



Research paper

Segregation, poverty stigma, and redistribution in a status signaling model

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ARTICLE INFO

JEL classification:

D11

D31

D62

Keywords:

Status

Segregation

Redistribution

Signaling

Stigma

Inequality

ABSTRACT

We study a three-type, two-market signaling model of social status in which status competition is segmented: poor and middle individuals interact in a low-status market, while middle and rich individuals interact in a high-status market. Because the middle type competes in both markets, changes that intensify poor–middle competition can relax status pressure at the top. We show that policies or transfers that raise poor incomes can increase rich welfare for a range of parameter values. We also show that narratives that stigmatize poverty can benefit the rich by reshaping beliefs and status incentives, at the expense of the middle class. Finally, segregation shields the rich from direct status competition with the poor and allows them to substitute away from conspicuous spending, so the rich may have incentives to promote segregation. The model yields predictions about elite distancing, support for targeted transfers to the very poor, and incentives to sustain poverty stigma.

1. Introduction

The desire to earn esteem within one's community shapes behavior across societies (Smith, 1759; Veblen, 1899). Because people care about how others perceive them (Bagwell and Bernheim, 1996; Bénabou and Tirole, 2006), they often pursue recognition through economically visible markers (Frank, 1985). This pursuit can induce conspicuous consumption: individuals spend on goods that communicate affordability, not only on goods that increase intrinsic enjoyment (Han et al., 2010). Status concerns are inherently relative, since individuals compare themselves to a reference group and seek local distinction (Frank, 1985; Hopkins and Kornienko, 2004). Segregation matters in this context because it shapes who observes whom, and therefore which comparisons and signals become payoff-relevant.

Our analysis builds on an ordinal view of status. Individuals care about being recognized as belonging to a higher social class, not about the cardinal size of income or consumption gaps. This feature naturally turns status into an object of competition: because recognition is relative and categorical, individuals must choose signals that distinguish them from nearby types in their reference group. Conspicuous spending matters because it affects recognition, not because higher spending is intrinsically better.

We study a setting in which status competition is segmented across social classes. Poor and middle individuals interact in a low-status location, while middle and rich individuals interact in a high-status location. The middle class spans both arenas. We develop a three-type signaling model with this partial segregation and show that it can redirect status pressure away from the top. When competition between poor and middle intensifies, the middle class must spend more to separate downward, which leaves it with fewer resources to compete upward. This mechanism relaxes the rich–middle competition and can allow the rich to attain separation at lower cost. In this sense, the rich can gain by pushing status competition downward.

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<https://doi.org/10.1016/j.jebo.2026.107553>

Received 20 June 2025; Received in revised form 7 April 2026; Accepted 8 April 2026

Available online 14 April 2026

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The mechanism relies on a specific feature of segregation: different strata use distinct and non-interchangeable symbolic languages of status. Signals that work in one location can lose meaning, or even backfire, in another. Segregation stabilizes these symbolic codes by restricting audiences and limiting cross-class visibility. This idea echoes (Bourdieu, 1979)'s observation that practices can become "out of place" outside the social space in which they are produced:

Jokes which 'fall flat' or, though acceptable in another context, in another market, here seem "out of place" and only provoke embarrassment or disapproval; quotations – in Latin, for example – which sound "pedantic" or "laboured."

A simple illustration comes from clothing. Visible branding can function as an effective marker of affluence in lower-status environments, yet the same items may be perceived as vulgar in higher-status contexts (Charles et al., 2009; Han et al., 2010). Conversely, subtle signals (e.g., bespoke tailoring or minimalist design) can convey status among elites while remaining largely unrecognized in lower-status settings (Bellezza et al., 2014). Consistent with this view, individuals adjust consumption and behavior to match the symbolic codes used for status recognition in their reference group (O'Casey and McEwen, 2004).

We use the model to study the rich's incentives over redistribution. In the standard separating logic of signaling games, raising poor income can benefit the rich because it forces the middle class to spend more to distinguish itself from the poor and therefore weakens its ability to challenge the rich.¹ The same logic implies that narratives or institutions that stigmatize poverty can also benefit the rich: stigma raises the middle class's value of distancing itself from the poor and intensifies poor–middle competition. At the same time, the rich need not always face this outcome configuration. In some parameter regions, the rich must overspend to prevent the middle class from abandoning downward separation and reallocating resources to compete upward. Depending on the income-class definition, the middle share can be large but has declined in several OECD countries; in some settings, "below-middle + above-middle" is close to half of the population (Pew Research Center, 2015), making rich–poor coalitions empirically plausible. The model therefore delivers sharp conditions under which redistribution attracts elite support, and when it instead triggers stronger status expenditures at the top.

Finally, we show that the rich may prefer to promote partial segregation. By limiting cross-class visibility and keeping symbolic codes location-specific, segregation can lower aggregate conspicuous consumption through a decline in rich spending.

The paper proceeds as follows. Section 2 positions the contribution in the relevant literature. Section 3 presents the three-type, two-location signaling model. Section 4 characterizes equilibrium behavior. Section 5 explains how partial segregation reshapes standard predictions about status competition. Section 6 studies redistribution. Section 7 analyzes poverty stigma. Section 8 concludes.

2. Literature

Our paper relates to work on conspicuous consumption and status signaling, on the political economy of redistribution under status concerns, and on socioeconomic segregation and reference groups. A long tradition studies how individuals use consumption to display social standing, starting from Veblen (1899). Building on signaling theory (Spence, 1973), a large literature models conspicuous expenditure as a costly signal of socioeconomic position and analyzes the resulting incentives to separate from nearby types in local status competitions (Frank, 1985; Ireland, 1994; Hopkins and Kornienko, 2004). This line of work also clarifies why status concerns can generate wasteful expenditure and why status comparisons typically depend on the relevant audience and reference group (Frank, 1985; Hopkins and Kornienko, 2004).

A second literature investigates how status-driven consumption interacts with inequality, social stratification, and support for redistribution (Ireland, 1998; Hopkins, 2008; Hopkins and Kornienko, 2010; Gallice and Grillo, 2020). Several contributions show that status concerns can give high-income individuals an economic interest in redistribution. Levy and Razin (2015) show that when individuals engage in costly sorting (e.g., through schools or neighborhoods), redistribution can attract support even among above-mean voters because it reduces incentives to sort. Friedrichsen et al. (2020) show that in dual provision systems richer citizens may favor higher public provision because it increases the exclusivity (status value) of private consumption. Adriani and Sonderegger (2019) show that redistribution can curb wasteful signaling, yet it may fail to secure majority support when voters value social distance from the poor. We contribute to this literature by introducing segmented status competition under partial class segregation and ordinal status concerns. In our framework, raising poor income can benefit the rich through a new channel: it intensifies poor–middle status competition in low-status environments, which shifts the middle class's status effort downward and relaxes status pressure at the top. The mechanism generates additional predictions (e.g., on charitable transfers and poverty stigma) absent from existing frameworks, and it operates without changing the income ranking.

