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**Participatory Equity, Identity, and Productivity:
Policy Implications for Promoting Development**

by

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# Participatory Equity, Identity, and Productivity
## Policy Implications for Promoting Development

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## Abstract

The role of a person's identity and sense of integration into society as instruments of economic development has been vastly underestimated in the literature in economics. We talk of policies to subsidize the poor and give direct support to alleviate poverty. But in the long run, what is critical is that we instill in people a sense of belonging and having certain basic rights as citizens. What the poor and the marginalized in society lack is a sense of "participatory equity." This paper tries to advance this perspective by building a new model where a person's community identity matters, *ex post*, in determining if he or she will be poor, even though (unlike in the Spence model) all persons are identical *ex ante*. The paper also draws on data collected from an NGO-run school in Calcutta to illustrate the role of a school child's sense of 'belonging' in determining how the child performs academically. The theory and the empirical work are inputs into the larger and more general idea that when people feel marginalized in a society, they tend to 'give up'. A substantial part of the paper is devoted to the policy implications of these analytical ideas and empirical results in the context of national policies and globalization.

**Keywords:** social integration, poverty, participatory equity, community identity

**JEL classification numbers:**   D20, D30, O12, D60, Z10

# 1. Social Integration and Economic Development

In much of standard economics, when we consider a person's productivity as *homo economicus* we treat the person's social or community identity as inconsequential. And, by extension, a people's sense of integration into society as an instrument of economic progress has been vastly underestimated in the literature in economics. We talk of policies to subsidize the poor and give a variety of direct support to alleviate poverty. These are important; but, in the long run, much depends on whether we can instill in people a sense of belonging and a sense of certain basic rights as citizens. I shall argue in this paper that what the poor and the marginalized in society lack is a sense of "participatory equity," namely, the sense that they belong to their society and also have rights like others. If this can be instilled in them and others are made to respect this, then economic development can be sustained much more effectively and without the use of permanent external crutches. The theme of "participatory equity" and economic development is relatively new to economics. This paper will try to advance this perspective by building on a growing body of work in politics, sociology and, more recently and parsimoniously, economics. The aim will be to draw on this diverse literature, but to contribute to broadening the models that *economists* use to craft policy.

It has, for instance, been noted that in some societies development seems to bypass large segments of the population. In South Africa, the unemployment rate among Blacks is close to 50%, much higher than the unemployment rate of just-over 10% among Whites, and the unemployment among Coloreds lies somewhere between these two

rates[1]. In contemporary India, more than 50 years since untouchability was declared illegal, there are large sections of 'backward castes' that remain distinctly poorer than the rest of society. In the United States, if one looks at the life expectancy and morbidity of inner-city Blacks, so much worse are the numbers compared to the mainstream that it appears as though they belong to another nation.

The standard neoclassical model of economics is inadequate to understand these phenomena. How can it be that the Blacks in South Africa have such high unemployment rates so persistently? Surely a firm that employs Blacks can undercut the wages of other firms that employ Whites, earn higher profits and drive the other firms out of business. This should, in the long run, cause Black unemployment rates to converge towards White and Colored unemployment rates. There are models in economics that can explain the persistence of such differences, but I shall argue that the real reasons run deeper than what most of our models suggest. Once a group of people is left outside the system or treated as marginal over a period of time, forces develop that reinforce its marginalization. The group learns not to participate in society and others learn to exclude members of this group, and participatory inequity becomes a part of the economic and societal 'equilibrium'.

Once this happens, a variety of interesting policy questions arise. How can we disrupt such an equilibrium and take the economy towards an outcome where there is greater participatory equity? We can of course use taxes and subsidies but other novel kinds of policy instruments suggest themselves, once we properly understand why some groups are excluded and how poverty is often a consequence of a person's group identity. The odds of breaking out of poverty can be much lower for an Indian Dalit, an American

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[1] The figures are from the Labour Force Survey, 2003, conducted by Statistics South Africa.

Black, and a South African Zulu, even if that person has the same education, intelligence and physical strength as another person belonging to a more advantaged group in the same country. It is often thought of as politically and morally correct behavior not to take account of a person's group or community identity. This is certainly as it should be for many different kinds of activities, such as when an examiner is evaluating answer scripts of different people. But if, *as researchers*, we ignore a person's identity markers, we risk missing out on a critical factor, which may explain why a person is so poor and this could handicap our effort to design good policy. This is the central theme of the present paper.

It will also be shown that some of this argument carries over to international policy making. In today's globalized world it is possible for *geographical* segments of the world and whole nationalities and religions to feel left out from the global boom. Hence, the idea of participatory equity has a global dimension that is important not to miss out on. This has policy implications. We may have to make effort to deliberately draw sections of the world that, left to free market forces, would be left out and marginalized, into the global market place, through planned interventions. This may require some sacrifice of short-run efficiency but it is necessary for our long-run well-being and political stability. This relates closely to the problem and tensions that are arising because of rapid *economic* globalization and much slower advance in global *political* institutions that I have written about elsewhere (Basu, 2005a, 2006a). Since global interventions lie beyond the purview of any single nation, this gives rise to special responsibilities on the part of international organizations such as the World Bank, the ILO and the UN and raises difficult questions of global governance (Basu, 2002).

It is worth digressing briefly here to talk about the role of identity, which is a relatively new topic in economics (Akerlof and Kranton, 2001, 2003; Loury, 2002; Fryer and Jackson, 2003; Sen, 2006), though among sociologists and social psychologists its significance has long been recognized (see, for instance, Goffman, 1959; Tajfel, 1974). Usually, when we think of identity in economics or more broadly the social sciences, we think in terms of conflict and competition, the communal clustering of behavior and mutual support (and often aggression towards the other side), and the persistence of certain cultural practices (Varshney, 2002, 2005; Basu, 2005b). Identity is, for instance, central to the study of rebellion and war. The literature has debated whether the prime impetus to rebel collectively comes from a groups's sense of deprivation and grievance or from its perception of the possibility of making large gains. Based on cross-country data on wars from 1960 to 1999, Collier and Hoeffler (2004) suggest that the latter is the dominant cause. No matter how one resolves this quandary, there is the additional question of how a group manages to resolve the innate 'public goods' problem involved in a group's rising up to war or rebellion.

