Assessing Racial Profiling

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Abstract

This paper explores some of the issues that must be addressed in the overall assessment of racial profiling in traffic stops as a public policy. This analysis explicitly considers ethical issues and is therefore conducted with respect to both welfarist and deontological considerations. I argue that the main factors that matter for a welfarist calculation, namely the effects of racial profiling on crime, the individual harms that accrue to an innocent person who is stopped, as well as the social costs involved in a policy that may contribute to stigma against African Americans, are all poorly understood. In contrast, I argue that racial profiling involves a clear injustice to innocent African Americans. The lack of precise probabilistic information on the welfarist side of profiling means that the assessment of profiling is an example of decisionmaking under ambiguity. I resolve this ambiguity by an appeal to a Fairness Presumption, which requires that there exists an affirmative case for a policy that reduces fairness in order for it to be implemented. The Fairness Presumption leads to a rejection of racial profiling as a traffic stop strategy. Finally, I discuss some relationships between my conclusions about profiling in traffic stops and the analysis of profiling in the contexts of antiterrorism and affirmative action.

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...a cop pulled him over to the side of the road Just like the time and the time before that In Paterson that's just the way things go. If you're black you might as well not show up on the street 'Less you wanna draw the heat.

Bob Dylan, *Hurricane*

1. Introduction

In this paper, I attempt to develop a framework for the overall evaluation of racial profiling as a public policy. The objective of this discussion is the development of an analysis of racial profiling that explicitly addresses the full range of effects of racial profiling on society. In doing so, I will explicitly focus on ethical issues that arise when profiling occurs. This focus does not mean that I will ignore questions of the efficacy of racial profiling with respect to law enforcement goals. Rather, I wish to place such factors in a context in which law enforcement objectives represent a subset of the desiderata for public policy. I do not claim to provide a direct way of trading off these desiderata. Instead, I will argue that the strength of available evidence is relevant to this tradeoff; current arguments about profiling need to account explicitly for the absence of strong empirical evidence on many of the factors that come into play when assessing profiling.

The philosophical issues associated with racial profiling have recently been discussed in an important paper by Risse and Zeckhauser (2004). This paper is valuable not only for the substantive arguments that are made but also for carefully delineating many of the issues that need to be addressed in evaluating racial profiling as a public policy. I will follow the organization of their analysis in considering both welfarist² and deontological issues in assessing profiling. While I accept many of the specific claims in their work, I will conclude that the case for profiling is substantially weaker than they

²Following Sen (1979) by welfarism I refer to the evaluation of policies on the basis of maximizing a function that only depends (positively) on the utilities of individuals in

do. In the discussion that follows, I will attempt to make clear why my conclusions differ from Risse and Zeckhauser. One reason for differences in conclusions is that I evaluate racial profiling using somewhat different criteria than those employed by Risse and Zeckhauser. At the same time, I will question several of their arguments on their own terms.

In my discussion, I will make the following assumptions. First, I will focus on one form of racial profiling: highway traffic stops in which the objective of the stops is to identify drug carriers. As such, the pretexts for the stops (traffic violations, etc.) have no intrinsic importance. Further, by focusing on this specific context, it is possible to discuss the state of evidence on the factors that are relevant to evaluating a profiling policy. Second, I assume that there are no errors in stops and searches in the sense that once someone is stopped, if he is innocent he is always let go whereas if he is guilty he is always arrested. Third, I ignore any issues of differential punishments by race; all criminals are assumed to have committed the same offense and receive the same punishment. Fourth, I do not question whether various drug laws are themselves just. These assumptions allow the discussion to focus on the main issues specific to profiling as a police strategy.

Section 2 of this essay defines some basic probabilities concerning stops and searches, guilt and innocence, and race. These probabilities, it will be argued, are the empirical objects needed for evaluating various arguments in favor of and against profiling. Section 3 considers welfarist approaches to assessing profiling. Section 4 explores deontological considerations. Section 5 discusses the question of how to evaluate arguments in favor and against profiling when these arguments depend on quantities that are not identified from available data. Section 6 evaluates how the framework I describe affects the analysis of other policy questions, specifically profiling and terrorism and affirmative action. Section 7 contains summary and conclusions.

2. Basic Issues: some probabilities relevant to assessing profiling

society. Sometimes, this is described as utilitarianism, but I reserve the latter for social welfare functions defined by the sum of individual utilities.

The basic issues that arise in evaluating profiling can be understood using simple probability arguments. This approach is developed in a recent paper by Dominitz (2003), who shows how to translate various notions of fairness in police behavior into probability statements; I will employ a modified version of his framework. To do this, let B and W denote black and white, k denote the fraction of the population that is black, I and G denote innocence and guilt, and S denote the event of a police stop.

The first set of probabilities that is relevant in analyzing profiling describes police behavior. The police face a decision with respect to the allocation of a fixed rate of traffic stops *C* between black and white drivers. A stop strategy is a pair

$$\Pr(S|B) = \text{probability of stop if black}$$

and

$$\Pr(S|W) = \text{probability of stop if white}$$

which are consistent with the overall stop rate, i.e.

$$k \operatorname{Pr}(S|B) + (1-k) \operatorname{Pr}(S|W) = C.$$
⁽¹⁾

A random stop and search policy is simply a special case where the search probabilities are equal. Profiling strategies are those where Pr(S|B) > Pr(S|W), since interest in the question derives from the oversampling of blacks.

A profiling strategy, in turn, affects the choices made by individuals on whether or not to commit a crime. Expressing behaviors in terms of innocence, these choices, which represent the only behavioral aspect of the analysis, are described by

 $\Pr(I|W, \Pr(S|W)) =$ probability of innocence if white given stop strategy

Pr(I|B, Pr(S|B)) = probability of innocence if black given stop strategy.

For simplicity I ignore sources of heterogeneity within races such as income that will lead to different criminal propensities; none of my conclusions would change if this assumption were relaxed since one could repeat the analysis conditioning on these additional factors. These race-specific probabilities should not be interpreted as implying a causal role for race.

The choice of a stop strategy combines with the innocence/guilt decisions of individuals to produce a set of equilibrium probabilities that form the basis for the assessment of racial profiling. One equilibrium probability of interest is the overall guilt rate associated with a stop strategy. I assume that all effects on the crime rate occur via deterrence, i.e. that the withdrawal of criminals from the population is too small to affect the crime rate. This allows us to express the equilibrium crime rate as

$$\Pr(G) = k \Pr(G | B, \Pr(S | B)) + (1 - k) \Pr(G | W, \Pr(S | W)).$$
⁽²⁾

I will also be concerned with the rates at which innocent blacks and whites are stopped. Unlike the case of the guilt rate, these probabilities will need to be considered separately:

 $\Pr(S|I,B)$ = probability of stop if innocent and black

and

$$\Pr(S|I,W) = \text{probability of stop if innocent and white.}$$

and

As will be argued below, together these equilibrium probabilities capture the main objects that in principle are needed to assess profiling as a public policy. One way to think about the empirical profiling literature is to ask to what extent the existing findings may be used to identify these objects.

