Malapportionment and the Judiciary:

A Comparative Perspective[*]

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Abstract

Malapportionment—the discrepancy between the share of legislative seats and the share of the population within a given geographical unit—violates one of the fundamental principles of democratic government, namely, one person, one vote. It also leads to undesirable governance results in many ways. Despite its importance, however, we know little about the causes of malapportionment. This paper examines this question with a focus on the role of the judiciary. I hypothesize that countries with higher *de facto* judicial independence and higher judicial activism tend to have lower levels of malapportionment. The basic logic behind this idea is the following: in countries where the judiciary exercises effective checks on violations of people's fundamental rights, the ruling elites are more likely to amend the electoral laws to reduce malapportionment and/or to avoid committing such violations in the first place. Cross-national statistical

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analyses, as well as case studies of the US and France, are provided. Both approaches provide evidence for these claims. Another noteworthy finding is that when the degree of judicial independence is controlled for, the effects of having a single-member district system lose their significance.

1. Introduction

Malapportionment—the discrepancy between the share of legislative seats and the share of the population within a given geographical unit—is anathema to one of the fundamental principles of democratic government, namely, one person, one vote. At the same time, ample research has demonstrated that unequal representation effects a number of undesirable consequences on governance. It leads to, for example, overrepresentation of conservative interests, regressive taxation, and biased transfers of state resources to overrepresented areas. Despite the normative and practical importance of the issue, comparatively little research has analyzed the causes of malapportionment.

The present paper attempts to fill this gap. Specifically, it examines the role of the judiciary in reducing malapportionment. I argue that *de facto* judicial independence and activism are two factors associated with lower malapportionment. When the judiciary can effectively provide checks against this problem, the ruling elites are more likely to amend electoral laws to reduce malapportionment and/or abstain from committing such violations in view of credible sanctions by the courts. A mixed-method strategy is employed to examine these claims. I combine a cross-national statistical analysis with case studies of France and the US. Both types of analyses offer findings consistent with my argument.

This paper is related to several strands of research in comparative politics. First, this paper contributes to the comparative study of electoral systems. As Samuels and Snyder (2001: 652) have remarked in their important article on the topic, the study of malapportionment has "curiously escaped" the attention of scholars. Although recent interest has been growing regarding this topic, there are still many holes to be filled in the literature. In particular, in contrast to research on the consequences of malapportionment (reviewed later), we know

little about why and how malapportionment is created and sustained in a comparative context. Second, this paper contributes to the expanding field of judicial politics. During the past several decades, scholarship on courts has expanded exponentially; this is particularly so among studies of emerging democracies (Kapiszewski and Taylor 2008). This paper follows this trend. Third, at a broader level concerning the quality of democracy, this paper's argument stresses the importance of "horizontal accountability" (O'Donnell 1998). By examining one of the mechanisms of horizontal accountability, this paper aims to contribute to the literature that offers suggestions on how to improve the quality of democracy.

I begin by surveying the degrees of malapportionment globally to show that great variation exists. Section 2 reviews the existing literature describing the consequences and causes of malapportionment. In Section 3, I outline my framework and hypotheses. Section 4 offers cross-national analyses. Case studies of the US and France are supplied in Section 5.

2. Why Malapportionment Matters

Malapportionment Around the World

Malapportionment exists when there is a wide discrepancy between the share of legislative seats and the share of the electorate in a given electoral district. If a country uses an electoral formula with a single nationwide district, there is no malapportionment; in this instance, the country may be said to have perfectly apportioned districting. This type of electoral system is found only in a handful of cases (e.g., Israel, Namibia, the Netherlands, and Sierra Leone).[1] Thus, malapportionment is a common characteristic of most electoral systems.

Malapportionment can be measured by a formula called MAL, which is detailed in Samuels and Snyder (2001). It takes the absolute value of the difference between each district's seat and population (or the number of registered

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1) Although Peru (1993) shows zero malapportionment in Figure 1, its electoral system (PR with nationwide constituency) has changed since 2000, and is thus not mentioned here.

voters) shares, adds them, and then divides by two.[2] One advantage of this measure is that it yields comparable values across countries and electoral formulae.

