Essay Review

Discrimination in Economic Theory and Development Studies in Southern Africa

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It is now fifteen years since the publication of Professor Gary Becker's seminal contribution to the economics of discrimination and segregation (*The Economics of Discrimination,* Chicago University Press, 1957). Since then empirical and theoretical inquiries on race and economics have blossomed in both America and Britain, as a by-product of growing public concern with the problems of racial and ethnic discrimination; consequently such problems, and their impact on economic and social equality, command considerable attention in most of the social sciences.[1]

The recent publication of a new edition of Becker's book*, however, prompts the reflection that economists in Southern, Central and East Africa have been much slower in following up the explicit theoretical considerations suggested in the models and methodology employed in this field. The reason for this is twofold. First, there has been a general neglect of discrimination in the body of conventional economic theory; secondly, the particular economic circumstances of Southern Africa have tended to focus attention on other problems. The purpose of this review, therefore, is to examine these factors and so throw light on the general theoretical importance of Becker's recent contributions and their potential significance for the economic analysis of the problems of discrimination and segregation that are all pervasive in South Central Africa.[2]

Neglect in Economic Theory

A review of economic theory and the focus of economists' attention between the publication of Adam Smith's *Wealth of Nations* in 1776 and the mid 1950s reveals a neglect of phenomena such as discrimination and segregation to an extent that would indicate to an uninformed observer that in past times these problems were non-existent or unimportant. The only significant contributions in this period were from J. E. Cairnes and F. Y. Edgeworth, who challenged the widely accepted theories of perfect competition.[3] Cairnes's doctrine of 'non-competing groups' is a forerunner of the theory on segregation in the labour market, but it is extremely rudimentary in comparison to recent theorectical formulations.[4] On an empirical level Cairnes interested himself in the economics of institutionalized slavery in the Southern United States, and his publication *The Slave Power* was an attempt to portray the inherent economic disadvantages of slavery as a technique of production.[5] This subject also has received increasing attention of late from econometric historians interested in quantitative evaluations of the profitability of slavery in the ante-bellum South.[6] Edgeworth's con-

*BECKER, G. S. 1971 *The Economics of Discrimination,* 2nd. edit. Chicago, University of Chicago Press, 167 pp.

cern was with sex discrimination in the labour market; and his principal contribution to the economics of discrimination was his 'crowding hypothesis' which has recently been the basis of econometric studies by Bergmann.[7]

Finally, the theoretical attack upon the classical free-market doctrines came in the 1930s and centred on price fixing, market-sharing, collusion and other market imperfections; and this attack has laid the groundwork for a similar challenge by Thurow[8] to Becker's competitive market model. Also it has only been in recent years, since Becker's first published contribution, that theorizing, model-building and empirical testing of hypotheses concerning discrimination have come to the forefront of economic analysis.

This by-passing of a significant social problem was due to the consistent undervaluation of discrimination as an economic variable. This in turn led to a partial treatment of the issue in economic analysis; and it is only recently that the discrimination factor has come to the forefront of theoretical studies, as a direct consequence of the increasing interest in race relations throughout the world since the Second World War.

Explanations of the Neglect.

The theoretical neglect of the discrimination variable in economic analysis has been due to a variety of causes. Becker, for instance, suggests that economists, being conscious of the property rights of sociologists and anthropologists who pioneered work in race relations, have tended to shy away from this 'non-economic' domain in the interests of academic division of labour. More convincing is his observation that 'the inability of economists to deal in a quantitative way with non-pecuniary motives could have been a sufficient deterrent. Also, because of the lack of 'a systematic theory with which to interpret the economic differentials between majority and minority groups', the economist has in the past only taken a tangential interest in the economic basis of racial discrimination.[9]