Our mechanism builds on an ordinal view of status, which naturally turns status into an object of competition: individuals care about being recognized as belonging to a higher social category and therefore choose signals to deter pooling and secure separation. This emphasis connects to work showing that equality can intensify wasteful status competition under ordinal concerns (Hopkins and Kornienko, 2004, 2006), while alternative (cardinal) formulations can deliver different comparative statics (Bilancini and Boncinelli, 2012; Hopkins, 2024). Relatedly, Hopkins and Kornienko (2010) distinguishes between equality in endowments and equality in the returns to status, which can have opposite effects on status expenditure. Finally, our modeling choice of partial segregation is motivated by both theory and evidence on reference groups. Some papers study status competition in networks in which each agent's neighborhood shapes comparisons (Ghigliano and Goyal, 2010; Immorlica et al., 2017), and Antinyan et al. (2019) shows that

¹ In a canonical separating outcome, the lower type spends zero on signaling while the higher type spends just enough to deter imitation (Riley, 2001).

when the network of status-concerned agents is endogenous, long-run links tend to form among individuals with similar income. Empirically, [Mijs and Roe \(2021\)](#) documents pervasive socioeconomic segregation across friendship networks, romantic partnerships, neighborhoods, education, workplaces, and labor markets, while [Krivo et al. \(2013\)](#) emphasizes that both disadvantaged and privileged districts can be socially isolated because daily activities occur in non-overlapping spaces. These patterns motivate our assumption that the extremes of the income distribution need not interact directly, whereas the middle class can interact with both. From a theoretical point of view, we abstract from settings where additional information about types can violate single-crossing and generate counter-signaling ([Feltovich et al., 2002](#)) or double-crossing preferences ([Chen et al., 2022](#)). Instead, we obtain non-standard incentives through audience segmentation: different receivers observe different signals because social interactions occur in distinct environments, so non-monotonic incentives arise from segmented status competition rather than from high types withholding signals.

3. Model

The present model is a variant of the status signaling model by [Bilancini and Boncinelli \(2012\)](#), inspired by [Bagwell and Bernheim \(1996\)](#), with two notable additions: a three-type population structure and partial segregation between social classes.

We model social status competition as a signaling environment with a continuum of senders and two audiences. A game is

$$G = \langle T, (\alpha, \beta, \gamma), (I_t)_{t \in T}, (A_t)_{t \in T}, (u, s_\ell, s_h) \rangle,$$

and it is schematically illustrated in [Fig. 1](#).

Types. There is a unit mass of senders. Each sender's type is drawn independently from the common distribution over T with probabilities $\Pr(t = P) = \alpha$, $\Pr(t = M) = \beta$, $\Pr(t = R) = \gamma$, where $\alpha + \beta + \gamma = 1$. The type t is privately observed by the sender and determines their income I_t , with $I_P < I_M < I_R$. For tractability, we assume income levels are sufficiently separated so that all strategic considerations leave the income ranking unchanged.

Segregation and information. There are two locations $j \in \{\ell, h\}$.² In each location j , agents can make a locally observable conspicuous expenditure $x_j \geq 0$. Type P appears only in location ℓ , type R only in location h , and type M in both. Within each location, observers see only the local expenditure (receiver ℓ observes only x_ℓ and receiver h observes only x_h). No other characteristics, actions, or outcomes are observable. In particular, income and all non-conspicuous consumption are never observed, and there is no information transmission across locations.

Actions. Action sets are:

$$\begin{aligned} A_P &= [0, I_P], && \text{choose } x_{\ell P}, \\ A_M &= \{(x_{\ell M}, x_{hM}) \in \mathbb{R}_+^2 : x_{\ell M} + x_{hM} \leq I_M\}, && \text{choose } (x_{\ell M}, x_{hM}), \\ A_R &= [0, I_R], && \text{choose } x_{hR}. \end{aligned}$$

Given an action a_t , non-conspicuous consumption is the residual income after conspicuous expenditure, namely:

$$I_P - x_{\ell P} \text{ for type } P, \quad I_M - x_{\ell M} - x_{hM} \text{ for type } M, \quad I_R - x_{hR} \text{ for type } R.$$

This residual is never publicly observed. Thus, only local conspicuous expenditure can affect beliefs and status.

Timing. (i) Nature draws t . (ii) The sender chooses $a_t \in A_t$. (iii) Receiver ℓ observes x_ℓ and receiver h observes x_h and form beliefs. (iv) Payoffs are realized.

Beliefs. Each location $j \in \{\ell, h\}$ hosts a passive audience (receiver) who observes only the local conspicuous expenditure x_j and forms beliefs about the sender's socioeconomic class. The audience takes no strategic action and affects payoffs only through the belief-dependent status term.

Receiver ℓ forms a belief about whether the sender is middle class, conditional on x_ℓ :

$$\mu_\ell(x_\ell) = \Pr(t = M \mid x_\ell),$$

and receiver h forms a belief about whether the sender is rich, conditional on x_h :

$$\mu_h(x_h) = \Pr(t = R \mid x_h).$$

Because income and the non-conspicuous consumption are not publicly observed, only x_ℓ and x_h can affect beliefs.

² We use 'location' and 'market' interchangeably to mean separate social arenas with distinct audiences and symbolic codes.

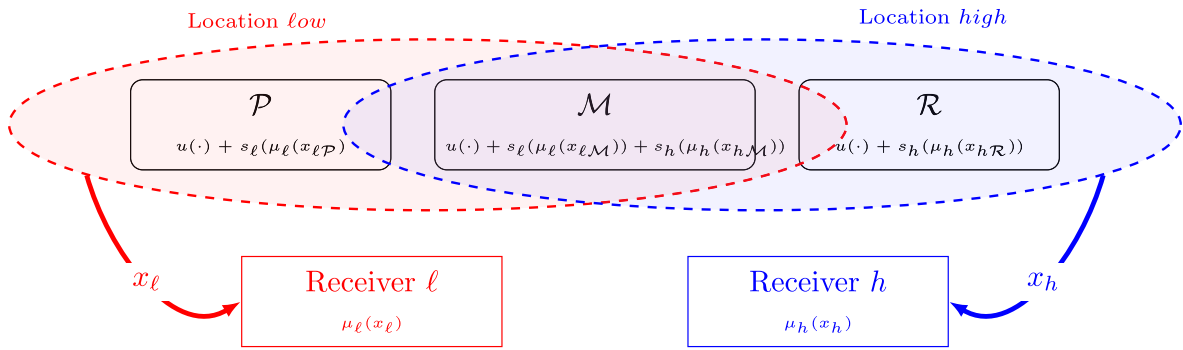


Fig. 1. Graphical representation of the model. The three black rounded boxes represent the social classes, each annotated with its corresponding utility. The red and blue shaded regions represent, respectively, the low and high location where individuals engage in conspicuous consumption, x_ℓ and x_h , to signal their status to the corresponding receivers, who in turn form beliefs $\mu_\ell(x_\ell)$ and $\mu_h(x_h)$. (For interpretation of the references to color in this figure legend, the reader is referred to the web version of this article.)

Payoffs. The utility functions of the poor, the middle class, and the rich are formalized as follows.

$$U_P = u(I_P - x_{\ell P}) + s_\ell(\mu_\ell(x_{\ell P})),$$

$$U_M = u(I_M - x_{\ell M} - x_{hM}) + s_\ell(\mu_\ell(x_{\ell M})) + s_h(\mu_h(x_{hM})),$$

$$U_R = u(I_R - x_{hR}) + s_h(\mu_h(x_{hR})).$$

The first component, $u(\cdot)$, is utility from non-conspicuous consumption (a composite private good, including savings), assumed strictly increasing and concave. The second component, $s_j : [0, 1] \rightarrow \mathbb{R}_+$, represents the social status utility coming from being recognized by the audience in the visited location $j \in \{\ell, h\}$, as part of a given socio-economic class. The status-bearing object is the income, which, as well as non-conspicuous consumption, is private information. The function $s_j(\cdot)$ is strictly increasing and continuous. We normalize ordinal status levels so that

$$s_\ell(0) = P, \quad s_\ell(1) = M, \quad s_h(0) = M, \quad s_h(1) = R,$$

which are assumed to be constant with respect to income changes and such that $P < M < R$.³ When signaling is ineffective and types pool, agents' beliefs, and hence expected status payoffs, depend on the relative population shares (α, β, γ) . By contrast, in separating equilibria, agents obtain full type-specific status, and equilibrium outcomes are independent of social composition.

