POLARIZATION ON ECONOMIC ISSUES OVER TIME – A SURVEY OF DELEGATES TO THE NATIONAL CONVENTIONS

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ABSTRACT

We ask whether partisan polarization on economic issues has increased over time among political elites. Based on survey results of party delegates to the national conventions of the Democratic and Republican parties in 1992, 2000 and 2008, we construct various measures of consensus. The surveys ask delegates whether they agree, agree with proviso or disagree with a number of economic propositions. For propositions common in all three time periods, we compare the level of consensus within and between the two political parties. Our results suggest a divergence of opinion between Republican and Democratic delegations from 2000 to 2009. This divergence of opinion is due to an increase in the level of consensus among Republicans from 2000 to 2009 but mitigated by a decrease in the level of consensus among Democrats from 1992 to 2000. While we confirm diverging opinions between 2000 and 2009, we also find that the 2009 survey results mirror some of the results from 1992, suggesting that the current polarization is not historically unique with respect to economic issues.

INTRODUCTION

Media accounts of the current political climate in the United States often focus on the high degree of polarization between Republicans and Democrats. Such accounts describe a trend of "relentless" and "vitriolic" polarization (Martin, 2010; Economist, Feb. 2010) along with the "death of moderates" in American government (Beinart, 2010). In trying to explain the apparent polarization, wedge issues or views founded in religious and moral values have been found to be important (Glaeser, Ponzetto and Shapiro, 2005, Layman, 1999). However, Glaeser, Ponzetto and Shapiro (2005) note that party platforms on economic issues, as opposed to religious or cultural issues, are less polarized citing language that is "quite moderate and similar across platforms".

This paper explores polarization on economic issues based on a set of economic propositions distributed to Democratic and Republican delegates to the national conventions preceding presidential elections in the years 1992, 2000, and 2008. The benefit of being able to compare survey results from three different time periods puts the current discussions of polarization in a larger context.

Delegate surveys have been used regularly to gather information on the political perspectives of party elites but infrequently focus on economic issues (Miller and Jennings, 1992). This paper amends the existing discussions of polarization by focusing on economic issues. Defining polarization as a divergence of opinion between the two parties, we construct two measures that provide the substance for our study. The first measure, the relative entropy index, is used to indicate the degree of consensus or the convergence of opinion in each party. The second measure, a conditional measure of broad agreement, is used to measure the direction of as well as an indicator of the level of consensus in each party. Results indicate that the average level of consensus among 2009 Republicans is significantly higher than in 2000. Conversely, the average consensus of opinion among 2000 and 2009 Democrats is significantly lower than in 1992. We also find that while opinions of Democrats and Republicans are somewhat fluid in the area of macroeconomics, 2009 Republicans appear more similar to their 1992 counterparts in their embrace of monetarist and supply side views. By contrast, 2009 Democrats appear increasingly skeptical of supply side propositions and more supportive of activist fiscal policy. The most enduring divisive issues between Republicans and Democrats involve the distribution of income and regulation. Immigration also appears to be an issue which finds Republicans and Democrats on the opposite side of the fence.

METHODOLOGY, SAMPLE, AND MEASURES OF CONSENSUS

The methodology employed in this paper relies on work originally done by Kearl et al. (1979), continued by Alston, Kearl and Vaughan (1992), and Fuller and Geide-Stevenson (2003), who study consensus among economists on a number of economics propositions. This methodology has also been used to survey economists in different countries, economists in different fields, as well as non-economists (e.g. Frey et. al, 1984, Ricketts and Shoesmith, 1992, Whaples, 2005). These studies ask participants to indicate whether they agree, agree with proviso or disagree (or a similar scale) with a given set of economic propositions in the areas of microeconomics, macroeconomics, income distribution, and international economics. Our three surveys of delegates are based on the original set of propositions developed by Kearl et. al. (1979), primarily positive statements that reflect basic concepts covered in standard introductory economics textbooks. We also include several normative statements that reflect fundamental values which often shape debates concerning economic policy. The current survey contains 42 propositions, of which 37 are identical to propositions in the 2000 survey while 23 are identical to propositions in the 1992 survey.

Fuller, Alston, and Vaughan (1995) conducted the first survey of party delegates followed by a second survey by Fuller and Geide-Stevenson (2007). In each study, surveys were mailed to a random sample of 1,000 – 1,300 delegates from each party. In the current sample, 1,200 Democratic delegates and 1,300 Republican delegates were mailed surveys in the Spring of 2009. Difficulties in obtaining the Republican delegate list caused a slight delay in the date at which surveys were mailed to Republican delegates. Response rates are 10.6% for Democrats and 14.4% for Republicans, lower than the respective response rates of 17.5% and 15.8% for the 2000 survey. These response rates are substantially lower than the response rates of around 40% from other convention delegate studies (Herrera, 1992). We can only speculate that this may be

due to the more technical nature of our survey instrument, survey fatigue, or some other combination of factors.

Our empirical analysis utilizes two measures of consensus. Following the basic methodology of Kearl, et. al., our first measure of consensus is the relative entropy index, ε , which is calculated based on the probabilities, p_i of each possible outcome, i = 1, ..., n. For each economic proposition there are four possible outcomes, agree, agree with proviso, disagree or no response. Given the observed relative frequencies, p_i , the entropy index is constructed as $E(p_i)$

$$=\sum_{i=1}^{4} -p_i \log_2 p_i$$
. The relative entropy index, ε , for each proposition is calculated by dividing the

entropy measure $E(p_i)$ by the maximum possible entropy which occurs when responses are equally distributed across all possible response options (i.e. p = 0.25). In short, the relative entropy index is defined as $\varepsilon = E(p_i)/(\text{maximum possible entropy})$. Given this definition, relative entropy ε can take on values between 0 and 1 where $\varepsilon = 0$ when all respondents choose the same response, that is, complete consensus. A relative entropy index of $\varepsilon = 1$ indicates all responses are equally likely, that is, no consensus. Thus, the lower the entropy index, the higher the degree of consensus on a specific proposition. As Fuller et al. (1995) indicate, the relative entropy index is nonlinear, as small changes in the distribution of responses result in large changes in entropy. For example, a response pattern of 70-15-10-5 (in percent) generates a relative entropy index of 0.66 while a response pattern of 60-20-15-5 results in an entropy index of 0.77. Following Fuller and Geide-Stevenson (2007), we define $\varepsilon \le 0.8$ to indicate consensus and construct a conditional measure of broad agreement. This measure is useful because it indicates the direction of opinion. We first add the frequency of those who "generally agree" to those who "agree with provisos". We then divide by the total number of responses less the frequency of those who returned "no response" to the proposition. In this way, we split respondents' opinions into "broadly agree" or "disagree". This second measure is taken to indicate consensus when at least 67% of respondents either broadly agree or disagree. When both the relative entropy index and the conditional percentage indicate consensus, we conclude "strong consensus". When only one of our measures indicates consensus, we conclude "consensus", and when neither measure indicates consensus, we conclude "no consensus".

