National Association of Insurance Commissioners

Journal of Insurance Regulation

Vol. 39, No. 3

Consent to Rate Laws: A Case Study of the North Carolina Homeowners Insurance Marketplace

J. Bradley Karl, Ph.D.
David C. Marlett, Ph.D
Faith Roberts Neale, Ph.D
Jamie Anderson-Parson, J.D.

JIR-ZA-39-03

NAIC
National Association of Insurance Commissioners

The NAIC is the authoritative source for insurance industry information. Our expert solutions support the efforts of regulators, insurers and researchers by providing detailed and comprehensive insurance information. The NAIC offers a wide range of publications in the following categories:

Accounting & Reporting
Information about statutory accounting principles and the procedures necessary for filing financial annual statements and conducting risk-based capital calculations.

Consumer Information
Important answers to common questions about auto, home, health and life insurance — as well as buyer's guides on annuities, long-term care insurance and Medicare supplement plans.

Financial Regulation
Useful handbooks, compliance guides and reports on financial analysis, company licensing, state audit requirements and receiverships.

Legal
Comprehensive collection of NAIC model laws, regulations and guidelines; state laws on insurance topics; and other regulatory guidance on antifraud and consumer privacy.

Market Regulation
Regulatory and industry guidance on market-related issues, including antifraud, product fi ling requirements, producer licensing and market analysis.

NAIC Activities
NAIC member directories, in-depth reporting of state regulatory activities and official historical records of NAIC national meetings and other activities.

Special Studies
Studies, reports, handbooks and regulatory research conducted by NAIC members on a variety of insurance related topics.

Statistical Reports
Valuable and in-demand insurance industry-wide statistical data for various lines of business, including auto, home, health and life insurance.

Supplementary Products
Guidance manuals, handbooks, surveys and research on a wide variety of issues.

Capital Markets & Investment Analysis
Information regarding portfolio values and procedures for complying with NAIC reporting requirements.

White Papers
Relevant studies, guidance and NAIC policy positions on a variety of insurance topics.

For more information about NAIC publications, visit us at:

http://www.naic.org//prod_serv_home.htm

Printed in the United States of America

NAIC Executive Office
444 North Capitol Street, NW
Suite 700
Washington, DC 20001
202.471.3990

NAIC Central Office
1100 Walnut Street
Suite 1500
Kansas City, MO 64106
816.842.3600

NAIC Capital Markets
& Investment Analysis Office
One New York Plaza, Suite 4210
New York, NY 10004
212.398.9000

Editorial Staff of the *Journal of Insurance Regulation*

Purpose

The *Journal of Insurance Regulation* is sponsored by the National Association of Insurance Commissioners. The objectives of the NAIC in sponsoring the *Journal of Insurance Regulation* are:

1. To provide a forum for opinion and discussion on major insurance regulatory issues;

2. To provide wide distribution of rigorous, high-quality research regarding insurance regulatory issues;

3. To make state insurance departments more aware of insurance regulatory research efforts;

4. To increase the rigor, quality and quantity of the research efforts on insurance regulatory issues; and

5. To be an important force for the overall improvement of insurance regulation.

To meet these objectives, the NAIC will provide an open forum for the discussion of a broad spectrum of ideas. However, the ideas expressed in the *Journal* are not endorsed by the NAIC, the *Journal's* editorial staff, or the *Journal's* board.

Consent to Rate Laws: A Case Study of the North Carolina Homeowners Insurance Marketplace

J. Bradley Karl, Ph.D.*
David C. Marlett, Ph.D.**
Faith Roberts Neale, Ph.D.***
Jamie Anderson-Parson, J.D.****

* East Carolina University; *karlj@ecu.edu*.
** Appalachian State University; *marlettdc@appstate.edu*.
*** University of North Carolina at Charlotte; *frneale@uncc.edu*.
**** Appalachian State University; *andersonja2@appstate.edu*.

Introduction

In this paper, we discuss Consent to Rate (CTR) laws. These laws, found in many states, allow insurers in a given marketplace to charge a rate that differs from the approved rate if the insured completes the appropriate documentation consenting to the rate change. As such, CTR laws effectively allow for the circumvention of strict rate regulation laws by providing a way for insurers in highly regulated marketplaces (e.g., homeowners or automobile) to charge higher rates than those promulgated or approved by state insurance regulators.

The insurance literature is rich with studies that concern rate regulation, and these studies consider myriad of topics. Early studies, such as Stigler (1971), laid the groundwork for understanding the effects of regulation on insurance markets and subsequent early studies largely focused on the effects of regulation in the automobile insurance market (Ippolito, 1979; Harrington, 1984) as it relates to insurance prices and insurers' loss ratios. Insurance economists continue to examine various facets of insurance regulation (Harrington, 2001; Cummins, Phillips and Tennyson, 2001; Barrese, Lai and Scordis, 2009; Weiss, Tennyson and Regan, 2010). To date, the literature attests to the fact that the regulation of insurance markets have important consequences for insurers, consumers and policymakers. Despite the large literature relating to insurance regulation, CTR laws are given virtually no attention in prior studies, and the dearth of information pertaining to these laws represents a significant shortcoming for insurance economists and policymakers.

