

II.C.2. PUBLIC OPINION ABOUT THE ENVIRONMENT, CONSUMPTION AND ECONOMIC GROWTH

II.C.2.a. General Support for Environmental Protection

Box IIC-6 shows trends in the United States over the past 23 years of support for spending money to protect the environment. After a high point in the early 1970's support moderated for most of that decade, then increased steadily through the 1980's as evidence of threats to the environment mounted. After a second high point in the late 1980's and early 1990's, culminating in the 1991 Earth Summit in Rio de Janeiro, support dropped once more. But despite the ups and downs the level of stated support for environmental protection is consistently high.

Further evidence of strong support for environmental protection is seen in **IIC-7** and **IIC-8**. In 1989 the issues listed in IIC-7 were sources of "worry" for an average of 80% of Americans. By 1997 this proportion had dropped a bit, to 75%, but this still indicates a very high level of concern. In 1994 upwards of 75% of Americans considered pesticides, nuclear power and global warming either extremely or somewhat "dangerous," as shown in Table 1 of IIC-8. And throughout the 1990's, a period of great ferment against governmental regulation, over 80% of Americans consistently supported *stricter* regulations to protect the environment, as shown in Table 2.

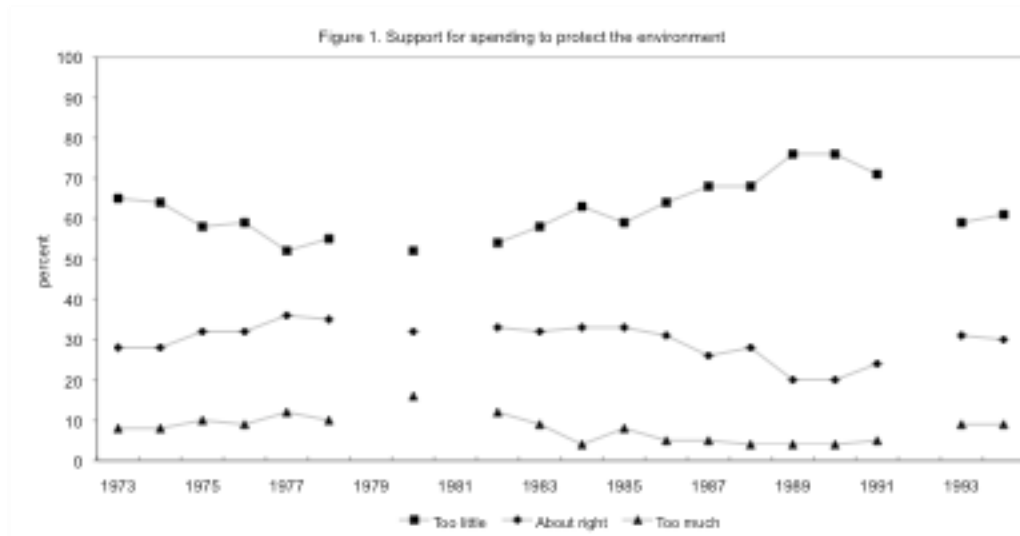
However, despite this very broad concern, environmental issues do not appear to stand out as a particularly *deep* concern. **IIC-9** and **IIC-10** show the results of a 1996 Pew Research Center survey in which respondents were asked to state the main wishes, hopes, fears and worries they had, both for themselves and for the country as a whole. The issues that people mentioned most frequently concerned money, jobs, health, their families, international conflict, crime,

SCENARIOS FOR THE 21ST CENTURY

BOX II-6. Support for environmental protection
[percents]

Table 1. Are we spending too much money, too little money, or about the right amount on improving and protecting the environment?

	too little	about right	too much
1973	65	28	8
1974	64	28	8
1975	58	32	10
1976	59	32	9
1977	52	36	12
1978	55	35	10
1979			
1980	52	32	16
1981			
1982	54	33	12
1983	58	32	9
1984	63	33	4
1985	59	33	8
1986	64	31	5
1987	68	26	5
1988	68	28	4
1989	76	20	4
1990	76	20	4
1991	71	24	5
1992			
1993	59	31	9
1994	61	30	9



source: National Opinion Research Center General Social Survey, codebook variable NATENVIR

BOX IIC-7. Public concern about environmental problems (1)
[percents]

I'm going to read you a list of environmental problems. As I read each one, please tell me if you personally worry about this problem a great deal, a fair amount, only a little, or not at all. How much do you personally worry about...

		Great Deal	Fair Amount	Only A Little	Not At All
a. The "greenhouse effect" or global warming	Nov 97	24	30	26	15
	May 89	35	28	18	12
b. Damage to the earth's ozone layer	Nov 97	40	28	21	9
	May 89	51	26	13	8
c. Contamination of soil and water by toxic waste	Nov 97	59	24	13	4
	May 89	69	21	7	3
d. Air Pollution	Nov 97	47	34	14	4
	May 89	63	25	8	4
e. Pollution of rivers, lakes & reservoirs	Nov 97	61	27	9	3
	May 89	72	19	5	3
f. The loss of tropical rain forests	Nov 97	44	26	19	10
	May 89	42	25	18	12
g. The loss of natural habitat	Nov 97	46	32	16	5
	May 89	58	27	9	5

source: Pew Research Center for People and the Press, News Interest Index Poll, 11/12-16, 1997; Question 22.

BOX IIC-8. Public Concern About Environmental Problems (2)

[percents]

Table 1

In general, do you think the items listed are...	pesticides and chemicals used in farming	nuclear power stations	global warming
extremely/very dangerous for you and your family	37	40	41
somewhat dangerous for you and your family	51	36	39
not very/not dangerous for you and your family	12	24	20

sources: National Opinion Research Center General Social Survey, 1994; codebook variables CHEMFAM, NUKEFAM and TEMPFAM.

Table 2

There needs to be stricter laws and regulations to protect the environment.

	Completely Agree	Mostly Agree	Mostly Disagree
Nov 97	41	40	13
July 94	46	36	13
June 92	55	35	7

source: Pew Research Center for People and the Press, News Interest Index Poll, Nov. 1997.