Using MAL, Figure 1 displays the degrees of malapportionment for the lower legislative chambers in 79 countries in recent elections. For example, if a country has a value of 10 percent, it means that 10 percent of available seats are allocated to districts that would not receive these seats if there were no malapportionment.
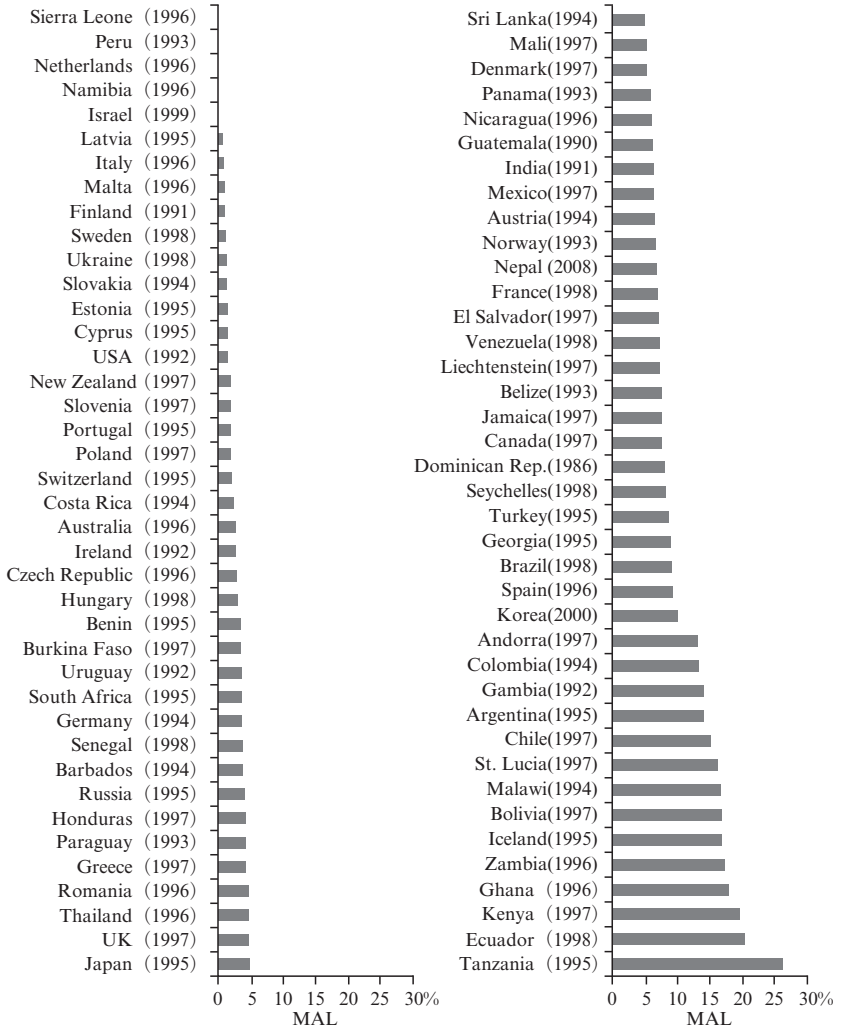
The Consequences of Malapportionment

Malapportionment leads to undesirable consequences in a number of ways. First, it creates "rural-conservative bias" in legislative representation (Snyder and Samuels 2004). Malapportionment usually leads to the overrepresentation of rural interests because rural districts tend to elect larger numbers of legislators with a smaller share of the electorate. This tendency is reported in many malapportioned systems, including in Latin America (Snyder and Samuels ibid), Japan (Christensen and Johnson 1995), India (Bhavnani 2021), and the US House of Representatives prior to the apportionment revolution (Ansolabehere and Snyder 2008). Malapportionment also sustains electoral authoritarianism (Higashijima and Kasuya 2022), as well as the legacies of authoritarianism in post-transition democracies. Analyzing Latin America, Bruhn, Gallego, and Onoratto (2010) show that overrepresented areas are more likely to vote for parties close to pre-democracy ruling groups. This happens because of the gerrymandered electoral districting authored by authoritarian elites at the time of democratization.

Second, theorized as a consequence of rural-conservative biases, malapportionment skews the collection and redistribution of government resources. Ardanaz and Scartascini (2013) show that countries with higher

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2) $0.5 \Sigma \, |s_i - p_i|$, where s is the seat share and p is the population share of the ith district against the national total. For other measures of malapportionment, see Samuels and Snyder (2001). For a more nuanced measure of malapportionment, see Kamahara et al. (2021).

Figure 1. Malapportionment in 79 countries

Country (Year)	MAL
Sierra Leone (1996)	
Peru (1993)	
Netherlands (1996)	
Namibia (1996)	
Israel (1999)	
Latvia (1995)	
Italy (1996)	
Malta (1996)	
Finland (1991)	
Sweden (1998)	
Ukraine (1998)	
Slovakia (1994)	
Estonia (1995)	
Cyprus (1995)	
USA (1992)	
New Zealand (1997)	
Slovenia (1997)	
Portugal (1995)	
Poland (1997)	
Switzerland (1995)	
Costa Rica (1994)	
Australia (1996)	
Ireland (1992)	
Czech Republic (1996)	
Hungary (1998)	
Benin (1995)	
Burkina Faso (1997)	
Uruguay (1992)	
South Africa (1995)	
Germany (1994)	
Senegal (1998)	
Barbados (1994)	
Russia (1995)	
Honduras (1997)	
Paraguay (1993)	
Greece (1997)	
Romania (1996)	
Thailand (1996)	
UK (1997)	
Japan (1995)	

Country (Year)	MAL
Sri Lanka (1994)	
Mali (1997)	
Denmark (1997)	
Panama (1993)	
Nicaragua (1996)	
Guatemala (1990)	
India (1991)	
Mexico (1997)	
Austria (1994)	
Norway (1993)	
Nepal (2008)	
France (1998)	
El Salvador (1997)	
Venezuela (1998)	
Liechtenstein (1997)	
Belize (1993)	
Jamaica (1997)	
Canada (1997)	
Dominican Rep. (1986)	
Seychelles (1998)	
Turkey (1995)	
Georgia (1995)	
Brazil (1998)	
Spain (1996)	
Korea (2000)	
Andorra (1997)	
Colombia (1994)	
Gambia (1992)	
Argentina (1995)	
Chile (1997)	
St. Lucia (1997)	
Malawi (1994)	
Bolivia (1997)	
Iceland (1995)	
Zambia (1996)	
Ghana (1996)	
Kenya (1997)	
Ecuador (1998)	
Tanzania (1995)	

Source: Compiled by the author based on Samuels and Snyder (2001), except for Nepal. The score for Nepal is calculated by the author based on data from the Nepalese Election Commission.
Note: The election year used to calculate the value is in parentheses. The value for New Zealand is adjusted based on the author's calculation. Korea's score uses data from the 2000 election and thus differs from Samuels and Snyder (ibid). It was calculated by Yuta Kamahara based on data from the Korean Election Commission.

malapportionment are associated with more regressive taxation because overrepresented elites can block legislative attempts to introduce progressive tax schemes. On the redistribution side, a malapportioned legislature tends to transfer state resources more heavily to overrepresented territories. This effect has been found for the US (Ansolabehere and Snyder 2008), Latin America (Gibson, Calvo, and Falleti 2004), and Japan (Horiuchi and Saito 2003).

