PARTICIPATORY EQUITY AND ECONOMIC DEVELOPMENT: POLICY IMPLICATIONS FOR A GLOBALIZED WORLD

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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, more general idea that when people feel marginalized in a society, 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

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1. Social Integration and Economic Development

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 a variety of direct support to alleviate poverty. These are of course 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, 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 the 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. 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

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1 The figures are from the Labour Force Survey, 2003, conducted by Statistics South Africa.
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 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 research analysts, 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 important 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 in the global economy. 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 IMF, the ILO, the WTO and the United Nations and raise important and 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), 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). 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 from some recent studies in India and South Africa and briefly from 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

We do observe all 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’ or innate qualities, like IQ or productivity. Men are higher income earners than women; native Americans do worse than non-
native Americans in terms of economic well-being; members of backward Indian castes get lower wages than *brahmins*; and so on.

In traditional economics there is however a tendency to explain people’s earnings differentials and other performance differentials 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 such 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 and neutral 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, some may find a mechanism that rewards the innately more productive *instead of the more needy* not so attractive but they reconcile to the fact that, at least in the present kind of world, there is 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 much 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 may 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 plain 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—call it umbilical if you wish--of methodological individualism, this is not difficult to see at all.

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 George Akerlof, Kenneth Arrow, Michael Spence, Joseph Stiglitz and others which make similar points (though not the same). 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. Marcel 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, Abhijit Banerjee and Kaivan Munshi (2004) in their study of the garment industry in Tirupur, Tamil Nadu, India, find that one particular community, 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 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 my 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

\[ y_i = F(e_i, m), \]

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.

\[ y_i = (1 + e_i)f(m), \]
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 other words, your lawn will be better maintained by an entrepreneur who has more contracts. And, likewise, your working capital has a higher expected return from an entrepreneur who has more lawn maintenance contracts.²

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

$$\pi_i = (1 + e_i)f(m) - mc \quad (3)$$

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).

² 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: $y_i = g(e_i, x_1, \ldots, x_n)$, where $x_i$ is an indicator variable, which takes a value of 1 if the $i$th contract is signed and 0 if it is not signed. The general assumption I want to use says that if, for some $i$, $x_i$ is changed from 0 to 1, the increase in output that occurs with this is greater if the value of $(x_1 + \ldots + x_{i-1} + x_{i+1} + \ldots + x_n)$ is higher, with $e_i$ being held constant.
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, 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 $i$. In seeing how he may go about this 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 $B$. 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 $e^0$ as follows.

$$ (1 + e^*)f(1) \equiv c. \quad (4) $$

$$ (1 + e^0)[f(n) - f(n-1)] \equiv c \quad (5) $$

It is easy to see that $e^* > e^0$. 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 $e < e^0$, 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 $e < e^0$ will get no contracts.

The interesting case is that of an individual with $e$ such that $e^0 < e < e^*$. What will happen to such an entrepreneur? Faced with such an entrepreneur a contractor faces a decision problem. This entrepreneur’s enterprise may or may not be productive. Let us 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 $e_i \in (e^0, e^*)$, 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.

A simple diagram can illustrate the workings of this model. Choose an
Let $e \in (e^0, e^*)$. Fixing $e_i = e$, draw the production function (2) as shown in Figure 1. Given the supermodularity assumption, it is convex.

![Figure 1](image)

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 $(1+e)f(\hat{m}) = cm$, 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:

\[
\pi_i = (1 + e_i) f(m) - mc - ke_i
\]  

(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 by 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 conducted by Hoff and Pandey (2004a) in Uttar Pradesh, the authors 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 begin to perform worse. Clearly, a public proclamation of a person’s caste has a withering effect on that person’s psyche.

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. The results are just in and still being analyzed but among many other findings is the fact that Black boys perform worse when the atmosphere is charged.

These rather dramatic 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—in particular, the highlighting of identity—and performance. But what causes the connection? Is it just the reminder of one’s more marginal status in society that weakens one’s zest to perform? Or is it that the announcement of race or caste by the examiners and proctors makes the children feel that they will anyway be discriminated against and so the additional effort is not worth it? It will be a while before these
questions can be fully answered but further studies by Hoff and Pandey (2004b) suggest that it is the latter.

If so, then this fits in rather nicely with the model in the previous section, especially the modification in the end, where the entrepreneur herself also has to decide how much effort she will put into her enterprise. We saw there that, if she thought that others were aware of her caste or race, then she herself will act in keeping with the stereotype about her caste or race. This drives home the point that a person’s productivity depends not just on the obvious variables, such as how much he or she has studied or how well-off her family is, but on her social situation. This immediately 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 have recently been able to get hold of from an NGO-run teaching institute for slum children in Kolkata called Anandam. Anandam 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. Anandam collects basic information about the children’s background.—Their 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 parents talk to the child. On the latter, one has to be careful about one caveat. This is significant only vis-à-vis a child’s parents, and not guardians. Children who live with their guardians seem to derive no benefit from conversation with their guardians. The OLS results and the summary statistics are presented in the three tables below. One word of clarification here. What each child was actually asked is if s/he lives with his/her parents or not. An answer no to this question is being treated by me here as though the child lives with guardians. From a cursory knowledge of the slums I suspect this will in general be true, though some children being completely on their own cannot be ruled out. In the statistical results reported here Dfamily = 1 means that the child lives with his/her parents and Dfamily = 0 means s/he lives with guardians.