EMPIRICAL RESULTS

Relative frequencies of responses for all three surveys are reported in Table 1 along with relative entropy indices, conditional percentages of agreement/ disagreement and conclusions of consensus. In addition, Table 1 also includes the p-values for the standard chi-square test of independence for 2000 and 2008 Republican and Democratic delegations, the 2000 and 2008 Republican delegations, and the 2000 and 2008 Democratic delegations. We use this to test the null hypothesis that the distribution of responses within a party is independent of when the survey was conducted. This test helps determine if response patterns on specific propositions have changed significantly over time. Since the chi-square test of independence is only useful when each response category is observed in sufficient numbers and the proportion of 'no response' is generally low or zero in our survey, we exclude the 'no response' category when

performing chi-square tests. We use the 5% level of significance ($p \le 0.05$) in order to reject the null hypothesis. Hence, rejection of the null hypothesis implies a high likelihood that the distribution of responses has changed over time.

For example, 46.8% of Republicans agreed with proposition #2 in 2000, while 70.4% agreed with this proposition in 2009. The p-value comparing the response distribution is 0 indicating that the response pattern has changed with certainty. By contrast, 31.4% and 34.4% of Democrats agree with proposition #2 in 2000 and 2009. The p-value of 0.354 indicates that the null hypothesis cannot be rejected, the response distribution is likely identical over time. Due to the complexity of the table, we do not report tests of independence involving the 1992 national delegations, referring to them only as warranted.

Table 1 Distribution of Responses, Measures of Consensus										
	Distrib		Responses, Republicar			ensus Democrai	ı	Chi-		
		1992	2000	2008	1992	2000	2008	Square P-values		
Microeconomic Propositions										
1. An economy that	A^1	70.2	32.9	48.6	13.2	15.4	6.4	R00-D00		
operates below	A/P	16.2	34.2	29.1	13.2	36.0	31.2	p = 0.00		
potential GDP has a	D	12.4	9.5	18.4	72.1	32.6	53.6	R08-D08		
self- correcting	NR	1.2	23.4	3.9	1.5	16.0	8.8	p = 0.00		
mechanism that will	3	.60	.94	.83	.60	.95	.78	R00-R08		
eventually return it to	AG/DG	.97/.13	.88/.12	.81/.19	.27/.73	.61/.39	.41/.59	p = 0.09		
potential real GDP.	Concl.	Str.	Cons.	Cons.	Str.	Cons.	Cons.	D00-D08		
								p = 0.00		
2. There is a natural	A	80.7	46.8	70.4	43.2	31.4	34.4	R00-D00		
rate of unemployment	A/P	13.5	36.2	19.6	29.3	26.3	29.6	p=0.00		
to which the economy	D	4.2	13.9	6.7	26.4	36.6	28.0	R08-D08		
tend in the long run	NR		3.2	3.3		5.7	8.0	p=0.00		
	3	.47	.80	.62	.81	.90	.93	R00-R08		
	AG/DG	.96/.04	.86/.14	.93/.07	.73/.27	.61/.39	.70/.30	p=0.00		
	Concl.	Str.	Str.	Str.	Cons.	None	Cons.	D00-D08 $p = 0.35$		
3. In the short run, a	A	58.3	17.7	16.2	23.2	14.3	12.8	R00-D00		
reduction in	A/P	27.6	28.5	25.1	35.7	30.3	21.6	p=0.67		
unemployment causes	D	12.1	47.5	53.6	40.0	49.7	58.4	R08-D08		
the rate of inflation to	NR		6.3	5.0		5.7	7.2	p=0.54		
increase*	3	.73	.86	.81	.81	.83	.79	R00-R08		
	AG/DG	.88/.12	.49/.51	.44/.56	.73/.27	.47/.53	.37/.62	p=0.58		
	Concl.	Str.	None	None	Cons.	None	Cons.	D00-D08 $p = 0.20$		
4. Changes in	A	-	18.4	22.9	-	18.3	12.0	R00-D00		
aggregate demand	A/P	-	37.3	29.6	-	35.4	24.0	p=0.83		
affect real GDP in the	D	-	26.0	37.4	-	29.1	40.8	R08-D08		
short run but not in	NR	-	18.4	10.1	-	17.1	23.2	p=0.11		
the long run*	3	_	.97	.94	-	.97	.94	R00-R08		

Table 1 Distribution of Responses, Measures of Consensus									
	Distrib		Republicar			ensus Democrat		Chi-	
		1992	2000	2008	1992	2000	2008	Square	
								P-values	
	AG/DG	-	.68/.32	.58/.42	-	.65/.35	.47/.53	p=0.08	
	Concl.	-	Cons.	None	-	None	None	D00-D08	
								p=0.02	
5. Inflation is caused	A	47.9	34.8	60.3	25.0	24.0	22.4	R00-D00	
primarily by too	A/P	23.5	27.9	22.9	42.9	33.1	28.0	p=.11	
much growth in the	D	26.6	32.9	15.6	30.0	36.6	40.8	R08-D08	
money supply.	NR		4.4	1.1		6.3	8.8	p= .00	
	3	.81	.89	.71	.83	.90	.92	R00-R08	
	AG/DG	.73/.27	.66/.34	.84/.16	.69/.31	.61/.39	.55/.45	p= .00	
	Concl.	Cons.	Str.	Str.	Cons.	None	None	D00-D08	
6. The Federal	Α		43.0	41.3		16.0	9.6	<i>p</i> = .61 R00-D00	
Reserve should focus	A/P	-	31.7	34.1	-	26.9	22.4	p = 0.00	
on a low rate of	D A/P	-	22.2	21.8	-	54.9	64.8	R08-D08	
inflation rather than	NR	-	3.2	2.8	-	2.3	3.2	p = 0.00	
other		-	.84	.84	-	.77	.69	R00-R08	
possible goals such as	ε AG/DG	-	.77/.23	.78/.22	-	.44/.56	.33/.67	p = 0.90	
employment, or	Concl.	-	Cons.	Cons.	-	.44/.50 Cons.	.33/.0/ Str.	D00-D08	
economic growth.	Conci.	_	Cons.	Cons.	-	Cons.	Sir.	p = 0.13	
7. Management of	A	34.5	50.0	39.1	10.7	25.1	9.6	R00-D00	
the business cycle	A/P	31.0	31.7	28.5	26.8	29.7	32.8	p = 0.00	
should be left to the	D	32.4	15.8	25.7	60.0	36.6	52.0	R08-D08	
Federal Reserve;	NR		2.5	6.7		8.6	5.6	p = 0.00	
activist fiscal policy	3	.85	.79	.91	.71	.93	.79	R00-R08	
should be avoided	AG/DG	.67/.33	.84/.16	.72/.28	.38/.62	.60/.40	.45/.55	p = 0.04	
	Concl.	Cons.	Str.	Cons.	Cons.	None	Cons.	D00-D08	
0.7							-0.	p = 0.00	
8. Increasing the	A	-	-	6.7	ı	-	53.6	D00 D00	
regulatory power of	A/P	-	-	30.2	-	-	26.4	R08-D08	
the Federal Reserve	D	-	-	62.0	-	-	18.4	p = 0.00	
will improve the functioning of	NR	-	-	1.1	-	-	1.6		
functioning of financial markets.	3	-		.64	-		.77		
manciai markets.	AG/DG	-		.37/.63	-		.81/.19		
O E' 1 1' 1	Concl.	- 70.2	50.6	Cons.	-	25.5	Str.	D00 D00	
9. Fiscal policy has a	A	70.3	50.6	34.1	64.3	37.7	56.8	R00-D00	
significant	A/P	16.9	38.6	31.3	16.8	33.7	29.6	p = 0.00	
stimulative impact on	D	10.7	8.9	31.8	18.2	22.3	8.8	R08-D08	
a less than fully employed economy.	NR	(2	1.9	2.7		6.3	4.8	p = 0.00 R00-R08	
empioyed economy.	3	.63	.72	.90	.67	.90	.75	p = 0.00	
	AG/DG	.89/.11	.91/.09	.76/.24	.82/.18	.76/.24	.91/.09	p- 0.00	

