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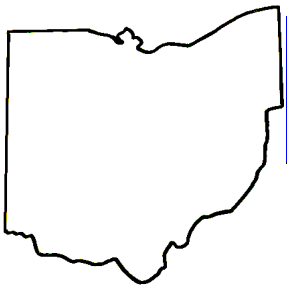

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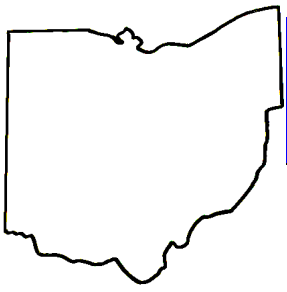

Volume 19
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Journal of Economics and Politics

EDITORIAL POLICY

The *Journal of Economics and Politics* is a scholarly journal directed to a broad audience of economists and political scientists. It is sponsored by the **Ohio Association of Economists and Political Scientists**, *OAEPS*, but is open to contributions from non-members as well as from members. It has a particular interest in the publication of articles dealing with Ohio and with the region, but it is a general journal. No particular method or approach is favored over another.

This electronic issue of the *JEP*, V. 19, will be updated as manuscripts in the hands of referees are returned. In addition, the entire Entrepreneurship issue of the *JEP* will be published, printed, and distributed world-wide during 2008 by Blackwell Publishing.

Journal of Economics and Politics
MANUSCRIPT INSTRUCTIONS for Year 2007

The *JEP* is a double-blind refereed journal.

I. EXAMPLE: Follow the example of the attached manuscript as closely as possible with respect to format, references in the text to articles and books, references at the end of the paper, font size, etc.

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III. DELIVERABLES:
1. CD or Floppy Disk: 3.5" for WINDOWS
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3. E-mail file of manuscript in MS Word v.6 or higher

IV. MAXIMUM # OF PAGES: 23 total, including paper, endnotes, references, etc.

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Abstract (the word "Abstract")	Times New Roman	12pt	bold, small caps	**LIKE THIS**
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1. All text, including Abstract, should have full (right & left) justification.
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QUESTIONS? Please contact:

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Journal of Economics and Politics

A MESSAGE FROM THE EDITOR-IN-CHIEF

This issue of the Journal of Economics and Politics marks three significant developments since the journal was first published by the OAEPS. First, this issue will be the first one published by Blackwell Publishing under the auspices of the OAEPS and Public Policy Journal. This is truly a remarkable development in that it will reach an audience in the thousands instead of in the low hundreds. In addition, it will be stocked by numerous libraries throughout the world. We expect to see a significant increase in the number of manuscripts submitted to the JEP because of this. This was a long process, but was unanimously endorsed by the OAEPS membership at the October 2006 annual meetings. A second development represented by this issue of the JEP is the long-awaited special issue devoted to entrepreneurship. Finally, the third development represented by this issue is that it marks only the second time the JEP, in addition to being published in a bound paper copy, is being made available as an electronic version. I must emphasize that this electronic version is still a "work in progress." Several more papers are in the refereeing process and will be added to this e-edition when available. Blackwell Publishing will publish, print, and distribute the Entrepreneurship Issue of the Journal of Economics and Politics in a bound paper copy, and that is eagerly awaited; however, since that will not take place until 2008, it was decided by the Executive Committee of OAEPS to make the long-awaited articles available to the OAEPS membership (only) now.

The Ohio Association of Economists and Political Scientists is in its 69th year. The Mission Statement of the OAEPS emphasizes the interaction of political and economic concepts. It is a professional association of practitioners, academics, and students in economics, political science, and related fields. It is devoted to the understanding and dissemination of knowledge, and to the facilitation of dialogue regarding economic and political concepts and events. Our emphasis is on how the interaction of these two social sciences impact Ohioans.

The *Journal of Economics and Politics* is in its 19th year. The quality of the *JEP* would not be what it is without able referees. I wish to thank a legion of referees who worked with me on Volume 19. Their names can not be mentioned since the *JEP* is a double-blind refereed *Journal*, but the results of their labor is evident in the quality of the articles which make-up this issue. Guidance and able assistance from the Associate Editors, Professors Mary Ellen Benedict, Dennis Miller, Dennis Petruska, and Thomas Sutton, has greatly improved the *JEP*. A special thanks goes to Dr. Andrew Lucker for his work on the OAEPS website and for placing the *JEP* on this site.

The title of our *Journal*, the *Journal of Economics and Politics*, reflects the reality of interdependence. Regional and State issues in economics and politics cannot be addressed in isolation from the environment around them. The growing global/international influences affect us all and certainly affect regional/state issues. The *Journal* welcomes articles on regional and state issues as well as topics of national, international, and global importance.

Finally, I wish to thank the Officers, the Executive Committee, and the OAEPS Membership for the trust they have shown in me through the years by appointing me to the position of Editor-in-Chief of the *Journal of Economics and Politics*. ***Nam b'e an diugh an de, cha bhithinn-sa mar a tha mi.***

Henry G. Rennie
Editor-in-Chief
Journal of Economics and Politics

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ARTICLES

PUBLIC SECTOR ENTREPRENEURSHIP:

EVIDENCE FROM TRADE POLICY

DAVID MCCLOUGH

BOWLING GREEN STATE UNIVERSITY

ABSTRACT

A SUDDEN AND SUSTAINED INCREASE IN REGIONAL TRADE AGREEMENTS NOTIFIED TO THE GATT/WTO DURING THE 1990S MAY BE REFLECTIVE OF INNOVATION BY POLITICAL AND POLICY-MAKING ENTREPRENEURS SEEKING TO OVERCOME INCREASING COSTS ASSOCIATED WITH PARTICIPATION IN MULTILATERAL TRADE NEGOTIATIONS CONDUCTED UNDER THE AUSPICES OF THE GATT/WTO. ANALYSIS OF DATA FROM THE WTO SUGGESTS THAT THE INCREASE IN RTA NOTIFICATIONS MAY REVEAL ENTREPRENEURIAL INNOVATION.

I. INTRODUCTION

The sustained increase in Regional Trade Agreements (RTAs) notified to the General Agreement on Tariffs and Trade (GATT) and World Trade Organization (WTO) during the 1990s receives considerable attention from analysts of economics and politics. However, analysts ignore entrepreneurship as a contributing factor to this international political economy phenomenon. This paper explores the possibility that political and policy-making entrepreneurs contribute to the increase of RTA notifications to the GATT/WTO during the 1990s. This paper does not purport to explain the increase in RTA notification rather this paper seeks to apply the entrepreneurship concept to this complex international political economy phenomenon. Determination of the causality of the increase of RTA notifications to the GATT/WTO during the 1990s represents an opportunity for future research.

The present paper asserts that the increase in RTA notifications to the GATT/WTO during the 1990s reflects innovation by political and policy-making entrepreneurs seeking to overcome increasing marginal costs resulting from participation in multilateral trade negotiations conducted under the auspices of the GATT/WTO. Descriptive statistics, Poisson regression analysis, and a diffusion model using data from the WTO provide limited; yet, suggestive, evidence that the increase in RTA notifications to the GATT/WTO after 1992 may be reflective of innovation by political and policy-making entrepreneurs. Review and discussion of conditions defining innovation complement the suggestive empirical evidence to support the assertion that the increase in RTA notifications to the GATT/WTO after 1992 may be reflective of innovation by political and policy-making entrepreneurs.

Part II of this paper proceeds with a brief examination of the analytical context framing this analysis. Parts III and IV identify the analytical focus and pose the hypothesis, respectively. Part V presents the analytical framework. Part VI introduces the data and Part VII presents the empirical component of this study. Part VIII discusses the empirical findings in the context of the analytical focus and Part IX presents summation and observations.

II. ANALYTICAL CONTEXT

Entrepreneurship has remained an elusive theoretical concept since the term was first introduced by Richard Cantillon (1755) in *Essai sur la Nature du Commerce en General*. Cantillon identifies entrepreneurs as those who buy at one price in the present intending to sell at a higher

price in the future. Cantillon views the entrepreneur as any actor bearing both the risk and the uncertainty of the market in exchange for profit; however, he does not distinguish between the risk and the uncertainty. This definition suggests that any self-employed individual meets this standard of entrepreneur. Cantillon's conception of the entrepreneur remains popular in the academic literature and the popular press. J. B. Say ([1880] 1971) identifies the entrepreneur as an actor who identifies opportunities to enhances the productivity of resources to recoup costs and to secure profit. Say extends the entrepreneur concept by incorporating the special ability to recognize opportunity to profit by deviating from convention. In addition, he contributes to the literature by distinguishing wages, interest, and rent paid to the factors of production from profit paid to the entrepreneur.

Frank Knight (1921) identifies entrepreneurship as the ability to anticipate and act on changes in the market. He seeks to incorporate entrepreneurship into the neo-classical economic theory emerging from the marginalist revolution of the late eighteenth century. To do so, Knight distinguishes entrepreneurship from other productive resources such as land, labor, and capital. In that neoclassical economic theory identifies the return to any single resource as its marginal product, Knight considers the marginal product of entrepreneurship and concludes that entrepreneurs are rewarded with profit in contrast to wages earned by labor, interest earned on capital and rent earned by land. Knight separates uncertainty from risk and identifies the respective payment for each: interest is paid to capital in exchange for bearing risk and profit is paid to entrepreneurs in exchange for bearing the uncertainty associated with acting on predicted change in the market.

Joseph A. Schumpeter (1934) presents entrepreneurship resulting from the instinct to innovate as the essential component in the dynamic process of economic growth and, therefore, as the source of improvement in the standard of living for society. It is through the process of *creative destruction* that the *old* is replaced by the *new*. The *new* innovation is imitated and diffuses throughout the economic system. The diffusion process eventually terminates yet, society's standard of living remains elevated (Schumpeter 1942). Schumpeter identifies the presence of entrepreneurship in the disruption of an equilibrium state rather than identifying entrepreneurship as an input factor that can be modulated systematically like other input factors. In this sense, entrepreneurship exists only in its observable effect. Moreover, the innovating entrepreneur may not receive the profit despite his creating the profit. For Schumpeter, the profit accrues to the owner of the firm (Heilbroner 1992). Clearly, Schumpeter does not conform to the more popular

and more familiar conception of entrepreneurship as the establishment of new firms that is frequently put forth in the business literature and the popular press.

In contrast to Schumpeter, for whom the *creative destruction* resulting from entrepreneurial innovation creates disequilibrium, Israel M. Kirzner (1979) treats the entrepreneur like an arbitrageur who identifies opportunities that move the market toward equilibrium. Kirzner (1997) elaborates on the identification process when he refers to the discovery process through which entrepreneurs identify profit opportunities by trial and error. Like Schumpeter, Kirzner presents entrepreneurship as a more dynamic process than the static analysis of neo-classical theory. In contrast to the business literature and popular press, neither Schumpeter nor Kirzner limit entrepreneurship to firm creation.

Despite the lack of clarity in meaning of the term, analysts attempt to unravel the entrepreneurial process and identify the specific benefit of entrepreneurship in the growth process. Maria Minniti (1999) suggests that entrepreneurs serve as catalysts for growth by generating a networking externality that contributes to new ideas and new markets. Richard A. Jenner (1998) asserts that entrepreneurs engage in a search for the combination of products and production techniques that lead to increased productivity and growth. These analysts conform to the descriptions by Albert Shapero (1975) and Carl P. Kaiser (1990) presenting the entrepreneur as innovator, resource allocator, and risk-taker.

Empirical studies examine the relationship between entrepreneurship and growth. Paul D. Reynolds, Michael Hay, and S. Michael Camp (1999) find that one-third of the variation in GDP growth rates can be attributed to differing levels of entrepreneurship within countries. Similarly, Andrew L. Zacharakis, William D. Bygrave, and Dean A. Sheperd (2000) focus entirely on developed countries to find that entrepreneurship explains nearly one-half of the variation in GDP growth rates. These studies measure entrepreneurship using an index of net firm creation. This measure of entrepreneurship is not consistent with the conception of entrepreneurship presented by Schumpeter because it ignores the essential component of innovation resulting in *creative destruction*. To the extent that entrepreneurship can be measured and distinguished from other factor inputs, it appears positively correlated with economic growth.

Theoretical and empirical research suggests that entrepreneurship contributes positively to the success of an individual firm and, in the aggregate, to economic growth. However, research

ignores entrepreneurship as it pertains to pursuit of trade policy liberalization, which affects the profit opportunity of individual firms and aggregate growth. Accordingly, an opportunity exists to extend the literature by exploring the role of entrepreneurship in trade negotiations, which are fundamentally political rather than economic outcomes. But first, it is necessary to consider the treatment of entrepreneurship in the public sector.

William A. Niskanen (1998) identifies entrepreneurship in the process of achieving consent on governmental actions. Entrepreneurs in the public sector seek governmental actions or candidates that are preferred to incumbent alternatives. Profit is earned by identifying opportunities to broker consensual change. He suggests that politicians profit through preferred jobs, favors, reputation, preferred government action, and monetary payments. Russell S. Sobel, J. R. Clark, and Dwight R. Lee (2005) consider how public sector entrepreneurship is directed depending on economic and political institutions. These authors argue that entrepreneurs in the public sector of countries defined by liberal economic and political institutions are more likely to contribute to wealth creation. In contrast, entrepreneurs in less liberal countries are likely to engage in transferring wealth. Stephania Zerbinati and Vangelis Souitaris (2005) develop a framework to analyze how entrepreneurship explains how local governments secure funds from the EU. Using case studies, these authors discover that cultural differences contribute to whether senior managers or politicians serve the role of entrepreneur.

Writing from an Austrian perspective, Thomas J. DiLorenzo (1988) criticizes public choice theory based on shortcomings of the neoclassical economic model. DiLorenzo argues that the static analysis of the perfect competition model fails to afford any role for entrepreneurship, which he argues is a dynamic process whose function is to disrupt static equilibrium. Furthermore, he challenges the conventional presentation of public choice theory that portrays the political entrepreneur as passive responder to desires of interest groups. Rather, he argues that political entrepreneurs seek profit opportunity just as private sector entrepreneurs.

The preceding review reveals that analysts of politics and public administration have been able to apply the concept of entrepreneurship to the public sector. This literature differentiates entrepreneurs in the public sector, as it is intended in this paper, from *political entrepreneurs*, as popularized by Burton W. Folsom, Jr. (1991), who distinguishes between the more familiar market entrepreneur and the *political entrepreneur*, whose success is a result of securing governmental favors. Implicit in this distinction is that market entrepreneurs improve efficiency

in contrast to political entrepreneurs who distort efficiency. Accordingly, the popular conception of entrepreneurship as firm creation is inappropriate when studying entrepreneurship in the public sector. This paper recognizes political and policy-making entrepreneurs as efficiency enhancing rather than efficiency distorting due to the implicit trade liberalizing effects of RTAs. Nonetheless, no evidence is presented applying entrepreneurship directly to the formulation of trade policy. This shortcoming in the literature is puzzling given the expected positive effect of trade liberalization on aggregate growth and the popularity of entrepreneurship as an explanatory variable in models of aggregate growth.

III. Analytical Focus

This analysis examines the extent to which the increase in RTA notifications to the GATT/WTO during the 1990s reflects innovation by political and policy-making entrepreneurs. Is the increase in RTA notifications to the GATT/WTO during the 1990s illustrative of entrepreneurship in the public sector?