BOX IIC-9. PERSONAL HOPES AND FEARS

[percents; up to three responses accepted]

1. What are your main wishes and hopes for yourself and your family... the things you most hope for to be happy in your life?

- 42 Financial**
more opportunities/get a better job (11); financial security (10); stability of social security (7); make more money/better wages (6); more successful professionally (5); sound economy (4); other (3)
- 21 Health**
good health/long life (18);
- 18 Family/Children**
happiness for family/children (7); education/job opportunities for kids (6); starting a family/having children (4); other (2)
- 10 Peace/Stability**
no wars/People not killing each other (7); other (3)
- 6 Quality of life**
- 6 Less crime**
- 4 Less government**
- 4 Return to morality**
- 4 Education**
get an education/finish school (3); other (1)
- 3 Material possessions**
buy a House (2); other (1)
- 10 Other**
- 12 Don't know**

2. What are your main fears and worries about your future?

- 38 Financial**
job security/find a job (10); personal finances/not enough money (10); stability of social security system (6); the economy (6); retirement plans/money for retirement (4); other (5)
- 14 Health**
being sick/poor health (8); inadequate health care/insurance (5); other (2)
- 10 Crime**
- 6 Worries about children's future**
- 5 The political system**
- 4 War/international instability**
- 3 Things getting worse/going downhill**
- 3 Moral decline**
- 24 None/no worries**
- 2 Don't know**

source: Princeton Survey Research Associates/Pew Research Center for the People & the Press; State of the Union Poll, 11/22-12/1 1996; Questions 3 and 4.

BOX IIC-10. HOPES AND FEARS FOR THE COUNTRY

[percents; up to three responses accepted]

1. WHAT ARE YOUR MAIN WISHES AND HOPES FOR THE COUNTRY'S FUTURE?

- 26 **Economic**
more jobs (9); a good/better economy (7); balance budget/less gov debt (6); other (7)
- 19 **World Peace/National Security**
world peace/no more war (16); stronger military/security (2); other (2)
- 12 **Crime**
less crime/violence (11); eliminate drug problems (1); other (1)
- 10 **Religion and Morality**
more moral society (5); more emphasis on religion (3); other
- 9 **Government/political Leadership**
better leadership (3); other (6)
- 8 **Cooperation/unity**
more unity (4); other (4)
- 6 **More money for education**
- 4 **Race relations (4)**
racial equality (2) other (1)
- 4 **Improved health care**
- 3 **Taking care of our own citizens**
- 3 **Help to the Homeless**
- 2 **Change Welfare**
- 9 **Other**
- 8 **Don't know**

2. WHAT ARE YOUR MAIN FEARS AND WORRIES ABOUT THE COUNTRY'S FUTURE?

- 18 **Economic**
the economy (4); unemployment, job loss (4); budget imbalance/debt (3); other (8)
- 12 **War/National Security**
war/fighting between nations (10); other (2)
- 10 **Crime/violence**
- 8 **Government/Political leadership**
effectiveness of government/political leadership (4); other
- 6 **Religion and Morality**
low morals (4); other (3)
- 6 **Things are getting worse/going downhill**
- 3 **Racial tension**
- 15 **Other**
- 28 **None/no worries**
- 1 **Don't know**

source: Princeton Survey Research Associates/Pew Research Center for the People & the Press; State of the Union Poll, 11/22-12/1 1966; Questions 5 and 6.

morality, and the quality of political leadership. Environmental concerns were not mentioned by enough people to appear in the final tally.¹

The impression that public concern about environmental issues is broad but perhaps less than critical is supported by the survey results shown in **IIC-11**. Eleven news stories that received important coverage in late 1997 are ranked by how closely they were followed by the general public. Coverage of the debate over US global warming policy was ranked second to last.²

It is possible that public concern about the environment is not so much less deeply held in a fundamental sense than are concerns about other issues, but that environmental issues appear to be more tractable, and thus perhaps less worrisome overall. This possibility is supported by the results of the survey described in **IIC-12**, which asked about the extent of progress people believed was being made on 17 social problems. Respondents believed that more progress was being made on addressing “environmental pollution” than on any of the other issues mentioned. Those issues on which they felt that *little* progress was being made were largely those that appeared as *high* sources of concern in the surveys described in IIC-9 and IIC-10. As might be expected, environmental protection ranked low--15 out of 20--when respondents were asked to name the single issue that they would like to see more done about. Crime, education, health care, finances, drugs and poverty/homeless issues headed the list.

II.C.2.b. Willingness to Pay for Environmental Protection

How willing are Americans to pay for environmental protection? The survey results displayed in **IIC-13** show very mixed responses. Tables 1, 2 and 3 all indicate that willingness to pay more for environmental protection is split roughly evenly between those who suggest they are

¹ Concerns mentioned by less than 2% of respondents were listed as “other.”

² If the survey had been conducted at the end of December, after the Kyoto negotiations, rather than during the period preceding them, attention paid to coverage of global warming concerns might have registered higher.

BOX IIC-11. NEWS STORIES FOLLOWED BY THE PUBLIC
[percents]

Now I will read a list of some stories covered by news organizations this past month. As I read each item, tell me if you happened to follow this news story very closely, fairly closely, not too closely, or not at all closely.

	Very Closely	Fairly closely	Not too Closely	Not at all Closely
1. Iraq's refusal to let Americans participate in weapons inspections	44	32	10	13
2. The trial of the British au pair accused of murdering an 8-month old child	29	36	20	14
3. Preparations for storm and flooding expected from El Nino	25	37	20	16
4. Recent ups & downs in the stock market	25	36	18	20
5. proposal in Congress to reform the IRS	25	34	18	22
6. The discovery of videotapes of President Clinton's White House coffees with campaign contributors	18	28	28	25
7. Congressional hearings on improper campaign contributions	16	33	27	23
8. The debate in Congress over "fast track" trade legislation	11	23	29	35
9. Chinese President Jiang Zemin's visit to the US	10	29	28	32
10. the debate over US policy concerning global warming	9	24	33	33
11. Elections in Virginia, New Jersey, New York City and other localities	7	14	22	55

note: the news stories are shown ranked beginning with the "most closely" followed. In the survey the order of the stories was rotated among respondents.