	Dictrib	ution of F	Tabl		s of Cons	ensus		
	Distrib		Republica		S OI COIIS	Democrat	4	Chi-
		1992	2000	2008	1992	2000	2008	Square P-values
	Concl.	Str.	Str.	Cons.	Str.	Cons.	Str.	D00-D08 $p = 0.00$
10. A large federal	A	89.3	65.8	91.1	86.1	72.6	38.4	R00-D00
budget deficit has an	A/P	5.9	22.2	7.8	5.4	17.1	44.0	p = 0.32
adverse effect on the	D	3.1	12.0	1.1	7.1	9.1	15.2	R08-D08
economy.	NR		0.0	0.0		1.1	2.4	p = 0.00
	3	.32	.62	.24	.39	.58	.80	R00-R08
	AG/DG	.97/.03	.88/.12	.99/.01	.93/.07	.91/.09	.84/.16	p = 0.00
	Concl.	Str.	Str.	Str.	Str.	Str.	Str.	p = 0.00
11. If the federal	A	33.8	19.0	18.4	34.3	18.3	22.4	R00-D00
budget is to be	A/P	27.6	31.0	23.5	40.7	26.3	24.8	p = 0.86
balanced, it should be	D	36.9	46.8	54.7	23.2	45.7	41.6	R08-D08
done over the course	NR		3.2	3.4		9.7	11.2	p = 0.25
of the	3	.84	.83	.779	.83	.90	.93	R00-R08
business cycle rather	AG/DG	.62/.38	.52/.48	.43/.57	.76/.24	.40/.51	.53/.47	p = 0.25
than yearly.	Concl.	None	None	Cons.	Cons.	None	None	D00-D08 $p = 0.62$
12. The level of	A	80.3	62.0	86.6	45.0	17.1	16.8	R00-D00
government spending	A/P	13.1	27.9	7.8	29.3	30.9	34.4	p = 0.00
relative to GDP	D	3.8	6.3	4.5	22.5	44.0	41.6	R08-D08
should be reduced	NR		3.8	1.1		8.0	7.2	p = 0.00
(disregarding	3	.48	.69	.37	.84	.87	.88	R00-R08
expenditures for	AG/DG	.96/.04	.93/.07	.95/.05	.76/.24	.52/.48	.55/.45	p = 0.00
stabilization).	Concl.	Str.	Str.	Str.	Cons.	None	None	D00-D08 $p = 0.83$
13. Appropriately	A	-	55.1	55.3	-	49.1	54.4	R00-D00
designed fiscal policy	A/P	-	32.9	29.1	-	37.7	32.0	p = 0.22
can increase the long	D	-	4.4	11.8	-	1.7	4.8	R08-D08
run rate of capital	NR	-	7.6	4.5	-	11.4	8.8	p = 0.17
formation.	3	-	.74	.77	-	.75	.76	R00-R08
	AG/DG	-	.95/.05	.88/.12	-	.98/.02	.95/.05	p = 0.08
	Concl.	-	Str.	Str.	-	Str.	Str.	D00-D08 $p = 0.19$
14. Lower marginal income tax rates reduce leisure and	A	33.5	18.4	37.4	9.6	11.4	3.2	R00-D00
	A/P	29.3	17.7	18.4	25.0	14.9	12.0	p = 0.18
	D	35.2	59.5	39.1	63.9	65.1	73.6	R08-D08
increase work effort.	NR		4.4	5.0		8.6	11.2	p = 0.00
	3	.85	.77	.86	.60	.74	.60	R00-R08
	AG/DG	.64/.36	.38/.62	.59/.41	.35/.65	.29/.71	.17/.83	p = 0.00
	Concl.	None	Cons.	Cons.	Cons.	Str.	Str.	D00-D08
								p = 0.03

			Tabl		0.0			
	Distrib	ution of F	Responses. Republica			<mark>ensus</mark> Democrat	,	Chi-
		1992	2000	2008	1992	2000	2008	Square
		1772	2000	2000	1772	2000	2000	P-values
15. Reducing the tax	A	95.2	81.7	91.6	24.6	24.6	18.4	R00-D00
rate on income from	A/P	3.1	15.2	5.0	20.7	21.1	18.4	p = 0.00
capital gains would	D	0.7	1.3	2.2	53.9	49.7	60.0	R08-D08
encourage investment	NR		1.9	1.1		4.6	3.2	p = 0.00
and promote	3	.17	.42	.26	.75	.84	.75	R00-R08
economic growth.	AG/DG	.99/.01	.99/.01	.98/.02	.46/.54	.48/.52	.38/.62	p = 0.01
	Concl.	Str.	Str.	Str.	Cons.	None	Cons.	D00-D08
								p = 0.23
16. Managerial,	A	-	17.1	11.2	-	15.4	10.4	R00-D00
information and other	A/P	-	32.9	24.0	-	29.7	19.2	p = 0.83
technological	D	-	41.8	58.7	-	43.4	58.4	R08-D08
advances have	NR	-	8.2	6.1	-	11.4	12.0	p = 0.76
significantly	3	-	.89	.77	-	.91	.81	R00-R08
lessened the severity	AG/DG	-	.54/.46	.38/.63	-	.51/.49	.34/.66	p = 0.01
of or fundamentally	Concl.	-	None	Cons.	-	None	None	D00-D08
eliminated the								p = 0.02
business cycle. 17. The U.S. has			41.1	16.2		27.4	1.4.4	D00 D00
entered a new	A /D	-	41.1	16.2	-	27.4	14.4	R00-D00
industrial revolution	A/P	-	34.1	24.0	-	38.9	23.2	p = 0.06 R08-D08
in which higher rates	D	-	20.3	53.6	-	25.1	54.4 8.0	p = 0.92
of economic growth	NR	-	4.4		-	8.6		P-0.92 R00-R08
can be maintained	3	-	.86	.82	-	.92	.83	p = 0.00
without inflationary	AG/DG	-	.79/.21	.43/.57	-	.73/.27	.41/.59	D00-D08
pressures.	Concl.	-	Cons.	None	-	Cons.	None	p = 0.00
prosoures.								P
International Economi	ics Proposit	tions					1	
18. Tariffs and	A	62.4	41.1	53.1	25.7	24.6	16.0	R00-D00
import quotas usually	A/P	20.7	26.6	22.9	28.6	25.1	20.0	p = 0.00
reduce the general	D	13.8	31.0	21.2	40.4	45.1	58.4	R08-D08
welfare of society.	NR		1.3	2.8		5.2	5.6	p = 0.00
	3	.72	.82	.80	.89	.87	.79	R00-R08
	AG/DG	.86/.14	.69/.31	.78/.22	.57/.43	.52/.48	.38/.62	p = 0.05
	Concl.	Str.	Cons.	Str.	None	None	Cons.	D00-D08
								p = 0.05
19. Flexible and	A	52.4	50.0	64.2	35.4	38.9	24.8	R00-D00
floating exchange	A/P	37.2	34.8	26.8	47.5	42.9	42.4	p = 0.10
rates offer an	D	4.8	7.6	4.5	13.6	10.9	16.8	R08-D08
effective international	NR		7.6	4.5		7.3	16.0	p = 0.00
monetary	3	.73	.80	.66	.80	.84.	.94	R00-R08
arrangement.	AG/DG	.95/.05	.92/.08	.95/.05	.86/.14	.88/.12	.80/.20	p = 0.44

