Discussion of “Misallocation due to Incomplete Markets”

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Summary and Contribution

Question: How much waste arises from the inability to share risk and smooth consumption?

Approach:

- Debreu-style "distance to frontier" measure A: max TFP contraction keeping everyone indifferent
- No social welfare function, no interpersonal comparisons, invariant to utility cardinalization
- Harberger triangle sufficient statistics: consumption data + EIS + r

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Key numbers:

- Domestic (PSID, 2,096 households): $\log A \approx 0.21 \Rightarrow \sim$20% of consumption
- International (32 countries, 54 industries, 1970–2019): $\log A \approx 0.05 \Rightarrow \sim$5%
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What I especially like:

- Single ruler across domestic and international: same framework, same triangle logic
- Cleanly separates efficiency from inequality (eq. 11 vs. Benabou 2002)

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- Capital controls, reserve accumulation
- Fast growers: should have borrowed against future growth, instead ran surpluses

Transitory wedges (insurance failures):

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- Absence of contingent claims
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Both are “incomplete risk sharing,” but they have different economic content. The structure of the paper’s sufficient-statistics formula allows us to separate them cleanly.

Comment 1 (cont'd): Decomposing the Misallocation Formula

Decompose each wedge: $\log \mu_{ht}(s) = \underbrace{m_{ht}}_{\text{predictable}} + \underbrace{\epsilon_{ht}(s)}_{\text{surprise}}$, where $m_{ht} \equiv \mathbb{E}_0[\log \mu_{ht}(s)]$, $\mathbb{E}_0[\epsilon_{ht}] = 0$.

Note: $\log \bar{\mu}_h = \sum_t \frac{r}{(1+r)^{t+1}} m_{ht} \equiv \tilde{m}_h$ (surprise terms drop out).

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Substitute into the approximation for $\log A$ and expand the product. Four terms arise:

1. $m_{ht}(m_{h't} - \tilde{m}_{h'})$ — deterministic $\times$ deterministic $\Rightarrow$ **survives**
2. $m_{ht}\, \epsilon_{h't}$ — deterministic $\times$ mean-zero $\Rightarrow \mathbb{E}_0[\cdot] = 0$
3. $\epsilon_{ht}(m_{h't} - \tilde{m}_{h'})$ — mean-zero $\times$ deterministic $\Rightarrow \mathbb{E}_0[\cdot] = 0$
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3. $\epsilon_{ht}(m_{h't} - \tilde{m}_{h'})$ — mean-zero × deterministic ⇒ $\mathbb{E}_0[\cdot] = 0$
4. $\epsilon_{ht}\,\epsilon_{h't}$ — surprise × surprise ⇒ **survives**

Cross terms vanish exactly (by $\mathbb{E}_0[\epsilon_{ht}] = 0$). Only Terms 1 and 4 remain.

Comment 1 (cont'd): A Clean Decomposition, No Interaction

Result:

$$\log A \approx \underbrace{\frac{1}{2}\sum_t \frac{r}{(1+r)^{t+1}} \sum_{h,h'} \omega_h \, \mathcal{M}_{hh'} \, m_{ht} (m_{h't} - \tilde{m}_{h'})}_{\log A^P \text{ (Persistent Wedges)}}$$

$$+ \underbrace{\frac{1}{2}\sum_t \frac{r}{(1+r)^{t+1}} \sum_{h,h'} \omega_h \, \mathcal{M}_{hh'} \, \mathbb{E}_0[\epsilon_{ht} \, \epsilon_{h't}]}_{\log A^T \text{ (Transitory Wedges)}}$$

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- $\log A^P$: **deterministic**. Captures the welfare cost of persistent, structural barriers (e.g., China not borrowing against future growth)
- $\log A^T$: **covariance of wedge surprises**. Captures imperfect insurance against shocks
- **No interaction term** — additively separable within the second-order approximation

Comment 1 (cont'd): The Allocation Puzzle IS log A^P

Gourinchas & Jeanne (2013): "capital flows uphill" — fast growers save more, run surpluses

$\Rightarrow$ Fast growers' wedges are large, persistent, trending — reflecting unexploited intertemporal trade