3. Welfarist considerations

One approach to evaluating a profiling strategy is to do so exclusively in terms of its effect on individual welfare for each member of the population. The racial profiling literature, at least in economics, has generally not focused on questions like this. Empirical discussions of racial profiling typically treat the number of arrests made in a set of stops as the criterion for assessing the program. There is no reason why this criterion is appropriate by itself for evaluating profiling.³ I now consider some of the ways in which a profiling strategy affects individual welfare and consider the extent to which there are good reasons to believe a profiling strategy may be justified over a random stop strategy using welfarist arguments.

i. benefits

What sorts of benefits might accrue to individuals from race-based stop policies? One obvious reason why profiling may produce individual benefits is its effect on the aggregate crime rate. The possibility that profiling schemes reduce crime rates lies at the heart of welfarist defenses of profiling, as noted by Risse and Zeckhauser (2004, 144). The role of profiling in crime reduction has been formally modeled in Persico (2002) and Harcourt (2004); the basic analytical issues may be derived as follows. Suppose that the police set a stop strategy to minimize the aggregate crime rate. This is a standard optimization problem: choose a set of stop rates to minimize (2) subject to (1). Assuming the relevant second-order condition holds and the first-order condition holds with equality, the profiling strategy that minimizes the overall crime rate is one such that

³This argument is also made in Persico (2002).

$$\frac{\partial \Pr(G|W,\Pr(S|W))}{\partial \Pr(S|W)} = \frac{\partial \Pr(G|B,\Pr(S|B))}{\partial \Pr(S|B)}.$$
(3)⁴

An alternative way to assess the relationship between profiling and crime minimization is to ask whether there is a profiling strategy that dominates a random stop strategy. Some form of profiling is efficient (again assuming relevant second-order conditions) when the changes in probability associated with search probabilities are unequal across races under a random profiling scheme, so that

$$\frac{\partial \Pr(G|W,C)}{\partial \Pr(S|W)} < \frac{\partial \Pr(G|B,C)}{\partial \Pr(S|B)}.$$
(4)

When this holds, at the margin, some disproportionate search of blacks relative to whites can be efficient.

As a theoretical matter, profiling may be required in order to fulfill a condition such as (3) or (4). This question reveals an important problem with existing empirical work on profiling, namely, the gap that exists between the current body of empirical evidence and deterrence. To assert that there are significant deterrence effects from profiling requires evidence on the sensitivity of individual crime decisions within each group to changes in the probability of being searched when guilty. However, this is not what is measured by studies that calculate the levels of crime rates across groups and there is no obvious reason why crime rates may be used to infer sensitivities to changes in arrest rates. In particular, the empirical profiling literature, in which Knowles, Persico, and Todd (2001) is a seminal contribution, has focused on the guilt rates across groups in environments where profiling occurs.⁵ The reason for this emphasis is that the

⁴Notice that the population ratios do not appear in this equation. Intuitively, tradeoff in stop and search rates between races is exactly offset by the population ratio differences in the effects of the stop and search rates on overall crime.

⁵The basic Knowles, Persico, and Todd (2001) framework for modeling taste discrimination versus statistical discrimination has been adopted quite widely in profiling studies in economics. A nice recent example is Anwar and Fang (2004) who

main question motivating empirical studies of this type is whether the disproportionate rates at which black motorists are stopped reflect a taste for discrimination or whether they are consistent with a stop strategy that maximizes the total number of arrests; the latter case means that differential stop and search rates may be interpreted as a form of statistical discrimination. A key implication of Knowles, Persico, and Todd (2001) is that arrest maximization requires that

$$\Pr(G|S,W) = \Pr(G|S,B).$$
⁽⁵⁾

Their analysis shows that this equality in general holds for Maryland data when there is profiling of blacks in stops. However, one cannot move from this finding to conclude that observed profiling strategies are efficient in terms of reducing crime rates; (5) and either (3) or (4) are different conditions, a point discussed in detail in Persico (2002).

It is easy to imagine cases where (5) is inconsistent with either (3) or (4). As a simple example, suppose that searches are restricted to black and white teenagers and under a policing rule where the probability of a stop is independent of race, the percentage of black teenagers carrying drugs is higher than whites. This does not imply that a marginal change should be made to increase the search rate among blacks. It is possible that the white teenagers will exhibit greater sensitivity in their choice of whether to commit a crime to a change in detection probability than the black teenagers. The derivative of a race-specific guilt rate with respect to the stop probability will depend on factors such as stigma for arrest, which presumably is lower in communities in which high percentages of black males have been incarcerated, or because of lesser labor market opportunities.

The general reason why one cannot use the available evidence to assess overall efficiency of profiling as a crime reduction measure is that there is no one-to-one mapping between the presence of equal guilt probabilities in the presence of profiling and the efficient allocation of police effort. This is a classic identification problem in

study profiling in which forms of heterogeneity in motorist and policy behavior are allowed. They concur with Knowles, Persico, and Todd (2001) that one can interpret observed stop patterns as consistent with the absence of taste discrimination.

econometrics. Hence, a welfarist argument for racial profiling is difficult to sustain based on the empirical observation of equal guilt probabilities if the basis of the argument is that profiling is needed for crime minimization. To be clear, the fact that (5) holds empirically is consistent with the claim that profiling minimizes crime rates. But it is also consistent with behavioral models of criminal behavior (i.e. descriptions of Pr(G|W, Pr(S|W)) and Pr(G|B, Pr(S|B)) which together represent a specification of how individuals behave in response to different stop and search probabilities) in which efficiency requires a violation of (5).

Deterrence is not the only welfarist argument for profiling. One can also argue that individuals benefit from successful arrest strategies because of the utility derived from retribution, i.e. from the fact that guilty parties are identified and presumably punished for their offenses. While one might argue that retribution is not a legitimate goal in designing a legal system,⁶ objections to it are irrelevant from a welfarist perspective, which takes the preferences of individuals as given and does not judge these preferences as to legitimacy. In other words, objections to retribution are deontological and therefore should not be considered if one is operating in a welfarist framework.⁷

In the profiling context, one can think of two ways to measure the level of retribution; no claim is made that these cover the full range of possible quantifications of the concept. First, one can equate retribution with the total number of arrests, if so, then the findings of Knowles, Persico, and Todd (2001) are consistent with retribution "maximization." However, this sort of measurement seems odd, since it would imply that agents prefer a large number of arrests regardless of the number of criminals. This would require that individuals feel retribution is better served in a society with 100

⁶At an abstract level, I see no reason to regard retribution as an illegitimate goal of society. Otherwise, one would have to question the meting out of punishments to Axis war criminals, where the possibility of recidivism was presumably zero. Whether retribution is sensible in the context I am discussing is of course quite another matter. The point is that one needs a context to make objections to retribution.