			Tabl	e 1				
	Distrib		_	, Measure				1
			Republica			Democrat		Chi-
		1992	2000	2008	1992	2000	2008	Square
	G 1	G.	G.	C.	G.	C	C	P-values
	Concl.	Str.	Str.	Str.	Str.	Cons.	Cons.	D00-D08
20 1 .			20.4	40.0		20.0	20.0	p = 0.06
20. Increasing	A	-	30.4	48.0	-	30.9	28.8	R00-D00
globalization of the	A/P	-	27.2	21.8	-	21.1	19.2	p = 0.43
economy, helped by the WTO, threatens	D	-	40.5	29.1	-	45.1	48.0	R08-D08 $p = 0.00$
nat'l sovereignty in	NR	-	1.9	1.1	-	2.9	4.0	R00-R08
the areas of	3	-	.84	.79	-	.83	.83	p = 0.01
environmental and	AG/DG	-	.59/.41	.71/.29	-	.54/.46	.50/.50	D00-D08
labor standards.	Concl.	-	None	Cons.	-	None	None	p = 0.84
21. Easing	A	-	_	8.4	-	_	24.0	P 0.07
restrictions on	A/P	-	_	14.0	-	_	33.6	R08-D08
immigration will	D	_	_	76.5	_	_	39.2	p = 0.00
ensure long run	NR	_	_	1.1	_	_	3.2	P
economic growth.	8	-		.53	_		.86	
S	AG/DG	-		.23/.77			.60/.41	
	Concl.	-		Str.	-		None	
22. Easing	A	<u>-</u>	_	43.0	<u>-</u>	_	20.8	
restrictions on	A/P	-	_	19.6	-	_	13.6	R08-D08
immigration will	D	_	_	34.6	_	_	63.2	p = 0.00
depress the average	NR			2.8	_	_	2.4	P 0.00
wage rate in the	3	_		.83	_		.71	
United States.	AG/DG	-		.64/.36	-		.35/.65	
	Concl.	<u>-</u>		None			Cons.	
23. Large balance of	A	80.7	50.6	67.6	82.5	54.3	69.6	R00-D00
trade deficits have	A/P	12.1	26.6	17.9	9.6	23.4	18.4	p=0.72
adverse effects on the	D	6.2	17.1	12.3	5.7	15.4	7.2	R08-D08
economy.	NR	0.2	5.7	2.2	3.7	6.9	4.8	p = 0.39
Conomy.		.47	.84	.66	.45	.83	.65	R00-R08
	ε AG/DG	.94/.06	.82/.18	.87/.13	.94/.06	.83/.17	.92/.08	p = 0.02
	Concl.			Str.				D00-D08
	Colici.	Str.	Cons.	Su.	Str.	Cons.	Str.	p = 0.02
24. The U.S. trade	A	-	20.9	11.7	-	21.7	15.2	R00-D00
deficit is primarily	A/P	-	28.5	19.5	-	22.9	16.0	p = 0.41
due to non-tariff trade	D	-	41.1	65.4	-	47.4	63.2	R08-D08
barriers erected by	NR	-	9.5	3.4	-	8.0	5.6	p = 0.55
other nations.	3	-	.92	.69	-	.88	.74	R00-R08
	AG/DG	-	.55/.45	.32/.68	-	.48/.52	.33/.67	p = 0.00
	Concl.	-	None	Str.	-	None	Str.	D00-D08
						,		p = 0.00
25. The economic	A	-	27.2	24.6	-	10.9	6.4	R00-D00
benefits of an	A/P	ı	17.1	24.6	ı	24.0	15.2	p = 0.00

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			Tabl					
	Distrib		Responses. Republica	, Measure		ensus Democrat	¢	Chi-
		1992	2000	2008	1992	2000	2008	Square P-values
expanding world	D	-	50.0	49.1	-	61.1	73.6	R08-D08
population outweigh	NR	-	5.7	1.7	-	4.0	4.8	p = 0.00
the economic costs.	3	-	.84	.80	-	.73	.60	R00-R08
	AG/DG	-	.47/.53	.50/.50	-	.36/.64	.23/.77	p = 0.31
	Concl.	-	None	Cons.	-	Cons.	Str.	D00-D08 $p = 0.05$
26. Some restrictions	A	-	20.9	19.6	-	42.3	52.0	R00-D00
on the free flow of	A/P	-	33.5	41.9	-	40.6	30.4	p = 0.00
financial capital are	D	-	37.3	35.7	-	11.4	8.8	R08-D08
essential to ensure the	NR	-	8.3	2.8	-	5.7	8.8	p = 0.00
stability and	3	-	.91	.83	-	.82	.81	R00-R08
soundness of the	AG/DG	-	.59/.41	.63/.37	-	.88/.12	.90/.10	p = 0.50
international financial system.	Concl.	-	None	None	-	Cons.	Cons.	D00-D08 $p = 0.14$
Distribution of Income	and Wealt	h Proposi	tions	I	I.	I	I.	
27. The distribution	A	10.0	6.3	2.2	76.4	62.9	59.2	R00-D00
of income in the U.S.	A/P	19.7	10.8	11.2	13.6	30.9	29.6	p = 0.00
should be more equal	D	69.7	82.3	84.9	8.9	6.3	9.6	R08-D08
	NR		0.6	1.7		0.0	1.6	p = 0.00
	3	.60	.44	.39	.53	.60	.69	R00-R08
	AG/DG	.30/.70	.17/.83	.14/.86	.91/.09	.94/.06	.90/.10	p = 0.18
	Concl.	Str.	Str.	Str.	Str.	Str.	Str.	D00-D08 $p = 0.54$
		I.	I.	l	l .	l	l .	
28. The increasing	A	-	10.1	11.7	-	12.6	6.4	R00-D00
inequality in the	A/P	-	19.6	14.5	-	16.0	12.8	p = 0.58
distribution of income	D	-	65.3	71.5	-	68.0	76.0	R08-D08
in the U.S. is due	NR	-	5.0	2.2	-	3.4	4.8	p = 0.28
primarily to the	3	-	.70	.62	-	.67	.57	R00-R08
benefits and pressures	AG/DG	-	.31/.69	.27/.73	-	.30/.70	.20/.80	p = 0.40
of a global economy.	Concl.	-	Str.	Str.	-	Str.	Str.	D00-D08 $p = 0.14$
29. The	A	3.8	1.9	1.7	55.4	40.0	49.6	R00-D00
redistribution of	A/P	7.9	5.7	3.4	17.4	36.0	24.8	p = 0.00
income within the	D	86.6	91.1	93.8	25.4	22.3	22.4	R08-D08
U.S. is a legitimate	NR		1.3	1.1		1.7	3.2	p = 0.00
role for government.	ε	.38	.27	.21	.76	.82	.82	R00-R08
	AG/DG	.12/.88	.08/.92	.05/.95	.74/.26	.77/.23	.77/.23	p = 0.57
	Concl.	Str	Str.	Str.	Str.	Cons.	Cons.	D00-D08 $p = 0.11$