IV. Hypothesis

Schumpeter (1942) posits that entrepreneurs are the driving force behind *creative destruction*, whereby innovation replaces the *old* with the *new*. Kirzner (1997) conceives of entrepreneurship as a discovery process through which profit opportunities are identified through trial and error. Accordingly, this paper hypothesizes that political and policy-making entrepreneurs identify profit-like opportunities that result in the destruction of *old* trade arrangements and the replacement by *new* trade agreements. Specifically, this paper hypothesizes that the increase in RTA notifications to the GATT/WTO during the 1990s reflects an innovation by political and policy-making entrepreneurs responsible for trade policy. The motivation to innovative trade policy is the desire to overcome increasing marginal costs associated with participation in multilateral trade negotiations conducted under the auspices of the GATT/WTO. Treatment of entrepreneurship as a trial and error process rather than as a tangible input factor similar to land, labor, and capital helps to demystify entrepreneurship as a factor of production. Treated as a process, entrepreneurship is ongoing, even if resulting innovation is discrete rather than continuous.

V. Analytical Framework

To analyze the entrepreneurial dynamic contributing to the formation of RTAs, it is necessary to identify behavioral assumptions motivating politicians and policy-makers to innovate. Potential political and policy-making entrepreneurs are motivated to pursue innovation for reasons identified by Nikasen (1998), who suggests that politicians profit through preferred jobs, favors, reputation, preferred government action, and monetary payments. It is reasonable to extent these motives to policy-makers as well. Alternatively, Adam Smith (1776) suggests that individuals seek public esteem; whereas, Schumpeter (1942) suggests that successful innovation is a joyful pursuit. Accordingly, we might treat politician and policy-makers as utility maximizers, whose utility is a function of monetary and non-pecuniary rewards.[1]

In the context of this analysis, profit-like opportunities emerge when differences exist between states in the relative value of RTAs and Rounds, multilateral negotiations completed under the auspices of the GATT/WTO. This paper asserts that political and policy-making entrepreneurs search to identify differences between states in the relative value of RTAs and Rounds through a continuous trial and error process. Economic actors such as multinational firms may influence the discovery process; however, the innovation associated with formation of an RTA is necessarily an outcome of the negotiations between political actors.

Despite incentives for politicians and policy-makers to innovate; neither has to be innovative to maintain employment. For example, politicians may enhance the probability of re-election by opposing trade liberalization. In the context of this analysis, entrepreneurial innovation goes beyond taking calculated political risks to include engaging uncertainty as posited by Knight (1921). The uncertainty of RTAs as an innovation advancing trade liberalization is readily apparent if one ascribes any weight to the position that formation of RTAs will result in creation of trade blocks (e.g. Fortress Europe) operating outside the auspices of the WTO.[2] This paper ascribes little weight to this possibility due to a growing body of empirical evidence suggesting that trade creation exceeds trade diversion in the case of RTAs.[3] Regardless of one's position on the *building blocks* versus *stumbling blocks* debate, trade policy must fundamentally alter international politics to be considered innovative.[4]

The increase in RTA notifications reflects diffusion of the RTA innovation. Not all completed negotiations are reflective of entrepreneurial innovation. This perspective is consistent with Schumpeter's (1934) conception of innovation diffusing throughout an economic system.

Innovation disrupts the status quo and diffuses through the entire economic system resulting in economic growth and an improved standard of living. Once the diffusion process is complete, the growth process concludes with the standard of living remaining elevated. Innovative RTAs create similar growth opportunities by advancing trade liberalization among trading partners. As such, we can distinguish between entrepreneurial politicians and policy-makers and non-entrepreneurial politicians and policy-makers based on whether or not they instigate innovation or, quite rationally, participate in the diffusion process by imitating the innovation.

VI. DATA

The WTO periodically updates a dated document titled, *Regional Trade Agreements Notified to the GATT/WTO and in Force by date of entry into force*. A dataset has been constructed by combining two versions of this document dated May 1, 2004 and January 1, 2005, respectively. The combined dataset is modified to include the Canada-US FTA, which came into force in 1989. The Canada-US FTA is absent from each of the two WTO documents because it was replaced in 1994 by the North American Free Trade Agreement (NAFTA) that includes Canada, the US, and Mexico.

The dataset includes RTAs that are no longer *in force* (e.g. Canada-US FTA). The principal distinctions between the two WTO documents used to construct the dataset are: 1) the more recent version of the document does not include RTAs formerly including any of the ten countries that joined the European Union in 2004, and 2) the more recent version of the document includes nine RTA notifications that came into force prior to May 1, 2004, yet not included on the older version of the document. Despite these RTAs being in force for nearly a decade, these RTAs were not yet notified to the WTO, therefore they were not included as part of the May 1, 2004, document. These idiosyncrasies, if not shortcomings, of the GATT/WTO data motivate the decision to combine the two documents to create a more complete reflection of RTA notifications among GATT/WTO members during the 1990s. Table 1 reports descriptive statistics reflective of the information presented in the WTO documents.

Table 1

RTAs (N = 225)	Frequency	Percentage of Total
Type of RTA:		
Customs Union	10	4.4%
Free Trade Agreement	150	66.7
Service Trade Agreement	35	15.6
Accession to RTA	13	5.8
Preferential Trade Area	17	7.6
Total	225	100%
Composition of RTA:		
2 states	112	49.8%
3 states or more	45	20.0
State and RTA	66	29.3
2 RTAs	2	0.9
Total	225	100%

Table 1 reveals that the most popular type of RTA is a Free Trade Agreement (FTA). FTAs represent two-thirds (66.7%) of the RTAs in the dataset. The second most popular type of RTA is a Service Trade Agreement (15.6%) followed by a Preferential Trade Agreement (7.6%) and Customs Union (4.4%). The dataset also includes 13 accessions, which reflect one or more countries joining an existing RTA. The accession does not create a new RTA but may dissolve existing RTAs. This research assumes that variation in type of agreement reflects state policy preferences.

Table 1 also shows that the most common form of RTA involves two states (49.8%) followed by an RTA comprised of a single state and an existing RTA (29.3%). The third most common form of RTA involves three or more countries (20.0%). Finally, the dataset includes two RTAs formed by two existing RTAs (0.9%).

Figure 1

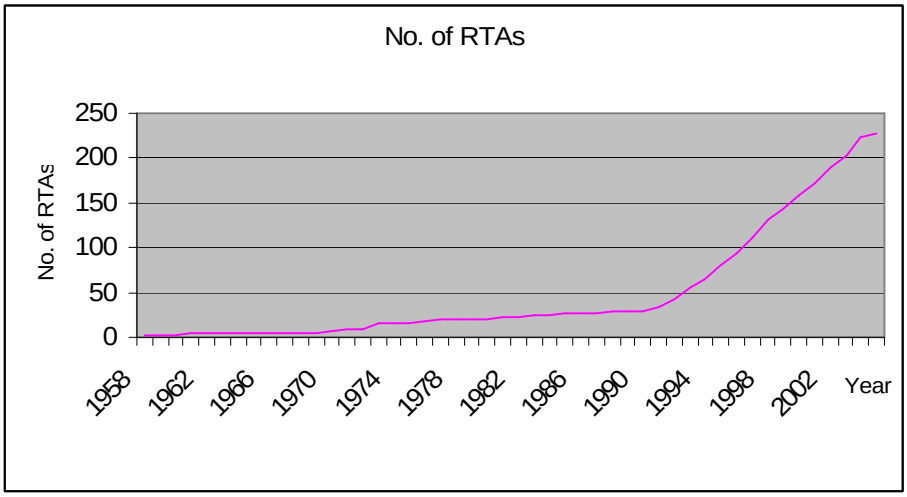


Figure 1 shows the cumulative number of RTA notifications to the GATT/WTO over time and reveals a rather dramatic and sustained increase in the number of RTAs reported to the GATT/WTO since the early 1990s.

VII. EMPIRICAL ANALYSIS

To identify the exact year of the increase in RTA notifications to the GATT/WTO, it is necessary to consider the number of annual RTA notifications.

Table 2

Year	Notifications	Year	Notifications
1990	0	1998	19
1991	3	1999	12
1992	9	2000	16
1993	13	2001	13
1994	9	2002	18
1995	16	2003	14
1996	13	2004	19
1997	19	2005	4

Table 2 reveals that the sustained increase in RTA notifications to the GATT/WTO begins in 1992. Figure 1 reveals the nonlinearity of RTA notifications to the GATT/WTO. Nonlinear least squares methods minimize the sum of squared residuals, however count data distributions, such

as the number of RTAs notified to the GATT/WTO in a particular year, exhibit heteroskedasticity. Accordingly, maximum likelihood estimation is more appropriate method of analysis than nonlinear least squares.

Normality is a standard distributional assumption for linear regression. The normality assumption is reasonable for continuous dependent variables that take on a large range of values. A count variable such as the number of RTA notifications to GATT/WTO takes on very few values including, potentially, many zeros and low values. The discrete nature of the dependent variable suggests that we can improve on least squares and the linear model with a specification that accounts for these characteristics. The appropriate distribution for count data is the Poisson distribution. Therefore, a Poisson regression tests whether the increase in RTA notifications to the GATT/WTO after 1992 is statistically significant rather than simply a chance outcome.

To test whether the increase in RTA notifications to the GATT/WTO after 1992 is statistically significant, we specify a Poisson regression model:

$$E(y_i' \mid x_1, x_2) = e^{(ß_0 + ß_1 x_1 + ß_2 x_2)}$$

The dependent variable, *y*, is the number of RTA notifications to the GATT/WTO in a given year, denoted by x_1. The independent variable, x_2, is a dummy variable taking the value *0* for years prior to 1992 and taking the value *1* for the year1992 and the years that follow. Taking the log of both sides of the equation generates a linear model:

$$\text{Log}\,[E(y_i' \mid x_1, x_2)] = ß_0 + ß_1 x_1 + ß_2 x_2$$

The variable of interest is the dummy variable, x_2. If the estimated coefficient of this variable is statistically significant then, quantitative evidence supports the observation that the observed increase in RTA notifications since 1992 is unlikely a chance event given the number of RTA notifications prior to 1992. The hypotheses to be tested can be summarized as follows:

H_0: RTA count prior to 1992 = RTA count after 1992

H_1: RTA count prior to 1992 ? RTA count after 1992

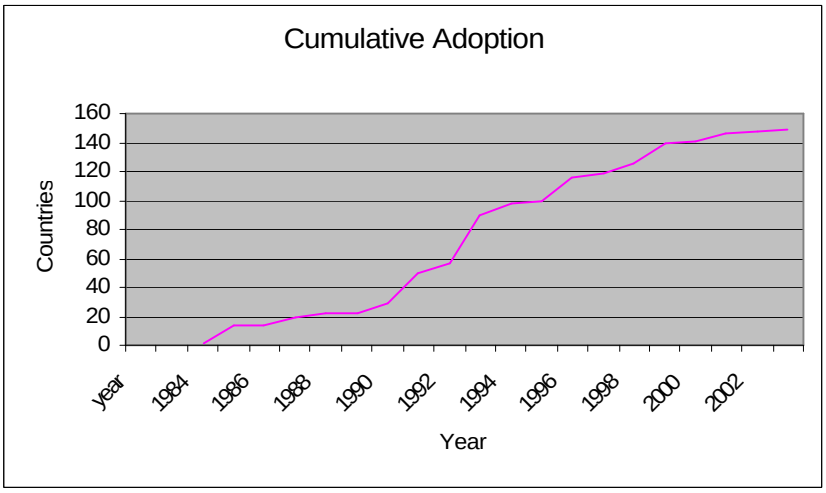
Table 3 reports the results of the Poisson regression analysis. The results indicate that the parameter estimate of the variable of interest is positive and significant at all conventional levels of statistical significance ($p < .0001$). Therefore, we reject the null hypothesis, H_0, and accept the alternative hypotheses, H_1. The positive sign of the coefficient estimate allows us to conclude that the number of RTA notifications after 1992 is necessarily greater than the number of RTA notifications prior to 1992.

Table 3

Analysis of Parameter Estimates					
Parameter	Df	Estimate	Std. Error	Chi square	p-value
Intercept	1	-29.5981	24.9326	1.41	.2352
Year	1	.0150	.0126	1.41	.2352
After 92	1	2.3083	.3439	45.05	<.0001

Everett M. Rogers (1983) states that the adoption pattern of an innovation is a normal, bell-shaped curve with frequency plotted over time. The resulting cumulative function results in an *s-curve*. Figure 2 shows the cumulative number of countries since 1983 to notify the WTO of participation in an RTA. The cumulative function visually depicts the expected *s-curve* pattern.

Figure 2



Ronald S. Burt (1987) is careful to note that in the absence of social contagion, diffusion does not resemble an *s-curve*. He reminds the reader that diffusion is driven by two factors: the average

predisposition to adopt independently of others (probability *k*) and the proportion of the population available to adopt (*1-y*, where *y* is the proportion that has adopted). The expected rate of diffusion is the product of the two factors: $dy/dt = k\,(1-y)$. Accordingly, for lower values of *k*, the diffusion will occur more slowly. For higher values of *k*, the diffusion will occur more quickly. In contrast, the presence of social contagion changes diffusion to the familiar *s-curve*. The effect of social contagion dampens the initial rate of diffusion. The rate of diffusion is given by the factors above, weighted by the extent to which the innovation is already adopted, *y*, so the expected rate of diffusion is the product of the three factors: $dy/dt = k\,y\,(1-y)$. The analysis of the pattern is not limited to graphical analysis but can be augmented using statistical methods developed in the marketing literatures (Bass 1969, Takada and Jain 1991, Redmond 1999).

The Bass diffusion model is the standard methodological approach used in assessing the diffusion of new products (Bass 1969). In this model, the number of new adopters in period *t*, (S_t), is a function of the eventual number of adopters in the cohort (*m*), the number of individuals who have already adopted (Y_{t-1}), and the probability that a non-adopter adopts in period t (P_t),

$$S_t = (m - Y_{t-1})\, P_t,$$

where

$$P_t = p + q\,[Y_{t-1} / m].$$

Here, *p* is the innovation parameter and *q* is the imitation parameter. The innovation parameter represents the earliest starters, while *q* represents the basic diffusion rate, that is, the rate of spread among the main group of potential adopters.[5]

Using data compiled from the WTO reporting RTA notifications to the GATT/WTO, the results of the maximum likelihood estimation indicate a reasonably good fit of the RTA data. Measured by the R^2 statistic, the goodness of fit for the model is 0.56.[6] The model is statistically significant (*F-value* = 7.32) at the 1%-level (*p* = .002).