⁷The idea that one wishes to distinguish between deterrence and retribution as sources of individual welfare is a key source of disagreement between non-utilitarian ethical positions and utilitarian ones. The notion that our moral intuitions naturally differentiate between different sources of utility, to give another example, the utility derived from

criminals, 50 of whom are caught than a society in which there are 30 criminals, 29 of whom are caught. An alternative measure of retribution that addresses this concern is the number of criminals who are punished because they are caught due to a search. This measure is the equilibrium percentage of guilty persons who are searched, Pr(S|G), which equals the ratio of the probability that a motorist is searched given one is guilty to the probability that one is guilty:

$$\Pr(S|G) = \frac{(1-k)\Pr(S|W)\Pr(G|W,\Pr(S|W)) + k\Pr(S|B)\Pr(G|B,\Pr(S|B))}{(1-k)\Pr(G|W,\Pr(S|W)) + k\Pr(G|B,\Pr(S|B))}.$$
(6)

Maximization of (6) will not generally produce the condition (5). Hence the equalization of guilt rates does not speak to whether profiling efficiently addresses retribution. Similarly, one cannot use (5) to infer whether profiling is needed for retribution. This illustrates once again that the arrest maximization rule can fail to match welfarist objectives.

Leaving aside the difficulties of quantifying the benefits of retribution effects, there is an argument by which one might conclude that retribution is a second-order issue relative to deterrence. To the extent that deterrence and retributive aspects of profiling are in conflict, to say that one should trade them off requires that one would, at least in principle, accept a higher rate of crime in order to make sure that a higher level or percentage of the guilty are punished. It seems difficult to claim that most individuals would prefer this state of affairs. The one exception is that if punishment of a particular criminal diminishes the suffering caused by the crime (to the victim, family members, etc.) then it is possible that one would choose a higher crime rate because it minimized the number of unpunished crimes. I find this possibility sensible⁸, but do not see that it

reading a novel versus the utility derived from watching a cockfight, is beautifully delineated in Sen (1979).

⁸One case where retribution might trump deterrence is the following. Suppose near the end of World War II a concentration camp commander offered to reduce the number of victims in exchange for immunity from post-war prosecution. The retribution costs could plausibly be high enough to reject the offer on utilitarian grounds.

is germane to the racial profiling context, where drug crimes are not associated with individual victims.

ii. costs

individual-specific harms to a stop and search

The consequences of a stop strategy for individual welfare extend beyond the effect of the strategy on the crime rate. In assessing the harms that profiling produces for individual welfare, it is important to consider the harms from a stop and search that accrue to a motorist. Under the assumption that the total number of stops is constant, the implications of profiling have to do with the shifting of stops from blacks to whites. In discussing these harms, I will focus exclusively on the harms to innocent blacks and whites. It is hard to imagine that the harms of a stop and search matter to a guilty party given a subsequent arrest and punishment and one can also imagine that the magnitude of feelings of humiliation and injustice from a search depend on whether the motorist is innocent. However, nothing in my argument is affected if one were to include harms to the guilty.

Are the private costs from a stop and search significant? Interestingly, this turns out to be a major question in efforts to evaluate profiling. Risse and Zeckhauser's (2004) "in principle" defense of profiling is very much involved in arguing that these costs are small. While acknowledging that the difficulties of providing empirical support on the magnitude of the harm (pg. 8) they argue that the costs to innocent African Americans from racial profiling are second-order:

"...imagine how much better-off, say African Americans would be if we just got rid of profiling, *keeping everything else fixed*. We think the answer is "only slightly so." (pg.8)

The main basis for this claim is that the harms of profiling in traffic stops only exist because of the background of past and contemporary racial harms that African Americans experience. In their view, the reaction to a search is highly sensitive to issues of personal identity and general perceptions of society. Hence, they imply that a profiling strategy that was associated with high intellectual ability, for example, would have little intrinsic harm.

While I concur the harms of profiling to individuals are intimately linked with background factors, the Risse and Zeckhauser conclusion that this argues against the costs of profiling seems quite wrong.⁹ There are three grounds for rejecting their claim.

First, the fact that the psychological harms to racial profiling only occur in the context of experiences of racism and discrimination in no way implies the harms are marginal. This takes a very particular stance on how African Americans are affected by stops and searches in a profiling environment. Risse and Zeckhauser essentially assume that blacks experience an overall cost that is a function of the total number of incidents (possibly weighted by gravity) which are perceived as involving bigotry. A second way to think about these costs is that background racism sensitizes African Americans and so makes individual incidents such as search and stops much more harmful to one's wellbeing than would otherwise be the case. By analogy, the pain of slapping my back is far greater when I am sunburned than when I am not. So, while the effect of the slap is almost entirely contingent on the sunburn, it is because of the sunburn that the pain is severe. The strength of opposition of African Americans to profiling at least hints my interpretation is more likely the correct one.

Second, even if the marginal effect of profiling is small, this does not mean that the policy is defensible, unless one restricts defensibility in an unappealing way. Suppose that the harm to African Americans comes from a set of two types of treatments by others and that the harm accrues if either of the types of treatment is experienced. Let one treatment be the differential experienced when police assistance is needed and the other treatment a stop and search which occurs under a profiling regime. If one is eliminated and the other is not, then the harm to the African American will not be reduced. However, for larger sets of potential public policy changes i.e. simultaneously changing the treatment in police interactions and eliminating profiling, the costs will be

⁹When the marginal cost experienced by an African American to an additional act of (perceived) racism is a function of the level of (perceived) racism, Risse and Zeckhauser are in essence assuming that marginal cost has a negative first derivative.

high. The fact that one may need to bundle elimination of racial profiling with other actions does not constitute a welfarist argument that it is unimportant.

Third, the assumption that a stop and search is intrinsically a minor inconvenience is questionable. There is no particular reason to believe this is the case. Gross and Barnes (2002, 745-746) state:

"As the level of the police officer's interest increases, the cost to the innocent citizen escalates rapidly. It's one thing to get a speeding ticket and an annoying lecture...it's quite another to be told to step out of the car and to be questioned...The questions may seem intrusive and out of line, but you can hardly refuse to answer an armed cop. At some point you realize you are not just another law-abiding citizen who's being checked out...like everyone else. You've been targeted. The trooper is not going through a routine so he can let you go...he *wants* to find drugs on you...Those of us who have not been through this sort of experience probably underestimate its impact. To be treated as a criminal is a basic insult to a person's self-image and his position in society. It cannot easily be shrugged off..."

