Belief in a Just World and Redistributive Politics

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Introduction

• Persistent differences in the extent of redistribution / the "social contract" across similarly developed countries. Welfare State vs. Laissez Faire. US vs. Europe, but also other notable cross-country differences.

• American exceptionalism, belief in the "American Dream" (noted since De Toqueville; Lipset, etc.). Why does the beleif in self-reliance, personal responsibility vs. "societal" causes– vary so much across countries?

• What limits the extent of redistribution in a democracy?

• *Broader aim:* introduce some psychology into political economy.

I - Economists

1. Exogenous institutional differences: federal vs. central state, geography, slavery (e.g., Alesina-Glaeser-Sacerdote (2001)).

2. Multiple politico-economic equilibria, due to interactions between wealth accumulation and political power (Bénabou (2000), Saint Paul (2001), Hassler et al. (2004)).

3. Different beliefs: about the costs/ benefits of redistribution or the mobility process (Hirschman (1973), Piketty (1995), Bénabou-Ok (2001), Alesina-La Ferrara (2002), Alesina-Angeletos (2003)), or the link between wages and productivity (Rotemberg (2002)).

• Will focus here on differences in *beliefs about the links between effort or investment and market rewards.* Magnitudes are striking.

? The Myth of a Po-

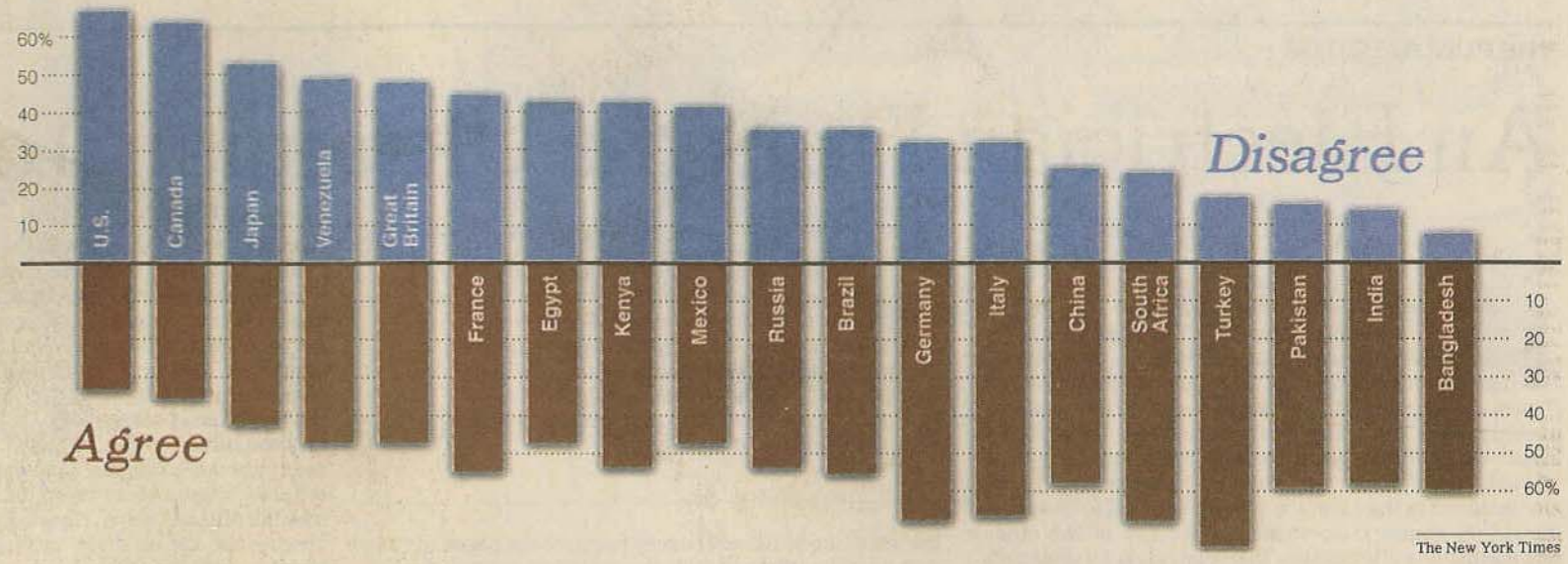
Continued on Page 4

Faith in the Future

Why America Sees the Silver Lining

'Success in life is pretty much determined by forces outside our control.'

— A Pew Center poll in 2002 of 38,000 people in 44 countries. Americans, more than any other respondents, disagreed.



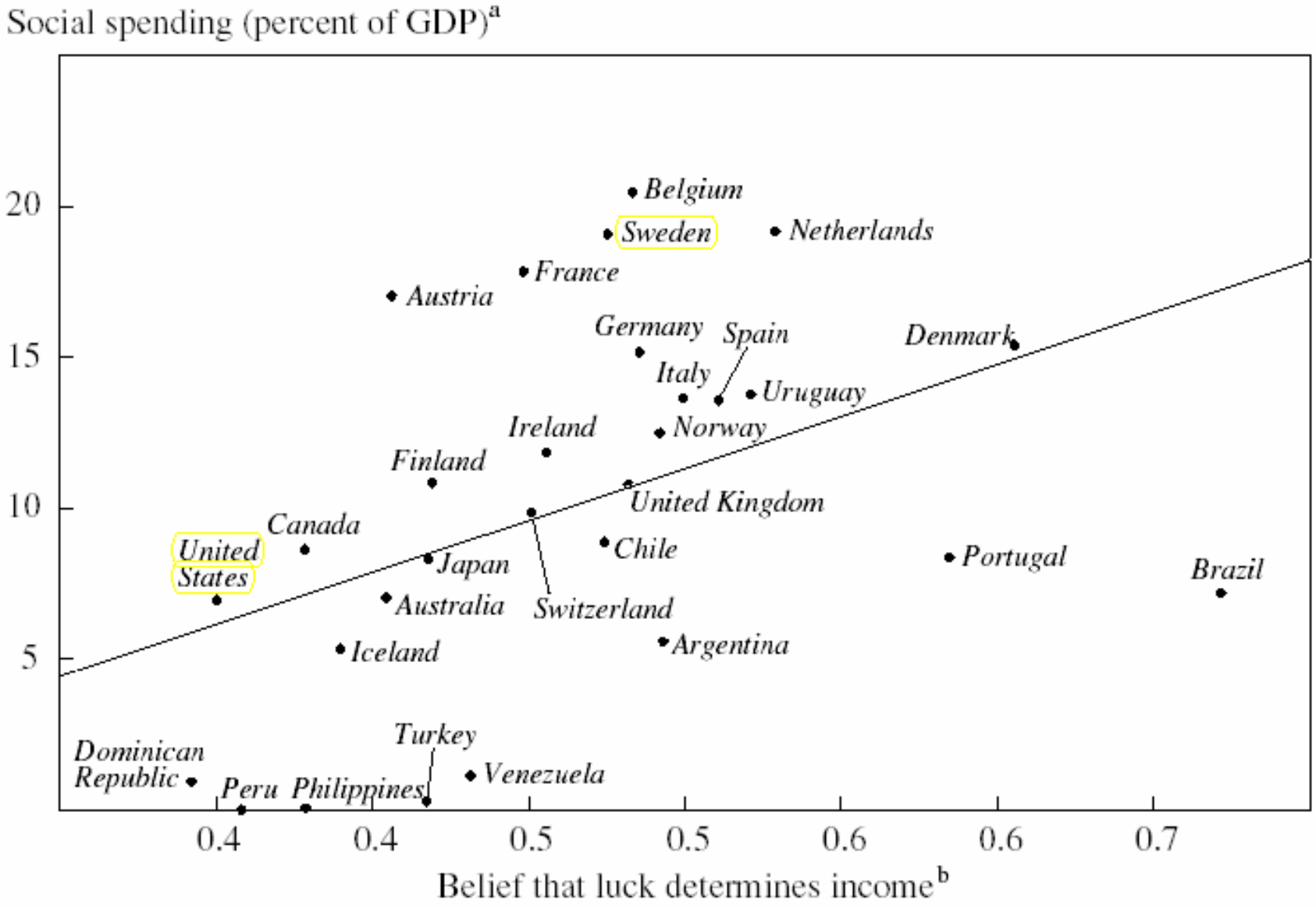
The New York Times

Table 13. Relationship between Leftist Political Orientation and Beliefs about the Poor

Percent

Item	*European Union*	*United States*
Identify themselves as on the left of political spectrum	30	17
Believe poor are trapped in poverty	60	29
Percent of the above who are on the left	34	26
Do not believe poor are trapped in poverty	40	71
Percent of the above who are on the left	27	14
Believe luck determines income	54	30
Percent of the above who are on the left	35	18
Do not believe luck determines income	46	70
Percent of the above who are on the left	25	16
Believe the poor are lazy	26	60
Percent of the above who are on the left	23	11
Do not believe the poor are lazy	74	40
Percent of the above who are on the left	34	25

Source: Authors' calculations based on data for 1981–97 from the World Values Survey (see appendix B).


Social spending (percent of GDP)[a]
20
15
10
5
Belgium
Sweden
Netherlands
France
Austria
Germany
Spain
Denmark
Italy
Uruguay
Ireland
Norway
Finland
United Kingdom
Canada
United States
Chile
Portugal
Brazil
Japan
Australia
Switzerland
Argentina
Iceland
Turkey
Dominican Republic
Peru
Philippines
Venezuela
0.4
0.4
0.5
0.5
0.6
0.6
0.7
Belief that luck determines income[b]

• At the individual level, these beliefs also play a central role in explaining voters' attitudes towards redistribution (Fong (2001)).

• Why such huge differences across countries?

– Role of history: attitudes and characteristics of early immigrants to US; availability of free land $\Rightarrow$ more equal opportunities. Yes, but through what channels do these "initial conditions" have effects that persist for so long after the "fundamentals" have changed?

– Traditional Marxist explanation: workers have "false consciousness"; victims of propaganda / brainwashing by capitalists, who control education, media, etc. Perhaps, but are they really so naive, and why would they be more susceptible to such deceptions in the US than in Europe?

– Piketty (1995): people / countries "accidentally" stuck with wrong beliefs: because costly to learn the returns to effort (you have to try working / not working and find out what happens), at some point they stop experimenting.

II- Sociologists – Political Scientists

Lane (1959), Hochschild (1981, 1996), Lamont (2000): detailed ethnographic interviews with hundreds of working class / moderate income workers (Black and White). Consistently find:

1. "False consciousness" is desired and valued

1a.– Obstinately / desperately cling to a belief that effort, hard work, good deeds will ultimately pay off: *people get what they deserve.* Conversely, what they get, they must deserve (good or bad).