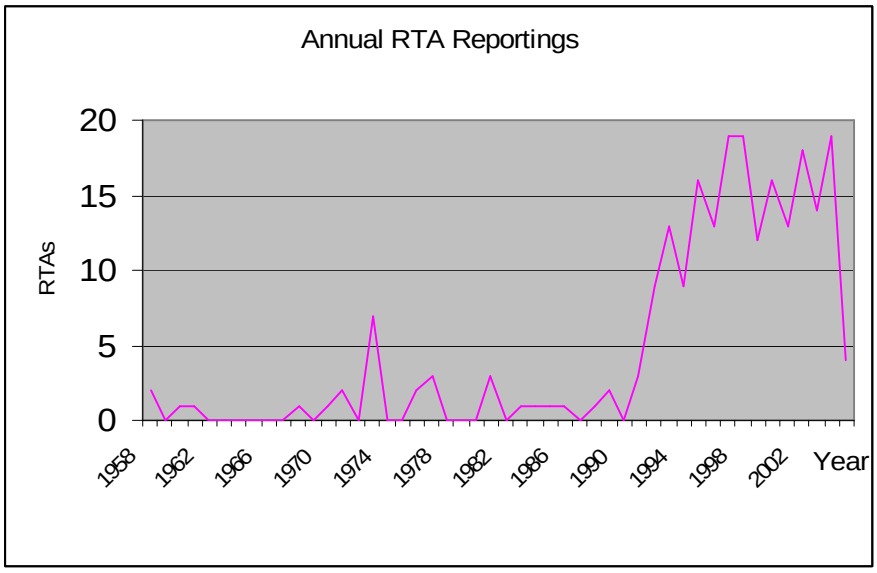
VIII. Discussion & Analysis

The R^2 value generated by the diffusion model is considerably lower than the typical R^2 (approximately = 0.9) of a new consumer product. Rogers (1983) examines the characteristics of innovations to explain why some diffusion processes move more quickly than others. He states that the relative advantage of an innovation, the compatibility, the complexity, the trialability, and the observability of an innovation will influence the adoption of the innovation (pp.14-16). RTAs are treaties mainly between nation states outlining rules and procedures relating to specified

exchange. Accordingly, it can be reasonably argued that RTAs are high in complexity and low in trialability, two characteristics which slow the diffusion process. As such, the R^2 = .56 may be remarkably high given what is involved in the negotiation and implementation of an RTA.

In *The Theory of Economic Development* (1934), Schumpeter identifies innovation as the source of economic development. In the second chapter, Schumpeter contrasts the stationary concept of *circular flow* (general equilibrium) with the dynamic process of *economic development* (growth). He identifies three conditions distinguishing economic development: first, development is endogenous, meaning it comes from within the system; second, development occurs discontinuously; third, development brings about *revolutions* revealing qualitative changes that replace the previous equilibrium of the *circular flow* and create radical new conditions. Based upon these criteria, the present paper asserts that the observed increase in RTA notifications to the GATT/WTO reflects the diffusion of an innovation in trade policy instigated by political and policy-making entrepreneurs.

Figure 3



To support of the assertion that the observed increase in RTA notifications reflects an innovation, let us consider each of the conditions presented by Schumpeter (1934). First, a compelling literature that addresses the endogeneity of RTA formation (Ethier 1998, Levy 1997, Krishna 1998, Baldwin 1996); second, Figure 3 shows that RTA formation is not smooth and continuous, but rather reflects a sustained discrete "jump" since the early 1990s; third, the increase in global trade has fundamentally changed the international economic order by creating an unprecedented

level of interdependence among nations as seen in the growth of trade, growth of multinational corporations, and social concerns relating to perceptions of lost sovereignty in the wake of so-called *globalization*. Considered in their entirety, the evidence is suggestive that the increase in RTA notifications to the GATT/WTO since 1992 is consistent with the Schumpeterian conception of entrepreneurship.

IX. Summation and Observation

This paper examines the extent to which entrepreneurship applies to the sudden and sustained increase in RTA notifications to the GATT/WTO during the 1990s. Descriptive statistics and statistical analysis offer evidence consistent with the Schumpeterian (1934) conception of entrepreneurship. Although this evidence cannot be considered conclusive, the evidence is suggestive that the increase in RTA notifications to the GATT/WTO since 1992 is illustrative of the diffusion of an innovation by political and policy-making entrepreneurs.

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ENDNOTES

[1] For discussion of trade-off between monetary and non-pecuniary rewards by economists see Benedict et. al. (2006).

[2] Krugman (1991) argues that three dominant trade blocks centered around North America, Europe, and Japan will result from the increase in regional trade agreements. Frankel (1997) employs gravity models to find that trade is increasingly concentrated within regional trade agreements.

[3] Sherman Robinson and Karen Thierfelder (1999) find that in most cases trade creation exceeds trade diversion. Sucharita Ghosh and Steven Yamarik (2003) employ gravity models to find that trade creation exceeds trade diversion across various definitions of regional agreements.

[4] Jagdish Bhagwati (1991) considers whether regional trade agreements will interfere with the multilateral effort. Accordingly, he asks whether regional agreements are *stumbling blocks* or *building blocks* toward global free trade.

[5] Parameters of the model were estimated using maximum likelihood procedures outlined by Takada and Jain (1991) on SAS NLIN software.

[6] The computer generated output does not include an R^2 value. Accordingly, the R^2 is calculated separately using the equation: $F = (R^2/k)/[(1- R^2)/(n-k-1)]$ where F is the F value (= 7.32), n is the number of observations (= 21 years), and k is the number of terms in the equation not including the constant (= 3).

ENTREPRENEURS, ORGANIZATIONAL STRENGTH AND THE PURSUIT OF PUBLIC GOODS BY VOLUNTARY ORGANIZATIONS

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ABSTRACT

SALISBURY (1969) ASSUMES THAT INTEREST GROUP ENTREPRENEURS ARE PROFIT-DRIVEN AND THAT THEY MAKE ATTEMPTS TO PROCURE COLLECTIVE GOODS IN ORDER TO INCREASE THEIR MEMBERSHIP AND REVENUE. THIS PAPER TAKES AS ITS RESEARCH QUESTION THE REVERSE OF SALISBURY'S CLAIM: CAN INTEREST GROUP ENTREPRENEURS INCREASE THE LIKELIHOOD OF PROCURING COLLECTIVE GOODS BY INCREASING THEIR ORGANIZATIONAL STRENGTH (MEANING MEMBERS AND BUDGET SIZE)? RESULTS OF A STUDY OF STATE-WIDE LESBIAN, GAY, BISEXUAL AND TRANSGENDER (LGBT) ORGANIZATIONS SHOW THAT LARGER MEMBERSHIPS ARE POSITIVELY AND SIGNIFICANTLY ASSOCIATED WITH SUCCESS IN PROCURING COLLECTIVE GOALS WHILE INCREASED BUDGETS ARE SIGNIFICANTLY BUT NEGATIVELY ASSOCIATED. THE IMPLICATIONS OF THIS RESEARCH ARE TWO-FOLD. FIRST, THE ASSUMPTION THAT ENTREPRENEURS PURSUE COLLECTIVE GOODS FOR REASONS OF SELF-INTEREST (BUILDING MEMBERS AND BUDGETS) MAY BE MORE COMPLICATED THAN SALISBURY SUGGESTS. THE RELATIONSHIP COULD BE THE OPPOSITE—INTEREST GROUP ENTREPRENEURS BUILD THEIR MEMBERSHIP TO SECURE COLLECTIVE GOALS. SECOND, BECAUSE OF THE FINDING THAT MORE MEMBERS MEANS MORE LEGISLATIVE SUCCESS BUT GREATER BUDGETS MEANS LESS LEGISLATIVE SUCCESS, INTEREST GROUP ENTREPRENEURS WHO ARE INTERESTED IN PROCURING COLLECTIVE GOALS SHOULD CONSIDER MAXIMIZING THEIR MEMBERSHIP RATHER THAN THEIR BUDGETS.

I. INTRODUCTION

Much attention in the literature has been paid to the relative importance to interest group entrepreneurs of pursuing collective goals in voluntary organizations. Some theorists (e.g. Olson (1965) and Salisbury (1969) have argued that collective goals are unimportant to the entrepreneur—that instead, she is interested in material gain for the organization and so focuses on increasing the membership figures or size of the budget. Other authors (e.g. Lowry (1997)) argue that collective benefits are more important to entrepreneurs than merely a means to increase revenues.

This paper reviews the seminal literature that outlines the collective action problem and its relevance to the pursuit of collective goals by interest group entrepreneurs. The literature review concludes with a discussion of key empirical tests of the collective action problem. Based on the findings in the literature, an argument is made for the importance of reversing the much debated issue about whether collective goals are pursued for material reasons. Rather than re-examining that question, the research question for this paper is the opposite—what is the relevance of an organization's material goods (number of members and budget) with regard to its attainment of collective goals? In the second section, I introduce the Lesbian, Gay, Bisexual and Transgender (LGBT) groups and their main goals and then consider what factors determine whether entrepreneurs pursue their collective goals (goal pursuit is operationalized as introductions in the state legislature) and what factors determine success in pursuing their goals in the legislature. Special attention is paid to entrepreneurial decision-making variables (value of

goal, estimated likelihood of passage, and expected utility) as well as the variables measuring organizational strength (membership numbers and budget size) and the conduciveness of the political environment. Section three shows the results of two empirical tests, one on the determinants of bill introductions and the other on determinants of legislative success. Are the goals that are most valued by entrepreneurs more likely to enjoy legislative pursuit and success? What role does group strength play in pursuing and procuring collective goals? Or is it the political opportunity structure (such as partisan composition of the legislature or the strength of the countermovement) that is more important in determining introductions and outcomes?

Findings show that neither membership figures nor budget size has a positive impact upon the likelihood of an interest group pursuing its collective goals in the state legislature. However, larger memberships do have a significant, positive effect on the progress of collective goals in the legislative process. Finally, larger budgets are found to have a negative impact on legislative success. The implications of this finding are that 1) researchers who observe interest group entrepreneurs attempting to maximize membership should be more cautious in concluding that the motivations of the entrepreneurs are self-interested, and; 2) at least on the state legislative level, entrepreneurs who are interested in collective goals should consider maximizing membership over budget size.

II. THE COLLECTIVE ACTION PROBLEM AND INTEREST GROUPS

This year marks the fortieth anniversary of Economist Mancur Olson's application of economic theories to interest groups. Olson's main logical insight about the incentives of individuals and the impact of these incentives on group formation had the effect of shaking to its theoretical foundations the then-dominant pluralist theory of democracy. Truman (1951), one of the best-known architects of the pluralist theory, conceives of interest groups as providing a crucial connection between individuals and the government. Although all of the features of pluralism cannot be described here, the most relevant pieces of Truman's theory to this paper is a more or less automatic founding of new groups in response to new interests and also an automatic connection of individuals to groups that represent their interests. Truman argues that these two automatic mechanisms help to ensure that interest groups represent the sum total of compelling citizen interests. Further, those groups that represent more citizens' interests could, if protecting their interests required it, draw on more group resources (such as a greater number of members and larger membership budgets).

Olson casts doubt on the pluralists' assumption that groups would form and individuals would join groups in response to changing interests by applying the collective action problem to

interest groups. He shows that it is not necessarily rational for individuals to voluntarily join interest groups that seek collective benefits (a.k.a. public goods) even if they agree with the cause of the group. Because a public good is indivisible and non-excludable, if obtained, it cannot be divided between contributors and non-contributors and cannot be denied to non-contributors. Thus, Olson shows that it is often rational for the individual to free ride on the efforts of the group. If the group is successful, s/he is free to enjoy the public good. If the group is not successful, then almost certainly it would not have been successful even if the individual had contributed. Thus, the individual does not spend membership dues or time on a failing enterprise.

In a partially parallel argument to Olson's, Salisbury (1969) develops the exchange theory of interest groups, which focuses on the relationship between group leaders and members or potential members. He conceives of group leaders as entrepreneurs and asserts that entrepreneurs "invest capital in a set of benefits, which they offer to prospective members at a price—membership" (p. 2). Entrepreneurs and members then engage in an exchange relationship wherein entrepreneurs must provide enough incentives to convince group members to join. Pursuing the collective goals of the organization is one way that entrepreneurs can advertise their cause and collect greater numbers of members and resources. In fact, Salisbury views the efforts of entrepreneurs to be primarily devoted to maximizing their revenues and asserts that "most group activity has little to do with efforts to affect public policy decisions but is concerned rather with the internal exchange of benefits by which the group is organized and sustained" (p. 20). Entrepreneurs may even lobby legislatures in order to induce more people to join the group.

For Salisbury, profit is essential to the motivations of the entrepreneur. Indeed, "profits remain the key requirement for continuation of the enterprise, and…the profit must approach some optimal return on the capital investment or the investment will be transferred to some other, more promising, enterprise" (p. 25). Because inducing greater membership and, therefore, greater contributions, are the main way to secure a profit, membership building is the main enterprise of the group entrepreneur.

Salisbury illustrates his conception of the use of collective goals to increase membership by considering the effects of economic recessions or depressions on the exchange relationship between entrepreneurs and members. Salisbury argues that group members are less likely to join during economically difficult times simply because they have fewer resources to do so. Entrepreneurs will respond to these membership difficulties and encourage more membership by stepping up their political activism.

In sum, Olson and Salisbury are arguing that the collective goals of the organization are often not the reason people join. Further, when entrepreneurs pursue these collective goals, it is

for self-interested or materialist reasons. Various authors have pointed to ways around the collective action problem. For example, Moe (1980) argues that the collective action problem is often overcome by psychological factors such as feelings of efficacy when joining (Moe, 1980). Walker (1983) finds that outside donors are often used by entrepreneurs as a way to cover many of the costs associated with the group even if free-riding occurs. More recently, Jones uses the logic of game theory to show the importance of the nonprofit label in signaling to potential members that a large percentage of their donations will be used for a good cause (Jones, 2004). If group members believe that their donations will be used efficiently, Jones finds that they may raise their estimates of how much of an impact their contributions will have on group success.

Perhaps the biggest weakness of the collective action problem, logically impressive though it is, is its lack of empirical support. Indeed, beginning just a few years after Olson's work was completed, the number of association-type interest groups rose dramatically (Walker, 1983). The increase in public interest groups is a puzzle that the collective action problem appears unable to explain. One possible explanation for this increase in the number of groups could be that more groups began to offer selective incentives for joining during that period. However, Berry (1977, 1999) finds that most interest group entrepreneurs (76%) do not offer any selective incentives in exchange for membership. With regards to individual motivations for joining groups, Forsythe and Welch (1983) show that members usually cite agreement with the collective goals of the group as their reason for joining and contributing. Moreover, research on the spending patterns of entrepreneurs (Lowry, 1997) shows that entrepreneurs do not attempt to maximize their revenues. Instead, they seek to maximize spending on achieving their collective goods.

As authors in the literature have wrestled about the importance of collective goals to increasing membership, the opposite connection to a group's collective goals has not been considered as carefully. Does group membership or budget size result in greater success for the group when it pursues its collective goals? The answer to this question is important theoretically and substantively. If greater membership and budget size helps to increase success with respective goals, then the relationship between revenue generation and collective goals is more complicated than Olson and Salisbury have considered. Just as likely as their notion that collective goods are used for strengthening the organization is the obverse—that entrepreneurs strengthen their groups so that they will have greater success with respect to their collective goals. Substantively, if there is a difference between the effects of membership figures or budget size on success of collective goal pursuit, then, assuming that entrepreneurs are interested in collective

goals, they would be wise to focus on the variable that most increases their likelihood for legislative success.

III. L.G.B.T. GROUPS AND COLLECTIVE GOALS

Groups that advocate for Lesbian, Gay, Bisexual and Transgender (LGBT) rights are most likely some of the weakest in state politics. Most of the groups are relatively new and belong in the category of interest groups, Women and Minorities, that Thomas and Hrebenauer find to be very weak in almost all states (1999). In addition to having weak interest groups, members of the LGBT community are hampered by various types of opposition and legal discrimination. Until the Supreme Court's reversal in 2003, sexual behavior between members of the same sex was criminalized in eleven states. Members of the group also experience high levels of hate-crimes directed against them. Further, they are a group that has enjoyed very little public acceptance in the public at large as revealed by consistently low rankings on the NES feelings thermometer (e.g. NES 2000). Finally, they are consistently opposed in every state by a religiously motivated group of fundamentalist Christians known as the Christian Right. This group has become very powerful in some states and in some states has managed to exert major influence or even control the Republican Party (Green, et al, 1998, Conger and Green, 2002).

