

## Appendix A

We first describe the survey items used in constructing the four issue scales. Tables A.1-A.4 then present the results of the factor analyses, including the eigenvectors, factor loadings, and scoring coefficients. Note that before conducting the factor analyses we standardized each variable to have a mean of zero and a standard deviation of one.

### American National Election Study (ANES)

The *Economic Issues Scale* for 1992-2000 is constructed from the following 14 items: Five 7-point scales, as follows: A scale on government spending and services, where 1 = "Government should provide many more services: increase spending a lot" and 7 = "Government should provide many fewer services: reduce spending a lot." A scale on government health insurance, where 1 = "Government insurance plan" and 7 = "Private insurance plan." A scale on government and jobs and standards of living, where 1 = "Government see to job and good standard of living" and 7 = "Government let each person get ahead on his own." A scale on environmental regulations vs. business, where 1 = "Tougher regulations on business needed to protect the environment" and 7 = "Regulations to protect environment already too much of a burden on business." A scale on environmental protection vs. jobs, where 1 = "Protect environment, even if it costs jobs and standard of living" and 7 = "Jobs and standard of living more important than environment." Eight 3-point spending scales, where 1 = "spending should be increased," 2 = "spending should stay the same," and 3 = "spending should be decreased or cut out entirely." The items are: child care, welfare, the poor, homelessness, food stamps, public schools, social security, and environmental protection. We also include one feeling thermometer, for labor unions, with the scale reversed so a higher score means the respondent feels cooler towards unions.<sup>1</sup>

The *Economic Issues Scale* for 2004 is constructed from the following 13 items: All of the items using in the 1992-2000 *Economic Issues Scale*, except the 7-point scale on environmental protection vs. jobs, and the 3-point spending scales on homelessness, food stamps, and environmental protection. Three items on the scope of government activity, as follows: One item with 1 = "There are more things that government should be doing" and 2 = "The less government the better." One item with 1 = "We need a strong government to handle today's complex economic problems" and 2 = "The free market can handle these problems without government being involved." One item with 1 = "Government has become bigger because the problems we face have become bigger" and 2 = "The main reason government has become bigger over the years is because it has gotten involved in things that people should do for themselves."

The *Moral Issues Scale* for 1992-2000 is constructed from the following 12 items: One 7-point scales on women's role in running business, industry and government, where 1 = "Women and men should have an equal role" and 7 = "Women's place is in the home." Two 5-point questions on homosexual rights, as follows: "Do you favor or oppose laws to protect homosexuals against job discrimination?" The options are: 1 = "favor strongly," 2 = "favor not strongly," 3 = "don't know," 4 = "oppose not strongly" and 5 = "oppose strongly." "Do you think homosexuals should be allowed to serve in the United States Armed Forces or don't you think so?" The options are: 1 = "feel strongly should be allowed," 2 = "feel not strongly should be allowed," 3 = "don't know," 4 = "feel not strongly should not be allowed" and 5 = "feel strongly should not be allowed." One question on gay child adoption: "Do you think gay or lesbian couples, in other words, homosexual couples, should be legally permitted to adopt children?" The options are 1 = "yes," 2 = "don't know" and 3 = "no." One question on abortion, with the following options: 1 = "By law, a woman should always be able to obtain an abortion as a matter

