Minority Voting Equality: The 65 Percent Rule in Theory and Practice

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*In order to provide minorities with a realistic opportunity to elect candidates
of their choice, an apparently obvious step is to create districts in which the
minority equals half the population. A number of factors, however, make this
a false equality. As a consequence, courts have used a "65 percent" rule,
suggesting that equality of the voting population is achieved only when the
overall population of a district is nearly two-thirds minority. We distinguish
between this "equalization percentage" and the percentage needed to create a
"safe" seat. We show that for blacks "equalization percentages": 1) are almost
never as high as 65 percent; 2) vary widely across time and space; 3) have
declined somewhat in the 1980s; 4) vary sharply between primaries and general
elections; 5) are affected most heavily by the proportion of minority
populations that is of voting age (or noncitizen) rather than by differences in
registration and turnout. Election results further caution us that even when
numerical equality in the voting population is appropriately calculated, such a
population proportion is not always sufficient to elect minority candidates
because of incumbency effects and differentially polarized voting. We argue
that both packing blacks into overwhelmingly black districts and ignoring less
tangible factors that hinder black electoral success are extremes to be avoided.*

Having laid to rest many of the questions about equal population, the
courts have spent much of their time in the last decade confronting issues of
minority vote dilution. In cases arising out of the 14th Amendment, the
1965 Voting Rights Act, and the 1982 revisions of the Act, courts have had
to confront numerous questions about potential biases in the electoral
process generally and in the drawing of district lines specifically. One of the
general questions to arise is how to provide minority voters with an
opportunity to elect candidates of their choice without at the same time
"packing" them into districts in a way that dilutes their votes.

The basis for the problem is the frequent observation that minorities
customarily vote at lower rates than do whites (Anglos) and have other
characteristics affecting the proportion of the total population that votes
(e.g., minority populations often have more persons not of voting age and

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may have a higher proportion of noncitizens). It follows that creating districts in which a minority group has a simple majority of the population will not necessarily create a realistic chance of electing a representative who is the choice of the minority community even if voting is strictly polarized along racial/linguistic lines.

In response to the problem, courts have adopted a "65 percent rule," especially in connection with districts potentially dominated by blacks. The 65 percent rule states that barring exceptional circumstances, a district should contain a black population of at least 65 per cent (or a voting age population of at least 60 percent) to provide blacks with an opportunity to elect a candidate of their choice. The belief is that if blacks make up 65 per cent of the *total* population, half of the *voters* will be black, thereby giving them an equal chance to elect a candidate of their choosing. Also implicit in the rule is the further assertion that to place larger proportions of blacks in districts may be to pack them in a way that dilutes their voting strength. Creation of districts that are not unnecessarily one-sided might "free" enough minority voters to form one or more additional districts in which blacks have an opportunity to elect candidates of choice. Minimally, it would extend the influences of blacks to additional districts.

Unfortunately, the 65 percent rule has become enshrined in court lore when in fact it was all along only a first approximation based on almost no hard evidence. Moreover, few seem to know the dubious origins of the rule; courts have only occasionally recognized its fragility; and social scientists have seldom had the data with which to shed additional light on the subject.

In this paper we first review the history of the 65 percent rule (Section I) and the simple algebraic model that implicitly underlies it (Section II). After briefly explaining how data requirements make research about the rule difficult, we utilize a unique set of data from four cities to test whether 65 percent is indeed an appropriate "equalization percentage" (Section III). Our analysis is intended as a guide as to how "effective voting equality" should be calculated in specific circumstances in the future; while our data suggest that for blacks 65 percent is often too high a figure, analysis also shows that no single number is appropriate at all times and places. Moreover, supplementary data from one of the cities add a cautionary note to a too simplistic interpretation of the basic calculations (Section IV). In particular, factors such as incumbency, limited access to campaign resources, and differential rates of polarized voting may make it impossible for minorities to elect candidates of choice even in districts in which minority voters are equal in number to white (Anglo) voters on election day.

We conclude on a more normative note by considering competing concepts of minority vote dilution along with the implications for minority political power of the creation of districts with large concentrations of minorities (Section V). We also argue that it is necessary to distinguish between the "equalization percentage" and the "safe-seat" percentage and that these two concepts have often been conflated despite their very

different normative implications. In an appendix we consider the methodology used in generating the data needed for the basic calculations we discuss.

I. THE ORIGINS OF THE 65 PERCENT RULE

In cases dealing with minority vote dilution, courts have confronted the question of what level of black or Hispanic population is sufficient to provide the group with a "realistic opportunity to elect officials of their choice. . . ." (*Kirksey v. Board of Supervisors of Hinds County Mississippi*, 1977, 676). This percentage has been called the "effective majority." In determining what constitutes an effective majority, or the "equalization percentage" as we shall call it, courts have tried to avoid both the Scylla of districts with insufficient minority population and the Charybdis of districts in which minority voting strength has been "packed" in a dilutive fashion.