People have ordinal concerns for social status, which means being concerned about their relative position in the socio-economic hierarchy, rather than the cardinal distance between ranks. We do not investigate here why concerns may be ordinal rather than cardinal (see Bilancini and Boncinelli, 2014, for a discussion of the microfoundation of the shape of the status function).

Thanks to the strict concavity of $u(\cdot)$ and the ordering $I_P < I_M < I_R$, the payoff function $u(I_i - x_j) + s_j(\mu_j)$ satisfies the Spence–Mirrlees condition in each location. Hence, indifference curves satisfy the single-crossing property in the (x_j, μ_j) space.

Strategies and equilibrium. A strategy profile is $\sigma = (\sigma_P, \sigma_M, \sigma_R)$ with $\sigma_i \in A_i$. An assessment $(\sigma, \mu_\ell, \mu_h)$ is a Weak Perfect Bayesian Equilibrium (WPBE) if: (i) each σ_i maximizes U_i given (μ_ℓ, μ_h) ; (ii) beliefs are consistent with σ via Bayes' rule on the equilibrium path.

The assumptions presented lead to two traditional signaling games bridged by the presence of the middle class in both. While the maximization problems of the poor and the rich are identical to those in conventional signaling games, and can therefore be analyzed separately, the middle class faces two interdependent signaling choices that necessitate a joint equilibrium analysis.

4. Equilibrium

This Section characterizes equilibrium behavior in a two-location status-signaling environment. We proceed in three steps. First, we introduce the equilibrium concept (WPBE) for this framework and show that the model admits multiple equilibrium classes. Second, we refine the equilibrium set by adapting the Intuitive Criterion to a two-location setting. Third, we derive a unique prediction at the level of outcomes (on-path expenditures) and explain intuitively why the refinement selects it.

We begin by defining the equilibrium concept and establishing multiplicity.

³ Allowing P, M, R to depend on (α, β, γ) is a natural extension. Since the direction of this dependence is theoretically ambiguous and context-specific, we leave it outside the baseline model and interpret our results as holding for given status values P, M, R . The ambiguity arises because the social value of belonging to a given class can plausibly increase or decrease with its relative size. On the one hand, membership in a small group may carry greater exclusivity and therefore higher status (e.g., being rich in a society where the rich are a tiny elite). On the other hand, a larger group may command greater social recognition, visibility, or political salience, which can also raise the status associated with belonging to it (e.g., the middle class in societies where it constitutes the social "norm").

Definition 1 (WPBE). An assessment $(\hat{\sigma} = (\hat{x}_{\ell\mathcal{P}}, (\hat{x}_{\ell\mathcal{M}}, \hat{x}_{h\mathcal{M}})); \hat{x}_{h\mathcal{R}}; \mu)$, with $\mu = (\mu_{\ell}, \mu_h)$, constitutes an overall *Weak Perfect Bayesian Equilibrium* in our three-type, two-location signaling game, if

- (i) $((\hat{x}_{\ell\mathcal{P}}, \hat{x}_{\ell\mathcal{M}}, \mu_{\ell}(x_{\ell}))$ is WPBE in the signaling game played in location ℓ , whenever the middle-income type spends $\hat{x}_{h\mathcal{M}}$ in location h ;
- (ii) $((\hat{x}_{h\mathcal{M}}, \hat{x}_{h\mathcal{R}}, \mu_h(x_h))$ is WPBE in the signaling game played in location h , whenever the middle-income type spends $\hat{x}_{\ell\mathcal{M}}$ in location ℓ ;
- (iii) There is no cross-location profitable deviation for the middle-income type.
Namely, for all $(x_{\ell\mathcal{M}}, x_{h\mathcal{M}})$ such that $x_{\ell\mathcal{M}} + x_{h\mathcal{M}} \leq I_{\mathcal{M}}$,

$$u(I_{\mathcal{M}} - \hat{x}_{\ell\mathcal{M}} - \hat{x}_{h\mathcal{M}}) + s_{\ell}(\mu_{\ell}(\hat{x}_{\ell\mathcal{M}})) + s_h(\mu_h(\hat{x}_{h\mathcal{M}})) \geq u(I_{\mathcal{M}} - x_{\ell\mathcal{M}} - x_{h\mathcal{M}}) + s_{\ell}(\mu_{\ell}(x_{\ell\mathcal{M}})) + s_h(\mu_h(x_{h\mathcal{M}}))$$

Definition 1 formalizes equilibrium in a way that respects the two-location structure: behavior must be locally consistent with signaling incentives in each location, while the middle type must have no profitable reallocation of conspicuous expenditure across locations.

The interaction of two local signaling problems, linked by the middle type’s shared budget constraint, generates a multiplicity of equilibria. The next result summarizes existence across the four natural outcome configurations (pooling versus separating in each location).

Proposition 1 (Existence). *The game \mathcal{G} admits at least one WPBE in each of the following classes: pooling–pooling, separating–separating, pooling–separating, and separating–pooling.*

Appendix A.1 provides the proof of **Proposition 1** and characterizes equilibria into the four classes.

Given this multiplicity, we next refine the equilibrium set by restricting off-path beliefs. As a technical note, because our environment involves two audiences and a two-dimensional choice for the middle type, standard refinements defined for canonical signaling games must be adapted. **Definition 2** provides the corresponding two-location version used in the analysis.

Definition 2 (Two-Location Intuitive Criterion). Fix a WPBE assessment (σ^*, μ^*) with equilibrium payoffs U_t^* for $t \in \{\mathcal{P}, \mathcal{M}, \mathcal{R}\}$. For any candidate deviation, define the set of types for whom the deviation can be made weakly profitable under some beliefs.

Deviations observed in location ℓ . Given an off-path observation $x_{\ell} \geq 0$, define

$$D_{\ell}(x_{\ell}) = \left\{ t \in \{\mathcal{P}, \mathcal{M}\} : \exists \hat{\mu}_{\ell} \in [0, 1] \text{ s.t. } \tilde{U}_t(x_{\ell}; \hat{\mu}_{\ell}) \geq U_t^* \right\},$$

where $\tilde{U}_{\mathcal{P}}(x_{\ell}; \hat{\mu}_{\ell}) = u(I_{\mathcal{P}} - x_{\ell}) + s_{\ell}(\hat{\mu}_{\ell})$, and for the middle type

$$\tilde{U}_{\mathcal{M}}(x_{\ell}; \hat{\mu}_{\ell}) = \max_{\substack{x_h \geq 0 \\ x_{\ell} + x_h \leq I_{\mathcal{M}}}} \left\{ u(I_{\mathcal{M}} - x_{\ell} - x_h) + s_{\ell}(\hat{\mu}_{\ell}) + s_h(\mu_h^*(x_h)) \right\}.$$

That is, after deviating in ℓ , the middle type is allowed to reallocate conspicuous expenditure across locations, anticipating that the audience in h updates according to μ_h^* upon observing x_h .

