Discussion: "Mixology: Order Flow Segmentation Design"
Joshua Mollner

Chaojun Wang (discussant)
The Wharton School, University of Pennsylvania

SFS Calvacade North America
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Segmentation based on adverse selection can reduce total welfare

Lee & Wang (JF, forthcoming)

Utilitarian Welfare $\downarrow$ if $\alpha < \bar{\alpha}$

Pareto efficiency achieves with reverse cream-skimming

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Mollner (2025)

α $1 - \alpha$

Informed   **Uninformed**

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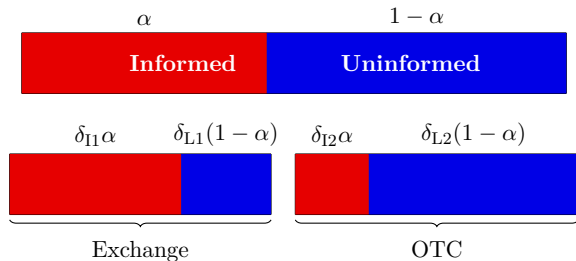$\delta_{I1}\alpha$ $\delta_{L1}(1-\alpha)$ $\delta_{I2}\alpha$ $\delta_{L2}(1-\alpha)$ $\delta_{I1}\alpha$ $\delta_{L1}(1-\alpha)$ $\delta_{IJ}\alpha$ $\delta_{LJ}(1-\alpha)$

...

Exchange   OTC   Venue 1   ...   Venue *J*

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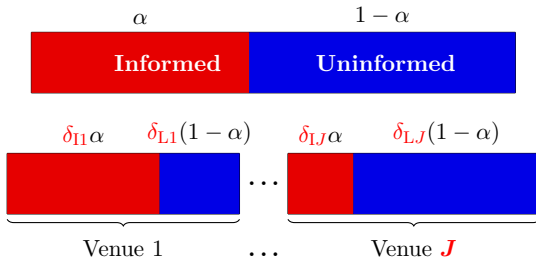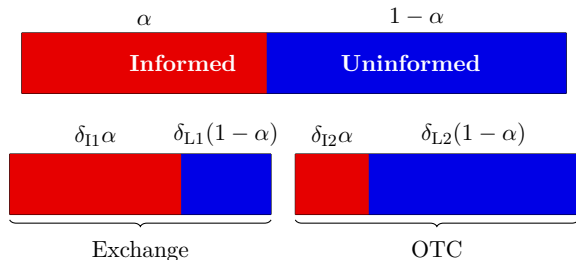Utilitarian Welfare $\downarrow$ if $\alpha < \bar{\alpha}$

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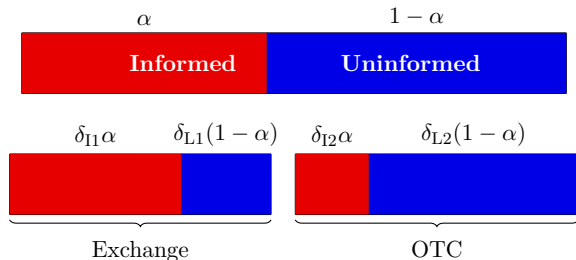
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- Pareto efficiency $\subseteq$ reverse cream-skimming

Suggestion #1: Any market has reverse cream-skimming?

Possible markets that have reverse cream-skimming:

Xbond is an LOB-like Chinese corporate bond platform

Initially, all participants' quotes are available to each other

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Insurance markets exclude riskiest individuals?

Suggestion #2: Informed traders with private value

- Every trader k has a private value $v_k \overset{\mathrm{iid}}{\sim} F_{\mathrm{L}}$

- Informed knows the common value $v \sim F_{\mathrm{I}}$

- Informed traders have "dual intent" of earning both speculative profit and hedging benefits

- Then excluding informed traders would cause a loss in their private values

Suggestion #3: Can cross-venue taxes/subsidies expand $\mathcal{F}$?