In short, malapportionment is neither just a matter of democratic ideals nor a minor detail of electoral systems but can have significant consequences for various aspects of politics.

Existing Research

Despite the worldwide existence of malapportionment and its undesirable consequences, its causes are still understudied. So far, cross-national empirical analyses have pointed to the following factors. The first is district magnitude. A single-member district (SMD) plurality formula is associated with a higher degree of malapportionment than a proportional representation system (Samuels and Snyder 2001, Horiuchi 2004, Ardanaz and Scartascini 2013). Two reasons have been suggested for this phenomenon (Samuels and Snyder 2001: 663). The first is a mechanical explanation. In SMD systems, there is but a single representative to be elected from each district. By comparison, multi-member districts (MMD) can elect variable numbers of representatives. In the latter, if geographic units cannot be subsumed into other districts for historic or administrative reasons, the number of representatives elected from a given district can be adjusted, whereas this kind of adjustment is impossible in SMD systems. The second reason identified is political. In SMD systems, politicians as individuals have higher stakes in reapportionment decisions since reapportionment would affect the boundaries of the districts they represent with a greater likelihood than in PR systems. Thus, legislators in SMD systems tend to resist reapportionment reform more strongly than those in MMD systems, rendering such adjustments slower.[3]

Second, economic inequality is associated with malapportionment (Horiuchi 2004, Ardanaz and Scartascini 2013). There are two suggested mechanisms according to which this relationship holds. First, inequality in

assets and income at the time of democratic transition creates incentives among outgoing elites to install districting plans favoring their support bases so that their power can be retained in the post-transition period (Samuels and Snyder 2004, Ardanaz and Scartascini 2013). Second, Horiuchi (2004: 182) suggests that once malapportionment exists, politicians from rural, depopulated, and poor areas are overrepresented and exercise their political power to preserve the status quo.

Scholars have hypothesized about other factors, though they lack empirical support. For example, Samuels and Snyder (2001) test whether it matters if a country adopts a two-tier electoral system and/or federal system; they find it does not. They also examine the population size and the level of democracy within countries but find insignificant results. They do, however, find that Latin America, compared to other regions in the world, had statistically significant high malapportionment. However, this regional effect disappeared once the effect of economic inequality was controlled for (Horiuchi 2004).

In a recent study, Ong et al. (2017) have shown that the degree of democracy and malapportionment has a curvilinear relationship. At the very high levels of democracy where the checks-and-balances institutions can contain politicians' incentives for malapportionment, while at the very low levels, or in regimes where elections are *de facto* absent, elites do not have incentives to malapportion. It is at the middle level of democracy, or in regimes with regular elections but weak accountability institutions, where levels of malapportionment tend to be higher.

My theory employs a similar logic to Ong et al. (2017) but has a specific focus on one of the accountability institutions within a political regime: the judiciary. In the next section, I provide the details of my conjectures.

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3) It is more appropriate to use electoral formulae, rather than the district magnitude, to explain the circumstance. The case of Japan illustrates this point. When the lower house used the single non-transferable electoral formula with MMD before the 1994 electoral reform, politicians had strong incentives to keep the status quo boundaries, and hence little redistricting took place. The degree of malapportionment was about 17 percent in the 1993 elections (based on author's calculation).

3. The Importance of the Judiciary

I argue that the judiciary plays an important role in influencing malapportionment. My starting point is what many malapportionment scholars have noted already: Malapportionment is fundamentally a product of political manipulation by those in power (e.g., Snyder and Samuels 2001, Ardanaz and Scartascini 2013). The task, then, is to explore under what conditions such manipulation can occur. To put it differently, how can political manipulation be curtailed? I propose that there are at least three ways that the judiciary can make an impact. First, the presence of a judicial review system creates an opportunity for citizens or affected parties to litigate against malapportionment. Judicial review is the doctrine according to which legislative and executive actions are subject to review by the judiciary. While the details of its institutional design vary depending on the country (Ginsberg and Versteeg n.d.), an overwhelming number of countries around the world have adopted some form of judicial review. In one statistical assessment, as of early 2000, 85 percent of countries had adopted such a system, with 71 percent of the remaining countries institutionalizing it as of 2011.[4] Some might think that for judicial review to be invoked, a constitutional provision on equal suffrage needs to exist. Most recent constitutions satisfy this condition.[5] As of 2013, of the 121 countries in the world with populations greater than 1 million, 89 (73 percent) had constitutions referring to equal representation, while 30 (25 percent) did not. The remaining two countries—Israel and the UK—have no written constitutions.[6] Yet, even in such cases, judicial review can be invoked based on existing electoral laws

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4) The figure of 85 percent is reported in Romeu (2006: 103, 125), in which the author states that out of 193 independent states, 164 have known some form of judicial review, while 25 have not. Ginsberg and Versteeg (n.d.) reports that as of 2011, 71 percent of 204 countries, including those that have ceased to exist, have adopted the institution.