It is also important to note that the low harm argument made by Risse and Zeckhauser is in principle consistent with a welfarist calculation that the harms are significant. Suppose that social welfare is defined by

$$SWF = \sum_{i} h(u_i) \tag{7}$$

where u_i is individual *i*'s utility. If $h(\cdot)$ is concave, then social welfare will reflect decreasing marginal benefits to changes in the utility of the low utility agents versus high utility agents. Now suppose that Risse and Zeckhauser are correct that blacks have low utilities due to the pervasive background of prejudice they experience. If so, then sufficient concavity of $h(\cdot)$ can produce the result that further decreases in the utility of blacks cannot be justified through increases in the utility of others, even if the changes in black utility are, when considered in isolation, "small" compared to the increases for others. Of course, this all depends on the size of the benefits, which I have argued are not known. The issue this discussion is designed to raise is that the Risse and Zeckhauser's low cost argument is incomplete in the absence of a specified social welfare function.

social harms

Beyond the direct harms of stops to innocent motorists, it is possible that there are social harms that are associated with profiling strategies that need to be accounted for in assessing the effects of profiling on individual welfare.

By way of background, it is useful to note that I have so far followed Risse and Zeckhauser in evaluating racial profiling under the assumption that police officers conduct stops and searches in as inoffensive a way as is possible. However, this assumption seems questionable, since any evaluation of racial profiling needs to account for what may in fact occur in practice. By analogy the claim that the best government is a benevolent monarchy, since by definition it will choose policies that are best for society and implement without impediments, is of little interest since such a government could not exist. Hence, unless Risse and Zeckhauser can make an argument that nonabusive profiling is possible, I do not see that this assumption is tenable. One can just as easily argue that profiling creates negative stereotypes in the minds of the police and makes abuse more likely.

More generally, when one considers the effects of profiling in the broader social context, one can identify costs beyond the private ones associated with a stop. In a profound recent study of racial inequality in America, Glenn Loury has argued that persistent inequality between blacks and whites may be understood as stemming from the effects of stigma on blacks. Loury (2002, pg. 9) defines stigma as

"...the identity unreflectively imputed to someone by observers who, not being privy to extensive idiosyncratic information, draw conclusions about a person's deeper qualities on the basis of easily observable indicators that may lie at hand."

In my interpretation of Loury's argument, stigma generates racial inequality because members of a society face a fundamental identification problem in evaluating issues associated with race, given the limited information from which such evaluations are made. Beliefs such as "blacks are less intelligent than whites partially due to genetic factors" may be nonsense from the perspective of the body of evolutionary biology but do not lend themselves to refutation given selective and limited observations on African Americans. Further, such beliefs can be self-perpetuating. If stereotypes about racial differences in intelligence contribute to lower educational attainment by African Americans, by discouraging African Americans from educational investment, producing disidentification of the type studied by Claude Steele (1997) and others, then the beliefs can be reinforcing.¹⁰

In this context, racial profiling may be argued to contribute to the promotion of racial stigma. By treating race as an appropriate criterion for policing decisions, the perception that crime and race are "fundamentally" linked is reinforced. The potential deleterious effects of thinking in categories have a long tradition in social psychology. The classic Robbers Cave experiment (Sherif et al (1961)), in which adolescents who were divided arbitrarily into groups developed intergroup prejudices and hostility is the most famous example of such research. The behavioral consequences of stereotyping have also been well documented; one interesting controlled experiment due to Rogers and Prentice-Dunn (1981) shows how angered whites will be more aggressive towards blacks than whites for the same "offense". Further, the perception of injustice in society by African Americans can be reinforced by the emergence of stigma, which will increase the costs of profiling.

Of course, there is no body of evidence that quantifies how racial profiling affects levels of racial stigma or how racial stigma affects African Americans. However, from the perspective of public policy analysis, the question is not whether one can design a sufficiently complicated set of laws that have efficiently decided which activities may and may not include profiling, in order to pursue the conflicting goals

¹⁰Notice that this is a somewhat different claim from standard formulation of statistical discrimination. In statistical discrimination models, beliefs about the stigmatized group are confirmed ex post in equilibrium. Here, the false beliefs produce outcomes that militate against their refutation, possibly due to identification problems. This is one reason why I believe Loury's notion of racial stigma is an important advance on statistical discrimination as an explanation of racial inequality.

facing a policymaker. If one is restricted to general legal principles, then a reasonable argument can be made that profiling should be ruled out in order to combat stigma.

iii. profiling as redistribution

In considering the different arguments on benefits and harms to profiling, it is worth noting that it is widely recognized that African American communities do not support racial profiling by the police. This means (if one takes these preferences as fixed) that it is highly likely that in a welfarist calculation, there will be tradeoffs between the welfares of blacks and whites under profiling. Since the Pareto improvement arguments cannot be invoked, one is left with the question of how to evaluate such tradeoffs. What makes such an assessment difficult is that one is in essence trading off the private harms to stops as well as stigma and respect for one group against lower susceptibility to crime (which will apply to both groups.) Hence, any welfarist argument for or against profiling will be sensitive to any implicit egalitarianism built into the social welfare function.

iv. evaluating welfarist claims

I conclude that there does not exist a strong welfarist argument for profiling. Does this contradict Risse and Zeckhauser (2004), who argue that in principle there exists a welfarist justification for profiling? While Risse and Zeckhauser agree that the case for profiling in traffic stops is weak due to a lack of evidentiary support, they present their analysis as a defense of profiling in some cases. In my view, their argument is, as an abstraction and given their assumptions, clearly correct. If one posits first, a welfarist objective and second, the possibility that the costs of profiling are plausibly small relative to the benefits, measured in terms of individual utilities, then it is necessarily the case that profiling may be justified in principle. However, I would argue that for the case under primary public policy dispute, traffic stops, these assumptions are highly questionable. There is no principled way to assign probabilities to the asserted costs and benefits since the empirical literature does not identify either

deterrence effects or individual and social harms. And to the extent to which one relies on "fuzzy" notions of the likelihoods of certain levels of costs and benefits, I disagree with qualitative claims made by Risse and Zeckhauser, notably on the likelihood that costs are small. This leads me to a different conclusion from Risse and Zeckhauser (2004). However, to say the case is weak does not mean that in an expected value sense, the net welfare benefits to profiling are low. What it means is that many of the factors that determine the welfare effects of profiling are not known to a policymaker. Whether this ultimately leads to a rejection of profiling will require some additional argumentation on how to assess "ambiguous" environments and is taken up in Section 5.

4. Deontological arguments

By deontological arguments, I refer to evaluations of profiling that are based upon ethical rules. These arguments also weigh against profiling as a policy. My argument in this section is that even if one sees a plausible welfarist argument in favor of profiling, ethical considerations exist that argue against it.

Deontological arguments may be subjected to the criticism that they may lead to violations of the Pareto principle. Sen (1970), for example, shows how the Pareto principle may conflict with individual liberties in a way that there exist configurations of laws that restrict liberties yet are unanimously preferred to any alternative in which these liberties are preserved. Kaplow and Shavell (2001) make a similar argument that deontological considerations such as a concern for fairness may lead to conflicts with the Pareto principle.