In the present paper I draw on these new perspectives but my aim is to understand why some people remain poor and some do well and the role of one's group identity in these outcomes. We have conducted too much of our analysis of poverty, overlooking this issue of identity. Wedded, as so much of economics is, to methodological individualism, social identity is a difficult concept to accommodate in our thinking. Hence, the convenient presumption was that identity either did not matter, or, if it did, it did so only as a surrogate for deeper factors. If we could understand those factors, we could do without having to refer to identity. The argument in this paper is that this is not

possible, at least not for the world as it exists now. Identity matters fundamentally. It may

be conceivable that in some future world a person's community or other group identity

will cease to be important—I certainly hope so—but for now that is not the case.

The central analytical idea is developed in the next section. In section 3, I pursue

some of the non-monetary roots of monetary backwardness and how a person's sense of

self can influence performance. I report some data that I have collected on classroom

performance of slum children in Kolkata (formerly Calcutta). Section 4 discusses the

policy implications of the model and the empirical findings. Section 5 discusses these

ideas in the context of globalization. Section 6 consists of closing remarks.


## 2.  Group Identity, Poverty and Market Forces: A New Approach

We do observe around us correlations between a person's performance and his or

her community identity—the group with which this person is associated—including

identity markers, which seem to be unconnected to the person's 'fundamentals,' such as

education, or largely innate qualities, like IQ. Men earn higher incomes than women;

native Americans do worse than the late comers in terms of economic well-being;

members of backward Indian castes get lower wages than the more favored castes[2].

Traditional economics tries to explain people's earnings differentials and other

performance gaps in terms of differentials in fundamentals.  Thus in mainstream

neoclassical economics we encounter statements like: "$i$ earns more than $j$ because $i$ has

greater innate productivity or because $j$ has a stronger preference for leisure than $i$ has".

And traditional economics is uncomfortable with a theory that concludes: "$i$ earns more

than *j because i* is White and *j* is Black". For one, if markets led to the latter kind of income disparities, then markets would lose some of their neocon lustre.  A free market would no longer be viewed as a fair mechanism for delivering greater income to whoever works harder or is more innately productive or is willing to take risks, and so on.

Of course, we may find even a mechanism that rewards the innately more productive (instead of the more needy) not so attractive, but we reconcile to the fact that, in practice there may be no escape from this.  For the economy to do well and progress we may need such a reward-mechanism. But what is being claimed here is that the market mechanism may not have even this minimal quality of rewarding the more productive. Its system of rewards may be more spurious and vindictive. A free market can reward a person of race X or religion Y simply for being of race X or religion Y.  In short, identities, which have nothing to do with innate qualities, may matter.

The view, that once markets are properly freed from government intervention, racist practices and caste-based rewards will wilt under competitive pressure and ultimately wither away, is wrong. In the case of caste practices we know that these rose to prominence in India at a time when there was very little government and, the logic of this note shows that they can flourish very well in the absence of government.  Indeed once we try to understand markets, cutting ourselves free from the chord of methodological individualism, this is not difficult to see.

I will present here a simple model to demonstrate this.  It should be clarified that it is not as if the literature is devoid of such models.  There are important works by Akerlof, Arrow, Spence, Stiglitz and others which make similar points, though in their

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² Which ones are the favored castes can vary from region to region. Also, while caste hierarchies are fairly stable, it is not as if these do not change at all. Social processes, like *sanskritization,* and political jockeying

model unlike mine, productivity can differ across individuals (even though they have the same profile over racial groups). There is a small empirical literature in economics which highlight what, at an intuitive level, we all know, that in different markets people from certain communities do well and tend to corner a disproportionate amount of the market. Fafchamps (2000) has described how in East Africa Europeans and Indians manage to get loans and credit to start and expand business, whereas Africans are left devoid of funding. More recently, Banerjee and Munshi (2004) in their study of the garment industry in Tirupur, Tamil Nadu, India, find that the Gounders--an elite cultivator caste that has had a history of being prominent in business and finance--controls a disproportionate amount of capital. The Gounders are a close-knit community and when they go into business they do so with a greater abundance of capital than do the non-Gounders, who comprise 42% of the exporters of Tirupur in the sample that Banerjee and Munshi study.

What these authors manage to demonstrate is that capital in the hands of the non-Gounders is as productive or even slightly more productive than capital in the hands of the Gounders. Output is smaller in a new non-Gounder firm compared with a new Gounder firm but the former typically cross over the Gounder firm in five years time.

Why then are the Gounder firms flush with capital? Banerjee and Munshi conclude, rightly, that this suggests the presence of 'community effects'. Clearly community identity matters per se. They, however, go on to suggest that *this contrasts* with a model "where the allocation of capital is guided entirely by its marginal product in alternative uses". I will, however, argue here that community identity effects are entirely consistent with capital being guided by the market principle of seeking higher productivity. Except in a tautological sense, a community even without having any

can cause caste groups to gain or lose advantages.

innate capital cost advantage can corner more capital. In brief, not only are markets no guarantee against community or race-based discrimination, they can actually nurture it.

The basic idea is simple. Barring those involved in completely unskilled work, human beings go through life exchanging assurances, making promises and signing contracts. A person (call him E) starting a business raises start-up capital by implicitly promising to the investor that he will use the money productively and pay it back with interest or profit-share at a later date. The same man may then go to someone to raise working capital. He may get raw material from some supplier and promise her that he will sell his final product to her at a cut price. E will, in the course of time, also try to get into contracts with customers. If this were a lawn maintenance company, homeowners may offer him contracts that take the form of a fixed monthly charge with the promise that E will maintain the lawn with the best of his ability.