Beginning with *Kirksey* in 1977, a rule of thumb has evolved that sets a 65 percent minority population as the basis for an effective majority. The 65 percent rule has been claimed to have the support of the Justice Department and to have been given the imprimatur of the U.S. Supreme Court in *United Jewish Organization of Williamsburgh v. Carey* (1977). Neither of these assertions is correct. In *UJO* the Supreme Court held that the Justice Department had the authority (under Section 5 of the Voting Rights Act) to deny preclearance to a plan with insufficient Hispanic concentrations in certain districts in Brooklyn on the grounds that the plan failed to provide Hispanics an opportunity to elect candidates of their choice. *UJO* did not suggest that the 65 percent rule is appropriate in all circumstances. Indeed, there is no discussion in *UJO* of the empirical basis for the choice of the 65 percent figure. In fact, the rule in that case rested on shaky empirical grounds.

Legend has it that the rule came about because someone in the Justice Department took 50 percent and simply added 5 percent to compensate for the higher proportion of Hispanic noncitizens, 5 percent for lower Hispanic voting age population (VAP), and 5 percent for lower Hispanic registration and turnout. The Justice Department evidently developed this rough approximation in consultation with attorneys for the NAACP Legal Defense and Educational Fund (Eric Schnapper, personal communication June 1980—Mr. Schnapper was one of the attorneys on the NAACP amicus brief in *UJO*).

Current Justice Department officials (see the Solicitor General's brief in *Ketchum v. Byrne*, 1984) do not regard the 65 percent figure as having any special significance. Rather, each case is to be investigated in terms of the facts special to it (Paul Hancock, U.S. Department of Justice, Voting Rights Section, personal communication, October 1986). In *Kirksey* there

was in fact a solid statistical basis for an adjustment for VAP.[1] But in no way was that correction, much less additional corrections for registration and turnout, intended as appropriate for all times and places (James Loewen, personal communication, June 29, 1987. Mr. Loewen was one of the expert witnesses in *Kirksey*).

Nevertheless, through repetition and misreading of the early cases, the 65 percent rule has become enshrined in court lore and now appears nearly engraved in concrete. According to *State of Mississippi v. United States* (1979), for example, "[I]t has been generally conceded that, barring exceptional circumstances such as two white candidates splitting the vote, a district should contain a black population of at least 65 percent, or a black VAP (voting age population) of at least 60 percent to provide black voters with an opportunity to elect a candidate of their choice." In *Ketchum* (1984: 1413) the U.S. Court of Appeals (7th Circuit) asserted "that the experience of many redistricting plans has lent weight to the understanding that some form of corrective . . . should be employed as a guideline in defining a minority district," citing 65 percent as a "frequent" figure. The court gives as its reason for this assertion that "just as minority groups have a younger-than-average-population, they also generally have lower vote registration and turnout characteristics" (1413). Later the court went even further, claiming that the 65 percent rule (or its equivalent) "has achieved general acceptance in redistricting jurisprudence" (1414) and that "numerous courts have either specifically or tacitly approved use of this 65 percent figure" (1415).[2]

While we share the appellate court's view in *Ketchum* that various features of minority communities may require a minority population of above 50 percent to provide an effective majority, we do not share the belief that there is anything special about the 65 percent figure. In our view it is sometimes too high and (especially for Hispanics) sometimes too low. We believe that it is necessary to take very seriously that court's observation that with "emerging changes in sociological and electoral characteristics of minority groups and broad changes in political attitudes, . . . the 65 percent figure . . . should be reconsidered regularly to reflect new information and new statistical data" (1416). We also believe that it is useful to take into account, at least at the margins, factors such as the presence of incumbents, and the probable access of black candidates to campaign finances and other campaign resources.

The question of what constitutes an effective majority is important under virtually any of the several different operationalizations of the concept of minority dilution. For example, while fragmentation of a coherent and reasonably large geographically defined community of a protected minority group, when coupled with other factors such as a history of racial/linguistic discrimination and racially divisive election campaigns, may be sufficient to establish prima facie evidence of discrimination (see, e.g., *Major v. Treen*, 1983; *Rogers v. Lodge*, 1982; *UJO v. Carey*, 1977), the need to look at

remedies indicates that the fragmentation standard may have to be supplemented by a test for effective voting equality when the choice is between a plan that creates a certain number of districts with a minority population only barely above 50 percent and one that creates safer (but perhaps fewer) minority districts.

Similarly, although effective equality is not explicitly part of the nonretrogression test for minority vote dilution,[3] which holds that there be proportionally at least as many districts after redistricting as there were before in which minority citizens can be assured of electing a candidate of their choice, a determination must be made of which districts are minority-controlled in order to apply the test. Thus, in this test, too, factors to be considered are analogous (but not identical) to those involved in determining effective voting equality.

We now turn to the presentation of a simple algebraic model to calculate the minority population needed for an "effective majority."

II. OPERATIONALIZING EFFECTIVE VOTING EQUALITY

As we noted at the outset, even if minorities constitute 50 percent of the overall population in a district, they may not make up 50 percent of the voters. There are four key reasons: (a) there are typically more *aliens* among minority (especially Hispanic) populations; (b) the *voting age population* is typically a lower proportion of the total population among minorities; (c) *registration* rates are often lower among minorities; and (d) *turnout* rates are often lower among minorities.[4]

Assuming we have appropriate data (see below), it is a straightforward operation to "correct for" these factors (i.e., to equalize majority and minority voting power). First, let us take the differential age composition of whites and blacks.[5] Obviously, if a greater proportion of the black population is under the age of 18 than is true for the white population and if the overall black and white populations are equal in size in a given district, then whites will have a higher proportion of age-eligible voters than will blacks. What we wish to find is the black proportion of the *total* population of the district that makes the *voting age* population (VAP) 50 percent (i.e., equivalent to the voting age population of whites). Intuitively, the answer will be above 50 percent; i.e., because blacks have more children, the total black population must be somewhat greater than 50 percent if the VAPs of blacks and whites are to be equal.