of personal choice,” 2 = “The law should permit abortion for reasons other than rape, incest, or danger to the woman’s life, but only after the need for the abortion has been clearly established,” 3 = “The law should permit abortion only in case of rape, incest, or when the woman’s life is in danger” and 4 = “By law, abortion should never be permitted.” One question on school prayer, with the following options: 1 = “By law, prayer should not be allowed in public schools,” 2 = “The law should allow public schools to schedule time when children can pray silently if they want to,” 3 = “The law should allow public schools to schedule time when children as a group can say a general prayer not tied to a particular religious faith” and 4 = “By law, public schools should schedule a time when all children would say a chosen Christian prayer.” One question on how much guidance religion provides in the respondent’s daily life, with the following options: 1 = “religion not important,” 2 = “some,” 3 = “quite a bit” and 4 = “a great deal.” One question on the authority of the bible, with the following options: 1 = “The Bible is a book written by men and is not the Word of God,” 2 = “The Bible is the Word of God but not everything in it should be taken literally, word for word” and 3 = “The Bible is the actual Word of God and is to be taken literally, word for word.” Four 5-point scales evaluating statements where the choices are: “agree strongly,” “agree somewhat,” “neither agree nor disagree,” “disagree somewhat,” and “disagree strongly.” The statements are: “The world is always changing and we should adjust our view of moral behavior to those changes” (1 = agree strongly... 5 = disagree strongly). “We should be more tolerant of people who choose to live according to their own moral standards, even if they are very different from our own” (1 = agree strongly... 5 = disagree strongly). “The newer lifestyles are contributing to the breakdown of our society” (1 = disagree strongly... 5 = agree strongly). “This country would have many fewer problems if there were more emphasis on traditional family ties” (1 = disagree strongly... 5 = agree strongly).<sup>2</sup>

The *Moral Issues Scale* for 2004 is constructed from the following 16 items: All of the items using in the 1992-2000 *Moral Issues Scale*, except the item on school prayer. Two questions on working mothers, as follows: “Working mother can have warm relationship with kids” (1 = agree, 2 = neither agree nor disagree, 3 = disagree). “Better if woman cares for home-family and man achieve” (1 = disagree, 2 = neither agree nor disagree, 3 = agree). One question on gay marriage, with the following options: 1 = “Same-sex couples should be allowed to marry,” 2 = “Same-sex couples should not be allowed to marry but should be allowed to legally form a civil union (volunteered),” and 3 = “Same-sex couples should not be allowed to marry.” Two additional questions on abortion, as follows: “Do you favor or oppose government funding for abortions” (1 = favor strongly ... 5 = oppose strongly). “Do you favor or oppose a law that makes late-term abortions, sometimes called partial birth abortions, illegal” (1 = oppose strongly ... 5 = favor strongly).

### **General Social Survey (GSS)**

The *Economic Issues Scale* is constructed from the following 12 items: Four 3-point spending scales, where 1 = “too little spending,” 2 = “about right” and 3 = “too much spending.” The items are: welfare, the environment, health, and the problems of big cities. One question asking about the level of taxes, where 1 = “too low,” 2 = “about right” and 3 = “too high.” One 7-point scale where 1 = “government should do something to reduce income differences between rich and poor” and 7 = “government should not concern itself with income differences.” Two 3-point scales about confidence in financial institutions and business, where 1 = “hardly any confidence,” 2 = “only some confidence,” and 3 = “a great deal of confidence,” and one question about confidence in labor (with the scale reversed). Three 5-point scales about the welfare state: In the first item, 1 = “I strongly agree that government should help improve living standards of the poor,” 3 = “I agree with both answers” and 5 = “I strongly agree that people should take care of themselves.” In the second item, 1 = “I strongly agree that government should do more to solve

our country's problems," 3 = "I agree with both answers" and 5 = "I strongly agree that government is doing too much." In the third item, 1 = "I strongly agree it is the responsibility of government to help in paying for doctor and hospital bills," 3 = "I agree with both answers" and 5 = "I strongly agree people should take care of themselves."