The presence of multiple challenges in the LGBT community places extra burdens on these weak interest groups to press for relief from the government in a variety of ways. In 2001, there were ten goals on the state level for the LGBT movement (D'Emilio, 2000; NGLTF State of the States Report, 1998). These goals were civil rights, domestic partnership, family issues (e.g. adoption), hate crimes, HIV/AIDS, other health issues (such as the high rate of breast cancer among lesbians), marriage/civil unions, safe schools, sodomy repeal and transgender rights.

Which of these goals will groups pursue first or most vigorously? Rational choice theory tells us that, all else being equal, groups will pursue those goals with the highest expected utility (Morrow, 1994). Expected utility is the value of the goal times the probability of gaining the goal minus the cost of obtaining the goal. Assuming that the cost is constant across goals[1], groups with multiple goals should pursue those goals they value more and that they believe they are most likely to achieve.

The characteristics of the group itself, as well as other groups in the political environment, should also affect goal pursuit. Following the pluralists, the more resources a group has (meaning numbers of members and size of budget), the more likely it should be to pursue its goals and the more successful it should be. Conversely, the stronger a group's organized

opposition, the less likely it should be for the group to pursue its goals because it will deem success to be less likely.

Besides the characteristics of the LGBT group and the opposition group, other factors in the political environment should also affect whether group leaders pursue their goals because they should affect the group's estimation of its probability success. First, several legislative variables should affect goal pursuit. Partisan composition of the legislature may affect success as Democrats should support LGBT group goals more. Also, the party of the governor may be important to legislative success. LGBT movement success should be more likely under a Democratic governor than under a Republican governor. Finally, the density of the interest group population on the state level (Gray and Lowery, 1996) may affect the interest group's likelihood of introducing their goals. The relationship between the two variables should be positive in this case because entrepreneurs may feel pressured to introduce their goals more often to distinguish themselves from a crowded field of other interest groups.

Noninstitutional factors in the state may also affect legislative success. The density of businesses that cater to LGBT people may be important because a powerful business base may convince legislators that the group is important in his/her state and, thus, that s/he should not interfere with the groups' goals. Finally, states with more highly educated residents (from U.S. Census) should be more supportive of the LGBT movement (Button, Rienzo and Wald, 1995) because education tends to liberalize people's views and make them more tolerant of less traditional lifestyles.

The same variables that affect group decisions to pursue goals should also affect the legislature's decision about whether or not to grant the goal. Legislators are assumed to be motivated by continued electoral success (Mayhew, 1974). Thus, if they are going to grant a group some goal, all else the same, they will grant a goal that the group values more or that has a higher expected utility for the group. The government should also respond positively to group membership numbers and a large budget. A large membership and budget signal more likely voters as well as campaign volunteers and campaign contributions for the legislators. For the rest of the variables except interest group density, the logic for legislative success is the same as for group pursuit of goals. Groups should see their demands go farther in the legislative process if the political environmental variables are favorable. Thus, the political context as described above should increase the likelihood of group success in the ways described above. Interest group density, hypothesized to be a positive predictor of group goal pursuit, should be a negative predictor of legislative success (as found by Lowery and Gray, 1996) because of the increased competition from other groups for attention from legislators.

IV. EMPIRICAL TESTS AND RESULTS

Two models are employed to test the several hypotheses listed in the previous section. The first model is a model of bill introductions and the second model is a model of legislative success. The dependent variable in the first model is whether or not, for each demand, the LGBT state-wide group had a bill introduced in the legislature in 2001.[2] The dependent variable for the second model is the disposition of introduced demands. Thus, the second model is a subset of the first model in that it only includes demands that were introduced. Disposition is an ordinal measure that captures the level of support that a given demand enjoyed within the legislature. A bill that is vetoed by the governor is not enacted as law. However, the bill has still enjoyed more legislative success than a bill that dies in the first committee into which it is introduced. The dependent variable legislative success is coded 1 if the bill died in the first house into which it was introduced, 2 if the bill cleared the first house but was not signed into law (e.g. died in a committee of the second house, failed to pass the second house or was vetoed by the governor), and 3 if the bill was signed into law. Data for the dependent variables were provided by the National Gay and Lesbian Task Force (NGLTF) and verified through Nexis-Lexis State Legislative Universe.

Data for the entrepreneurial variables of value and likelihood were obtained from surveys of the leaders of state-wide LGBT groups during 2000. For each state that responded, there was one and only one group in each state that pressed multiple demands on the state level (as predictable per Gray and Lowery's (1996) work on interest group diversity) except in Louisiana.[3] Out of fifty-one possible organizations, thirty-three completed the survey. Since there were ten movement demands and thirty-three groups, there were 330 possible cases in the introductions model reduced to 280 because of incomplete questionnaires. Since only introduced bills were analyzed in the outcomes model, there were seventy-six cases analyzed for legislative success.

For the value variable, entrepreneurs were asked to list their goals and rank them in terms of value. For the likelihood variable, entrepreneurs were asked to assess the likelihood (1=very likely, 5=very unlikely) that the goal would be granted in the legislature in the following year.[4] Expected utility is an interaction term obtained by multiplying the value of the goal times its estimated likelihood of passage. For organizational strength, entrepreneurs were asked to provide their membership figures and annual budget.

The rest of the data came from public records or from measures created by other social scientists. Countermovement strength was from Conger and Green's (2002) estimate of the extent to which the Christian Right has gained control of the Republican Party in each state. This measure was gained by elite interviews with party officials in all of the fifty states. The

percentage of college-educated residents was obtained from the U.S. Census (2000). Partisan information on the legislature and governor's office is from *Book of the States*. For the legislatures, the information on partisanship in the legislatures was recoded for which party held the majority in the House and a similar variable was recoded for the Senate.

The introductions model[5] shows some interesting results (see table 2). First, the model as a whole is statistically significant (Wald chi2=46.36, prob>chi2=.0000). With this model, the percentage of correctly classified bills (correctly predicted whether or not each bill is introduced) is 73%. With regard to specific variables, there is support for the rational choice variables of value and likelihood. Value is statistically significant and in the expected direction. This finding is interpreted to mean that group leaders are more likely to introduce goals that they value more. The likelihood measure is also statistically significant. In addition to introducing goals they value more, group leaders are also introducing goals that they believe are more likely to be successful in the legislature. The expected utility variable, which is an interaction term between value and likelihood, is not statistically significant.

None of the group variables was significant in predicting bill introductions. Neither the number of members in the state group nor the size of the group's budget was statistically significant with respect to introductions. The density of LGBT businesses in the state also has no bearing on whether a given demand will be introduced. The last group measure, oppositional strength, is also not significant in explaining bill introductions for the LGBT movement. This finding makes more sense if the areas in the state with LGBT group strength are different from the areas of the state where the Christian Right strength is greatest. In that scenario, legislators could be introducing more LGBT and Christian Right bills with no interference. The outcomes model should be more illuminating with respect to countermovement influence because the group should be expected to oppose LGBT gains in the legislative process. The education measure is a positive predictor of whether LGBT demands are more likely to be introduced but is not significant at the customary .05 level. Only one of the institutional variables is significant with respect to bill introductions. Interest group density was, as hypothesized, a positive predictor of LGBT demands. The party of the Governor is not a significant predictor for introductions and neither was the proportion of Democrats in the Senate.[6]

Similar to the introductions model, the dispositions model (see table 2) is also statistically significant (Wald chi2=72.23, prob>F=.0000).[7] Of the entrepreneurial decision-making variables (value, likelihood or expected utility), only likelihood is significant. Apparently, valuing the goal more highly does not translate into actual legislative success. However, the likelihood variable

being significant shows that social movement entrepreneurs are able to predict with some accuracy whether their introduced demands will be successful.

The organizational strength findings are very interesting with respect to legislative success. First, an increase in group membership results in a statistically significant increase in the likelihood of bill success. This finding is consistent with the hypothesis expressed earlier in the paper. A surprising finding in terms of organizational strength, however, is the significant negative effect that a large budget has on legislative success. It was hypothesized that both a larger membership and a larger budget would signal to legislators the need to take the group more seriously and confer the group its collective goals. Although this finding was supported for membership, the finding about the budget was the opposite of the predicted direction.[8] An interpretation for this unexpected finding is that, to the extent that entrepreneurs must choose between maximizing membership, maximizing budget and maximizing effort on collective choice pursuit (as Lowry, 1997, assumes), prioritizing budget pursuit may interfere with the pursuit of those other goals.

Several other variables were significant with respect to legislative success. The party variables showed mixed results. The party of the governor is significant but in a negative direction (opposite of the prediction). Having a Democratic governor is less helpful for collective goal attainment than having a Republican governor. The proportion of Democrats in the Senate, however, is positive and significant. This mixed relationship between the Democratic Party and the LGBT movement should also be more carefully examined in future work. Christian Right movement strength is in the expected direction but not significant with respect to legislative success.

How much of a difference do the organizational strength variables make in terms of the group's ability to pass legislation? By holding all other variables at their mean and varying the independent variable of interest from one standard deviation below the mean to one standard deviation above,[9] we can compare the relative impacts of the two independent variables of interest. Mean membership across states is 1189. When membership is one standard deviation below that mean (standard deviation for this variable is 2200 so the membership was set at 0), chances of an introduced bill being passed are 7%.[10] When membership levels reach one standard deviation above the mean, however, chances of passage increase to 27%.[11] Thus, increasing membership could result in a 20% increase in each bill's chances of succeeding.

For the budget variable, the changes in predicted bill passage are fairly similar. The mean annual budget for groups is $153,000. At one standard deviation below the mean (again, because the standard deviation is $360,000, the budget value is set at $0), chance of passage for

any LGBT bill is at 25%.[12] When the budget is increased to one standard deviation above ($500,000) the mean, however, chance of passage decreases to 01%.[13] Thus, an increase in the budget from one standard deviation below the mean to one standard deviation above results in a 24% decrease in the likelihood of the bill passing.[14]

V. IMPLICATIONS

Summarizing the introductions model, we see that group entrepreneurs are more likely to introduce the collective goals that they value more highly and that they think are more likely to be successful in the legislature. However, from the dispositions model, we see that the most valued goals and the goals seen as most likely to pass are not actually enjoying greater amounts of legislative success. Instead, membership numbers and budget numbers of the countermovement is what matters (as well as some other state demographic and political factors).

Because the second model is a subset of the first, the results of the two models should be considered together and some cautionary notes sounded. First, it would be incorrect to argue that, because the entrepreneurial decision-making variables (value and likelihood) are not significant in the dispositions model, they do not matter with respect to disposition. The disposition of the goals is non-existent unless the bill has been introduced. Thus, the value and estimated likelihood of success are important to outcomes because those factors, important to introductions, create a selection effect which, in part, determines which bills are introduced.

Another important group of findings to discuss with respect to outcomes is the organizational strength variables. First, the finding that membership numbers increase the likelihood of legislative success is fairly intuitive. However, this finding reverses the causal argument made by Olson and Salisbury that collective goals are introduced by the entrepreneur to increase organizational strength. While this work does not show that Olson and Salisbury are wrong, it does complicate the interpretation that scholars should make when they observe an entrepreneur taking steps to increase the group's membership base. The motivation for the entrepreneur could be personal wealth or prestige but it could also be a desire to improve the chances of legislative success for the collective goals. In any case, the causal arrow between membership building and pursuit of collective outcomes should be more carefully examined.

Second, the finding that budget size has a negative impact on collective outcomes was counter to this paper's hypothesis but not completely surprising. It may still be the case that, on the state level, membership strength is more important than budget size in terms of legislative success. If that relationship still holds, as this paper finds, then entrepreneurs would be

misguided (assuming that they do value collective goals) if they spent most of their time maximizing their budget instead of pursuing collective action.

If a big budget decreases the probability of obtaining collective goals, then why do some entrepreneurs still seek it? Perhaps some entrepreneurs overestimate the value of money in obtaining collective goals. Or perhaps entrepreneurs have mixed motives for running their organizations. Some may have the self-interested motivations that Olson and Salisbury assume. Others may be motivated more by the public good. Future research should consider that entrepreneurs may differ in their motivations. Imputing one motivation to all entrepreneurs, though analytically elegant, may be too costly with respect to accuracy.

In conclusion, this paper examined the collective action problem and the expectations about the behavior of interest group entrepreneurs generated by the exchange theory. The causal relationship between organizational health and collective goals was reversed and the effects of membership numbers and budget size on the likelihood of pursuit of and success in obtaining collective goals were examined. Results show that decision-making variables are more important with respect to collective goal pursuit. For collective goal success, however, group membership is positively related while membership is negatively associated. The implications for these findings are that the assumption of self-interest on the part of entrepreneurs is problematized. Even if one observes an entrepreneur working to improve organizational membership numbers, it may be to increase the likelihood of collective goal success. However, the negative relationship of group budget and goal success suggests that interest group entrepreneurs who are interested in collective goals should consider maximizing their membership rather than the size of their budget.

ENDNOTES

[1]Such as the cost of lobbying or motivating the membership to contact their representatives.

[2]It is assumed that groups can have a bill sponsored by a legislator whenever they like. This assumption was verified empirically in a survey—90% of groups reported that they could have a bill sponsored anytime or almost anytime.

[3]In Louisiana, there were two state-wide groups. The models were run with both groups, then with one group, then with the other group. None of the combinations changed the results of either model.

[4]One may wonder if the value and likelihood variables are conceptually distinct. However, they are only correlated at .36. Were likelihood and value conditioning indistinguishable to the group leader, one would expect the measurement of the two concepts to be more highly correlated. Further, expected utility, insignificant in both models, is an interaction term between value and likelihood that is controlled for in both models.

The model for introductions is logit whereas the dispositions model is run using an ordered logit.

[5]Robust standard errors are generated for both models because comparing groups across states may result in uneven disturbance distributions.

[6]The proportion of House and Senate Democrats were correlated at such high levels (.8) that the House variable was excluded because of suspected multicollinearity.

[7]To test the parallel regression requirement for using ordered logit, an approximate likelihood ratio test of proportionality of odds across response categories was run. The results were chi2-12.85, prob>chi2=.5383. These results meet the parallel regression requirement and support the use of ologit as an appropriate model.

[8]These two variables are correlated at .695. To test for effects of multicollinearity, the model was rerun without the membership variable. The relationship of budget to legislative success was still negative though not statistically significant.

[9]These variables were generated using King, Tomz and Wittenberg's (2000) Clarify Software.

[11]An alternative explanation, that legislators are responding to the demographic strength of LGBT citizens in their districts rather than to group strength, was tested using census data on LGBT citizens. The numbers of citizens in the state was neither significant in explaining outcomes nor increased the overall explanatory power of the model.

