

Firearms-Friendly: Lax State Gun Laws and Firearms Fatalities: Inventing an Index of State Firearms Permissiveness

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Abstract: It is no secret that the United State has had an epidemic of gun violence long before the horrific episodes of Columbine, Sandy Hook, Las Vegas, Parkland and Jacksonville. Only recently have state policy makers begun to take notice of the rising tide of anti-firearm violence sentiment and put forth a number of policy measures to ameliorate the level of violence amidst bitter opposition from the gun lobby led by the National Rifle Association (NRA). Gun control opponents are quick to argue that it is not policy that matters but social problems such as lack of care for the mentally ill. The feeling here is that policy does matter and that the more permissive a state is with its firearms policies the higher the firearms fatality rate per capita will be. Using data from 2014, a year in which data for all variables was available akin to the work published on an investigation of the Parkland shootings (Brezenski, 2018) an index (Firearm Permissiveness Index or FPI) was constructed and tested using state positions on key firearms policy measures.

Keywords: state gun laws, Firearms Permissiveness Index, school shootings, gun violence, gun control

Introduction

As the 2018 midterm elections approach, gun control looms as perhaps the second most important issue in voters' minds behind that of health care, even ahead of terrorism and immigration. The horrific tragedies of Parkland and Jacksonville have made 2018 a watershed moment for both sides of the gun control debate. Control of the US House of Representatives and Senate is very much in doubt and the situation is similar in state legislatures across the country. For decades, the NRA has held an iron grip on state legislatures, particularly in states such as Florida which is so firearm-friendly it is known as the 'Gunshine State' due to the influence of powerful NRA lobbyists such as Marion Hammer, former national president of the NRA (Brezenski, 2018). This has prevented the enacting of measures such as regulations on large capacity magazines, rifles such as the popular AR-15, universal background checks at private gun shows and the ability of local governments to enact their own gun laws. The conclusion here is that positions on these key provisions make states strong or weak on firearms regulation with a positive effect on the corresponding firearms fatalities rate. Moreover, it is also concluded that the states that surround a given state have an effect on a states' gun death rate; the 'iron pipeline' theory of the flow of guns across state borders (Wintemute, 2002). The resulting total index is interaction between a states own index and the average of the states surrounding it, explained in detail in the following section.

Constructing the Firearms Permissiveness Index (FPI)

The Firearm Permissiveness Index (FPI) of state weakness on firearms laws was constructed using state positions on four key provisions for the year 2014: the presence of large clip magazine regulations, 'assault-style' weapons regulations, universal background checks at gun shows and the ability for municipalities to pass their own firearms provisions (no state preemptions). A state that had no provision in the three policy areas and/or no ability to pass local gun laws each were given a score of four, for example, indicating it had a score of one in each category. Thus, the range would be from a score of zero to four, with four being a very permissive state and zero indicating a state with very strict firearms control. Each of the fifty states were scored on each policy (score of zero or one) obtained from data from Gifford's Law Center To Prevent Gun Violence.

Once an Internal Score for each state was established, a Border State Score was calculated using the mean of the scores of the states surrounding each state, again with a range from zero to four. Non-contiguous states, such as Alaska and Hawaii, were given border scores of the states closest to them, those being Washington and California, respectively. The scores for each state and its border states are summarized in Table 1. The FPI is an interactive index constructed by multiplying these two scores together:
State FPI = (Internal FPI) * (mean of Border State FPIs)

Rational Behind the Four Measures Of The FPI

The four measures of assessment of state weakness in the area of firearms regulation were selected on the basis that previous research has shown that they were effective in lowering the state firearms fatality rate. The first measure, regulations on large capacity magazines, or LCM's were a logical first choice. The ability to fire anywhere from fifteen to one hundred rounds without pausing to reload gives targets of a potential shooter

almost little or no opportunity to seek cover or flee for safety. Moreover, LCMs are available for both weapons like the commonly owned AR-15 as well as hand guns like the Smith & Wesson semi-automatic Sigma (Dougherty, 2011). Smaller magazines require a shooter to pause and reload giving victims a greater chance to escape the line of fire as well as the potential for the magazine to become jammed during the reloading process leaving the weapon unable to fire. Limiting magazines of civilian weaponry to ten rounds and under would ostensibly on average lower the death rate in a mass shooting situation. Studies such as by Koper and Roth (2002) even go so far as to say that the magazine is more of an important issue than the type of weapon itself. Therefore, regulations on LCMs were included as one of the four measures that comprise the index.

