When and Why Does the U.S. Supreme Court Overrule a Precedent?

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Introduction

The doctrine of *stare decisis* refers to the Supreme Court's obligation to follow precedent rulings. Adherence to this doctrine maintains the court's accountability, stability and legitimacy (Spriggs and Hansford, 2001). It marks the exercise of judicial restraint as it limits judges' ability to interpret cases by their own will. However, as societies evolve, some precedents lose workability. As Justice Anthony Kennedy explains in *Patterson v. McLean Credit Union (1989, 172)*, "Our precedents are not sacrosanct, for I have overruled prior decisions where the necessity and propriety of doing so has been established." Between 1947 and 2018, the Supreme Court overruled 178 of its prior decisions, and I want to ask: when and why does an overruling of precedents occur?

Previous research on this topic has been conducted by James F. Spriggs, II and Thomas G. Hansford in 2001. Spriggs and Hansford discovered that the decision to overrule U.S. Supreme Court precedent results from "the justices' pursuit of their policy preferences within intra- and extra-Court constraints." They conducted survival analysis on cases decided from 1946 to 1995 and found that although the political environment exerts no effect in judicial decision making, factors such as ideological incongruence between a precedent and a subsequent Court, the type of legal provisions precedent cases based on (statutory or constitutional), and the treatment cases receive from the subsequent courts, are significant variables in determining the lifespan of the Supreme Court cases. They consequently concluded that the legal norms influence judicial decision making. A similar research by McMillion and Vance in 2017 on the Court's decision to revisit cases also found that the Supreme Court is more likely to revisit a case as the number of circuit courts critical of that opinion increases, suggesting that even though the Court's word is final, criticism by lower courts could make the Supreme Court cast doubt on its precedents. Other studies also show that factors such as precedents unanimity, complexity, age, the Court's composition, quality of a precedent's reasoning, and whether there is a changed understanding of relevant facts all play important roles in their durations. (C. Benesh, Sara & Reddick, Malia. 2002, C.P. Banks. 1999, B. J. Murrill. 2018).

In this paper, I hypothesize that 1) The area of a precedent is a significant indicator of its duration until overrule. Cases in some areas are more controversial and thus are overturned more frequently than in others. 2) The justices' vote split between the majority and the minority opinions when a precedent was decided also predicts its lifespan. The higher the minority-to-majority-vote ratio, the more likely an issue will be overruled. 3) To test one of the conclusions in Spriggs and Hansford, I assume that issues based on statutory interpretation are more likely to be overruled than on constitutional interpretations. 4) Furthermore, I assume that whether the decision's ideological "direction" of the issue is liberal or conservative also leads to distinctive survival curves. 5) Last but not the least, I conjecture that the higher the ideological disparity between the Court that established a precedent ruling and the Court that overruled it, the shorter the survival time would be.

I will divide this paper into 6 sections. In section 2, I will provide the data and methods utilized to answer the research question. In section 3, I will present the results. Then in section 4, I will interpret practical implication of the results and discuss variable interactions in a larger context. In section 5, I will state the conclusion and provide suggestion of further effort on this topic and lastly in section 6 list all references.

Data and Methods

To test my hypotheses, I gathered data from all Supreme Court decisions from January 1947 to January 2018 (N=8,893) from the Supreme Court Database by Harold J. Spaeth, Lee Epstein, et al. Version 2018 Release 1. Cases decided prior to 1947 are ignored in this paper because they are usually considered as "legacy" cases, meaning that comparing them with contemporary cases with the same measures are less meaningful since the Court structure and functionality changed over the decades.

Because each individual case once decided cannot be "overruled" by itself, in order to study the duration of Court decisions, I gathered the cases into "issues" (N=278) and recorded the decision time of each case under each "issue". The way I classified "issues" focus on the subject of controversy (e.g. affirmative action, sex discrimination, state tax) rather than its legal basis (e.g. the equal protection clause).

If an issue is overturned multiple times, then each overturn constitutes a new observation; on the other hand, if an issue is never overturned until the date that the data was collected (January 31, 2018), it will count as a censored observation. This approach produced a total of 169 cases that the Supreme Court decided and overruled between the 1947 and 2018 terms, and 185 censored cases that were decided but never overruled (N=354).