5) In my cross-national analyses provided later, all countries in the sample have some form of judicial review.

6) Based on the author's calculation. The phrases coded "yes" include "equal protection by the laws"; "equality under (the) law"; "equality under the constitution"; "equality in the value of a vote"; "one person, one vote."
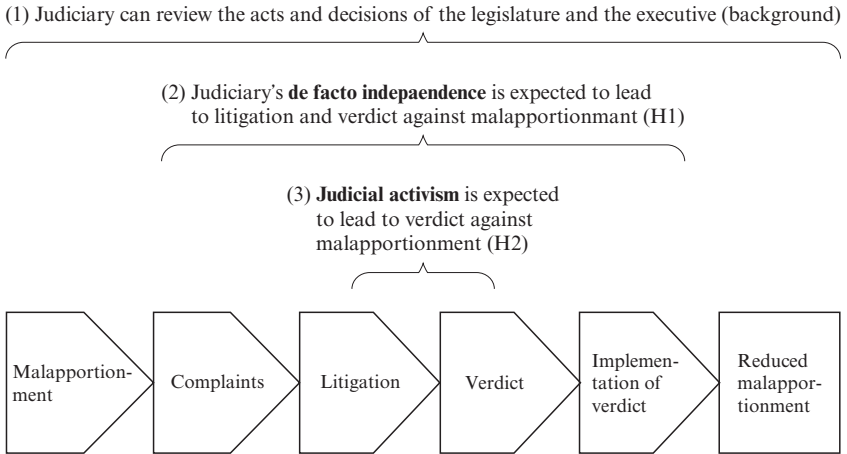
(Holland 1991). In sum, judicial review is a prerequisite for the courts to play a role in reducing malapportionment, and in the contemporary context, most countries already provide this institutional setting.

The second aspect of the judiciary allowing it to help reduce malapportionment may be found in its independence from political pressure. Here, the distinction between *de jure* and *de facto* judicial independence is important (Feld and Voigt 2003, Hayo and Voigt 2005, Linzer and Staton 2011, Rios-Figueroa and Staton 2014). *De jure* independence refers to the formal rules designed to insulate judges from undue political and/or social pressure. The major indicators of *de jure* independence include judges' fixed tenure, multilateral appointment procedures, and judicial budgetary autonomy. *De facto* independence embraces behavioral aspects. Two types of characteristics are associated with this concept. First, judges must be able to form their opinions independent of external pressures. Second, courts are considered *de facto* independent when their decisions are enforced in practice, even when political actors would rather not comply.

I argue that the judiciary's *de facto*, rather than *de jure* independence, can reduce malapportionment. For example, Feld and Voigt (2003) show that while *de jure* judicial independence does not have any significant impact on economic growth, *de facto* judicial independence positively influences GDP growth. Their explanation behind this result is that people's behavior depends more on their evaluation of the *de facto* independence rather than *de jure* independence of the judiciary. I employ the same logic. As mentioned, malapportionment is often the result of political manipulation in districting decisions. If some actors—an opposition party or a group of citizens—were desirous of changing the status quo, they would turn to the judiciary if deemed reasonably independent in practice. If the courts were known to be corruptible by political elites, these actors would not seek judicial relief to begin with. Even if they did, judges under the influence of the elites would be more likely to uphold the status quo. In addition, it is possible that the expectation of judicial review by an independent court could exert pressure on incumbent politicians who control districting to refrain from outright manipulation.

Third, judicial activism can reduce malapportionment. Although judicial

Figure 2. The Sequential Framework

(1) Judiciary can review the acts and decisions of the legislature and the executive (background)

(2) Judiciary's **de facto indepaendence** is expected to lead
to litigation and verdict against malapportionmant (H1)

(3) **Judicial activism** is expected
to lead to verdict against
malapportionment (H2)

Malapportion-ment	Complaints	Litigation	Verdict	Implemen-tation of verdict	Reduced malappor-tionment

activism is a "loaded term" (Lindquist and Cross 2009: 1), one commonly used definition describes it as the acts of the judiciary that invalidate the decisions and acts of the legislative and executive branches, in contrast to when judicial actors merely confine themselves to the adjudication of legal conflicts. Judicial independence may be a prerequisite for judicial activism, but judicial independence does not always correlate with robust activism. For example, Germany and Japan both have relatively independent judiciaries. Yet the German judiciary is known to be highly active, while its Japanese counterpart is characterized by its passivity. A lack of judicial activism contributes to the maintenance of the status quo, including a high degree of malapportionment. Complaints may be made, but if judges have strong reservations about intervening in politics, the status quo tends to persist.

Figure 2 depicts the ways in which these three factors can lead to reducing malapportionment. Among them, the judiciary's *de facto* independence and activism will be examined with cross-national data. The effect of judicial review is difficult to test since it is present in most countries. Thus, my framework positions judicial review as a background factor, and empirical examination will be conducted only for *de facto* independence and activism.

Based on the above discussion, I test the following two hypotheses.

Hypothesis 1: Malapportionment tends to be lower in countries where *de facto* judicial independence is higher, other things being equal.

Hypothesis 2: Malapportionment tends to be lower in countries where judicial activism is higher, other things being equal.