The only 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. Children, whose parents converse among themselves and with the children, clearly make for a more congenial living condition for the children; and this translates into significant human capital. Another suggestion—and at this stage it is no more than that—is that a person’s citizenship status matters. If a person feels a proper ‘citizen of the household’, it bolsters 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. 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. 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.

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3 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 with them, they gave erratic answers to the question.
### Table 1. Definition of Variables and Summary Statistics

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

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>-0.023</td>
<td>0.266</td>
<td>0.288</td>
<td>0.304</td>
<td>1.197*</td>
<td>1.084*</td>
</tr>
<tr>
<td></td>
<td>[0.454]</td>
<td>[0.486]</td>
<td>[0.485]</td>
<td>[0.564]</td>
<td>[0.554]</td>
<td>[0.551]</td>
</tr>
<tr>
<td>Wealth&lt;sup&gt;a, b&lt;/sup&gt;</td>
<td>-1.824**</td>
<td>-1.259</td>
<td>-1.128</td>
<td>0.001</td>
<td>0.001*</td>
<td>0.001*</td>
</tr>
<tr>
<td></td>
<td>[0.825]</td>
<td>[0.893]</td>
<td>[0.897]</td>
<td>[0.001]</td>
<td>[0.001]</td>
<td>[0.001]</td>
</tr>
<tr>
<td>FMcnvs</td>
<td>4.620**</td>
<td>4.780**</td>
<td>4.666**</td>
<td>4.437*</td>
<td>3.772*</td>
<td>3.429*</td>
</tr>
<tr>
<td></td>
<td>[1.861]</td>
<td>[1.835]</td>
<td>[1.830]</td>
<td>[2.276]</td>
<td>[1.950]</td>
<td>[1.932]</td>
</tr>
<tr>
<td>CPcnvs</td>
<td>0.334</td>
<td>0.597</td>
<td>-0.261</td>
<td>0.091</td>
<td>0.638</td>
<td>-1.002</td>
</tr>
<tr>
<td></td>
<td>[0.671]</td>
<td>[0.683]</td>
<td>[1.007]</td>
<td>[0.885]</td>
<td>[0.773]</td>
<td>[1.417]</td>
</tr>
<tr>
<td>Dfamily</td>
<td>2.594</td>
<td>-1.228</td>
<td></td>
<td></td>
<td></td>
<td>1.083</td>
</tr>
<tr>
<td></td>
<td>[1.712]</td>
<td>[3.725]</td>
<td></td>
<td></td>
<td></td>
<td>[4.628]</td>
</tr>
<tr>
<td>CPcnvs*Dfamily</td>
<td>1.505</td>
<td>2.265</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[1.304]</td>
<td>[1.653]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>[5.595]</td>
<td>[6.814]</td>
<td>[7.005]</td>
<td>[6.787]</td>
<td>[7.568]</td>
<td>[8.605]</td>
</tr>
<tr>
<td>Observations</td>
<td>45</td>
<td>45</td>
<td>45</td>
<td>30</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.26</td>
<td>0.3</td>
<td>0.32</td>
<td>0.18</td>
<td>0.43</td>
<td>0.47</td>
</tr>
</tbody>
</table>

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

Table 3. OLS Estimates of the Effects of Parental Conversation on Kids' Performance in Aptitude Test for Stratified Samples

<table>
<thead>
<tr>
<th></th>
<th>Dfamily=1</th>
<th>Dfamily=0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>0.774</td>
<td>1.017</td>
</tr>
<tr>
<td></td>
<td>[0.631]</td>
<td>[0.729]</td>
</tr>
<tr>
<td>Wealth&lt;sup&gt;a, b&lt;/sup&gt;</td>
<td>-1.014</td>
<td>-0.001</td>
</tr>
<tr>
<td></td>
<td>[1.083]</td>
<td>[0.001]</td>
</tr>
<tr>
<td>FMcnvs</td>
<td>4.050*</td>
<td>4.739*</td>
</tr>
<tr>
<td></td>
<td>[2.047]</td>
<td>[2.342]</td>
</tr>
<tr>
<td>CPcnvs</td>
<td>1.496*</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td>[0.827]</td>
<td>[0.880]</td>
</tr>
<tr>
<td>Constant</td>
<td>4.151</td>
<td>0.825</td>
</tr>
<tr>
<td></td>
<td>[7.507]</td>
<td>[8.150]</td>
</tr>
</tbody>
</table>
4. The Policy Implications

5. Globalization, Identity and Marginalization
References


Kuran, T.


Appendix 1: Questionnaire for Aptitude Test

Type I

1. Name India’s capital
2. Is Pakistan part of India?\(^4\)
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\(^5\):
    1, 0, 12, 0, 123, 0, ( )
12. There are 10 girls in a class. Two boys went away. How many girls are left?

\(^4\) This may seem too obvious a question, but a few students did think the answer is “yes”.
\(^5\) 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.
13. Red, Blue, Sandesh, 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

---

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