The observed dependent variable is the length of survival time in days (min = 0, max=26089). I also included a status variable to keep track of whether each observation is censored (Status=0) or exact (Status=1). Currently, I have five explanatory variables: issue area (issue Area), the ratio of minority votes to majority votes (votesratio and cat_votesratio), the legal provision that each decision cited (legal Provision), whether the decision leans towards liberal or conservative policy preferences (decision Direction), and the court's median ideological disparity between the year when the precedent was established and when it was overruled (ideology diff and cat_idediff). Note that for variables votesratio and ideology diff, I included two categorical variables for the convenience of non-parametric analyses.

Variable 1: Area of Controversy (issueArea)

The variable *area* is a categorical variable with 12 values, such as "criminal", "due process", and "First Amendment". These values are directly extracted from variable *issueArea* in the SCDB database

Variable 2: Judges Vote Split (votesratio and cat votesratio)

The variable *votesratio* is produced by the number of votes in the minority party divided by the number of votes in the majority party. The majority votes and minority votes usually add up to the total number of justices (N=9) but could be less when some justices were absent. For example, if a decision is agreed by all justices, then *votesratio*=0/9=0. The reason I chose to use minority vote divided by majority vote is that I want to avoid infinite values. I also transformed this quantitative variable into a categorical one, *cat_votesratio*, which has three groups: [0~0.125] (unanimous vote), [0.125~0.285] (1-8 vote split), and [0.285~1] (2-7 vote split and above). I summarized cases with higher vote split into one category because their sample sizes are smaller.

Variable 3: Legal Provision Type (legalProvision)

The variable *legalProvision* is categorical with two values either "constitutional" or "statutory". They are derived from the *legalProvision* variable in the SCDB database. Issues whose *legalProvisions* values are from 100 to 241 or from 311 to 319 (the Constitution, Constitutional Amendments, and the Civil Rights Act) are decided based on constitutional interpretations, and thus have "constitutional" under the *legalProvision* variable. All the other observations are left as "statutory".

Variable 4: Ideological Direction (decision Direction)

This variable has two values: 0 represents liberal, and 1 represents conservative. They are directly extracted from the SCDB database under the same name, except that I recorded observations with unspecified direction (*decisionDirection=3*) as "NA", so models regarding this variable disregarded these observations.

Variable 5: Ideological Disparity (ideologydiff and cat_idediff)

Variable ideologydiff (0~2.11) is extracted from the Martin-Quinn scores which measure each justice's ideology score by year. A detailed explanation of how they are calculated can be found in Andrew D. Martin and Kevin M. Quinn's paper "Dynamic Ideal Point Estimation via Markov Chain Monte Carlo for the U.S. Supreme Court, 1953-1999" published in 2002. Here, I took the median court ideology score per year, and kept the absolute value of the difference between the year when a precedent case is established (variable mindate) and the year when it is overruled (variable maxdate). For analysis convenience, I also created a categorical variable that divides ideologydiff into four quantiles. This variable is recorded as $cat_idediff$.

There are several advantages of using the duration models in this study. First, duration models examine observation evolutions by a changing context. This characteristic is especially advantageous in studying the Supreme Court decision overrules because as some precedent cases goes on not overruled, they gain legacy, meaning that the hazard rate of being overruled in the subsequent years, given it has survived so far should decrease. Furthermore, duration models take into account of the observations that survived till the end of the study (right-censored data) and therefore prevents bias. In the SCDB database, 8715 out of a total of 8893 Supreme Court decisions from 1947 to 2018 never formally altered a precedent. This information will be lost if I used non-durational models.

For the above reasons, I chose to utilize survival analysis to examine the Supreme Court's overruling of precedents. From the family of survival models, I assumed Weibull and Log-Normal parametric distribution because I hypothesized that the hazard rate decreases by time. However, because each case presented to the Supreme Court is decided on a case-by-case basis, I have enough reason to also examine the data through semi-parametric and non-parametric methods in order to eliminate any biased assumption. Therefore, I also decided to use Cox PH model and Kaplan-Meier curves in this paper. I will first examine the Kaplan-Meier models for the issue area variable, then apply Cox PH model, Weibull model and Log-Normal model to each individual variable. Finally, I will look at the Cox PH, Weibull and Log-Normal models for all 5 variables together, and proceed for interaction models if necessary.

