

NOTICE - Warning Concerning Copyright Restrictions.

The copyright law of the United States (**Title 17, United States Code**) governs the making of photocopies or other reproductions of copyrighted material.

Under certain conditions specified in the law, libraries and archives are authorized to furnish a photocopy or other reproduction. One of these specified conditions is that the photocopy or reproduction is not to be "used for any purpose other than private study, scholarship, or research." If a user makes a request for, or later uses, a photocopy or reproduction for purposes in excess of "fair use," that user may be liable for copyright infringement.

This institution reserves the right to refuse to accept a copying order if, in its judgment, fulfillment of the order would involve violation of Copyright Law.

**LEGISLATIVE TERM LIMITS:
PUBLIC CHOICE PERSPECTIVES**

edited by
Bernard Grofman



Kluwer Academic Publishers
Boston/Dordrecht/London

Distributors for North America:

Kluwer Academic Publishers
101 Philip Drive
Assinippi Park
Norwell, Massachusetts 02061 USA

Distributors for all other countries:

Kluwer Academic Publishers Group
Distribution Centre
Post Office Box 322
3300 AH Dordrecht, THE NETHERLANDS

Library of Congress Cataloging-in-Publication Data

Legislative term limits : public choice perspectives / edited by
Bernard Grofman.

p. cm. -- (Studies in public choice : 10)

Includes bibliographical references and index.

ISBN 0-7923-9702-9 (alk. paper)

1. United States. Congress--Term of office. 2. Social choice--
United States. I. Grofman, Bernard. II. Series.

JK1140.L44 1996

328,73'073--dc20

95-52837

CIP

Copyright © 1996 by Kluwer Academic Publishers

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, mechanical, photo-copying, recording, or otherwise, without the prior written permission of the publisher, Kluwer Academic Publishers, 101 Philip Drive, Assinippi Park, Norwell, Massachusetts 02061.

Printed on acid-free paper.

Printed in the United States of America

**THE EFFECT OF TERM LIMITS
WHEN COMPETITION IS
ENDOGENIZED: A PRELIMINARY
MODEL***

*Bernard Grofman
Neil Sutherland*

In the ongoing debate about legislative term limits it is an almost unchallenged assumption that restricting the number of terms legislators can serve will decrease average legislative tenure and, in the process, increase legislative competitiveness. Certainly if, in the absence of term limits, the average tenure is greater than what the new restriction would permit, then a restriction on terms will necessarily reduce average years of service. However, if the average previous length of service without term limits is less than the maximum length of service under the new term limit restrictions, we can show that it is quite possible that changes in key parameters induced by rational actors responding to the institutional shift can create circumstances in which average tenure in office actually rises after term limits are introduced. Moreover, it does not follow that higher turnover implies greater average competitiveness for seats. As the political scientist Thomas Mann was perhaps the first to realize (Mann, 1992:25), we can easily imagine circumstances in which the ceiling imposed by term limits turns "into a floor, with would-be candidates deferring their challenge and awaiting the involuntary retirement of the incumbent. If a norm of deference to the term-limited incumbent takes root, elections would only be contested in open seats, and then only those not safe for one party or the other."

This brief chapter has two aims. First, we wish to present a very simple model of two-party competition in which the decision whether or not to challenge an incumbent is endogenized so as to reflect rational calculations by a potential strong challenger about the relative advantages of making the challenge or delaying until the seat is open. Second, we wish to present some historical evidence on the consequences of gubernatorial term limits for gubernatorial term length that demonstrates that the intuitions derived from our simple formal model are not unrealistic ones. By presenting our work in explicitly rational choice terms we show that what Mann (1992:25) refers to as a "norm of deference" (in the quote in the paragraph above) can be given justification in expected utility terms.¹

A SIMPLE FORMAL MODEL OF POLITICAL COMPETITION, WITH AND WITHOUT TERM LIMITS

Consider a sequence of two-party contests. There either is or is not an incumbent. At any given time there is exactly one strong challenger of the opposite party who may choose either to contest the election or to defer a decision to run until the next election. In our very simple model the strong challenger is assumed to be able to capture the nomination of his/her own party in any election year s/he runs as long as s/he has not yet lost an election to a candidate of the opposite party; however, if a challenge is unsuccessful, then there is no second chance, and a new strong challenger will emerge.² If a weak challenger runs against an incumbent we assume that the incumbent wins with probability one.³

Let

I_i = the probability that the strong challenger (of party i) will defeat the incumbent if the incumbent runs

V_i = the probability that the strong challenger (of party i) will win if s/he is contesting an open seat, with no incumbent of the opposite party

$R_{j,t}$ = the probability that the incumbent (of party j) will be running for a tth term.