	Distrib	ution of R	Tabl Responses.		s of Cons	ensus		
			Republica			Democrat	<u> </u>	Chi-
		1992	2000	2008	1992	2000	2008	Square P-values
								1 -values
30. The distribution	A	_	31.7	34.6	_	6.3	4.8	R00-D00
of income and wealth	A/P	-	26.0	16.2	-	15.4	12.8	p = 0.00
in the U.S. has little if	D	-	39.2	46.4	-	75.4	80.0	R08-D08
any impact on the	NR	-	3.2	2.8	_	2.9	2.4	p = 0.00
overall rate of	3	-	.86	.81	-	.56	.49	R00-R08
economic growth and	AG/DG	-	.59/.41	.52/.48	_	.22/.78	.18/.82	p = 0.08
stability.	Concl.	-	None	None	-	Str.	Str.	D00-D08
								p = 0.66
31. Minimum wages	A	64.5	45.6	65.4	14.6	8.0	8.8	R00-D00
increase	A/P	13.1	26.0	19.5	10.7	8.0	2.4	p = 0.00
unemployment	D	20.7	27.2	14.5	73.2	82.3	88.8	R08-D08
among young and unskilled workers.	NR	60	1.3	0.56	5.0	1.7	0.0	p = 0.00 R00-R08
uliskilled workers.	3	.68	.81	.65	.58	.46	.29	p = 0.00
	AG/DG	.79/.21	.72/.28	.85/.15	.26/.74	.16/.84	.11/.89	D00-D08
	Concl.	Str.	Cons.	Str.	Str.	Str.	Str.	p = 0.11
32. There are few	A	33.5	37.3	47.5	5.7	10.9	12.0	R00-D00
compensation and	A/P	25.5	24.7	25.7	7.5	9.7	5.6	p = 0.00
promotion gaps	D	40.0	36.1	26.8	84.3	78.3	80.8	R08-D08
between men and	NR		1.9	0.0		1.1	1.6	p = 0.00
women that cannot be	3	.81	.83	.76	.43	.51	.47	R00-R08
explained by	AG/DG	.60/.40	.63/.37	.73/.27	.13/.87	.21/.79	.18/.82	p = 0.11
productivity and/or	Concl.	None	None	Str.	Str.	Str.	Str.	D00-D08
career choices.				- 0.2		21-		p = 0.43
33. Welfare reforms	A	-	77.9	79.3	-	21.7	23.2	R00-D00
which place time	A/P	-	17.1	12.8	-	40.6	35.2	p = 0.00
limits on public assistance have	D	-	5.1	7.3	-	37.1	40.8	R08-D08 $p = 0.00$
increased the general	NR	-	0.0	0.56	-	0.6	0.8	R00-R08
well-being of society.	3	-	.47	.48	-	.79	.80	p = 0.43
went being of society.	AG/DG	-	.95/.05	.93/.07	-	.63/.37	.59/.41	D00-D08
	Concl.	-	Str.	Str.	-	Cons.	Cons.	p = 0.65
34. The persistence of	A	67.9	62.0	69.8	8.6	17.7	5.6	R00-D00
poverty is due more	A/P	15.9	24.1	18.4	9.6	16.0	16.8	p = 0.00
to a breakdown of the	D	15.5	13.3	11.2	80.7	64.6	73.6	R08-D08
family unit than to a	NR		0.6	1.1		1.7	4.0	p = 0.00
general lack of	3	.64	.68	.62	.47	.69	.59	R00-R08
economic	AG/DG	.84/.16	.87/.13	.89/.11	.18/.82	.34/.66	.23/.77	p = 0.33
opportunity.	Concl.	Str.	Str.	Str.	Str.	Cons.	Str.	D00-D08
								p = 0.01
35. The Earned	A	-	30.4	24.0	-	59.4	47.2	R00-D00

	D!:.4	4°	Tabl		C.C			
	Distrib	ution of R	Republicat			ensus Democrai	·	Chi-
		1992	2000	2008	1992	2000	2008	Square P-values
Income Tax Credit	A/P	-	22.8	16.8	-	25.1	24.8	p = 0.00
program should be	D	-	42.4	55.3	-	10.3	18.4	R08-D08
expanded.	NR	-	4.4	3.9	-	5.1	9.6	p = 0.00
•	3	-	.87	.79	-	.75	.89	R00-R08
	AG/DG	-	.56/.44	.42/.58	-	.89/.11	.80/.20	p = 0.06
	Concl.	-	None	Cons.	-	Str.	Cons.	D00-D08 $p = 0.07$
Microeconomics Propo	ositions	l		I	I	I	I	1
36. Antitrust laws	Α	34.5	21.5	27.4	75.7	58.3	72.8	R00-D00
should be enforced	A/P	40.0	36.1	38.0	17.1	30.3	22.4	p = 0.00
vigorously to reduce	D	23.5	41.1	33.5	6.1	10.3	3.2	R08-D08
monopoly power	NR		1.3	1.1		1.1	1.6	p = 0.00
from its current level.	3	.83	.81	.82	.53	.69	.54	R00-R08
	AG/DG	.76/.24	.58/.42	.66/.34	.94/.06	.90/.10	.97/.03	p = 0.28
	Concl.	Cons.	None	None	Str.	Str.	Str.	D00-D08 $p = 0.01$
37. Pollution taxes or	A	32.4	27.2	11.2	24.6	14.9	20.8	R00-D00
marketable pollution	A/P	37.2	24.1	14.5	23.9	19.4	24.8	p = 0.00
permits are a more	D	27.9	44.9	72.6	47.9	62.9	50.4	R08-D08
economically	NR		3.8	1.7		2.9	4.0	p = 0.00
efficient approach to	3	.85	.85	.69	.84	.72	.83	R00-R08
pollution control than	AG/DG	.71/.29	.53/.47	.26/.74	.53/.47	.35/.65	.48/.52	p = 0.00
emission standards.	Concl.	Cons.	None	Str.	None	Cons.	None	D00-D08 $p = 0.11$
38. Higher taxes on	A	-	-	12.9	-	-	58.4	1
fossil fuels will	A/P	-	-	22.9	-	-	26.4	R08-D08
encourage firms to	D	-	-	60.9	-	-	12.8	p = 0.00
develop alternative	NR	-	-	3.3	-	-	2.4	1
energies that	3	-		.73	-		.73	
reduce carbon	AG/DG	-		.37/.63	-		.87/.13	
emissions	Concl.	_		Cons.	_		Str.	
39. Reducing the	A	56.2	51.3	65.4	6.1	4.6	5.6	R00-D00
regulatory power of	A/P	23.5	27.9	21.2	8.9	12.0	8.0	p = 0.00
the Environmental	D	19.7	20.3	12.3	83.6	80.0	84.0	R08-D08
Protection Agency	NR		0.6	1.1	22.0	3.4	2.4	p = 0.00
(EPA) would improve	3	.73	.76	.66	.43	.50	.43	R00-R08
the economic	AG/DG	.80/.20	.80/.20	.88/.12	.15/.85	.17/.83	.14/.86	p = 0.02
efficiency of the U.S.	Concl.	Str.	Str.	Str.	Str.	Str.	Str.	D00-D08
economy.	Conci.	on.	ou.	Du.	501.	541.	5.11.	p = 0.49
40. Economic	A	19.3	13.9	11.7	15.0	17.7	15.2	R00-D00
evidence suggests	A/P	39.3	16.5	12.3	39.6	16.6	15.2	p = 0.52