By no means am I the first to highlight the role of the judiciary in studies of malapportionment. It is well known and thoroughly researched that Supreme Court decisions led to a "reapportionment revolution" in the US in the 1960s (e.g., Ansolobehere and Snyder 2008, Cox and Katz 2002). This paper is an extension of studies of the American experience to the cross-national context. Also, in analyzing Latin America, the investigation of Snyder and Samuels (2004) points out the role of judicial oversight but does so in a dismissive manner. The authors posit that judicial oversight would not be a remedy because most courts in Latin America are "notorious both for their politicization and for their weakness" (Snyder and Samuels ibid: 156–157). Their evaluation may appear counter to this paper's claims, but in fact, it is not. What the Latin American cases imply is that by making the courts less politicized and stronger—equivalent to making them *de facto* independent and activist—there is a good possibility that malapportionment can be reduced.

4. Cross-national Analyses

Judicial Independence

In this subsection, I test my first hypothesis with cross-national data using an ordinary least squares (OLS) regression. My dependent variable is the degree of malapportionment (MAL) across countries in recent elections. The logged values are used because of the highly skewed distribution. The data comes from the same sources as in Figure 1. This data is the most extensive cross-national data on malapportionment currently available, but one limitation is that it measures

the degree of MAL only for a single election. Nevertheless, since the degrees of MAL do not vary so widely from one election to the next, the use of this data can be justified.

The independent variable of interest is *de facto* independence of the judiciary, denoted *Judiciary*. I use *de facto* judicial independence scores compiled by Linzer and Staton (2011). This score measures the concept of *de facto* judicial independence as a latent variable drawing upon a number of existing indexes. It ranges from zero to one, with one being the most independent. The original data covers around 200 countries for 50 years. I use the natural log of this score for each country at the time of the election for which MAL is calculated. *Judiciary* is expected to be associated with lower MAL.

In order to control for the effects of other influencing factors, I include the following control variables.[7] One is a dummy variable pertaining to whether a country has adopted a single-member district system, named *SMD* (Samuels and Snyder 2001, Ardanaz and Scartacini 2013). It is expected that countries adopting SMD systems have higher malapportionment than those with non-SMD systems. Data is obtained from Samuels and Snyder (2001). The other control variable relates to the degree of economic inequality, called *inequality*. Several studies (Horiuchi 2004; Ardanaz and Scartascini 2013) have shown that higher inequality is associated with higher malapportionment. This variable was the natural log of the Gini coefficient during the 1990s. The data comes from the United National University, World Institute for Development Economics Research.[8] *Inequality* is expected to have a positive effect on MAL.

As a first-cut examination of Hypothesis 1, Figure 3 presents the plot of malapportionment and *de facto* judicial independence. The figure shows a negative relationship between the two, offering preliminary rough support for Hypothesis 1.

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7) I do not include other variables that previous studies have included, but have found to have insignificant effects. These include the size of a country, a dummy variable for federalism, the level of democracy, a dummy variable for tiered electoral systems, and dummy variables for the world's major regions and change in urban population ratio.

8) Retrieved from: http://www.wider.unu.edu/research/Database/en_GB/wiid/.

Figure 3. Malapportionment and judicial independence in 72 countries
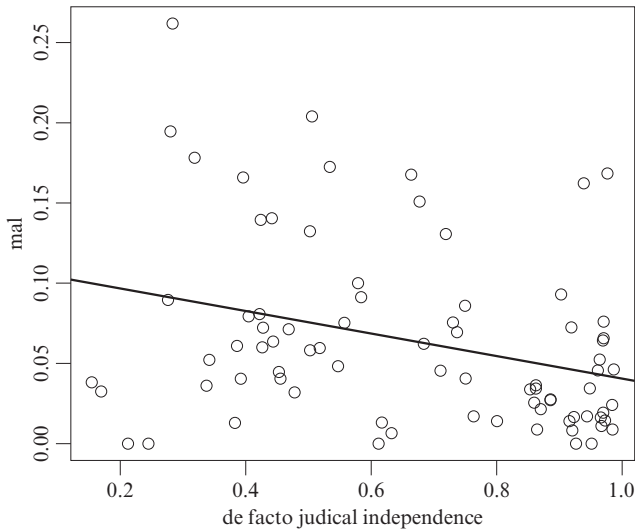
Source: Compiled by the author.

Table 1 presents the regression estimates. Models 1, 2, and 3 are the results of bivariate regression testing the effects of judicial independence, district magnitude, and inequality. All of them have statistically significant relationships in the expected direction. Model 4 is a simplified version of previous studies (Samuels and Snyder 2001, Horiuchi 2004, Ardanaz and Scartascini 2013). The results, in principle, echo the previous findings.

Model 5 is the full model, including the variables pertaining to judicial independence, SMD, and inequality. It shows that judicial independence has a significant and negative effect on the malapportionment index after controlling for the effects of electoral formulae and inequality. The estimated coefficient suggests that a 1 percent increase in judicial independence yields a 0.48 percent decrease in the malapportionment index. This effect is statistically significant at the 5 percent level. Inequality also remains significant after controlling for the effects of judicial independence and electoral formulae. With a 1 percent change in the Gini index, a 0.97 percent increase in the malapportionment index is

associated with statistical significance at the 1 percent level.

It is worth noting that when judicial independence is included, the effect of *SMD* is no longer statistically significant. This happens regardless of the presence or absence of *Inequality* (see Models 5 and 6). This suggests that the presence of an independent judiciary mitigates the technical difculties of drawing boundaries and/or stronger political incentives to block redistricting associated with the SMD system. As illustrated in the next section, this is what happened in the case of the US House of Representatives.