Deviations observed in location h . Given an off-path observation $x_h \geq 0$, define

$$D_h(x_h) = \left\{ t \in \{\mathcal{M}, \mathcal{R}\} : \exists \hat{\mu}_h \in [0, 1] \text{ s.t. } \tilde{U}_t(x_h; \hat{\mu}_h) \geq U_t^* \right\},$$

where $\tilde{U}_{\mathcal{R}}(x_h; \hat{\mu}_h) = u(I_{\mathcal{R}} - x_h) + s_h(\hat{\mu}_h)$, and

$$\tilde{U}_{\mathcal{M}}(x_h; \hat{\mu}_h) = \max_{\substack{x_{\ell} \geq 0 \\ x_{\ell} + x_h \leq I_{\mathcal{M}}}} \left\{ u(I_{\mathcal{M}} - x_{\ell} - x_h) + s_{\ell}(\mu_{\ell}^*(x_{\ell})) + s_h(\hat{\mu}_h) \right\}.$$

Restriction on off-path beliefs. The WPBE (σ^*, μ^*) satisfies the Intuitive Criterion if, for every off-path x_{ℓ} and x_h :

- if $D_{\ell}(x_{\ell}) = \{\mathcal{P}\}$ then $\mu_{\ell}^*(x_{\ell}) = 0$, and if $D_{\ell}(x_{\ell}) = \{\mathcal{M}\}$ then $\mu_{\ell}^*(x_{\ell}) = 1$;
- if $D_h(x_h) = \{\mathcal{M}\}$ then $\mu_h^*(x_h) = 0$, and if $D_h(x_h) = \{\mathcal{R}\}$ then $\mu_h^*(x_h) = 1$;

while if both types in the location j belong to $D_j(\cdot)$, the criterion imposes no restriction.

In words, the criterion restricts off-path beliefs by requiring that, after an unexpected expenditure in a given location, the audience should not assign positive probability to a type for whom the deviation cannot be rationalized as weakly profitable under any belief. Crucially, the middle type is allowed to reallocate expenditure across locations when evaluating deviations.

We now turn from equilibrium *beliefs* to equilibrium *behavior*. While WPBE may differ in how they specify off-path beliefs, the two-location Intuitive Criterion pins down a unique pattern of *on-path* conspicuous expenditures. To state this prediction concisely, we introduce three expenditure cutoff levels. These cutoffs summarize the key incentive constraints: separation in location ℓ (1), separation in location h (2), and the middle type’s incentive to reallocate expenditure across locations (3).

Definition 3 (Cutoff Expenditures). Define $x_\ell^* > 0$ as the unique solution to the poor type's indifference condition in location ℓ :

$$u(I_p) + P = u(I_p - x_\ell^*) + M. \tag{1}$$

Given x_ℓ^* , define $x_h^* > 0$ as the (Riley) separating expenditure in location h that deters type \mathcal{M} from mimicking type \mathcal{R} while holding fixed x_ℓ^* :

$$u(I_{\mathcal{M}} - x_\ell^*) + M = u(I_{\mathcal{M}} - x_\ell^* - x_h^*) + R. \tag{2}$$

Finally, define $x_h^{**} \geq 0$ as the minimal expenditure that deters the middle type's cross-location deviation, allowing it to reallocate conspicuous spending across locations:

$$u(I_{\mathcal{M}} - x_\ell^*) + 2M = u(I_{\mathcal{M}} - x_h^{**}) + P + R. \tag{3}$$

Let

$$\tilde{x}_h \equiv \max\{x_h^*, x_h^{**}\}. \tag{4}$$

The term x_h^* corresponds to the standard Riley separating expenditure in location h absent cross-location reallocations, while x_h^{**} captures the additional deterrence needed when the middle type can shift expenditure across locations; \tilde{x}_h is the effective separating level selected in equilibrium.

These cutoffs allow us to express the refined equilibrium outcome in closed form.

Proposition 2 (Unique Outcome). *The two-location Intuitive Criterion selects a unique equilibrium outcome (up to off-path beliefs). On the equilibrium path:*

$$x_{\ell p} = 0, \quad x_{\ell \mathcal{M}} = x_\ell^*, \quad x_{h \mathcal{M}} = 0, \quad x_{h \mathcal{R}} = \tilde{x}_h.$$

Equivalently, the selected outcome is: (i) Riley–Riley if $x_h^* \geq x_h^{**}$; and (ii) Riley–Non-Riley (with rich overspending in location h) if $x_h^{**} > x_h^*$.

The proof of Proposition 2 is provided in Appendix A.3. Detailed definitions of the Riley–Riley and Riley–Non-Riley configurations are presented in Appendix A.2. In the Riley–Riley outcome, the rich separate by spending in h just enough to deter within- h imitation by the middle, while the middle spends in ℓ to avoid being perceived as poor. In the Riley–Non-Riley outcome, the rich must also deter the middle's cross-location reallocation (shifting expenditure from ℓ to h), so equilibrium spending in h can exceed the within- h Riley level.

Proposition 2 summarizes the model's unique behavioral prediction under the refinement. The two-location Intuitive Criterion eliminates all pooling outcomes. Pooling requires off-path beliefs under which a deviation to a more status-intensive expenditure is interpreted as coming from a lower type, even though only higher types can profitably deviate. As in standard signaling models, such beliefs are not credible: whenever a deviation can benefit only the higher type, the audience should assign it to that type. Hence, pooling cannot survive in either location.

Among the remaining separating outcomes, the criterion selects the most efficient one, i.e. the separating allocation that achieves incentive compatibility at the lowest wasteful conspicuous spending. In location ℓ , efficiency implies a Riley outcome: the poor spend zero, and the middle class spends the minimal amount x_ℓ^* that deters imitation. In location h , the rich must separate efficiently from the middle class. If the standard Riley level x_h^* already prevents the middle class from reallocating expenditure away from ℓ to mimic the rich in h , the selected equilibrium has a Riley–Riley configuration. Otherwise, the rich must increase spending to x_h^{**} to block this cross-location deviation, yielding a Riley–Non-Riley configuration. Which configuration arises depends on the model parameters, in particular on the perceived value of being recognized as rich relative to the cost of being perceived as poor. Appendix B illustrates how the selected configuration varies with the status utility from being recognized as rich, holding all other parameters constant.

5. Segregation

The introduction of segregation, modeled as two separated locations in which different classes compete for status, has non-trivial implications for wasteful conspicuous spending. In this Section, we compare the equilibrium predictions of our model to a benchmark environment in which all classes compete in a single location. We show that segregation benefits the rich, which in turn suggests an incentive for the upper classes to favor social arrangements that increase separation from lower-income groups. More specifically, we expect the wealthy to support the emergence of new forms of conspicuous consumption that reinforce social boundaries and sustain exclusionary status hierarchies.

Benchmark (one location). In the benchmark case, the three classes compete for social status within the same location, purchasing a single conspicuous good x . By a standard result in signaling models, the equilibrium features a separating (Riley) outcome such that the equilibrium levels of conspicuous expenditure of the poor, middle, and rich are respectively

$$x_p^{one} = 0, \quad x_{\mathcal{M}}^{one} > 0, \quad x_{\mathcal{R}}^{one} > 0,$$

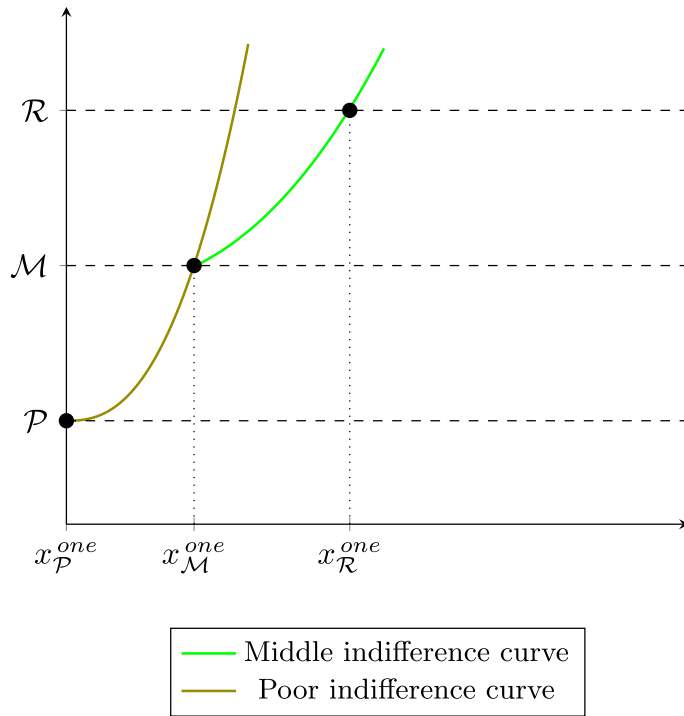


Fig. 2. Riley outcome of a three-type, one-location signaling game, representing status competition in the absence of segregation. Equilibrium conspicuous spending is $x_P^{one} = 0$, x_M^{one} , and x_R^{one} .

where x_M^{one} and x_R^{one} satisfy

$$u(I_P) + P = u(I_P - x_M^{one}) + M, \tag{5}$$

$$u(I_M - x_M^{one}) + M = u(I_M - x_R^{one}) + R. \tag{6}$$

Fig. 2 depicts this benchmark outcome.