Since CTR laws provide the opportunity for insurers to bypass regulatory-imposed price constraints, our paper seeks to contribute to the literature in three specific ways. First, we provide a thorough discussion of CTR laws so that state insurance regulators and consumers are aware of the existence of these laws and their potential consequences for insurance pricing. Second, for all 50 states, we search statutes and other resources in order to identity the states with CTR laws "on the books," which we hope provides state insurance regulators and consumers with perspective on the prevalence of CTR laws in the U.S. Third, we discuss CTR usage in the homeowners insurance market in North Carolina, South Carolina, and Virginia. As detailed later in the paper, while the homeowners markets in these states face similar exposures, North Carolina's insurance regulation is unique compared to the other two states. We provide summary empirical evidence that CTR usage in North Carolina has dramatically increased over recent years, while CTR usage in other states is virtually nil. While we cannot definitively attribute the higher levels of CTR in North Carolina to regulatory circumvention, our empirical and anecdotal evidence is consistent with this belief. As such, we hope state insurance regulators take note of the complex relationship between price regulation and CTR laws when making policy decisions pertaining to the pricing of homeowners insurance.

From a broader perspective, we hope our discussion of CTR laws will help inform state insurance regulators of the potential ways in which insurers may leverage these laws. Our research suggests that most states have statutes addressing CTR, but very little is known regarding the extent to which CTR is used by insurers in other states. We therefore hope our discussion motivates state insurance regulators to consider the laws in their state more closely, especially as insurers seek ways to operate in highly regulated and/or catastrophe-prone marketplaces. We also hope our discussion attracts the attention of the average insurance market participant (or at least the trade groups disseminating information to them), as CTR laws have direct consequences for the cost of insurance.

Our paper proceeds as follows. First, we provide an overview of CTR laws and the impact on consumers. Next, we use a case study approach using three neighboring states to provide detailed information on their rate regulation model and the extent of use of CTR law. Based on the experience of the three states, we find evidence that insurers leverage CTR laws to obtain rate increases when rates are suppressed by the rate approval process.

General Background Regarding Consent to Rate Laws

Rate regulation is one of the state insurance regulators' most visible roles. State laws typically require the commissioner to regulate rates to promote public welfare. Therefore, states mandate that rates may not be excessive, inadequate or unfairly discriminatory. The approach to regulating insurance rates varies by state and by line of insurance, but there are several general approaches in use. Some states place varying degrees of restrictions on rate changes. For example, some states allow insurers to use rates once they are filed with the insurance department—i.e., *Use and File* and *File and Use* laws—but still retain discretion to disapprove of rate changes.[1] Many states, especially in lines such as homeowners and automobile insurance, require rate change requests to be approved by the insurance commissioner before the new rates can go into effect; i.e. *Prior Approval* laws. At least one state allows O*pen Competition*; insurers in this state provide documentation of rates upon request by the insurance commissioner.

In a competitive marketplace, insurers would like to choose their own rate and change rates without approval from the commissioners, but rate regulation laws curb or prohibit insurers from doing so. However, CTR laws provide insurers with a method for mitigating some, or all, of the constraints imposed by rate regulation laws. More specifically, CTR laws permit insurers to ask a policyholder to consent to a rate that is higher than the rate approved by the commissioner. If the policyholder consents, usually by simply signing the CTR form provided by the insurer, then the insurer effectively mitigates the regulatory constraints imposed by

1. Other states employ a *Flex Rating* model, whereby filings with changes within a specified percentage are implemented without prior approval on a *File and Use* or *Use and File* basis, but those requests that exceed the specified amount require prior approval.

the rate regulation law of the state. As a specific example of a CTR law, we provide the North Carolina General Statute,[2] which states:

> *(b) A rate in excess of that promulgated by the Bureau may be charged by an insurer on any specific risk if the higher rate is charged in accordance with rules adopted by the Commissioner. An insurer shall give notice to the insured that the rates used to calculate the premium for the policy are greater than those rates that are applicable in the State of North Carolina by including the following language in the policy on page one of the declarations page or on a separate page before the declarations page, in at least 14 point type or in a font size larger than the remainder of the document whichever is larger, bolded, and all capitalized: NOTICE: IN ACCORDANCE WITH G.S. 58-36-30(b1), THE PREMIUM BASED UPON THE APPROVED RATES IN NORTH CAROLINA FOR RESIDENTIAL PROPERTY INSURANCE COVERAGE APPLIED FOR WOULD BE $____. OUR PREMIUM FOR THIS COVERAGE IS $____.... The insurer shall retain consent to rate information for each insured and make this information available to the Commissioner, upon request of the Commissioner.*

It is important to note that, by nature, CTR laws require policyholders to agree to be charged more for insurance, and it is not clear why a policyholder would do so. However, one possibility is that the policyholder is simply unaware that the form they sign or the document received gives insurers permission to increase rate coverage. Another possibility is that the policyholder recognizes that, without consenting to a higher rate, they may have to purchase insurance from another, lower quality, insurance company or obtain the limited coverage that is available in the residual marketplace. It is also conceivable that policyholders value the protection provided by a given insurance company, and they are driven to consent to higher rates by a positive desire to stay with their current insurer. This may be a function of loyalty to the insurer or agent or time constraints due to the significant amount of time needed to search for another insurer and then provide all the information necessary to alternative insurers and other stakeholders when changing insurers. While we are unable to determine why policyholders consent to increased rates, it is clear that in some states—i.e., North Carolina—many policyholders do so.

The extent to which insurers utilize CTR in the marketplace is not well understood, most likely due to limitations in data availability and a lack of policymaker/academic attention. We searched state statutes and other resources to identify all states with CTR laws on the books between 2006 and 2016 (Table 1).