Table 1								
	Distrib	ution of R						
		I	Republicar			Democrat		Chi-
		1992	2000	2008	1992	2000	2008	Square
								P-values
there are too many	D	38.3	63.3	69.3	41.4	56.6	55.2	R08-D08
resources in	NR		6.3	6.7		9.1	14.4	p = 0.22
American agriculture.	3	.84	.75	.68	.82	.83	.85	R00-R08
	AG/DG	.60/.40	.32/.86	.26/.74	.57/.43	.38/.62	.36/.64	p = 0.41
	Concl.	None	Str.	Str.	None	None	None	D00-D08
								p = 0.92
41. Employer-	A	-	-	18.4	-	-	25.6	
provided health	A/P	-	-	19.0	-	-	18.4	R08-D08
insurance reduces the	D	-	-	59.8	-	-	55.2	p = 0.37
efficiency of the labor	NR	-	-	2.8	-	-	0.8	
market by reducing	3	-		.75	-		.74	
labor mobility.	AG/DG	-		.39/.61	-		.44/.56	
	Concl.	-		Cons.	-		Cons.	
42. The competitive	A	-	54.4	55.9	-	29.7	20.8	R00-D00
model is generally	A/P	-	26.0	26.3	-	30.3	28.0	p = 0.00
more useful for	D	-	5.1	6.1	-	20.0	30.4	R08-D08
understanding the	NR	-	14.6	11.7	-	20.0	20.8	p = 0.00
U.S. economy than	3	-	.80	.79	-	.99	.99	R00-R08
are models of	AG/DG	-	.94/.06	.93/.07	-	.75/.25	.62/.38	p = 0.94
imperfect competition	Concl.	_	Str.	Str.	-	Cons.	Cons.	D00-D08
and other game			~	~				p = 0.06
theoretic models.								

- 1: The possible responses are: A = Mainly agree, A/P = Agree with provisos, D = Disagree, NR = No response.
- 2: Records the frequencies of responses from the 2000 and 2009 sample.
- 3. Conditional percentages of broad agreement: AG = (A+A/P)/(A+A/P+D) and disagreement DG = D/(A+A/P+D).
- 4: Columns 6, 7, 8 and 9 report the entropy index ε ; the conditional percentage of broad agreement (AG) or disagreement (DG), and the level of consensus (strong, consensus or no consensus.
- 5: p-value for the chi-square test of identical distributions of responses between two groups, e.g., Republicans (R) and democrats (D).
- 6: Strong consensus: $\varepsilon \le 0.8$ and AG or DG $\ge 67\%$.
- 7: Consensus: $\varepsilon \le 0.8$ or AG or DG $\ge 67\%$.
- 8: No consensus: ε < 0.8 and AG or DG < 67%.
- 9. "-": proposition was not included in that year's survey

CONSENSUS WITHIN THE DEMOCRATIC AND REPUBLICAN PARTIES OVER TIME

We define polarization to occur when opinions diverge towards poles of distribution. Thus, one indication of polarization is lower values of the relative entropy index as opinions migrate to either agreement or disagreement with a proposition. Said differently, a higher value

of the entropy index indicates more diversity of opinion. Table 2 displays the average relative entropy index for all propositions included in the surveys, the 23 propositions common to all surveys and the 37 propositions common to the 2000 and 2009 survey only.

Table 2 Comparison of average entropy								
	Average Relative Entropy							
	1992	2000	2009					
Republicans	0.676	0.775	0.689					
Democrats	0.679	0.775	0.746					
Republicans (23)	0.653	0.739	0.641					
Democrats (23)	0.668*	0.770*	0.730					
Republicans (37)		0.770*	0.688*					
Democrats (37)		0.785	0.745					

At first glance, average entropy increased for both Democrats and Republicans between 1992 and 2000. Thus, there is the suggestion that both parties may have been more inclusive or diverse in opinion in 2000 than 1992. Comparing 2009 to 2000, we see a much steeper decline in the entropy index for Republicans than Democrats. When we limit our analysis to propositions that are common between surveys, the only statistically significant changes in mean entropy at the 5% significance level, indicated with an asterisk, are observed for Republican delegates between 2000 and 2009 (37 common propositions) and for Democratic delegates between 1992 and 2000 (23 common propositions).

We shed additional light on the convergence of opinion in each party by examining the incidence of strong consensus, consensus, and no consensus constructed from the entropy index and conditional percentages of agreement reported in Table 1. Table 3 summarizes the results for the 23 propositions common to all surveys, the 37 propositions common to the 2000 and 2009 surveys, and the 42 propositions of the 2009 survey.

In all three surveys, Republican Delegations report a higher incidence of strong consensus than the Democratic delegation. This result is invariant to the set of propositions. The overall sample proportions of strong consensus fell for Republicans from 1992 to 2000 at a 10% level of significance. However, the proportion of strong consensus among Republicans is higher in 2009 than in 2000 for the 37 common propositions at a 10% level of significance. For the 23 common propositions, the difference in the proportion of strong consensus is not statistically different among Republicans between 1992 and 2009. Among Democrats, the proportion of strong consensus for the entire set of propositions as well as the 23 common propositions falls

from 1992 to 2000 at a 10% level of significance. All other differences in the proportions of strong consensus among the Democratic delegations are insignificant.

	Table 3									
Comparison of Degree of Consensus										
Sample	Strong Consensus	Consensus	No consensus							
Republicans (2008)	16/23 22/37 23/42	5/23 8/37 11/42	2/23 7/37 8/42							
	(70%) (59%) (55%)	(22%) (22%) (26%)	(9%) (19%) (19%)							
Democrats (2008)	10/23 16/37 18/42	8/23 11/37 13/42	5/23 10/37 11/42							
	(43%) (43%) (43%)	(35%) (30%) (31%)	(22%) (27%) (26%)							
Republicans (2000)	12/23 16/37	5/23 8/37	6/23 13/37							
	(52%) (43%)	(22%) (22%)	(23%) (35%)							
Democrats (2000)	7/23 11/37	6/23 12/37	10/23 14/37							
	(30%) (30%)	(26%) (32%)	(43%) (38%)							
Republicans (1992)	15/23	4/23	4/23							
	(65%)	(17%)	(17%)							
Democrats (1992)	12/23	7/23	4/23							
	(52%)	(30%)	(17%)							

Taken together, the two measures of consensus suggest that Democrats became significantly more inclusive or diverse in economic opinion between 1992 and 2000. A slightly weaker conclusion follows for Republicans between 1992 and 2000. However, between 2000 and 2009, the data suggests that while Republicans became significantly less inclusive or diverse in economic opinion and returned to 1992 levels in some cases, the diversity of opinion among Democrats remained largely unchanged. These insights support the findings based on the average entropy measures.

The process of polarization suggests that opinions are fluid over time and the direction of change is towards a greater degree of certainty. Comparing the 2000 and 2009 samples, our data does suggest some migration of opinion in the last decade. For the 37 common distributions in 2000 and 2009, Democrats show statistically different response patterns at the 5% confidence level for 13 propositions, while Republicans show changed response patterns for 17 propositions. Thus, Republican delegates showed a slightly higher frequency of significant shifts in response patterns between 2000 and 2009.