Mathematically we can find the answer as follows. Let

> M = the proportion of the district's total population (all ages) that is minority
>
> W = 1 − M = the proportion of the district's total population that is white

A_1 = the proportion of the minority population that is age-eligible to vote (18 or older)

A_2 = the proportion of the white population that is age-eligible to vote

Therefore,

$M(A_1)$ = the proportion of the total population that is minority and age-eligible   (1)

$(1 - M)A_2$ = the proportion of the total population that is white and age-eligible   (2)

We want to find out what value of M is needed for (1) and (2) to be equal. Algebraically, we set them equal and solve for M. Four steps yield:[6]

$$M = A_2/(A_1 + A_2)$$

Thus, for example, if 60 percent of the whites and 50 percent of the blacks are of voting age,

$$M = .60/(.60 + .50) = .5454$$

or 54.5 percent. In other words, if 54.5 percent of the total population of the district is black, whites and blacks will have equal voting age populations.

The same sorts of calculations can be applied using the other elements that contribute to turnout. All we need to do is substitute the proportions of the black and white populations that are registered (or turn out to vote or, in the case of Hispanics, the proportions that are nonalien) in place of A_1 and A_2. Moreover, by proceeding in sequence from percent voting age to percent registered to percent voting, we can determine the relative effect of each of these factors (as we shall do in Section III). We can also modify the calculations so that they are based on VAP rather than total population (i.e., the "correction" for differential VAPs is already taken into account). This would be useful in a practical sense if published data are expressed as proportions of VAP.[7]

In the next section we will utilize these simple calculations to analyze data from four cities in which litigation has recently occurred.

III. EFFECTIVE VOTING EQUALITY IN FOUR CITIES

Although the model outlined above is straightforward, it is difficult to find the necessary data to which it should be applied. The racial/linguistic composition of the total population is available for Congressional districts, but figures on voting age population, registration, and turnout, even if available for the total population, are not typically broken down by race/language. For state legislatures and municipal offices, even the racial/linguistic composition of the total population may not be available. In the

absence of a ready supply of appropriate data, we begin by briefly considering VAP, registration, and turnout statistics for the nation as a whole. While these calculations are meaningless for purposes of redistricting, they permit us to be somewhat more confident of the conclusions derived from the analysis of the four cities that follows.

We then turn to data from four cities in which (a) census population information has been converted into precinct information so that total populations and VAPs could be calculated for blacks and white separately for each relevant jurisdiction; and (b) statistical analysis has been done yielding estimates of registration and turnout by race for each area. (Details of these procedures are given in the Appendix.)

Beginning with the national data, in Table 1 we show, for a 20 year period, what percentage black the U.S. population would have had to be in order for there to have been equal white and black VAPs, numbers registered to vote, and number of voters. Not surprisingly, there is a fairly strong downward trend, though the largest changes have occurred in the last several elections. It is also true that in off-year elections proportionately fewer blacks vote, thereby raising the equalization percentage. An obvious interpretation is that the equalization percentage will generally be higher in low salience elections, an interpretation we shall test more fully below.

Aside from these changes across time, two aspects of Table 1 are most significant. First, all of the percentages required to equalize white and black turnout are below 62.1 percent—even those from the 1960s. One cannot so easily find empirical justification for using a figure of 65 percent as a general rule. Moreover, the recent changes indicate important variations across time, and we shall see wide variations across space as we turn to data

Table 1. Black Percentage of the Overall Population Needed to Equalize White and Black Subpopulations, United States, 1966–1984

| Year | Percentage Needed to Equalize | | |
	Voting Age Populations	Number of Registered Voters	Number of Voters
1966	54.4	58.6	62.1
1968	54.6	57.8	58.9
1970	54.4	57.7	60.6
1972	53.7	56.5	59.0
1974	53.9	57.2	61.3
1976	53.5	57.4	59.0
1978	53.5	56.2	59.4
1980	53.5	56.7	58.2
1982	53.2	55.8	56.9
1984	53.0	54.2	55.3

Source: Calculated by the authors from figures in U.S. Bureau of the Census, *Current Population Reports*, Series P.25, "Estimates of the Population of the United States by Age, Sex, and Race" and Series P.20 "Voting and Registration in the Election of . . .", Washington: U.S. Government Printing Office, various years.

from four cities. Second, in 1984, the factor most accountable for equalization percentages above 50 percent was differential VAP. In the nation as a whole, voting-age blacks registered and voted at rates not too different from voting-age whites. If this situation continues, then once the difference between the age distribution of blacks and whites is taken into account, the proportion of blacks among those registered to vote and the proportion black among actual voters are likely to be very similar. There has been, however, only a minimal decline in the adjustment needed to equalize VAPs. Blacks are still on average considerably younger than whites, with a higher proportion of the population below voting age.