A problem of multicollinearity is detected if one compares the results of Models 1 and 5. In Model 1, the coefficient of *Judiciary* is − 0.827, and that in Model 5 is − 0.488. This downward change is mostly the result of including *Inequality* in Model 5.[9] This, in turn, suggests the presence of a significant correlation between *Judiciary* and *Inequality*. Indeed, the correlation coefficient between the two is − 0.47, statistically significant at the 1 percent level.[10] This means that higher judicial independence is associated with lower economic inequality. There are two possible interpretations of this relationship. First, judicial independence reduces inequality through providing checks on political decisions that favor the rich. Another interpretation is that a more egalitarian society allows for the emergence of an independent judiciary because no single group dominates politics. When there is a dominantly powerful group, that group is likely to subsume the judiciary under their control. Future research should investigate which way the direction of influence runs. At this stage, what can be said about the results is that the current value of the coefficient of *Independence* has to be taken with some caution, owing to the potential bias resulting from a multicollinearity problem.[11]

Overall, the results of OLS are consistent with Hypothesis 1.

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9) This is because when *Judiciary* and *SMD* are included in the model, as in Model 6, the coefficient value for *Judiciary* remains virtually the same as in Model 1.

10) The correlation coefficient between *Independence* and *SMD* is − 0.23, and that between *Inequality* and *SMD* is 0.053; neither is statistically significant.

11) One solution to have a more accurate estimate is to increase the number of observations (especially increasing the number of MAL) in the future.

Table 1. Determinants of the Malapportionment of Seats in Lower Chambers

	(1)	(2)	(3)	(4)	(5)	(6)
Judiciary	− 0.827***				− 0.488**	− 0.742***
	(0.217)				(0.235)	(0.226)
SMD		0.469**		0.414**	0.297	0.270
		(0.213)		(0.199)	(0.202)	(0.209)
Inequality			1.316***	1.240***	0.976***	
			(0.311)	(0.306)	(0.324)	
Intercept	− 3.464***	− 3.229***	− 7.833***	− 7.700***	− 6.948***	− 3.516***
	(0.141)	(0.125)	(1.125)	(1.100)	(1.134)	(0.146)
Adj. R-sq'ed	0.158	0.051	0.197	0.235	0.271	0.166
N. of Obs.	72	72	69	69	69	72

Note: Robust standard errors in parentheses; $p^* < 0.1$, $p^{**} < 0.05$, $p^{***} < 0.01$

Judicial Activism

Unlike the data on judicial independence, cross-national data measuring the degree of judicial activism is underdeveloped. The most extensive thus far is found in Cooter and Ginsberg (2003), covering 14 countries. Their definition of "judicial daring"—which they interchangeably call "judicial activism"—includes the following: (1) willingness to make new law through interpretation, or (2) willingness to adopt interpretations contrary to government preferences (ibid: 16). This is a five-point scale score based on evaluations by 23 experts (see Appendix for actual values). One of the limitations of this measurement is its ambiguity with regard to the time frame; Cooter and Ginsberg do not specify the time period for evaluation. Given that their paper was published in the early 2000s, I use this index with the assumption that experts rated the degree of judicial activism around the late 1990s or early 2000s. This matches the time period for which MAL scores have been calculated.

Figure 4 plots the judicial activism scores and MAL for 12 countries where both measurements are available. It shows that the lower degrees of malapportionment are associated with higher degrees of judicial activism. This result should be viewed with caution since other possibly important factors are not controlled for. In addition, there is no statistically significant relationship in

Figure 4. Judicial activism and malapportionment
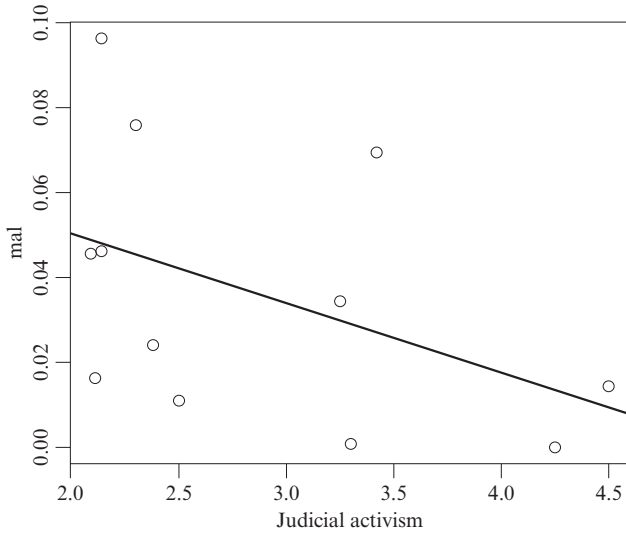
Source: Compiled by the author.

the bivariate regression. Nevertheless, it at least suggests some degree of plausibility for Hypothesis 2. In the next section, I provide case studies of the US and France to illustrate how judicial activism can influence malapportionment.

5. Case Studies

The United States

The US typifies high judicial independence (0.97) and high judicial activism (4.5). It likewise provides a clear-cut example of how a nation's judiciary has brought about reduced malapportionment.[12]

In March 1962, the Supreme Court handed down its decision in the case of *Baker v. Carr,* in which urban plaintiffs in Tennessee had challenged the state

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12)   This section draws heavily on Cox and Katz (2002).

legislature's failure to reapportion despite widespread population shifts towards urban districts. The Warren Court ruled that Baker's case was justifiable in light of the Fourteenth Amendment's guarantee of equal protection of the laws to all citizens. Similar lawsuits followed immediately after the verdict. In 1964, through *Reynolds v. Sims*, the Court formulated the "one person, one vote" standard that has since become a democratic motto around the world. In 1973, it reaffirmed the requirement that districts be apportioned "as mathematically equal as reasonably possible." Further, in 1983, the Supreme Court's decision set a numerical standard that congressional districting should be done with a deviation of 0.7 percent from the target figure or else be deemed unconstitutional.