Partial segregation via time allocation. To assess the role of segregation while keeping the total amount of status at stake comparable to the benchmark, we extend the two-location model by assuming that the middle class spends an exogenous fraction $\tau \in (0, 1)$ of time in location ℓ and the remaining fraction $(1 - \tau)$ in location h . Accordingly, the middle type evaluates status as a convex combination of the status obtained in the two locations. The parameter τ is exogenous and cannot be chosen by any type.

We restrict attention to values of τ for which the single-crossing property continues to hold in the relevant comparisons in each location.⁴ Under this restriction, the expenditures separating \mathcal{P} from \mathcal{M} in location ℓ are unchanged: $x_{\ell\mathcal{P}} = 0$ and $x_{\ell\mathcal{M}} = x_\ell^*$ as defined in (1).

In location h , define $x_h^*(\tau) > 0$ as the (Riley) separating expenditure that deters within-location imitation by \mathcal{M} holding x_ℓ^* fixed,

$$u(I_M - x_\ell^*) + (1 - \tau)M = u(I_M - x_\ell^* - x_h^*(\tau)) + (1 - \tau)R, \tag{7}$$

and define $x_h^{**}(\tau) \geq 0$ as the minimal expenditure that deters the middle type's cross-location reallocation deviation,

$$u(I_M - x_\ell^*) + M = u(I_M - x_h^{**}(\tau)) + \tau P + (1 - \tau)R. \tag{8}$$

The rich must deter both deviations, hence the equilibrium expenditure in h is

$$\bar{x}_h(\tau) \equiv \max\{x_h^*(\tau), x_h^{**}(\tau)\}. \tag{9}$$

Segregation reduces rich spending and raises rich payoffs. The next lemma shows that segregation alleviates the rich type's separation problem and consequently reduces the rich type's equilibrium conspicuous expenditure relative to the one-location benchmark.

⁴ If τ is close to 0, the middle class places negligible weight on status in location ℓ and may prefer not to signal there, potentially breaking the single-crossing logic.

Lemma 1 (*Segregation Lowers the Rich Type’s Equilibrium Expenditure*). Let $\tau \in (0, 1)$, let x_R^{one} solve (6), and let $\tilde{x}_h(\tau)$ solve (9). Then

$$\tilde{x}_h(\tau) = \max\{x_h^*(\tau), x_h^{**}(\tau)\} < x_R^{one}.$$

Proof of Lemma 1 is in Appendix A.4.

When competition is split across two locations, mimicking the rich in h no longer distinguishes the middle from the poor “for free”, because the middle must still spend in location ℓ to avoid being perceived as poor there. This opportunity cost weakens the middle as a competitor in h , allowing the rich to separate with lower expenditure. Moreover, the middle values status in h only for a fraction $(1 - \tau)$ of time, which further reduces the incentive to mimic. Since the rich remain recognized as rich on the equilibrium path, lower conspicuous expenditure translates into higher consumption and therefore higher utility.

In both environments, the rich type attains the top rank on the equilibrium path (it is recognized as rich), so the comparison is driven by the consumption component. Since $u(\cdot)$ is strictly increasing, Lemma 1 implies Result 1.

Result 1 (*Segregation Is Profitable for the Rich*). Under the assumptions of Lemma 1, segregation increases the rich type’s equilibrium payoff.

A further observation regarding segregation is that, as the middle class spends more time in location ℓ (higher τ), its incentive to compete for high-status recognition in h weakens. This relaxation of status competition loosens the rich type’s separation constraint in h and allows the rich to save on conspicuous spending. Put differently, segregation operates as a substitute for expenditure: by splitting status competition across locations, a higher τ reduces the conspicuous signal required for the rich to maintain separation, sustaining the same status distance with less consumption.

In the current formulation, the degree of segregation τ is exogenous, and the middle class remains active in both locations. This assumption captures the idea that individuals typically interact with different social groups across contexts, but the model’s logic suggests a natural extension in which segregation emerges endogenously. In particular, since Result 1 shows that the rich benefit from a higher degree of separation, they would have incentives to support institutional or social arrangements that increase τ . Allowing τ to be endogenous would also raise the possibility that the middle class concentrates its activity in a single location (i.e., $\tau \in \{0, 1\}$). While such corner solutions could arise, they would come at the cost of losing access to status comparisons in the other location, thereby limiting the middle class’s ability to signal upward. This trade-off suggests that, for a broad range of environments, interior values $\tau \in (0, 1)$ are likely to be relevant. We leave a full characterization of equilibrium τ to future work. Importantly, the core mechanism highlighted in this Section, that segmentation relaxes the rich type’s separation constraint and reduces wasteful conspicuous spending, does not rely on τ being exogenous, and would naturally extend to a setting in which segregation is itself an equilibrium outcome.

6. Income distribution

Status concerns shape how people evaluate redistributive policies. We examine how a marginal increase $\delta > 0$ in the poor’s income reshapes equilibrium conspicuous spending ($x_\ell^{*\delta}$ and $\tilde{x}_h^\delta = \max\{x_h^{*\delta}, x_h^{**\delta}\}$) and the rich’s incentives to support redistribution in an economy with partial segregation.

A higher income of the poor intensifies status competition in location ℓ . Intuitively, when the poor become relatively richer, the middle class must increase conspicuous spending in ℓ to preserve separation. The left panel of Fig. 3 illustrates this mechanism.

The same shock affects incentives in the high-status location h because it changes the middle class’s outside options and constraints. The key trade-off is two-sided. On the one hand, since the middle class spends more in ℓ , it has less disposable income available to compete for status in h . On the other hand, tougher competition in ℓ makes it more attractive for the middle class to attempt a cross-location deviation toward h . Which force dominates depends on the configuration of incentive constraints that the rich satisfy in equilibrium.

When the equilibrium has a *Riley–Riley* structure, the rich need to deter within-location imitation: they choose their conspicuous spending so as to make the middle class indifferent between competing for the rich’s status in h and not doing so. In this case, a higher I_p relaxes the relevant constraint in h because the middle class becomes effectively “poorer” in h after spending more in ℓ . The right panel of Fig. 3 depicts this case.

When the equilibrium instead has a *Riley–Non-Riley* structure, the rich need to deter cross-location deviations by the middle class. Then, making ℓ more competitive strengthens the middle class’s incentive to deviate across locations, and the rich must increase conspicuous spending in h to keep such deviations unattractive.

Proposition 3 summarizes the comparative statics: increasing the income of the poor always tightens competition in ℓ , but it helps the rich in the *Riley–Riley* configuration (because it relaxes within- h imitation incentives) and hurts them in the *Riley–Non-Riley* configuration (because it strengthens cross-location deviation incentives).

Proposition 3 (*Mechanism*). A marginal increase in the poor’s income affects the rich’s equilibrium conspicuous spending in location h , depending on the equilibrium configuration:

- (i) *Riley–Riley*. A marginal increase in the income of the poor reduces the rich’s equilibrium conspicuous spending in h , so the rich are better off.