In Table 2 we present equalization percentages for Boston, Charleston, Chicago, and Norfolk.[8] The periods and elections covered vary considerably, depending on what data were collected in connection with court cases in those areas, but collectively they are highly revealing. In each city, only one correction was made for voting age population because the database on which the figures are calculated began with the 1980 Census tape. However, since relative proportions of voting age populations are not likely to change much even over a decade, this simplification leads to only minimal distortion.

Note, first of all, the wide variations across time and space. Even if we restrict our attention to general elections, the minority percentage required to equalize numbers of registered voters varies from 60.2 percent (Norfolk, 1979) to 51.0 percent (Charleston, 1982, Chicago, 1982), and the percentage needed to equalize turnout varies from 63.8 percent (Norfolk, 1974) to 50.7 percent (Norfolk, 1982). No single number adequately characterizes all equalization percentages. It is hard even to characterize one city or another as having consistently high or low percentages.

Nor do we see systematic differences in equalization percentages between national, state, and local elections. Variations of this sort might arise if racial differences in registration and turnout were greatly affected by the salience of elections. That is, we might think that lower stimulus elections, such as most mayoral and city council races, would not only depress turnout in general but also specifically depress black turnout relative to white turnout. The evidence, however, is mixed. In Chicago, racially divisive elections in 1983 led to extraordinarily high levels of turnout by both blacks and whites. In other instances, what is typically the lower stimulus election may have actually been the more important one because of a perceived threat of black dominance, because of the presence of specific black candidates, or, in the case of primaries, because one-party dominance makes them the real contest. In any case, the point is that even if one limits consideration to a particular class of elections, a 65 percent or other such rule is not generally applicable.

As in the national data, the highest percentages—e.g., most of those over 60—occur in the earliest years shown. Similarly, the lowest percentages occur in very recent elections, especially those of 1982 through 1984. The

Table 2. Minority Percentage of the Overall District Population Needed to Equalize White and Minority Subpopulations, Selected Elections in Four Cities

Type of Election, Year, and Race	Percentage Needed to Equalize		
	Voting Age Populations	Number of Registered Voters	Number of Voters
General Elections			
Boston			
1983 Mayor	56.1	58.2	59.3
Charleston			
1978 Sec. of State	54.3	51.9	52.2
1980 President	54.3	53.7	55.6
1982 Governor	54.3	51.0	51.0
Chicago			
1980 State's Attorney	56.3	55.6	60.2
1982 Governor	56.3	51.0	53.9
1983 Mayor	56.3	51.5	52.4
1984 President	56.3	52.2	55.9
Norfolk			
1974 City Council	54.1	58.2	63.8
1975 H. of Delegates	54.1	60.0	59.5
1976 City Council	54.1	59.7	56.7
1977 H. of Delegates	54.1	59.3	59.7
1978 City Council	54.1	60.0	55.6
1979 H. of Delegates	54.1	60.2	56.1
1980 City of Council	54.1	59.7	55.0
1981 H. of Delegates	54.1	58.8	56.3
1982 City Council	54.1	58.3	50.7
Primaries			
Boston			
1983 Mayor	56.1	59.2	60.5
Charleston			
1978 Sec. of State	54.3	52.8	35.9
1980 President	54.3	53.1	39.6
1982 Governor	54.3	51.7	19.7
Chicago			
1975 Mayor	56.3	58.5	64.3
1977 Mayor (spring)	56.3	56.7	68.3
1979 Mayor	56.3	57.3	63.6
1980 State's Attorney	56.3	56.3	59.0
1983 Mayor	56.3	51.7	53.9
1984 President	56.3	53.9	51.9
Norfolk			
1979 H. of Delegates	54.1	60.6	46.8
1981 H. of Delegates	54.1	60.2	41.2

Source: Calculated by the authors. Data base described in Appendix.

1980s' changes came about primarily because of increased black registration. In Chicago, for example, the rate of white registration was regularly greater than that of blacks in the 1970s. Beginning in 1980, however, blacks moved ahead of whites, marginally at first, and then by almost 20 percent at the time of the 1983 mayoral election. In Table 2 this appears in the form of reduced percentages needed to equalize the number of registered voters. In a

few instances—e.g., Norfolk in 1982—registration rates changed little, but heavier turnout by blacks resulted in a lowering of the percentage needed to equalize numbers of blacks and whites actually voting. The point, in any event, is that equalization percentages are neither invariant across time nor characterized by a simple trend.

Aside from these points, there are two dramatic observations about the results in Table 2. First, only one of the 29 percentages required to equalize turnout *(none of the general elections and one of 17 in general elections)* reaches as high as 65 percent. While less tangible factors still have to be considered (see below), on the basis of VAP, registration rates, and turnout, the 65 percent rule for the overall minority population codifies an exception rather than the norm. Second, the only factor that consistently raises equalization percentages is the difference in black versus white voting age populations. When registration and turnout rates are added, equalization percentages _often rise very little or even decline, signifying that black registration and turnout rates are comparable to or above those for whites. In fact, it is likely that in the near future there will be general elections in which blacks have more than 50 percent of the voters with less than 50 percent of the overall district population.