2. N.C.G.S. § 58-36-30 (2018).

We also refer to the Property Casualty Insurers Association of America (PCI) compliance chart on CTR in 2018.[3]

Table 1:
CTR Status for Homeowners Insurance by State as of 2019

States with CTR laws for Homeowners Insurance			**States Prohibiting CTR for Homeowners Insurance**
Alabama	Maine	Oklahoma	California
Alaska	Maryland	Oregon	Michigan
Arizona	Massachusetts	Rhode Island	Pennsylvania
Arkansas	Minnesota	South Carolina	Texas
Colorado	Mississippi	South Dakota	
Connecticut	Missouri	Tennessee	
Delaware	Montana	Utah	
Florida	Nebraska	Vermont	
Georgia	Nevada	Virginia	
Hawaii	New Hampshire	Washington	
Idaho	New Jersey	Washington, DC	
Illinois	New Mexico	West Virginia	
Indiana	New York	Wisconsin	
Kansas	North Carolina	Wyoming	
Kentucky	North Dakota		
Louisiana	Ohio		

We searched state statutes over time, looking for language that specifically addresses CTR. We find that roughly half the states permitted CTR for at least one year between 2006 and 2016. We find that the number of CTR laws increase over time, suggesting that many states are giving insurers the option to adjust prices outside of the regulatory structure imposed by rate regulation law. In addition, we reviewed information for states that do not use the term "consent to rate" but have laws that have the same potential impact (per PCI chart). When we include the 2018 research from PCI, it suggests that nearly all the states permit some sort of CTR, attesting to the prevalence of these little-studied laws.

A Closer Look at CTR in Three Coastal States

In this section, we provide detailed information regarding the regulatory structure and CTR use in the homeowners insurance markets of NC, SC and VA for two reasons. First, considering CTR use alongside rate regulatory structure is needed to gain in-depth policy insight regarding the potential consequences of CTR laws.

3. The authors of the PCI chart also reviewed statutes and contacted representatives at state DOI offices. During our search, we found little consistency with the format and affected lines of insurances. The lack of uniformity is noted in the PCI chart as well. For example, some states do not call it "consent to rate," but the statute has essentially the same process and requirements.

Second, we find a dearth of detailed data regarding the use of CTR in the states, with North Carolina being one exception. We obtain data from the North Carolina Department of Insurance (DOI) that is more detailed than any other CTR data source of which we are aware. This data allows us to provide an in-depth discussion of CTR effects that we hope will contribute to policy discussions of state insurance regulators and educate industry groups and consumers.

The Regulatory Model of North Carolina

North Carolina utilizes a prior approval rating system for residential property insurance that includes a rating bureau. Figure 1 summarizes this complex process. Historically, many states required insurers to be members of their respective rating bureau and use its rates and forms. In general, rating bureaus collected data including premiums, losses and exposure units; developed policy forms; and filed documentation with the state insurance regulators. Apart from North Carolina, state rating bureaus for residential property have either ceased to exist or evolved to offer advisory services. In North Carolina, licensed insurers writing residential property insurance are still required to participate.

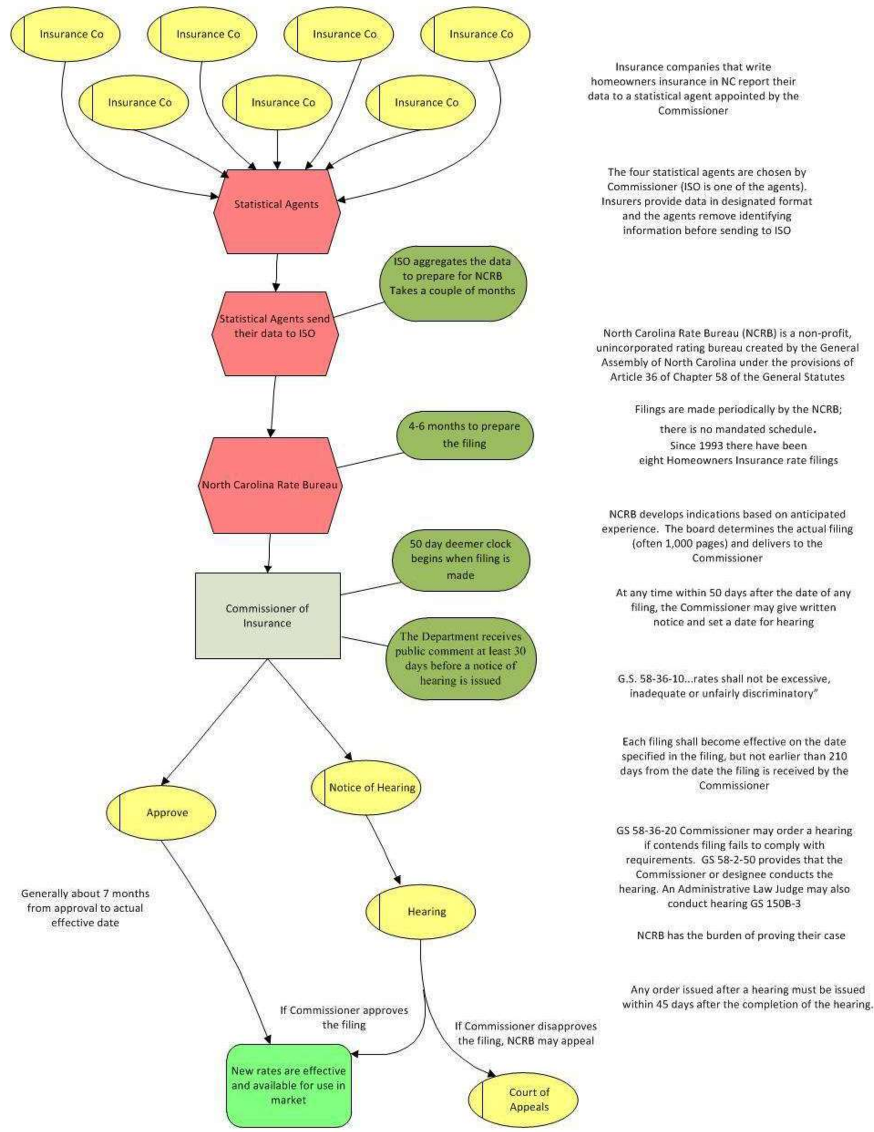
The rate approval process in North Carolina is unique and considerably more complicated than that found in other states. The process begins with insurers reporting their data loss to a statistical agent of their choice but that has been approved by the commissioner. Statistical agents then format and validate the data prior to providing it to the Insurance Services Office (ISO), where the data is aggregated and validated for the North Carolina Rate Bureau (NCRB). [4]