Probably the most popular measure with the general public is that of regulations on particular types of civilian weaponry, those being ‘assault-style’ guns closely related to a full-scale military one, such as the M-16, of which the popular AR-15 is (Dougherty, 2011) and therefore many people commonly refer to it as an ‘assault rifle’ whether it is worthy of the moniker or not. A big misconception about the AR-15 starts with its initials ‘AR’ which does not stand for ‘assault rifle’ but for ArmaLite, the company that developed it (The Firearms Industry Trade Association, 2018). Invented by renowned gun designer Eugene Stoner in the late 1950’s, it was designed as a military weapon that could penetrate a standard military helmet at five hundred yards and was embraced by the military and christened the M-16 (Dokoupil, 2016). The civilian version of the AR-15 today is semi-automatic and is widely popular, with an estimated fifteen million in the hands of civilians (Schuppe, 2017). This is no surprise given the weapon’s versatility as a hunting rifle and target shooting rifle (The Firearms Industry Trade Association, 2018). With magazines available that can hold up to one hundred rounds (Jones, 2013) it is a feared and effective home defense weapon as anyone in their right mind would think twice about invading a home where the resident has one at his or her disposal. It is also easy to modify with different barrels, chamber, grips, stocks and scopes (The Firearms Industry Trade Association, 2018) making it easy to mold to the owners needs and specifications based on what type of game is being hunted, from coyote to bear, or what usage (hunting, target shooting or home defense). Thus, AR-15 owners are fiercely loyal to these weapons and are staunchly opposed to any regulations on them due to the above reasons. These types of rifles also make up a very small percentage of the hundreds of millions of firearms in civilian hands in the United States today, far less than handguns responsible for most firearms deaths. Still, there is no denying that research has shown that these weapons do more damage (Kristof, 2002). Moreover, a recent study indicates that those using semi-automatic weapons as opposed to non-semi automatic weapons kill twice as many people in active shooter scenarios (Tanner, 2018). The family of the now-deceased Eugene Stoner has now spoken out also and stated that the AR-15, despite the uses mentioned above, was never intended for the civilian populace (Dokoupil, 2016). Sandy Hook and Parkland seem to bear this out and rifles of this type were therefore included in the composition of the index.

The mere fact that one can be a violent convicted felon but still be able to walk into a gun show in many states and purchase a firearm no questions asked is mind-boggling. Still, it is part and parcel of the gun show business in many states where one can avoid the National Instant Criminal background Check System (NICS) entirely by simply buying from an unlicensed dealer as they are not required to run background checks as legitimate, federally licensed dealers are. Thus felons and those deemed mentally unfit for firearms ownership can get their hands on weapons ranging from handguns to semi-automatic rifles with the greatest of ease due to this notorious ‘gun show loophole.’ Universal background checks, which would require every dealer at every gun show, federally licensed or not to run background checks on each purchaser would shut off this avenue and make it more difficult for those who are not supposed to have firearms to obtain them. The prevailing mantra of the majority of illegal gun sales occurring out of car trunks in dangerous neighborhoods in the dead of night is quickly becoming passe’. As Wintemute (2007) points out, many of these transactions take place in the completely legal and safe environment of gun shows, making the lack of universal background checks at gun shows a must for inclusion in the index.

The fourth measure in the index is the least known among the populace but is the bane of local government officials. The policy of preemption, the prohibition of municipalities to legislate or rule-make in a given policy area thus strangling home-rule is probably the most insidious way the gun lobby maintains a monopoly on state firearms policy. By getting state legislatures to preempt municipalities from enacting any sort of firearms legislation, the state legislature retains total control over every aspect of gun law from carry permits to ammunition sales. In the case of most states, gun-industry friendly interest groups such as the NRA have a firm political grip on the ruling majority thus insuring that localities are hamstrung when it comes to legislating gun safety. This author looked at the effect of local firearms exemptions and found them to be significant and positively related to the overall state firearms death rate (Brezenski, 2018a). Thus, the presence of state firearms preemptions became the final piece of the preliminary construction of the index.

Testing The Firearms Permissiveness Index (FPI): The Model

The viability of the index lies in its relation to the firearms fatality rate in both direction and significance. The model would also include three independent policy variables, explanation for inclusion of is explained below.

Mental Health Care Access Level

There is little doubt that mental health issues play a role in firearms deaths from their minimal role in overall violent crime to their central role in suicide death by firearm. Both sides of the gun control debate acknowledge that mental health care is a key component in combating the gun violence problem. Having access to quality mental health is vital to avoiding both public and private tragedy and this is captured in the model by an interactive variable taking the state's population percentage of those with a mental illness and multiplying it by the access to care level as determined by mentalhealthcareamerica.net. It is expected that the relationship between this variable and the dependent variable firearm death rate by state will be negative as better mental health care increases the chances for those in positions to intervene to spot 'red flags' like those that were missed in the case of the Parkland shooter.