1b – At the same time, some recognition that world is not so just; constant struggle with this "cognitive dissonance".

[Maria, cleaning lady]. *"Once Maria wonders if executives deserve their $60,000 annual salary: "I don't think they do all that [much] work, do you? Sit at their desk –they got it easy". But she suppresses the thought immediately" "Well, maybe it* is *a lot of work. Maybe they have a lot of writing to do, or they have to make sure things go right. So maybe they* are *deserving of it".* (Hochschild (1996)).

"My mom always told me that hard work, loyalty and respect for others will bring me success,: wrote J. K., who was let go from Credit Suisse in late October. "That's why I came back to CSFB after b-school... and did all that other stuff. Apparently it doesn't always work that way."

New York Times (12/01/2002).

- Notable parallel with the discrepancy between:

– prevalent and persistent perception of the United States as an exceptionally mobile society, especially in the US itself.

– comparative empirical evidence on intergenerational income mobility: shows no significant difference with European welfare states, and even sometimes more mobility in the latter.

(Couch-Dunn (1997), Björklund-Jäntti (1997), Ichino-Cecchi (1999)).

2. Key role (in outcomes and in "values") of willpower

(What Lamont (2000) terms "the disciplined self").

2a – Key challenge of their lives: struggle to "keep it going," not give up, persevere in the face of adversity. Otherwise: welfare, homelessness, drugs...

2b– Very harsh judgements on the (very) poor / welfare recipients (especially Blacks); poverty attributed in large part to "giving up", not caring, no "values", no direction in life.

- "General view that success is a triumph of the will and a reflection of ability". (Lane (1980)).

- WVS question: is whether people think that the poor "... are lazy, or lack willpower".

III-Psychologists

A. Self-Control Problem*:* excessive tendency to sacrifice long-run objectives and welfare to short-run impulses, instant gratification. Such "momentary" preferences $\Rightarrow$ insufficient effort or perseverance (school, work), low savings, addiction, etc.

B. Cognitive Biases*:* *"Fundamental attribution error"* (Ross and Nisbett (1991)): excessive tendency to explain behavior of others by dispositions (personal actions or attributes) rather than circumstances (luck, etc.).
"Illusion of control", overconfidence: excessive beliefs that they, and others, have control over their environment.

C. Belief in a Just World: (Lerner (1980), Peplau and Tyler (1975)): *"Individuals have a need to believe that they live in a world where people generally get what they deserve".* When confronted with contradictory information, people try hard to ignore, reinterpret, distort, forget it.

Many experiments: reinterpretation of explicitly fortuitous rewards as deserved; blaming the victim

Questions at Hand

– Why do people want / "need" to believe in a just world?

– To what extent can they succeed in achieving such beliefs "false consciousness" (if the word is not-so-just)?

– Why are there such variations in BJW across countries? (Also groups, individuals).

– What are the political economy implications of BJW? Redistribution / welfare, stigma on the poor, etc.

– Can theory also explain other forms of *collective beliefs* and cognitive biases? Money / consumption buys happiness (or not), affective forecasting. Religion.

A Theory of Ideology

1. Demand for motivated beliefs. Rosy worldview where people ultimately get their "just deserts" can serve three broad purposes:

– Functional: imperfect willpower⇒ need to motivate oneself towards effort, educational investment, not giving up, etc. Equivalently: parents want to motivate their children.

– Hedonic: BJW is intrinsically desirable, reassuring.

– Religion: beliefs over rewards / punishments in the afterlife. .

2. Supply of motivated beliefs.

– Self-deception: through selective memory, attention, awareness, etc.

–Indoctrination: trying to impart one's children with view that effort and sacrifice will be rewarded in the long run.

3. General equilibrium feedbacks. Endogenous complementarities arise between individual's "demand" for BJW, via their collective political decisions.

⇒ incentive to *believe what others believe,* independently of its veracity.

• If many people have BJW, thinking success is highly dependent on effort => will be a majority or politically pivotal, and want low taxes and transfers.

• If one anticipates little redistribution ⇒ one's fate is highly dependent on effort ⇒ the costs of insufficient motivation are high: no safety net or welfare state. Conversely, greater rewards from being highly motivated to study, work. ⇒ people have greater incentives to maintain BJW.

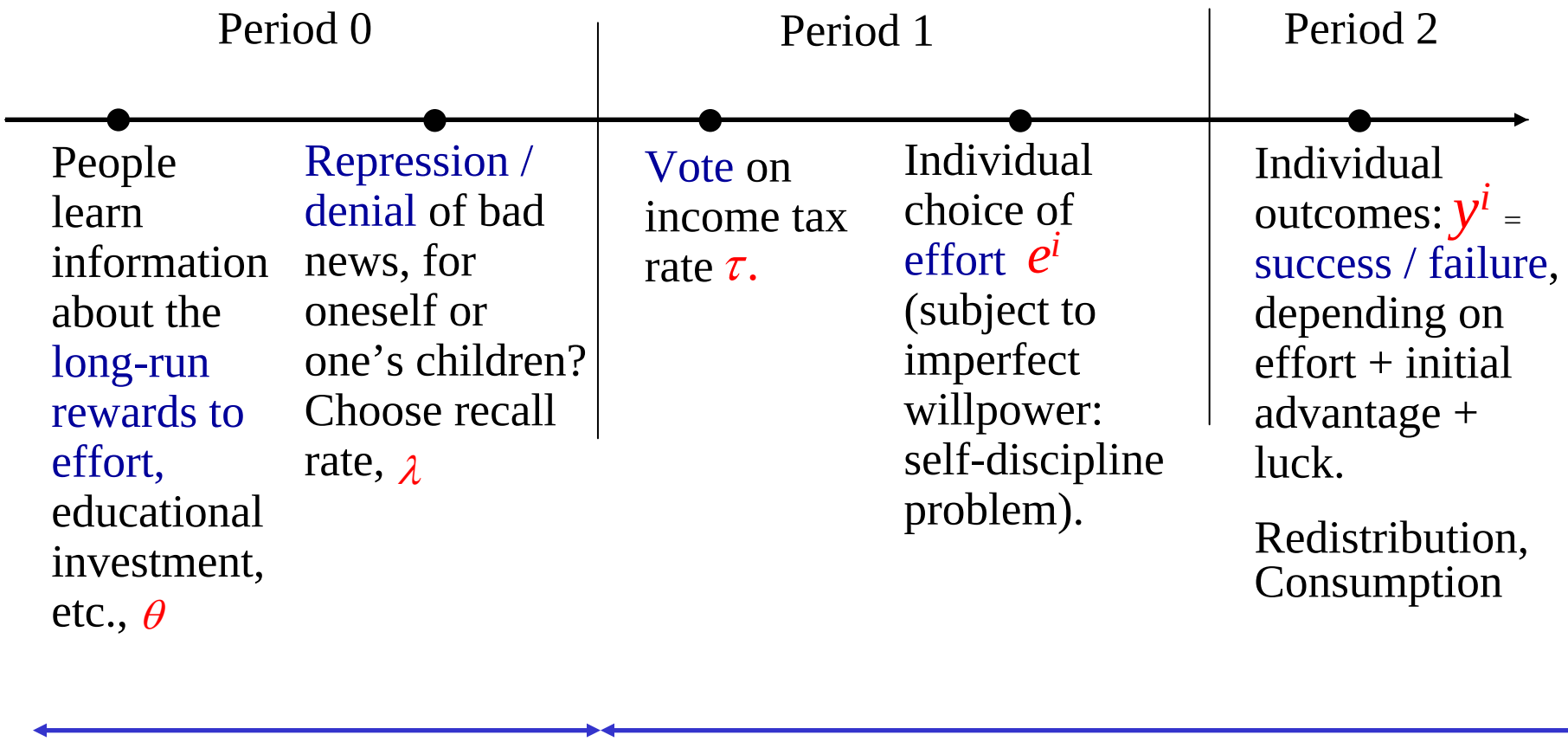
Thus, two equilibria (stable configurations of ideology and policy):

• *Laissez-faire / BJW:* high degree of "learned optimism," little redistribution. Also implies more blaming poverty on lack of effort or willpower by the poor.

• *Welfare state / Realistic-Pessimist:* low degree of BJW (more cynicism), generous welfare state. More "understanding" of the poor.

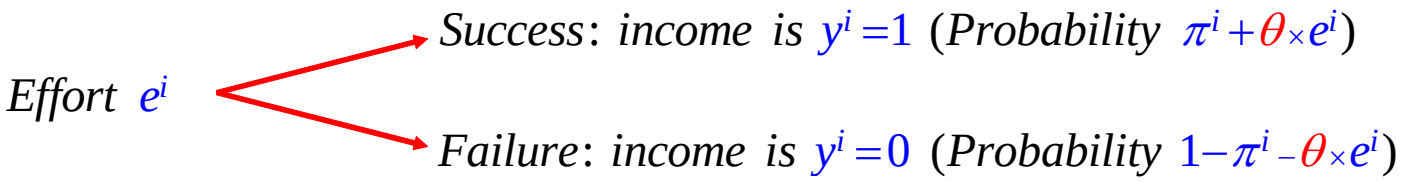
⇒ *Role for history:* initial conditions / historical events (free land, beliefs of early immigrants, etc.) can have long lasting effects. *Persistence of ideology.*

Basic structure of the model



Economic Setting

- Large number of agents $i \in [0,1]$, producing with technology:



- e : effort, perseverance, human capital investment of individual i.

- θ : *extent to which effort (or investment) is rewarded,* i.e. how much it matters for income determination. "Justness" of the world.

True θ is unknown. People observe signals (evidence) about it, and then decide how to process / recall / them, or to transmit them to their children.

- π : innate or preexisting *advantage;* inherited human or social capital, discrimination, etc. Minority $\varphi < 1/2$ of agents are "advantaged", with a high π_1, majority $1-\varphi$ are disadvantaged, with a low π_0. Averages: $\bar{\pi}$.

- Income redistributed at a rate $\tau \leq 100\%$, determined by majority voting: pretax $y^i \rightsquigarrow$ disposable $(1-\tau)y^i + t\bar{y}$.