The NCRB is a non-profit, unincorporated rating bureau created by the General Assembly of North Carolina under the provisions of Chapter 58 - Article 36 of the General Statutes. It was created in 1977 to propose and promulgate rates for residential property insurance, as well as several other essential lines of insurance coverage. This authority is granted by legislation, and the NCRB operates as an unincorporated entity. All the insurance companies licensed by the commissioner of insurance that write residential property coverage in North Carolina must subscribe to and be members of the NCRB.[5] State statutes require member companies to support the NCRB financially in proportion to their state market share.

4. The ISO is part of Verisk Analytics, an organization that provides data analytic services to insurers. *http://www.verisk.com/iso/about/iso-services-for-property-casualty-insurance.html*

5. The NCRB operates under a Constitution that vests responsibility in a 14-member Governing Committee. The Governing Committee is composed of 12 representatives of member companies (six from stock insurers and six from non-stock) and two non-voting members appointed by the Governor.

Figure 1:
Summary of North Carolina's Regulatory Process



The NCRB staff and committee members review the ISO data and develop actuarial indications based on anticipated experience. They develop the filing (often more than 1,000 pages), including indicated and requested rates, and deliver it to the commissioner, at which time it becomes publicly available.[6] The NCRB has had 10 filings since 1993 (Table 2). The insurance commissioner must approve rate changes before implementation. At any time within 50 days after the filing date, the commissioner may approve, deny, or give written notice of a hearing. During this period, the DOI receives public comment, and it is required to receive comment for at least 30 days before issuance of a notice of hearing. The commissioner may not support the NCRB filing request because it does not meet the requirements that rates not be excessive, inadequate or unfairly discriminatory.[7] None of the proposed rate change filings have been approved initially, and in most cases, the NCRB settles for a considerably lower amount. If a settlement is not agreed upon, insurers can challenge the commissioner's decision at a rate hearing in which the commissioner can appoint a hearing officer or Administrative Law Judge.[8]

Table 2:
North Carolina History of Homeowners Insurance Rate Filings and Result

Filed Date	Overall Statewide Filed/Proposed Rate Change	Effective Date	DOI Ordered Rate Change or Agreed Upon Settlement
Jun-93	12.7%	Oct-94	2%
Dec-98	15.6%	Jun-99	4.3%
Mar-02	20%	Aug-02	5%
Feb-05	12.1%	Aug-05	2.2%
Dec-06	21.9%	Aug-06	5.4%
Dec-08	19.5%	May-09	4.1%
Oct-12	17.7%	Jul-13	7%
Jan-14	25.3%	Aug-14	0%
Nov-17	18.7%	Oct-18	4.8%
Dec-18	17.4%	May-20	4%
No filing in 1995, 1996, 1997, 1999, 2000, 2001, 2003, 2004, 2007, 2009, 2010, 2011, 2013, 2015, 2016			
Source: North Carolina Rate Bureau, www.ncrb.org			

The Regulatory Models of South Carolina and Virginia

In contrast to North Carolina, the residential property insurance rate filings in South Carolina and Virginia do not require the involvement of a rate bureau or a lengthy review process. More specifically, the current regulatory approach in South Carolina is based upon the Property & Casualty Insurance Personal Lines Modernization Act of 2004 (South Carolina Code of Laws, Section 38-73-220). The modernization law replaced the prior approval rate regulations with a flex-band model. Flex-band allows insurers to submit rate filings to increase or decrease

6. Filings are made periodically by the NCRB; there is no mandated schedule The most recent filing submitted in January 2014, requested a 25.6% increase.
7. N.C.G.S. §58-36-10 (2016).
8. N.C.G.S. §58-2-50 (1999). The Commissioner or designee conducts the hearing.

current levels by up to 7%.[9] They are limited to two filings within a 12-month period. Each insurance company submits individual rate filings to the DOI and the director's designee (in accordance with GS 38-73-960 and GS 38-73-990) reviews every filing. The rates become effective within 30 days of filing without prior approval of the director of insurance if the market is "competitive."[10]

Virginia is a file and use state for property insurance. Rate filings must be submitted to the Bureau of Insurance on or before the effective date of implementation, and they are subject to review by the Bureau's consulting actuaries who ensure that filings are complete and not in violation of any of the laws of the Commonwealth. Rates may be used on or after the date they are received by the Bureau if the market is deemed to be competitive.

It is important to note that the rate approval process in South Carolina and Virginia is substantially faster than in North Carolina. In South Carolina, the rate approval process takes an average of 60 days, and speed to market is a priority for the DOI.[11] In Virginia, unless amendments or corrections are needed, such submissions will usually be reviewed and acknowledged within 30 days. In contrast, per North Carolina statute, insurers may have to wait up to 210 days after filing to implement rates. As a result, insurers in North Carolina face higher levels of regulatory stringency and delays in rate implementation compared to their counterparts in South Carolina and Virginia. If residential property insurers desire to circumvent these regulatory barriers, we should observe higher levels of CTR use in North Carolina relative to South Carolina or Virginia.