Source: Pew Research Center for the People and the Press, News Interest Index Poll, Nov. 1997.

BOX IIC-12 . MAKING PROGRESS; MORE TO BE DONE

[percents]

A. Now I'd like to ask you some questions about some of the problems we face in this today... Do you think the problem of (insert) is About the Same as it has been, that we are Making Progress towards solving the problem, or that on this problem the country is Losing Ground?

	Making Progress	About the same	Losing Ground
soc. security/Medicare	10	21	65
high taxes	11	31	55
political corruption	12	36	49
low morals& ethics	12	24	62
drugs	13	21	64
job security	14	25	58
poverty/homeless	14	30	54
illegal immigration	15	32	47
crime	15	23	61
good-paying jobs	19	26	51
health care system	20	25	52
federal budget deficit	23	24	48
public education	24	22	52
race conflict	27	31	39
welfare system	31	21	45
discrimination	33	36	28
* environmental pollution	42	26	30

B. Of the issues listed, which ONE would you most like to see more done about?

crime	12
public education	12
health care system	8
federal budget deficit	7
soc. security/Medicare	7
drugs	7
poverty/homeless	7
high taxes	7
welfare system	6
low morals & ethics	4
job security	4
political corruption	4
good paying jobs	3
* environmental pollution	3
race conflict	2
discrimination	1
illegal immigration	1
none	1
don't know	4

The responses to question A have been sorted in increasing order of "Making Progress."
The responses to question B have been sorted in decreasing order of "urgency."

source: Pew Center for the People and the Press, State of the Union Poll, 11/22-12/1/96.

BOX IIC-13. Willingness to Pay to Protect the Environment

[percents]

Table 1

We worry too much about the future of the environment, and not enough about prices and jobs today.

	1994
strongly agree/agree	42
neither agree nor disagree	14
disagree/strongly disagree	44

source: National Opinion Research Center General Social Survey, codebook variable GRNECON.

Table 2

People should be willing to pay higher prices in order to protect the environment.

	Complete Agree	Mostly Agree	Mostly Disagree	Completely Disagree
Nov. 97	17	38	29	16
July 94	17	40	28	15
June 92	26	41	22	11

source: Pew Center for the People & the Press, Values Update Survey, Nov. 1997

Table 3

How willing would you be to pay much higher prices in order to protect the environment?

	1994
Willing	50
Neither willing nor unwilling	24
Unwilling	26

source: National Opinion Research Center General Social Survey, codebook variable GRNPRICE.

Table 4

How willing would you be to pay much higher taxes in order to protect the environment?

	1994
Willing	35
Neither willing nor unwilling	22
Unwilling	43

source: National Opinion Research Center General Social Survey, codebook variable GRNTAXES

Table 5

"People should pay the environmental costs of the things they buy. Products should be taxed depending on their effect on the environment."

	Earth First	Sierra Clu	public	dry cleaner	sawmill wks
Agree:	97	85	70	77	48

source: Kempton et al., (1995:257)

Table 6

"I would be willing to pay as much as 10% more a week for grocery items if I could be sure they would not harm the environment."

	Yes	No
1990	64	31
1971	47	43

source: Yankelevitch (1980); cited in Kempton et al., (1995:5)

Table 7

How much more per month would you personally be willing to pay for all the goods and services you use as a consumer, if you know that as a result... business and industry would... not harm the environment?

1990	36.99	[median value]
1984	10.23	[median value, 1990 dollars]

source: Cambridge Reports (1990); cited in Kempton et al., (1995:5)

and those who suggest they are not. Table 3 and Table 4 distinguish between willingness to pay in the form of *prices* and *taxes*, and show a markedly greater unwillingness to pay in the form of taxes. Table 5 is from Kempton et al.'s intensive survey of groups chosen to represent the spectrum of tendencies with respect to environmental values, ranging from Earth First! and the Sierra Club on one end, through a general public sample in the middle, to dry cleaners subject to toxic regulations and finally to saw mill workers who were laid off as a result of legislated reductions in logging on the other. Kempton's results show far higher willingness pay by the environmentalists, as would be expected, but show very high willingness among the general public and the dry cleaners as well. The results in Tables 4 and 5, if valid, might be interpreted to imply that while 70% of the public believes that people *should* pay environmental taxes, only 35% would be willing to actually pay them. Alternatively, there may have been important differences in the context and presentation of the survey that produced such apparently disparate results.³

Tables 6 and 7 in IIC-13 go beyond general sentiment and attempt to measure willingness-to-pay in dollar terms. Whether these results indicate high or low willingness is a matter of interpretation. The average household spends about \$2803 annually for groceries; thus the 10% premium that 2/3 of Americans are willing to pay for environmentally safe grocery items represents an added dollar cost of \$280/year. Meanwhile, as noted below in Table 4, most Americans appear willing to pay an extra 25 cents per gallon of gasoline to reduce global warming; for the average household this represents an added annual cost of \$239. The sum of these two premiums alone comes to \$519 a year. But Table 7 suggests that for a majority of Americans the amount they would be willing to pay to address environmental harms associated with "all goods and services" they consume would be in the neighborhood of \$444 per year.

³ Kempton et al.'s results consistently show far higher levels of support for environmental protection than do the results of most other surveys.

Returning to the important topic of global warming, the public appears split down the middle on their general willingness to support higher prices and taxes, but more clearly opposed to taking action if such steps would cause unemployment to go up a great deal, as shown in **IIC-14**. When specific prices are mentioned, the levels of support or opposition become clearer. Nearly three-fourths would support a nickel per gallon gasoline tax, and, as noted above, 60% would support a 25-cent levy. This tax is about the level required by the goals tentatively agreed to in the Kyoto accords, which would bring US CO₂ emissions to 7% below 1990 levels by 2010. However, it is not enough to stabilize emissions at a level that would stabilize global warming below 2.5 degrees Centigrade; for this, carbon taxes at a level equivalent to as much \$2.00 per gallon are probably required. Still, these higher levels of price disincentives can be phased in over a period of several decades. On balance, the apparent willingness of Americans to support a 25 cent gas tax to address global warming is an encouraging sign. But the question of how much Americans may be willing to pay to address the entire range of environmental concerns remains unresolved.