Preferences and effort decisions

Individuals care about their net, disposable income, and dislike effort. Their ex-ante, long-run objective is to maximize:

$$U^i = E_0\left[(1-\tau)\, y^i + \tau\, \bar{y} - (e^i)^2/2\right]$$

At time when effort is actually chosen, however, its cost is particularly salient / => temptation to procrastinate, give up. So ex-post, ends up maximizing instead:

$$\widehat{U}^i = E_1\left[(1-\tau)\, y^i + \tau\, \bar{y} - \frac{(e^i)^2}{\beta}\right]$$

$\beta \leq 1$: degree of willpower (time-consistency)

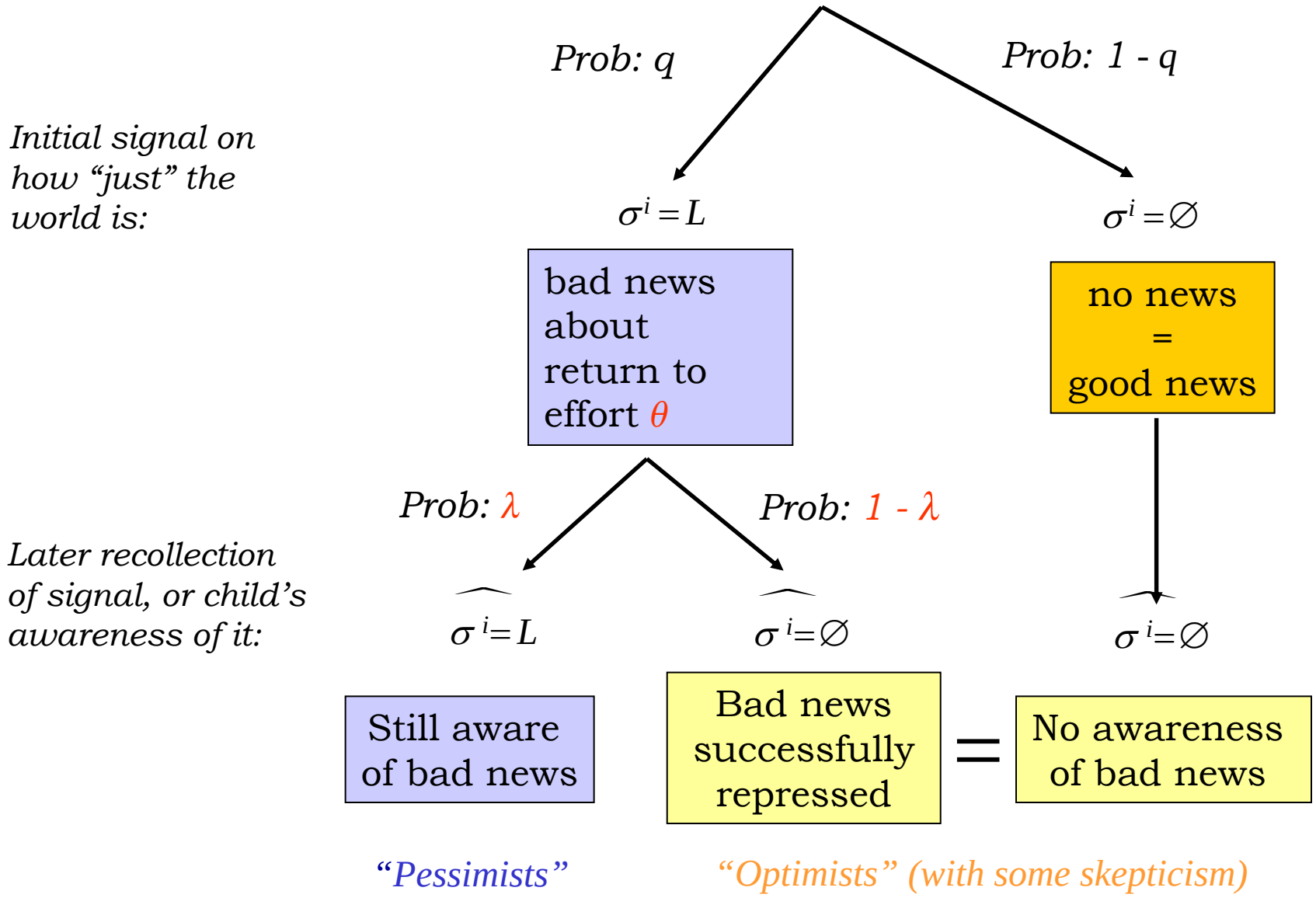
$\Rightarrow$ will choose: $e = \beta \times (1-\tau) \times Expectation\ of\ return\ to\ effort\ \theta$

instead of desired: $e^* = 1 \times (1-tax) \times Expectation\ of\ return\ to\ effort\ \theta$

- *Key point #1:* being optimistic about the long-term rewards to effort θ helps alleviate the undermotivation problem (the fact that $\beta < 1$).

- Same model: conflicting preferences between parents and children.

Cognitive Decisions – Ideological Choice



• *Memory / education:* probability that bad news will be remembered or transmitted accurately (endogenous)

$$\lambda \equiv \Pr\left[\hat{\sigma} = L \mid \sigma = L\right].$$

• *Posterior beliefs* when voting and choosing effort: $\mu^i \equiv \Pr\left[\sigma = \varnothing \mid \hat{\Omega}^i\right]$

$$\mu^i = \begin{cases} 0 & \text{when aware of a negative signal,} \quad \hat{\sigma}^i = L \\ r & \text{when unaware of any negative signal,} \quad \hat{\sigma}^i = \varnothing \end{cases}$$

where r is the the *reliability* of optimistic ("no bad news") recollections or parental speeches:

$$r = \frac{q}{q + (1-q)(1-\lambda)}.$$

Effort / investment and Political Preferences

- Given posterior μ^i, each agent i chooses effort optimally:

$$e^i = a\beta(1-\tau) \times (\mu^i \theta_H + (1-\mu^i)\theta_L) \equiv a\beta(1-\tau) \times \hat{\theta}^i$$

- Also relevant for his political preferences are *his beliefs about other agents' beliefs* concerning θ, which determine their efforts:

$$E[\bar{y} \mid \hat{\Omega}^i] \;=\; \bar{\pi} + E\left[\theta \cdot \int_0^1 e^j \, dj \;\middle|\; \hat{\Omega}^i\right]$$

- Voter i evaluates tax rates τ according to:

$$V^i \;\equiv\; (1-\tau)\left(\pi^i + a\beta(1-\tau)\left(\hat{\theta}^i\right)^2\right) - \frac{a\beta^2}{2\gamma}(1-\tau)^2(\hat{\theta}^i)^2 + \tau E[\bar{y} \mid \hat{\Omega}^i]$$

Maximizing V^i gives the preferred tax rate $T(\pi^i, \mu^i; \lambda, r)$ of each voter i. How will these preferences be aggregated?

The expected utility of voter i 's with belief μ^i is

$$V(\tau, \pi^i, \mu^i) \equiv (1-\tau)[\pi^i + a\beta(1-\tau)\theta(\mu^i)^2] + \tau[\bar{\pi} + a\beta(1-\tau)\Gamma(\mu^i)] - \frac{a\beta^2}{2\gamma}(1-\tau)^2\theta(\mu^i)$$

where:

$$\theta(\mu^i) \equiv \mu^i\theta_H + (1-\mu^i)\theta_L.$$

reflects his belief about θ , which determines his effort $e^i = a\beta(1-\tau)\theta(\mu^i),$ while

$$\Gamma(\mu^i) \equiv E\left[\theta \cdot \int_0^1 \theta(\mu^j)\, dj \,\middle|\, \Omega_1^i\right] = \mu^i\theta_H\theta(r) + (1-\mu^i)\theta_L[\lambda\theta_L + (1-\lambda)\theta(r)].$$

reflects his beliefs about other agents' beliefs, as the latter determine the tax base from which transfers will be financed.

Assuming interior optimum, agents i 's ideal tax rate given by $\partial V^i(\tau, \pi^i, \mu^i)/\partial \tau = 0,$ or

$$T(\pi^i, \mu^i) \equiv 1 - \frac{1 + (\pi^i - \bar{\pi})/[a\beta\Gamma(\mu^i)]}{2 - (2 - \beta/\gamma)\theta(\mu^i)^2/\Gamma(\mu^i)}.$$

Three intuitive effects:

- Numerator: relative endowment $\pi^i - \bar{\pi}$ vs. distortions to the effort-elastic component of the tax base, proportional to $\Gamma(\mu^i)$. Latter more of a concern when effort is expected to be productive, i.e. for an optimist.

- Denominator: POUM effect: optimistic individual plans on working hard and thus expects to move up in the income distribution, relative to low-effort pessimists: ratio $\theta(\mu^i)^2/\Gamma(\mu^i)$ between agents' own expected output from effort and the average he expects others to produce with their labor.

- Time preference: when agents use fiscal policy to correct for the suboptimality of effort $(\gamma = 1),$ T is lower than when they do not $(\gamma = \beta).$