The *Moral Issues* scale is constructed from the following 19 items: One question asking the respondent about the strength of his/her religion ranging from 4 = "no religion" to 1 = "strong." Seven questions asking whether it should be possible for a pregnant woman to legally obtain an abortion under various circumstances. In all cases, 1 = "yes" or 2 = "no." The circumstances are (a) there is a strong chance of a serious defect, (b) "she is married and does not want any more children," (c) "the woman's own health is seriously endangered by the pregnancy," (d) "the family has a very low income and cannot afford any more children," (e) "she became pregnant as a result of rape," (f) "she is not married and does not want to marry the man," (g) "the woman wants it for any reason." Six questions about whether limitations should be placed upon people whose ideas are considered bad or dangerous by other people. The first question asks whether such a person should be allowed to make a speech in the respondent's community, the second asks whether such a person should be allowed to teach in a college or university, and the third asks whether a book written by such a person should be removed from the public library. In all case the responses are 1 = "yes" or 2 = "no." The categories for these three questions are atheists and homosexuals. One question asking "Do you think the use of marijuana should be made legal or not? (1 = "yes," 2 = "no). Two questions asking about sexual attitudes. The first asks "What is your opinion about a married person having sexual relations with someone other than the marriage partner? And the second asks "What do you think about sexual relations between two adults of the same sex?" For both questions, the options are, 1 = "not wrong at all," 2 = "wrong only sometimes," 3 = "almost always wrong" and 4 = "it is always wrong." One question about laws related to pornography, where 1 = "There should be no laws forbidding the distribution of pornography," 2 = "There should be laws against the distribution of pornography to persons under the age of 18" and 3 = "There should be laws against the distribution of pornography whatever the age." One 3-point scale about confidence in the clergy, where 1 = "hardly any confidence," 2 = "only some confidence" and 3 = "a great deal of confidence." <sup>3</sup>

**Table A.1**  
**Factor Analysis for Issues Scales, NES 1992-2000**

<b>Economic Issues Scale</b>			
Number of observations = 5,611			
Largest eigenvalue = 4.05; proportion of variance = .85			
Second eigenvalue = 0.96			
Item	Factor Loadings	Uniquenesses	Scoring Coefficients
Gov spending & services	.64	.58	.15
Gov health insurance	.50	.75	.09
Gov & jobs/standard of living	.53	.72	.10
Environment vs. business	.61	.62	.17
Environment vs. jobs	.35	.88	.06
Spending: child care	.57	.68	.11
Spending: welfare	.55	.70	.12
Spending: the poor	.64	.59	.15
Spending: homelessness	.67	.55	.16
Spending: food stamps	.52	.73	.12
Spending: public schools	.48	.77	.08
Spending: social security	.42	.82	.07
Spending: environment	.50	.75	.10
Thermometer: labor unions	.42	.82	.07
<b>Moral Issues Scale</b>			
Number of observations = 5,313			
Largest eigenvalue = 3.23; proportion of variance = .93			
Second eigenvalue = 0.57			
Item	Factor Loadings	Uniquenesses	Scoring Coefficients
Women's role	.44	.81	.09
Homosexual job discrimination	.50	.75	.12
Homosexuals in military	.55	.70	.15
Homosexuals & adoption	.64	.59	.18
Law on abortion	.56	.68	.14
Law on school prayer	.39	.84	.08
Guidance from religion in life	.52	.73	.13
Authority of bible	.58	.67	.16
Adjust moral views to change	.39	.85	.09
Tolerate others' moral standards	.50	.75	.13
Newer lifestyles, breakdown	.57	.67	.15
Traditional family ties	.51	.74	.12