Kenneth Boulding, in contrast, prefers to claim that economists' interest in poverty and discrimination have simply taken second place to the questions of exchange and pricing theory that have preoccupied theoretical economics. He argues that the 'interest in exchange eventually outweighed the interest in poverty and wealth, and that economists lost interest in poverty as they gained interest in exchange'. Furthermore, because economic science, at least in the Western world, had its roots in the Judaic-Christian world, its affiliations, subject matter and attentions tended to be orientated by a 'subculture of economists' to serve the needs of intellectual middle-class groups at the expense of answering problems for a largely lower class non-white world.[10] Also there is an inherent individualistic bias in the framework of orthodox economics stemming from classical and bourgeois economic philosophies with the result that the 'economics of the group' has fallen into neglect. Inevitably, therefore, economics developed 'an insensitivity to the problems of identity, especially group identity, which are so important now'[11]

Limitations of Marxist Analysis

Although the Marxist break with the classical tradition was partly a revolt against the individualistic preoccupations of liberal economists, the Marxist diagnosis was quite inadequate. The application of class analysis to economic situations compounded by racial overtones has generally proved unwieldy and cumbersome with the real relationships of the problem tending to become obscured by the need to 'fit' the existing order into a previously defined framework.

In Rhodesia, Arrighi's treatise on the political economy of black and white economic relationships since 1900 is an outstanding example of these theoretical and empirical difficulties.[12] One reviewer has accepted the validity of much of Arrighi's argument,[13] but the analytic and prescriptive value of this Marxist model is less than that of the technically rigorous theoretical structures of economists, like Thurow, who have addressed themselves directly to the economics of discrimination. For, it is not just that there are weaknesses in class theories when applied to problems of discrimination in less developed economics, but rather that the complexities of inter-racial relationships in the socio-economic fabric require that explicit, and not merely peripheral, treatment be given to the race factor if the elucidation is to be consistent with reality.

Limitations of Classical Economic Theory

Classical economic theory has also had the effect of playing down the importance of discrimination and segregation in the real world by setting up for analysis theoretical systems representing economic arrangements which bear little relation to the empirical world. The assumptions of the competitive market system, so long an espoused typology of the idyllic economic order, have explicitly ignored ethnic or minority problems by holding to premisses that maintain homogeneity of labour assumptions. Nearly all equilibrium models and income distribution theories, except for some notable exceptions in the last fifteen years,[14] ignore racial differentiation and segregation in their labour supply and demand functions and, in addition, rest explicitly or implicitly on the assumption of entrepreneurial profit maximization. The assumption of homogeneity of labour is radically at variance with actual conditions, whilst the premise that the capitalist operates solely on the principle of profit maximization precludes the incorporation of other more relevant decision-making criteria into the welfare function. This criticism is particularly applicable in cases where owners of capital assets, whether private or public, distribute their resources in accordance with non-pecuniary or non-market objectives. Undoubtedly, as Becker has demonstrated, these extra non-monetary variables may be catered for within the traditional competitive market framework: but their long exclusion can be legitimately cited as a contributory reason for the neglect of problems of discrimination in the literature before the Second World War.

Beyond this, there has been the belief, on the part of those propagating the virtues of the pure market system, in the ability of the 'invisible hand' to correct short-run maladjustments. In the long run, emphasis has been placed on the equalizing forces of competition to eradicate factor discrimination and economic segregation. The case of whether or not the economic system has in-built forces to counteract any tendencies towards discrimination has been raised by Kenneth Arrow who concluded that if the logic of the competitive system is accepted, discrimination should still be undermined in the long run, at least in the case of employer discrimination.[15] However, it should be noted that the assumed equilibrating power of the free market is still a contentious and unresolved matter. Moreover, it is not the logic of the competitive system that is really under question, rather, it is the basic assumptions of the classical model that are being attacked.