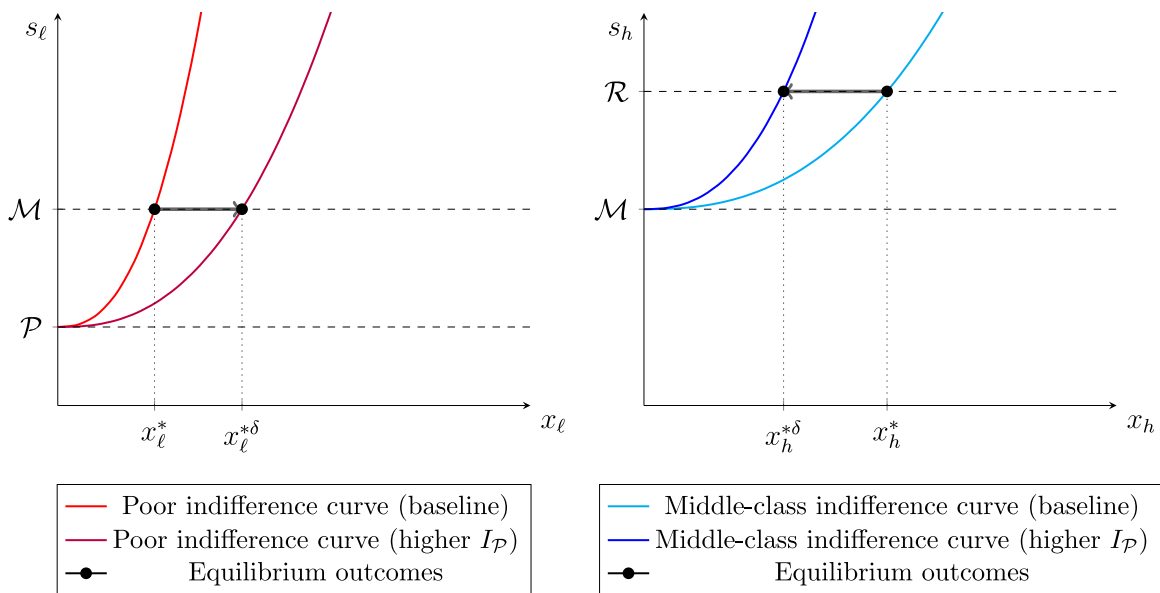


Fig. 3. Poor's income increase Left panel: a higher income of the poor flattens the poor's indifference condition, raising the middle class's equilibrium expenditure from x_ℓ^* to x_ℓ^{δ} . Right panel: in the Riley–Riley configuration, the same shock steepens the middle class's relevant indifference condition in h , allowing the rich to reduce equilibrium expenditure from x_h^* to x_h^{δ} .

(ii) *Riley–Non-Riley.* A marginal increase in the income of the poor increases the rich's equilibrium conspicuous spending in h , so the rich are worse off.

Appendix A.5 provides the proof of Proposition 3.

In what follows, we focus on the Riley–Riley configuration, because it creates scope for policy intervention: raising I_P generates a status-based surplus for the rich by reducing wasteful expenditures in h .

This naturally raises the question of how such targeted resources can be financed. A natural benchmark is voluntary giving by the rich. Corollary 1 formalizes this intuition by showing that in the Riley–Riley configuration, the rich are willing to transfer resources to the poor if and only if the status-based benefit outweighs the direct monetary cost of the transfer.

Corollary 1 (When Do the Rich Donate?). In the Riley–Riley case, the rich support a positive transfer when this status-based gain offsets the direct monetary loss, namely

$$\frac{\gamma}{\alpha} \geq \frac{1}{\left(1 - \frac{u'(I_P)}{u'(I_P - x_\ell^*)}\right) \left(1 - \frac{u'(I_M - x_\ell^*)}{u'(I_M - x_\ell^* - x_h^*)}\right)}. \tag{10}$$

Appendix A.6 provides the proof of Corollary 1.

Condition (10) highlights a simple aggregate feasibility logic: a given donation by the rich is diluted across the poor, so the per-poor increase in I_P scales with γ/α . As a result, voluntary donations become rational only when the mass of rich is sufficiently large relative to the mass of poor. Specifically, concavity implies that each bracket in the denominator lies in $(0, 1)$, the right-hand side exceeds 1, so a necessary condition is $\gamma/\alpha > 1$. This requirement can be demanding: even though the status channel is positive in the Riley–Riley configuration, a small rich group cannot generate enough per-poor income gains to justify the private cost.

Because voluntary transfers rely on this strong demographic condition, we next consider a policy that taxes the rich and the middle class and redistributes the revenues among the poor. Corollary 2 characterizes when such a policy can be sustained by majority voting.

Corollary 2 (When Does a Lump-Sum Tax On \mathcal{M} and \mathcal{R} Win a Majority?). In the Riley–Riley case, consider a balanced-budget policy indexed by $\kappa > 0$ that taxes each middle-class and rich individual a lump-sum amount κ and rebates the proceeds equally to the poor. Thus, each poor individual receives the subsidy

$$\Delta I_P(\kappa) = \frac{1 - \alpha}{\alpha} \kappa.$$

Then there exists $\bar{\kappa} > 0$ such that a policy with any $\kappa \in (0, \bar{\kappa})$ is supported by the majority of the population if

$$\left(1 - \frac{u'(I_M - x_\ell^*)}{u'(I_M - x_\ell^* - x_h^*)}\right) \left(1 + \frac{1 - \alpha}{\alpha} \left(1 - \frac{u'(I_P)}{u'(I_P - x_\ell^*)}\right)\right) \geq 1. \tag{11}$$

$$\text{and } \alpha + \gamma \geq \frac{1}{2}. \tag{12}$$

Appendix A.7 provides the proof of Corollary 2.

Relative to Corollary 1, the political condition is more permissive: the rich’s support requires only that the poor are not “too many” (11). In that case, the poor and the rich together can form a coalition that constitutes a majority under condition (12). This captures the idea that the rich’s status-based gain can sustain an interclass coalition with the poor even when voluntary donations are not individually rational. At the same time, the middle class bears a double burden in this policy: it pays the tax and, because I_p rises, it must also spend more in ℓ to preserve separation.

Result 2 summarizes the message of this Section.

Result 2 (Redistribution And Interclass Coalitions Under Segregation). *With partial segregation, status competition can make donations to the poor attractive to the rich and can sustain rich–poor political coalitions, provided the type distribution allows a winning majority and the equilibrium has a Riley–Riley structure.*

Both corollaries can be translated in terms of progressive income taxation with lump-sum redistribution. The first corollary corresponds to a setting in which the rich effectively finance targeted increases in I_p (leaving the middle class’s budget unaffected directly), while the second allows the tax burden to fall on both the rich and the middle class and therefore admits the possibility of a negative net effect on the middle class. This distinction matters for implementation. If a policymaker evaluates redistribution only through direct monetary transfers and ignores status-driven responses, they may view a progressive lump-sum redistribution as broadly acceptable, while in equilibrium it can impose additional (and politically salient) costs on the middle class through intensified status competition in ℓ . In this sense, status concerns and segregation shape not only whether redistribution is desirable for the rich, but also which redistributive instruments are politically sustainable once we account for endogenous conspicuous spending.

7. Poverty stigma

Redistribution is generally intended to reduce inequality and ensure access to basic necessities, including food, housing, and healthcare. However, redistributive policies are often accompanied by social stigma: individuals receiving transfers may be perceived as lazy or undeserving, which lowers their social standing (Baumberg, 2016). In this Section, we show that poverty stigma systematically benefits the rich by reshaping status competition.