Now suppose you are one of the persons offering E a contract (for instance, providing him working capital). Before doing so, you will try to find out how productive and efficient E is (to make sure your money is safe and will yield a return). So you may look at his educational attainment, size up his penchant for hard work and promptness at returning calls, and so on. But E's productivity may depend not just on all these characteristics *of his*. A large part of what E does depends on what others who offer contracts to E (the moneylenders, consumers, and so on – I shall refer to all such people here as 'investors') do. If consumers do not sign contracts with E, he will not be able to pay you back. If the provider of raw material refuses to sign a raw material supply contract, he will not be able to pay you back.

Of course, the same is true of the consumer and the raw material supplier. Before signing a contract, each of them will wonder about E's productivity and efficiency. In each case, this will depend in part on E's own characteristics but also on how others view E, since whether E will be able to serve consumers well or pay back his raw material supplier within the stipulated time will depend on whether he has enough working capital.

In most developing countries there may not be much occasion for formal contract signing but there will be surrogates for this—such as making verbal promises, shaking hands over an agreement, and talking in the presence of a villager senior, who can later count as witness. But the essence of the problem is the same. How much compliance you can expect from a person depends on how successful he or she is getting others to do business with him or her.

And here lies the nub. Assume that a person's community or religions or race identity has no bearing on his productivity. So whether a person is a Christian, a Brahmin, Black, White, a Jew, a Gounder or Dalit makes no difference to his business or work acumen or to his preference for leisure and work. But if a belief forms that a person from community C is more productive, then this may turn out to be true *ex post*. A person's community identity could begin to matter in determining how effective a life he can lead, even though it has no innate significance and it may also involve no special behavior or choice on the part of the person involved.

This explanation opens the way for important government interventions, like affirmative action. Hence, it is useful to try to understand the argument more closely by formalizing it.

This is not necessary but for simplicity suppose there are two kinds of people in society – entrepreneurs and investors. Investors offer contracts to entrepreneurs. Investors can be those with start-up capital to offer, working capital to lend or lawns that need mowing and upkeep. Entrepreneurs are like E in the above story. In reality, an entrepreneur is not just a person running an enterprise but anyone with responsibilities. It can be a manager of a firm who signs contracts and produces some crucial input for a firm; a poor farmer who wants to start a poultry business; a peasant who wants to grow vegetables on his plot of land and sell the surplus in the village market; or someone running a lawn-maintenance company. In a more realistic model I would treat every person as a bit of both—an investor and an entrepreneur, as indeed we all are. But to keep the algebra simple let us go along with this bifurcation.

Each entrepreneur $i$, signs contracts (or deals) and produces output. Each person can sign up to $n$ contracts (it is not humanly possible to handle more) and the output, $y_i$, he produces depends on his innate productivity, $e_i$, and the number of contracts, $m$, he manages to sign. Hence, we can write this as follows

$$y_i = F(e_i, m), \qquad\qquad (1)$$

where F is a function that, given the values of $e_i$ and $m$, tells us what the output will be. Of course, it is being assumed that if $e_i$ is larger or $m$ is larger, then output $y_i$ will be larger.

For simplicity, let me assume that a person's innate productivity depends only on his IQ score and this is easy to test. So $e_i$ is a number between zero and one that denotes i's IQ score. Alternatively, we could think of $e_i$ as i's educational achievement.

In reality, a person's output depends on how many contracts he is able to sign or deals he is able to make but in a more complex way than (1) suggests. Clearly, it is not simply the *number* of deals or contracts that matter but which ones. If *E*, in the above example, gets lots of working capital but very few home-owners asking for his service his production will be different from having lots of home-owners but little working capital. But again, for simplicity and also because in the present context it is harmless, I am making the assumption that what matters is simply the *number* of deals or contracts entrepreneur *i* gets.

To make life even easier I will assume that the 'production function', (1), takes the following special form.

$$y_i = (1 + e_i) f(m), \tag{2}$$

where $f(0) = 0$ and $m'' > m'$ imply $f(m'') > f(m')$.

Next, I will make an assumption that I will call 'the supermodularity assumption'. This says that $[f(m+1) – f(m)]$ increases as *m* increases. In words, this means that, of two identical entrepreneurs, if one has more contracts and an additional contract is offered, then the returns to this *additional* contract will be greater from the entrepreneur who has more contracts. In other words, your lawn will be better maintained by an entrepreneur who has more working capital. And, likewise, your working capital has a higher expected return from an entrepreneur who has more lawn maintenance contracts.[3]

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[3] I am using the more bombastic term 'supermodularity' instead of the (in this context) equally good term 'convexity', to clarify that I could have worked with a more general model where each contract may have a different effect on output. Such a model would use a production function, g, as follows: $y_i = g(e_i, x_1, \dots x_n)$, where $x_j$ is an indicator variable, which takes a value of 1 if the jth contract is signed and 0 if it is not signed. The general assumption I want to use says that if, for some j, $x_j$ is changed from 0 to 1, the increase in output that occurs with this is greater if the value of $(x_1 + \dots + x_{j-1} + x_{j+1} + \dots + x_n)$ is higher, with $e_i$ being held constant.

I will here take contract cost to be fixed and constant. Each contract has a cost of $c$. So, if an investor offers start-up capital, the entrepreneur is supposed to pay the investor $c$. Treat $c$ as the opportunity cost to the investor. If he gets less than $c$ it is not worthwhile for him to sign a contract with the contractor. In a more elaborate model I would allow for the fact that the investor's return would be higher the greater the profit of the entrepreneur (that is, there is some equity income for the investor). But nothing essential is lost here by the simplicity and hence I stay with it.