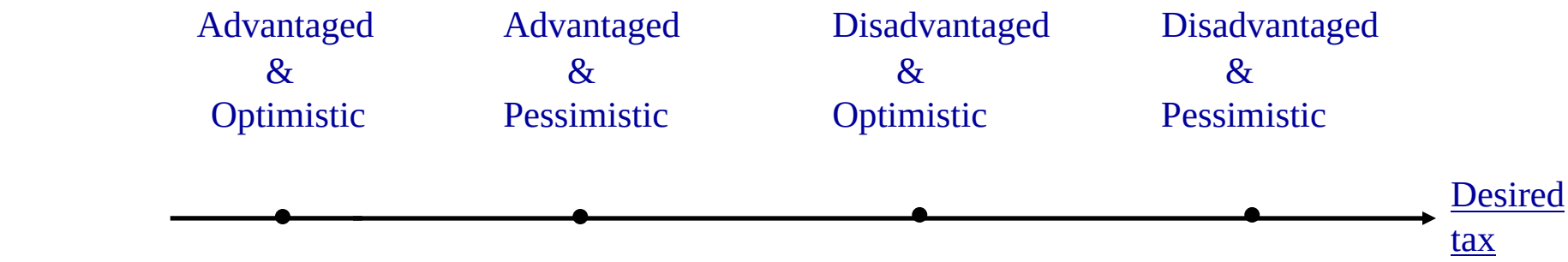
Distributional Politics

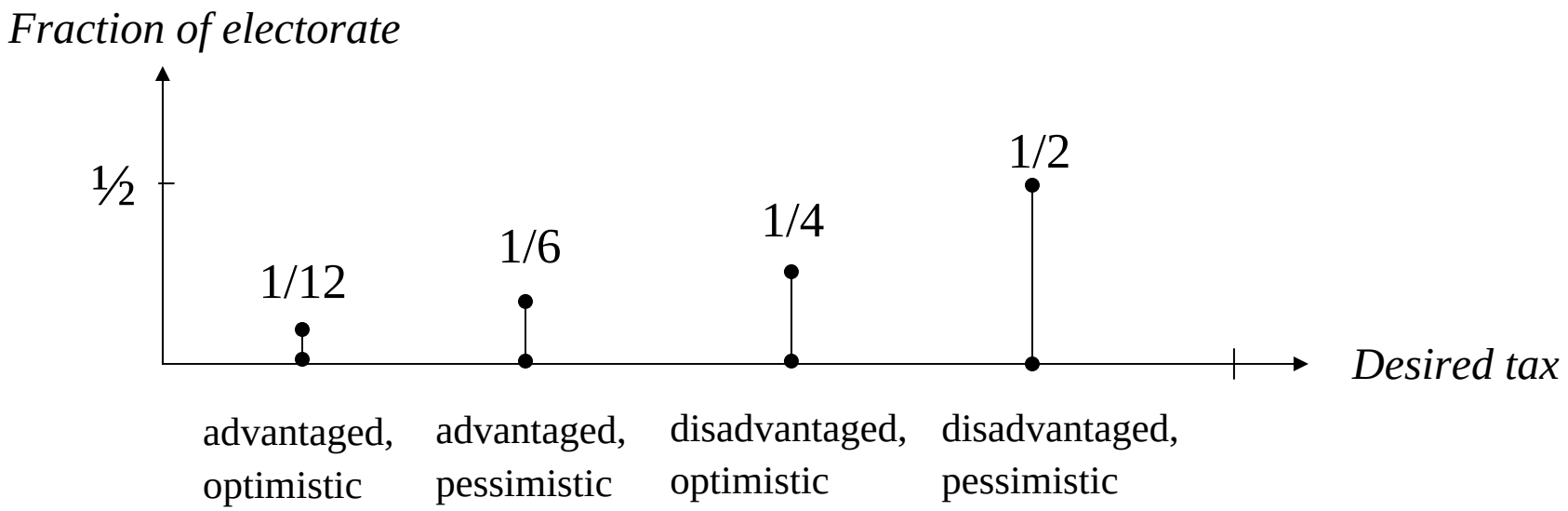
Composition of the electorate:

• Minority φ of advantaged or "rich" agents (high probability of success even with low effort), majority $1-\varphi$ of disadvantaged or "poor" agents.

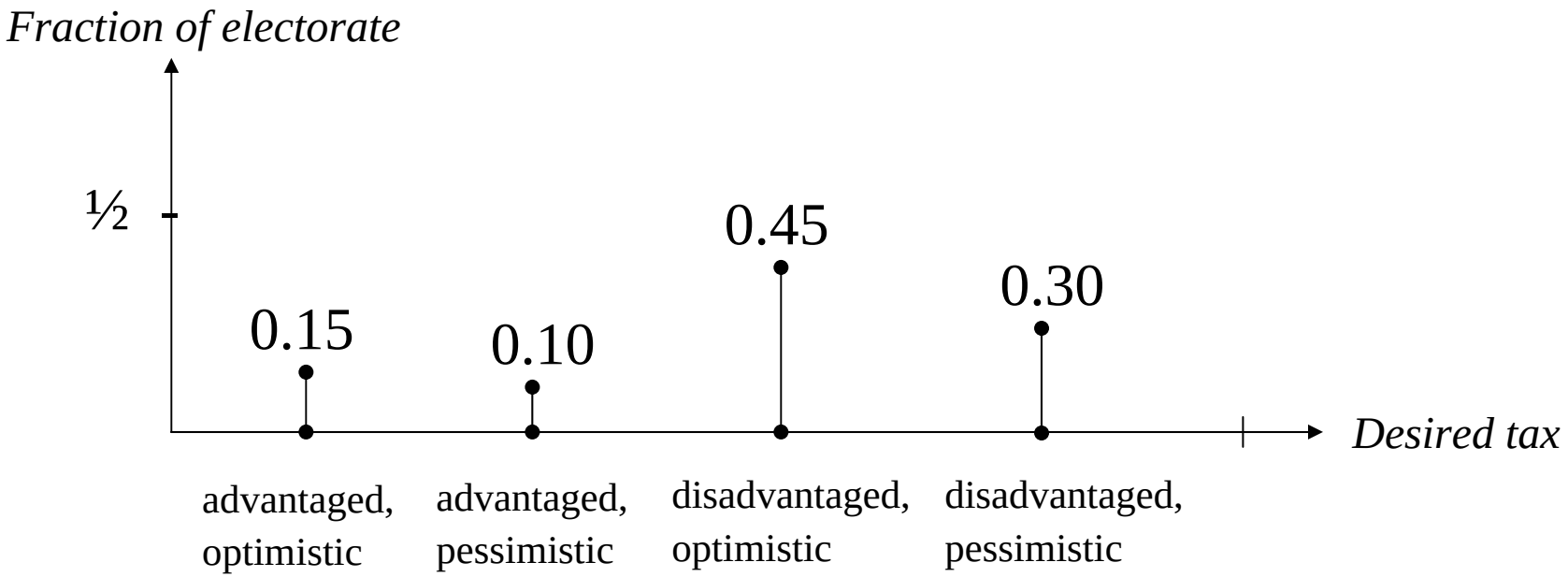
• Within each group, a fraction $1-\lambda$ of "optimists" (believe effort will pay), and a fraction λ of "pessimists" (believe success mostly predetermined by social advantage / disadvantage).

• Being *advantaged* makes one *want less redistribution*. Being *optimistic* also, because: a) expects to move up socially through effort; b) believes that taxes create large distortions



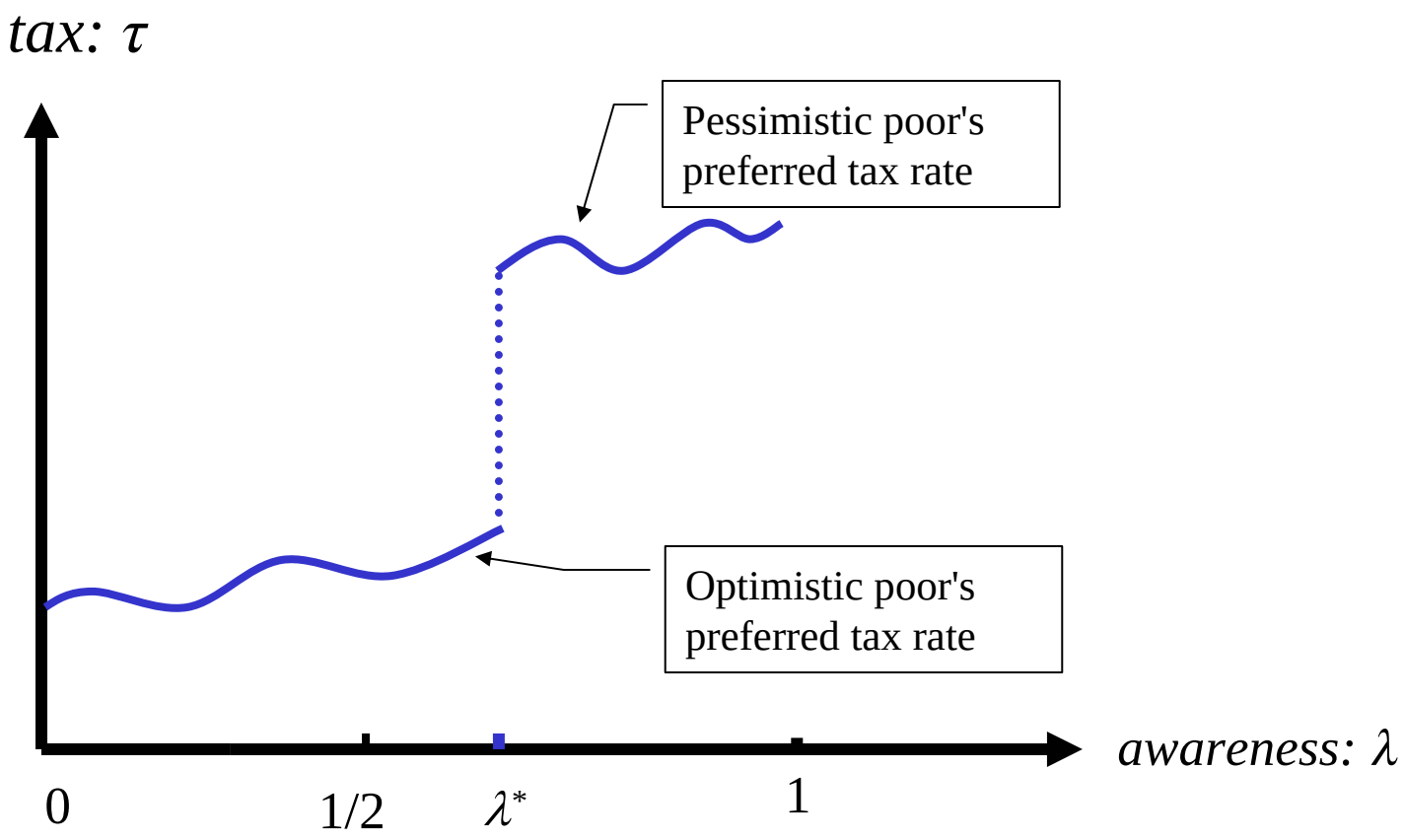


Low-BJW dominant ideology (λ= 2/3, with φ = .25) : pivotal agent is disadvantaged and pessimistic