Excluding China: 0.052 $\rightarrow$ 0.019; all fast growers (incl. India, SK, Indonesia): $\rightarrow$ 0.010. But includes *both* persistent and transitory wedges

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A natural next step: compute $\log A^P$ and $\log A^T$ directly

- **Feasible:** same data — only need to separate m_{ht} from $\epsilon_{ht}(s)$
- **Interpreting the decomposition:**
  - $\log A^P$ dominates $\Rightarrow$ driven by unexploited intertemporal trade
  - $\log A^T$ dominates $\Rightarrow$ driven by uninsured state-contingent risk

Comment 2: Trade Openness and Deglobalization

The international measure *requires* trade openness. Example 2: as import share $\alpha \to 0$, measured misallocation $\log A \to 0$. No trade means no scope for reallocation, regardless of underlying frictions.

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An interesting implication for deglobalization

Declining trade shares mechanically force measured misallocation (A) to fall. But welfare does not improve. There are two distinct effects:

1. **Frontier shrinks:** Less trade $\Rightarrow$ smaller $\mathcal{C}(1)$ $\Rightarrow$ everyone is worse off.
2. **Distance to frontier falls:** Fewer traded goods $\Rightarrow$ less scope for risk sharing.

A captures the *distance* to the frontier, not the *level* of the frontier.

Takeaway: A declining A post-2020 could mistakenly signal better risk sharing when it actually reflects welfare-reducing deglobalization.

Comment 3: How Tight Is The Domestic 20%?

The authors provide excellent robustness checks, but structural forces push the feasible distance to the frontier downward:

1. **First-best vs. constrained-efficient:** The 20% is distance to the first-best. If idiosyncratic wedges exist to preserve incentive compatibility (moral hazard/private info), a fictitious planner cannot remove them. A *constrained-efficient* benchmark would be strictly smaller.

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Takeaway: If we accept the model's fixed boundaries, the 20% is likely an **overestimate** of the attainable efficiency gains.

Comment 3 (cont'd): The Sensitivities of Going Dynamic

The paper repurposes Baqaee & Farhi (2020) from *static production* to *dynamic consumption* misallocation. The dynamic version introduces new sensitivities:

- **Discount rate** r for future triangles (no static analogue).
- **Information set** for persistent vs. transitory wedges.
- **The dual role of the EIS (η):** In the international setting, η is required to *recover* the wedges from real exchange rates.

The $1/\eta^2$ Explosion

The domestic EIS only scales welfare ($1/\eta$). But internationally, smaller EIS values force the recovered Backus-Smith wedges to explode as $1/\eta^2$. The 5% result is highly sensitive to this parameter calibration.

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The Endogenous TFP Channel (Missing Growth)

- Literature shows that uninsurable risk directly depresses high-risk, high-reward activities.
- Without perfect insurance, households underinvest in human capital, entrepreneurship, and hoard capital in safe, low-yield assets.

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Takeaway: 20% measures the static deadweight loss. Misses the dynamic "missing growth" that a complete-market allocation would unlock.

Minor Comments

1. Who generates the 20%? A distributional decomposition

- Proposition 4's triangles are additively separable across households
- Group by PSID wealth quintile: does the bottom 20% (hand-to-mouth) generate most of the waste?
- Would connect the efficiency measure to the household heterogeneity literature

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2. Purging exchange rate noise from international wedges

- Exchange rate disconnect literature: real exchange rates contain financial noise that eq. 17 attributes to risk-sharing failures
- IV approach: project RER onto fundamentals (e.g., relative productivity); use fitted values in wedge formula
- If $\log A$ drops substantially $\Rightarrow$ financial noise, not frictions, was driving the result

Conclusion

Pushing the Methodological Frontier

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Shifting Macroeconomic Priors

- The true cost of risk lies in uninsured *idiosyncratic* shocks, not aggregate fluctuations.
- The domestic misallocation problem is a factor of four larger than the international problem.

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The Big Picture: Bounding the True Cost

- *Inside the model:* General equilibrium effects and participation constraints suggest the reported figures are an **overestimate** of the attainable surplus.
- *Outside the model:* By omitting the endogenous growth that perfect insurance would unlock, the static waste measure is an **underestimate** of the true cost.