II.C.2.c. Growth and the Environment

The debate over “growth and the environment” takes place in at least two domains. One is a micro-domain of arguably calculable marginal costs and benefits, and focuses on the sorts of concerns we noted in the immediately preceding section. The other is a macro-domain of less easily articulated but perhaps deeper concerns about the nature of the relation between growth and the environment, and what it means for the well-being of one’s self, one’s family and others. For most Americans the terms “growth” and “environment” both carry strongly positive connotations; thus the possibility of a conflict between them is unsettling. Survey results reflect this, as shown in **IIC-15**. If forced to choose, most Americans will typically express a commitment to assuring the integrity of the environment, as shown in Tables 1 and 2. At the same time, they seek to affirm statements which suggest that perhaps environmental protection

BOX IIC-14. WILLINGNESS TO PAY TO AVOID GLOBAL WARMING
[percents]

Table 1.

Would you, personally, be willing or not willing to have the United States take steps to reduce global warming if costs for gasoline or electricity went up a great deal?

	1997
Yes, willing	44
Not willing	48
depends (volunteered)	4
no opinion	4

source: The Gallup Organization, www.gallup.com/poll/news971202.html

Table 2

Would you, personally, be willing or not willing to have the United States take steps to reduce global warming if unemployment went up a great deal?

	1997
Yes, willing	34
Not willing	54
depends (volunteered)	5
no opinion	7

source: The Gallup Organization, www.gallup.com/poll/news971202.html

Table 3

Would you be willing to pay 5 cents more per gallon if it would significantly reduce global warming, or wouldn't you?

	1997
Yes, willing	73
Not willing	24
don't know/refused	3

source: Pew Research Center for the People & the Press, 11/97 News Interest Index Poll.

Table 4

Would you be willing to pay 25 cents more per gallon if it would significantly reduce global warming, or wouldn't you?

	1997
Yes, willing	60
Not willing	37
don't know/refused	3

source: Pew Research Center for the People & the Press, 11/97 News Interest Index Poll.

BOX IIC-15. ECONOMIC GROWTH AND THE ENVIRONMENT
[percents]

Table 1

Which of these statements comes closest to your own point of view: Protection of the environment should be given top priority, even at the risk of curbing economic growth, or, Economic growth should be given top priority, even if the environment suffers to some extent?

	protect environment	economic growth	no opinion
1995	62	31	7
1991	70	20	10
1990	70	19	11
1984	61	27	12

source: The Gallup Organization, survey, May 11-14, 1995.

Table 2

Economic growth always harms the environment.

	1994
Agree	21
Neither agree nor disagree	26
Disagree	53

source: National Opinion Research Center General Social Survey, codebook variable GRWTHARM

Table 3

In order to protect the environment, American needs economic growth.

	1994
Agree	48
Neither agree nor disagree	24
Disagree	28

source: National Opinion Research Center General Social Survey, codebook variable GRWTHHELP

Table 4

"The American people would be better off if the nation's economy stopped growing so fast."

	Earth First!	Sierra Club	public	dry cleaners	sawmill workers
agree:	97	85	70	77	48

source: Kempton et al. (1995:270)

and economic growth need not, after all, be in conflict, as shown in Table 3 (and in Table 1 of Box IIC-17 as well). Clearly, the terms “economic growth” and “environment” are too abstract to allow a useful unqualified judgment about their relative value. But in the United States the terms are commonly used as metaphors for particular constellations of social values and commitments. These are indeed often in conflict, as suggested by the large minority positions shown in the survey results displayed in IIC-15, and especially in the widely diverging responses shown in Table 4.

II.C.2.d. Consumption and the Environment

Additional ambivalence concerning economic values and environmental values can be seen in the results reported in **IIC-16**. By overwhelming majorities, the respondents express support for a whole range of statements that appear to reflect a dissatisfaction with consumerism and materialism, and a sense that the high-consumption path we are on is in some manner ecologically unsustainable, as seen in Table 1 and Table 2. However, when it comes to making the sorts of changes in personal behavior that these sentiments seem to call for, the respondents agree to all of them, *except* for the one that would eliminate an individual’s continuing *option* of pursuing a high-consumption path, as shown in Table 3.

Signs of ambivalence are further compounded by the results shown in **IIC-17**. The statements shown in Table 1 and Table 2 were deliberately crafted by their authors to ferret out inconsistent beliefs. They note that only the Earth First!ers respond in clearly consistent proportions to the two statements (Kempton:130). The responses of the other groups can be reconciled only if we assume they are suggesting that a “drastic” reduction in one’s “level of consumption” need not reduce one’s “standard of living.” I use quotes around the key terms because their precise definition determines whether that suggestion may be reasonable or not.

The results in Table 4 and Table 5 similarly appear to be inconsistent. In Table 4 fully 97% of the public appear willing to decrease their “standard of living today” if this is necessary in

BOX IIC-16. CONSUMPTION AND THE ENVIRONMENT
[percents]

Table 1

	Agree	Disagree	don't know
An underlying cause of environmental problems is that:			
(i) We focus too much on getting what we want now and not enough on future generations.	91	8	1
(ii) buying and consuming is the American Way.	89	11	1
I believe that protecting the environment will require most of us to make major changes in the way we live	88	12	1

Table 2

I'm going to mention some actions that we as Americans could take to help the environment. For each possible action, please tell me whether you believe it would make a Big difference in helping the environment, make Some difference, make No difference at all, or whether it would actually hurt the environment.

	Big/Some	None	Hurt	don't know
i) if we all reduced the amount of stuff we consume.	89	8	1	2
ii) if we taught our children to be less materialistic.	89	9	1	1

Table 3

Some people say that Americans should take action to reduce the amount we consume and the level of materialism in our society. Others say such actions are unnecessary. I'm going to read a list of actions that have been suggested. For each action, please tell me which of these statements best describes your view:

- A. That's a good idea; we should move ahead with it.
- B. That's a good idea, but I'm not ready to do that.
- C. That's not a good idea.