Table 1: Introduction of LGBT Group Demands into State Legislatures

Variable	**Coeff**	**(Robust Std. Error)**
Decision-Making Variables		
Value of Goal	.39	(.156)**
Estimated Likelihood of Gain	.699	(.379)*
Expected Utility	-.042	(.048)
Group Variables		
Number of Group members	-.00001	(.00009)
Size of the Budget	.00000003	(.000002)
Opposition group strength	.052	(.177)
Density of interest group environment	.009	(.003)***
Density of LGBT Businesses	.032	(.092)
Political Structure/Demographic		
Governor's party	.007	(.350)
Democrats control Senate	.506	(1.219)
Mean Education Level of the State	7.255	(5.088)
Wald Chi2(14)=46.36		
Prob>chi2=.0000		
Log Likelihood= -107.57365		
All tests one-tailed		
*signif <=.05		
**signif<=.01		
***signif<=.001		

Table 2: Disposition of LGBT Group Demands in State Legislatures

Variable	**Coeff**	**(Robust Std. Error)**
Rational Choice Variables		
Value of Goal	.020	(.218)
Estimated Likelihood of Gain	1.089	(.665)*
Expected Utility	-.089	(.073)
Group Variables		
Number of Group members	.0004	(.0002)**
Size of Group Budget	-.000009	(.000005)**
Opposition group strength	-1.043	(.523)*
Density of interest group environment	-.001	(.005)
Density of LGBT Businesses	.004	(.179)
Political Structure/Demographic		
Democratic Governor	-1.511	(.692)*
Proportion of Democrats in Senate	3.520	(1.872)
Mean Education Level of the State	-16.105	(12.087)
Wald Chi2(11)=72.23		
Prob>chi2=.0000		
Log Likelihood= -56.465		
All tests one-tailed		
*signif <=.05		
**signif<=.01		
***signif<=.001		

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REGIONAL SELF-EMPLOYMENT
THE EFFECT OF STATE PUSH AND PULL FACTORS

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ABSTRACT

This study investigates business cycle, tax, and self-employment policy effects on the self-employment rate at the state level. Using 1999-2002 data, the results of the analysis suggest that the recession push hypothesis of self-employment is not supported for the United States. In fact, it appears as though the prosperity pull hypothesis is a more likely candidate for explaining self-employment and business cycle changes. Further, the Self-Employment Assistance Program, based on the recession push hypothesis, appears to have a negative effect on the self-employment rate. These results suggest that current programs to promote self-employment have incorrectly focused on the unemployed and/or have not prepared participants for self-employment. The study also examines the tax effect on self-employment and finds only weak support for the tax avoidance hypothesis.

I. INTRODUCTION.

Over the years, academics have studied why individuals become their own bosses.[1] Growing interest in self-employment and entrepreneurship is evident by the increase in academic publications on the topic, the growth of entrepreneurship programs in institutions of higher education, and with the increased attention paid to self-employment-related policies by the federal and regional governments.

Research on the determinants of self-employment can be conducted from a macro or microeconomic approach. Because we are interested in the impact of business cycles and state policies on self-employment rates, we take the macro approach. Our investigation tests several traditional push and pull factors from the self-employment literature in order to learn how state self-employment rates are related to regional business cycles, tax policy, and state self-employment assistance programs. Our goal is to investigate these three factors in order to answer the following questions:

1. Is there a self-employment "recession push" in the United States? In other words, is a state's self-employment rate sensitive to the business cycle? As described in the next section, there is conflicting evidence about the relationship between the two variables.
2. Do tax rates affect the state self-employment rate? Theoretically, higher tax rates should push individuals into self-employment when they seek to find ways to avoid paying high taxes (Blau, 1987; Schuetze, 2000). However, it is not clear whether the results from these studies reflect the hypothesis or something else, such as an income effect.
3. Do state policies designed to assist dislocated workers[2] pull individuals into self-employment? The federal government offers states the opportunity to design self-employment assistance (SEA) programs for dislocated workers. The goal of the program is to "encourage and enable unemployed workers to create their own jobs by starting their own small businesses" (Self-Employment Assistance, 2006). We examine states that have initiated SEA programs to see if they have higher average self-employment rates compared to states without such programs.

II. REGIONAL PUSH AND PULL FACTORS.

There are a number of theories used to explain one's decision to become self-employed. At the macro level, one way to investigate self-employment is to examine how aggregated self-employment rates are related to economic push and pull factors. Push factors are those that force individuals into self-employment, while pull factors are those that provide incentives for individuals to become self-employed. In other words, the self-employment decision is opportunistic, where the economic environment at a particular time drives the self-employment choice (Aaronson, 1991).

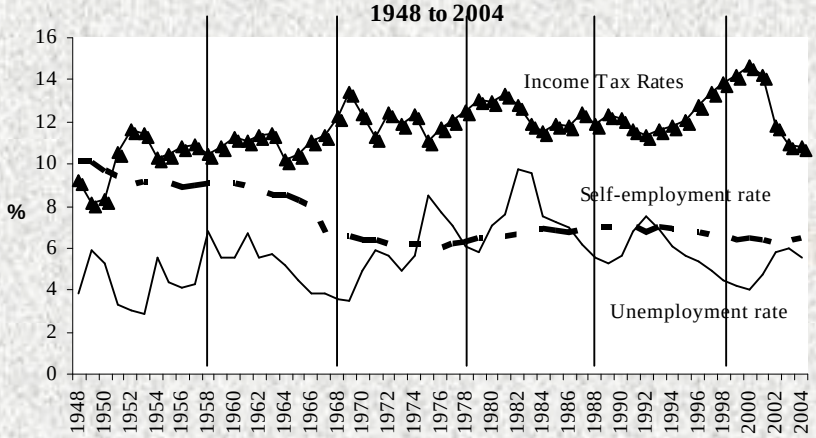
This theoretical approach has led to the study of how the business cycle affects self-employment rates. In particular, it is hypothesized that as the business cycle contracts, rising unemployment should push individuals to create their own jobs. A secondary hypothesis is that a recession leads to more available capital as firms shut down, thus lowering prices for used capital equipment and providing more opportunities for new ventures (Binks and Jennings, 1986). Again, rising unemployment is hypothesized to be positively associated to self-employment.

Aaronson (1991), Parker (2004), and Blanchflower (2004) provide reviews of the studies testing this "recession push" hypothesis. The estimated outcomes relating unemployment to self-employment depend on whether: (a) cross-sectional or times series data are used (Time series data tend to support the hypothesis (Parker, 2004).); (b) the time period employed by the researcher (Aaronson (1991) reports on two studies using data after World War II to 1980 that find an inverse relationship between self-employment and the business cycle.) and (c) the country used the analysis (Perhaps lesser developed countries support the theory because of their larger agricultural sectors, which may be more sensitive to business cycle changes).

Parker (2004) notes that an additional element is important in explaining the business cycle effect on self-employment, which he calls the "prosperity pull" hypothesis. Here, recessions lower aggregate demand so self-employment income declines and individuals move into paid work. Empirical research lends some support to this notion because when GDP is included in a regression, the coefficient on GDP is positive and the statistical significance associated with the unemployment coefficient disappears (Acs, Audretsch and Evans, 1994).

Figure 1 describes the non agricultural self-employment, unemployment and tax rates in the United States from 1948 to 2004.[3] Early in the series, there is a steady decline in the self-employment rate from a high of over 10 percent in 1948. The series levels off and stays between 6 and 7 percent from 1967 through 2004. The U.S. unemployment rate is much more volatile, reaching highs of nearly 10 percent in 1982 and 1983 and falling below 4 percent in several periods. From the figure, it is difficult to detect any strong relationship between the two series, except for the years following World War II, where the self-employment rate declined and the unemployment rate rose. In general, there does not appear to be any support for the recession push theory.

Figure 1. Nonagricultural SE, UE and Tax Rates in the U.S. 1948 to 2004



Data Source: Compiled by the authors from several federal agency sources.

A second major factor explored in the literature is the tax rate. Researchers have found a positive relationship between marginal tax rates and self-employment rates, and conclude that rising tax rates push individuals to self-employment, where underreporting of taxable income is easier than with paid work (Schuetze, 2000; Blau, 1987; Evans and Leighton, 1989). However, in these studies, it is not clear what the result means, because the researchers construct the marginal rates with aggregated data (Blau, 1987), or employ family tax data (Schuetze, 2000) or payroll taxes (Evans and Leighton, 1989). Thus, the tax rates used in the studies are not the actual tax rates that may push a particular individual into self-employment. In other words, the tax studies make conclusions about individual behavior, but use macro level tax data. Despite this interpretation issue, the positive effect of taxes on self-employment rates remains consistent in the self-employment literature.

Figure 1 above presents average tax rates on personal income and one can see that the relationship to self-employment may be sensitive to the time period of the data. When tax rates rose in the 1960s, the self-employment rate declined. The same pattern is evident for the late 1990s. However, data from the 1970s and early 1990s suggest that the two series move together, even though the self-employment rate series is rather flat. From 1975 through 1981, the average tax rate rose from 11 to over 13 percent and the self-employment rate rose from 6.1 to 6.5 percent. Further, the Reagan tax cuts in the 1980s are associated with rising self-employment rates. Overall, these patterns do not generally support the tax push theory, and as Aaronson (1991) notes, taxes may reflect some other underlying factor. Our study will test both marginal and average tax rates to see how well the relationship to self-employment fares once other variables enter the model.

The last major factor we test is the impact of the Self-Employment Assistance Program (SEA). As noted in the introduction, the federal government provides states with financial assistance to develop programs for those workers who are permanently terminated from their jobs. The programs can provide management and other business training and the worker who elects to be part of the program can collect weekly unemployment assistance while developing and starting a new business. Currently, seven states are included in the program, including Delaware, Maine, Maryland, New Jersey, New York, Pennsylvania, and Oregon (Self-Employment Assistance, 2006). The programs vary in terms of rules and procedures, but all permit program participants to collect their weekly unemployment checks while starting a self-employment venture.

The SEA program relies heavily on the recession push theory. When a region faces structural economic changes, resulting in a large number of permanently displaced workers, it is assumed that the program participants are willing to create their own jobs, but do not have the human or financial capital to support the move. It is also hoped that these small businesses will ultimately result in employment growth as the participants' businesses grow.

The relationship between unemployment, taxes, and self-employment can be used for policy formation at the regional level, as with the SEA program. State and local governments assume the recession push theory to develop such programs, but what if such a theory is wrong-headed? Governments may waste dollars on inefficient and ineffective programs. Likewise, if states

erroneously worry that increases in income tax rates lead to tax avoidance by way of business start-ups, then tax policy changes made under the wrong assumptions may lead to lower tax dollars collected. This paper explores these factors in light of possible policy implications.

III. MODEL AND DATA DESCRIPTION.

In order to measure the business cycle and tax effects on self-employment, we use panel data for U.S. states. Because the error term is likely to include state and time varying effects, a least-squares dummy variable (LSDV) model, also called a fixed effects model, is employed:

$$\text{Self-Employment}_{it} = \beta_1 + \beta_k X_{kit} + \beta_i \text{State}_{i+} \beta_t \text{Year}_t + \xi_{it} \quad (1)$$

The self-employment rate depends on *k* business cycle and tax variables, *i* dummy variables for the 50 states and the District of Columbia (less one benchmark state), and *t* dummy variables for the time series part of the panel (less one benchmark year). ξ_{it} is the error term and is assumed to satisfy the classical normal linear regression model assumptions.[4] Our data cover the period of 1999 to 2002. We selected this time frame because the availability of detailed state data necessary for the analysis.

We wanted to explore state level data for two reasons. First, national data may be so aggregated that the push and pull factors may not be evident. Second, regional effects are more important from a policy perspective, because states and regional governments are often the first-line defense during business cycle changes.

The annual state data come from four sources: the Bureau of Labor Statistics [BLS] (www.bls.gov), the Bureau of Economic Analysis [BEA] (www.bea.gov), the U.S. Census Bureau (www.census.gov), and the National Bureau of Economic Research [NBER] (www.nber.org). Following Lin, Compton and Picot (1999), two potential dependent variables were considered as measures of self employment: the self–employment rate (defined as the number of self–employed people over the civilian labor force) and the self-employment ratio (the number of self-employed divided by the population). We ultimately focus on the self-employment rate rather than ratio, because the regressions with both rate and ratio give similar results,[5] and the rate measures the number of self-employed as a fraction of the economically *active* part of the population, which can be more informative when observing self-employment as a function of business cycle variables. The number

of self-employed as well as the labor force and population statistics are provided by the BLS (Geographic Profile of Employment and Unemployment). We also concentrate on the non-agricultural sector because, compared to workers in other industries, those in agriculture face a unique economic environment and decision-making process about whether or not to be self-employed.

Based on previous research and our interest in business cycle and tax effects, we include several explanatory regressors in our analysis: the unemployment rate, the labor force participation rate, average taxes or marginal taxes, and the ratio of paid-to-employed average income. We also use the model to investigate the effect of the SEA programs for particular states.

As noted earlier, factors explaining self-employment are usually divided into two groups: push factors and pull factors. According to the recession push theory, labor market hardship can push people into self-employment and the unemployment rate (UERATE) is among the push factors. The BLS is the source for this data series, the state annual average unemployment rate.

We also include the labor force participation rate (LFPR), which is the percentage of employed in the labor force. The LFPR controls for the pool of available workers in the state in time *t*. The data series for LFPR was taken from the U.S. Census Bureau database (Statistical Abstracts of United States). LFPRs by gender were averaged to create the total LFPR for each state and year.

We include a control for the average income of the non-farm self-employed proprietors and average income of paid workers, provided by the BEA State Personal Income database, to examine how relative income levels affect the self-employment rate. If the self-employment decision is opportunistic, then we would expect the relative rise of self-employment income to increase the self-employment rate, and the relative rise of paid work to lower the rate. This variable is entered into the regression as a ratio of average paid employment income to self-employment income, so we expect that the coefficient will be negative; that is, as the relative average income of paid workers rises, fewer individuals will desire to be self-employed. We also use the previous year's income information in order to avoid potential endogeneity problems.[6]

Average tax rates and marginal tax rates are used to test the tax avoidance theory of self-employment (Blau, 1987). This theory suggests that individuals who face a large tax burden will become self-employed in order to hide the true level of one's annual income. For example, the self-

employed individual can ask for (and receive) cash payments, rather than other forms of payment that can be traced in an audit. In paid work, the employer is required to keep detailed payroll records and taxes are directly deducted from the employee's pay. Thus, paid workers have few options to avoid paying their taxes.

Average tax rates are estimated as the sum of the federal, state and local tax revenues divided by the state's total personal income. The data source for this measure of taxes is the BEA. However, this indicator a rough measure of tax rates, so we also test marginal tax rates taken from the NBER. This might be a better approach for comparability, since others in the self-employment literature used marginal taxes to test the tax-push hypothesis. The NBER statistics provide six types of average marginal state tax rates: wages, interest, dividends, lottery gain, mortgage paid and pension received. We exclude the last two in our analysis since it is unlikely that they have anything to do with self-employment rates.

Finally, we use the coefficients on the dummy variables from our fixed effects model to account for state programs supporting self-employment activities within states. Because we employ a fixed effects model, a separate binary variable for the SEA programs would lead to perfect collinearity, as each state, less one, is already represented with a binary variable. Thus, our only option with the data at hand is to explore the statistical and economic impact of the coefficients associated with each of the SEA states. Recall that these are Delaware, Maine, Maryland, New Jersey, New York, Pennsylvania, and Oregon.

We would expect those states with SEA programs to have a positive and statistically significant coefficient in the regression model. We also interact the dummy variable for the SEA states with each state's unemployment rate. It is expected that the marginal effect of the interaction term will reflect the positive impact of the programs when more workers become unemployed in the SEA states.