My view is that there is no reason why the Pareto criterion should be regarded as having some special, i.e. lexicographic, ethical standing. This is not to say that welfarist considerations should not be a primary consideration in evaluating policies, only that deontological considerations may play a primary role as well. Arguments in support of the primacy of the Pareto criterion imply a prior ethical judgment that there is no feature of social good outside the utilities of society's members. There is no reason why one need reject the existence of these other features. Hahn (1982, pg. 188) makes this argument as follows, in the context of the value of liberty:

"A social state is not fully described by me if I am only given the utilities of the agents in that state. I also need to know the liberty enjoyed by them. It follows that my ranking of social states cannot be of the form of the social welfare function whose arguments are only the utilities of individuals. If the utilitarian asks me why I should care about liberty over and above what is already recorded in the utility functions, I can answer that, for me, liberty is an intrinsic good just as for him utilities are intrinsic goods."

Suppose that an all-white society passed a set of laws that explicitly discriminated against blacks. Would these laws be unjust and could someone outside the society argue against them? I believe that the answer is clearly yes even though 1) no discriminatory consequences occur to any member of the society and 2) individuals may derive some utility from the existence of the laws.¹¹ Similarly, one could argue that one society is to be preferred relative to another due to the level of scientific and cultural attainments even if individuals in the other society are happier. These examples suggest why one might in principle decouple ethical considerations from unanimity. As noted above, following arguments such as Sen (1979), one can make elaborate arguments that factors outside of individual welfare are morally relevant in evaluating societal outcomes, even if one places positive weight on individual welfare.¹² An appealing feature of Hahn's formulation is that it recognizes that deontological considerations do not trump individual welfare considerations but that both are relevant in assessing policies. This idea that different ethical criteria should be simultaneously entertained in evaluating policies is discussed in great depth in Roemer (2003) in the context of redistribution.

¹¹This does not mean that the moral offensiveness of these is independent of the scope of their effect. By analogy, contemporary anti-Semitism in Japan is less offensive that anti-Semitism in France at least partially because of its irrelevance; my argument is simply that the discriminatory laws are unethical and that this is a basis for rejecting the laws.

¹² Without going into detail here, many of the objections to welfarism amount to rejecting the idea that a policymaker should judge the appropriateness of individual preferences. Sen (1979) gives a number of interesting examples.

In the context of profiling, the considerations that impinge upon any welfare calculation are those that derive from our notions of justice. Here, I will focus on a particular notion of fairness, one that may be linked to some of the conditional probabilities I have defined in Section 2. To do this, I argue that an appropriate fairness criterion for profiling may be derived from the notion of equality of opportunity, specifically as understood by John Roemer in a series of studies, cf. Roemer (1993,1998).¹³ Roemer makes the following argument. Suppose that society is considering an outcome such as education, and wants to determine whether the society provides equality of opportunity with respect to that outcome. Roemer argues that to do this, one must identify the determinants of the outcome and divide them into two categories: determinants for which an individual should be held responsible and determinants for which the individuals against harms that accrue due to those factors that they cannot control.¹⁴

Roemer's argument may be interpreted¹⁵ probabilistically as implying that equality of opportunity requires that the conditional probability of an outcome should only depend on those factors for which an individual is responsible. This general idea has straightforward application for the profiling problem since innocence and guilt are clearly characteristics for which an individual should be held responsible whereas race is clearly one that is not. In the profiling context, I will not refer to equality of opportunity but to fairness. For an innocent individual, complete fairness implies that the

¹³ Analyses such as Roemer's represent the modern philosophical effort to provide foundations to egalitarianism. Cohen (1989) is an excellent analysis of different approaches to egalitarianism, and well summarizes the egalitarian idea:

[&]quot;A person is *exploited* when unfair advantage is taken of him and he suffers from (bad) *brute luck* when his bad luck is not the result of a gamble or risk he could have avoided. I believe that the primary egalitarian impulse is to extinguish the influence on distribution of both exploitation and brute luck.

Cohen's notions of exploitation and brute luck are both involved in my discussion of fairness. Decomposing their respective roles is perhaps a useful subsequent exercise.

¹⁴Roemer recognizes that this distinction is not self-evident and needs to be adjudicated as part of a political process.

¹⁵I defend this interpretation in Durlauf (1999,2002).

conditional probability of the negative outcome of being stopped should not depend on his race.¹⁶

$$\Pr(S|I,W) = \Pr(S|I,B)$$
(8)

What implications does the fairness requirement (8) have for racial profiling strategies? This equality may be rewritten

$$\frac{\Pr(S|W)\Pr(I|S,W)}{\Pr(I|W)} = \frac{\Pr(S|B)\Pr(I|S,B)}{\Pr(I|B)}$$
(9)

or

$$\frac{\Pr(S|W)}{\Pr(S|B)} = \frac{\Pr(I|S,B)}{\Pr(I|B)} / \frac{\Pr(I|S,W)}{\Pr(I|W)}$$
(10)

In this expression, $\frac{\Pr(I|S,W)}{\Pr(I|W)}$ and $\frac{\Pr(I|S,B)}{\Pr(I|B)}$ represent the ratios of the conditional

probabilities of innocence given race and search to the probabilities of innocence given race. Therefore, it is possible for racial profiling to co-exist with fairness in the treatment of the innocent. However, any differences in search rates that are race-based are consistent with fairness if and only if they reflect differences in efficiency of search decisions, i.e. that for the race where the stops occur more frequently, there is better screening of the innocent from others. If there is no such information, then, each of these ratios equals 1 and fairness implies that regardless of the underlying innocence probabilities, the conditional probability of stops and searches should not differ across

¹⁶There is no guarantee that complete fairness can hold in a given context. Measures of the extent of violation of eq. (8), for example $|\Pr(S|I,W) - \Pr(S|I,B)|$, can, in principle, be used to assess degrees of unfairness for alternative policies.

race, i.e. equal accuracy in assessing guilt implies that stops and searches should be random with respect to race, i.e.

$$\Pr(S|W) = \Pr(S|B).$$
⁽¹¹⁾

If one accepts my definition of fairness, then it is straightforward to see why racial profiling may engender a basic tradeoff between fairness and efficiency. As illustrated by a comparison of (8) with (3), the fairness criterion may be inconsistent with targeting stops and searches in order to minimize the crime rate; the criterion is also inconsistent with (5), the criterion that differentiates statistical from other types of discrimination.

Do existing racial profiling practices in fact involve a violation of fairness? It appears that there is a prima facie case to believe the answer is yes. Knowles, Persico, and Todd (2001) results, for example, imply that the stop rates for innocent blacks must exceed whites given the oversampling of blacks unless Pr(I|B) > Pr(I|W), a condition that is implausible given the general tendency of crime rates to be higher among blacks than whites; this condition is of course inconsistent with the standard rationale for profiling made by its advocates. I am unaware of any evidence that (8) holds under profiling as has been practiced nor am I aware of anyone who has argued that the police are better able to identify black criminals than white ones when stopping automobiles, so that the profiling does not place a disproportionate burden on innocent blacks. For Knowles, Persico and Todd, Pr(I|B) would have to be over 2 times as large as Pr(I|W) in order for the profiling pattern they studied to be consistent with (8), which I believe can be ruled out.