**Table A.2**  
**Factor Analysis for Issues Scales, NES 2004**

<b>Economic Issues Scale</b>			
Number of observations = 1,143			
Largest eigenvalue = 3.83; proportion of variance = .98			
Second eigenvalue = 0.42			
Item	Factor Loadings	Uniquenesses	Scoring Coefficients
Gov spending & services	.67	.55	.17
Gov health insurance	.55	.70	.12
Gov & jobs/standard of living	.63	.61	.16
Environment vs. jobs	.29	.91	.05
Spending: child care	.61	.63	.14
Spending: welfare	.51	.74	.10
Spending: the poor	.58	.67	.13
Spending: public schools	.53	.72	.11
Spending: social security	.47	.78	.09
Gov scope: do more	.55	.70	.12
Gov scope: complex problems	.51	.74	.11
Gov scope: problems bigger	.63	.60	.16
Thermometer: labor unions	.41	.83	.07
<b>Moral Issues Scale</b>			
Number of observations = 1,063			
Largest eigenvalue = 4.79; proportion of variance = .89			
Second eigenvalue = 0.73			
Item	Factor Loadings	Uniquenesses	Scoring Coefficients
Women's role	.43	.81	.06
Working women and kids	.28	.92	.04
Women working vs. at home	.49	.76	.08
Homosexual job discrimination	.51	.74	.08
Homosexuals in military	.49	.76	.08
Homosexuals & adoption	.66	.56	.13
Same-sex marriage	.73	.46	.17
Law on abortion	.65	.58	.13
Gov funding abortion	.58	.66	.11
Late-term abortion	.43	.82	.06
Guidance from religion in life	.56	.69	.10
Authority of bible	.61	.62	.11
Adjust moral views to change	.34	.88	.05
Tolerate others' moral standards	.51	.74	.08
Newer lifestyles, breakdown	.64	.59	.13
Traditional family ties	.64	.59	.12

**Table A.3**  
**Factor Analysis for Issues Scales, GSS 1977-2002**

<b>Economic Issues Scale</b>			
Number of observations = 32,557			
Largest eigenvalue = 2.34; proportion of variance = 1			
Second eigenvalue = .60			
Item	Factor Loadings	Uniquenesses	Scoring Coefficients
Spending: the environment	.32	.90	.09
Spending: health	.40	.83	.12
Spending: problems of cities	.33	.89	.09
Spending: welfare	.44	.80	.12
Gov. role equalizing income	.58	.66	.18
Taxes	.03	.99	.01
Confidence: financial institutions	.13	.98	.04
Confidence: business	.24	.94	.06
Confidence: labor	.23	.95	.06
Gov resp to help poor	.69	.52	.27
Gov resp to solve natl problems	.65	.57	.23
Gov resp to help the sick	.63	.60	.21
<b>Moral Issues Scale</b>			
Number of observations = 26,194			
Largest eigenvalue = 5.72; proportion of variance = .66			
Second eigenvalue = 2.16			
Item	Factor Loadings	Uniquenesses	Scoring Coefficients
Atheist allowed to speak	.50	.75	.08
Atheist allowed to teach	.49	.76	.07
Book by atheist in library	.54	.71	.09
Homosexual allowed to speak	.56	.69	.10
Homosexual allowed to teach	.57	.67	.11
Book by homosexual in library	.57	.67	.09
Legalization of marijuana	.49	.76	.07
Religiosity	.38	.86	.05
Confidence: clergy	.27	.93	.03
Abortion: birth defect	.50	.75	.08
Abortion: want no more children	.74	.45	.15
Abortion: health of mother	.42	.83	.06
Abortion: poor	.70	.50	.11
Abortion: rape	.51	.74	.07
Abortion: single	.73	.47	.14
Abortion: any reason	.72	.47	.12
Homosexual sex	.57	.67	.08
Extramarital sex	.35	.88	.04
Laws regulating pornography	.53	.72	.07

## Interpretation of Issue Scales

What do different values of the *Economic Issues Scale* mean? We examine the 1992-2000 ANES. First, consider a respondent with the following profile: She wants to increase spending (score = 1) on child care, the poor, homelessness, public schools, social security, and environmental protection, and hold spending the same on all other items. She has a “one-point left of center” score of 3 on the following 7-point scales: government spending and services, government health insurance, and government and jobs/standards of living. She has the average score on all other items (not literally possible, of course, but approximately possible). Then the respondent would have a score at the 26<sup>th</sup> percentile on the *Economic Issues Scale* – i.e., 74% of the respondents would be more conservative than her, and 26% would be more liberal.