The final point worth noting in Table 2 is the obvious difference between primaries and general elections. The explanation for the low equalization percentages in certain primaries is straightforward. All of the primary elections in Table 2 are Democratic primaries, and the proportion of blacks going to the polls is often greater than the proportion of whites simply because whites are often Republican. Thus, for example, in Charleston in 1980, whites registered slightly more often than blacks (lowering the equalization percentage for registered voters 2.6 percent), but 42.5 percent of blacks and only 17.3 percent of whites voted in the Democratic presidential primary. The turnout difference lowered the proportion needed to equalize turnout some 32.0 points (Table 2). What may in fact be more surprising is that there are instances, in spite of differing partisan preferences, in which the proportion of whites voting in Democratic primaries is greater than the proportion of blacks. This was especially true in Chicago, where even in the 1984 presidential race it would have taken a black population of more than 50 percent to equalize primary turnout. Of course, if voting is along racial lines and blacks are outnumbered in the general election, *it does them little good to control the Democratic primary.*

As noted above, there are other factors that can be taken into account in figuring equalization percentages. One of these is seldom considered but is easily incorporated into the framework we have adopted so far. "Roll-off" occurs when voters fail to vote for offices below that at the top of the ballot. It is likely that this will occur disproportionately among less involved voters and may consequently alter the percentage needed to equalize the number voting for a particular office. In Chicago, the only city for which we have the relevant data, black roll-off was indeed higher than white roll-off,

typically by two to five percent. To equalize the numbers of blacks and whites voting for lower offices, one might therefore have to raise the percentages found in Table 2 by about one percent.

IV. GOING BEYOND NUMERICAL EQUALITY?

While there is consensus in the court cases that the definition of effective voting power should take into account differential age and citizenship of minority and nonminority populations, there is some dispute as to whether it is necessary to take into account lower minority registration and turnout figures if these cannot be attributed to lingering effects of past discrimination. There is also considerable disagreement about whether incumbency, access to campaign funds, and other such factors should be taken into account in determining what minority population is substantial enough to allow group choice to be effective. There is also dispute about whether the degree of racially polarized voting and the feasibility of electoral coalitions are important.[9]

Also at stake is whether a realistic chance of electing candidates of their choice means "competitive" seats or "safe" seats. The *Beer* test requires that the proportion of districts that are in the control of minority voters not be decreased, i.e., that the proportion of minority safe seats not be reduced. Similarly, minority groups and especially minority incumbents often advocate maximizing the number of minority safe seats. Such an objective will, however, often conflict with the objective of maximizing the number of districts in which minority voters have effective voting *equality*, i.e., in which minority citizens have an equal chance of electing candidates of their choice. For minorities to have certain victories, some minority voting strength must be "wasted" by creating districts that are overwhelmingly minority in nature.

Thus an important follow-up to the results of the algebraic model of the previous section is to ask whether the creation of districts in which there is black-white equality (whether of VAP, registered voters, or actual voters) results in the election of black candidates.[10] The presence of white incumbents alone suggests that equality, even of actual voters, is unlikely to translate into the immediate election of blacks (though increasingly the presence of minority incumbents should also be taken into account—Hedges and Carlucci, forthcoming). In addition, differences in access to campaign funding, lack of experienced candidates and campaign organizers, potential difficulties in campaigning in white areas, and lack of skill in dealing with the media may all make it difficult for blacks to win. Grofman (1982), for example, found that in New York City, state assembly, state senate, and congressional districts often failed to elect blacks even in districts with minority populations above the percentages needed to equalize turnout.[11] The single most important factor appeared to be white incumbency. When

there are white incumbents, the proportion of whites who vote for the white incumbent exceeds the proportion of black voters who vote for the black (or black-supported) challenger.

We are able to consider the same question using data from Boston's city council elections of 1984–85 and Chicago's aldermanic elections of 1983. Unfortunately for research purposes, there were only a few districts with black populations in the most meaningful range. In Boston, two districts had total black populations of 82 and 66 percent; both elected black council members. (The remaining seven districts all had black populations under 15 percent.) In Chicago, there were 15 districts with total black populations of 79 percent and up and 31 with black populations of less than 47 percent; all of the former and none of the latter elected blacks (though a number of the latter elected Hispanics). That left four districts, with black populations of 58, 60, 62, and 75 percent.

In Table 3 we show details about those four districts. The most heavily black of these districts returned a white, but that was due to a good deal of support from both blacks and whites for an avowedly liberal incumbent. The most telling districts, therefore, are the three with about 60 percent black populations. Based on our earlier calculations of equalization percentages, all of these districts had large enough minority populations that blacks should have had a reasonable opportunity to be elected. Because registration and turnout among blacks was high, total populations of as little as 52 to 56 percent should have been sufficient (Table 2). Yet blacks were elected in only one of these districts. Again, the presence of white incumbents was a critical factor, giving rise to a large difference between the level of white support for white incumbents and black support for black candidates; hence, even with a larger black than white voting age population, black supported candidates lost, except in the one district in which a sizable portion of whites consisted of relatively low turnout Hispanics.

Thus, while additional supportive evidence is desirable, it seems clear that equalization percentages calculated as above are a *conservative* estimate of

Table 3. Representation in Chicago Districts with Total Black Populations of 55–75 Percent

Ward	Total Black Population	Black Voting Age Population	Alderman	Race
5	75.4%	71.9%	Bloom	White
37	61.7%	56.2%	Damato	White
15	60.1%	52.6%	Brady	White
7	58.4%	58.0%	Beavers	Black

Note: Districts 37 and 15 were among the wards in which special elections were held in March, 1986, after redistricting. With populations of 81 and 74 percent, respectively, they both elected blacks.

the population actually needed to elect a minority representative. Districts with black populations of the calculated size may elect a black, as in District 7. But they may very well not, as in Districts 15 and 37.