Our final model, which is in log form in order to estimate elasticities, is:

$$\begin{aligned} LnSELF_{it} = {} & \beta_1 + \beta_2\, LnUERATE_{it} + \beta_3\, LnLFPR_{it} + \beta_4\, LnTAXRATE_{it} + \\ & \beta_5\, LnSALRATIO_{it} + \beta_6\, LnUERATE{*}SEA\ States_{it} + \beta_i\, State_i + \beta_t\, Year_t + \xi_{it} \end{aligned} \qquad (2)$$

Table 1 presents the descriptive statistics of the main variables. The average self-employment rate for all states is 6.3 percent, while the average unemployment and tax rates are 4.3 and 12.5 percent, respectively. Marginal tax rates are between 4 and 5 percent.

Table 2 lists the non-agricultural self-employment rates by state, where the variation in self-employment is much greater than in the aggregated national rates shown in Figure 1. Montana has an average high of 9.9 percent, and Delaware has the lowest average rate of 4.4 percent. When we view the self-employment rates for those states with SEA programs, only Maine tends to have high self-employment rates, and as noted, Delaware is consistently low in self-employment. High self-employment rates tend to be in less populated states, such as Alaska, Maine, Montana, Vermont, and Wyoming. Only California bucks this trend, and the heavily populated state has self-employment rates that average over 8 percent.

We next explore the LSDV model results to see how self-employment is related to the variables of interest to this study.

IV. LSDV MODEL RESULTS.

Table 3 presents the regression results. The adjusted R^2 statistics indicate that all of the models have a high degree of explanatory power. The F-statistic is used to test the viability of the LSDV model, and the statistically significant results indicate that the model is appropriate.

Model 1 enters the unemployment rate alone and presents a negative and statistically insignificant coefficient. When we include the labor force participation rate (Model 2), the coefficient on unemployment changes very little. The coefficient on LFPR suggests that a 10 percent increase in the labor force participation rate increases the self-employment rate by an average of 6.67 percent. These two regression models do not support the recession push theory of self-employment. In fact, the positive and statistically significant coefficient on LFPR is indicative of the prosperity pull hypothesis, because a growing workforce is associated with more individuals becoming self-employed.

Models 3 through 5 test the tax avoidance theory. Model 3 indicates that a 10 percent increase in the state's average tax rate increases the self-employment rate by an average of 3.68 percent. The

elasticity is within the ranges found in Schuetze (2000) and suggests that higher tax rates push more individuals into self-employment. Because we use average taxes, calculated as tax revenues divided by personal income, Model 4 tests whether the tax variable represents an income effect on self-employment. In other words, do high average tax rates reflect high income, and subsequently higher tax revenues? Model 4 indicates that the tax coefficient is very similar when state per capita income is included in the model, and the coefficient on state per capita income is statistically insignificant and negative. We can conclude that our tax variable does not reflect income; however, it is not clear whether our results support the tax push theory. When we use marginal tax rates (Model 5), none of the coefficients are statistically significant[7] and a model that includes all relevant variables (Model 6) leads to a statistically insignificant coefficient on the average tax rate.

One possible concern may be that taxes and self-employment are simultaneously determined. A test for causality of either variable on the other involves two different methods, both of which employ a F-statistic and distribution. With both tests, one must develop a restricted regression, where some coefficients are forced to take on a zero value, by excluding those variables from the regression. The sum of squared errors of the restricted regression is compared to its counterpart in an unrestricted regression, where all variables are included.

In the first test, the restricted regression model includes lags of the dependent variable only, while the unrestricted model includes both lags of the dependent variable and lags of the variable of interest. If an independent variable (tax) truly *causes* changes in a dependent variable (self-employment), then adding the lagged independent variables improves the model. Because the outcome of the test can be sensitive to the number of lags (Gujariti, 2003), we test models with one and two lags. Reverse causality is tested by making tax the dependent variable and self-employment the independent variable. A second test involves a model with differenced data, where the restricted model excludes the differenced independent variable of interest (Wooldridge, 2002). Again, reverse causality is tested by reversing the dependent and independent variable in the model. All tests include controls for fixed effects, although the time dummy variables are excluded in the differenced model per Wooldridge (2002).

Table 4 presents the results of the causality tests. Because the estimated F-statistics are not statistically significant, the tests do not indicate strict exogeneity between the self-employment and tax rates. Because the tax variable is statistically significant in some of the regressions presented in Table 3, we at most can conclude that the average tax rate is weakly exogenous in the self-employment rate model (Gujariti, 2003). Note that a regression with the average tax rate as the dependent variable against the self-employment rate (all logged) indicates that self-employment has no causal effect on the tax rate.[8]

A final test of the push and pull theories examines how the SEA programs are associated with the self-employment (Model 7). Only the coefficient on Maine is associated with a statistically significant and positive coefficient. In fact, many of the states that have developed an SEA program have a negative coefficient. Further, the coefficient on the interactive term is negative and suggests that a 10 percent increase in the unemployment rate for the SEA states leads to an average 2.69 percent decline in the self-employment rate, holding other variables constant. It does not appear that the SEA program promotes self-employment in these states, and the positive coefficient associated with Maine could be related to other state-related factors (e.g., Maine residents could have an entrepreneurial spirit).

V. CONCLUSIONS.

This study investigates business cycle, tax, and self-employment policy effects on the self-employment rate at the state level. The results of the analysis suggest that the recession push hypothesis of self-employment is not supported for the United States. In fact, it appears as though the prosperity pull hypothesis is a more likely candidate for explaining self-employment and business cycle changes. Further, the Self-Employment Assistance Program, based on the recession push hypothesis, appears to have a negative effect on the self-employment rate. These results suggest that current programs to promote self-employment have incorrectly focused on the unemployed and/or have not prepared participants for self-employment.

A number of micro studies indicate that the self-employment choice is associated with experience, education, and financial capital.[9] The SEA programs do promote training; however, the training

portion of these programs is short-lived and usually must be completed during the period of eligibility for unemployment benefits, which is at most twenty-six weeks. Further, the SEA is targeted to dislocated workers, who may have limited education and experience specialized to a particular industry (e.g., automobiles). On the financial side, the SEA only provides the weekly unemployment benefit, which averages about $277 across states (Unemployment Insurance Data Summary, 2006). So, even though an SEA participant may receive some dollars while in training, the financial support is not enough to start a business, and it is likely that the average SEA participant, designated as unemployed, will be ineligible for a business loan. Thus, it appears that the SEA program does not do enough to prepare its target audience for self-employment success.

When we examine the tax effect, a positive relationship between the average tax rate and the state's self-employment rate is consistent in all models in Table 3. However, once other variables that reflect the business cycle are included in the model, the coefficient on the average tax rate becomes statistically insignificant. Further, marginal tax rates had no effect on the self-employment rate and causality tests indicate only a weak causal effect. We therefore are hesitant to support the tax avoidance hypothesis and wonder if the hypothesis can only be examined with micro-level data that includes personal and business tax rate information for the individual. We also suggest that any study of tax avoidance delineate between those who own a business with employees and those who work for themselves generally. It may be that the itinerant carpenter underreports taxes because it is easy to do; however, small business owners are under much scrutiny and have less opportunity for tax avoidance.[10]

What might states do to create higher self-employment rates? Clearly, more must be provided than a weekly unemployment benefit. Business success requires long-range planning and the financial ability to weather initial start-up problems. If we as a society desire a growth in the self-employment sector, governments must provide avenues for financial support, screen individuals for the training programs, and be willing to provide general long-term support for those individuals who take the self-employment path.

TABLE 1. MEANS AND ST. DEVIATIONS OF THE VARIABLES			
Variable	***Description***	***Mean***	***Std.***
SE rate	Number of self-employed (non-agric sector)/ Labor force	0.063	0.014
UERATE	Unemployed as a percentage of labor force	4.345	1.043
LFPR	Percentage of employed in labor force	67.148	4.140
TAXRATE	Total average tax rate	0.125	0.022
TAXWAGE	Marginal tax rate on wage	4.580	2.518
TAXINT	Marginal tax rate on interest	4.501	2.202
TAXDIV	Marginal tax rate on dividends	4.750	2.319
TAXGAIN	Marginal tax rate on gains	4.446	2.503
SALSELF	Average salary of self-employed	24631.62	7574.11
SALPDWK	Average income of paid worker	32404.96	6039.64
SALSELF/SALPDWK	The ratio of SALSELF to SALPDWK	0.743	0.135
Data compiled by the authors from several sources.			

TABLE 2: SELF-EMPLOYMENT BY STATE 1999-2002					
State	***Average***	***1999***	***2000***	***2001***	***2002***
Alabama	5.49	6.01	6.04	4.89	5.04
Alaska	8.90	10.16	9.01	8.07	8.36
Arizona	6.26	6.35	6.18	6.69	5.84
Arkansas	6.01	5.73	5.41	6.85	6.07
California	8.03	8.34	8.14	8.01	7.65
Colorado	6.93	6.80	7.38	6.93	6.61
Connecticut	6.86	7.15	7.04	6.58	6.66
Delaware	**4.41 (min)**	**5.40**	**4.65**	**4.06**	**3.55 (min)**
Distr. Columbia	4.56	4.96	4.66	4.68	3.95
Florida	5.18	5.25	5.15	5.11	5.20
Georgia	5.52	6.41	5.44	4.99	5.27
Hawaii	6.69	6.39	6.39	6.93	7.04
Idaho	7.69	7.94	7.60	7.62	7.60
Illinois	4.68	5.00	4.53 (min)	4.60	4.61
Indiana	5.26	5.43	5.48	4.89	5.23
Iowa	6.38	6.54	6.33	6.42	6.24
Kansas	5.68	6.62	5.39	5.07	5.66
Kentucky	5.74	6.19	5.50	5.54	5.75
Louisiana	5.81	5.90	6.06	5.66	5.63
Maine	**9.74**	**10.27**	**10.60 (max)**	**9.36**	**8.75**
Maryland	**5.27**	**5.86**	**5.03**	**5.01**	**5.18**
Massachusetts	6.31	6.62	6.24	6.46	5.91
Michigan	5.05	5.20	5.02	5.02	4.96
Minnesota	6.20	6.00	5.73	6.72	6.34
Mississippi	6.39	5.83	6.79	6.33	6.63
Missouri	5.23	4.85	5.09	5.59	5.38
Montana	9.93 (max)	10.34	10.23	9.46 (max)	9.70 (max)
Nebraska	5.99	6.15	5.74	6.03	6.05
Nevada	4.95	5.73	4.56	4.79	4.72
New Hampshire	7.76	8.41	8.45	6.82	7.37
New Jersey	**4.72**	**4.87**	**4.63**	**4.95**	**4.42**
New Mexico	7.53	7.78	7.80	7.04	7.52
New York	**5.60**	**5.74**	**5.60**	**5.50**	**5.53**
North Carolina	6.31	6.87	6.72	6.13	5.54
North Dakota	6.25	6.23	6.49	6.19	6.07
Ohio	5.18	5.13	5.41	5.38	4.79
Oklahoma	7.02	6.98	6.67	7.63	6.79
Oregon	**8.31**	**8.58**	**9.26**	**7.75**	**7.63**
Pennsylvania	**5.70**	**5.63**	**5.73**	**5.94**	**5.48**
Rhode Island	4.78	4.96	4.55	4.76	4.86
South Carolina	5.25	4.99	5.44	5.54	5.03
South Dakota	6.64	6.75	6.23	7.16	6.41
Tennessee	6.93	7.31	6.54	6.85	7.04
Texas	6.61	6.80	6.74	6.61	6.27
Utah	5.90	5.90	6.25	6.19	5.25
Vermont	9.47	10.42 (max	9.34	8.66	9.46
Virginia	4.48	4.74 (min)	4.93	3.92 (min)	4.31
Washington	6.68	7.25	6.57	6.64	6.26
West Virginia	5.06	5.75	4.97	4.68	4.85
Wisconsin	5.78	5.77	6.27	5.65	5.42
Wyoming	8.04	7.63	8.99	8.49	7.04
Data Source: Bureau of Labor Statistics (BLS)					

TABLE 3. DEPENDENT VARIABLE: LNSELF-EMPLOYMENT RATE[1]							
Variable	***Model 1 UE1***	***Model 2 UE2***	***Model 3 Ave. Tax***	***Model 4 Ave. Tax 2***	***Model 5 Marg. Tax***	***Model 6 Full Model***	***Model 7 SEA prog.***
Constant	2.120*** (25.11)	-0.686 (-0.40)	1.176*** (2.60)	1.165* (1.69)	2.040*** (60.66))	-1.432 (-0.83)	-1.77 (-1.03)
Ln UE rate	-0.050 (-1.02)	-0.053 (-1.09)				-0.047 (-0.90)	-0.043 (-0.83)
Ln LFPR		0.667* (1.65)				0.660 (1.63)	0.739* (1.83)
Ln TAXRATE			0.368** (1.92)	0.387** (1.98)		0.302 (1.51)	0.306 (1.55)
Ln TAXWAGE					-0.725 (-1.36)		
Ln TAXINT					0.290 (1.17)		
Ln TAXDIV					0.208 (0.36)		
Ln TAXGAIN					0.008 (0.12)		
Ln STATE INC				-0.170 (0.55)			
LN SALRATIO (Paid/Self)						-0.013 (-1.21)	-0.012 (-1.15)
Delaware							-0.297 (-1.57)
Maine							0.579*** (2.90)
Maryland							-0.137 (-0.69)
New Jersey							-0.172 (-0.76)
New York							0.046 (0.18)
Oregon							0.037 (0.61)
Pennsylvania							0.099 (0.43)
SEA*UE							-0.269* (-1.88)
Adj. R^2	0.931	0.934	0.932	0.932	0.932	0.934	0.936
F-stat[2]	37.44***	36.65***	37.70***	36.73***	36.55**	33.14***	33.75***

[1]Data complied by the authors. F-stat tests the importance of the LSDV model. Statistical significance is denoted as follows: ***=.01 percent, **= 5 percent, and *=.10 level of significance.
[2]All regressions include state and year dummy variables, with Wyoming and the year 2002 as the omitted categories, respectively.

Table 4: Test of self-employment/tax causality

Ho: The lag values of tax/self-employment improve the regression model

Test	*DF m/n-k*	F^*_{SE}	F^*_{Tax}	$F_{Critical}$	*Conclusion*
1-lag	1/98	1.56	0	3.099	Fail to reject Ho for both SE and Tax
2-lags	2/48	1.46	.330	3.198	Fail to reject Ho for both SE and Tax
Differenced data	1/99	.446	.440	3.098	Fail to reject Ho for both SE and Tax

DF is the degrees of freedom. *m* represents the number of lags and is the numerator degrees of freedom, *n* is the sample size, and *k* is the number of regressors in the unrestricted regression. F* is calculated with the error sum of squares from the restricted and unrestricted regressions. $F_{critical}$ values are interpolated from a standard F-table.

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Endnotes

[1] See Aaronson (1991) and Blanchflower (2004) for a review of the literature on self-employment and entrepreneurship.
[2] Dislocated workers are those who have been permanently laid off from their place of employment.
[3] The self-employment rate is the percentage of the self-employed of the civilian labor force. Unemployment is the percentage of individuals unemployed over the total labor force. Tax rates are calculated as the U.S. tax income divided by total income (an average).
[4] The LSDV model operates within the framework of least squares. We also tested an error components model (ECM). The coefficients of the ECM model were in similar directions as the LSDV model, but individual coefficients were less likely to be statistically significant. Further, as noted later, the F-tests associated with the LSDV model indicated that the assumption of fixed effects was appropriate.
[5] Self-employment ratio results are available from the authors on request.
[6] It is likely that wage income and self-employment/paid employment choices are endogenous because wages and labor supply decisions are determined simultaneously. Therefore, we use income information from the previous year and assume that individuals make self or paid work choices after viewing wages in the previous period.
[7] We also tested the wage marginal tax rate individually but the coefficient was essentially unchanged. Results are available from the authors on request.
[8] Results available from the authors.
[9] The list of papers on these topics is very long. For examples, see Blanchflower and Oswald (1990); Evans and Jovanovic (1989); Benedict and Kim, (2005).
[10] The authors thank Frank Woods, a small business owner, for his insight into the self-employment/tax relationship.