	A	B	C	don't know
i) Use our possessions longer instead of buying new things	81	13	6	1
ii) Spend less money so we can save more.	71	19	9	1
iii) Spending more time working with our neighbors on community service projects and less time shopping	76	15	7	1
iv) Spend less time working and make less money than we do now	18	21	56	4

Source for all tables: Merck Family Fund (1995)

BOX IIC-17. Personal consumption, standards of living, and the environment
[percents]

Table 1

We don't have to reduce our standard of living to solve global climate change or other environmental problems.

	Earth First!	Sierra Club	Public	Dry Cleaners	Sawmill Wrkrs
agree:	23	59	60	63	67

Table 2

Americans are going to have to drastically reduce their level of consumption over the next few years.

	Earth First!	Sierra Club	Public	Dry Cleaners	Sawmill Wrkrs
agree:	90	74	87	69	67

Table 3

You shouldn't force people to change their lifestyles for the sake of the environment.

	Earth First!	Sierra Club	Public	Dry Cleaners	Sawmill Wrkrs
agree:	0	0	27	13	41

Table 4

We have to protect the environment for our children, and for our grandchildren, even if it means decreasing our standard of living today.

	Earth First!	Sierra Club	Public	Dry Cleaners	Sawmill Wrkrs
agree:	100	100	97	87	74

Source: Tables 1 through 4 are from Kempton et al (1995:257,258,270).

Table 5

How willing would you be to accept cuts in your standard of living in order to protect the environment?

	1994
Willing	33
Neither willing nor unwilling	24
Unwilling	43

Source: National Opinion Research Center General Social Survey, codibook variable GRNSOL.

order to “protect the environment for our children...” But in Table 5 only 33% are clearly willing to accept cuts in their “standard of living in order to protect the environment,” and fully 43% are explicitly unwilling. The important difference, of course, is that the first question includes “for our children” as the stated rationale for protecting the environment, whereas the second question leaves the rationale unstated. If the reported results are valid, this means that 93% of the 43% of respondents who said they were unwilling to accept cuts in their standard of living in order to protect the environment in and of itself, so to speak, would be willing to do so if they believed the well-being of their children was at stake. This finding might be felt to have important implications for the debate over growth and the environment. On the other hand, the result shown in Table 4 may be less a measure of an intrinsic willingness to support the environment than it is of the willingness of parents to make sacrifices for their children.

II.C.2.e. International Comparisons

Many surveys of environmental opinions in countries other than the United States have been conducted. We highlight a very few of these here to introduce the topic.

A. World Values Survey (1990-1993)

Inglehart (1995) supervised a wide-ranging survey of values held by people in 43 countries, covering 70% of the world’s population. Environmental values were directly addressed through several questions. When asked if they approved or disapproved of the environmental movements in their countries, 96 % of the persons surveyed said they approved. When asked if they agreed or disagreed with the statement, “I would be willing to pay more taxes if I were certain that the money would be used to prevent environmental pollution,” 65% said they agreed. The results by country are shown in Table 1 of **IIC-18**. People were also asked whether they agreed or disagreed with the statement, “The government has to reduce environmental pollution, but it should not cost me any money.” This is the same question as the preceding one, but structured such that a response of *agreement* indicates an *unwillingness* to pay

BOX IIC-18. SUPPORT FOR ENVIRONMENTAL PROTECTION AMONG COUNTRIES

[percents]

Table 1
Willingness to Sacrifice for Environmental Protection

"I would agree to an increase in taxes if the extra money is used to prevent environmental pollution."

country	percent "agree" or "strongly agree"
1 China	78
2 Sweden	77
3 South Korea	76
4 Chile	76
5 Norway	73
6 Turkey	71
7 Brazil	71
8 Denmark	70
9 Britain	70
10 Bulgaria	70
11 Lithuania	70
12 Slovenia	70
13 Netherlands	69
14 Moscow	69
15 Mexico	67
16 Belarus	67
17 Czechoslovakia	67
18 Russia	67
19 N. Ireland	65
20 Portugal	65
21 United States	64
22 Canada	64
23 Latvia	64
24 Iceland	60
25 Estonia	59
26 Spain	57
27 Italy	57
28 Finland	56
29 Nigeria	56
30 India	55
31 E. Germany	55
32 France	54
33 Austria	52
34 Ireland	51
35 Japan	51
36 Argentina	50
37 W. Germany	49
38 Belgium	41
39 Hungary	35

Table 2
Public Support for Environmental Protection

Percent scoring "high" on Environmental Protection Index*

country	percent
1 Sweden	69
2 Denmark	65
3 Netherlands	64
4 Norway	59
5 South Korea	58
6 Iceland	54
7 Russia	53
8 Turkey	53
9 Czechoslovakia	52
10 China	52
11 Mexico	50
12 Finland	48
13 Brazil	48
14 Japan	47
15 East Germany	47
16 Moscow	46
17 Chile	46
18 Slovenia	46
19 India	45
20 Bulgaria	44
21 Latvia	44
22 Lithuania	43
23 Britain	42
24 Canada	42
25 West Germany	41
26 United States	40
27 Belarus	40
28 Austria	39
29 Estonia	38
30 No. Ireland	38
31 Portugal	34
32 Ireland	36
33 Belgium	33
34 Italy	31
35 Spain	30
36 France	30
37 Argentina	30
38 Nigeria	27
39 Hungary	24

* Respondents are classified as "high" on support for environmental protection if they "agree" or "strongly agree" that:
 (1) "I would be willing to give part of my income if I were sure that the money would be used to prevent environmental pollution."
 (2) "I would agree to an increase in taxes if the extra money is used to prevent environmental pollution"
 AND who "disagree" or "strongly disagree" with the statements:
 (3) "The government would reduce environmental pollution, but it should not cost me any money."
 (4) "Protecting the environment and fighting pollution is less urgent than often suggested."

taxes to reduce environmental pollution. In response to this question only 45% expressed a willingness to pay. Inglehart notes that none of these responses reveal the “true” level of support for environmental protection; rather, they measure different things. Thus, for further analysis, Inglehart constructed an Environmental Protection Index based on the four questions shown at the bottom of IIC-18. The country by country ranking of support for environmental protection, as measured by the Environmental Protection Index, is shown in Table 2.