Underestimation of Role of Government

Since, too, government is an important source of discrimination, especially in Southern African economies, any model minimizing the significance of centrally directed policies will tend to understress the existence and effects of discrimination. Clearly, for South Africa and Rhodesia, this is a major consideration. Only in relatively recent years, since the Keynesian revolution, has the role of central government in the economic management of resource allocation been accorded its proper place in economic theory. With the growth of the public sectors in both Rhodesia and South Africa, it can be expected that the influence of policies for discrimination initiated or operated by governments will become even more important. However, even with recognition of the economic significance of governmental sectors, there is a lack of knowledge about the vital issues involved in the control of disadvantaged minorities by governments who usually act on behalf of the numerical majorities or the economically predominant. In fact, even Becker's work stresses discrimination as it arises via the market and pays less heed to governmental and non-market discrimination. The latter set of problems was first analysed in 1969 by Thurow who specifically isolated the effects of government discrimination, monopolistic practices of the dominant group and the contribution of market imperfections to the development and perpetuation of discriminatory behaviour.[8]

Finally, strong pressure in academic circles in the past to restrict economic analysis to 'positive economics' has tended to reduce the professional creditability and popularity of economic works that made explicit value judgements or assumptions of a normative nature. The strong attacks on the assumed value-free nature of orthodox economics has had the effect of stimulating greater concern in economic studies with prevailing socio-economic and political goals, not least of which has to do with the desirability, equity and economic costs of discrimination and segregation.[16] By calling into question the relevance of orthodox doctrine, criticizing the inappropriateness of a fully operative market system and citing the dangers of misplaced aggregation in economic models and economic policy-making, development economists have been able to achieve a considerable shift in attitudes towards what were often previously regarded as 'non-economic' problems.

Recent Improvements

Economic theory has also been improved by the aid of more advanced quantitative techniques. The development of sophisticated econometric techniques has enabled analysts to disaggregate variables as well as specify more accurately the quantitative values of functional relationships. Measurement techniques have, therefore, been an important tool for assessing the impact, cost and effects of discrimination and segregation and thereby give greater rigour and precision to what was previously based on *a priori* reasoning, theoretical deduction and intuitive knowledge.[17] The use of the Cobb-Douglas production function, to assess the extent to which discrimination is present in an economy, is a case in point; the first application of this methodology was in fact performed in South Africa in 1943 by Browne, and since then at least two other similar studies have followed.[18] No published production function studies, however, are available on the Rhodesian economy, although racial income distribution patterns have been investigated.[19]

In conjunction with the econometric approach improvements in the coverage, presentation and quality of statistical data have been instrumental in the formulation and testing of hypotheses on discrimination. The advantages of more refined methodological inquiries and better data can be seen by a comparison of early works with more recent research.[20] The former are characterised by a rudimentary statistical base, loosely formed hypotheses and tentative and shaky conclusions; the latter, by contrast, have a solid statistical analysis, in well formed hypotheses, and reach meaningful and specific conclusions.

The beneficial effect of quantitative and econometric studies are now being felt in Southern Africa. An example of improved technique can be seen by a comparison of Lombard's analysis in 1962 of racial income differentials with the more advanced treatment and techniques used in Spandau's investigations.[21] In many respects Becker needs to be recognised as a pioneer in this regard. As a consequence, the costs and benefits of alternative policies, and even economic systems, can be subjected to more intensive and fruitful study before policy decisions are made.[22] Thus, the policy orientation of modern day economics is another contributing factor to the recent upsurge in the economics of discrimination.

Lastly, there is the growing recognition that discrimination is closely interwoven with the still unresolved problems of poverty and underdevelopment in the advanced and less developed countries respectively. Estimates of the economic costs of discrimination are, therefore, eagerly sought after by political interest groups, social and economic planners and academics alike, not only to point out the welfare losses and gains in existing socio-economic arrangements, but also to estimate least cost options of implementing efficient segregatory and discriminatory policies, as for example, has occurred in South Africa.[23]

Changing attitudes

The historical neglect of the race variable in economic theory has been counteracted by the changing pattern of world race relations; in the last two decades this has had a profound effect on social and economic theory and has finally brought the discrimination component of socio-economic systems to the forefront of policy and analysis.