- Levy a tax T_j from each venue j,

$$(1-\alpha)\delta_{\mathrm{L}j}[1 - F_{\mathrm{L}}(s_j)]s_j = \alpha\delta_{\mathrm{I}j}\int_{s_j}^{1}(v - s_j)\mathrm{d}F_{\mathrm{I}}(v) + T_j$$
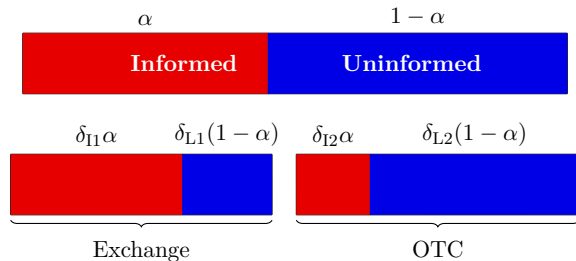
- $T_j < 0$ means subsidy

- Budget neutral: $\sum_j T_j = 0$

- How does $(T_j)_{j=1,\ldots,J}$ expand the feasible set $\mathcal{F}$?

    Pigouvian tax may be more effective with certain type of segmentation

Suggestion #4: Volume pairs (V_I, V_L)

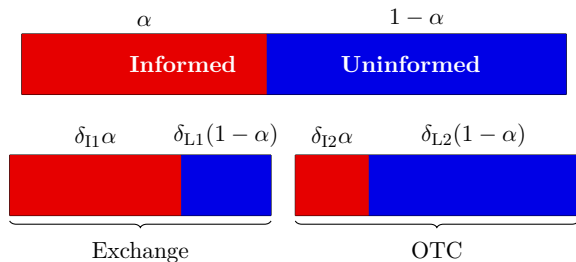If the policy goal is to maximize likelihood of execution, then maximize (V_I, V_L)

Lee & Wang

- Utilitarian Welfare ↓ if $\alpha < \bar{\alpha}$

- Aggregate volume ↑

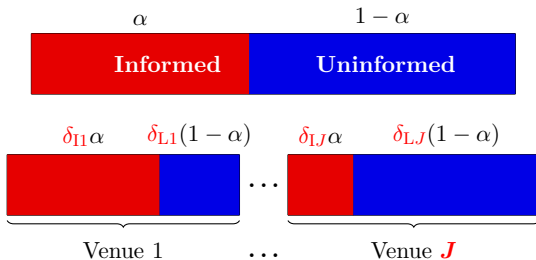# Suggestion #4: Volume pairs (V_I, V_L)

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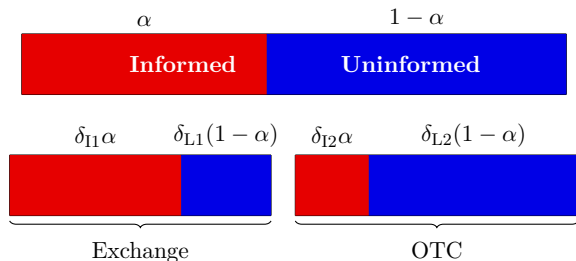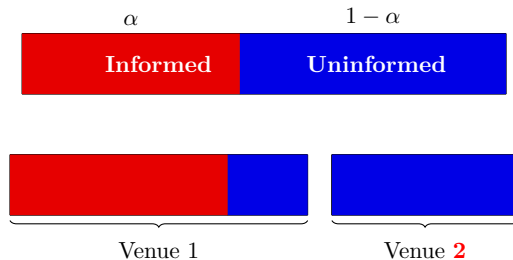

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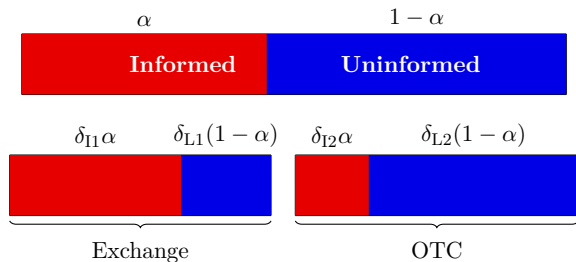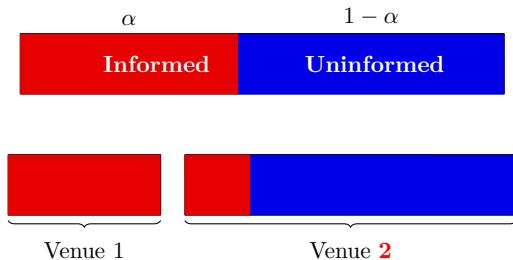

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- cream-skimming is Pareto efficient?
- reverse cream-skimming is Pareto inefficient?

Summary

The paper already has a great deal of generality AND a sharp result!

Main suggestions:

- Motivate with real-life examples of reverse cream-skimming

- Generalize to informed traders with dual intent

- Introduce Pigouvian tax across segmented venues

- Consider alternative objectives: Volumes (V_I, V_L)