

Urban Issues: Discussion

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HCEO Market Design Perspectives on Inequality
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Urban Issues Discussion

- Glaeser and Kominers: Market Design in Developing-World Cities: Overlooked?
- Klement and Neeman: Res Judicata and Access to Justice
- Application of Res Judicata: Land Titling in Developing-World Cities

Market Design

- Market design facilitates gains from trade of underutilized human and physical capital
 - ▶ Technological advances reduce transaction costs: a modern rebirth of barter exchange?
 - ▶ “Ethical” barrier still remains.
- Traditionally, government’s role to provide public goods and services:
 - ▶ Substitutes: families, churches, mafia, gangs. Issue: can involve involuntary participation, coercion.
 - ▶ Market design solution allows individuals to *willingly* and *voluntarily* engage in exchange.

Market Design in Developing World Cities

- Developing Countries: Governments perhaps fiscally constrained, corrupt, unstable.
 - ▶ Economists typically prioritize problem of having working markets.
 - ▶ Often overlooked! With fragile governments, (market) substitutes for government provision of goods and services even more in demand.
 - ▶ Glaeser and Kominers: Market designers can propose solutions that reflect individual choice.
- Why not apply the same mechanisms to developed countries?
 - ▶ Market design solutions to tame and reduce the size of government, without sacrificing provisioning of goods and services?
 - ▶ Solution for active illegal markets? (migrant workers, sex trade)
- Fragile legal systems in developing world-cities
 - ▶ What insights does res judicata have to offer?

Res Judicata

- Consider class of N cases with binary outcomes $\{Y, N\}$, all dealing with same issue.
 - ▶ Applying res judicata “blocks” future rulings: decision on Case 1 gets applied to all cases $n > 1$.
 - ★ Impervious to changes in information, evidence, or other factors that could lead to different outcomes in future cases.
 - ▶ Alternatively, decide each of the N cases independently.
- Comparison:
 - ▶ *Res Judicata*: effectively decide all cases together at once
 - ★ (Extreme form of) consistent ruling, but higher variance in mistakes.
 - ▶ *Decide independently*: court decides on each case separately
 - ★ Potentially inconsistent, with lower variance in mistakes.

Welfare Comparisons

- Welfare trade-off:
 - ▶ consistency of rulings across cases
 - ▶ minimize mistakes (errors) in rulings
- Explore welfare of Res Judicata vs. Decide Independently:
 - ▶ Correlation structure over joint probability distribution of two cases:
 - ★ Perfect Correlation vs. Stochastic Independence
 - ▶ Social Welfare Function
 - ★ Separable vs. Nonseparable Welfare
 - ★ Increasing Differences: Welfare increasing in number of correctly ruled cases

$$W(c, c) - W(n, c) > W(c, n) - W(n, n)$$

Welfare: 2 x 2 case, Perfect Correlation

- **Perfect Correlation (PC) + Separable Welfare (SW):**

$$W_{RJ} = p = W_{Ind}.$$

- *Intuition:*

- ▶ PC: mistake made on one case implies mistake made on both cases
- ▶ PC + SW: consistency achieved whether decide cases all at once (res judicata) or separately

- **Perfect Correlation (PC) + Nonseparable Welfare (NSW):**

$$W_{RJ} = p > p^2 = W_{Ind}.$$

- *Intuition:*

- ▶ PC: mistake made on one case implies mistake made on both cases
- ▶ NSW: Consistency favors RJ. If RJ, only require court to make correct decision first time around. If decide independently, require joint probability for court to make correct decision on both cases.

Welfare: 2 x 2 case, Stochastic Independence

- **Stochastic Independence (SI) + Separable Welfare (SW):**
 $W_{RJ} = p^2 = W_{Ind}$.
- **Stochastic Independence (SI) + Nonseparable Welfare (NSW):**
 $W_{RJ} = p^2 = W_{Ind}$.
- *Intuition:*
 - ▶ SI: mistakes equally likely to occur for either case.
 - ▶ SI: From SI, RJ decision on Case 1 has equal probability of being correct for Case 2. No gains from deciding future case ex ante.
- *Observe:* Above results hold when social welfare exhibits increasing differences and only rewards unit welfare when both cases correctly decided.

Welfare: 2 x 2 case, PC and Less Convex Welfare

- Previous Examples: $W(c, c) = 1$, $W(\cdot, \cdot) = 0$ otherwise.
- Relaxing Convexity: $W(c, c) = 1$, $W(c, n) = a$, $W(n, c) = b$, $W(n, n) = 0$
- **Perfect Correlation (PC) + Nonseparable Welfare (NSW)**:

$$W_{RJ} = p > 2 \cdot \frac{1}{2} [1 \cdot p^2 + a \cdot p(1-p) + b \cdot (1-p)p + 0] = W_{Ind}$$
$$\iff a + b < 1 \iff \underbrace{1}_{W(c,c)} - \underbrace{b}_{W(n,c)} > \underbrace{a}_{W(c,n)} - \underbrace{0}_{W(n,n)}$$

- *Intuition*:
 - ▶ PC: mistake made on one case implies mistake made on both cases (favors RJ)
 - ▶ NSW + ID: Total mistakes ($a + b$) when deciding independently do not outweigh consistency from RJ of getting both correct (1) if welfare function exhibits increasing differences.

Inequality, Information, and Naïvety

- Does res judicata favor parties with sophisticated strategies?
 - ▶ Under-investment in stating information: want to appear naïve so that judge may not enforce res judicata in the future.
 - ▶ Over-investment in stating claims: want to make sure win the case - all information must be included prior to the judgment of the case, otherwise game over!
- Effect on inequality unclear:
 - ▶ Being naïve or under-resourced can still be OK!
 - ▶ Increased probability of lifting res judicata blockage.

Land titling and Res Judicata

- Consider dynamic evolution of the following:
 - ▶ Case 1: Decide on division of land. Obtain prepaid bond for future property taxes.
 - ▶ Interim: New information, housing value realized.
 - ★ Ex-ante prepaid property taxes vs. ex-post taxes with realized housing value.
 - ▶ Case 2: Appeal Case 1.
- Res judicata: Case 2 blocked by claim preclusion.
 - ▶ Saves legal costs.
 - ▶ Does this affect strategic sophistication of claimants in Case 1?
- Deciding independently: decision on case 2 may or may not be aligned with that of case 1.
 - ▶ If decision is consistent: RJ more efficient.
 - ▶ If not consistent, need to outweigh the (legal) costs with benefits.

True, False, or Uncertain?

TFU: It is always ex-post efficient for the legal system to prioritize consistency in rulings.

TFU: As long as traditional markets of exchange are well-functioning, there is no role for market designers in developing countries.