These final data, then, suggest that just as the 65 percent value cannot be consistently relied on, any such number for the size of the effective majority—even one calculated with recent, local data—must be carefully interpreted and used. Mechanical application of the mathematics of equalization can in some sense guarantee an equal opportunity to elect a candidate of choice, but it will not guarantee minority or minority-supported representation. Less tangible but equally powerful aspects of campaigns and elections, plus the degree of racial bloc voting, must also be considered at least at the margin.

V. CONCLUSION

We have dealt thus far with how to determine the population needed for effective voting equality, and have taken as given the view that it is desirable to create districts in which minorities have a realistic opportunity to elect candidates of choice. Here we broaden the scope of our discussion.

Abigail Thernstrom (1985: 21) has recently argued that to create minority districts is to "resegregate politics," and that "minority representation might actually be increased not by raising the number of black officeholders but by increasing the number of officeholders, black or white, who have to appeal to blacks to win."[12] While raising an interesting point, we think she misses an even more important one.

The perspective of several of the authors is that legislatures and courts must consciously create black districts unless we wish to ignore totally the progress of blacks in the electoral arena. Without specifically minority districts, the possibility is too great that black candidates will often be shut out of office. With no such protection, and with devices such as suburban consolidation, at-large city elections, anti-single-shot provisions in multi-member elections, plus the frequency with which whites avoid voting for blacks,[13] even abandoning partisanship to do so, blacks would all too often be in the position of casting a large minority of the votes but not being able to win. Without actual black electoral success, the process of pluralist politics cannot function—they require the participation of blacks as representatives and not merely as voters. Moreover, the failure of black political success at any given level of government hinders black political success at all other levels of government. Only with a pool of experienced officeholders can blacks mount effective campaigns for higher office and aid their fellows in campaign at lower levels.

As for the notion of minority influence districts, there are real tradeoffs that need to be considered. For example, when Georgia's fifth Congressional district was made 65 percent black as a result of Voting Rights litigation,

"the neighboring fourth district was reduced from 28 percent to 13 percent black. *The result in the fourth district was the defeat of a moderate Democrat by an extreme right-wing Republican*" (Political Scientists Meet, Assess Black Power Gains, 1987, p. 3, emphasis in original). In Charleston, one white state legislator—a liberal Democrat—was candid enough to say in his deposition in a 1984 Voting Rights case (*U.S. v. South Carolina*) that he sought "between 30 percent and 40 percent black in his district." In our view this proportion was chosen as being large enough to insure reelection but small enough to make it unlikely that a successful challenge could be mounted to a white incumbent in the Democratic primary by a black candidate. If black candidates are to be elected to office themselves rather than having black voters serve as a needed support base for liberal white representatives, districts with substantial black population must be created. The price will sometimes be the loss of one or more liberal white representatives. In particular, absent Justice Department or judicial intervention that compelled the creation of districts with increased minority population proportions, there would now be no black congressmen from the deep South (Willingham, 1987; Grofman and Handley, 1987).

The question as we see it is not whether to create minority districts, but how many and what kind to create. Specifically, we must keep in mind the possible tension between creating a smaller number of safe minority seats and a somewhat larger number of minority-competitive seats (districts in which minorities have a realistic chance of winning but are not an overwhelming majority). Just as districts with too few blacks may be unproductive, the other side of the coin is that arbitrarily to create districts that are 65 percent or more minority may sometimes reduce the total number of districts in which blacks can elect candidates of choice.

Especially now, as blacks are catching up to and even surpassing whites in their levels of registration and turnout (at least relative to VAP), use of the 65 percent figure may have the same effect as the classic gerrymander: squeezing more of one type of voter into districts than is necessary for them to be competitive in order to reduce the number of districts in which those voters constitute an effective majority. Of course it is not always easy to regulate the district minority population; blacks are often situated in such a way that even with the best of intentions one is forced to create a set of overwhelmingly black districts. Yet these limitations should not blind us in those instances in which more minority competitive districts are possible, or in which possibilities for minority-influence districts have been lost with no compensating gain in minority representation. When it is feasible, we should recognize that districts in which the black population is 60 percent, and sometimes even less, can be minority-competitive even if not necessarily "safe seats" for minority candidates. To create numerous districts that are 70 to 100 percent black is to assure blacks of a fixed number of sure seats but may make it exceedingly difficult for them to go beyond that number.[14]

It is very important to recognize that just as creating the maximum number of seats in which minorities have a "realistic opportunity" to elect candidates of choice is not the same as maximizing the number of minority-influence districts, it is also not the same as creating the maximum number of safe seats. Frank Parker, an attorney who has argued many reapportionment cases, has asserted that "as a practical matter a 65 percent majority black district was necessary to elect a black candidate" (Political Scientists Meet, Assess Black Power Gains, 1987, p. 3). Data in Grofman and Handley (1987) show that at least for the U.S. Congress, Parker is correct if we are talking about the black population proportion needed to provide a *certainty* of black candidate success. If, however, we are looking toward a realistic opportunity to elect (say, a probability well above 50 percent but well below certainty), then lower percentages may be adequate. Determining what is the appropriate population percentage to assure a realistic opportunity to elect a candidate of choice in a given case is a matter of considerable complexity.