Undoubtedly, one of the most important stimulants to an increasing awareness of problems in race relations has been the rise in the political consciousness of large sections of the non-white world both within the confines of the advanced countries, particularly the United States and Britain, and in the nations of the less-developed world who have recently obtained political independence from former colonial powers. In Southern Africa political tendencies towards racial segregation have highlighted the conflicts between the governmental demands for separation and the economic costs of these policies in terms of reduced rates of growth, bottlenecks in the supply of skilled labour, structural inflation and widening income differentials between rich and poor. In Rhodesia, the recent policies of promoting rapid non-selective European immigration, enforcing the restrictive and discriminatory employment principles of 'Rate for the Job' and 'No Job Fragmentation' throughout the industrial structure, and the economic effects of legal inequalities are being increasingly examined in the light of their economic costs to the community at large and economic minorities in particular.

The quest amongst minorities, numerical or economic, for political power arises out of a recognition that for economic development or welfare to be achieved or sustained, gains must be secured not only in the economic fields of private enterprise but also in the public domain, its institutions and government as well. Coupled with a growing public condemnation of the morals and ethics of discriminatory and segregatory practices this has led to the implementation of stronger equity considerations in the formulation of public policy and greater use of the legislative framework, aiming at a more equitable treatment for all. Notable examples of the latter are the 'War on Poverty', Civil Rights Legislation and Fair Employment Laws in the United States and the Race Relations Act in the United Kingdom. In contradistinction to those trends are other legislative devices and administrative practices, particularly in Southern Africa, designed to maintain socio-economic and political divisions between different racial groups. Despite these counter-currents the general drift of world opinion is heavily weighted against discrimination and it is a result of this viewpoint that the United Nations Organization, and its affiliated bodies and nations, have sought to expose discriminatory practices in the political as well as the economic sphere.

The present directions in research by individuals, institutions, study groups, church bodies and others can be expected to ensure increasing rather than decreasing attention being given to the economics of the race factor; this tendency is already having its impact on economic theory as the works of a number of authors already indicate.[24]

The Case of Southern Africa

The economic theory on discrimination has not been widely known or used in development studies in Southern Africa, an area where, at first glance, one would expect it to have substantial relevance. Apart from localized reasons, such as the general lack of research in economics in Rhodesia, there are two important considerations in less developed countries of the Southern African type which militate against the widespread application of the theory of economic discrimination.

First, because of the generality of the assumptions of most models, the specificity of individual socio-economic situations is likely to be at variance with the general properties of the embyronic theory of discrimination. The theorizing on discrimination and segregation from Becker in 1957 to Arrow in 1970 has been based on the structures of advanced economics. The economic morphologies of less developed countries are radically different, and it is therefore not surprising that structural differences between advanced and underdeveloped economies preclude the direct relevance of theory originally formulated to analyse and deal with problems flowing from a different set of socio-economic arrangements. There is then a need for the development of specific models to deal with the specific situations of specific underdeveloped economies.

Secondly, the economics of discrimination is in many ways, at present, a special theory of distribution. Yet, in Southern African economics, even while distributional problems are important and tend to be sensitive areas of social conflict, the main economic policy concern is still one of growth. Distribution considerations, especially those across race boundaries in the direction of the underprivileged groups, tend to be ignored in the welfare criteria used by planners and policy makers.[25] The existing conceptions of 'development' used by policy-makers in Southern Africa are almost synonymous with the academic economists' conception of 'growth'. The current pre-occupation with that sacred cow 'the rate of economic growth' has shifted the focus of debate from the imperatives of distributional equity, on the tenuous assumption that the process of economic growth *per se* would, through the benevolent and 'Invisible Hand' of the market, correct racial income inequalities.

There are other specific considerations as well which have led to a limited application of the theory of economic discrimination in Southern Africa. Take, for instance, the operation of some of these factors in Rhodesia. First, the assumptions of the theory have not always been relevant to Rhodesian circumstances. Another limiting influence has been the paucity of data on the important variables that need to be incorporated into the models. For example, adequate wage earnings data are available by race for all major industrial sectors; but before use can be made of multiple regression analysis, to estimate Becker's market discrimination co-efficients, cross-sectional data on the occupational and skill structures of the labour force are required. These data are not available, and the best estimates are outdated, unreliable and partial. Other cross-sectional data to account for the influences of variables such as age, sex and education are also lacking. Even the available data on population, unemployment, incomes, and wages must be treated with exceptional care in order to account for conceptual differences between statistical and economic interpretations and those of the real world. Furthermore, data are often collected under a number of different definitions. Thus, to calculate black/white income differentials in the modern sector, allowance must be made for the fact that data is primarily gathered under the categories of 'African' and 'European'. The former incorporates many persons in the subsistence sector (also ill-defined and the numbers of which are not accurately known) whilst the latter incorporates Asians, Coloureds as well as Whites.