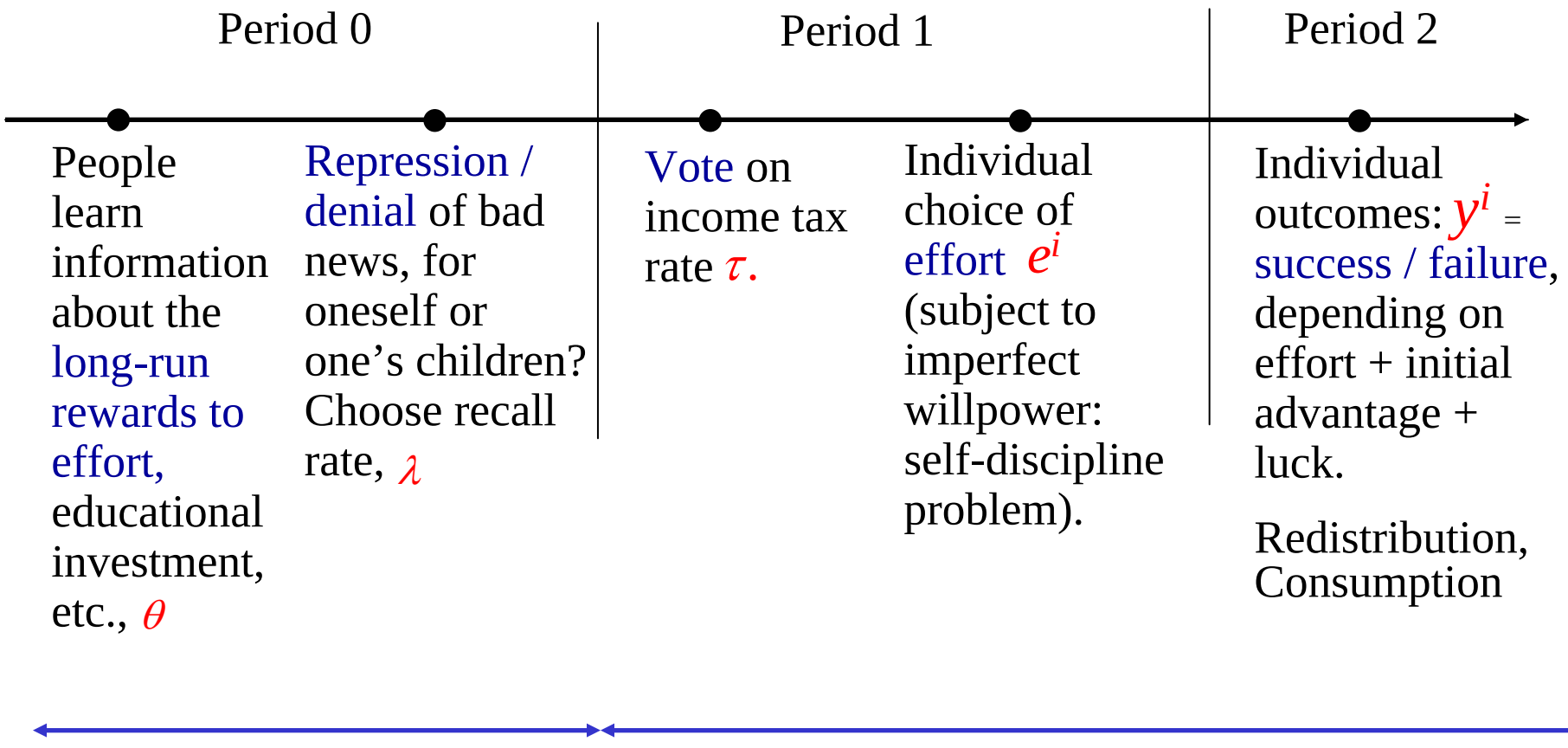
High-BJW dominant ideology (λ = 0.4, with φ = .25) : pivotal agent is disadvantaged and optimistic

Key point #2: The pivotal vote switches to the optimists as λ (awareness) declines below a critical value, resulting in a lower rate of redistribution.

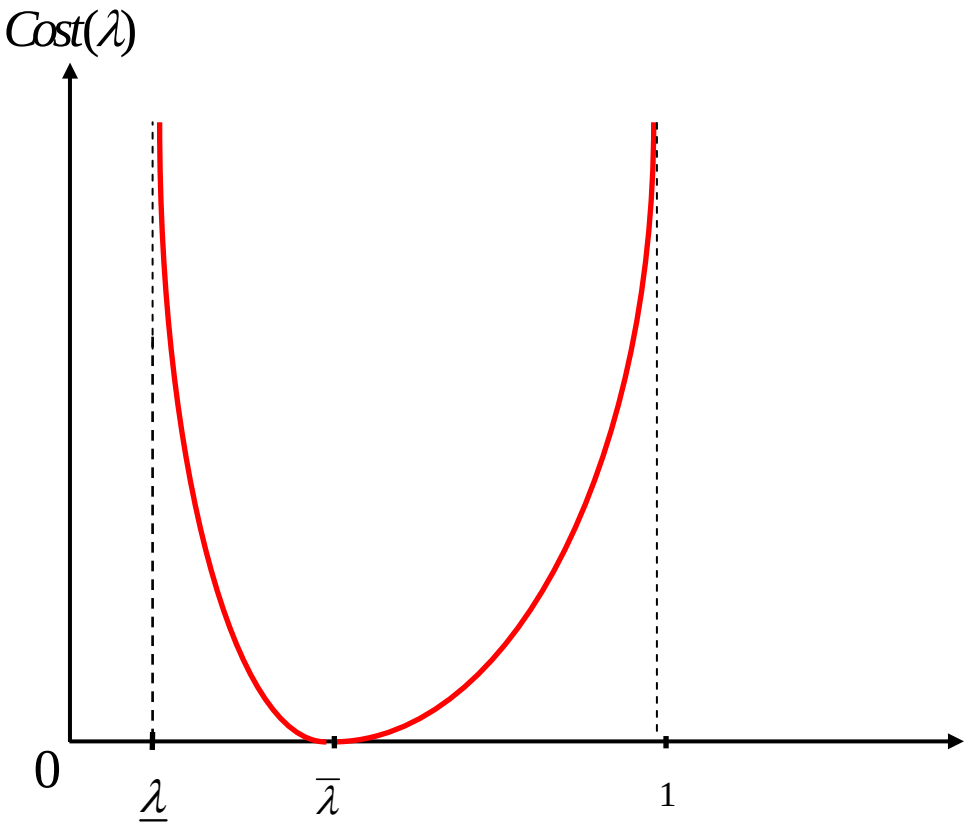


Equilibrium redistribution: tax rate τ, as a function of the degree of recall / awareness, λ (or the degree of denial 1 – λ) in the population.

Basic structure of the model



Investing in Ideology: Costs



$M(\lambda)$: Direct costs of manipulating own awareness / memory, or child's beliefs, to bring recall rate to λ. Requires time, effort, resources, stress….

$\bar{\lambda}$: Natural rate of recall: achieved without any effort or cost.

$\underline{\lambda}$: Mimimum rate of awareness achievable; $1-\underline{\lambda}$: = maximum rate of reality denial.

Cognitive Decisions

• What λ^i will each agent choose? Will depend on *anticipated* τ, as well as on *other agents'* (λ, r).

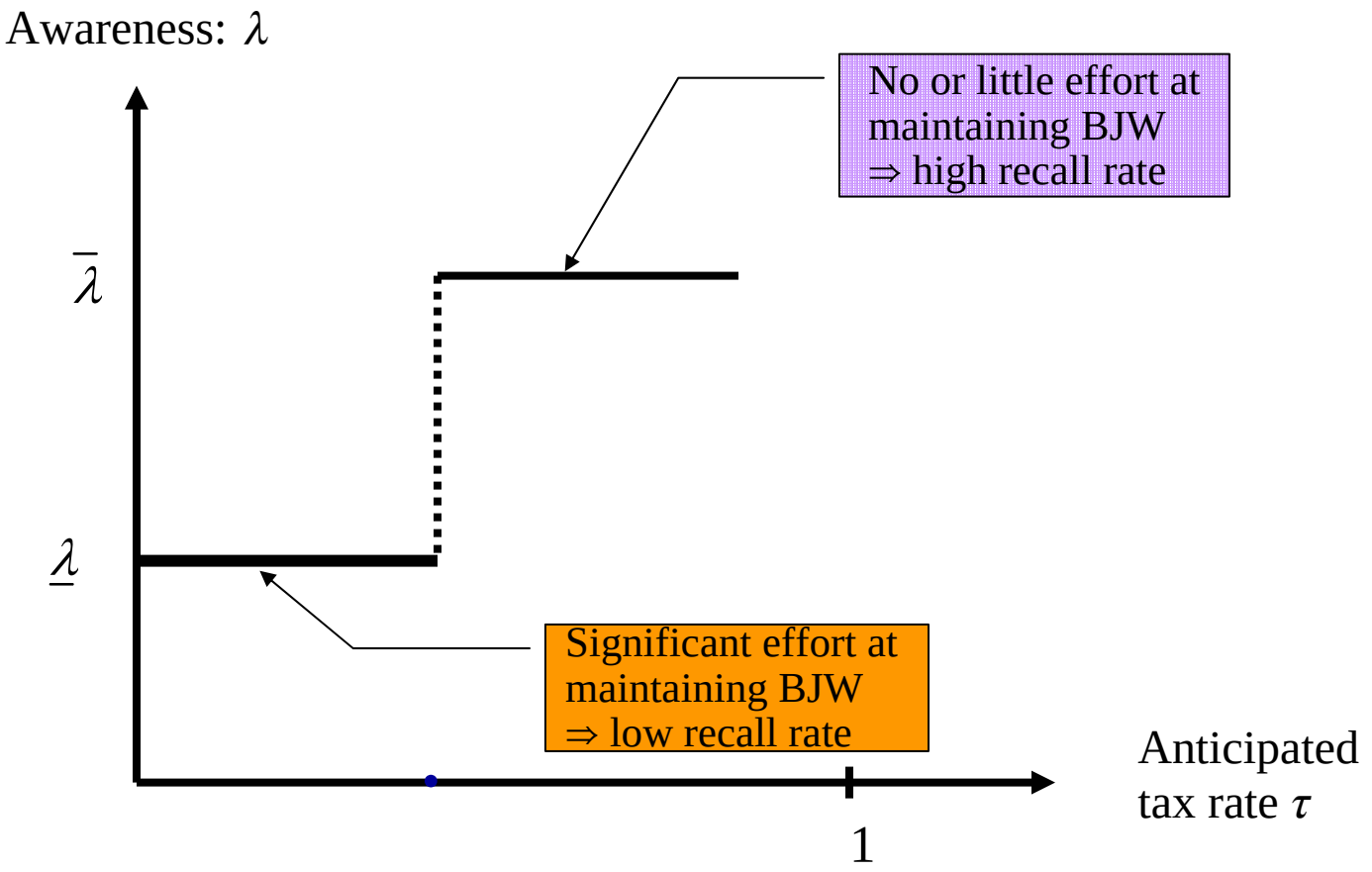
• Consider agent with initial bad news ($\sigma^i = L$). Depending on whether he later remains aware of them or not he will be a pessimist (posterior belief $\mu^i = 0$) or an optimist (posterior belief $\mu^i = r$). Let $U_L^P(\pi^i, \tau)$ and $U_L^O(\pi^i, \tau)$ be the corresponding levels of ex-ante expected utility, reflecting his optimal effort level and his expectations of what others are doing.

$\Rightarrow$ cognitive decision problem is:

$$\max_{\lambda' \in [0,1]} \left\{ \lambda' \underbrace{U_L^P(\pi^i, \tau)}_{\text{pessimist}} + (1 - \lambda') \underbrace{U_L^O(\pi^i, \tau)}_{\text{optimist}} - M(\lambda') \right\},$$

But: both $U_L^P(\pi^i, \tau)$ and $U_L^O(\pi^i, \tau)$ are proportional to $1 - \tau$, because they represent after-tax-welfate $\Longrightarrow$ a lower τ increases incentives to repress bad news, think positively.