If $i$ signs $m$ contracts his profit, $\pi_i$, is given by

$$\pi_i = (1 + e_i)f(m) - mc \tag{3}$$

But what the entrepreneur actually gets is not always $\pi_i$ because, if $\pi_i$ is negative, he simply goes bankrupt and earns zero. That is, there is an effective limited liability clause underlying these contracts. There is at times a presumption among economists that limited liability clauses are special to advanced market economies. But that is simply not true. There is enough evidence that when famines cause crop failures landlords and moneylenders are expected to forego at least a part of their claims on the peasant. Not only is this simply a matter of informal custom but a finding of a cache of old share tenancy contracts in South India shows that these limited liability clauses were often written into the contracts (Atchi Reddy, 1996).

Hence, for those offering contracts, this is a risk that has to be kept in mind. If $\pi_i$ is negative, each of them receives less than $c$. If they knew this in advance, of course, they would not have signed the contract, that is, they would not have got into an agreement with the entrepreneur in the first place. This is exactly the problem that each contractor has to solve in taking a decision whether or not to invest in entrepreneur $i$.

Suppose $i$ has two visible characteristics $e_i$ and $z_i$, where $e_i$ is his IQ and $z_i$ is his racial or caste identity. Assume $z_i$ can be $W$ or $B$, meaning White or Black. Since $z_i$ does not appear in (2), it has no effect on a person's ability to produce. So at first sight it seems that it will not matter at all.

Now define $e^*$ and $e^o$ as follows.

$$(1 + e^*)f(1) \equiv c. \tag{4}$$

$$(1 + e^o)[f(n) - f(n\text{-}1)] \equiv c \tag{5}$$

It is easy to see that $e^* > e^o$. This follows from the supermodularity assumption and the fact that (4) can be written as

$$(1 + e^*)[f(1) - f(0)] = c.$$

The meaning of these two critical values is this. If someone's innate productivity exceeds $e^*$, every contractor will want to offer him contracts, no matter how few other contracts he is expected to have. If $e < e^o$, then no matter how many contracts such a person receives, it is not worthwhile for you to offer him a contract. It is easy to verify the above claims. Hence, individuals with $e > e^*$ will get all the capital they need and all the customers they need; whereas individuals with $e < e^o$ will get no contracts.

The interesting case is that of an individual with $e$ such that $e^o < e < e^*$. What will happen to such an entrepreneur? With such an entrepreneur a contractor faces a dilemma. The entrepreneur's enterprise may or may not be productive. Now suppose that people use race or caste to form conjectures about how productive such an entrepreneur will be. Suppose it is generally believed that for any entrepreneur, $i$, with $e_i \in (e^o, e^*)$, he will be able to generate positive profit, $\pi_i$, if and only if $x_i = W$, that is, $i$ is White. Interestingly, if everyone believes in this then this will be true. It is a self-fulfilling

conjecture and it does not depend on anything that the entrepreneur does. In that case White entrepreneurs will run profitable enterprises and Black entrepreneurs will fail, if they try. If one were to look for an explanation of Bertrand and Mullainathan's (2004) celebrated finding on how employers in the U.S. prefer to call for job interview applicants who have 'White' names instead of 'Black' that is not based on innate racism, then this is a possible model. The use of racial categories is justifiable for each individual but not for the collectivity of those individuals.

A simple diagram can illustrate the workings of this model. Choose an $e \in (e^o, e^*)$. Fixing $e_i = e$, draw the production function (2) as shown in Figure 1. Given the supermodularity assumption, it is convex.
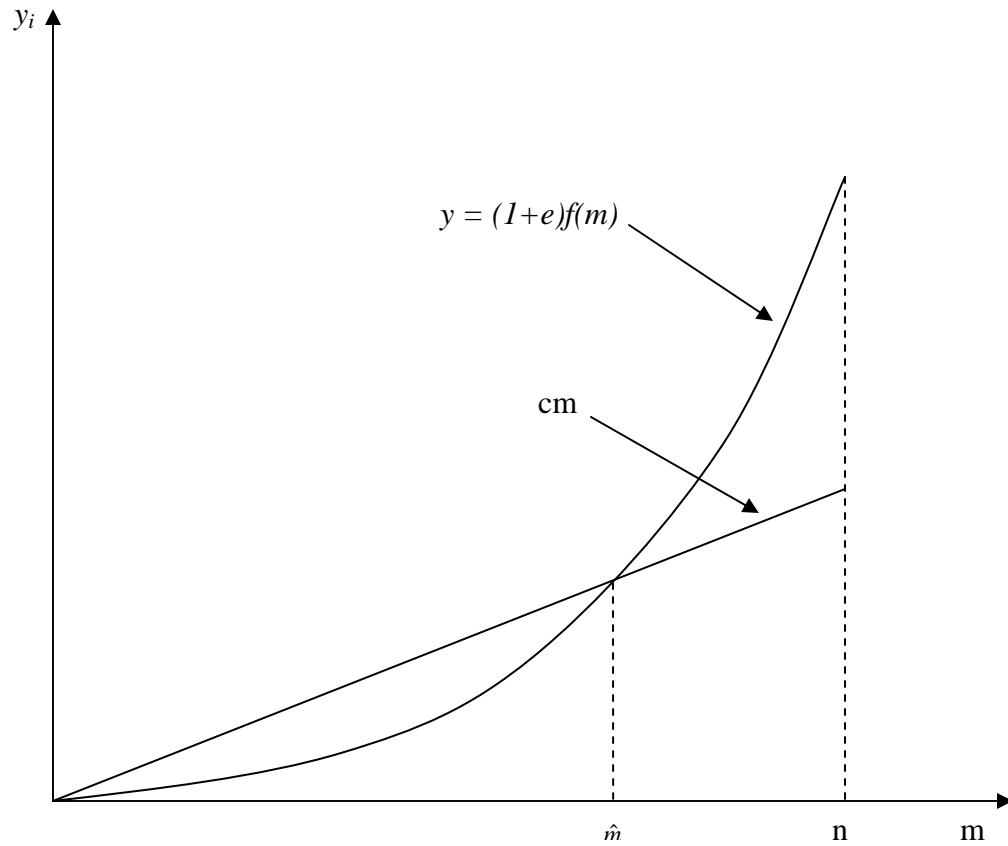
**Figure 1**