Consider the effects of a two-term limit under the assumptions specified above.

We provide calculations from the perspective of a challenger of party i. If the strong challenger chooses to run when there is an incumbent of the opposite party currently holding office, the conditional probability s/he will win an initial term in office is I_i if s/he runs against an incumbent, which event will occur with probability $R_{j,2}$; and V_i if there is no incumbent in the race, which event will occur with probability $1 - R_{j,2}$.⁴ Thus, the probability of victory by a challenger who chooses to run when there is an incumbent of the opposite party currently holding office is given by

$$(1) \quad I_i * R_{j,2} + V_i * (1 - R_{j,2})$$

If a challenger is successful in this initial contest against an incumbent, then the challenger becomes the incumbent and, assuming a strong challenger contests, the conditional likelihood that the challenger will win a second election once s/he has won the first is $(1 - I_j) * R_{j,2}$. The likelihood of this event (conditional on there being a strong challenger) is given by

$$(2) \quad \left[(1 - I_j) * R_{j,2} \right] * \left[I_j * R_{i,2} + V_j * (1 - R_{i,2}) \right].$$

If, however, the challenger chose to delay until the present incumbent was forced to retire then, with a two-term limit, the likelihood of winning the open seat election would be given simply by

$$(3) \quad V_i$$

Now, we may consider whether or not a rational challenger would prefer to contest the incumbent or delay till there is an open seat.⁵ Since, we would certainly anticipate that, under normal circumstances, $I < V$, regardless of party, the value of Eq. (3) is always greater than that of Eq. (1). Therefore, absent discounting of future expectations in terms of present value, under the very special simplifying assumptions we have used, with a two-term limit in place, strong challengers in each party would always delay until there was an open seat. If we introduce a discounting factor, d , then a challenger of party i will delay the challenge until there is an open seat if and only if

$$(4) \quad I_i * R_{j,2} + V_i * (1 - R_{j,2}) < d * V_i$$

i.e., iff

$$(5) \quad R_{j,2} / (d + R_{j,2} - 1) < V_i / I_i$$

For reasons of notational simplicity, we shall henceforth drop the party subscripts. The reader is reminded however that the values of I , V , and R are likely to be party specific and the reader should fill in the appropriate subscripts mentally.

If we assume that Eq. (5) is satisfied for challengers of party i and that the corresponding inequality is satisfied for challengers of party j , then the probability that a challenger will win the first time is simply V ; and the conditional probability that this challenger (now an incumbent) if s/he chooses to run will win a second term if the first campaign is successful is one. The reason for this is that, by the reasoning above, which we have hypothesized to apply to challengers of both parties, no strong challenger will contest an incumbent; they will defer until term limits creates an open seat. Thus, the unconditional probability that the challenger will win a second term is simply the conditional probability of winning a first term, V , multiplied by the likelihood that s/he will contest this contest, R_2 , multiplied by the likelihood of incumbent success when there is no strong opponent (one). Hence, the expected tenure of a challenger when a two-term limit is in place will be

$$(6) \quad V + R_2 * V = (1 + R_2) * V$$

On the other hand, if there were no term limits, then the likelihood that the challenger would win the first contest is given by Eq. (1); while the conditional probability of success in a second term bid is given by $(1 - I) * R_2$, and the unconditional probability of success in a second term bid is given by Eq. (2). In like manner, the conditional probability of success for a third term is given by $(1 - I) * R_3$, while the unconditional probability of success in a third term is given by

$$(7) \quad [(1 - I) * R_3] * [(1 - I) * R_2] * [I * V * (1 - R_2)]$$

Etc.

If we make the simplifying assumption that

$$(8) \quad R_i = R_j = R$$

then we may use the formula for the sum of an infinite series⁶ to get expected tenure in the case where there are no term limits as

$$(9) \quad [I * R_2 + V * (1 - R_2)] * [1 / (1 - (1 - I) * R)]$$

We now wish to find whether there are circumstances under which the formula in Eq.(6) exceeds that given in Eq. (9), i.e., circumstances under which, for members of a given party, expected tenure with a two-term limits is actually greater than expected tenure without term limits. If we assume that R is the same for members of each party, after some algebra, we find that, for this to be true, we must have

$$(10) \quad V > I / (1 + 1 - (1 - I) * R)$$

From Eq. (10) we see that the requisite inequality is more likely to hold the lower is I, the lower is R, and the greater is V. But are there values for which it does hold? The answer is yes. For example, if $I = .6$, $V = .5$, and $R = .8$, then the inequality holds.⁷ If the inequality holds for both parties then we would expect that the imposition of even this extreme form of term limits (two terms) would actually increase legislative tenure.⁸