THE ENTREPRENEURIAL ASSUMPTION: THINKING ABOUT TAXES IN CONTEMPORARY POLITICAL THEORY

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ABSTRACT

THIS PAPER ARGUES THAT CONTEMPORARY POLITICAL THEORY OFTEN CONTAINS AN OBSCURED SUPPOSITION WHICH I CALL THE ENTREPRENEURIAL ASSUMPTION. THIS ASSUMPTION CAN BE MOST CLEARLY SEEN WHEN POLITIAL THEORISTS WHO DO NOT HAVE ECONOMIC EXPERTISE PER SE THEORIZE THE RELATIONSHIP BETWEEN THEIR POLITICAL THOUGHT AND TAXATION. IN ORDER TO EXPLICATE THE ENTREPRENEURIAL ASSUMPTION, THE PAPER ENGAGES IN CLOSE READINGS OF JOHN RAWLS, ROBERT NOZICK, AND RONALD DWORKIN. BY ELABORATING ON HOW EACH OF THESE SEE THE IMPORTANCE OF PRESERVING "TALENT" THROUGH A SYSTEM OF TAXATION, THE CENTRALITY OF THE ENTREPRENEURIAL ASSUMPTION CAN BE SEEN MORE CLEARLY.

I. INTRODUCTION

In terms of understanding entrepreneurship from a democratic theoretical perspective, it is most important to recognize the key feature of risk. This is virtually a platitude, for the common view of the term entrepreneur clearly entails an understanding that what it takes to become one (by definition) is to risk something, most often and most obviously, capital. In other words, one is hardly called an entrepreneur if they have not risked anything and it is not permissible to use the term entrepreneur to refer to more cautious persons. Why then is entrepreneurship important? According to standard (capitalist) explanations, it is in the risking of capital that progress happens. More specifically, entrepreneurs (as risk takers) are recognized as responsible for innovative endeavors that solve economic and social problems by assuming the monetary risk of projects. For this reason, from the capitalist perspective it is considered imperative to encourage risk taking behavior; bolstering entrepreneurs is ostensibly what propels technological and social change.

In this paper, I trace how this logic of preserving entrepreneurship has been carried out in contemporary mainstream democratic theory. From my perspective the predisposition of

promoting risk taking is seen most clearly when political theorists who are *not* specifically economic theorists talk about how taxes fit in to a more general approach to politics. Though perhaps counterintuitive, by focusing on scholars for whom taxation is neither their specific focus nor their expertise we can see how assumptions about the relationship between entrepreneurship and democracy get connected. This is because taxation is clearly understood as a mechanism that has social and political effects; most specifically, scholars seem to implicitly understand that taxes can mold behavior. Taxation and tax policy, then, do not figure primarily as merely a revenue gathering mechanism for the state, but rather are recognized as encouraging and discouraging certain kinds of behavior. When teasing out the entrepreneurial assumption of contemporary democratic theorists when they talk about taxation, I will show how the entrepreneurial assumption is often invisible. This will involve introducing the interconnectedness of justice, talent and "the distributive paradigm" to a broad-based consideration of democracy, and calling the assumption itself into question.

II. CONTEMPORARY POLITICAL THEORY: RAWLS

For the purposes of this paper, I focus on the use of the term "talent" as a kind of proxy for entrepreneurship and ambition in the work of John Rawls, Robert Nozick, and Ronald Dworkin. Though they differ in significant ways, all three thinkers are clearly political theorists who have and explain assumptions about the relationship between taxation and broader considerations of justice and democratic governance. All three recognize that notions of political fairness involve a careful consideration of how economic inequality affects democratic theory. However, all three assume (through their discussions of taxation) that inequality of wealth is necessary to preserve incentives for "talent." In the sense in which it is used here, "talent" has a guardedly market-based definition; talent, for these thinkers, seems understood as what other people ("the market") will pay for. In order to understand this approach to talent, and ultimately to critique its place as central to democratic theory, a close reading of Rawls, Nozick, and Dworkin is needed.

In recuperating the social contract device in order to justify principles of a liberal democratic welfare state and ostensibly move beyond utilitarianism and intuitionism, Rawls is justly seen as one of the most important contributors to political philosophy in the twentieth century. In order to reformulate the social contract from its roots in Hobbesian and Lockean approaches, Rawls uses a counterfactual of the "original position" in which we all imagine that we live under a "veil of ignorance" as to our actual chances in life vis-à-vis our talents. This is

understood as a way to imagine a just society where talents may be rewarded, but fairly in the sense that talents are not the basis for infringing on the liberties of others. From this veil we can conceive of a set of principles that would order society in the fairest way. For Rawls the use of the "veil of ignorance" enables a fair conception of society to emerge. By imagining that we do not know our own talents or our propensity to risk, we can imagine a distribution of social goods that would be fair to everyone. In this way, he deduces the "difference principle" whereby

> All social primary goods—liberty and opportunity, income and wealth, and the bases of self-respect—are to be distributed equally unless any or all of these goods is to the advantage of the least favored (Rawls 1971, 303).

Rawls is not concerned with removing *all* inequalities, but only those that would not benefit the least well-off. Because there may be a conflict of interest in what benefits are received regarding one least-advantaged group over another, Rawls establishes a priority by which we can judge. Priority is first given to liberty, which can only be restricted for the sake of liberty, that is, it can only be restricted if it "strengthen[s] the total system of liberty shared by all" and is acceptable to those who will have less liberty (Rawls 1971, 303). Similarly, any inequality of opportunity must "enhance the opportunities of those with the lesser opportunity" and "an excessive rate of saving must on balance mitigate the burden of those bearing the hardship" (Rawls 1971, 303).

Rawls' view of the importance of individuals motivates his conception of justice and so his concern at all times is to respect individuals as ends and not means. Rawls' concern is that under present conditions, much of the earned benefits of individuals are not morally significant in that they can be reduced to being a product of luck, not talent.

> I have tried to show that once we try to find a rendering of [the two principles] which treats everyone equally as a moral person, and which does not weight man's share in the benefits and burdens of social cooperation according to their social fortune or their luck in the natural lottery, it is clear that the democratic interpretation is the best choice among the four alternatives (Rawls 1971, 75).

The motivation behind retaining certain inequalities as just, if they work to the advantage of the less well off, is that it rewards individuals based on their *choices* in life rather than their initial endowments. But from the initial position under the veil of ignorance, one cannot predict what choices one will make nor what advantages they will have in life. As a result, Rawls argues that

the rational individual, from this standpoint, will adopt a "maximin" strategy. This is the rational position because everyone in it will want to ensure that they have the best possible access to primary goods and in so doing will choose a principle of justice that maximizes said goods if one ends up being in the minimum, or least well-off, position (Rawls 1971, 150-161).

The consequences for taxation of Rawls' principles are fascinating and important. In fact, Rawls carefully spells out these implications in a section of *A Theory of Justice* devoted almost solely to taxes. This section is titled "Background Institutions for Distributive Justice" (Rawls 1971, 274-284), because though he spends much time on taxation, he considers it to be a conditional institution that forms the backdrop for more essential practices. Rawls' views on taxes uncover a very important set of interactions that make both justice *and* democracy a possibility under his approach. One of the problems of democratic thought is the relation between how representative choices are made and the connection of these choices to just outcomes. That is, as John Stuart Mill observed in the 19th century, democracies can be tyrannies as well (Rossiter 1961). So the problem becomes, how can we have a procedural system that is democratic such that representatives are free to represent and vote—the very meaning of representative democracy—and still ensure a relatively fair outcome whereby these representatives do not merely represent but also make just decisions (Pitkin 1967)? In fact, Rawls' whole project hinges on this problematic to a certain degree in the sense that for him "the main problem of distributive justice is the choice of a social system" (Rawls 1971, 274). This is precisely because for him, the principles of justice regulate major institutions but the "the idea of justice as fairness is to use the notion of pure procedural justice to handle the contingencies of particular situations" (Rawls 1971, 274-275). In order to take seriously the role of procedural justice, he argues that the social system must be so considered as to yield justice regardless of what decisions are made. Once just procedures are established, the outcome can be truly democratic in the sense that though there will be conflicts, they will be bounded by a formulation of justice as fairness. By being bounded in this way, just outcomes in particular situations cannot be predicted in content, but because of the justice of the form of their production they can be called just.

Rawls is cautious with regard to his assumptions; among other things he assumes that a just constitution and a social minimum will be required. Following Richard Musgrave, Rawls thinks of these background institutions (that are *assumed* rather than *deduced* in his argument) (Rawls 1971, 275) as being divided into four branches, namely, for allocation, stabilization, transfer, and distribution (Musgrave 1959). Taxation plays a role in all of these branches, though

Rawls devotes the most space to explicating the distribution branch, which should "preserve an approximate justice in distributive shares by means of taxation and the necessary adjustments to the rights of property"(Rawls 1971, 277). This branch is further divided by purpose; on the one hand, some taxes should be levied "not to raise revenue…but gradually and continually to correct the distribution of wealth and to prevent concentrations of power detrimental to the fair value of political liberty and fair equality of opportunity" (Rawls 1971, 277), while on the hand, other taxes are to "raise the revenues that justice requires" (Rawls 1971, 278). It is important to note the interaction of these two purposes in that both derive from the two principles of justice (Rawls 1971, 279). The first purpose of the distribution branch is practically realized through the taxation of inheritance and income at progressive rates when necessary (Rawls 1971, 279). He also stresses the importance of legally defined property rights that secure institutions of equal liberty (Rawls 1971, 279). The second purpose is materialized in the form of "proportional expenditure (or income) taxes [that] are to provide revenue for public goods, the transfer branch and the establishment of fair equality of opportunity in education, and the like, so as to carry out the second principle" (Rawls 1971, 279). One of Rawls' unique insights here that should be brought to the fore is his differential use of tax principles. That is, taxation is neither progressive nor proportionate *at all times.* Rather, judgment as to appropriate progressivity or proportionality is regulated by differing understandings about what is fair based on the particular purpose that the acquisition of the tax serves. Progressive rates are appropriate for the purpose of adjusting the distribution of wealth but proportional (that is, a fixed percentage rate that effects everyone at the same level though yielding different actual contributions based on the baseline) rates are appropriate when the revenue is needed for institutions that ostensibly benefit everyone as institutions of justice.

Rawls counterpoises his own conception of taxation to the conventional criterion. He recognizes that traditionally, taxation is seen in reference to benefits received or ability to pay, but he sees these as "common sense precepts" which are a "subordinate consideration" (Rawls 1971, 279). This is precisely because, for Rawls, distributive shares are "recognized as that of designing background institutions" for which "the conventional maxims are seen to have no independent force, however appropriate they may be in certain delimited cases" (Rawls 1971, 280). In other words, because taxation is a background institution, the traditional methods of understanding fairness in taxation cannot be used because they are not derived from the priority of liberty as he understands it. This is one of the many places where Rawls is specifying his social contract argument from that of utilitarianism; "the aim of the distribution branch is not, of

course, to maximize the net balance of satisfaction but to establish just background institutions" (Rawls 1971, 280). The establishment of the institutions is for the purpose of supporting the procedurally democratic polity based on justice. Therefore, the institutions are themselves are governed by a slightly different, and subordinate, logic than the "primary" procedures.

Interestingly, though, Rawls' argument turns slightly once background institutions are established. At this point, because "the distribution of income and wealth is assumed to be just, the guiding principle changes" (Rawls 1971, 282). Citing Knut Wicksell (1994), he now introduces a concept of benefit that had previously been a subsidiary consideration through the "unanimity criterion." This criterion means that no expenditure would be voted on separate from a vote on the means to securing its costs. That is, the goal is that a government budget would be continually balanced in the sense that all expenditures have a known and agreed upon source, unanimously. The logic behind this is that "there is no more justification for using the state apparatus to compel some citizens to pay for unwanted benefits that others desire than there is to force them to reimburse others for their private expenses" (Rawls 1971, 283). In this sense there is a need for completely separate government body that operates, not on the principle of justice, but on the principle of benefit, which says that people pay into the government to the extent that they benefit from it.

III. AMBITION SENSITIVITY AS "TALENT"

Part of the appeal of Rawls' *The Theory of Justice* is its conception of equality being responsive to ambition-based inequalities and insensitive to endowment-based ones. Ronald Dworkin, for one, has accepted this basic approach to the problem of justice but has argued that Rawls' scheme may not be the best way to attain the ideal. Dworkin's approach also utilizes a social contract device, but rather than imagining ourselves as creating a set of principles of justice, we are to imagine ourselves as involved in an auction of sorts. In this auction we all begin with the same amount of purchasing power, but we are enabled to choose what we do with said purchasing power. We would all have the same resources only in the sense that with our initial purchasing power we choose what resources to invest in. This would ensure an envy-free environment where no one would ostensibly covet another person's bundle, precisely because we could have chosen the exact same bundle with our own initial purchasing power. But Dworkin points out that we are not all born with the same natural assets and to treat everyone as equal in the sense that we can all create a life for ourselves with the same bundle of purchasing power is to

ignore natural disadvantages such as poor health or handicaps. As such, he devises another counterfactual to correct this problem.

Dworkin's insurance model is one of the more creative approaches to taxation in democratic theory and is premised on similar grounds to Rawls. In the artificial space of creating a just distribution, we are to imagine ourselves with an initial purchasing power. This is in contradistinction to Rawls' original position where we are to imagine ourselves without knowledge of our resources, thus ensuring that we will maximize the advantages of those that are least well off on the logic that we ourselves may be least well-off. For Dworkin, we begin by imagining that we have the same purchasing power, but what we don't know is our own natural endowments. The question we are then confronted with is whether we would purchase insurance against being naturally disadvantaged. As Kymlicka eloquently summarizes

> If we can make sense of this hypothetical insurance market, and find a determinate answer to the question of what insurance people would buy in it, then we would use the tax system to duplicate the results. Income tax would be a way of collecting premiums that people hypothetically agreed to pay, and the various welfare, Medicare, and unemployment schemes would be ways of paying out the coverage to those who turned out to suffer from the natural disadvantages covered by the insurance (Kymlicka 2002, 79).

Such a scheme has obvious problems, some of which Dworkin himself recognizes. One problem that Dworkin is particularly concerned with is that of the enslavement of the talented. In the initial position of the insurance scheme one would gamble on what one's earning power would be. Suppose one undershot and had more talents and endowments than one would have initially risked, thus forcing one to choose a career that one may not prefer but that would make more money from (Dworkin 2000, 99). In this case, Dworkin argues that the choice of careers for the talented still marks an option that only the talented can have, thus it is a kind of fair lack of choice.

In order to make sense of Dworkin's concern for the enslavement of the talented through a system of taxation, we must explore one of his interlocutors on this point; Robert Nozick. Nozick's *Anarchy, State, and Utopia* is a serious assertion of libertarianism and one particular discussion has caught the attention of many scholars and can usefully be explored to show the distinction between Dworkin and Nozick as well as to reveal the common set of assumptions that

they both share. In this text, Nozick uses the famous and extremely talented professional basketball player Wilt Chamberlain as the example in an elaborate approximation of the logic of the free market. Nozick's stated project is to defend individual rights against the state through the use of state of nature theory, thus establishing that the state must be shrunk to a minimum from this perspective (Nozick 1974, ix and 3). Central to this project is the role of individual choice.