Superimpose on it the line *cm*.  By (5), we know at $m = n$, $(1 + e)f(m) > cm$ (as shown) and, by (4), we know $(1 + e)f(1) < c$ (as shown).  Hence, (ignoring the discreteness problem) there exists $\hat{m}$ such that $(1 + e)f(\hat{m}) = c\hat{m}$, with $1 < \hat{m} < n$. Hence, with such an entrepreneur if you expect more than $\hat{m}$ contractors to sign deals with him, it is worthwhile for you to sign a deal.  And if you expect fewer than $\hat{m}$ people to sign deals, you will not sign a deal.

It is actually not necessary that people form conjectures on *m*. They may simply form conjectures on whether a person will create (weakly) positive profits, $\pi \geq 0$, or negative profits ($\pi < 0$). In the case of an entrepreneur of the kind illustrated in Figure 1, if all contractors share the same conjecture, then either all will offer him contracts or no one will and the conjecture will be self-fulfilling. So if race, color or religion is treated as focal information by all, then race, color or religion will turn out to have actual information, ex post.

This model has one similarity with Spence's (1974) model of job-market signaling and Coate and Loury's (1993) model of affirmative action. Racial prejudices, even when they have no actual basis, get borne out in equilibrium. But the similarity ends there. In that model, innate productivity varies across people and people use schooling to signal their productivity. In my model, entrepreneurs, across races, are not only *ex ante* the same, but they may not even choose different actions.

In fact, in the above model it is entirely possible to have all entrepreneurs having the same innate ability. If for instance $e_i = \hat{e}$, for all *i*, and $e^o < \hat{e} < e^*$, even then, it is possible to have an equilibrium where community identity matters and people of one race get all the contracts and earn more. In other words, the market exhibits racism and the racism is entirely a product of the free market.

Thus far I have treated $e_i$, for every individual i, as an exogenously given variable, such as the person's innate intelligence. It is easy to modify the above model so that $e_i$ is something that is chosen by the agent. It could be the amount of education or simply the amount of effort she is willing to put into her entrepreneurial activity. Let us here treat it

as the latter and assume that $e_i \in [0, 1]$. Let the cost of each unit of effort be k. Then entrepreneur i's profit is given by:

$$\pi_i = (1 + e_i) f(m) - mc - ke_i \tag{6}$$

Now, unlike in the above model and somewhat akin to the model of Spence (1974), the individual also has to make a decision—how much effort to put in. It is easy to see from (6) that, if $f(m) - k > 0$, then it is worthwhile setting effort equal to 1. Otherwise she should set $e_i$ equal to 0. Let us suppose that, for some m, $f(m) - k > 0$; and, for some m, $f(m) - k < 0$. Then how the entrepreneur will behave will depend on her expectation of m, that is, on her expectation of how much business others will give her. If it is commonly known that investors give business to those of a certain race or caste group, then the individual i will put in a high effort if and only if she is of that group. In other words, the individual's own behavior will further reinforce the stereotypes of society. In other words, the person's expectation that others will 'discriminate' against her may make her perform less efficiently.

The way to correct the unfairness of the market is determined government action. Different kinds of affirmative actions can correct this. For instance, subsidizing the education of disadvantaged groups or providing subsidized capital to such groups can help. Of course, in reality failure can be habit forming. Persistent discrimination can lead to habits of tardiness and sloth and it can take time to break out of these habits. Hence, unlike in the model, where a subsidy can cause an instantaneous switch in equilibrium, in reality the change can take a long time and may need sustained effort and some financing for some length of time. I shall return to some of these policy questions later.

## 3. Social Context, Performance and Productivity

This model links up interestingly to some recent experimental work on identity

and performance. Through a set of experiments in India's Uttar Pradesh Hoff and Pandey

(2004a, 2004b) demonstrated a remarkable result. Low caste children solve mazes (an

indicator of intelligence and analytical skill) with as much dexterity as upper caste

children. But if before the same kind of test each child's caste is publicly announced, then

the lower caste children perform worse. The public proclamation of a person's caste has a

withering effect on the psyche of those belonging to historically disadvantaged groups[4].

These results—following in the tradition of earlier work in psychology, such as

by Steele and Aronson (1995) and Ambady, Shih, Kim and Pittinsky (2001)—highlight

the connection between social context and performance and makes the general point that

a person's productivity depends not just on the obvious variables, such as how much she

has studied or how well-off her family is[5], but on her social situation. This opens up a

whole new set of policy options for enhancing human capital and productivity.

This general point receives reinforcement in some data that I recently acquired

from an NGO-run teaching institute for slum children in Kolkata called Anandan.

Anandan is a teaching institute that is meant to supplement teaching for slum children.

Children are taught basic numeracy, logic, English; they are made to be aware of world

affairs. The idea is to take the poorest children and spark their curiosity and intellectual

interests. Anandan collects basic information about the children's background.—Their

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[4] A similar set of experiments recently conducted by Field and Nolen (2005) with South African children—
Blacks, Whites and Coloreds--finds similar results, especially with boys. Of course, race, unlike caste, is
visible. So an announcement of race is not as revelatory as the announcement of caste. So what Field and
Nolen do is to consider situations where no mention is made of race and situations where the atmosphere is
'charged' by giving questionnaires on race.

household income; whether their households have radios, bicycles, watches; their number of siblings; and of course basic information about each child, such as age, sex and mother-tongue. In addition, they also have with them answers from questions directly administered to the children, about social conditions in the household, such as, if the parents beat each other, if the parents talk to each other and if so how much, if the parents talk to the children.