If we impose term limits less restrictive than just two terms, an argument analogous to that given above shows that, if delay is not too costly, strong challengers will still defer until there is an open seat. But, the less restrictive the term limitation,

the less likely will it be that its imposition actually significantly diminishes tenure in office, since the argument given above shows that the imposition of term limits changes the incentive structure of challengers to make it very likely that incumbents will not face strong challengers. In contrast, when there are no term limits, given that incumbents do not appear to become significantly more vulnerable to external challenge as their tenure increases (except for the very oldest incumbents),⁹ there is no particular reason for a challenger to delay his/her challenge. Moreover the basic intuitions of the two-term model should also apply for longer term limits, namely that the effects of terms limits on change in average legislative tenure will vary positively with V and negatively with I and R . Thus, once we take into account changes in incentive structure, the supposed consequences of term limits for reduced legislative tenure and increased legislative competitiveness may be far from what they are cracked up to be.

SOME ILLUSTRATIVE ANALYSES OF THE EFFECTS OF TERM LIMITS ON GUBERNATORIAL TENURE

Gubernatorial term limits were quite common in the early part of our nation's history but declined after the Civil War because almost all the new constitutions of the formerly Confederate states dropped the previously existing gubernatorial term limits that most had. Subsequently, limitations on gubernatorial terms have been making a slow but steady comeback. At present, over 60 percent of the states have gubernatorial term limits, usually for two terms. Gubernatorial elections in the U.S. offers us, in principle, a natural experiment that allows us to see whether the central intuition of the previous modeling, namely that tenure in office may not be significantly diminished (and might actually even increase) when term limits are imposed, could be observed with real data.

While recent work has looked at the link between gubernatorial term limits and term lengths and gubernatorial tenure in office (Beyle, 1992; Grofman and Sutherland, Section IV this volume), this work has been primarily descriptive rather than analytic. There are two key problems in using gubernatorial data for purposes of term limit analysis. The first is that the structure of gubernatorial elections is very time-dependent. In particular, there has been a gradual increase in gubernatorial term lengths, from the one-year terms common just after the founding to two-year terms to the four-year terms we now have for all but a handful of states. Also, except for the handful of states that maintained a two-year term with a two-term limit, in this century there has been a slow but significant increase in gubernatorial tenure within each category of term length/term limitation. The second and related problem is that, because term limits and term length are so closely intertwined (Grofman and Sutherland, this volume), if we want to hold term length constant, then we have only a few states for which we have a meaningful longitudinal comparison of gubernatorial tenure with and without term limits. Nonetheless, we

can make use of pooled cross-sectional data as well as report the few cases that permit direct same-state longitudinal comparisons.¹⁰

Table 10.1 shows mean gubernatorial tenure as a function of term lengths and term limits for data pooled over the period 1790-1990. For the proportion of states in each category over this period see Grofman and Sutherland (this volume, Table 10.1).

Table 10.1
Gubernatorial Tenure as a Function of Term Length and Term Limitation, 1790-1990*

Term Length	Term Limit	Period	Mean Tenure
1	∞	1790-1920	2.6
2	2	1790-1990	3.0
2	3	1790-1920	3.3
2	∞	1790-1990	3.2
3	2	1790-1870	4.2
4	2	1790-1990	5.4
4	∞	1790-1990	6.3

*Data on gubernatorial terms limits and term lengths for the period 1776-1907 uses state constitutions as a primary data source. Secondary sources for the period 1907-1940 are various issues of the *American Political Science Review* that contain reports on changes in state constitutions. Data for the period 1940-1992 was obtained from the *Book of the States*. Data for gubernatorial tenure for the period 1790-1978 is based on *American Governors and Gubernatorial Elections, 1775-1978*, compiled by Roy Glashin. This data was updated by Neil Sutherland.