> Treating us with respect by respecting our rights, it allows us, individually or with whom we choose, to choose our life and to realize our ends and our conceptions of ourselves, insofar as we can, aided by the voluntary cooperation of other individuals possessing the same dignity. How *dare* any state or group of individuals do more. Or less (Nozick 1974, 334).

This ominous ending to an extended argument for Lockean property rights can be interpreted in many ways, though here I will bracket this question and focus on his Wilt Chamberlain example because it is the most thorough expression of Nozick's views on rights, with clear connections to Locke. Furthermore, the Wilt Chamberlain example has been taken up not only by Dworkin but by other scholars with a direct interest in the question of taxation. A close reading of this example will help to illuminate the common entrepreneurial assumption that Rawls, Nozick and Dworkin share, though they disagree on logic that results from the assumption itself.

Nozick is working on an entitlement theory whereby we have full property rights to what we are *entitled* to. This involves three topics that determine distributive justice in his scheme: the original acquisition of holdings, the transfer of holdings, and the repeated justice of the first two (Nozick 1974, 150-151). Following Locke, Nozick argues that "the holdings of a person are just if he is entitled to them by the principles of justice in acquisition and transfer, or by the principle of rectification of injustice (as specified by the first two principles). If each person's holdings are just, then the total set (distribution) of holdings is just" (Nozick 1974, 152). This interpretation of just entitlement relies on a contentious passage in Locke. Nozick distances himself from the theory that mixing one's labor with something entitles one to it as property, to the extent that he suggests it is no longer a tenable theory of property rights in the contemporary world. But he accepts Locke's proviso that there be "enough and as good left in common for others" when one appropriates from the common stock of collectively entitled property. Further, he "believe[s] that the free operation of a market system will not actually run afoul of the Lockean proviso" (Nozick 1974, 182).

To support his entitlement conception of property, Nozick uses the example of Wilt Chamberlain. He asks us to suppose an initial equal distribution (D1) whereby "perhaps everyone has an equal share, perhaps shares vary in accordance with some dimension you treasure" (Nozick 1974, 160-161). Suppose then that Chamberlain is in high demand and therefore gets twenty-five cents from each ticket to a game that he is playing in. "The season starts, and people cheerfully attend the team's games; they buy their tickets, each time dropping a separate twenty-five cents of their admission price into a special box with Chamberlain's name on it"(Nozick 1974, 161). Chamberlain's resulting income will be significantly higher than the average income, so Nozick asks whether this new distribution (D2) is unjust (Nozick 1974, 161). The assumption that Nozick makes here is that D1 is a just distribution because people are entitled to their initial share and that because of this any argument against D2 being just would not be respecting people's right to *choose* what they do with their resources. "If D1 was a just distribution, and people voluntarily moved from it to D2, transferring parts of their shares they were given under D1 (what was it for if not to do something with?), isn't D2 also just?"(Nozick 1974, 161)

Lastly, Nozick spells out the implication and the motivation behind this example:

> The general point illustrated by the Wilt Chamberlain example…is that no end-state principle or distributional patterned principle of justice can be continuously realized without continuous interference with people's lives….To maintain a pattern one must either continually interfere to stop people from transferring resources as they wish to, or continually (or periodically) interfere to take some persons resources that others for some reason chose to transfer to them (Nozick 1974, 163).

Nozick's Chamberlain example is of interest to tax scholars and democratic theorists who are concerned about taxes because it spells out the logic behind his libertarianism quite explicitly (Fried 1995, 226-245). That is, it is a working out of the entitlement theory of property that suggests very limited state intervention into people's "choices" about what they do with their money. The intimation of this discussion is that making people give up their property not by choice (and it is assumed that taxes are always not by choice) is unjust. For Nozick, "taxation of earnings is on par with forced labor" (Nozick 1974, 169). The logic here is that a person would choose to work only a given amount to fulfill her needs, but that in order to pay taxes that same person would have to work over and above this amount, thus being "forced" to labor. In short, for Nozick, "patterned principles of distributive justice involve appropriating the actions of other

persons" (Nozick 1974, 172). Further, "end-state and most patterned principles of distributive justice institute (partial) ownership by others of people and their actions and labor" Nozick 1974, 172).

Dworkin reads the Chamberlain example against his own conception of equality of resources. He suggests, "equality of resources would not denounce the result [D2], considered in itself" (Dworkin 2000, 111). That is, his conception does not rule out the unequal distribution of wealth as a result of people's choices to pay to watch Chamberlain play basketball. For Dworkin this wealth "reflects the value to others of his leading the life he does" and moreover, can be traced back to his greater talent (Dworkin 2000, 111). Bringing it back to his own discussion of the insurance counterfactual, Dworkin suggests that such an extreme amount of talent would not be foreseen under the conditions of uncertainty about one's talents prior to insurance purchasing. It would be, as he says, "a strikingly irrational investment" to purchase insurance against not having such talents (Dworkin 2000, 111). As a result, Dworkin's scheme "would not justify taxing any of Chamberlain's wealth for redistribution to others not so fortunate, if we attend only to the fact, as Nozick does, that others have much less wealth than he does" (Dworkin 2000, 111). However, Dworkin asks us to consider the actual circumstances in which Chamberlain's wealth came about, thus concluding that "a great many people earn less than the average presumed coverage of a plausible hypothetical insurance market for that society" (Dworkin 2000, 111). As such, regardless of whether we can trace Chamberlain's wealth back to his talent, the fact remains that "we are still required to put in place a tax system for redistribution…and Chamberlain will be required to contribute to that system" (Dworkin 2000, 111). This is because Dworkin distances himself from Nozick's understanding of justice as consisting "not in the distribution [that] a fair market of rational persons would reach, but in the distribution that has actually, as a matter of historical contingency, been reached by a process of might, but [that] need not include any market transactions at all" (Dworkin 2000, 112). For Dworkin, the market enters rather

> Because it is endorsed by the concept of equality, as the best means of enforcing, at least up to a point, the fundamental requirement that only an equal share of social resources be devoted to the lives of each of its members, as measured by the opportunity cost of such resources to others (Dworkin 2000, 112).

Further, that is where the value of the market ends and after such point it can be restricted or forsaken when it fails at this role. So, the market is consistent with a maxim of equality for Dworkin, but it ceases to reflect equality when we consider actual historical distributions. This is

why the Chamberlain example is so complicated for Dworkin. Chamberlain's wealth can be accurately conceived of as consistent with the dictates of equality, but this is independent from the fact that it is also consistent with the premise of equality to tax him and redistribute the money.

In discussing what (if any) is the reasoning behind taxation, Rawls, Dworkin, and Nozick differ in significant ways, as I have highlighted here. However, more significant is the way in which they agree; the fundamental assumption that we should have some sort of a political system that rewards (and does not punish) ambition to use talents that have a market value. This is part of what makes Nozick's Chamberlain example so pertinent, since clearly his basketball talent would not have been rewarded 200 years ago. This is because the relative monetary value of talents changes, and the way that the term is used here has no set moral or political significance per se. But the desire to preserve ambition sensitive inequalities is about more (or less) than just a vague desire to preserve talent.

IV. THE ENTREPRENEURIAL ASSUMPTION

The desire to preserve talent, or more broadly the desire to preserve ambition sensitive inequalities (through a system of taxation) is symptomatic of what I call the entrepreneurial assumption. For Rawls, Dworkin, and Nozick a certain amount of inequality is to be accepted because otherwise we are not respecting people's choices or talents. This reflects in part a Kantian desire to regard persons as ends and not means, thereby taking seriously people's own choices as indicative of their desires with full knowledge of repercussions. A corollary to this, however, is that it encourages people to use those talents that are specifically recognized by the market as valuable, or to put it another way, to preserve the entrepreneurial spirit. Within a vast array of positions, Elizabeth Anderson points out that many theorists with a strong commitment to egalitarianism nevertheless accept inequalities that result from adults' voluntary choices. She links this discussion particularly to Dworkin and his insurance scheme, pointing out that this paradigm views the welfare state as "a giant insurance company that insures its citizens against all forms of bad luck" (Anderson 1999, 292). Thus redistributive taxes become in this model a version of "insurance premiums against bad luck" (Anderson 1999, 292).

What motivates this is a desire to preserve risk-taking. In the sense in which it is used here, risk-taking means the idea that a person takes chances by making certain decisions that could end up hurting them, though they may make the decisions based on a calculus in which

they assume they will not. People are conceptualized as inherently conservative, to the extent that they will not necessarily make choices that could hurt them. The idea is that making risky choices is what propels progress and change. This is a desire to preserve risk-taking in that it is commonly believed that risk-taking is at the heart of what makes capitalist economics superior in producing economic growth. Understood in this way, risk-taking is the assumption behind the preservation of inequalities that takes seriously the promotion of entrepreneurship through an approach to taxation in a democracy.

Anderson identifies four specific ways in which such risk-oriented entrepreneurial thinking impinges on arguments for equality. The first is that it abandons negligent victims, as in the case of a faulty driver who has no insurance but is hooked up to a respirator as a result of an accident that was ostensibly caused by her. Anderson cites Rakowski as arguing "the faulty driver has no claim of justice to continued medical care" (Anderson 1999, 296). Similarly, the state is required to make special accommodations for the disabled, unless their disability is the result of their own faulty behavior (Arneson 1990, 159-94). Anderson calls this discrimination among the disabled. Further, there is the issue of geographic choices, as in those citizens that choose to live near a fault line or in an area with a high likelihood of hurricanes: a geographical discrimination among citizens. Lastly, there is the issue of occupational discrimination, as in the case of people who choose to be engaged in very dangerous work, such as mining or the armed forces. In all of these cases, Anderson critiques the "egalitarian" impulse that puts too much emphasis on people's choices as too unsympathetic and as working against the underlying point of equality as she sees it.[i] This is because the idea of risk-taking is seen as liable to create just rewards, but also just punishments. In the cases cited above, just punishments include lack of medical attention, lack of state assistance in rebuilding one's home, lack of handicapped services, and lack of worker's compensation for injury. Had the risks not turned out negatively, the same people would have been rewarded with insurance-free driving (at a lower cost), homes in places with ostensibly lower rent or mortgage payments, or in the case of the workers in high risk jobs, ostensibly higher income as a result of doing difficult and dangerous jobs.[ii] The flip side of punishing risk-dependent problems should be entitlement to risk-dependent good fortune.

Anderson's intervention points out that "free choice within a set of options does not justify the set of options itself" (Anderson 1999, 308-309). The problem with relying on market decisions as a basis for standards of equality is that "people's real or hypothetical market choices offer no guidance whatsoever to what citizens are obligated to provide one another on a collective basis" (Anderson 1999, 309-310). Furthermore, she points out, following Hayek, that merit-

based systems of equality have the effect of making people uniquely accountable to other people's standard of what kinds of decisions they should have made with their life (Anderson 1999, 310). That is, a person could be subject to the judgment that she may have "wasted her talent" in the eyes of another, though there may be perfectly good reasons that she decided to forego a market wage for whatever talent she allegedly wasted.[iii] Such standards of equality also raise fundamental questions about non-wage work. The hypothetical individuals in the equality-based arguments she critiques seem to be autonomous in the sense that they do not go through major periods of dependency or care for others. However, as Anderson points out, "long periods of dependency on other's care taking are a normal and inevitable part of everyone's life cycle" (Anderson 1999, 311). Many feminist theorists have brought this issue more concretely to the fore, showing how non-wage work, especially care taking, which significantly tends to be done by women, is undervalued in the market and consequently in political theory.

While Anderson systematically critiques the poverty of concepts of equality as they currently abound, she counterpoises them to a notion of "democratic equality" which she endorses. This conception emerges in part from an engagement with Iris Young's work and a serious application of her critique of the distributive paradigm to notions of equality. The concept "distributive paradigm" (Young 1990, 15-38) refers to an obsessively nodal way of thinking about politics; questions of who gets what and why prevail against all other issues. Anything that does not fit easily into this paradigm becomes harder to address. This paper suggests that one such difficult issue to address is the entrepreneurial assumption itself. The process of "depoliticizing the process of public policy formation" (Young 1990, 10) is an outcome of the use of the "distributive paradigm" in political theory. So, while taxation as a public policy issue appears in the work of thinkers like Nozick, Dworkin and Rawls, its appearance underscores public policy as a logical outgrowth of a prior assumption which is not subject to public debate or discourse. In this paper, the prior assumption is the desire to preserve talent (the entrepreneurial assumption) and as a result the process of tax policy formation appears to be not a result of political discourse but a natural and/or logical deduction from the desire itself.

V. CONCLUSION

The entrepreneurial assumption is deeply embedded in contemporary political theory. The assumption itself may or may not be worth defending, but what is significant for this paper is how imperceptible it can be. Wrapped in the shroud of the term "talent" understood to connote market-regarded risk taking activities, the assumption comes off as natural, or at the very least

benign. Rawls, Nozick, and Dworkin, as emblematic of a mainstream approach to political democracy and fairness, all have this assumption. Not by chance, the assumption is most clearly seen when we look carefully at their understanding of taxation. This is because they all implicitly understand that taxation is a form of incentive and disincentive; we can reward and punish people with our fiscal policies. Agreement among these thinkers that inequality based on the preservation of risk taking through the proxy of the misnomer "talent" is an effort to promote entrepreneurship. However, the entrepreneurial assumption implicitly promotes behavior on the part of people that will (or can) be monetarily rewarded, without being able to account for non-market regarded behaviors that could perhaps be more politically and socially valuable. Significantly, a distinction can be made between tax policy and welfare entitlements, especially on this issue of incentives and disincentives.[iv] This distinction has been deliberately blurred in this paper in order to show how thinking about taxation from a political theoretical perspective can and has been depoliticized despite the otherwise forthright thinking on welfare generally. In other words, the thinkers highlighted in this paper undermined their own commitments to equality and liberty by failing to question the entrepreneurial assumption in thinking about tax policy.

The purpose of this paper was not to critique the entrepreneurial assumption per se, but to show how it operates nearly undetectably in theories of democracy. As Young (1990, 192-225) has pointed out in regards to "the myth of merit," the corollary to a theory that assumes talent (and risk-taking) based inequalities is that these same inequalities are then assumed to be a result of some natural or at least benign reasoning. In other words, it quickly comes to seem that the decisions of the market are themselves morally or politically just. Anything that is worth anything, by this reasoning, is worth paying for. So, while entrepreneurship per se may not be clear danger that many Marxists make it out to be, the entrepreneurial assumption in our thinking about how we tax and organize the political world clearly has repercussions. Though a new assumption would be better suited for democratic theory from my perspective, a first step in re-thinking the political world is recognition of the entrepreneurial assumption itself.

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[i] On this point she is primarily responding to a particular point raised by Rakowski.
[ii] This is of course faulty reasoning because it is *not* the case that salaries are commensurate with risk. Mining, in fact, is the paradigmatic example of a high risk job that is not highly paid.
[iii] If she has a talent for killing with her bare hands, shouldn't she squander this talent, even if it is heavily rewarded by the market? Talent is a morally and socially ambiguous term.
[iv] Thank you to an anonymous reviewer for bringing this point more clearly to mind.

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