Rhodesia's social plurality implies the existence of a number of discriminatory relationships that could only adequately be handled in a three or four sector model. Becker's model, and most others based upon it, operate with two sectors. The complications and permutations induced by the inclusion of an additional sector may easily render quantitative studies virtually impossible. Thus, in multiple regression studies, or production function studies, where three or four partial regression coefficients are derived, the incidence of multicollinearity and increased difficulties of computation may lead to fallacious conclusions.

Second Edition of Becker's Book

The second edition of *The Economics of Discrimination* has come after fifteen years of fertile work, but has little of substantial significance to offer which was not already present in his earlier work. The only changes are the inclusion of three addenda:

1. An analysis of trade union discrimination in the labour market (originally published in 1959)[2] with primary emphasis on price and non-price methods of rationing entry into unions, the effects of nepotism and the costs of discrimination to unions;
2. a discussion on the relationship between market discrimination and educational investment (originally published in 1962)[26]; and
3. a defence of empirical estimates regarding the relative occupational position of Negro males during the first fifty years of the twentieth century (originally published in 1962).

The first two of the above issues have a direct relevance to Rhodesia. Unskilled (Black) and skilled (White) unions in Rhodesia present a segregated labour front and, with the exception of a few 'multi-racial' unions, bargain on a racially divisive basis with White Employers Organisations and White capitalists. Similarly, in the educational sector, which is under the effective control of government agencies, segregationist policies favouring a discriminatory investment of public capital resources have an important effect on the differential market returns to Black and White labour. Both these aspects are at present under-investigated areas of the Rhodesian economy.

Since Becker has left his basic propositions unaltered, there is some merit in critically evaluating his model, particularly since there is implicit in Becker's modified restatement of his theory a number of assumptions which are widely accepted in the White societies of Southern Africa. These are, firstly ,that the perfect market system is an appropriate conceptual framework within which to examine the problems of discrimination; secondly, that discrimination as exercised in the economy is simply a rational ordering of consumer preferences undertaken at an economic cost to the discriminator group in an attempt to trade-off real income returns against psychic utilities obtained from segregation: and thirdly, the implicit denial, in the largely unmodified structure of the second edition that there is any legitimacy to critiques and counter-arguments put against Becker's original formulation and that by extension social scientists in Southern Africa should continue to adopt an analytical position akin to Becker's free market model.

Becker's theory has a number of deficiencies as an explanation of the economic motives for racial discrimination and the economic consequences of discriminatory behaviour. Those limitations relate principally to the theoretical framework of Becker's analysis, the relevance of his model to the empirical world especially in the Southern African case, and the narrowness of perspective in his model about the origins, consequences and mechanisms of economic discrimination in the real world.

Becker's emphasis is heavily weighted on the side of those factors relating to market discrimination. The explicit repercussion of this approach is to divert attention away from those non-market forces that cause and help to perpetuate discrimination. A non-institutional approach must of necessity be partial and exclude a whole host of relevant variables. How far can it legitimately be assumed that political and institutional determinants are of secondary importance when these factors set the framework in which different social groups must operate? Discriminatory legislation and unequal political power between racial groups as existing in Southern Africa can be seen to be of fundamental significance in countries where economic discrimination is highly visible. Thus, the basic theoretical structure within which Becker chooses to examine the problem cannot be regarded as one of general applicability and validity. This does not mean, however, that a change in political regime, or a re-design of legal systems to make laws, at least in *de jure* terms, 'non-racial', will in itself reduce the intensity of discrimination against a minority group. Law itself is not a sufficient deterrent to discriminatory behaviour and may, like the Industrial Conciliation Act, be framed with non-racial provisions and operated with the explicit purpose of facilitating *de facto* discrimination in the market place.