The Supreme Court's decisions changed the rules of apportionment so that the state-level courts now play an important role. Since 1929, seats have been automatically apportioned among the states according to population after each decennial census. However, it has been up to the state to define the boundaries of its allotted number of districts—generally by state legislation involving both legislatures and governors. If a law did not pass, then the next election was held under the old law, which kept malapportionment intact. After the reapportionment revolution ushered in by the Supreme Court, when the state legislature could not pass new laws, the highest state court imposed a plan. Thus, state legislatures had to plan districting under the threat of the courts' involvement.

Figure 5 displays the degree of malapportionment in the US House of Representatives elections from the end of WWII until the 1990s. The blue line indicates the degree of national-level malapportionment. The red line pictures interstate malapportionment, which is the extent to which each state receives an unfair share of seats according to its state-wide population. The box plot shows the distribution of malapportionment among the 50 states, with the middle line in the box indicating the median value. Figure 5 reveals that the sources of malapportionment during the pre-reform era mostly came from malapportionment within each state. In other words, the distribution of seats to each state has been relatively fair throughout the post-WWII period. The narrowing gap between the red and blue lines from the late 1960s to the mid-

Figure 5. Malapportionment in the US House of Representatives since WW II
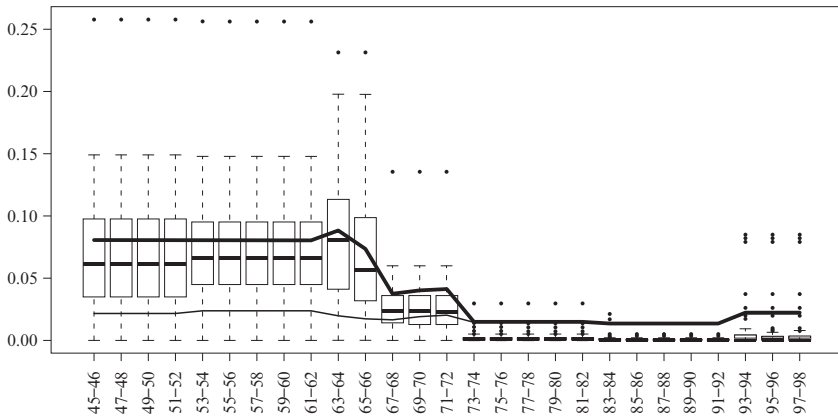
Source: Compiled by the author, based on data provided on Scott Adler's home page.[13]

1970s indicates the movement of states away from biased districting practices around this period. The figure, as a whole, confirms the standard story that the Supreme Court's decisions in the 1960s have dramatically reduced malapportionment in the elections of the US House of Representatives.

France

Although the case of France is not as clear-cut as that of the US, it is another country in which the judiciary has played an important role in reducing malapportionment. France scores relatively high in both *de facto* judicial independence (0.74) and activism (3.42). It also uses an SMD system with two rounds of voting.[14] The French Constitution stipulates that each department must have at least two representatives in the National Assembly. The Ministry of Interior plans the boundaries, and the government promulgates the districting

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13) http://sobek.colorado.edu/~esadler/Congressional_District_Data.html

14) This system has been used consistently under the Fifth Republic that began in 1958, except for the PR system-based 1986 election. This change was initiated and implemented by the Socialist government, but after their defeat in the 1986 election, the SMD system was quickly re-adopted.

plan as a decree.

In France, the Constitutional Council is established to conduct judicial review. It began addressing the malapportionment issue beginning in the 1980s. In the aftermath of the 1986 election, a group of socialist deputies led by Pierre Joxe appealed to the Constitutional Council that the existing districting plan violated the principle of equal suffrage. The plan in use at that time was a product of the Gaullist government, prepared by then-Minister of the Interior Charles Pasqua, and had been decreed just before the 1986 election. In the election law of 1986 governing that year's election, it was stipulated that no districts could have a population differing from the national average district population by more than 20 percent. Under Pasqua's plan, only 24 out of 96 departments met this standard (Balinski 2008: 183–184). Ruling against the Joxe case, the Council did not declare Pasqua's districting unconstitutional. However, it issued a strong warning that deviation from the 20 percent standard should be "reserved for exceptional cases."[15]

The Council's warning in 1986 has served as a reference point for the successive decisions and observations that the Council has delivered on malapportionment subsequently. For example, in 2005, the Constitutional Council issued an observation stating that the current Pasqua districting plan was unsatisfactory and that reform should be undertaken, if not before the coming 2007 election, then after.[16] The Pasqua districting plan of 1986, which was based on the 1982 census, had been in use without alterations for elections held in 1988, 1993, 1997, and 2002. As the government again failed to re-district for the 2007 election, the Council issued another observation dated May 29, 2008.[17] Citing the "regret" expressed in the abovementioned 2005 observation, the Council stated that it was now "imperative" to reform the districting plan.
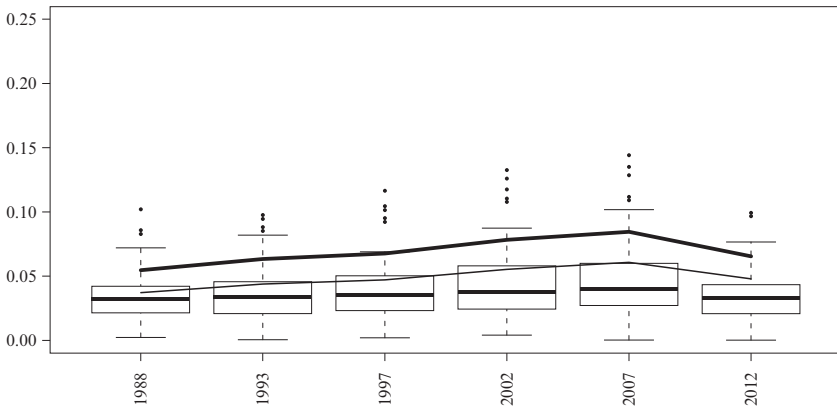
Shortly after the observation was made public, President Sarkozy tasked