The economic views of Democrats are most fluid in the area of macroeconomics where the distribution of responses has significantly changed for almost half of the propositions between 2000 and 2009. In several cases, however, the changes indicate greater uncertainty than certainty. For example, in 2000 the conditional rate of agreement with the concept of a self-correcting mechanism of the economy (#1) was 61% while in the 2009 sample agreement fell to 41%, a view more representative of the 1992 sample. Reflecting, perhaps, the start of the Great Recession in 2008, Democrats now indicate no-consensus with the "new economy" proposition #17. In addition, the incidence of broad agreement with the proposition that short run fluctuations in aggregate demand have no long run impacts on real GDP (#4) has fallen from 65% in 2000 to 47% in 2009.

We do find macroeconomic propositions for which Democrats have a higher level of consensus in 2009. In terms of managing the business cycle, 2009 Democrats are significantly more likely to agree with the efficacy of fiscal policy (#9) and to disagree with relegating responsibility solely to the Federal Reserve Bank (#7) although only 55% disagree with this latter proposition. 2009 Democrats are also significantly more likely to disagree with the supply side proposition linking lower marginal income tax rates to increased work effort (#14).

Democrats in 2009 are significantly more likely to agree with the proposition that large balance of trade deficits have adverse effects on the economy (#23), and to disagree with the proposition that tariffs and import quotas reduce the general welfare of society (#18). There is some suggestion that the views of current Democrats more closely resembles opinions in 1992, when over 80% of the respondents agreed that trade deficits have an adverse effect on the economy. The common denominator between 1992 and 2009 is that in both years, the U.S. economy was in a slow recovery from a recent recession. Given this, current Democrats are significantly less likely to blame non-tariff trade barriers for the U.S. trade deficit (#24). Finally, Democrats are significantly more likely to disagree that the economic benefits of an expanding world population outweigh the economic costs (#25).

In the area of distributional and microeconomic propositions (#29 - #42), there are only two propositions for which the distribution of responses in 2009 shows a significant change. Democrats are more significantly likely to disagree that the persistence of poverty is due more to the breakdown of the family than to lack of economic opportunity (#34) and more likely to agree that antitrust laws should be vigorously enforced (#36).

Republican delegates' views on macroeconomic propositions appear to have changed to a greater degree than Democrats, showing a significant change from 2000 to 2009 in the response pattern for 60% of comparable propositions. 2009 delegates appear to express some stronger monetarist and supply side sentiments compared to their 2000 counterparts, more similar to the 1992 survey in some cases. Compared to 2000, current Republicans are significantly more likely to agree with the notion that the economy tends to a natural rate of unemployment in the long-run (#2), to agree with the proposition that large federal deficits have adverse effects on the economy (#10), to agree with the proposition that the level of government spending should be reduced relative to GDP (#12), and to agree that inflation is linked to the money supply (#5). They are also significantly more likely to disagree with the proposition that fiscal policy has a significant stimulative impact on a less than fully employed economy (#9). Propositions #14 and #15 that emphasize the incentive effects of taxes also generate significantly higher likelihoods of agreement.

Not all evidence points to increasing consensus in the area of macroeconomics. In 2009, the rate of broad agreement with the proposition that management of the business should be left to the Federal Reserve Bank (#7) was 72%, down from 84% in 2000. As with Democrats, 2009 Republicans now indicate no-consensus with the "new economy" proposition #17.

While free trade is embraced more strongly (#18), agreement that the WTO threatens sovereignty in the areas of labor and environmental standards (#20) is significantly higher. Compared to the 2000 delegation, 2009 Republicans are significantly more likely to agree that trade deficits have an adverse effect on the economy (#23). However, there are significantly

higher levels of disagreement that U.S. trade deficits are linked to non-tariff barriers of trade (#24).

For the distributional propositions, 2009 Republicans are significantly more likely to agree with the proposition that minimum wages increase unemployment among young and unskilled workers (#31). Significant shifts in opinion on microeconomics propositions are observed exclusively in the area of environmental policies. Current Republicans show significantly increased disagreement with the proposition that pollution taxes or permits are more efficient than emission standards (#37) and increased agreement with the proposition that reducing the regulatory power of the EPA will increase economic efficiency (#39). For propositions #31 and #39, the distribution of opinion in 2009 is not significantly different at a 5% level from 1992. Proposition #37 is striking in that 2009 Republicans now disagree more strongly than their 1992 counterparts.

CONSENSUS BETWEEN THE DEMOCRATIC AND REPUBLICAN PARTIES OVER TIME

To test whether the distribution of responses differs between the political parties, we again use a chi-square test of independence, rejecting the null-hypothesis at p-values of 5% or less. In 2000, we could not reject the null-hypothesis for 42% of all propositions at a 5% level of significance. In 2009, we could not reject the null-hypothesis for 26% of all propositions. This result suggests less similarity in the economic views of Republicans and Democrats between 2000 and 2009. Based on the 23 propositions common to all survey periods, Republican and Democratic response patterns are statistically similar at the 5% level for 13% in 1992, 35% in 2000, and 17% in 2009. This comparison suggests that partisan polarization on economic issues in 1992 was at least as strong as in the most recent survey period.

It may be the case, however, that the chi-square tests of independence overstate the degree of dissimilarity between the views of Republicans and Democrats. An additional criterion involves a comparison of the direction of conditional agreement/disagreement on each proposition. That is, if both parties indicate a majority either conditionally agree or disagree with a proposition, then there is an indication of common ground even if the distribution of responses is statistically different.² It is those propositions for which the parties differ in the direction of conditional agreement/disagreement and that have statistically significantly different distributions that polarization is the greatest. Looking at the 2009 survey only, we identify 16 of 42 propositions that satisfy both criteria. This leaves somewhat less that two thirds of the propositions for which there appears to be common ground.

These 16 propositions are relatively clustered in propositions concerning the regulation and the distribution of income and wealth. There seems to be little common ground concerning the normative propositions that the distribution of income should be more equal (#27), that the redistribution of income is a legitimate role for government (#29), or that the Earned Income Tax Credit program should be expanded (#35). Similarly, Democrats and Republicans show little commonality for the positive propositions that the minimum wage increases unemployment among young and unskilled workers (#31), that few compensation and promotion gaps among

men and women are unexplained by productivity and/or career choices (#32), or that the persistence of poverty is due more to a breakdown of the family unit than lack of economic opportunity (#34). There is also little commonality concerning the propositions regarding regulation. Democrats and Republicans are of opposite opinion about the likelihoods that increasing the regulatory power of the Federal Reserve improving the functioning of financial markets (#9) and reductions in the regulatory power of the EPA improving the economic efficiency of the U.S. economy (#39). We also find evidence that the views of Republicans and Democrats concerning the benefits of easing restrictions on immigration (#21, #22) are on the opposite side of the fence.

One of the few propositions that generated an identical response pattern by both parties in each survey period is proposition #23 stating that large trade deficits have adverse effects on the economy. In 1992, delegates from both parties showed strong agreement with this proposition. While both 2009 delegations agree that flexible and floating exchange rates are an effective international monetary arrangement (#19), Democrats now disagree with the proposition that tariffs and import quotas usually reduce the general welfare of society (#18), a significant change from 2000. A consensus of agreement among 2009 Republicans with proposition #20 may be linked to the highlighted role of the World Trade Organization, betraying increased scepticism toward supra-national governing bodies.