Furthermore, the school had earlier this year given 60 children, of ages from 9 years to 16 years, take some basic IQ, arithmetic and general knowledge questions. The questions they were asked are reproduced in an appendix. The data were not collected with special statistical care and was not meant for formal social science enquiry. They were for the school's internal use. But the data can nevertheless be used to get a sense of what is most important as a determinant of a child's aptitude. It is not possible to determine causality; one can merely get the correlations or run some minimal regressions and get a sense of which variables go together with which variables and then speculate about correlations. These caveats are meant to warn the reader not to over-interpret these results.

What turns out to be most important for a child's aptitude is not income, or the possession of radios, watches and bicycles; but whether the parents talk to each other and whether the child lives with her family. The OLS results and the summary statistics are presented in the two tables below.

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[5] Between these two, education seems to be overwhelmingly the more important cause (Glick and Sahn, 2006).

**Table 1. Definition of Variables and Summary Statistics**

| Variables | Description | Obs. | Mean | Std. Dev. | Min | Max |
|---|---|---|---|---|---|---|
| Aptitude_1 | Score on the Type I Aptitude Test | 58 | 5.76 | 2.3 | 0 | 10 |
| Aptitude_2 | Score on the Type II Aptitude Test | 59 | 2.98 | 1.83 | 0 | 6 |
| Aptitude_3 | Score on the Type III Aptitude Test | 59 | 7.73 | 3.33 | 0 | 14 |
| Aptitude | Sum of the scores from all three parts of the test | 58 | 16.41 | 5.58 | 6 | 27 |
| Age | Age of a kid | 60 | 10.07 | 1.78 | 7 | 14 |
| Dfamily | 1 if lives with family, 0 otherwise | 60 | 0.47 | 0.50 | 0 | 1 |
| Dtv | 1 if owns a TV, 0 otherwise | 60 | 0.83 | 0.38 | 0 | 1 |
| Dradio | 1 if owns a radio, 0 otherwise | 60 | 0.57 | 0.5 | 0 | 1 |
| Dbike | 1 if owns a bicycle, 0 otherwise | 60 | 0.43 | 0.5 | 0 | 1 |
| Wealth A | Sum of Dtv, Dradio and Dbike | 60 | 1.83 | 0.92 | 0 | 3 |
| Wealth B | Kids' self-reported family income | 36 | 2002.78 | 1303.29 | 500 | 7500 |
| FMcnvs | Parents converse with each other (0, 1, 2) | 55 | 1.09 | 0.4 | 0 | 2 |
| CMcnvs | Child converses with the mother (0, 1, 2) | 51 | 1.45 | 0.7 | 0 | 2 |
| CFcnvs | Child converses with the father (0, 1, 2) | 50 | 1.2 | 0.73 | 0 | 2 |
| CPcnvs | Sum of CMcnvs and CFcnvs | 50 | 2.66 | 1.15 | 0 | 4 |

**Table 2. OLS Estimates of the Effects of Parental Conversation on Kids'
Performance in Aptitude Test**

| | Dependent Variable: Aptitude | | | | | |
|---|---|---|---|---|---|---|
| | [1] | [2] | [3] | [4] | [5] | [6] |
| Age | -0.023 | 0.266 | 0.288 | 0.304 | 1.197** | 1.084* |
| | [0.454] | [0.486] | [0.485] | [0.564] | [0.554] | [0.551] |
| Wealth[a, b] | -1.824** | -1.259 | -1.128 | 0.001 | 0.001* | 0.001* |
| | [0.825] | [0.893] | [0.897] | [0.001] | [0.001] | [0.001] |
| FMcnvs | 4.620** | 4.780** | 4.666** | 4.437* | 3.772* | 3.429* |
| | [1.861] | [1.835] | [1.830] | [2.276] | [1.950] | [1.932] |
| CPcnvs | 0.334 | 0.597 | -0.261 | 0.091 | 0.638 | -1.002 |
| | [0.671] | [0.683] | [1.007] | [0.885] | [0.773] | [1.417] |
| Dfamily | | 2.594 | -1.228 | | 6.765*** | 1.083 |
| | | [1.712] | [3.725] | | [2.094] | [4.628] |
| CPcnvs*Dfamily | | | 1.505 | | | 2.265 |
| | | | [1.304] | | | [1.653] |
| Constant | 14.264** | 8.185 | 10.193 | 7.082 | -8.694 | -2.753 |
| | [5.595] | [6.814] | [7.005] | [6.787] | [7.568] | [8.605] |
| Observations | 45 | 45 | 45 | 30 | 30 | 30 |
| R-squared | 0.26 | 0.3 | 0.32 | 0.18 | 0.43 | 0.47 |

Standard errors in brackets
* significant at 10%; ** significant at 5%; *** significant at 1%
[a] Wealth A is used for columns [1]-[3].
[b] Wealth B is used for columns [4]-[6].

       The reason for reporting on this result, though this will need more investigation in
the future, is the suggestion the a child's *social* conditions matter significantly in how he
or she performs in school; and, in this case, they seem to matter more than the economic
conditions of the child's household. One suggestion is that a person's citizenship status
matters. If a person feels a proper 'citizen of the household', it bolster's his or her self-
confidence and this again results in intelligence and human capital. If the parents talk to
you, it bolsters your status in the household and that citizenship status aids intellectual
performance.[6] This is further reinforced by the fact that children who live with their
parents on average do better in aptitude tests (see Table 2). In fact, on average they get

6.76 marks more, that is, one standard deviation higher marks. Clearly, children have a more secure status at home when they reside with their parents. These are somewhat similar to the results *a la* Hoff and Pandey, and Field and Nolen, on children's performance when they are reminded of their marginalized status in society.