Next, consider another respondent with the following profile: She wants to decrease spending (score = 3) on food stamps and welfare, and hold spending the same on all other items. She has a “one-point right of center” score of 5 on the following 7-point scales: government spending and services, government health insurance, government and jobs/standards of living; and environmental regulations vs. business. She has the average score on all other items. Then the respondent would have a score at the 80<sup>th</sup> percentile on the *Economic Issues Scale*.

What about different positions on the *Moral Issues Scale*? Consider a respondent with the following profile: She favors laws to protect homosexuals against job discrimination (but not strongly, score = 2). She believes that gays should be allowed to serve in the military (but not strongly, score = 2), that homosexual couples should be legally permitted to adopt children (score = 1), that by law a woman should always be able to obtain an abortion as a matter of personal choice (score = 1), and that the law should allow public schools to schedule time when children can pray silently if they want to (score = 2). She disagrees somewhat with the statement that the world is always changing and we should adjust our view of moral behavior to those changes, and agrees somewhat with the statement that newer lifestyles are contributing to the breakdown of society. She has the average score on all other items. Then the respondent would have a score at the 24<sup>th</sup> percentile on the *Moral Issues Scale*.

Finally, consider a respondent with the following profile: She opposes laws to protect homosexuals against job discrimination (but not strongly, score = 4). She believes that gays should not be allowed to serve in the military (but not strongly, score = 4), that homosexual couples should not be legally permitted to adopt children (score = 3), that the law should permit abortion only in case of rape, incest, or when the woman’s life is in danger (score = 3), and that the law should allow public schools to schedule time when children as a group can say a general prayer not tied to a particular religious faith (score = 3). She agrees strongly with the statement that the world is always changing and we should adjust our view of moral behavior to those changes, and disagrees strongly with the statement that newer lifestyles are contributing to the breakdown of society. She has the average score on all other items. Then the respondent would have a score at the 76<sup>th</sup> percentile on the *Moral Issues Scale*.

## Endnotes

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<sup>1</sup> We also constructed an *Economic Issues Scale* in which we added the following items to those above: A 7-point scale on defense spending, where 1 = “Greatly increase defense spending,” and 7 = “Greatly decrease defense spending.” A 3-point scale on foreign aid spending, where 1 = “spending should be decreased or cut out entirely,” 2 = “spending should stay the same,” and 3 = “spending should be increased.” Four feeling thermometers for the following groups or institutions: welfare recipients, poor people, environmentalists, the federal government. Six 5-point scales on statements about equality and equal opportunity, where the choices are: “agree strongly,” “agree somewhat,” “neither agree nor disagree,” “disagree somewhat,” and “disagree strongly.” The statements and codes are: “Our society should do whatever is necessary to make sure that everyone has an equal opportunity to succeed” (1 = disagree strongly... 5 = agree strongly). “One of the big problems in this country is that we don’t give everyone an equal chance” (1 = disagree strongly... 5 = agree strongly). “If people were treated more equally in this country we would have many fewer problems” (1 = disagree strongly... 5 = agree strongly). “We have gone too far in pushing equal rights in this country” (1 = agree strongly... 5 = disagree strongly). “It is not really that big a problem if some people have more of a chance in life than others” (1 = agree strongly... 5 = disagree strongly). “The country would be better off if we worried less about how equal people are” (1 = agree strongly... 5 = disagree strongly). The results using this modified scale are essentially the same as those reported in the paper.

<sup>2</sup> We also constructed a *Moral Issues Scale* in which we added one question on the death penalty, and feeling thermometers for feminists, the women’s movement, homosexuals, and Christian fundamentalists. The results using this modified scale are essentially the same as those reported in the paper.

<sup>3</sup> A handful of questions were left out of some surveys. We imputed values for the missing years, using the “best subset linear regression” imputation method. We have also constructed a *Moral Issues Scale* using a smaller set of questions that were present in every survey, obtaining very similar results to those presented in the paper.