Inglehart notes that countries that score higher on the Environmental Protection Index tend to do so for several reasons. Some score high for *objective* reasons, i.e., because the level of pollution in their countries is so great that the disutility is widely acknowledged. These include both developing countries like China, Mexico and Brazil, which have only recently begun to industrialize, and more fully industrialized countries such as South Korea, Russia and Czechoslovakia. Other countries score high because of *subjective* or *cultural* reasons. These include the Nordic countries and the Netherlands, who have some of the lowest pollution levels of any countries of the world, yet score the *highest* on the Environmental Protection Index.

Inglehart interprets the pattern of support for environmental protection among countries through his theory of *postmaterialism*:

“...as a result of the rapid economic development and the expansion of the welfare state following World War II, the formative experience of the younger birth cohorts differed from that of older cohorts in ways that were leading them to develop fundamentally different value priorities. Throughout most of history, the threat of severe starvation had been a crucial concern for most people. But the unprecedented degree of economic security experienced by the postwar generation in most industrial societies was leading to a gradual shift from “materialist” values towards “postmaterialist” values.” (p 62)

As used by Inglehart, “materialist” values emphasize economic and physical security, while “postmaterialist” values emphasize freedom, self-expression and the quality of life.

In 1970 Inglehart devised a four-item survey module that, he believed, could distinguish persons and groups holding higher and lower levels of materialist and postmaterialist values. Since that time Inglehart and his colleagues have been conducting surveys that they believe demonstrate empirically the shift from materialist to postmaterialist values in industrial societies.

The four-item survey module asks respondents to consider four goals for their nation and identify the two that they believe should be the top goals. The four goals are:

1. maintaining order in the nation
2. giving the people more say in important governmental decisions
3. fighting rising prices
4. protecting freedom of speech

Persons choosing goals 1 and 3 are identified as “materialist.” Persons choosing 2 and 4 are “postmaterialist.” Persons choosing any of the other four combinations are identified as having “mixed” values.⁴

Box IIC-19 shows the distribution of materialist, postmaterialist and mixed values among the citizens of six Western European nations over the period 1971 to 1993.⁵ **IIC-20** shows the same information for the United States.

Inglehart claims that environmentalist values are clearly postmaterialist values, and associates the rise of the environmental movement in the West with the maturing of the first postwar birth cohorts. **IIC-21** demonstrates a high positive correlation between the importance a person gives to postmaterialist values and the likelihood that they will vote for the Greens in upcoming elections in Europe.

Inglehart’s “cohort” theory of societal value shift is a predictive theory. **IIC-22** shows Inglehart’s calculations, using demographic and survey data, of the continuing growth of postmaterialist values through 2020 in the six European nations that he has surveyed most thoroughly. Although postmaterialist values continue to spread, they do so at a slower rate than in past decades, largely due to the steady decline in population growth in these countries.

⁴ Inglehart has also developed 8- and 12-item modules that allow finer identification of materialist and postmaterialist value orientations. The 8-item module include these four additional goals: a) maintaining a high rate of economic growth, b) making sure the country has a strong defense force, c) seeing that people have more say in how things are decided at work and in their communities, and d) trying to make our cities and countryside more beautiful. The 12-item module adds e) maintaining a stable economy, f) progress toward a less impersonal, more humane society, g) the fight against crime, and h) progress toward a society where ideas are more important than money.

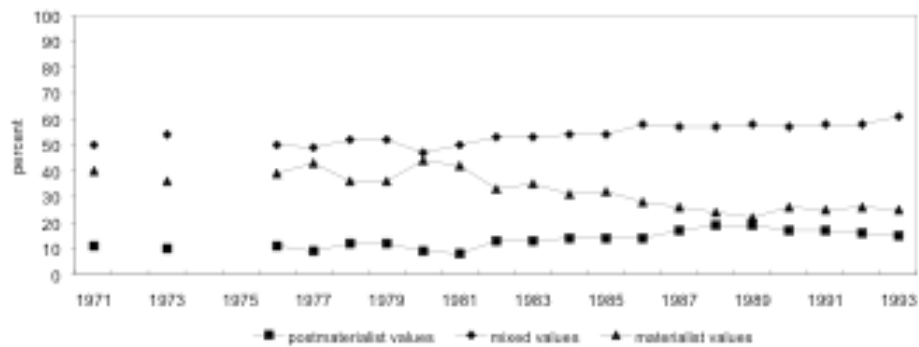
⁵ The nations are West Germany, United Kingdom, The Netherlands, France, Belgium and Italy.

BOX IIC-19. Materialist/Postmaterialist values in Six Western European Publics
[percents]

Table 1.

	postmaterialist	mixed	materialist
1971	11	50	40
1972			
1973	10	54	36
1974			
1975			
1976	11	50	39
1977	9	49	43
1978	12	52	36
1979	12	52	36
1980	9	47	44
1981	8	50	42
1982	13	53	33
1983	13	53	35
1984	14	54	31
1985	14	54	32
1986	14	58	28
1987	17	57	26
1988	19	57	24
1989	19	58	22
1990	17	57	26
1991	17	58	25
1992	16	58	26
1993	15	61	25

Figure 1. Distribution of Materialist/Postmaterialist Values Western Europe

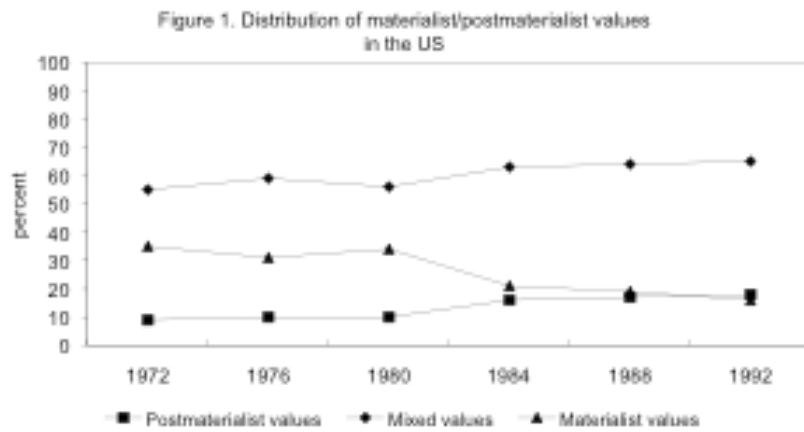


Source: Abramson and Inglehart (1995), Value Change in Global Perspective.