The most striking fact about the data in Table 10.1 is the perfect monotonicity of the pattern with respect to term length, i.e., the greater the term length the greater the mean time in office. The next most striking fact is the limited extent of differences across rows, once we control for term length. States with two-year term lengths are virtually identical in mean gubernatorial tenure, regardless of whether or not they have a limitation on terms in office and regardless of whether that limitation is for two terms or for three terms. Indeed, states with two-year term lengths and a three-term limit actually average marginally higher gubernatorial tenure than states with two-year term lengths and no term limit. While the difference in mean gubernatorial between states with and without term limits does go in the predicted direction for states whose governors had terms that lasted four years, this difference in mean tenure is still less than one year. In short, the cross-sectional data shows almost no impact of term limits—largely because other factors were already strikingly limiting gubernatorial terms in the states where governors were free to run for reelection indefinitely.¹¹

Of course, we must be careful of cross-sectional comparisons since the states we are comparing may differ in other ways. But the “no real difference” result

hold up in our cross-sectional data even if we impose regional controls and/or look only at more recent data. For example, for 1920-1990, while states in the South and Northeast with four-year gubernatorial term lengths and no limit on terms of service had higher mean tenure (but still by less than a year) than states from those same regions with four-year gubernatorial term lengths and a two-term limit on service; in states in the Midwest/West the inequality went in the opposite direction, albeit only barely. Similarly, if we again confine ourselves to the more recent data from 1920-1990, then, while the gap in gubernatorial tenure between states with two-year terms and no term limits and those with two-year terms and a two-term limit widens from that for the entire 200-year period, the difference remains less than one year.¹² Unfortunately, (as of 1990) there were only five states (California, Maine, Maryland, Nevada and Ohio) that shifted directly from four-year terms without term limits to four-year terms with a two-term limit. For Nevada, the change is minuscule, a mean tenure of 5.4 before the change as opposed to 5.3 afterward. For Maryland, the decrease in term length is less than one year. For California, Maine and Ohio, the change is too recent to permit reliable comparisons.

DISCUSSION

The modeling above should be taken as preliminary. We have simplified by assuming that there is one and only one strong challenger making a decision whether or not to delay seeking office until an open seat is available through the forced retirement of the incumbent, we have neglected the effects of term limits on partisan balance, we have not distinguished between open seats caused by incumbent non-forced retirement and those caused by defeat in a primary, and we have not treated parameters such as R as endogenous, even though the desirability of office will certainly be different with and without term limits. Nonetheless, that modeling has identified key factors that can be expected to impact on how great will be the changes in mean tenure caused by the imposition of term limits, namely the likelihood that incumbents will seek reelection, and the relative likelihood of success of challengers facing incumbents as opposed those in contests for open seats. Moreover, even the simple model we have offered provides us a way to account for the observed lack of impact of gubernatorial term limits on mean gubernatorial tenure once we control for term length, in terms of the behavior of rational political actors faced with a changed structure of incentives. Thus, we see it as a contribution to the "strategic politicians" literature begun by authors such as Schlesinger (1966) and Jacobson and Kernell (1981). Of course, we would need to gather data on victory margins before and after term limits to directly test the hypothesis offered by Mann (1992) about strong challengers tending to defer their challenges until the incumbent is forced to retire, and we have only a handful of states where such direct natural experiments are possible without the confound of changes in term length as well.

Endnotes

*We are indebted to Dorothy Gormick and Cheryl Larsson, UCI, for bibliographic and copyediting assistance.

1. While the model we present can be thought of as a formalization of Mann's (1992) insights, it was initially developed independently.

2. This assumption can be modified easily, but it is useful to first explore the dynamics of the very simplest model to show that even this model has some somewhat counter-intuitive properties.

3. This assumption, too, can be modified.

4. We use a 2 as the time subscript to indicate that the incumbent is seeking a second term.

5. To simplify, we may assume the decision to announce comes before it is known whether the incumbent has chosen for personal reasons to retire or has been defeated in his/her own party's primary. (Note also that we simplify by not distinguishing between challenger success probabilities in these two cases.)

6. Of course, we could do finite sums here with greater realism, but using the formula for infinite series improves mathematical tractability, and as long as R is reasonably less than one, the importance of the tail-end terms will not be that large.

7. Of course, if I or R are slightly higher than the values given above, the inequality no longer holds.

8. The imposition of term limits may also impact on party balance. For example, it might be the case that the party whose members had the greater average tenure would be advantaged by the change and elect more members. If so, it is possible that the inequality in Eq. (10) could fail to hold for either party and yet average legislature tenure increase as a result of imposing term limits. In this preliminary modeling effort we neglect such complications.

9. At least this is the pattern that has been observed for the United States Congress.

10. The historical data in Beyle (1992) are presented in a fashion that makes it essentially impossible to disentangle these various factors and estimate the independent effect of term limits on tenure.

11. In particular, after the passage of the presidential term limits, as four-year gubernatorial terms have become the norm, voters may now view governors who seek more than two terms with great suspicion.

12. In this period there are no longer any states with a two-year term of office and a three-term limit. Indeed, by 1990 only a handful of states had two-year terms for governor.