## 4. Poverty, Identity and Policy

The above analysis belongs to a larger class of ideas, which claim that to understand an individual's economic well-being, it is essential to know about the larger *social* status of the individual—the community to which he belongs, the kin-system of which she is a member, the neighborhood where she has been raised and so on. There is now a growing literature that recognizes the role of an individual's social 'membership' and institutional location as vital factors that explain if he or she will be poor (Durlauf, 2001, 2006; Hoff and Sen, 2006; Plotnick and Hoffman, 1999).

Much of traditional economics viewed poverty as the fault or, more forgivingly, the choice of the poor. What is good about the membership- or identity-based theories is that they eschew this extreme individualistic precept. And, with that, new policy options open up. But before going to that I want to locate the above models in an even larger idea that has been around for a while in sociology and social psychology but is relatively new to economics, namely the recognition of the importance of identity. Whether or not one views this as a challenge to the very axiom of methodological individualism, on which economics is, allegedly, founded[7], the recognition of identity clearly alters the way we reason in economics. This recognition of the significance of identity raises numerous

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[6] It remains a bit of a puzzle why this does not happen for children who live with their guardians, instead of the parents. It is possible that when asked if their parents talk to each other, since their parents do not live

research questions, which will no doubt keep our hands full for a long time to come. Is identity something that enters directly into a person's sense of well-being, or to put it in the language of economics, should identity be thought of as an argument in a person's utility function? Or is it something that matters instrumentally? Of the many identity markers that each of us carry, which ones are socially salient? Is (or to what extent is) identity a matter of choice and/or an unalterable attribute of a person? Can identity explain economic performance? Can it be a cause of a person's poverty?

The two latter questions have been answered in this paper, and in the affirmative. The other questions have found partial answers in the literature and will no doubt inspire future research. Clearly, identity can enter directly into a person's 'utility function,' (see Akerlof and Kranton, 2000, 2003). But it is also possible that identity is of negligible (or no) direct concern to individuals but of great significance *ex post*. This is suggested in the works of Varshney (2002, 2005) and also in the model constructed in Basu (2005b).

Varshney argues that sparks that can *potentially* cause a conflagration occurs in all societies and at various times. But often they are of no consequence. But depending on certain societal conditions, these sparks can catch fire and then they become matters of consequence. He has tried to identify testable conditions under which sparks in Hindu-Muslim societies do actually become conflagrations. In Basu (2005b) it is argued that there are many identity markers, which we human beings wear with no great significance. But in some social contexts these markers become sources of conflict and we have to contend with what I describe as "the malignancy of identity." When this happens, it becomes in one's individual interest to go with one's own community and to pitch

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with them, they gave erratic answers to the question.
[7] For a discussion, see Bhargava (1993), Arrow (1994) and Basu (2006c).

oneself against the 'other' community, even for individuals who have no sense of innate-community chauvinism. I also argued that this could be used to explain why individuals might wish to adhere to their 'culture'—for instance, the ghetto culture--, even when collectively they do worse by that culture. This brings us back to the kind of argument that was developed in the paper where individuals are often doomed by their societal location. No individual can do anything to break out of it.

This kind of analysis suggests many possible policy initiatives and provides justification for some standard initiatives. The most important is affirmative action. These models stress the importance of affirmative action—not just any affirmative action but ones that are designed in particular ways. A poorly-designed affirmative action plan can lead to greater stereotyping of the disadvantaged groups.

In designing an affirmative action plan well, we have to first determine which groups to target. Suppose poverty in a society coincides with lower intelligence, race, gender and age. Which ones should be the target of affirmative action? What the above model suggests is that it must be a trait vis-à-vis which there is an element of the self-fulfilling prophecy. If everybody takes the person of this trait to be unproductive, then she will be unproductive and if everybody takes her to be productive then she will be productive. Clearly intelligence will not have this property, because it is likely to have a direct positive bearing on productivity. So while there may be a case (and I believe there is) to help all poor people, *for the purpose of affirmative action*, the unintelligent is not the right category to focus on.

Likewise, age we may want to ignore since we know that everybody will typically experience all ages. Hence, over a person's lifetime there will be equity. But race and

gender have little innate connection with a person's productivity and they are traits about which a person can do little to alter. Hence, in a society where one racial group or sex does badly, there may be a case for bolstering the group's position by using subsidies or direct legal provisions. What is interesting and different about the line taken in this paper is that such policies can be justified purely on grounds of efficiency[8]. These interventions tend to deflect the economy from a bad equilibrium to a good equilibrium.

Policy interventions in models with multiple equilibria have an interesting trait. The interventions need not be persistent. After a certain period, the intervention can be revoked without having the economy slide back to the earlier, inferior equilibrium. I have elsewhere called such an intervention a 'benign intervention'. An example of this is a nation's child labor laws. Take, for instance, the U.S., where child labor has been banned either by state laws or by the nation-wide Fair Labor Standards Act, 1938. When these laws were first initiated they had a lot of bite, but it is arguable that now, even if the law were to be revoked, children would not go back to work. The economy has simply shifted to a better equilibrium.