One also cannot adhere slavishly to the most easily quantifiable part of minority vote calculations, namely, to the equalization percentages. The latter part of our analysis was necessarily brief, but both it and our experience in many court cases indicates that nondemographic factors do make a difference. While our analysis in this paper emphasized that districts of less than 65 percent may now be competitive for blacks for certain types of elections in certain cities, we are in no way suggesting that the equalization percentage tells us whether a district will be won or lost by blacks or black-supported candidates. In fact, the analysis of districts in Chicago suggests that for blacks, incumbency, polarization, and other factors may now be as significant as differences in registration rates, voting rates, and even VAP. Analyses for specific redistricting circumstances must take into account which minority one is dealing with (see footnote 8), the particular circumstances of that minority, and less tangible factors (in addition to VAP, registration, and turnout rates) such as access to campaign funds and experience in campaigning. Districting to achieve minority voting equality is something of a balancing act; both packing blacks into overwhelmingly black districts and ignoring the very real but less easily quantifiable considerations that suggest the need for districts with high minority populations are extremes that should be avoided whenever possible.

METHODOLOGICAL APPENDIX

While calculating equalization percentages is simple once one has estimates of VAP, registration, and turnout, all by race, obtaining these data can be a complicated task. Total populations and voting age populations of cities are available from the Census Bureau (Summary Tape File 1B of 1980 Census).

However, below the national level data on white and black registration and turnout rates are usually not kept by race. (The state of South Carolina is required to keep registration and turnout figures by race, so for Charleston the data represent official figures.) Consequently, relatively complicated procedures are needed to estimate these numbers.

The procedure begins with a database that includes demographic data (total population and VAP from 1980 Census Summary Tape File 1B) and election returns (obtained from city election officials in three cities and from the South Carolina Election Commission for general elections and the County Democratic Party chairmen of South Carolina for primary elections). In order to relate demographic data to voting performance, it is necessary to match census blocks to political precincts (as electoral boundaries need not follow census boundaries). The match required comparing precinct maps with maps of the census blocks and compiling a list of census blocks that compose each precinct.

Whenever a census block was split between two or more precincts, a proportionate allocation was made on the basis of voter registration lists (which permitted us to approximate the number of voters who lived in each section of the block according to street address). Once this was done, it was possible to recompose census blocks up to the precinct level and compute population and VAP figures by race for each precinct. (Some VAP data were suppressed by the Census Bureau at the block level. so disaggregation of the data from the census tract or block group level to the census block level was necessary.) Since precinct boundary configurations frequently change between elections, the equivalency procedure was repeated for each election so that the precinct population proportions were as accurate as possible.

This census to precinct match, once completed, gave us the total population and VAP by race for each precinct, information that was essential for conducting the statistical analysis. Statistical procedures described in Grofman, Migalski, and Noviello (1985: 203–206) (chiefly ecological regression) then allowed us to estimate the number of blacks and whites who registered, turned out, and (in Chicago) voted for a particular office in a given election.

It is important to recognize that the elections used to determine turnout by race must be ones that are similar or identical to those in the political units in which effective voting equality is to be determined. As the data presented in the text makes clear, there can be considerable variations in electoral patterns between primary and general elections, on-year and off-year elections, and between local, state, and national elections held within a given jurisdiction.

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NOTES

1. However, even in *Kirksey*, the nature of the calculations was misread by the court. The court read a five percent difference between "black VAP/total VAP" and "black population/total population" as requiring a five percent correction to equalize black and white VAPs. But that is not true in general even though it happened to be correct in the county involved in *Kirksey*. Here is what *Kirksey* (1975, 668–669) actually said:

> Utilizing a statistical analysis of the estimated voting age population (VAP) by race, Dr. Loewen's testimony revealed that [of] 84,064 blacks living in Hinds County, 37,988 (45.2%) are under eighteen years of age, leaving a black voting age population of 46,072 or 34.19% of the total voting age population. Of the 130,592 whites living in Hinds County, 41,895 (32.1%) are under eighteen years of age, leaving a white voting age population of 88,697 or 65.81% of the total voting age population. Thus, pursuant to Dr. Loewen's calculations, *the percentage of blacks in the total voting age population* of Hinds County (34.19%) is five percentage points less than *the percentage of blacks in the total population* of the county. However, the percentage of whites *in the total voting age population* of Hinds County (65.8%) is five percentage points more than *the percentage of whites in the total population* (60.75%).

It may not be surprising that subsequent courts have gotten lost in this sea of numbers and percentages and seized on the seemingly simply "five percentage points" difference. However, the particular difference cited is the wrong number to look at—although unless black/white population differences are extremely large, what it will yield is not too far from the correct answer. The confusion here is between "percent black of the total voting age population" and "percent of the black population who are of voting age." The former requires us to take into account the relative numbers of blacks and whites in the county, the latter does not. The former is relative only to calculations for the county as a single district; the latter can be used for any subpopulation that mirrors the countywide proportion of blacks who are of voting age.