In the area of macroeconomics, there is agreement in both 2009 delegations with the normative proposition that government spending should be reduced relative to GDP (#12) although Republicans more strongly agree than Democrats. In addition, both parties show a strong consensus of agreement that large federal deficits have adverse effects on the economy (#10). There does appear to be some divergence in 2009 concerning macroeconomic policy, however. While the level of agreement among Democrats on the link between money supply and inflation (#5) seems to have declined over time, Republicans more strongly embrace this monetarist view. Furthermore, there appears to be a divergence of opinion between 2009 Republicans and Democrats over the normative proposition that the Federal Reserve Bank should focus only on a low rate of inflation (#6). In the area of fiscal policy, 2009 Republicans retain their agreement with supply propositions (#13, #14, #15) while the level of disagreement among Democrats appears to be increasing over time.

CONCLUSION

The data suggest an increase in the degree of polarization between Republicans and Democrats from 2000 and 2009. At the aggregate level, there seem to be two trends that impact the apparent divergence of opinion between 2009 Democrats and Republicans. The first is a greater degree of consensus or convergence of opinion from 2000 to 2009 in the Republican party. In some respects, the 2009 Republican delegation resembles the 1992 delegation with a stronger embrace of monetarist and supply side views than in 2000. The second trend is the lower degree of consensus among 2000 compared to 1992 Democrats that was not reversed in 2009. Reflecting, perhaps the onset on the Great Recession, Democratic opinions in 2009 shifted

towards a stronger embrace of the efficacy of fiscal policy and increased doubt about the ability of the economy to self-correct.

While it is tempting to emphasize the extent of current polarization, we note many areas of agreement between Republicans and Democrats. Of the 42 propositions in the 2009 survey, both parties appear to be on the same side of the fence for 26 propositions in the sense that a majority broadly agree or disagree. There are several propositions for which there is evidence of continued agreement over time. For example, both parties agree that the level of government spending relative to GDP should be reduced and that well designed fiscal policy can increase the rate of capital formation. There is also shared concern about the impacts of large balance of trade deficits and federal budget deficits. We suggest that agreement among the parties is due to the generality and broadness of these propositions and disagreement arises over the tools used to address these issues.

It is notable the extent to which the opinions of Republicans and Democrats continue to differ when it comes to issues concerning the distribution of income. Republicans and Democrats continue to be strongly on the opposite side of the fence over the normative propositions concerning equality in the distribution of income and the legitimacy of the role of government in redistribution income. It is possible that these durable normative values spill over into opinions about the positive propositions such as the impact of minimum wages on unemployment among young and unskilled workers and the persistence of poverty. As economists note, almost every change in public policy, macroeconomic or microeconomic, has distributional implications. Economists are also adept at identifying the winners and losers of changes in public policy. Unfortunately, only under strict assumptions can economists render conclusions about distributional changes on the social welfare function. Given the strong polarization in views about the distribution of income, it may serve as an economic wedge issue and a driver of political gridlock. Unfortunately, it is in regards to the costs and benefits of income redistribution that economists have the least to offer.

Finally we note the polarization that is apparent in the propositions involving regulation and/or the environment. This is evident in the strong diversity of opinion concerning the stronger regulations evolving for the financial industry as well the substitution impacts of higher taxes on fossil fuels. There is also persistent polarization over the efficiency effects of reducing the power of the Environmental Protection Agency. And while the comparative faith in the ability of regulation to improve market outcomes has long distinguished the liberal from the conservative view, we note the inclusion in the 2008 Republican Platform of the call for "reasonable regulation, basing it on sound science to achieve goals that are technically feasible...". One possibility is that this shows an increasing skepticism of academic research by the Republican Party. If so, this may be a call for academicians as a whole to reflect on whether our normative values drive our research outcomes or whether our research informs our normative values.

Endnotes

- 1. Interestingly, there is still broad agreement on the existence of a natural unemployment rate to which the economy tends in the long-run (#2). As developed by Milton Friedman (1968) and Edmund Phelps (1968), the basic argument is that fiscal policy can help reduce unemployment to, but not sustainably below, the unemployment rate consistent with long run aggregate supply.
- 1. Fuller and Geide-Stevenson (2003) report that 91.6% of economists in their survey broadly agree with proposition #37. Given that it is now more or less standard in introductory economics texts to discuss the comparative efficiency of marketable pollution permits and/or effluent taxes versus emissions standards, the apparent growing disconnect between politician (both Republican and Democrat) and economist is glaring in light of the Fuller and Geide-Stevenson (2007) finding that Democrats and Republicans are more likely to agree among themselves than to agree with economists.
- 2. A good example of this is proposition #2 concerning the natural rate of unemployment. The 2009 sample conditional rate of agreement among Republicans is 93% while for Democrats it is 70%. However, the chi-square test of independence is rejected at a 5% level of significance.

REFERENCES

- Alston, R. M., J.R. Kearl and M. B. Vaughan. (1992). Is there a Consensus Among Economists in the 1990's? *American Economic Journal* 82(2):203-209.
- Beinart, Peter. (2010). Why Washington's Tied Up in Knots. Time 175(8):20-24.
- Frey, B. S., W.W. Pommerehne, F. Schneider and G. Gilbert. (1984). Consensus and Dissension Among Economists: An Empirical Inquiry." American Economic Review 74(5):986-993.
- Friedman, Milton (1968). The Role of Monetary Policy. American Economic Review 58: 1-17.
- Fuller, Dan A., R. M. Alston and M. B. Vaughan (1995). The Split Between Political Parties on Economic Issues: A Survey of Republicans, Democrats, and Economists. *Eastern Economic Journal* 21(2):227 238.
- Fuller, Dan A. and Doris Geide-Stevenson (2003). "Consensus Among Economists: Revisited." *Journal of Economic Education* 34(4):369-387.
- Fuller, Dan A. and Doris Geide-Stevenson (2007). A Survey of Republicans, Democrats and Economists. *Eastern Economic Journal* 33(1):81-94.
- Glaeser, Edward L, Giacomo A. M. Ponzetto and Jesse M. Shapiro (2005). Strategic Extremism: Why Republicans and Democrats Divide on Religious Values. *Quarterly Journal of Economics* 120(4):1283-1330.
- Herrera, Richard (1992). The Understanding of Ideological Labels by Political Elites: A Research Note. *Western Political Quarterly*, 45(4):1021-1035.
- Kearl, J. R., Clayne L. Pope, Gordon C. Whiting and Larry T. Wimmer (1979). A Confusion of Economists.. *American Economic Review*, 69(2):28-37.
- Layman, Geoffrey C. (1999). "Culture Wars" in the American Party System: Religious and Cultural Change among Partisan Activists Since 1972. *American Politics Research* 27:89-121.
- Martin, Jurek (2010). A Sad Descent into Vitriolic Polarisation. Financial Times (May 5):8
- Miller, Warren E. and M. Kent Jennings (1992). *Parties in Transition: a Longitudinal Study of Party Elites and Party Supporters*. New York: Russell Sage Foundation.
- Phelps, Edmund (1968). Money-Wage Dynamics and Labor-Market Equilibrium. *Journal of Political Economy* 76: 678-711.

Ricketts, M. and E. Shoesmith (1992). British Economic Opinion: Positive Science of Normative Judgement? American Economic Review 82(2):210-215.

The 2008 Democratic National Platform. Available at http://www.democrats.org/about/party_platform.

The 2008 Republican Platform. Available at http://www.gop.com/2008Platform/.

Whaples, R. and J.C. Heckman (2005). Public Choice Economics: Where is There Consensus? *American Economist* 49(1):66-78.

No author.. 2010. "A Study in Paralysis; America's Democracy. The Economist 384(8670):24