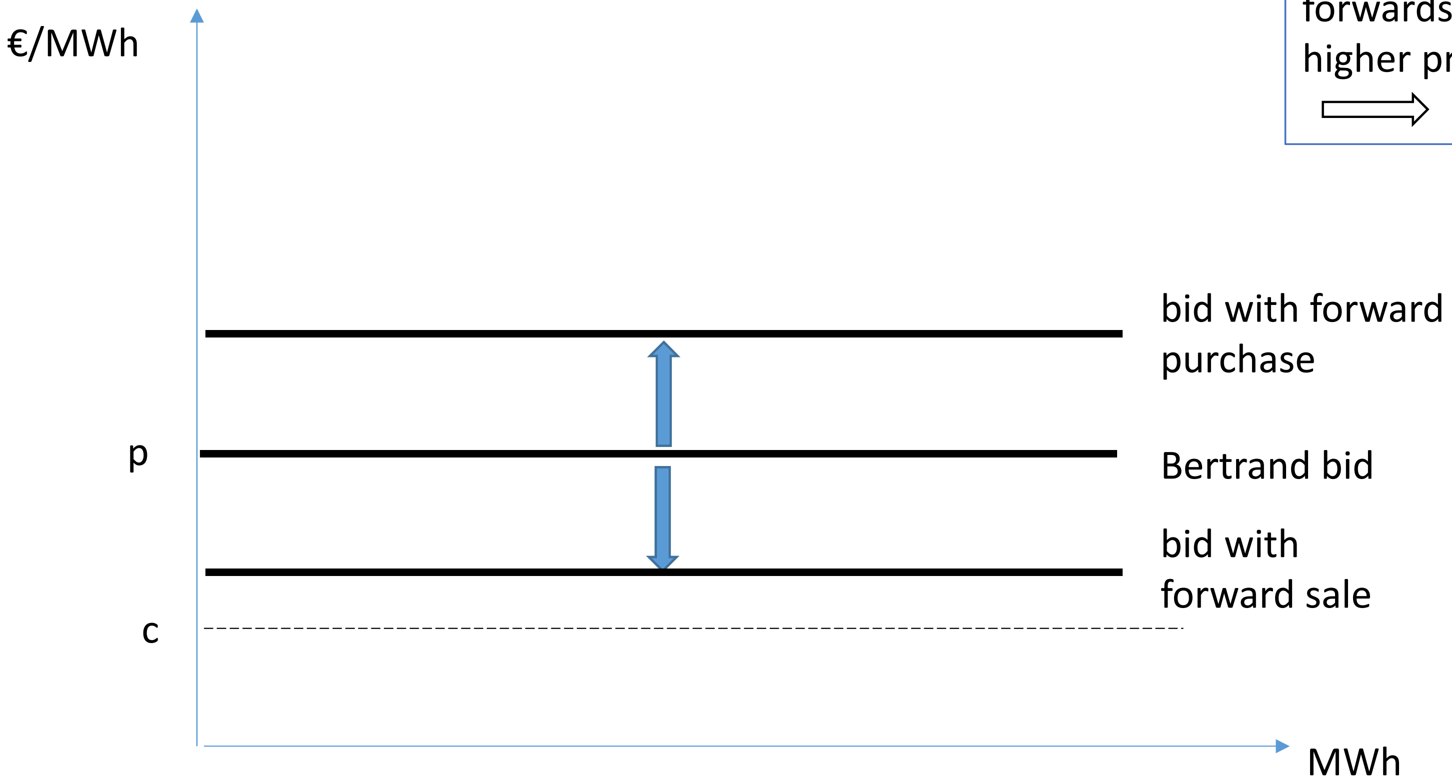
Allaz and Vila



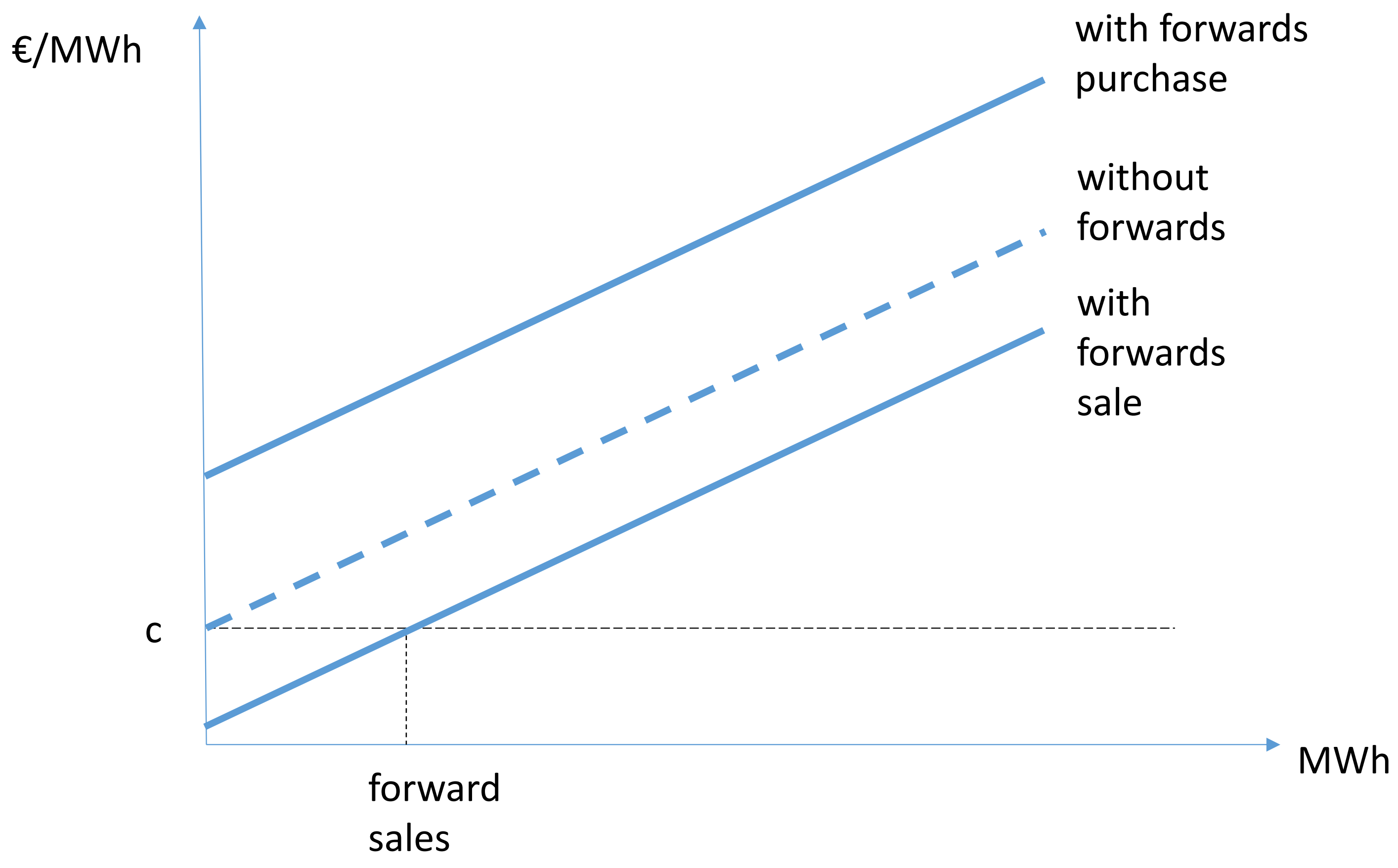
at equilibrium, firms sell forwards $\Longrightarrow$ they bid larger quantity on the spot market $\Longrightarrow$ competition is tougher

Mahenc and Salanié

at equilibrium, firms buy forwards ⟹ they bid higher prices on the spot market ⟹ competition is weaker



Supply function with forward purchase



- "The total net forward positions of firms are not observable. Indeed, the net-forward position are a conglomerate of financial contracts, physical delivery contracts and retail delivery obligations."
- Are you sure no producer is a buyer on the forward market?
- How could purchase strategy change your model?

2. On ramping rates

- "We estimate the forward position of each firm by intersecting ex-post optimal supply and marginal cost curves".
- Actually bidding below marginal cost can have technical reasons.
- Assume warm up costs:

$$C(q_t\,,\, q_{t+1}) = c_t q_t + c_{t+1} q_{t+1} \quad \text{where } c_{t+1} = c(q_t)\,,\; c'(.) < 0$$

Then

$$\Delta C/\Delta q_t = c_t + q_{t+1}\, c'(q_t) < c_t$$

- "only thermal units of the four major firms in the market are included in the regression"
- Don't you overestimate the role of forward selling in left part of the supply function?