Thacher (2002) makes a very similar argument to the one presented here. Following Dworkin (2000), he argues that "morally homogeneous" (Thacher (2002) pg. 8) groups should be stopped and searched at the same rate as violations of this would violate the principle that a government should "exhibit equal concern for each citizen's liberty," (Thacher 2002 pg. 10). This leads him to argue that stop and search policies should obey (8) as well as

$$\Pr(S|G,W) = \Pr(S|G,B), \qquad (12)$$

which equates stop and search probabilities among the guilty as well.

In my view, (12) is not necessary for fairness. Guilt is an illegitimate choice in a way that, say cigarette smoking is not, and impinges on an individual's claims on society. An individual can achieve equal treatment if (8) holds so long as he chooses not to commit crimes. This does not mean that violations of (12) cannot occur for unjust reasons; my claim is rather a violation of (12) is not by itself determinative of unfairness the way that (8) is determinative. If (12) differs because there is some exogenous reason why it is easier to detect guilty members of one group versus another (for example, because the poorer group invests less in efforts to avoid detection), then violations of (12) do not seem offensive. This is the corollary to the argument made above that fair stop and search policies need not equalize stop rates across races, as discussed in reference to eq. (10); differential rates are permitted because of differences in the accuracy of detecting criminals. On the other hand, if (12) is violated because of a disproportional interest in identifying guilty blacks, then fairness is a consideration that needs to be addressed. So, if the police invest in technology that allows identification of black criminals when investment in a different technology that allows identification of white criminals has been rejected for reasons unrelated to minimizing the overall crime rate, e.g. prejudice, then one can construct objections to the violation.

Put differently, the importance of fairness may be reasonably linked to individual responsibility. An individual's claims to fair treatment by a government can be conditioned on certain requirements for individual behavior, in this case, law abiding behavior. To see why arguments that ignore this can go awry, consider the issue of selective prosecution of war criminals. Browning (1992) studies a particular reserve army unit, Reserve Police Battalion 101, which was involved in civilian killings in World War II. Because the members of the battalion were primarily from the same city (Hamburg), the records for the battalion were unusually complete, so the German government was able to prosecute members of the battalion. Prosecutions of war criminals of this type were quite rare (Browning (1992, pg. 146)). Does the fact that

one group of soldiers was singled out for prosecution because of a factor that was not under their control (the fact that they happened to end up in this particular unit) relevant to their prosecution? Clearly not, since their actions determined their membership in the group, i.e. the decision to participate in war crimes.

This issue of illegitimate choice and claims to fairness leads to a final issue that needs to be addressed. To what extent should an individual be held responsible for his choices? This question is less trivial than it appears, as may be seen in Roemer's (1993) example of indemnification of individuals for the medical costs induced by smoking. Consider groups of smokers where the group is defined by characteristics that are not a choice variable, such as ethnicity. Roemer argues that if a majority of individuals in a group smoke, then society has an obligation to share medical expenses with the smokers in a way that it would not for a group where smoking is an outlier behavior. Roemer's idea is that the median behavior in a group reflects the factors to which group members have been exposed (e.g. role models, social norms, etc.) for which they cannot be held responsible.

I claim that whatever the strength of Roemer's approach, it does not naturally extrapolate to issues of the treatment of those who commit crimes. In contrast, consider the question of war crimes guilt. One of Browning's findings is that 80%-90% of the soldiers in Order Battalion 101 committed the war crimes when ordered to do so, and did so in the knowledge that they would not be punished for refusing. Does the fact that a majority engaged in the action have the same salience in terms of the appropriate levels of condemnation and punishment? Is the fact that a refusal to obey orders was an outlier behavior a mitigating factor? It is fair to stipulate that the answer is clearly no. The difference between this case and Roemer's is that the harms of cigarette smoking accrue to the smoker whereas the acts of members of the order battalion harmed others. So long as individuals are not automatons, society may reasonably expect them to overcome social pressure and influences to avoid clearly immoral acts. This matters for my argument as I have differentiated the innocent and guilty in terms of their claims to equally fair treatment by society; the argument I have made means their choice is morally relevant and thus allows one to differentiate between them. Of course, one

cannot equate drug possession with war crimes; my point is to show that there is no abstract reason why my differential treatment of the innocent and guilty is incoherent.

The upshot of this discussion is that the levels of $\Pr(S|I,W)$ and $\Pr(S|I,B)$ are the relevant objects in assessing the costs of profiling on individuals who have claims on full consideration by society; ceteris paribus, lower values for these probabilities are always preferred. Fairness is violated whenever $\Pr(S|I,W) - \Pr(S|I,B) \neq 0$, which will allow for partial orderings of different values of this difference. And as argued above, as an empirical matter it is reasonable to conclude that current profiling practices violate fairness.

5. The role of fairness in analyzing ambiguous environments

One way to interpret a number of my arguments is that there is substantial model uncertainty present in the analysis of the effects of racial profiling. The available data are consistent with models in which the disincentive effects of profiling are large as well as with models in which the disincentive effects are nonexistent. Arguments about the costs of racial profiling at best rely on essentially anecdotal claims about the harms that are inflicted on African Americans by stops and searches. From this perspective, there is an interesting parallel between the assessment of racial profiling and recent attempts in economics to deal with "ambiguous" economic environments, i.e. environments in which the true model of the economy is unknown and probabilities cannot be assigned to the possible models. Much of this work has focused on the case where the true model lies in some space of possible models, but where one cannot assign probabilities to the elements of this space and thereby engages in standard Bayesian decisionmaking under uncertainty.

One approach to resolving ambiguity is to adopt a rule for choosing a particular model to work within a model space. The best known approach of this type is the minimax approach where a policymaker assumes that the least favorable model among the elements of the model space is the "true" model and chooses a policy in response to that; this strategy has been adopted in work on macroeconomic policy evaluation, cf. Hansen and Sargent (2003). The minimax approach sets a lower bound on the losses a policymaker will incur. It is often criticized as excessively risk averse; other criteria such as minimax regret (cf. Manski (2004)), which argues in favor of decisions that minimize the cost of not possessing complete information, have been advocated. This amounts to another strategy for choosing a model in the model space and optimizing against it.

The evaluation of racial profiling is very much an example where one must engage in decisionmaking in an ambiguous environment as we have no basis for assigning probabilities to different potential values of the behavioral response probabilities Pr(G|W, Pr(S|W)) and Pr(G|B, Pr(S|B)), different levels of private and social costs to a stop and search, etc. Can recent work on decisionmaking under ambiguity be used to evaluate racial profiling?