Results

Overall, the p-values for all proposed variables showed significance to some extent (Table 1 and Table 2), suggesting that I can reject the null hypothesis that my explanatory variables independently or jointly have no effect, and accept the alternative: that issue area, vote ratio, whether an issue is under statutory or constitutional interpretation, whether the decision is liberal or conservative and the ideological disparity between two courts, are significant indicators on the duration of the Supreme Court precedents.

I. **Kaplan-Meier Curves** 0.8 Issue Area Survival Rate 9.0 civil rights criminal economic First Amendment 9.4 judicial power privacy unions 0.2 0.0 0 5000 10000 15000 20000 25000 30000 Survival Time in Days

Figure 1: Kaplan-Meier curves by issue areas (For better visualization, only a few issue areas are included in this graph)

I hypothesized that the survival curves for the Supreme Court precedents vary by issue area. From Figure 1 I could see that the survival rate drops very fast for First Amendment issues, whereas it goes down slowly for judicial power precedents and unions. Civil rights issues, criminal issues, and economic issues are centered in between First Amendment and judicial power curves.

Table 3: Mantel-Cox Log-Rank Test Results					
	test-statistic	p-value	hazard ratio		
Area: First Amendment/judial power	29.82	1.693×10^{-3}	6.522		
${\bf Votes ratio:~2-7 split+/unanimous}$	22.15	$1.867{\times}10^{-4}$	5.331		
$Law Supp: \ constitutional/statutory$	26.43	$2.733{\times}10^{-7}$	2.179		
Decision direction: liberal/conservative	10.52	$1.181{\times}10^{-3}$	1.670		
ideologicaldiff: 1stQ/4thQ	13.95	$2.977{\times}10^{-3}$	2.109		

Table 3 shows the Mantel-Cox version of the log-rank test for each categorical variable. Note that the test-statistic and p-value columns are composed of values for all categories under each variable.

However, since some categorical variables have more than two groups, I only selected one pair in each test to calculate the hazard ratio. For example, I only compared the hazard ratio between group 1: $cat_votesratio=[0~0.125]$ (unanimous decisions, 0-9) and group 3: $cat_votesratio=[0.285~1]$ (decisions with 2-7 vote split or higher).

The hazard ratio between group 1 and group 3 is 5.331, meaning that precedents decided with 2-7 split or higher are on average 5 times riskier to be overruled than cases decided unanimously. Similarly, I discovered that First Amendment issues are 6.5 times more likely to be overruled than judicial power issues; precedents decided based on constitutional interpretations are roughly twice more likely to be overruled than those decided based on statutory interpretations; liberal decisions are 1.7 times more likely to be overruled than conservative decisions; lastly, cases under the first quantile of the ideological disparity spectrum (low disparity) are twice as likely to be overruled than cases under the fourth quantile (high disparity). I will explain potential reasons for this finding in detail in the Discussion section.

II. Univariate Models

Table 1: Univariate models

	Dependent variable:		
	Time Time $+ 0.01$		e + 0.01
	Cox PH	Weibull	$Log ext{-}Normal$
agofc	2.2216	0.2009	0.2445
civil rights	3.1148	0.0993	0.1309
criminal	4.1463**	0.0556**	0.0363*
due process	3.1118	0.0911	0.0458
economic	3.7460*	0.0666*	0.0647**
federal taxation	1.9625	0.2323	0.3936
federalism	3.3454*	0.0834*	0.0698
First Amendment	7.2162**	0.0200**	0.0269
judicial power	1.0692	0.8331	1.4459
privacy	2.9818	0.1096	0.2552
min/maj vote ratio	12.1605***	0.0083**	0.0045*
lawSupp: statutory	0.4512***	4.7841***	9.0776***
decision direction: conservative	0.6001**	2.8428**	2.5748
ideological disparity	0.6720*	2.3439*	8.5998***
Observations	354	354	354
Note:	*p<0.1; **p<0.05; ***p<0.01		

I presented the results of five univariate regression models in Table 1. Rows from "agofc" (attorney's or governmental official's fees or compensation) to "privacy" are values of variable *issueArea*, with the base *issueArea*= "unions". The last four rows show the other four the univariate

models. Values under the *Cox PH* column represent hazard ratios, and values under the Weibull and Log-Normal models are time ratios.