One practical matter concerning affirmative action is worth bringing up here. There is often a tendency to impose educational and job quotas in step with the relevant population percentages. This has been explicitly used in India. If x% of the population is belongs to a backward caste that one is trying to help through affirmative action, the tendency is to require that x% of school seats or jobs in some sector should be reserved

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[8] I am personally in favor of using affirmative action, including job quotas, even when there may be no efficiency gain to be made, purely to build up role models within communities that have faced discrimination over long periods of time. (This has to be used in limited measures keeping in mind that this may involve efficiency tradeoffs.) This is a purely normative stance of mine that does not have anything to do with the argument developed in this paper. What is different about the argument being presented here is that it points to why there may be a case for affirmative action even if one had no normative commitment to correct intertemporal inequities.

for this group. But of course that need not be. I would typically set a reservation percentage at y, where y is less than x. After all, a reservation means setting floor to the percentage. Clearly, if there are more good candidates of the relevant caste group, there is no bar on admitting them. The model developed in this paper can potentially be used to determine what the y should be, keeping in mind that the aim of this policy is to snap the economy out of the bad equilibrium and set it on course towards the good equilibrium.

The paper also suggests the importance of education, government activism and the building up of role models to stress to people of various religions, caste-groups and races that they are equal citizens with prospects as good as anybody else. Since this policy does not entail 'hard acts' like new laws or new fiscal initiatives, we often play down the role of this. But repeated emphasis that all minorities have equal rights and steps to integrate disadvantaged groups into the mainstream by deliberately bringing people in to various walks of life—politics, business, science and so on—can have a huge impact on people's sense of self-respect and, through that, on their intelligence and productivity.

## 5. Globalization, Identity and Marginalization

Many of these topics that I have discussed thus far in the context of particular nations carry over to inter-country relations, especially in this age of globalization. First, let us see how the logic of the model in section 2 carries over to a nation. How well a nation does clearly depends in part on how much foreign direct investment and other forms of international contracts the nation receives. Given that the productivity of one foreign direct investment (FDI) depends positively on how many other FDIs it receives, it

is entirely possible to have multiple equilibria vis-à-vis nations. Each may receive very little or plenty of FDIs and other kinds of international offers. One reason China is a good bet for investment is that so many nations and multinational corporations think that China is a good bet. In the case of India it is virtually possible to see the shift from one equilibrium to another. Till the late eighties nations and corporations were wary of India, whether it be on matters of trade, FDIs or portfolio investment. This began to change in the early nineties and suddenly money and contracts are flowing into the country.

This should alert us to two important policy wisdoms. First, countries that are currently poor and doing badly may need a deliberate nudge. Secondly, after a phase of nudging many nations will begin to move on auto-pilot with no further intervention from industrialized country governments and international agencies being required, because it will then be in the self-interest of nations and MNCs to invest in the country. Hence, the fiscal strain of enabling a poor nation to escape poverty may not be as big as may appear at first sight. What is needed is the effort to take the country beyond a threshold.

Let me now turn to the subject of inter-country policy coordination. In today's globalized world with volatile capital, it is important for nations at similar levels of development to coordinate on certain policies in order not to drive away capital. This is true, for instance, in the matter of labor laws and regulation. One nation trying to unilaterally uphold its labor standards, by pushing up wages or enforcing strictly laws about workplace safety or giving workers greater right to bargain collectively could easily have corporations shift their business to other more lax nations. This can give rise to the need for coordinated labor market polices across nations (Basu, 2005a).

But there is another matter requiring coordination that has gone unnoticed. Often when a nation has a lot of poverty or inequality, we blame the nation or its government for this. But just as we now recognize (as discussed above) that the blame for a person's poverty does not lie solely with the person but could lie partly with the collectivity to which the person belongs, a single nation may not be able to do much about its inequality and poverty in today's globalized world. It is therefore not be surprising at all that within-country inequality is rising sharply in most developing countries, most notably, China (see Kanbur and Zhang, 2005) and India (see Basu, 2004).

Effecting transfers from the rich to the poor become very different activities in closed and open economies. In today's world an attempt to transfer money to the poor from the rich can therefore be met with flight of capital and flight of professional labor. And given that most poor countries cannot afford such flights, this puts a natural brake on what a single nation can do about its poverty and inequality and explains some of the rise in intra-country inequality in tandem with globalization.

I have argued elsewhere (Basu, 2006a) that this calls for global coordination of policies for curbing poverty and inequality. Institutional arrangements for doing this are notable by their absence. We have the WTO to coordinate on trade policies, the ILO to coordinate on labor policies and various organizations for coordinating environmental policies but nothing to orchestrate global anti-poverty and inequality control policies. This is something that needs urgent attention.

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**Appendix 1: Questionnaire for Aptitude Test**

Type I

1. Name India's capital.
2. Is Pakistan part of India?[9]
3. Who is the prime minister of India?
4. Who is the chief minister in West Bengal?
5. What is the name of the highest peak in the world?

Type II

6. There are 10 students in a classroom. One person leaves and two people enter the room. How many students are in the classroom now?
7. There are 10 students in a classroom. Each student was asked to bring two biscuits. One student forgot and brought three biscuits. One student did not bring any. How many biscuits are there?
8. The teacher gives 15 biscuits to six students and asks them to share. How many does each student get?

Type III

9. What will be the number in the blank space:
   1, 3, 5, (  )
10. What will be the number in the blank space
    0, 3, 6, 9, (  )
11. What will be the number in the blank space[10]
    1, 0, 12, 0, 123, 0, (  )
12. There are 10 girls in a class. Two boys went away. How many girls are left?
13. Red, Blue, Sandesh[11], and Green went for a stroll. Which should not have been a part of the group?
14. In a strange village, two together with two becomes five. There are two biscuits and two biscuits. Also there are two other biscuits and two more. How many biscuits are in this village altogether?
15. From a, b and c, below, choose the one which will fit best in the blank space, following the three words: hand,   head,   ear,   (    )
    a. cat
    b. foot
    c. books

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[9] This may seem too obvious a question, but a few students did think the answer is "yes".

[10] This was the only question for which no child got the right answer, which is (to the extent that IQ questions at all have right answers) 1234.

[11] Sandesh, as all Calcuttans know and for the love of which they are willing to court diabetes, is a delicious milk-based sweetmeat.