We model stigma as a parameter $B > 0$ that reduces the social status associated with being recognized as poor. That is, after the policy, the poor obtain status $P - B$ rather than P . Lowering the poverty status intensifies competition in location ℓ , since the poor are willing to spend more to avoid stigma, and the middle class must respond by increasing its separating expenditure. This mechanism, formalized in Proposition 4, relaxes the separation constraint faced by the rich and reduces their equilibrium conspicuous spending.

Proposition 4 (Poverty Stigma Benefits the Rich). *Introducing poverty stigma ($B > 0$) reduces the equilibrium conspicuous spending of the rich in both the Riley–Riley and the Riley–Non-Riley configurations.*

The proof of Proposition 4 is in Appendix A.8.

Since poverty stigma provides the rich with an additional way to reduce their expenditures, we next examine the conditions under which a transfer that stigmatizes poverty can be implemented. We do so in Corollary 3.

Corollary 3 (When Is a Stigmatizing Transfer Jointly Supported?). *Consider a redistributive policy that transfers a fraction ω of the rich’s income to the poor and induces poverty stigma of magnitude $B > 0$.*

(i) *The poor accept the policy if and only if the monetary gain outweighs the stigma cost,*

$$B < u\left(I_p + \frac{\gamma}{\alpha}\omega I_R\right) - u(I_p). \tag{13}$$

(ii) *In a Riley–Riley configuration, the rich support the policy if and only if stigma is sufficiently strong to offset the direct monetary cost of the transfer,*

$$B > \omega I_R \left[\frac{u'(I_p - x_\ell^*)}{1 - \frac{u'(I_M - x_\ell^*)}{u'(I_M - x_\ell^* - x_h^*)}} - \frac{\gamma}{\alpha} (u'(I_p - x_\ell^*) - u'(I_p)) \right]. \tag{14}$$

A stigmatizing transfer is jointly supported by the rich and the poor if and only if the interval defined by (13) and (14) is non-empty, which requires

$$\frac{\gamma}{\alpha} > \frac{1}{1 - \frac{u'(I_M - x_\ell^*)}{u'(I_M - x_\ell^* - x_h^*)}}. \tag{15}$$

Table 1
Summary of the results.

	Riley–Riley	Riley–Non-Riley
Segregation	The rich benefit from partial social segregation.	
Transfer to the poor	The rich support a transfer, but are willing to make direct donations only if they outnumber the poor.	The rich oppose a transfer.
Poverty stigma	The rich benefit from stigmatizing the poor.	

The proof of [Corollary 3](#) is in Appendix A.9.

Under [\(14\)](#), the rich are willing to transfer a fraction ω of their income to the poor. While sufficiently strong stigma makes the transfer attractive to the rich, it simultaneously reduces the poor's willingness to accept redistribution. Joint support, therefore, requires an intermediate range of stigma levels, which exists only when condition [\(15\)](#) holds. In particular, a necessary condition for political feasibility is that the rich outnumber the poor.

This mechanism suggests a possible explanation for why redistributive programs that impose stigma on recipients may nonetheless attract political support from higher-income groups, even though they harm beneficiaries directly, while non-stigmatizing universal transfers often encounter resistance. More broadly, the model highlights how stigma can function not merely as a social byproduct of redistribution but as a policy instrument that reshapes status competition and the formation of interclass coalitions. [Result 3](#) summarizes the role of stigma for poverty.

Result 3 (*Poverty Stigma and Redistributive Support*). *Introducing poverty stigma reduces equilibrium conspicuous spending by the rich in both the Riley–Riley and Riley–Non-Riley configurations, by intensifying status competition between the poor and the middle class. As a result, stigma relaxes the incentive constraints faced by the rich and can expand the set of redistributive policies they are willing to support, even when such policies impose welfare losses on recipients.*

In contrast to the wealthy, the middle class has an interest in opposing the stigma of poverty. While stigma increases the symbolic distance between the poor and the middle class, it simultaneously intensifies competition in location ℓ . As a result, the middle class must raise its conspicuous spending to avoid being associated with the stigmatized poor. Because this additional expenditure is purely wasteful and does not improve the middle class's position with respect to the rich, stigma strictly reduces middle-class welfare. In the model, stigmatizing redistribution therefore places the middle class in a disadvantageous position: it raises their cost of maintaining status without generating compensating gains, explaining why the middle class has no incentive to support stigmatization.

More generally, the model sheds light on how different social classes may hold conflicting interests with respect to manipulations of the status distribution. In broad terms, the rich benefit from policies that lower the relative status of the middle class while easing pressure at the bottom; the middle class favors policies that reduce the status advantage of the rich while improving the position of the poor; and the poor benefit from policies that relax competition with the middle class, even if this implies a relative improvement in the status of the rich. [Remark 1](#) provides a discipline to these conjectures by highlighting the constraints imposed by a possible status normalization. A systematic analysis of the relative political power of different classes, however, lies beyond the scope of this paper. We therefore focus on poverty stigmatization, which emerges from the model as an empirically relevant prediction for which, to the best of our knowledge, there is no formal explanation.

Remark 1 (*Status Normalization*). Throughout the analysis, we only require $P < M < R$. A possible extension is that total social status is fixed and normalized so that $P + M + R = 1$. Under this normalization, any stigma-induced decrease in P must be offset by an increase in M and/or R . This reallocation does not automatically help the middle class. If M rises, middle-class status becomes more valuable, which can *strengthen* incentives to separate from the poor in location ℓ and therefore intensify status competition. In this sense, status normalization highlights a tension: stigma can raise the social stakes of being middle class while also increasing the spending needed to sustain middle-class distinctiveness.

8. Discussion

In a signaling model of conspicuous consumption, high-income individuals have an economic incentive to promote social segregation. Segregation alters equilibrium signaling incentives by reducing the need for costly status displays among the rich, which in turn affects their preferences over redistribution. These forces contribute to the emergence and persistence of poverty stigma. The model's theoretical predictions help rationalize patterns observed in real-world societies. [Table 1](#) briefly summarizes the results of the paper.

[Result 1](#) shows that segregation functions as a substitute for conspicuous consumption. This mechanism helps explain the tendency of high-income individuals to separate themselves from the rest of society: as discussed in [Section 5](#), greater social segregation reduces the need for costly displays of status. The model's notion of spatial distance admits a broader interpretation. Returning to the example of language introduced earlier, affluent individuals have incentives not only to physically distance themselves from lower-income groups, but also to develop new, exclusive forms of signaling—"languages", that are inaccessible to others. Consistent with this view, evidence indicates that high-income households increasingly signal status through less visible channels, particularly investments in education and cultural capital. For example, [Currid-Halkett \(2017\)](#) documents that in the

United States, the top 1% more than tripled the share of income devoted to education between 1996 and 2014, while education spending among middle-income households remained roughly constant.

Result 2 concerns redistribution. The relationship between support for redistribution and income is not uniform across contexts. Instead, cross-country evidence shows substantial heterogeneity in both the sign and strength of the income-redistribution gradient (Steele et al., 2022), pointing to mechanisms beyond simple income-based self-interest or linear altruism. We show that, under certain conditions, it is optimal for the rich to transfer resources to the poor, either through direct donations or by supporting redistributive policies. We do not presume that this mechanism fully explains the charitable actions of wealthy people. However, it can be combined with altruism (Fong, 2001), biased views about the determinants of inequality (Bénabou and Tirole, 2006), prospects of social mobility (Piketty, 1995), and fear of social upheavals (Simmel and Jacobson, 1965) to better understand why people may support redistribution. Beyond this general prediction, the model delivers comparative statics: depending on the intensity of status concerns, the relative size of social classes, and the income distribution, different socioeconomic groups support different forms of redistribution.