In general, I can see that all five variables have some significance. The hazard ratios are roughly the inverse of the time ratios. Issue areas such as "First Amendment" and "criminal" have survival time generally shorter compared to "unions", whereas precedents on federal taxation and judicial power last longer and are closer to unions' survival time.

For each vote that switches from the majority group to minority group, the risk of overrule in the future increases by two to three times according to the Cox PH model. Precedents with statutory interpretations last five times longer than those with constitutional interpretations, according to the Weibull model, and nine times according to the Log-Normal model. Conservative decisions generally last longer than liberal decisions (2.8 times by the Weibull model and 2.6 times by the Log-Normal model). For every one-unit increase in ideological disparity, a precedent would supposedly last two to nine times longer.

III. Multivariate Models

Table 2: Multivariate models

	L	ependent vari	
	Time	Time	+ 0.01
	Cox PH	Weibull	$Log ext{-}Normal$
agofc	1.6191	0.4137	0.4401
civil rights	2.5062*	0.1658	0.1625
criminal	3.1210**	0.1117**	0.0494**
due process	2.2407	0.1862	0.0931
economic	4.1946***	0.0651**	0.0525**
federal taxation	2.9544	0.1170	0.1114
federalism	2.0792	0.2252	0.1410
First Amendment	4.0060**	0.0699**	0.0372
judicial power	0.9727	0.9739	1.0037
privacy	1.6215	0.3974	0.6455
min/maj vote ratio	3.2012	0.1252	0.2893
lawSupp: statutory	0.5009***	3.4606***	4.7295***
decision direction: conservative	0.6317***	2.2967**	1.3707
ideological disparity	0.6447**	2.3127**	9.0156***
Observations	354	354	354
Log Likelihood	-877.496	-1,742.308	-1,781.958
Wald Test	63.410***		
LR Test	71.998***		
Score (Logrank) Test	69.136***		

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 2 has the same format as Table 1, except that it displays three multivariate models. From the output I can see that the time ratios and hazard ratios are similar to the univariate models. The significance for most variables do not change much, except for the variable *votesratio*. This variable alone has a very significant effect on the survival and/or hazard (p=0.0009779, 0.0025 and 0.048 from Cox PH, Weibull, and Log-Normal, respectively), but its significance disappeared after I added the other four variables (p=0.200024, 0.24581 and 0.687 respectively).

To investigate the driving factors for this loss of significance, I added variable *issueArea* and variable *legalProvision* individually to the univariate *votesratio* Cox PH model, and the significance drops slightly (p1=0.02919, p2=0.0424). However, when I add variable *decisionDirection* and variable *ideologydiff* individually to the univariate *votesratio* Cox PH model, the significance maintains. When I add both *issueArea* and *legalProvision* to the univariate *votesratio* Cox PH model, *votesratio* completely loses significance (p3=0.256). This result indicates that *legalProvision* and *issueArea* are confounding variables between *votesratio* and duration time.

Discussion

The results from the analyses above provide a great deal of information on when and how the Supreme Court justices overrule precedent cases. To understand these results, I claim that implications of these significance can be summarized into two categories: 1) Justices are political, and their behaviors in court are influenced by their policy preferences. 2) However, justices are also constrained policy makers whose decisions are limited by certain legal norms and institutions.

Results on variables issueArea, legalProvision, and ideologydiff, support the claim that justices act by their policy preferences. First and foremost, the fact that *ideologydiff* is highly significant in all of my models indicates that the lifespan of a precedent case depends on the ideological disparity between the court that established the precedent and the court that overturned it. So I would subsequently argue that the Supreme Court's behavior more or less depends upon its ideological beliefs. Furthermore, liberal decisions on average are roughly two times as likely to be overruled than conservative decisions. A potential explanation to this result is that since my dataset include cases from 1947 to present, a lot of the overruled precedents were decisions made in the Warren Court during the 1950s-1960s. As the court composition became more conservative with increasing republican appointees, these liberal decisions which are oftentimes criticized as "judicial activism" by the conservative members of the court would be overruled. Additionally, the result from the issueArea="judicial power" also conversely confirms this argument. I summarized the issueArea variable into "judicial power" (N=46) and "not judicial power" (N=308), and tested the interaction between this new variable and variable decision Direction (interaction term p=0.4249). From this result I observed that precedents under judicial power are independent of whether a decision is liberal or conservative. This result could be interpreted as that justices prioritize maintaining the Court's judicial power over sticking to their policy preferences, which conversely confirms that justices act upon their political preferences. The extremely slow drop of the Kaplan-Meier curve for judicial area cases also supports this observation.