Key point #3: The less redistributive the institutions they face, the more individuals engage in "positive thinking".



A politico-economic equilibrium is a triple (λ, r, τ) such that, in state *L,*

$$\lambda \in \arg \max_{\lambda' \in [0,1]} \{\lambda' \tilde{U}_L(\tau, 0) + (1 - \lambda')\tilde{U}_L(\tau, r) - M(\lambda')\},$$

$$r = \frac{q}{q + \chi(1 - q)(1 - \lambda)},$$

τ : is the majority tax rate, given the distribution of beliefs induced by (λ, r),

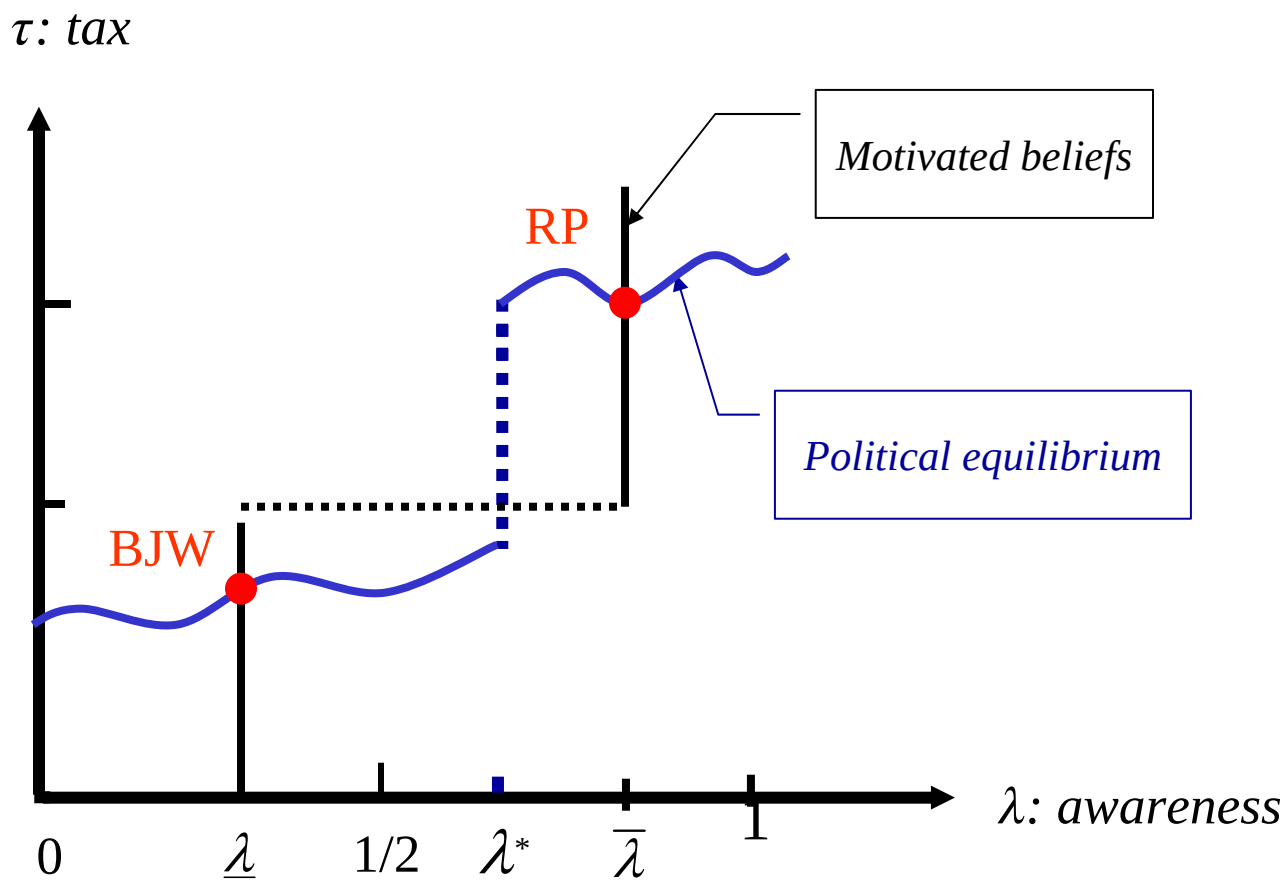
and in state $\sigma = \varnothing$ the majority tax rate is $T_{opt}(\pi_0)$, also a function of (λ, r).

Proposition *Let Assumptions 1-4 be satisfied. For a range of values of the denial cost* m *(and for all* $m' > 0$ *), there exist two politico-economic equilibria, such that:*

1) Awareness rate in the informative state $(\sigma = L)$ *is* $\underline{\lambda}$ *in the BJW equilibrium and* $\bar{\lambda}$ *in the RP equilibrium, with associated tax rates* $\underline{\tau}$ *and* $\bar{\tau}$, *such that* $\underline{\lambda} < \bar{\lambda}$ *and* $\underline{\tau} < \bar{\tau}$. *Average effort and output are higher in the BJW equilibrium.*

2) In the no-information state $(\sigma = \varnothing)$ *the rankings of tax rates, effort and output across the two equilibria depend on parameters. If* $\pi_1 - \pi_0$ *and* χ *are small enough, in particular, there exist values of* $\underline{\lambda}$ *and* $\bar{\lambda}$ *such that these rankings remain the same as in the informative state.*

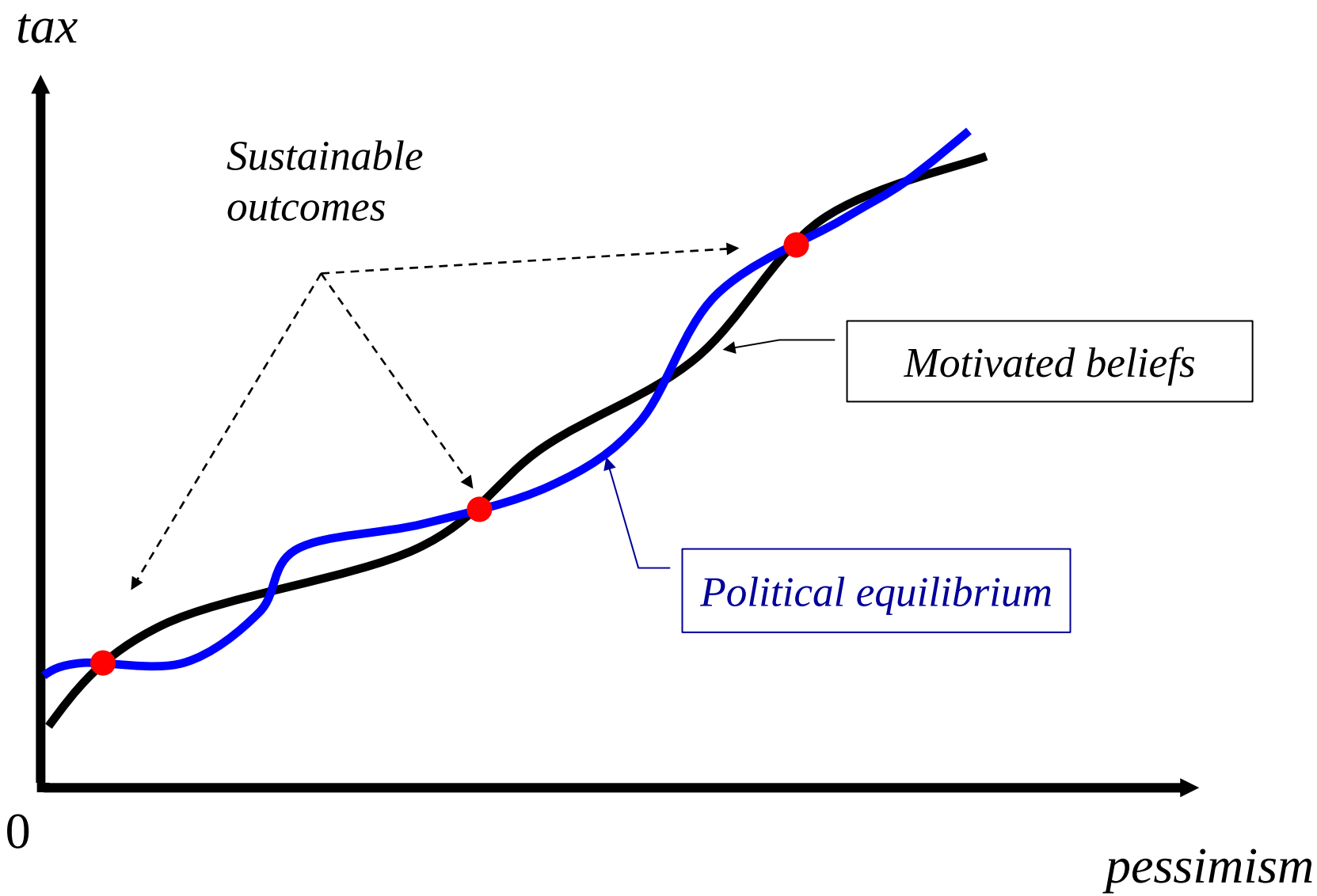
Main result: Multiple equilibria (stable policy-ideology configurations)