BOX IIC-20. Distribution of Materialist/Postmaterialist values in the US [percents]

Table 1.

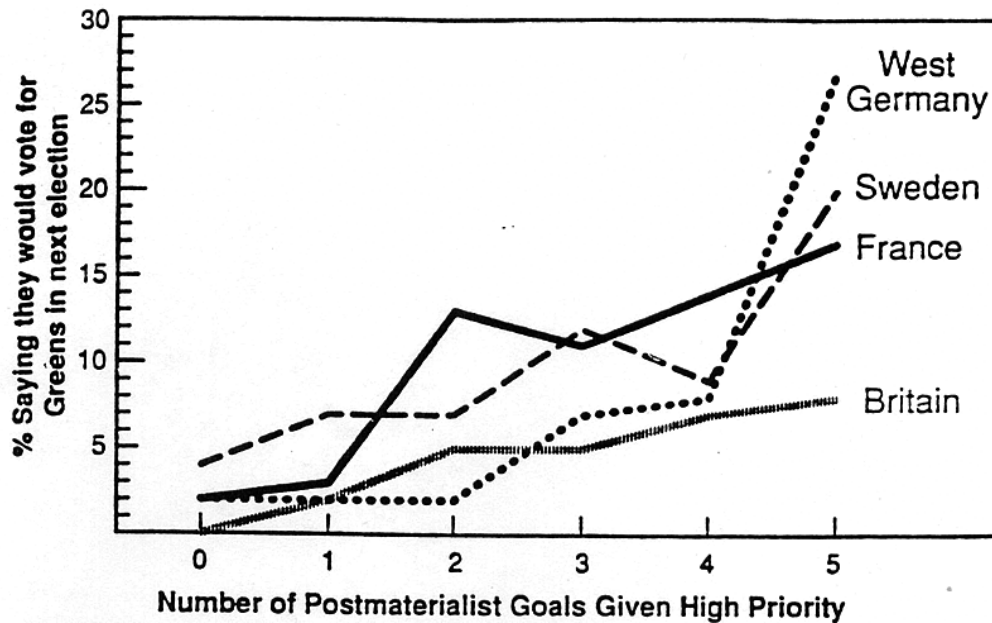
	postmaterialist	mixed	materialist
1972	9	55	35
1976	10	59	31
1980	10	56	34
1984	16	63	21
1988	17	64	19
1992	18	65	16



Source: Abramson and Inglehart (1995:19)

BOX IIC-21. Intent to Vote For Environmentalist Political Parties, by Materialist/Postmaterialist Values in Four Countries

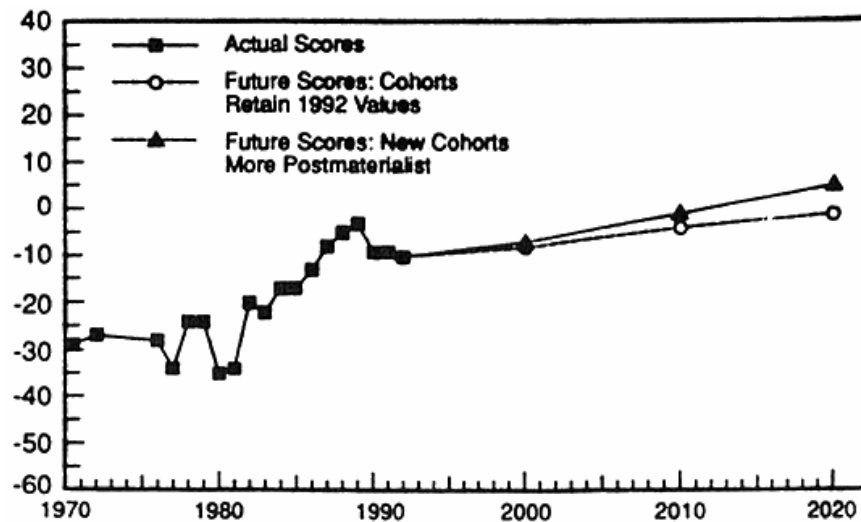
[Reprinted from Inglehart, 1995]



BOX IIC-22. Past and Projected Growth of Postmodern Values

[Reprinted from Abramson and Inglehart, 1995]

The vertical axis shows the postmodernist/modernist difference index (PDI), the percentage of a surveyed population identified as postmodernists minus the percentage identified as modernists. The actual scores are based on surveys done in West Germany, Britain, the Netherlands, France, Belgium, and Italy.



Inglehart's theory has been criticized on both conceptual and methodological grounds by many authors. One frequent criticism is that his use of the terms "materialist" and "postmaterialist" is not in accord with the most common understandings of these terms. Under Inglehart's definition, Bill Gates and Ted Turner, for example, might be characterized as holding "postmaterialist" values, if we suppose that they are motivated less by concerns about "economic and physical security" than they are by concerns about "freedom, self-expression and quality of life."

Terminology can be changed. If we believe that the substance of the theory might have some value, how might this inform our judgment about the credibility of the scenarios constructed in Part I of this dissertation?

The most important thing to note is that the values that Inglehart believes accompany the spread of industrial development need not be consonant with one another. On the one hand, more attention may be given to public goods values such as concern for the environment, whether in its utilitarian, aesthetic or intrinsic forms. On the other hand, Inglehart's postmaterialism emphasizes individualistic, rather than communitarian or solidaristic, sensibilities, which works against the realization of public goods values.

B. Gallup Health of the Planet Survey (1992)

The Gallup organization conducted a major survey of environmental opinions in 22 countries in preparation for the 1992 Earth Summit. **HC-23** shows responses to a question in that survey that sought to determine the relative priorities given to environmental protection and economic growth. We see that in 20 of the 22 countries respondents give greater priority to environmental protection, "even at the risk of slowing down economic growth." The results appears to be at odds with many widely held assumptions and much current political controversy. For example, they suggest that Brazil and Mexico may be far more willing to sacrifice economic

BOX IIC-23. Gallup Health of the Planet Survey
[percents]

With which one of these statement about the environment and the economy do you most agree?