On the other hand, results on variables *legalProvision* and *votesratio* provide evidence that justices behave within some norm of judicial restraint. Both the univariate and multivariate models on *legalProvision* indicate that precedent cases based upon constitutional interpretations are in general

twice as likely to be overruled than those based on statutory interpretations. One of the possible reasons for this observation is that the language in the Constitution and Constitutional Amendments has more ambiguity and vagueness by design, leaving larger space for interpretations and thus less definitiveness. Whereas in statutory interpretations, justices act by a stronger legal norm. This finding also implicates the relationship between Congress and the Court. Once the Court construes a statute, the interpretation becomes part of the statute itself, so that "overruling the earlier opinion is almost like repealing and rewriting the statute, which is something that only the legislature is supposed to do." (Kmiec, K. D. 2004) In order to constrain its position as the judiciary and judiciary only, the Court would avoid overruling precedents based on statutes. Moving to the result on variable votesratio, I observed that unanimous decisions are 5 times "safer" than cases with 2-7 vote split or above. This result suggests that in order to preserve the Court's legitimacy, justices have the motivation to stick to the doctrine of *stare decisis* and subsequently secure the precedents' standing for a longer period of time. However, variable *votesratio*'s loss of significance under the presence of issueArea and decisionDirection implies that the legitimacy contained in unanimous votes are influenced by justices' political lenience on the issue of controversy and their ideology direction preference.

Overall, the results I see in this paper could be interpreted as a manifestation of the battle between judicial activism and judicial restraint in the past 70 years. I would postulate that justices during the social turmoil of the 1950s-1960s often found themselves in the front and center to achieve progressive goals. However, such active litigations faded away during the 1980s when justice Anthony Scalia proposed an alternative: originalism. As Scalia put it, "[t]he Constitution that I interpret and apply is not living but dead, or as I prefer to call it, enduring. It means today not what current society, much less the court, thinks it ought to mean, but what it meant when it was adopted." Stronger originalist voices to some extent may account for the overrules in my dataset from 1947 till present (Kaufman, W. 2014).

My results mostly agree with previous literature on the Supreme Court precedent overrules by survival analysis, but I do have surprising findings. As I explained in the Introduction, a positive relationship between the survival time and the ideological disparity between the court when a precedent was established and the court when it was overruled was expected (Spriggs and Hansford 2001). However, my models suggested the opposite correlation: the bigger the ideological gap, the longer a precedent survives. I speculate that the Supreme Court would avoid touching controversial issues in the case selection process, so that it will be able to produce more unanimous decisions and subsequently preserve its image as an apolitical institution. For instance, in December 2018, the Court was found to have refused to hear two cases aiming to bar Planned Parenthood clinics from the Medicaid program, which according to New York Times signals Chief Justice Roberts's effort in keeping the court out of major controversies. This hypothesis is also supported by the fact that 39.8% of the cases from 1947 to present are decided unanimously.

To answer original question: When and why does the Supreme Court overrule its precedents, I conclude: The Supreme Court overrules precedents when doing so aligns with the Court's political preference. However, the Court also limit such violations as attempts to maintain its legitimacy. Most overrules I examined can potentially be explained by the change of Court composition since the 1950s.

