



# Intraday Capacity Pricing

European Energy Regulators' Workshop

**CLIENT:** Ofgem

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Reputation built on Results



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# Approach



# Principles



- ▶ Allocative efficiency
- ▶ No distortion
- ▶ Investment signals
- ▶ Fairness of allocation
- ▶ Simplicity

# Challenges

- ▶ Allocative efficiency
- ▶ No distortion
- ▶ Investment signals
- ▶ Fairness of allocation
- ▶ Simplicity

Avoid unutilised capacity  
where there is a price  
differential

# Challenges

- ▶ Allocative efficiency
- ▶ **No distortion**
- ▶ Investment signals
- ▶ Fairness of allocation
- ▶ Simplicity

Potential difference in rent  
distribution between DA and  
ID markets

# Challenges



- ▶ Allocative efficiency
- ▶ No distortion
- ▶ **Investment signals**
- ▶ Fairness of allocation
- ▶ Simplicity

Reduced ID congestion  
rents

# Challenges



- ▶ Allocative efficiency
- ▶ No distortion
- ▶ Investment signals
- ▶ Fairness of allocation
- ▶ Simplicity

Difficult with continuous trading during sudden changes



# Challenges

- ▶ Allocative efficiency
- ▶ No distortion
- ▶ Investment signals
- ▶ Fairness of allocation
- ▶ **Simplicity**

Find balance between  
theoretical optimum and  
practical issues of  
transparency

# Options

Capacity is being used to arbitrage a price spread...

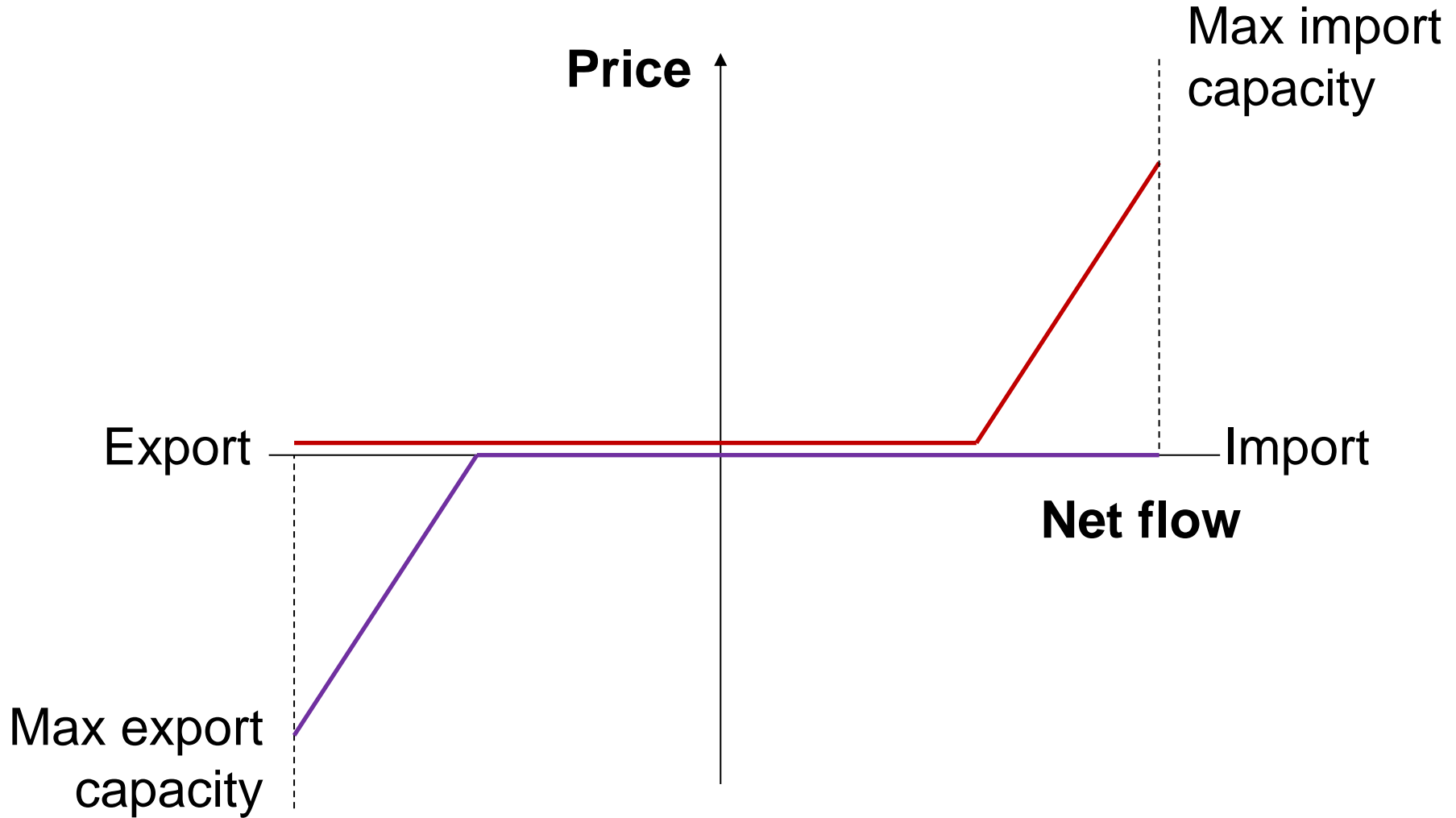
...but outturn spread not known in advance...