For our purposes, it seems difficult to see how one could implement rules such as minimax or minimax regret to the profiling context. One reason for this is that the model space under which racial profiling must be characterized is not well defined. How does one incorporate potential stigma or abuse into the model space? How does one characterize the range of possible levels of emotional harm to profiling? Similar problems exist because of the absence of a clear preference ordering over the consequences of profiling. Even if the model space were clearly defined, in order to define the least favorable model or to define which actions minimize regret on the part of the decisionmaker one must specify how deterrence and fairness objectives should be traded off. Preferences defined over the outcomes associated with racial profiling are not readily quantifiable in the way, say, the objective of minimizing the weighted sum of the variance of output and inflation is for a monetary policy authority. Further, differences in preferences with respect to efficiency and ethical goals will render the reporting of an evaluation exercise problematic unless the full range of possible preference orderings is considered.

My analysis thus far suggests that there is an unambiguous ethical cost to profiling, violation of equal treatment of the innocent, which needs to be matched against the combined ambiguous deterrence effects and individual and social costs to stops. Assume that within the range of potential deterrence effects that it is possible that the deterrence effect is large enough to trump all other factors and justify profiling. Does the absence of precise information on the model space and associated probabilities of models being true mean that one simply has to conclude that assessments of profiling cannot come to a conclusion? I believe such a conclusion is overly pessimistic. As an alternative strategy for evaluating racial profiling given the ambiguous model uncertainty inherent in the problem, I propose an alternative strategy, one that represents a response to the nature of the competing objectives that are at the heart of the evaluation: ethics and efficiency in meeting law enforcement objectives.

In environments such as profiling, I propose that the ambiguity that attends the assessment of costs and benefits be adjudicated by a notion of *presumption*. By presumption, I mean that certain actions by the government should be presumed to be inappropriate unless an affirmative case is made in their favor. In particular, I would propose as an evaluative criterion what I term a Fairness Presumption:

A government policy that violates fairness in its treatment of individuals is presumed to be wrong and hence requires an affirmative defense. The burden of proof is on the advocate of the policy to argue that the violation meets other social goals in a way to overcome the violation.

The Fairness Presumption employs a number of terms whose content needs to be defined before it is operationalized. Most obviously, how does one characterize the burden of proof? In fact, I do not think explicit definition is necessary for purposes of assessing the notion of presumption in the abstract.¹⁷ What the definition requires is that an individual treat deviations from fairness as something that needs to be argued for. The purpose of the definition is not to resolve an issue, but rather to define a criterion by which one can structure a debate on the merits of a policy. Similarly, work on virtues of deliberate democracy, initiated by Habermas (1984,1987) and nicely surveyed in the essays in Elster (1998) supports the notion that just decisions are those that derive from an appropriately structured process of interchange and debate. The presence of a

¹⁷Further, legal systems employ different standards for the burden of proof according to context. The required evidentiary threshold is higher in criminal than civil cases, for example.

presumption for fairness structures policy debate in a way that treats individual equality as a primary good. Dworkin (2000) makes an elaborate argument on the primacy of equality in ethical analysis; in the narrow context of this paper Dworkin's argument justifies the Fairness Presumption although Dworkin would go much farther.

This approach to thinking about racial profiling implicitly moves us away from conventional decision-theoretic modeling to the more nebulous world of political debate. As such, it is consistent with some trends in political philosophy. Scanlon (1998) for example, argues that one way to identify immoral actions is to identify those that cannot be reasonably justified. This sort of argument attempts to derive moral conclusions on the basis of how rational agents with reasonable value systems will adjudicate issues. The Fairness Presumption makes explicit a "ground rule" for policy debate. The principle is a procedural one in that it means that for policy debates certain rules should exist to structure the resolution of disagreements. This has some relation to Hampshire (2000) who argues that justice in procedures is something on which a consensus may be formed on the basis of asking how disagreements may be rationally adjudicated and justice in substance, where disagreements are inevitable. Unlike Hampshire, I reject the clean division between procedural and substantive justice in that the rules of adjudication I propose embody substantive values. Unless the rules of adjudication embody some notion of what Nagel ((1979) p. 111) calls the "assumption of moral equality between persons," it is not clear that rational adjudication has any content; the value of my opportunity to make arguments presupposes that those sitting in judgment will care about them. As such, my approach addresses a criticism of Hampshire due to MacIntyre (2000).

The principle I have proposed gives a "weak" priority to fairness in that other factors may overcome it. For example, one can imagine cases where an increase in unfairness is reasonably justified via appeal to Rawls' difference principle, i.e. the decrease in fairness is justified if it improves the situation of the worst off person in society. Similarly, a welfarist calculation can be used to justify an increase in expected average utility even though it violates fairness. Whether an increase in unfairness can be justified using such arguments is context-specific. The key to the principle is that the burden of proof is on the advocate of a policy if it decreases fairness.

Nothing said here solves the problem of model uncertainty as it pertains to racial profiling or any other policy questions. Rather, I propose what I believe is a reasonable rule to help resolve the indeterminacy on decision evaluation that occurs in ambiguous environments. In some ways this strategy is similar to Bewley (2002) who argues in favor of an "inertia assumption" to resolve ambiguity; for Bewley, status quo behaviors are not altered unless there is a reason to do so. The Fairness Presumption can be interpreted in parallel as saying that one does not move from a more to less fair set of policies unless there is a reason to do so. It is not clear that one can do more than identify sensible principles when it is necessary to evaluate decisions in ambiguous cases.

Based on the Fairness Presumption, I conclude that the racial profiling in traffic stops and searches should be rejected as a law enforcement strategy. Nothing in the available empirical literature suggests, in my judgment, that the deterrence effects are plausibly large enough to meet what I regard as an appropriate level of burden of proof to overcome the clear violation of fairness that occurs in that innocent blacks are stopped and searched more frequently than innocent whites. I should reiterate that this argument is assuming that profiling violates (8), which in principle will not occur if due to differences in the ability of the police to identify the guilty by race, i.e. eq. (10); as argued before this case seems implausible.

6. Relation to other policies

In this section I consider how the arguments of this paper relate to analyses of other policies that involve conditioning on race: anti-terrorism profiling and affirmative action. My intent is not to explore either of these difficult issues in detail but rather to indicate links between my analysis of profiling and how one might analyze these questions.

i. anti-terrorist policies

One reason why discussions of racial profiling are topical concerns the role of profiling in the war on terrorism. Do my arguments against profiling in police stops and searches have force in anti-terrorism contexts? I believe that any analogies that may be drawn are weak, so that one can oppose profiling in traffic stops and consistently support some forms of profiling in anti-terrorist conflicts.