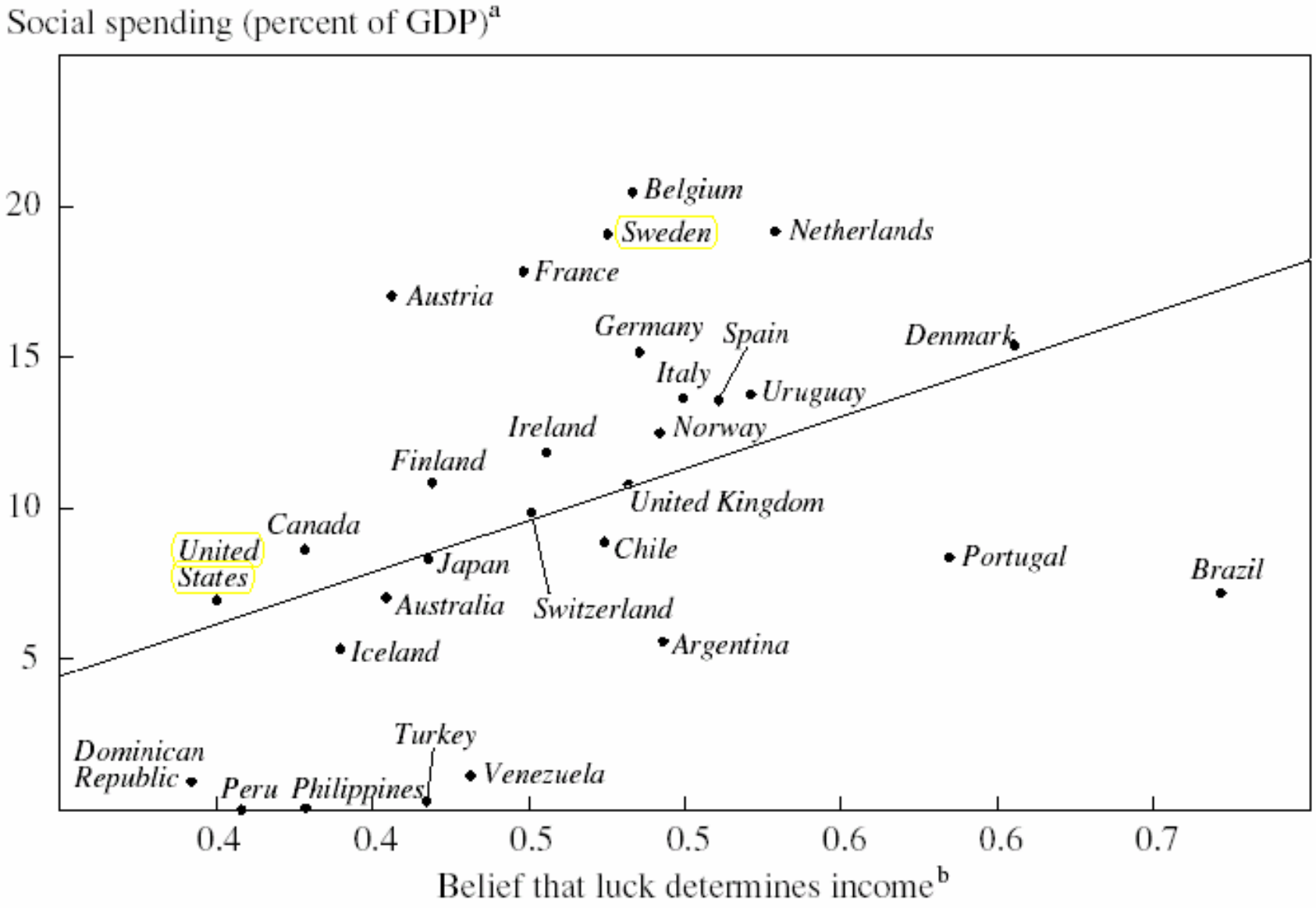


BJW : Belief in a Just World + Laissez-Faire Equilibrium [US]

RP: Realistic Pessimism + Welfare State Equilibrium. [Europe]

Multiple policy-ideology regimes: the more general point




Social spending (percent of GDP)[a]
20
15
10
5
Belgium
Sweden
Netherlands
France
Austria
Germany
Spain
Denmark
Italy
Uruguay
Ireland
Norway
Finland
United Kingdom
Canada
United States
Chile
Portugal
Brazil
Japan
Australia
Switzerland
Argentina
Iceland
Turkey
Dominican Republic
Peru
Philippines
Venezuela
0.4
0.4
0.5
0.5
0.6
0.6
0.7
Belief that luck determines income[b]

Main Result and Implications

•Theory of differences in *ideology and redistributive policies.* American Dream / Laissez Faire, vs. Europessimism / Welfare State, each sustained by endogenous complementarities between individuals' ideological choices.

• *Is the "American dream" just a dream , a collective illusion?*

1) Yes and no:

– yes, in the sense that more overestimation of the extent to which "people get what they deserve", can go from rags-to riches, the poor are not trapped, everyone can become president, etc.,

– No, in the sense that *net* incomes / rewards are truly more closely tied to "merit" in a BJW equilibrium: people more likely to overestimate θ, but the aftertax $(1-\tau)\times\theta$ is indeed higher.

2) May be a very useful illusion / ideology: higher motivation and effort, higher aggregate output / growth, etc.

3) Much less clear for the poor: lower transfers, more stigma.

What determines which regime a country is in?

- *History:*

  a) initial generations of settlers or migrants self-selected to be hard-working, due to either preferences or religious beliefs;

  b) availability of free land ("open frontier") made initial opportunities truly more equal than in Europe

⇒ US initially settles on the BJW equilibrium. *Even after these original conditions have disappeared, will persist due to mechanisms identified here.*

NB: Historical evidence on intergenerational social mobility: was indeed higher in US than in GB until about 1900. Today very close, but popular perception of a large difference persists (with political implications).

2. Big shocks:

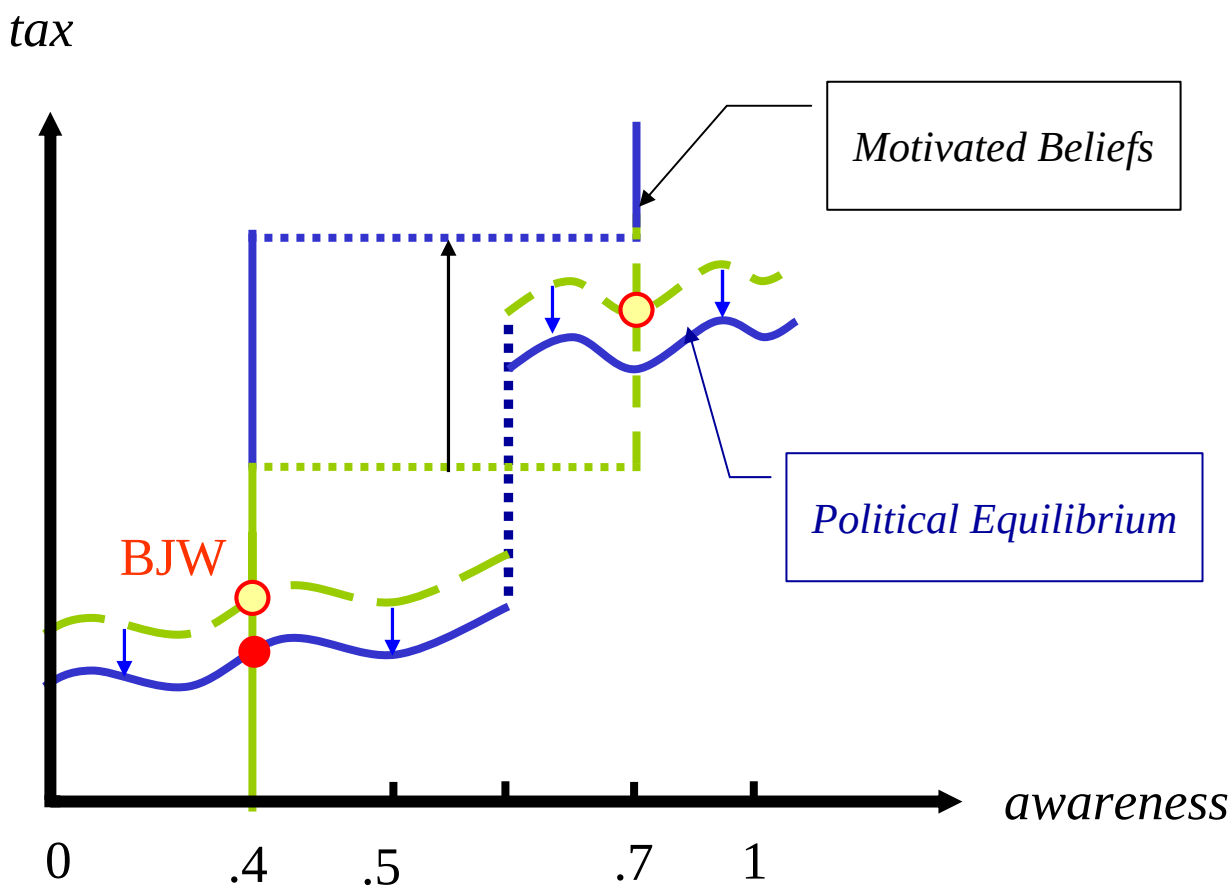
a) *Great Depression* triggered a durable change in attitudes toward the causes of wealth and poverty that made possible made possible a radically new set of redistributive institutions.

b) Inequality-generating ("skill-biased") *technological change.*

c) *Opening to international trade* of a previously closed country (LDC's, Eastern Europe).

NB: (b) and (c) push to BJW regime by changing the value of holding beliefs in self-determination, the long-run return to effort, etc.

Shifts in ideology and policy induced by technical change /opening to trade



BJW : Belief in a Just World / Laissez-Faire Equilibrium is *the only one sustainable* when the value of economic success (gap between high and low incomes) –and hence to motivation– becomes large enough.

The Lazy Poor

• A fraction x of people are lazy / have no willpower:$\beta = 0 \Rightarrow$ never work ($e = 0$).

• "Laziness" and initial endowment π_i uncorrelated, and x is small enough that these agents are never pivotal (or, just don't vote):

• When one sees a person j who has failed in life / is poor ex-post ($y^j = 0$), what is the probability attributed to laziness? For an agent i :

$$p \equiv \text{Pr}\Big[\text{ agent } j \text{ has } \beta = 0 \mid \text{agent } i \text{ sees } \; y^j = 0\Big]$$

is higher, the more optimistic i is about the productivity of effort θ, and the greater is non-lazy people's incentive to work, $1 - \tau$.

Since (in no-so-just world):

• $1 - \tau$ is higher in a Belief in Just World equilibrium than in a Realistic Pessimism equilibrium;

• more individuals i (a majority) have a higher estimate of θ in BJW equilibrium than in RP.

$\Rightarrow$ there is a greater prevalence of "stigma" on the (ex-post) poor in a BJW equilibrium.

• *Implications of these negative inferences / stereotypes:* emotional (resentment, anger, etc.) and / or economic: less willing to give them transfer less, given social preferences / reciprocity such that people to want to help the non-lazy poor only (evidence: Fong (2000)).

Affective forecasting: Consumerist vs. leisure-oriented societies

• Does *money buys happiness?* Attitudinal differences, within and across countries, on the extent to which consumption of material goods, rather than leisure and non-market activities, generates lasting increases in well-being.

• Frequent (but debated) claim that in modern societies people excessively value material consumptions relative to "relational" ones: family, friends, community service, etc. (Putnam (2000), Frank (2000)).

• Psychologists point to *"hedonic treadmill"* and *"immune neglect"*, i.e. tendency to underestimate the speed at which well being adapts to changes in life circumstances (Gilbert et al. (1998), Kahneman (2000)).

• While adaptation has been found to operate on both material consumptions (changes in income, wealth, tenure) and relational goods (marriage, divorce, etc.), claim is made that *affective forecasting fails differentially*, leading to bias towards materialism (e.g., Frey-Stultzer (2003)).