My analysis compared to the previous literatures stands out on three aspects. First, it utilized the data collected up until January of 2018, which provides insights on the most current Supreme Court

precedent overruling behaviors. Secondly, I included all families of the survival analysis models including non-parametric analysis (Kaplan Meier curves), semi-parametric analysis (Cox PH models) and parametric analysis (Weibull and Log-Normal models). I did not settle on the assumption of one type of models (e.g. I did not assume that the hazard ratio is constant overtime as Cox PH models would by itself), so I could compare these results and avoid assumption biases. Moreover, I utilized the dynamic ideology score for each justice each year, rather than calculating the average of the justices' ideology scores over their entire career. This approach acknowledged the possibility that justices' ideology and policy preferences evolve over time, which would produce ideological disparity scores with higher accuracy. As Spaeth and Segal explained in their book *Majority Rule or Minority Will*, "[e]xamples of justices' changing their votes and opinions in response to established precedents clearly exist. In *Griswold v. Connecticut (1965)*, Stewart rejected the creation of the right to privacy... Yet in *Eisenstadt v. Baird (1972)* he accepted *Griswold*'s right to privacy." Accounting for such time dependency is also necessary.

Conclusion

In this paper, I aim to explain when and why the Supreme Court overrules its precedents. I first examined the Kaplan-Meier curves for each individual categorical variable and performed the Mantel-Cox version of the Log-Rank Test. Then, I explored the Cox PH, Weibull and Log-Normal models for each individual variable as well as for all five variables together. By comparing the significance, time ratios and hazard ratios in these models, I discovered that the Court overrules its precedents when the violation of *stare decisis* is in alignment with its median ideology, and subsequently concluded that justices make decision based on their political preferences but also within the constraint of certain legal norms.

One limitation of this paper could be that my dataset is solely composed of cases from 1947 to January, 2018. This 70-year period most prominently demonstrated the court ideology shift from liberal in the 1950s to conservative from the 1980s onward, but whether this shift would go further into the conservative end on the spectrum or bounce back to the liberal end remains unexplained. Another limitation is that I only included five independent variables to study the duration of the Supreme Court precedents. The reality that might affect the precedent overrules are a lot more complex than that. Therefore, further research could include more variables such as public opinion, the treatment of subsequent courts precedents received from subsequent courts. Future efforts could also delve deeper into the interactions between the independent variables by stratifying some of the controlled groups.

The doctrine of *stare decisis* is a fundamental part of the American legal system (Spaeth and Segal, 1999). This paper is only a first attempt on understanding the Supreme Court's overruling of precedents and its adherence to *stare decisis* from a durational model approach. However, it provides empirical results on the legal norms that influence judicial decision making.

Reference

Spriggs J. F. II and Hansford T. G. (2001). *Explaining the Overruling of U.S. Supreme Court Precedent*. The Journal of Politics, 63(4), 1091-1111.

Martin A. D. and Quinn K. M. (2002). *Dynamic Ideal Point Estimation via Markov Chain Monte Carlo for the U.S. Supreme Court, 1953-1999.* Political Analysis, 10, 134-153.

Martin A. D. and Quinn K. M. (2002). Martin-Quinn Scores Project Description. Retrieved from http://mqscores.lsa.umich.edu/index.php

Spaeth, H., & Segal, J. (1999). *Majority Rule or Minority Will: Adherence to Precedent on the U.S. Supreme Court.* Cambridge: Cambridge University Press, doi:10.1017/CBO9780511625572

Epstein, L., Landes W. M., and Posner R. A. (2012). *Are Even Unanimous Decisions in the United States Supreme Court Ideological?* Northwestern University Law Review, 106(2).

Kmiec, K. D. (2004) *The Origin and Current Meanings of Judicial Activism*. California Law Review, 92(5).

C. Benesh, Sara & Reddick, Malia. (2002). Overruled: An Event History Analysis of Lower Court Reaction to Supreme Court Alteration of Precedent. Journal of Politics. 64. 534 - 550. 10.1111/1468-2508.00138.

C. P. McMillion &K. Vance. (2017). *Criticism from Below: The Supreme Court's Decision to Revisit Cases.* Journal of Law and Courts. 5:1, 81-103.

C.P. Banks. (1999). Reversals of Precedent and Judicial Policy-Making: How Judicial Conceptions of Stare Decisis in the U.S. Supreme Court Influence Social Change. Akron Law Review. 32(2).

B. J. Murrill. (2018). *The Supreme Court's Overruling of Constitutional Precedent*. Congressional Research Service. R45319

Kaufman, W. (2014). *The Truth about Originalism*. The Pluralist, 9(1), 39-54. doi:10.5406/pluralist.9.1.0039