In a segregated society where the middle class is obsessed with not looking poor (a Riley–Riley outcome), the equilibrium predicts that the rich purchase just enough of the *exclusive* conspicuous good to deter middle-class emulation, confident that the middle class will keep spending on the *common* conspicuous good to avoid being mistaken for poor. A realistic interpretation is that the common conspicuous good consists of widely recognizable status markers (branded clothes, visible accessories, and other “logo” goods) that the middle class uses to signal distance from poverty. By contrast, the exclusive conspicuous good captures forms of distinction that require both money and cultural competence to be recognized (a tailor-made suit with subtle cues, original works of art, or niche tastes and aesthetic codes) that are largely unintelligible to the lower part of society.

When the poor become richer, the middle class must increase spending on the common good to preserve separation from below. This intensified “downward” pressure relaxes the rich’s incentive constraint and reduces the need to signal at the top. As a result, redistribution can become attractive to the rich: by raising the poor’s income, transfers shift part of the status competition to the lower segment of society and reduce pressure on the rich.

From a policy perspective, if the middle class does not constitute a majority, such that the poor and the rich together form the larger group, formal policies transferring public resources to the poor are likely to be implemented. When the middle class constitutes the majority, instead, it can block such policies. Importantly, this opposition does not reflect hostility toward the poor *per se*, but rather the middle class’s incentive to protect its separating position. Finally, when the poor and the rich together represent a small fraction of the population and the rich outnumber the poor, the rich may prefer voluntary transfers: targeted donations to the poorest can generate sizable status gains while limiting the extent to which redistribution compresses the middle class’s separating standard.

Conversely, in a segregated society where the middle class is dazzled by the social status of the rich (a Riley–Non-Riley outcome), the equilibrium predicts that the rich purchase just enough of the *exclusive* conspicuous good to prevent the middle class from cutting back on the *common* conspicuous good. In this way, the middle class is willing to accept the risk of being mistaken for poor by part of the broader public if doing so allows them to be perceived as rich within the elite social circles they occasionally access. In this case, redistribution harms the rich not only directly, through reduced income, but also indirectly through the status channel. Increasing the income of the poor intensifies status rivalry from below, making competition at the top relatively more attractive and forcing the rich to increase their conspicuous spending. Consequently, we expect to observe less generosity and fewer poverty-oriented redistributive policies in this type of society.

To grasp the relevance of this result, we need to gauge the relative size of income classes in the population. This is not straightforward, because the literature offers several competing ways to define the “middle class” (with the poor and the rich defined residually). Researchers typically use income-based definitions because income data are relatively comparable across countries and over time. They then operationalize “middle income” in three main ways: (i) absolute cutoffs, such as the World Bank’s \$10 – \$50 per day in PPP terms (particularly useful for emerging economies) (Ferreira et al., 2013); (ii) a fixed segment of the income distribution, such as the “middle 60%”, which is simple but mechanically prevents the middle class from shrinking or expanding by construction (Reeves et al., 2018; Pew Research Center, 2015); and (iii) relative thresholds around the median, for instance income between 75% and 200% of the national median, which allows the middle class size to vary across countries and over time and is consistent with standard measures of relative poverty (OECD, 2019). Using this median-based definition, the middle-income group remains the largest in most advanced economies, yet its size has declined across generations. On average across OECD countries, the share of individuals in middle-income households (75%–200% of national median disposable income) fell from 64% to 61% between the mid-1980s and the mid-2010s (OECD, 2019). The United States illustrates how far this shift can go: Pew Research Center (2015) reports that the middle-income share declined from 61% in 1971 to 50% in 2015, implying that adults above and below the middle combined are now roughly as numerous as those in the middle. In these terms, the hypothesis that rich and poor may jointly form a majority, and thus potentially support policies at the expense of the middle class, becomes empirically plausible. Finally, the relevant “rich–poor coalition” in our model depends on who benefits from redistribution. In the data, some widely used income-class definitions classify as “middle income” households that weakly benefit from redistribution, suggesting that empirical “middle class” measures may include a portion of what our model labels as poor (Causa and Hermansen, 2017).

The partial segregation formalized in this model is essential to generate all the effects presented. In the absence of segregation, the potential status-based interest of the rich in increasing the income of the poor disappears. Thus, conditional on a Riley–Riley outcome, more integrated societies are expected to exhibit lower levels of charity and redistribution, *ceteris paribus*.

Result 3 shows that the rich can benefit from strengthening narratives that stigmatize poverty, i.e., to lower the social status attached to being poor. The role of poverty stigmatization studied in Section 7 is consistent with the evidence presented by Graham

and Grisard (2019). As already emphasized by Simmel and Jacobson (1965), the poor may generate social and economic benefits for the wealthy by serving as recipients of aid. Graham and colleagues document that, in nineteenth-century Canada, charitable organizations often subjected recipients to humiliating procedures, which they interpret as a transfer of social status from the poor to the rich. In our model, the rich have an additional indirect interest in stigmatizing poverty, which provides an additional explanation for these findings based on the intensified competition faced by the middle class.

Another relevant pattern of social status recognition concerns modern society's tendency to celebrate the middle class. A prominent example is the image of the white picket fence, an iconic symbol of the idealized middle-class suburban lifestyle, representing family stability, home ownership, and social respectability. This phenomenon aligns with our model, since, alongside the stigma attached to poverty, it increases the value of being identified as middle class and intensifies competition to attain that status. At the same time, competition with the rich is attenuated, as the middle class has less to gain from emulating the rich, given its improved fallback position in terms of social status. As a result, this pattern may indirectly benefit the wealthy by allowing them to reduce conspicuous expenditures. In the same spirit, the middle class may have an incentive to raise the social status associated with poverty (that is, to rehabilitate the image of the poor) because doing so relaxes the middle class's need to invest in visible "respectability" spending to avoid downward misrecognition. These conflicting interests over the social allocation of status suggest that the dominant narrative about social classes may reflect relative power in the public sphere: groups with greater political, cultural, or media influence can more effectively shape how poverty and affluence are framed and perceived.

Finally, one may ask how robust our results are to relaxing some of the model's assumptions. While two distinct locations for status competition and the middle class's simultaneous participation in both are central to the framework, the cross-location transmission mechanism itself does not depend on the restriction to three income types. Suppose that a multiplicity of income types competes for rank within each location, and that some individuals participate in both locations. An increase in the income of the poorest type steepens competition at the bottom of the status ladder in the low-status location. Because the marginal "winners" of this intensified competition also enter the high location, they bring weaker incentives to climb the top ladder, which relaxes competitive pressure for those who only compete there and generates positive spillovers at the top. The same cross-location logic implies that changing the social status attached to poverty, through stigma, can propagate beyond the bottom of the distribution via the set of individuals who frequent both locations.

Overall, our contribution sheds light on hidden mechanisms affecting preferences for income redistribution in societies characterized by class segregation and status concerns. When status competition occurs separately in the lower and upper segments of society, strategic incentives emerge that shape support for redistributive policies and foster dynamics in which certain social groups are elevated while others are diminished.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgments

We thank the reviewers and editors for their helpful comments. We also thank Federico Vaccari and the audiences at the Virtual Formal Theory Workshop 2022, European Meeting on Game Theory 2022, Royal Economic Society & Scottish Economic Society Glasgow 2023 Annual Conference, SAET Conference Paris 2023, 12th IBEO Political Economy, 11th Oligo Workshop, and the Microeconomics Department of Universitat Pompeu Fabra for valuable feedback and discussions.

Appendix A. Supplementary material

Supplementary material related to this article can be found online at <https://doi.org/10.1016/j.jebo.2026.107553>.

Data availability

No data was used for the research described in the article.

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