First, the cases fundamentally differ in terms of potential benefits. As I have emphasized above, assessment of racial profiling must be done in context in order to assess costs and benefits to individuals and in terms of tradeoffs between individual welfare and other social objectives. There is self-evidently a stronger case for profiling young Arab men stopped in vans in the vicinity of nuclear plants based upon potential harm relative to racial profiling in traffic stops and searches.

A second important distinction between the two traffic stop and terrorism cases lies in the extent to which profiling will be efficacious in affecting crime. One of my objections to racial profiling is the absence of any evidence that profiling in traffic stops is efficient in terms of combating crime. This latter argument was based on the claim that the only nontrivial effects of traffic stops on drug trafficking is via individual incentives, something for which we have no evidence. In contrast, in the case of nuclear plants, the individuals subjected to profiling will include a nontrivial part of the potential criminal group, so the issue is stopping the particular individuals rather than inducing disincentive effects for a larger population of potential criminals. The case that profiling will reduce the probability of a successful terrorist strike against a nuclear plant would seem to be much stronger.

Further, it is difficult to see how the harm to individuals who are investigated in the nuclear power plant case is likely to be high. The activity is easily avoided in a way that use of public highways is not. In addition, this narrow context makes it relatively unlikely that the group of young Arab men would suffer general stigmatization if profiling is limited to very specific contexts such as this.

Generally, defenses of profiling in traffic stops that employ analogies to terrorism fail because the costs and, especially, benefits are of different orders of magnitude. The fact that the press may be prohibited from publishing war plans has little bearing on other cases where the government attempts to exercise prior restraints on

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freedom of the press. Of course, none of this in any way justifies (or condemns) profiling of Arab Americans as is currently practiced by law enforcement.

ii. affirmative action

Affirmative action policies raise fairness issues that are closely related to those discussed in Section 4. After all, interpreted in its starkest form, affirmative action policies involve adding race as a conditioning variable for some outcome such as college admission or employment. The affirmative action context in fact is useful in clarifying the difficulties that exist in operationalizing a concept such as the Fairness Presumption. To see this, consider the case of college admissions. Letting *A* denote admission, one might initially start with the notion that race should not have any bearing on admissions, so that

$$\Pr(A|B) = \Pr(A|W).$$
⁽¹³⁾

Clearly, this definition of fairness is inadequate as it fails to account for past academic achievement; this corresponds to the idea that admissions are a reward for accomplishment and so captures intuitions that surround the idea of merit. If we define past academic achievement as P, then one might wish to use a definition such as

$$\Pr(A|B,P) = \Pr(A|W,P).$$
(14)

However, once one thinks about past academic achievement, then additional problems arise. Suppose that a black student has attended an inferior school, something for which he is obviously not responsible. One might want to only condition on the component of past academic achievement that reflects effort E. But if we modify the definition so that

$$\Pr(A|B,E) = \Pr(A|W,E)$$
(15)

other problems arise. If stigma has affected a student's past effort, then the variable for which we hold an individual responsible is partly determined by a factor outside his control. The only point I wish to make here is that affirmative action is a morally complex problem, so much so that it is difficult to draw easy inferences as to what constitutes fairness Roemer (1993,1998) specifically argues that this is to be expected: disagreements about the appropriate conditioning factors in assessing fairness are inevitable. However, traffic stops do not seem to involve additional factors in the way that, say, college admissions and affirmative action do. So, I see no strong reason to believe that opposition to profiling traffic stops imposes any constraints on one's views concerning affirmative action.

7. Conclusions

My basic conclusion is simple: when assessed by welfarist and/or deontological arguments, the overall case in favor of racial profiling in traffic stops and searches is very weak. The welfarist argument, that racial profiling reduces crime rates, has not been established empirically; studies of guilt rates and race do not identify the deterrence effects from the policies. Retribution arguments, in the context of traffic stops appear to be second-order in comparison to deterrence. In addition, there are no good reasons to believe that the harms of profiling to African Americans are minor when considered either from the perspective of individual stops or the associated stigma that may be produced by a profiling policy. From a deontological perspective, racial profiling violates an appealing notion of fairness: the equal treatment of the innocent. Moving from individual to social harms, I argue that profiling can be contributory to stigma against blacks. This leads to a situation where, based on current information, one is trading an ill-defined (in a probability sense) degree of deterrence against a principle, namely fairness. I argue that a presumption should exist against implementing policies that violate fairness, so that the appropriate public policy conclusion is that profiling is unjustified.

One weakness of this discussion is the lack of attention to alternative policing strategies and crime patterns. To see how the first matters, part of Kennedy's (1997) objection to profiling is that the police can find alternative strategies for choosing who to stop and search, strategies that do not require conditioning on race. Kennedy does not provide specific discussion of alternative strategies and I am unaware of any author who does. Nevertheless, the case for profiling will be correspondingly weakened if Kennedy is correct. A proper analysis of profiling requires a full specification of the strategy set available to police, which suggests a useful area for research. Similarly, my discussion does not address the issue of opportunity cost with respect to police resources.

As for crime patterns, one can imagine that complicated issues of fairness arise when there are correlations between the race of an offender and the race of a victim.¹⁸ My analysis has assumed that the aggregate crime rate is a sufficient statistic for understanding the rate of individual victimization, *V*. Suppose that black and white criminals tend to affect members of their own racial groups. If a policymaker is interested in fairness in the allocation of police resources from the perspective of equalization of vicitimization probabilities, i.e.,

$$\Pr(V|I,W) = \Pr(V|I,B)$$
(16)

then one could imagine a defense of profiling that derives from this. To be clear, there is no reason to believe (and Randall Kennedy's argument would militate against it) that profiling, as opposed to other policing strategies, is required for fairness with respect to victimization. But it is important to recognize the possibility that different notions of fairness (in this case equality in stops and searches of the innocent versus equality in victimization of the innocent) may prove to conflict with better knowledge of the determinants of crime. I conjecture that the analysis of the Fairness Presumption in cases such as this would require that a hierarchy of fairness claims be developed in which one considers first the direct effects of policy on fairness (in this case, effects of the strategy on the innocent) and then the indirect effects (in this case, effects of the strategy on crime rates) that reflect the differential knowledge available in assessing direct versus indirect effects. In other words, I conjecture that there exists a hierarchical structure to presumption; the burden of proof is on the proponent to show that a policy promotes fairness indirectly when its direct effects reduce fairness. Development of this argument is part of future work.

To conclude, one interpretation of this essay is that what is needed is better evidence on the effects of profiling strategies on individual decisions, which means either the construction of new data sets and/or econometric methods that allow a researcher to identify (at least partially, in Manski's (2003) sense) deterrence effects. Similarly, we have very little firm evidence on the effects of a stop and search on the well being of a motorist. Many of the arguments I have presented concern the plausibility of empirical claims that have been made by others or appear to be necessary to justify profiling and typically my conclusion has been that these claims are little more than assertions. For this reason, my conclusions should be read as contingent on our current ignorance.

¹⁸I thank Petra Todd for stimulating this line of argument.

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