Consent to Rate in North Carolina

If insurers feel that mandated rates are inadequate, they have two options. They can reallocate capital to other states where they can earn higher returns, enabling them to withdraw completely or partially from the underperforming market or they can utilize CTR and charge higher than state mandated rates. If insurers reallocate capital, affected property owners have three remaining options: obtain coverage in the residual market, pay higher prices in the surplus lines market, or "go bare" and rely on personal savings to rebuild (or not rebuild) in the event of a loss. This could lead to significant disruption in the insurance market. If insurers utilize CTR laws, property owners can remain in the standard market. Higher rates may lead to consumer complaints and discontent with the insurance market.

An interesting aspect of CTR in North Carolina is that prior to reforms in 2018, insurers were required to obtain CTR from the insured once, and they did not have

9. If insurers wish to increase or decrease their current rate by an amount greater than 7%, they must seek prior approval from the DOI.

10. Elements of a "competitive" market are described in the state code of laws (GS 38-73-230). The market is considered competitive unless the director indicates otherwise. If the market is deemed to be non-competitive, then the flex-band approach is modified and additional information supporting the requested rate change could be required.

11. The director receives weekly reports on filings that include the submission date, status, rate change requested, approved amount, and the number of objection letters.

to request again at renewal regardless of whether there is a change in rate. Table 3 summarizes the previous Code requirements for CTR applications. While CTR statutes exist in most other states, the situation in North Carolina appears to be unusual regarding the extent of use. CTR use by insurers in North Carolina is provided in Table 4. The calculations are based upon data we received from the Actuarial Division of the North Carolina DOI.[12] Prior to 2010, the North Carolina DOI had relatively little involvement with the CTR process, and it did not collect data. As a result of the passage of HB 1305 in 2009, a reporting requirement of the industry for the homeowners line of business was created with the first reporting period being calendar year 2010 and subsequent years.

Table 3:
Consent to Rate Application Requirements in North Carolina Prior to 2019

Consent to Rate Application Requirements
A description of the insurance proposed, including primary and excess limits, the amount of coverage, the property insured, the deductible, and any other factor used for rating, where applicable.
The rate and premium that would be charged without application of CTR.
The proposed rate and premium.
The percent increase. The rate to be charged shall be presumed reasonable if it does not exceed 250% of the rate that would be charged without application of CTR.
The names and addresses of the insurer, the writing agent, and the insured.
The effective date of the proposed rate, policy period and policy number.
A letter signed by the insured acknowledging and consenting to the proposed rate. If coverage for the specific risk written on CTR is available through a residual market (Fair Access to Insurance Requirements [FAIR] Plan, Beach Plan). A statement signed by the insured acknowledging that fact must also be executed.
The *North Carolina Administrative Code* provides the CTR Procedures in 11 NCAC 10 .0602 CONSENT TO RATE PROCEDURES: RATE BUREAU COVERAGES. [23]

23. 11 NCAC 10.0602 (2018).

We report several relative measures in Table 4. The column titled "House Years" indicates the percentage of homes insured under CTR. [13] The column titled "Insured Amount" indicates the proportion of the Coverage A amount insured under CTR. The column titled "Premiums" indicates the proportion of CTR premiums relative to total homeowners insurance premiums. For all but one year, all three measures are increasing in the prevalence of CTR use over time.

The overall take-away from the data in Table 4 is that a considerable amount of homes in North Carolina are insured using CTR, suggesting that insurers are circumventing the stringent, prior approval process. In particular, usage of CTR began to increase quickly for all measures from 2013 to 2014. Usage continued to

12. N.C.G.S.§ 58-45-71 (2009).

13. House years represents an insurer providing coverage for a home. If an insurer provides coverage for the entire year, that would count as one house year. If the insurer only provided coverage for six months, they would report 0.5 house years.

increase each year with approximately 4.6 out of 10 homes, or 50% of premiums written, insured using CTR in 2017.

Table 4:
Statewide Percentage of CTR Use for Residential Property in North Carolina

Statewide Percentage of Total of Amounts Provided by Insurers Using Consent to Rate 2010–2017 in North Carolina			
	House Years	Insured Amount	Premiums
2010	22	26	23
2011	26	30	27
2012	20	18	22
2013	24	21	26
2014	35	30	37
2015	43	40	47
2016	43	41	46
2017	46	43	50

Data for *House Years, Coverage A Insured Amount, and Actual Written Premium* provided by the North Carolina DOI.

House Year represents an insurer providing coverage for a home. If an insurer provides coverage for the entire year, that would count as one house year. If the insurer only provided coverage for six months, they would report 0.5 house years.

Coverage A Insured Amount is the limit of insurance for the dwelling.

Average Written Premium is calculated by dividing Actual Written Premium by House Years.

%CTR statewide is calculated by dividing the reported statewide figures using CTR by the reported total for the state (including CTR).

Statewide CTR data was not collected prior to 2010.

Statewide CTR data for 2018 is preliminary, but initial reports indicate that CTR usage remains in the mid-40% range.

We examine the data for each of the three territories in North Carolina and find that CTR use varies across the state.[14] Generally, it is used more extensively on the eastern half of the state (by the coast) than the western half (piedmont and mountains), implying that approved rates in the western territories are perceived as being closer to adequate and thereby have less need to use CTR.[15]

The use of CTR in North Carolina became so extensive over time that it drew the attention of state legislators. Specifically, House Bill 287 (Session Law 2016-78) was passed by the legislature effective Oct. 1, 2017. The new law required a

14. The data call summary report for the DOI is aggregated into "beach," "coastal," and "remainder of state." *Beach* includes the outer banks, *coastal* includes the remaining coastal counties, and *remainder of state* includes the counties west of the coast.