NICS State Rate of Reporting Per Capita

Put simply, this is crude measure of how many guns are passing into civilian hands. The more NICS checks being made, the more guns in the public square. Most gun purchasers that pass a background check are by law-abiding citizens but a good number are so-called 'straw purchases' where an eligible person buys for a ineligible one, such as a prohibited felon. There are no good ways of accounting for how many of these transactions take place but one can safely assume that more gun transactions does not equal a safer society but exactly the opposite. It is therefore expected that the relationship between this variable and the dependent variable will be positive.

Speed of Mental Health Reports To NICS

As mentioned previously, mental health is a critical part of the gun safety conversation. That said, keeping guns out of the hands of those deemed a danger to themselves or others is critical to lowering the firearms mortality rate. In almost all states, a person needs to be adjudicated mentally ill by a court of law to be deemed ineligible for firearms sales or ownership. Anyone found to meet the disqualifying criteria is to be reported for inclusion in the NICS database. The problem lies in the fact that there is no set standard for how fast this information must be transmitted from the state to the federal agency governing NICS, the FBI. States set their own policies on reporting and depending on the state, can be lightning fast or honey slow. For example, reporting speeds range from 'immediately' to 'in a timely manner' which is basically code for whenever someone gets around to it. For this variable, a scale was developed, running from one to ten with states that report the fastest (immediately, within 24 hours, for example) scoring closer to ten while the slower states (in a timely fashion, within three weeks) scoring closer to one. The belief here is that the faster the data gets to NICS, the more ineligible people will be disqualified and the relationship with the overall firearms fatalities rate will be negative.

Discussion of Results

The FPI itself, with results outlined in Table 2, had a respectable R-Square value of .52, a Beta weight of .486 and more importantly, significant at the $p < .001$ level, indicating a strong positive relationship with the dependent variable. In sum, the model results affirmed what was originally hypothesized: that lack of adequate firearms regulation at the state level on average results in higher firearm fatalities rates, surrounding states' policies matter and that the FPI indeed captures what it is supposed to. It is also worth mentioning that the Mental Health Access Care variable came up in the hypothesized direction and significant at the $p < .005$ level lending credence to the argument that any future policy discussion involving the reduction of gun-related violence in the United States needs to address repair and/or restructuring of the current community-based mental health care system.

Conclusion & Suggestions for Future Research

The creation of the Firearms Permissiveness Index (FPI) is another step in the resolution of the gun violence debate. It is a useful tool for firearms policy analysts to rate states based on their affinity for or resistance against sound firearms safety policies. It takes into account both the internal and external factors affecting a state's firearms' fatalities rate. There literally have been thousands of studies on diffusion of policies and how neighboring states' decisions influence one another (see Shipan and Volden, 2012). The flow of guns into one state from another makes considering diffusion in firearms policy analysis research worth further exploration. What makes the FPI valuable is that as an index it is malleable and can change along with policy in the American states. It also gives researchers a quick oversight of the 'state of the states' in terms of where the

United States is in terms of firearms safety regulations. Moreover, it can be utilized as a state characteristic variable along the lines of level of happiness, livability, urbanization and other descriptive measures commonly used in econometric state-level public policy study. All told, the FPI is a worthy addition to the toolbox of both firearm public policy analysts as well as state public policy scholars and furthers the knowledge base in both.

References

[1]. Brezenski, T. F. (2018, Spring-Summer). Inside the 23rd Congressional District (FL) Gun Violence Task Force: Real-Time Crisis Policymaking in the Wake of the Marjory Stoneman Douglas School Shootings. *Journal of Multidisciplinary Research* 10(1-2), 35 - 49.

[2]. Brezenski, T. F. (2018a). From Parkland to Jacksonville: Firearms Mortality and Local Preemptions. *Florida Political Chronicle*, v. 26(1) 19 - 25.

[3]. Dokoupil, T. (2016, June 16). Family of AR-15 Inventor Eugene Stoner: He Didn't Intend It For Civilians. *NBC News.com* 1-12
<https://nbcnews.com/news/us-news/famil-ar-15-inventor-speaks-out-n593356>

[4]. Dougherty, M. (2011). *Small Arms Visual Encyclopedia*. London: Amber Books Ltd.

[5]. Jones, B. (2013, November 1). Another AR-15 rampage? Here are the facts about America's most popular rifle. *Business Insider*, I. <https://www.businessinsider.com/assault-rifle-weapon-ar-15-2103-11>.