• Why it should be so, however, is typically not explained. Provide here a simple, motivation-based, theory.

• Same model with $\theta \equiv 1$ in production function but preferences at $t = 1$ now:

$$\hat{U}^i \equiv E\left[\left(\frac{\theta}{P}\right)\left[(1-\tau)\left(y^i\right)+\tau\bar{y}\right]\middle|\,\hat{\Omega}_i\right]-\frac{\left(e^i\right)^2}{2a\beta},$$

$\theta =$ imperfectly known preference parameter (e.g., speed of hedonic adaptation), $P =$ known price deflator.

• Models are isomorphic $\Rightarrow$ two equilibria:

1) Consumerist, laissez faire equilibrium: many agents believe that consumption is a key to happiness $\Rightarrow$ undertake high levels of effort and vote for low levels of redistribution, to avoid subsidizing pessimistic agents + deadweight losses. Low $\tau \Rightarrow$ greater incentives to believe, or teach, that the fruits of effort will translate into lasting happiness.

2. Leisure-oriented, redistributive equilibrium: mechanism works in reverse, with majority or pivotal group holding more negative views about the value of material consumption, opting instead for leisure, family and social life, etc.

• Comparative statics: $\nearrow$ in productivity or terms of trade $X = 1/P$, can trigger a massive shift from "traditional values" (communal or village life, extended families, social interactions, etc.) to a more atomistic ("bowling alone") and mass-consumption society.

• Welfare: materialistic beliefs are a mixed blessing, helping overcome the tendency to underprovide effort but delivering lower than expected levels of satisfaction.

Intrinsically desirable beliefs in a just world

• Have stressed the potential usefulness of BJW in facilitating the pursuit of long-term goals given conflicting ex-ante and ex-post preferences (intra- or intergenerational).

• Many people also just *like to think* that they live in a Just World. Their sense of fairness may be offended if they believe individuals' fate to be predetermined by social origins or discrimination; or they may find the idea that their fate is beyond their control anxiety-provoking.

Such affective concerns can easily be substituted for, or combined with, the motivational one. Let utility at $t = 1, 2$ now be:

$$\hat{U}^i \equiv E\left[(1-\tau)\left(y^i\right) + \tau\bar{y} - \frac{\left(e^i\right)^2}{2a\beta}\middle|\hat{\Omega}_i\right] + u\left((1-\tau)\hat{\theta}^i\right) \ ,$$

Note: β could be $= 1$, as hyperbolicity in preferences is no longer needed. Allow for any $\beta \leq 1$.

• Specific utility function u not very important; what is key is that agents care about the *net* return to effort $(1-\tau)\theta$ rather than just θ. This assumption is the natural one (e.g., a world where θ is high but the government

takes away all the fruits of effort would not be a very "fair" one), and it delivers the key *complementarity* between agents' ideological choices:

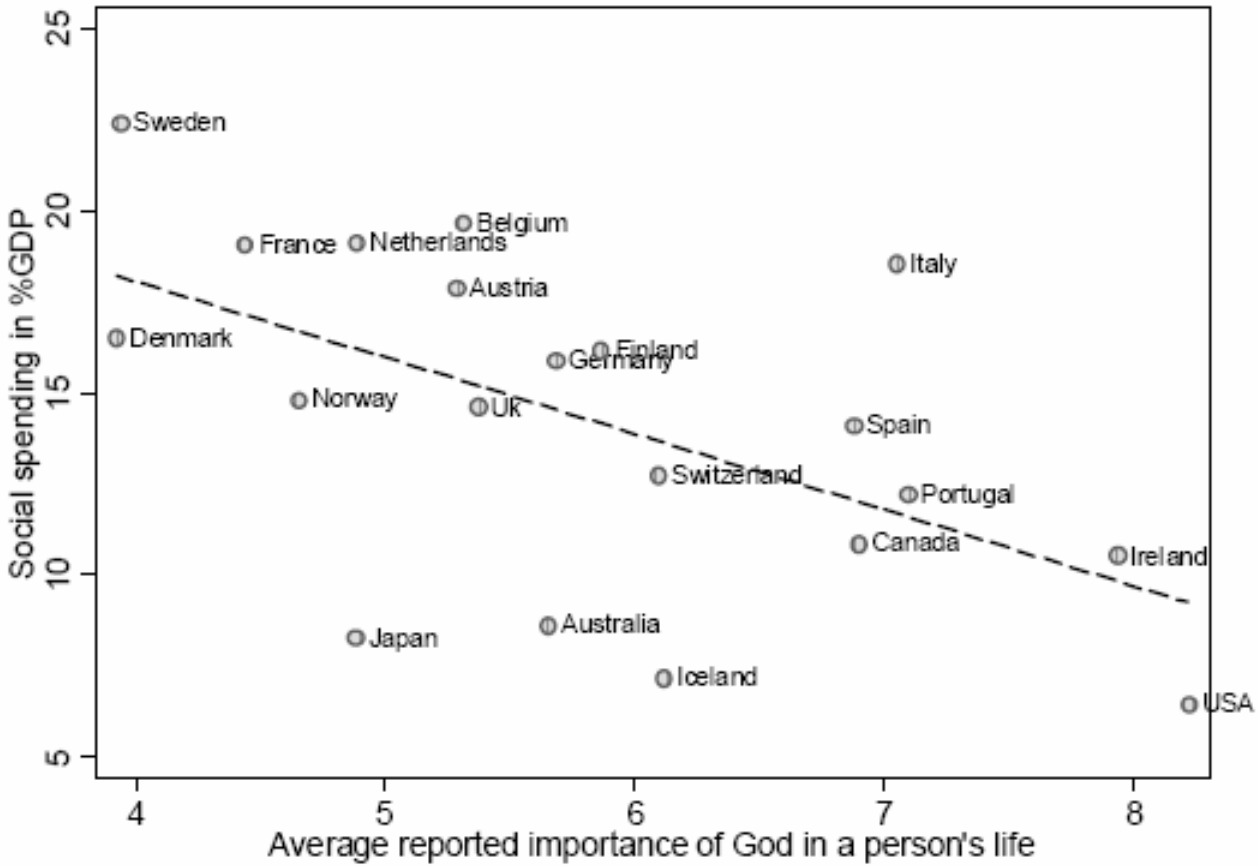
•The more people acquire or maintain beliefs that θ is high, the lower will τ be, and therefore the more satisfying it will be (at $t = 1, 2$) to think that θ is high (and the more frustrating to think that it is low). Thus, at time zero, the greater the incentive to manipulate future awareness in that direction.

• With $u(c) \equiv \rho c^2/2$, the incentive to censor a negative signal $\sigma = L$ (gross of the required costs) is

$$(1-\tau)^2 r(\Delta\theta)\left(\frac{\beta a}{2\theta_L}\right)\left[1-\left(\beta-\frac{\rho}{\beta a}\right)\left(1+\frac{r\Delta\theta}{2\theta_L}\right)\right].$$

$\Rightarrow \rho$ plays very similar role, in determining the demand for just-world beliefs, as the degree of time inconsistency $1-\beta$. Even when $\beta = 1$ there will be a positive incentive to engage in cognitive manipulation (to be traded off against the marginal cost $M' = m$), as long as ρ is above some minimum value. Furthermore, the net incentive is again increasing in $1-\tau$.

Figure 1: Religiosity and Social Spending



Source: Scheve and Stasavage (2005)

A simple theory of religion

• Can account for (some) aspects of *religious beliefs,*their links with *political attitudes,* and cross-country *differences in religiosity.*

• Focus on very specific (but economically relevant) set of beliefs: that *rewards in the hereafter* will be determined according to *effort, industriousness, self-sacrifice, etc.,* during one's lifetime. Linked / similar / to Protestant ethic. Alternative: no afterlife, or rewards independent of / antithetical to / industriousness, material success etc.: good deeds, poverty and asceticism, rituals, contemplation, "extinction" of desires, etc.

• Uncertainty over the existence and or nature of divine rewards (and punishments) can be modelled as follows:

a) in the production function, $\theta \equiv \bar{\theta}$; everyone agrees on the nature of economic processes.

b) preferences involve no time-inconsistency ($\beta = 1$, although could combine: religion is also a self-discipline mechanism), but includes an anticipal term at $t = 1$ for the "value of the afterlife", e.g.

$$E\left[u(e,\theta) \mid \hat{\Omega}^i\right] = \hat{\theta}^i e^i,$$

θ is unknown, with expected values $\theta_H > \theta_L$ conditional on $\sigma = \varnothing, L$.

The complementarity in beliefs now operates as follows:

• The more religious the individual (the higher μ^i), the harder he works and the lower he wants taxes to be, because: i) does not want to redistribute income towards less hard-working "unbelievers"; ii) high taxes will reduce his own effort, and therefore his heavenly rewards.

$\Rightarrow$ the greater the proportion of religious individuals $1 - \lambda$, the lower the equilibrium tax rate τ.

• The anticipation of a low tax rate raises the value of holding (or teaching) religious beliefs –and this, even though divine rewards are *out of the reach* of earthly redistribution. But if individual expects high e^i, then believing in a high θ in the afterlife will result in high "anticipatory" utility $\hat{\theta}^i e^i$ during his lifetime. If he expects to work little (because of high taxes or due to personal characteristics) then fervent religious beliefs are not very welfare-enhancing.

Therefore, can again have two equilibria:

1) A high-religiosity / Protestant work ethic equilibrium, with low redistribution. More religious individuals are also those with politically conservative (anti-redistribution). beliefs –a robust empirical finding.

2. An equilibrium characterized by a greater *predominance of agnosticism,* or by *religions that do not stress individual industriousness* in the pursuit of worldly achievements.

Empirically:

– BJW scores and opposition to redistribution are heavily correlated, at the individual; level, with religious beliefs, esp. Protestantism: Peplau and Tyler (1975), Guiso et al. (2002).

– Religion(s) and growth: Barro and Mc. Cleary (2003): find that a greater prevalence of beliefs in an afterlife characterized by heaven or hell is associated with faster growth (controlling for the usual determinants).

Conclusion

• Developed a formal theory of differences in *ideology and redistributive policies,* (welfare state vs. laissez faire), and of the persistence of the *"American dream"* in particular.

– Incorporates certain departures from traditional full "rationality" that appear important in the light of survey, ethnographic and experimental studies.

– Yet, retains purposive behavior, explicit treatment of beliefs, general equilibrium analysis of economic and political interactions.

• *Directions for further research:*

– Other collective beliefs: material consumption brings happiness (or not), religion.

– Group-level beliefs: minorities, stereotypes, identity.

– Propaganda.