...so need (some) price discovery

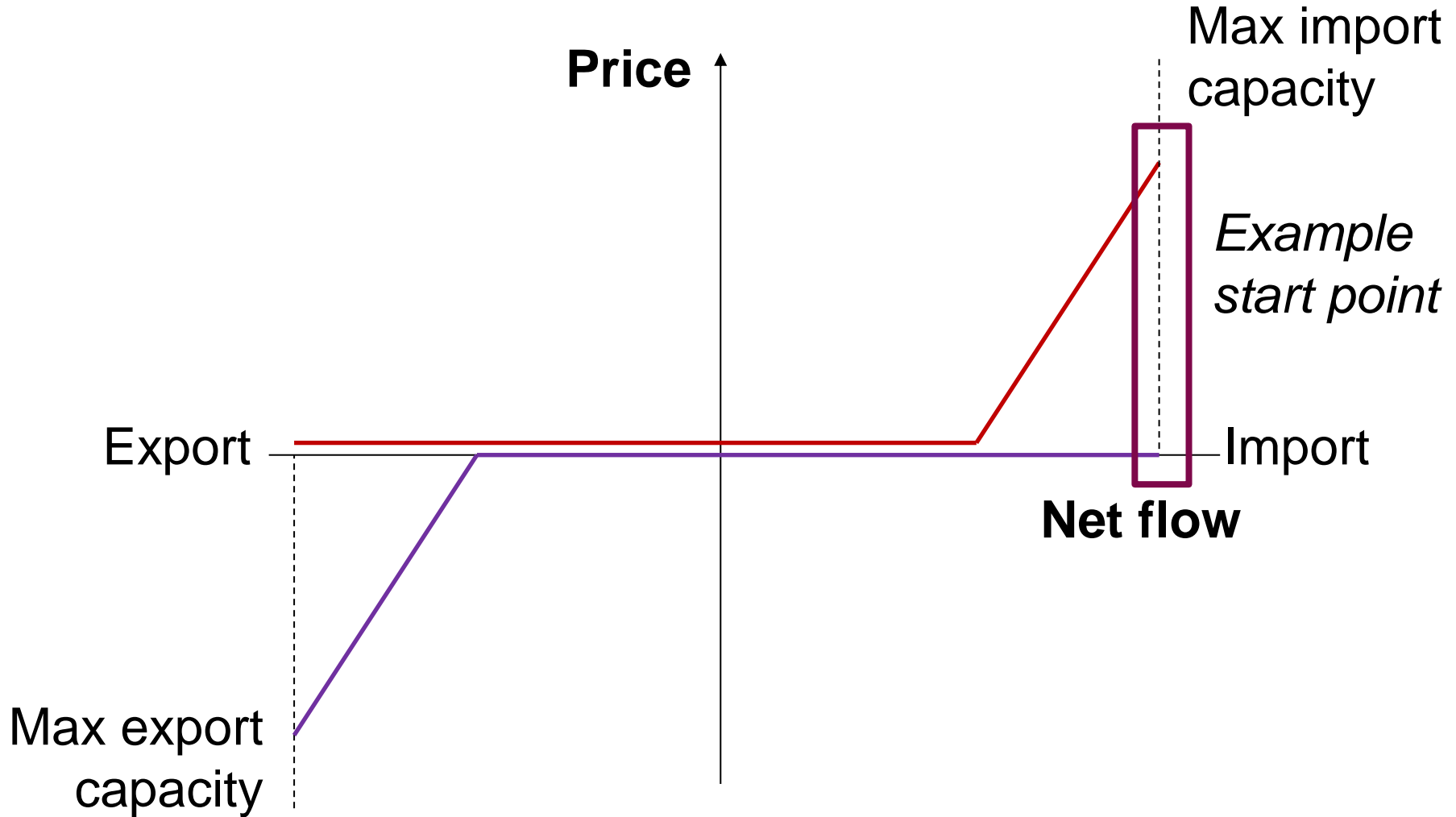
Allocate tranches at different prices

Energy bids/offers visible in neighbouring market adjusted by this price

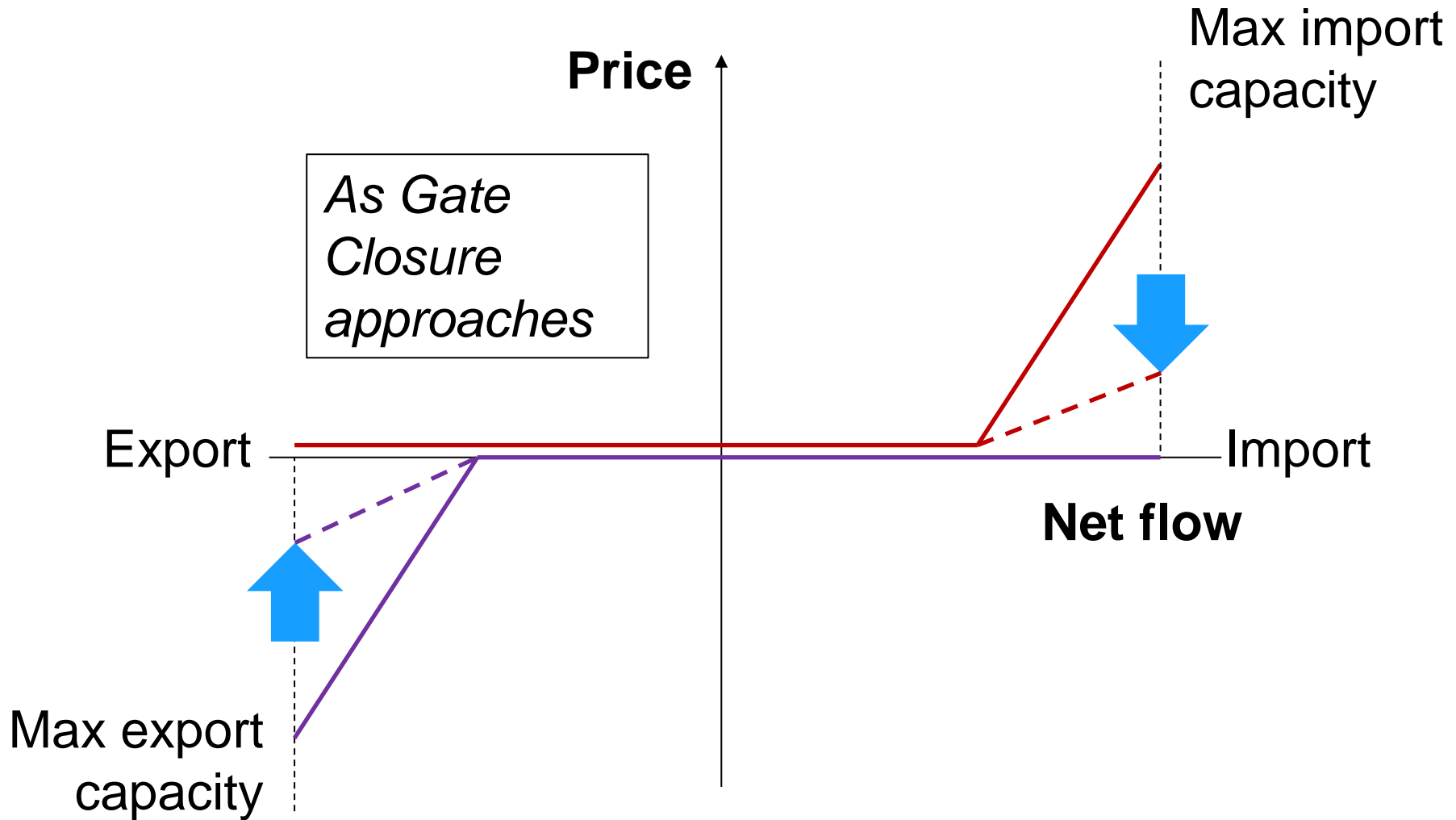
# Price scaling



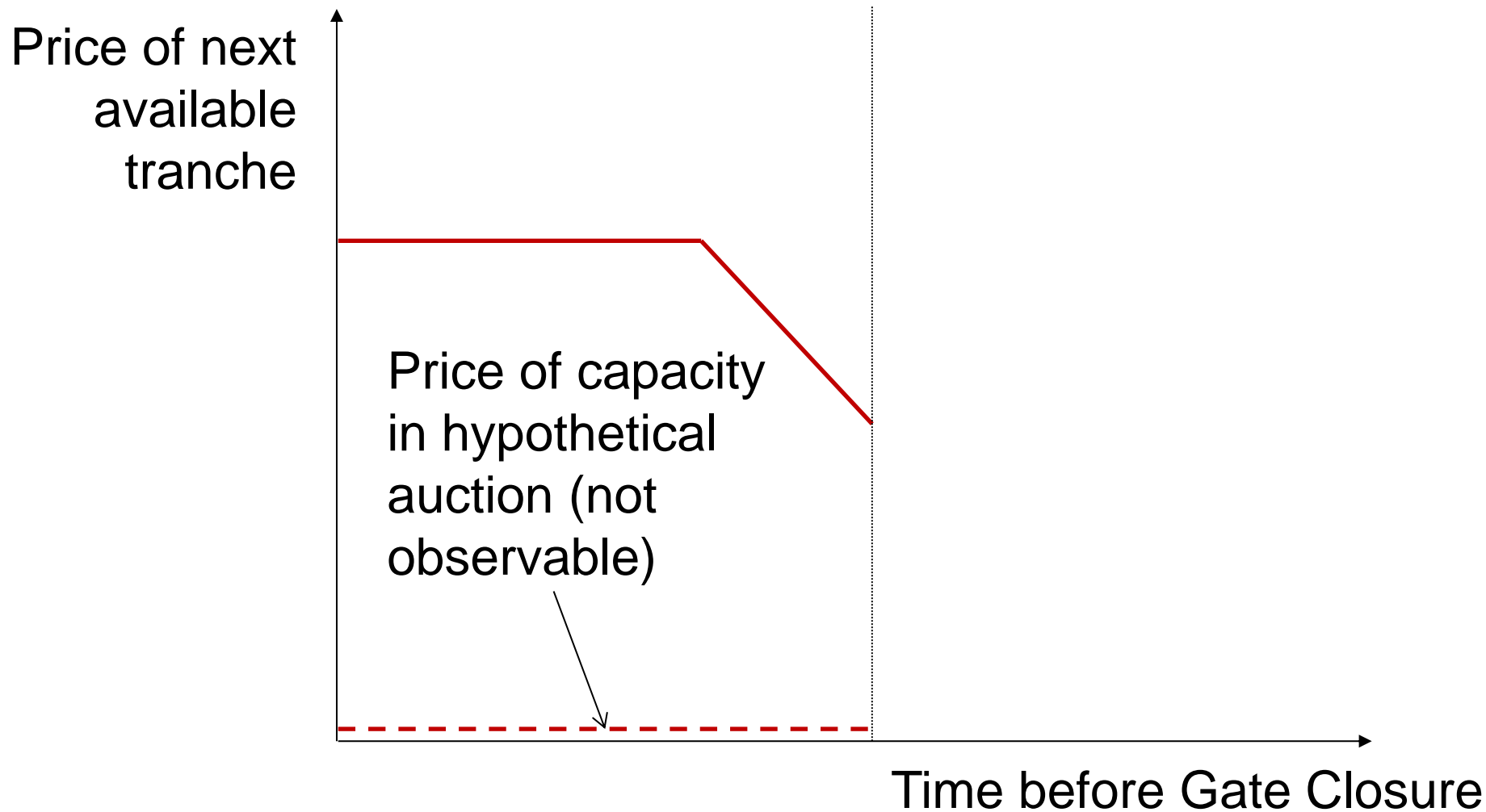
# Price scaling



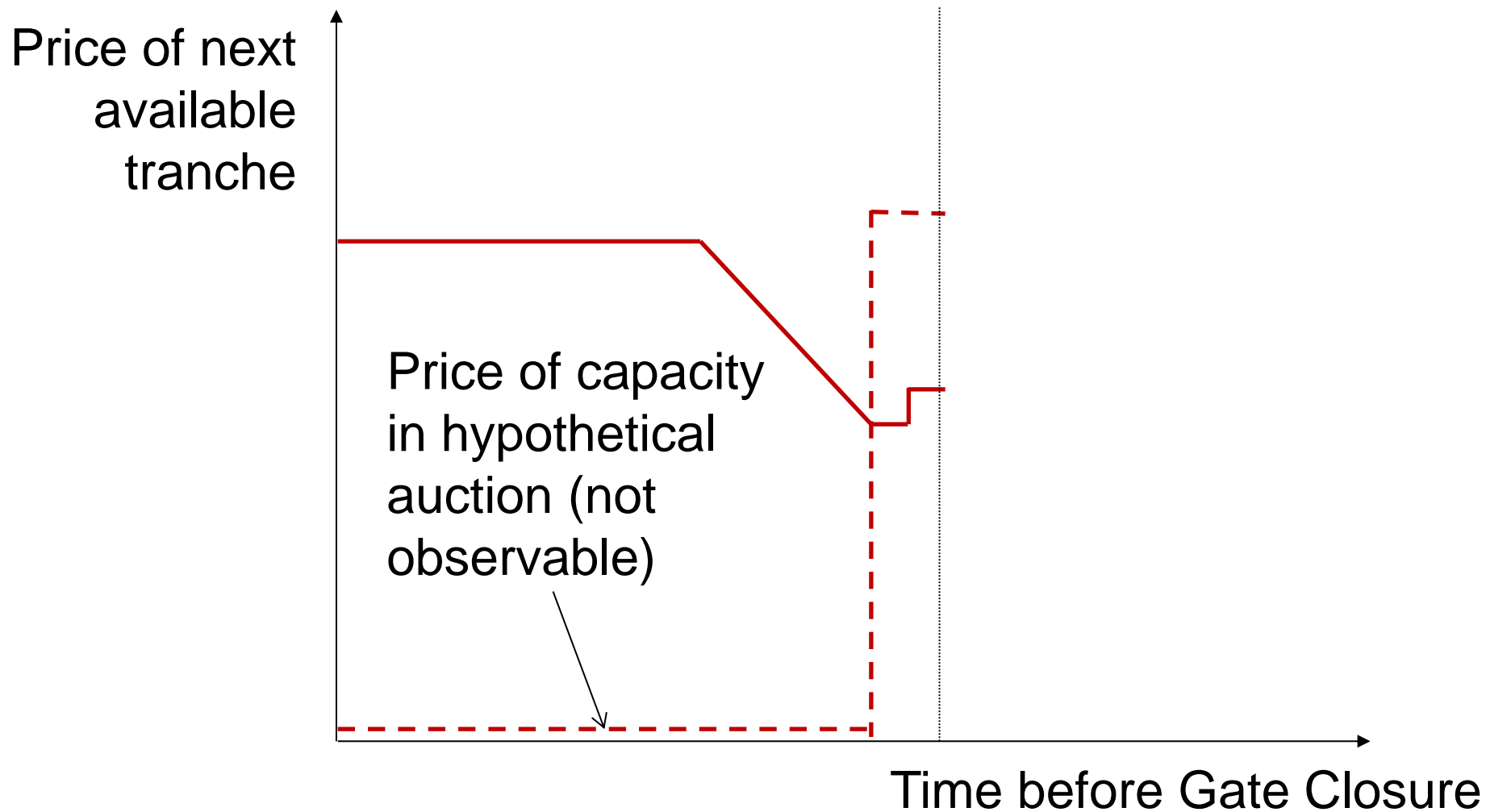