15. An interesting exception is for the two rating territories on the eastern border directly on the Atlantic Ocean. The percentage of policies using CTR in these two territories are the two lowest in the state, but this is likely due to the North Carolina residual market offering policies using rates lower than the insurers are willing to offer using CTR.

specified notice on all CTR forms and a minimum amount of time to inform insureds for CTR and policy renewals. Specific language and formatting were established for notice to insureds.[16,17] It is likely that if insurers in other states turn to CTR as a method of circumventing strict rate regulation, legislators of those states may take similar action.

Consent to Rate in South Carolina and Virginia

Ideally, we would like to perform a similar examination of the prevalence of CTR in other states; unfortunately, such data is not available. However, generally available information suggests limited use of CTR outside of North Carolina.

North Carolina's homeowners market is in a geographic area prone to catastrophic windstorm loss. As a result, the use of CTR may be a function of geographic location rather than regulatory environment. We examine CTR use in South Carolina and Virginia, states that are adjacent to North Carolina with similar coastal exposure. All three states have experienced rapid population growth, especially in coastal counties; however, North Carolina has the lowest total amount of insured value and the lowest proportion of total property insured in coastal counties.[18] If CTR use is a result of catastrophic coastal exposure, North Carolina insurers should have the lowest utilization of CTR.

We conducted interviews of representatives from the insurance departments in South Carolina and Virginia to get a better understanding of CTR usage in the states. We found that, while South Carolina permits the use of CTR, it is rarely used in the residential property insurance market. In Virginia, CTR is referred to as "excess rating"; again, our interviews with representatives from the Bureau of Insurance indicate that it is rarely used in Virginia, suggesting that coastal catastrophic exposure is not the reason insurers use CTR. On the other hand, both states have faster, more flexible rate approval models than North Carolina, suggesting that the prevalence of CTR use in North Carolina is a result of insurers leveraging CTR to circumvent the rate regulation process.

16. "NOTICE: THE PREMIUM USING NORTH CAROLINA RATE BUREAU'S APPROVED RATES FOR THE HOMEOWNERS INSURANCE COVERAGE I APPLIED FOR IS $________. THE PREMIUM FOR THIS COVERAGE IS $________. THE TOTAL PERCENTAGE INCREASE ABOVE THE APPROVED RATES IS _______%."

17. Soon thereafter, further reform was passed in 2018, effective Jan. 1, 2019, removing written notice of CTR to insureds and requiring only that CTR use be disclosed either on the declarations page or on a separate page before the declarations page. Source: Bulletin Number 18-B-08 of the North Carolina DOI retrieved at *https://www.ncdoi.com/LS/Documents/Bulletins/2018/18-B-08%20-%20Consent%20to%20Rate.pdf*, accessed March 5, 2020.

18. Source: AIR Worldwide, http://www.air-worldwide.com/Publications/AIR-Currents/2015/The-Growing-Value-of-U-S--Coastal-Property-at-Risk/.

Loss Ratios for North Carolina, South Carolina and Virginia

We provide loss ratios from 1998 to 2018 for all three states in Table 5.[19] The loss ratios in North Carolina and Virginia exceed the average of the three states in 14 of 21 years. South Carolina exceeds the average in only four years. During this time-period, Virginia experienced the largest range of ratios of 108.5 points from a high of 140.16 in 1999 to a low of 31.76 in 2005. South Carolina's loss ratio fluctuated only 48.09 points. North Carolina fluctuated 78.09 points from a low of 39.26 in 2005 to a high of 117.35 in 2011 when North Carolina experienced the largest amount of tornadoes in state history in April, followed by Hurricane Irene in August.[20] The 2011 loss ratios for Virginia and South Carolina also reflect higher losses, but the increases are much less dramatic. Of interest, North Carolina is the only state to incur a loss ratio greater than 100 in the past 15 years.

Table 5:
Incurred Loss Ratios, Homeowners Insurance, North Carolina, South Carolina and Virginia

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
NC	75.7	90.89	61.92	49.88	60.58	67.09	44.14	39.26	41.7	45.02	53.52	57.09	59.39	117.35	52.25	44.62	45.32	43.57	57.02	49.43	93.62
SC	53.85	72.36	79.52	47.62	51.16	42.89	40.69	34.92	33.77	31.43	47.66	46.17	57.93	79.17	44.53	32.1	51.5	38.35	54.92	43.36	41.78
VA	74.13	140.16	84.31	65.17	60	121.49	36.12	31.76	39.67	40.38	51.48	48.5	56.18	71.45	55.06	34.49	37.04	43.12	59.27	59.38	77.01
Avg	67.9	101.13	75.25	54.23	57.25	77.16	40.31	35.32	38.38	38.94	50.89	50.59	57.83	89.32	50.61	37.07	44.62	41.68	57.07	50.72	70.8

Source: S&P Global Market Intelligence

The NCRB requested a statewide rate increase of 17.7% in October 2012 and was allowed to increase rates 7% (Table 2).[21] In January 2014, they requested a 25.3% increase and the insurance commissioner eventually denied an increase. Following these events, CTR utilization by North Carolina insurers increased about 10% each year from 24% of homes insured in 2013 to 43% in 2015, where it has remained relatively stable through 2018 (Table 4). Hurricane Matthew landed in North Carolina in 2016 causing extensive damage as well. In this case, the loss ratio for North Carolina (57.02) was similar to South Carolina and Virginia and was no cause for concern. However, North Carolina and Virginia experienced a large increase in loss ratios in 2018 with Hurricane Michael in October (Figure 2). North