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15) http://www.conseil-constitutionnel.fr/conseil-constitutionnel/francais/les-decisions/ acces-par-date/decisions-depuis-1959/1986/86-208-dc/decision-n-86-208-dc-du-02- juillet-1986.8273.html.

16) http://www.conseil-constitutionnel.fr/conseil-constitutionnel/francais/les-decisions/ acces-par-date/decisions-depuis-1959/2005/2005-22-elec/decision-n-2005-22-elec-du-07- juillet-2005.107207.html

Figure 6. Malapportionment in the French National Assembly since the 1980s

Source: Compiled by the author.

Alain Marleix, the then Secretary of State for Interior and Local Authorities, to make a new districting plan, which was completed in 2010.[18] Marleix's plan was used in drawing district boundaries in the 2012 election.

Figure 6 displays the change in the degree of malapportionment in France from the 1980s to the 2012 election. The structure of the graph is notably similar to that of Figure 5. The increasing malapportionment from 1986 to 2007 can be attributed to changing demographics, such as inter-regional migration, because little else had changed. In the 2012 election, with the use of a new districting plan, MAL declined to approximately 1986 levels. Although the 2010 districting plan is far from perfect, this sequence of events illustrates that the judiciary's repeated warning against MAL stimulated the government to embark on districting reform.

17） http://www.conseil-constitutionnel.fr/conseil-constitutionnel/francais/les-decisions/ acces-par-date/decisions-depuis-1959/2008/2008-24-elec/decision-n-2008-24-elec-du-29-mai-2008.108157.html

18） http://www.lefigaro.fr/politique/2008/07/12/01002-20080712ARTFIG00038-decoupage-electoral-marleix-tente-de-deminer-le-terrain-.php

6. Conclusion

This paper has argued that high levels of *de facto* independence and activism of the judiciary can serve as one channel by which malapportionment can be reduced. Although preliminary, both a cross-national statistical examination and case studies have provided support for this argument. Another noteworthy finding is that when the effect of judicial independence is included in the regression model, the SMD electoral system is no longer a statistically significant factor. This finding should be contrasted with those of previous studies that consistently found SMD to be associated with higher malapportionment. My result indicates that when the court can exercise effective oversight, the effects of SMD—either technical difficulties in districting or politicians' stronger incentives to resist reform, or both—are curtailed.

These results suggest that one solution to the problem of malapportionment is to improve the independence and activist character of the courts. Snyder and Samuels (2004) have suggested that changing electoral formulae from SMD to PR would be a possible remedy. The findings of this paper imply that such changes may not be necessary if the courts can exercise effective checks on malapportionment.

There are, however, a number of issues to be addressed in a future version of this research. First, to examine in detail how judicial independence affects malapportionment, we need longitudinal data about malapportionment for a large number of countries. Such data would also be useful in disentangling the correlation between inequality and judicial independence. Second, the number of case studies may be helpfully increased. Currently, the paper only examines cases scoring high values for both independent and dependent variables. In the future, cases with lower values for both should be studied to glean a more comprehensive understanding of the role of the judiciary.

More broadly, scholars should seek other causes of malapportionment to accumulate more knowledge about this understudied topic. One factor worth investigating is rules concerning redistricting. It can be expected that when a politically insulated body is in charge of redistricting, as in the case of Mexico's Federal Electoral Institute (IFE) since the late 1990s,[19] lower malapportionment

is the likely result. Conversely, when the incumbent government has the ultimate decision-making power, malapportionment might be higher. The other possibility important factor turns on constitutionally justified malapportionment at the level of the lower legislative chamber. It is well-known that many federal countries have a constitutional provision that deliberately overrepresents smaller geographic unites at the upper chambers. Some countries have similar constitutional mandates for their lower chambers. France's National Assembly is one such example, as mentioned in my case study.[20] Malapportionment resulting from constitutional quota is justifiable as legitimate and thus should be separated from politically maneuvered malapportionment. With the growing availability of cross-national and cross-sectional data on malapportionment, these issues demand attention in the future.

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19) This point is suggested in Snyder and Samuels (2004: 157).

20) Another example is Brazil. Its constitution mandates that no state can have less than eight or more than 70 deputies. This practically means that small states have a constitutionally sanctioned quota spelling their overrepresentation in the lower chamber.

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Appendix. Judicial Activism Score

Country	Activism score
US	4.5
Israel	4.25
Netherlands	4
Belgium	3.5
France	3.42
Italy	3.3
Germany	3.25
Sweden	2.5
Australia	2.38
Canada	2.3
Japan	2.14
Spain	2.14
NZ	2.11
UK	2.09

Source: Cooter and Ginsberg 2003.