# Price scaling + move to zero price



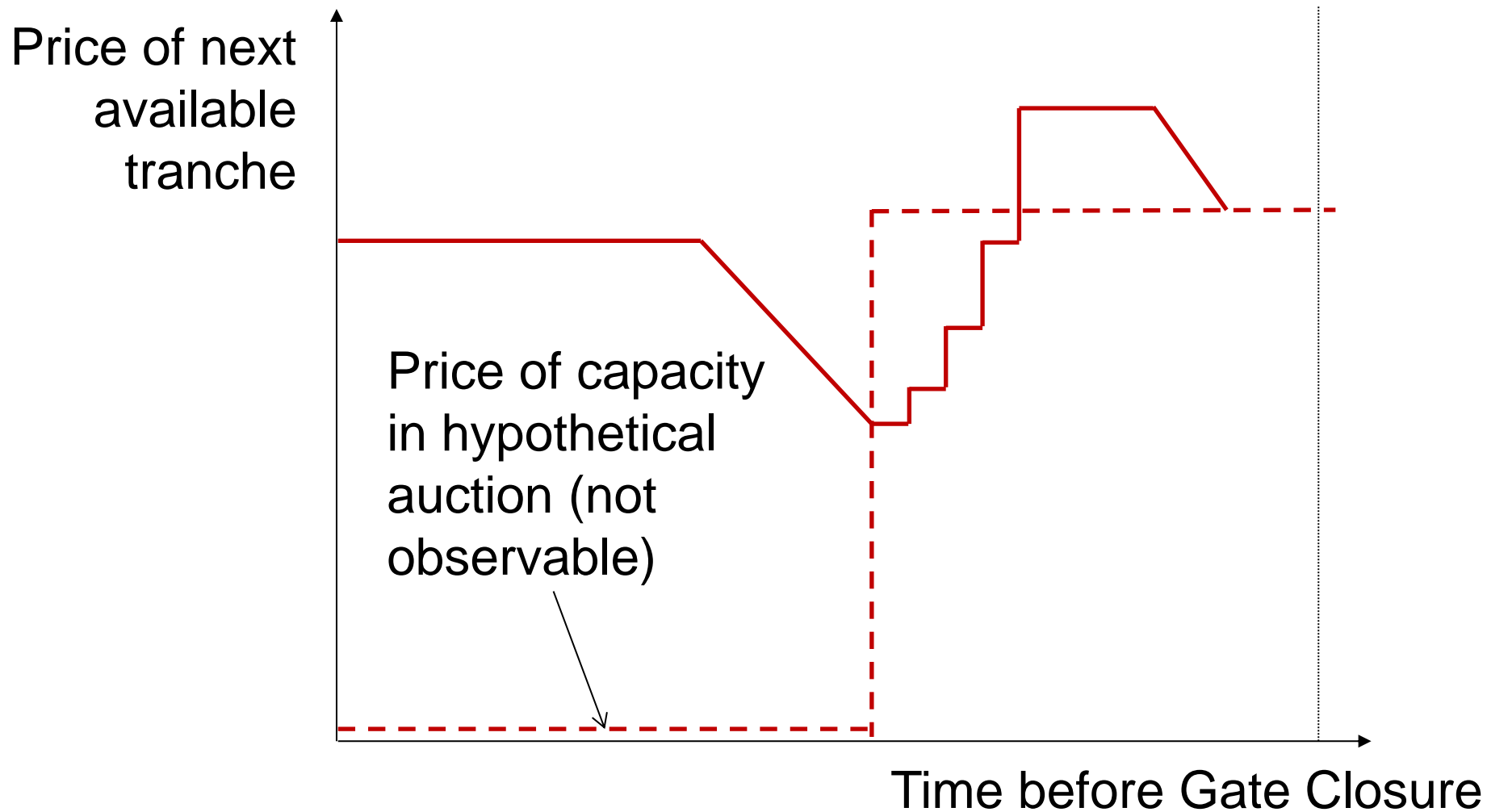
# Dynamic pricing



# Dynamic pricing



# Dynamic pricing





# Options

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Allocate tranches at  
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# Options

Capacity is being used to arbitrage a price spread...

...but outturn spread not known in advance...

...so need (some) price discovery

Allocate tranches at different prices

*...or sell rights and let market participants decide*

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- ▶ Auction capacity rights shortly after DA auction
- ▶ Track rights by participant on ID exchange
- ▶ Reflect starting state of implied flows
- ▶ UIOLI towards Gate Closure

# Assessment



Principle	Price Scaling	Move to zero price	Dynamic pricing	Auction of rights
Allocative efficiency	Red	Light Green	Light Green	Light Green
No distortion	Yellow	Yellow	Light Green	Light Green
Investment signals	Yellow	Yellow	Light Green	Light Green
Fairness of allocation	Yellow	Yellow	Light Green	Light Green
Simplicity	Light Green	Light Green	Yellow	Red
Compliance	Light Green	Light Green	Light Green	Red

## ▶ Further analysis



- ▶ Define parameters
  - Little empirical evidence – so start simple
  - Change process to enable updates as ID market develops
  - Metrics to evaluate performance against principles
- ▶ Define approach for capacity changes
- ▶ Assess system requirements



# Q&A