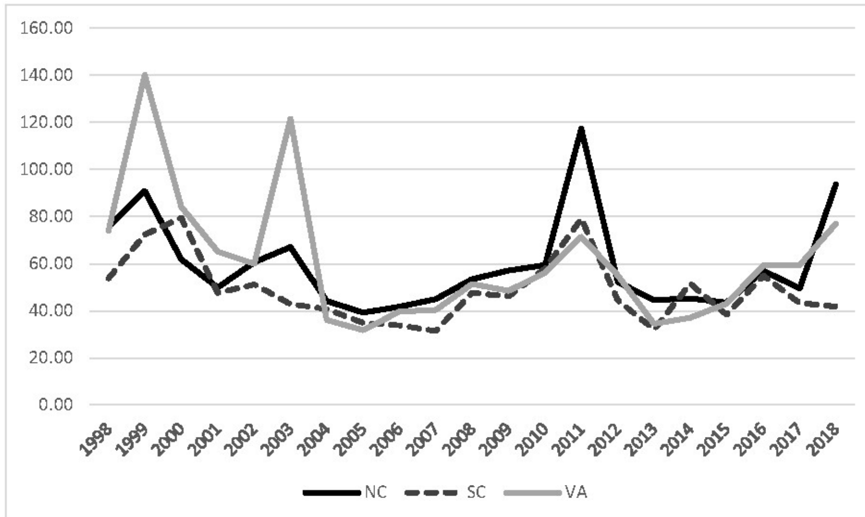
19. The loss ratio is defined as incurred losses divided by premiums earned, and it is from S&P Global Market Intelligence.

20. For more information on these disasters go to *https://www.ncdps.gov/emergency-management/recent-disasters/hurricane-irene-2011*.

21. The NCRB generally requests rate increases lower than actuarially indicated rates, and for some territories, quite a bit lower. For example, in its 2012 rate filing, actuarial analysis indicated that it needed a 30.8% increase in the statewide rate for homeowners insurance. It filed for 17.7% and settled with the insurance commissioner for 7%. Analysis indicates a change of 119.2% for homeowners in territory 8; it filed for 30% and settled for 19.8%. These filings are at *http://www.ncrb.org/ncrb/residentialproperty/ratefilings.aspx*.

Carolina also incurred extensive tornado damage in April 2018. Based on history, we expect to observe an increase in CTR use in 2019.

Figure 2:
Incurred Loss Ratios, Homeowners Insurance, North Carolina, South Carolina and Virginia



Source: S&P Global Market Intelligence

We note that North Carolina's stringent regulatory environment is the result of a combination of several factors. At one time, rating bureaus were standard practice across the U.S. In the early 1900s, the states began regulating insurance rates using public utility rate regulations as their model (Schwarcz, 2018). Regulations continued to evolve over time based on state specific needs while the NAIC promoted uniformity of regulation across the states by developing model laws and regulations. Eventually, North Carolina became the only state with a rating bureau that files rates for all insurers in the state. In addition, insurers in North Carolina may be required to wait up to 210 days after filing before using the rates. Further, the insurance commissioner of North Carolina is elected and has to balance the friction between consumers who desire low rates and insurers who would like to charge higher rates. As a result, a patchwork of laws was developed over time, including CTR. In 2017, North Carolina's average homeowners insurance premium was $1,086, ranking 28th out of 51 states and Washington, DC. South Carolina's average premium was $1,269 (17th), and Virginia's premium was $999 (34th).[22] With

22. From the Insurance Information Institute, Facts + Statistics: Homeowners and Renters Insurance. The most expensive state is Louisiana with an average premium of $1,968. The least expensive state is Oregon with a premium of $677. See *https://www.iii.org/fact-statistic/facts-statistics-homeowners-and-renters-insurance*.

the exception of years with catastrophes, the loss ratios and premiums of North Carolina insurers appear to be reasonable when compared to South Carolina and Virginia.

Concluding Discussion

In this paper, we discuss CTR laws in the context of homeowners insurance. CTR laws permit insurers to charge higher rates, relative to those approved, to individuals who give consent to insurance companies. This practice effectively gives insurers the option to side-step rate regulation in a given state. However, CTR is absent in the academic literature, and it is frequently a sidebar in policy discussions pertaining to insurance markets.

Given the dearth of information pertaining to CTR, the goal of our paper is to provide information that informs state insurance regulators and policy makers while simultaneously highlighting an important area of future academic research. More specifically, we discuss CTR and gather information regarding CTR laws "on the books" in the US. We find that additional states are permitting the use of CTR, increasing the possibility that issues pertaining to CTR could become an increasing concern for state insurance regulators and consumers across the country.

Using a case-study approach, we provide summary evidence that, in heavily regulated markets, insurers leverage CTR laws to gain price increases that exceed those imposed by the state insurance regulators of a state. More specifically, we discuss the regulatory climate, insurer performance, and CTR usage in North Carolina, South Carolina, and Virginia and find that regulatory constraints and CTR usage is dramatically higher in North Carolina. Given that the loss ratios and premiums of insurers in North Carolina are relatively reasonable, it appears that the patchwork of laws is a reasonable compromise between consumers, insurers and the insurance commissioner at this time. However, this is subject to change in the event of successive years of catastrophic losses.