The thesis that discrimination involves a cost to the discriminator also needs closer examination. As Thurow points out, racial discrimination is not simply demanding a premium to associate with another group: 'The discriminator may want to work with, buy from, or hire Negroes, but he insists on specifying the relationships under which the two parties will meet and how the Negro will respond'.[27] This observation is highly pertinent to socio-economic systems in which the dominant, controlling group must, for economic survival and welfare, enter into economic relationships with the disadvantaged group. To maintain control and to maximize its own welfare function, the dominant group usually seeks both economic domination and economic gain from that domination.

Becker's resort to a utility function that has as one of its constituent elements the maintenance of a 'physical distance' from the disadvantaged group is a narrow perception of the issue involved. Thurow, who suggests that a 'social distance' concept may be more relevant and could lead to a different set of actions, is closer to the empirical world, although even here, there is a slighting of the importance of the economic factor. Thus, it may be that all three influences, 'physical distance', 'social distance' and 'economic distance', play an important part in the over-all motives for, and patterns of, discrimination and segregation. Singular reliance on any one could lead to a partial and incomplete insight into the nature of socio-economic discrimination.

The concept of the 'taste for discrimination' used by Becker suffers from similar limitations. Dewey criticises the concept of a single individual 'taste for discrimination' and claims that 'most whites have not one but many tastes for discrimination which are not necessarily consistent'.[28] By extension it can be argued that groups, governments and employers may not discriminate on one occasion but may do so in different circumstances or at different points in time. Further, because the 'taste for discrimination' is assumed to involve a cost, the discriminator must forfeit income if he wishes to discriminate. On this assertion Thurow comments pertinently: 'if this deduction is correct, empirical impressions are amazingly false. Do the whites of South Africa or the United States really have a lower standard of living as a result of their discrimination?'[19] The importance of whether the 'taste for discrimination' involves the discriminator in real income gains or losses can be seen where policy-makers are interested in securing changes in existing discriminatory situations. Under Becker's theory, discrimination is an exercise of consumer preference and can only be reduced by changes in consumer tastes and preferences. Thurow's analysis stands in contradistinction to this view, since it is the essence of Thurow's theory that discriminators gain from discrimination. Implicit in this latter proposition is the idea that a government could tax these gains thereby making it unprofitable to discriminate. On the crucial question of how a taste for discrimination changes, Becker sheds no light and so his theory has little predictive or prescriptive content. For economists and policy makers interested in the efficient and optimal allocation of resources in a dynamic context, Becker is only able to offer a specification of existing disequilibrium with few suggestions for correcting the maladjustments.

Becker's dichotomization of White capital and labour interests being in conflict within the discriminating group need not always be so in practice. Although the separation of the discriminating group into capitalists and labour makes it possible to more accurately identify gainers and losers and estimate gains and losses, there is little reason in Becker's analysis, apart from assertations to the contrary, to suppose that White capital and White labour, through non-market motives or pressures, would not or could not collude to enforce discrimination in varying degrees. Becker's theory fails to identify the important mutual interests that White capital and White labour have in the *status quo* which cause the former group to subordinate personal interests to group interests; or, if White-capital were unwilling to discriminate voluntarily, which cause mediatory influences of the public sector to operate to establish a discriminatory equilibrium. The White capital-labour conflicts in Southern Africa are a clear example of this latter behaviour pattern.