To see how this works, let us look at the only two numbers in the above morass that are really relevant, 45.2% and 32.1%. We know that 45.2% of blacks are under 18; thus 54.8% of blacks in the county are of voting age. Similarly, 32.1% of the whites in the county are not of voting age; thus 67.9% of the whites are of voting age. If we assume that these two percentages characterize any district within the county as well as the entire county, then to calculate what percentage of black population in a district (which we call x) is needed for black VAP to equal white VAP, we may solve the following equation:

$$54.8\ x = 67.9\ (1 - x).$$

Doing so yields an equalization percentage of 55.3%, or roughly a five point "correction."

If we used the first method, it would be sensitive to the proportion of the county population that was black. Imagine, for example, another county with the same characteristics and same total population (214,973 according to the

table at 688) but with only 10% of the total county population black instead of the 34.19% in Hinds County. Then the percentage of blacks in the voting age population is figured as:

black VAP/total VAP = (21,497 x .548)/(21,497 x .548 + 193,476 x .679)
= 8.2%.

Thus, for a county that is 10% black, the difference between "the percentage of blacks in the total voting age population" and "the percentage of blacks in the total population" would be only 1.8% percentage points. Nonetheless, in this county, too, a district would still have to have a 55.3% black population to have a 50% black VAP. Only the relative percentages of whites who are of voting age and of blacks who are of voting age is relevant, *not* the relative percentages of whites and blacks in the total population of the county. The confusion here is a classical statistical fallacy, indeed one to which even expert witness (e.g., an expert witness in his deposition testimony in *U.S. v. South Carolina*) occasionally fall prey.

2. See also *Rybicki I*, p. 1113 n. 87; *In re Illinois Congressional Districts Reapportionment Cases* p. 19; *Latino Political Action Committee Inc. v. City of Boston*, p. 414; in writings about the rule, see Parker (1984, p. 111).
3. Based on *Beer v. United States* (1976), used for Section 5 of the Voting Rights Act (see Grofman, Migalski, and Noviello, 1982).
4. A possible fifth factor is that there is more "roll-off" among minorities, i.e., they fail to vote for offices below the top of the ballot. We will touch on this factor briefly below.
5. The proportion of aliens is of considerable relevance for Hispanics, but of little relevance for blacks. Since our empirical analysis will focus on black participation rates we will neglect the effects of non-citizenship and will refer specifically to blacks in the rest of the paper.
6.
$$M(A_1) = (1 - M)A_2$$
$$M(A_1) = A_2 - M(A_2)$$
$$M(A_1) + M(A_2) = A_2$$
$$M(A_1 + A_2) = A_2$$
$$M = A_2/(A_1 + A_2)$$
7. Suppose one wished to divide 100 residents into single-member districts and had the following data:

	Whites	Blacks
Total population	70	30
VAP	56 (80%)	21 (70%)
Registered to vote	39	13
Voted	35*	10**

*50.0% of the total population; 62.5% of the VAP
**33.3% of the total population; 47.6% of the VAP

Then, using equation 3, the minority percentage needed to equalize turnout is:
Based on total population: .500/(.500 + .333) = .60 or 60%
Based on VAP: .625/(.625 + .476) = .568 or 56.8%
If one created a district with a total population of 60, one would want 36 (60 x .60) blacks and 24 (60 x .40) whites, of whom 25 (36 x .70) and 19 (24 x .80), respectively, would be adults. If we begin instead with the VAP figures, there are 46 adults, of whom 25 (46 x .568) should be black and 19 (46 x .432) should be white.

8. As noted, we restrict our concern here to blacks. In the two cities with relatively sizable other minorities, Hispanics, Asians, and "others" were excluded. In Norfolk and Charleston, Hispanics, Asians, and others were included in the white category. Because of what is often a very high proportion of noncitizens, the effective majority is apt to be very high for Hispanics, sometimes well above 65%.

9. Racial polarization could be brought formally into the model described in Section II for determining equalization percentages. Our purpose here, however, is to show that 65% is often an incorrect figure even if that complicating factor is ignored, as it is in most discussions of the 65% rule. In addition, voting polarization is an issue that deserves a much lengthier discussion than we could give it here.

10. Even if they had complete control, of course, blacks might reasonably support a white candidate, especially a long-time incumbent with substantial legislative experience and power. We are sensitive to this issue and comment on one instance of crossover voting below.

11. However, Grofman combined black and Hispanic populations on the assumption that these would form a unified voting bloc—an unrealistic assumption made only because of the pressure of time. In addition, Grofman used estimates that were borough wide and did not take into account variations on a district by district basis. Informal review of this New York data suggests that it is the Hispanic noncitizen populations that raised the proportion needed for effective voting equality. Analogous findings appeared in the analysis by several of the present authors of data on Hispanic turnout in Los Angeles city council elections.

12. See also Butler (1984).

13. In the recent mayoral race in Chicago, for example, the incumbent black mayor received under 20% of the votes of whites in the Democratic primary and was successful only because of his nearly 98% support level from black voters. White unwillingness to vote for black candidates is an all too unpleasant reality of American political life (see, e.g., Grofman, Migalski, and Noviello, 1986.)

14. However, as noted in a previous footnote, higher effective majorities are commonly needed for Hispanics than for blacks.