In addition to the general knowledge that we add to policy discussions, our paper contributes to the academic literature that considers topics related to insurance regulation. Including CTR in these studies could strengthen the understanding of market forces and the conclusions drawn. Given that CTR directly affects the cost of insurance, CTR is an important component for refining the literature's understanding of issues pertaining to the price of homeowners insurance and the associated profitability of the insurers supplying the product. In addition, insurers' market conduct decisions are influenced by their ability (or lack thereof) to adjust the price of insurance as they see fit, suggesting that CTR may also be an important, yet overlooked, component of empirical research. Other examples of areas of the literature that could benefit include studies that examine market competition, the composition of residual markets, catastrophic risk bearing capacity, and similar areas.

To be clear, our paper does not argue that the results of prior studies are inadequate or otherwise incorrect without considering the effects of CTR. Rather, our intent is to enhance these studies so they can be further developed to continue to advance our understanding of the insurance marketplace. It is our hope that by drawing attention to the use of CTR both nationally and in several specific states, we will inform state insurance regulators and policymakers of a potentially emerging trend in other insurance marketplaces that has real economic consequences for the price and availability of insurance, as well as the stability of the insurance market. Finally, we hope that our study will also gain the attention of policyholders (or the groups advocating on their behalf) and provide them with useful information regarding CTR, which directly affects the cost of their insurance.

References

11 NCAC 10.0602 (2018).

Barrese, J., G. Lai, and N. Scordis, 2009. "A Measure of the Stringency of State Insurance Regulation," *Journal of Insurance Regulation*, 27(2): 21–40.

Cummins, J.D., R.D. Phillips, and S. Tennyson, 2001. "Regulation, Political Influence and the Price of Automobile Insurance," *Journal of Insurance Regulation*, 20(1): 9–50.

Emory, C., 2019. Property Casualty Insurers Association of America Consent to Rate Requirements Chart.

Harrington, S.E., 1984. "The Impact of Rate Regulation on Prices and Underwriting Results in the Property-Liability Insurance Industry: A Survey," *Journal of Risk and Insurance*, 57: 577–617.

Harrington, S.E., 2001. "Effects of Prior Approval Rate Regulation of Auto Insurance." in Cummins, J.D., ed., "Deregulating Property-Liability Insurance: Restoring Competition and Increasing Market Efficiency." AEI-Brookings Joint Center for Regulatory Studies, 285–314.

Ippolito, R.A., 1979. "The Effects of Price Regulation in the Automobile Insurance Industry," *Journal of Law and Economics,* 22(1): 55–89.

N.C.G.S. §58-2-50 (1999).

N.C.G.S. §58-36-10 (2016).

N.C.G.S. § 58-36-30 (2018).

N.C.G.S. § 58-45-71 (2009).

Schwarcz, D., 2018. "Ending Public Utility Style Rate Regulation in Insurance." *Yale Journal on Regulation*, 35(3): 941–989.

Stigler, G.J., 1971. "The Theory of Economic Regulation." *The Bell Journal of Economics and Management Science*, 2(1): 3–21.

Weiss, M.A., S. Tennyson, and L. Regan, 2010. "The Effects of Regulated Premium Subsidies on Insurance Costs: An Empirical Analysis of Automobile Insurance." *Journal of Risk and Insurance*, 77(3): 597–624.

Journal of Insurance Regulation

Guidelines for Authors

Submissions should relate to the regulation of insurance. They may include empirical work, theory, and institutional or policy analysis. We seek papers that advance research or analytical techniques, particularly papers that make new research more understandable to regulators.

Submissions must be original work and not being considered for publication elsewhere; papers from presentations should note the meeting. Discussion, opinions, and controversial matters are welcome, provided the paper clearly documents the sources of information and distinguishes opinions or judgment from empirical or factual information. The paper should recognize contrary views, rebuttals, and opposing positions.

References to published literature should be inserted into the text using the "author, date" format. Examples are: (1) "Manders et al. (1994) have shown. . ." and (2) "Interstate compacts have been researched extensively (Manders et al., 1994)." Cited literature should be shown in a "References" section, containing an alphabetical list of authors as shown below.

Cummins, J. David and Richard A. Derrig, eds., 1989. *Financial Models of Insurance Solvency*, Norwell, Mass.: Kluwer Academic Publishers.

Manders, John M., Therese M. Vaughan and Robert H. Myers, Jr., 1994. "Insurance Regulation in the Public Interest: Where Do We Go from Here?" *Journal of Insurance Regulation*, 12: 285.

National Association of Insurance Commissioners, 1992. *An Update of the NAIC Solvency Agenda*, Jan. 7, Kansas City, Mo.: NAIC.

"Spreading Disaster Risk," 1994. *Business Insurance,* Feb. 28, p. 1.

Footnotes should be used to supply useful background or technical information that might distract or disinterest the general readership of insurance professionals. Footnotes should not simply cite published literature — use instead the "author, date" format above.

Tables and charts should be used only if needed to *directly support* the thesis of the paper. They should have descriptive titles and helpful explanatory notes included at the foot of the exhibit.

Papers, including exhibits and appendices, should be limited to 45 double-spaced pages. Manuscripts are sent to reviewers anonymously; author(s) and affiliation(s) should appear only on a separate title page. The first page should include an abstract of no more than 200 words. Manuscripts should be sent by email in a Microsoft Word file to:

Cassandra Cole and Kathleen McCullough
jireditor@gmail.com

The first named author will receive acknowledgement of receipt and the editor's decision on whether the document will be accepted for further review. If declined for review, the manuscript will be destroyed. For reviewed manuscripts, the process will generally be completed and the first named author notified in eight to 10 weeks of receipt.

Published papers will become the copyrighted property of the *Journal of Insurance Regulation*. It is the author's responsibility to secure permission to reprint copyrighted material contained in the manuscript and make the proper acknowledgement.