Melvin Reder raises another objection to Becker's model and argues that it has limited applicability since it only refers to large groups of persons: 'For if Negroes collectively refuse to deal with discriminators they may raise the marginal cost of discrimination sufficiently to alter the relative demand for their labour services and thereby increase their incomes'; Becker, 'neglects the fact that proposals for economic retaliation against discriminators almost always envisage collective action'.[30] By concentrating on individual expression and playing down the importance of social pressures, groupings and interest groups, Becker is ignoring the potential power of minorities to engage in collective action for retaliatory or ameliorative purposes. This feature has, however, been accounted for by Anne Krueger in her extension of Becker's model where, in addition, an allowance is made for collective counteraction by whites.[31]

It would also, in the light of wide differences in history, circumstances and practices, be difficult to claim a universality for Becker's model. Certainly, some of the concepts and propositions may transcend national frontiers and the basic economic principles used could be applied to environments other than the United States from which source much of the inductive verification originates. But this is not the same as providing a generalised theory applicable at all times in all conditions and to many different socio-economic institutions.

Another fundamental shortcoming of Becker's theory when seen from a policy viewpoint is that it is couched in terms of a two-sector model. Even in the United States there exist a plethora of minority groups, of differing economic status, concentrated in diverse regions or urban centres, with a variety of problems facing them, not all of which are similar, and who are subject to a variety of forms and intensities of discrimination and segregation. To argue that minority groups other than Blacks, who feel the brunt of economic discrimination, are a marginal proportion of the total population and can be ignored is in the first instance acceptable if the objective is to isolate the main areas of discrimination against Blacks. But this procedure tends to ignore the fact that where a discriminator is able to gain from discrimination against a number of disadvantaged groups he may well be influenced by the extent to which one group is weaker than others, or will accept a greater intensity of discrimination. The existence of a trade-off between Blacks and other non-whites may be a very real factor in influencing the wage and employment opportunities of smaller minorities. In countries with plural populations, as in South Africa, Madagascar, East Africa or Rhodesia, the need to demarcate three or more groups is paramount. It cannot be guaranteed that the extension of Becker's results and analysis to a three or four sector model would yield the same type of employer and employee discriminatory behaviour patterns, maximizing position for the dominant discriminator, or relationships between capitalists, labour, government and trade unions. Specific recourse to the institutional environment is needed in each case. This is particularly relevant in societies where racial groups are at different stages of economic growth and where social, economic and political policies of governments are based on racial lines with the declared purpose of retaining discrimination and segregation. General theories, of the two factor, two society variety, used by Becker, are weak on this score.

A related problem area concerns the effects of government revenue and expenditure policies on the real disposable incomes of different racial groups especially where these groups are identifiable with markedly discrete income levels. Tax, welfare and fiscal policy changes by government may inadvertently, or otherwise, lead to discrimination and so increase income inequality between the races. These issues are largely ignored by Becker and arise out of his exclusion of a public sector from his general model.

It has also been argued by Krueger that there do exist economic motives to discrimination and it is not necessary to rely on the existence of a 'taste for discrimination' to explain differentials in income. Several different white utility functions could lead to discrimination by whites all of which exclude tastes for discrimination. Thus the validity of Becker's thesis is eroded by the existence of theoretical alternatives that reach contrary conclusions. Krueger's findings lend support to Thurow's interpretation of the purpose of racial discrimination in the economy, *viz.*, to secure pecuniary gain.

Conclusion

There is, then, a wide range of criticisms that can be urged against Becker's theory and his second edition has not answered these criticisms satisfactorily. Consequently, competitors have entered the field of economic discrimination and can be said to hold a commanding position over Becker's initial *tour de force*.

Nevertheless, *The Economics of Discrimination* can still be genuinely regarded as a landmark in economic theorizing in this field. The definitions and clarification of concepts have helped push the boundaries of economic science much closer to a real understanding of a difficult area of social inquiry, and have formed the foundation for the important economic analyses of Gilman[20], Gwartney and Landes.[31] Even though the investigators have leaned heavily on Becker's original ideas, there are still valuable insights to be obtained from deductive inquiry based on Becker's initial formulations. However, the tide of opinion in the theory has now undoubtedly shifted towards a sharper recognition of market imperfections and a more determinate role for institutional factors. In this reviewer's opinion this new theoretical focus is likely to prove more productive for empirical research than Becker's orthodoxy.

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