[6]. Koper, C., and Roth, J. (2002). The impact of the 1994 federal assault weapons ban on gun markets: an assessment of short-term primary and secondary market effects. *Journal of Quantitative Criminology*, 18(3), 239 - 266. <http://dx.doi.org.10.10123/A:1016055919939>.

[7]. Kristoff, N. (2004, August 18). Who needs assault weapons? *New York Times*, p. A23
<http://www.nytimes.com/2004/08/18/opinion/who-needs-assualt-weapons.html>

[8]. Schuppe, J. (2017, December 2017). America's rifle: Why so many people love the AR-15. 1-22.
<https://www.nbcnews.com/news/us-news/america-s-rifle-why-so-many-people-love-ar-15-n831171>

[9]. Shipan, C. and Volden, C. (2012) Policy Diffusion: Seven Lessons for Scholars and Practitioners. *Public Administration Review* 72(6 November-December) 788 - 796 Stable URL: <https://www.jstor.org/stable/41688003>

[10]. Tanner, L. (2018, September 11). Active shooter stidy: Semi-automatic rifles more deadly. 1 - 7. *Medicalxpress*.
<https://medicalxpress.com/news/2018-09-shooter-semi-automatic-rifles-deadly.html>

[11]. The Firearms Industry Trade Association. (2018) <https://www.nssf.org/msr/>

[12]. Wintemute, G. (2002). Where the guns come from: The gun industry and gun commerce. *The Future of Children* 12(2) 54 - 71. Stable URL: <https://www.jstor.org.stbale/1602738>

[13]. Wintemute, G. (2007). Gun shows across a multistate American gun market: Observational evidence of regulatory policies. *Injury Prevention* 13, 150 - 156. <https://doi.org/10.1136/ip2007.016212>

Appendix

Table 1: Summary Of Firearm Permissiveness Index (FPI) Scores By State (2014)			
State	Internal FPI	Border States Mean FPI	State FPI
AK	4	3	12
AL	4	4	16
AR	4	4	16
AZ	4	2.8	11.2
CA	1	3.7	3.7
CO	1	4	4
CT	0	2.3	0
DE	3	1.7	3.7
FL	4	4	16
GA	4	4	16
HI	1	1	1
IA	4	4	16
ID	3	3.7	11.1
IL	4	4	16
IN	4	3.8	15.2

KS	4	3.3	13.2
KY	4	3.7	14.8
LA	1	4	4
MA	1	2.4	2.4
MD	1	3.3	3.3
ME	4	4	16
MI	4	3.5	14
MN	4	4	16
MO	4	4	16
MS	4	4	16
MT	4	4	16
NC	4	4	16
ND	4	4	16
NE	4	3.5	14
NH	4	3	12
NJ	1	2.5	2.5
NM	4	3.3	13.2
NV	4	2.8	11.2
NY	1	1.7	1.7
OH	3	3.6	10.8
OK	4	3.5	14
OR	3	2.8	8.4
PA	3	1.8	5.4
RI	3	0.5	1.5
SC	4	4	16
SD	4	4	16
TN	4	4	16
TX	4	4	16
UT	4	3.8	15.2
VA	4	3.2	12.8
VT	4	2	8
WA	3	3	9
WI	4	4	16
WV	3	3	9
WY	4	3.3	13.2

Table 2: Multivariate Regression Results – Utility Of Firearm Permissiveness Index (FPI)

Dependent Variable: Gun Death Rate by State (2014)

	B	Beta Weight	T-Value	Sig.
(Constant)	9.867		6.040	.000
State Firearm Permissiveness Index (FPI) Score	.384	.486**	4.420	.000
Mental Health Care Access Level	-.006	-.362*	-3.301	.002
NICS State Rate Of Reporting Per Capita	5.674	.132	1.271	.271
Speed Of State Mental Health Reports To NICS	-.186	-.151	-1.460	.151
R - Square = .523				
Durbin Watson Test = 1.991				
p<.005*				
p<.001**				
N = 50				

About The Author

Thomas F. Brezenski, Ph.D. is an Associate Professor of Political Science at St. Thomas University in Miami, FL. He has been teaching at the collegiate level for over two decades and has taught and/or created close to thirty courses. He is one of under fifty firearms policy analysts/experts in the United States and served on the 23rd Congressional District Gun Violence Task Force formed in the wake of the tragic Marjorie Douglas Stoneman Douglas High School shootings chaired by Hon. Rep. Debbie Wasserman-Schultz. Dr. Brezenski works with legislators and their staffs to provide supporting evidence for sound legislation that will reduce the public health epidemic of gun violence in America. He is the father of five and resides in Pembroke Pines, FL.