- * Protecting the environment should be given priority, even at the risk of allowing down economic growth.
- * Economic growth should be given priority, even if the environment suffers to some extent.

Countries ranked by percent giving priority to PROTECT THE ENVIRONMENT

70% +		60% - 69%		50% - 59%		< 50%	
Denmark	77	Canada	68	Philippines	59	Turkey	43
Germany (W)	73	Ireland	65	United States	59	India	43
Mexico	72	Uruguay	64	Japan	58		
Norway	72	Rep. Korea	63	Netherlands	58		
Finland	72	Chile	63	Poland	58		
Brazil	71	Switzerland	62	Great Britain	56		
				Russia	56		
				Hungary	53		

Source: Gallup International Institute, Health of the Planet Survey, March 1992. IIP0 1992-93:639.

Sample sizes: Brazil (N=1414); Canada (N=1011); Chile (N=1000); Denmark (N=1019); Finland (N=770); W. Germany (N=1048); Great Britain (N=1015); Hungary (N=1000); India (urban; N=4984); Ireland (N=928); Japan (N=1434); Rep. Korea (N=1500); Mexico (N=1502); Netherlands (N=1011); Norway (N=991); Philippines (N=1000); Poland (N=989); Russia (N=964); Switzerland (N=1011); Turkey (N=1000); United States (N=1032); Uruguay (N=800).

growth in order to protect the environment than is the United States.⁶ In some cases the responses to the Gallup survey and to the Inglehart survey seem consistent with one another (e.g., Russians and Turks respond in nearly the same proportions on both surveys) but in others they seem inconsistent (65% of Irish respondents support the environment over growth in the Gallup survey but only 35% score “high” on Inglehart’s enviro-index shown in Table 2 of IIC-18.) A regression of the Gallup results against the Inglehart results gives an R^2 of only .20. Many questions about the wording, format and administration of these surveys, and about cultural factors that might influence responses, would need to be answered before a confident interpretation of their results could be made.

C. Latinobarometer (1995)

Table 1 in **Box IIC-24** shows responses given by people in 8 Latin American countries when asked to name the single most important problem facing their country today. The pattern is similar to that shown in Boxes 4 and 5 when Americans are asked the same question: economic issues—unemployment, low salaries, inflation and poverty--receive the great bulk of mentions; environmental concerns barely show up on the list. Despite this, when the same sample group (in the same survey!) is explicitly asked to choose between the economy and the environment, they respond strongly *in favor* of the environment, as shown in Table 2. These results appear to constitute a logical contradiction: when asked to judge the priority of two issues, one of which is felt to be far more important than the other, respondents give priority to the less important issue. Once more, a confident interpretation of these results is difficult without more information.

D. International Environmental Monitor (1998)

Box IIC-25 shows responses to another question that asks respondents to choose between environmental and economic values, this time in the context of the debate over global warming. Once again, a strong majority of people in a strong majority of countries expresses preferences

⁶ In 1994 India and Brazil had per capita incomes of \$1,891 and \$1,993, respectively; in that year US per capita income was \$20,500.

BOX IC-24 LATINOBAROMETER
[percents]

Table 1

What do you consider the most important problem facing our country today?

	Argentina	Brazil	Chile	Mexico	Paraguay	Peru	Uruguay	Venezuela	unweighted average
unemployment	45	12	14	28	13	31	29	6	22.3
low salaries	13	11	18	12	5	13	20	6	12.3
inflation	3	3	9	27	9	3	10	31	11.9
poverty	6	12	13	8	16	13	6	5	9.9
health	7	19	11	3	9	5	9	8	8.9
education	8	10	6	5	9	10	5	13	8.3
corruption	9	4	2	4	24	3	3	13	7.8
delinquency/crime	2	6	7	3	6	2	8	9	5.4
drugs	1	11	10	1	2	8	2	2	4.6
youth opportunity	2	4	4	3	1	6	2	1	2.9
housing	1	3	3	1	1	1	2	3	1.9
political violence	-	3	2	3	-	3	1	2	1.8
no answer	1	1	-	1	3	1	3	1	1.4
other	1	-	-	1	2	-	1	-	0.6
environment	1	1	1	-	-	-	1	-	0.5

Table 2

Which of the following do you agree with more:

- * One should give priority to the protection of the environment even if it might significantly hurt our economy
- * One should give priority to a healthy economy even if it might significantly damage the environment

	Argentina	Brazil	Chile	Mexico	Paraguay	Peru	Uruguay	Venezuela	unweighted average
priority to environment	61	57	66	51	57	51	62	58	57.9
priority to economy	28	33	30	38	25	40	28	31	31.6
no answer	11	10	4	11	18	9	10	11	10.5

source: Latinobarometer 1995; IP0 1995-96:621. Sample sizes: Argentina-1200; Brazil-1200; Chile-1240; Mexico-1204; Paraguay-587; Peru-1226; Uruguay-1212; Venezuela-1200

BOX IIC-25. GLOBAL WARMING SURVEY
[percents]

Which statement do you agree with more:

1. Given scientific uncertainty over climate change, we should not take major action until we know more because of the great economic costs involved.
2. We should assume the worst and take major action now to reduce human impacts on climate, even if there are major costs

country	1998	change from 1997
Greece	85	
France	82	+8
Italy	82	+12
Korea (Rep)	77	+24
Germany	74	+3
Russia	73	+46
Kazakhstan	73	
Indonesia	71	
Australia	70	+3
Japan	68	-1
Canada	67	+6
Finland	65	+11
Great Britain	64	+12
New Zealand	63	-2
Chile	63	+2
Mexico	62	+12
India	61	-2
Argentina	60	
Colombia	58	
China	56	+24
Uruguay	54	
USA	51	+5
Hungary	50	+15
Brazil	"near majority"	
Venezuela	"near majority"	
Poland	"near majority"	
Turkey	"near majority"	

Source: Market & Opinion Research International Ltd. (MORI), International Environmental Monitor 1995.
www.mori.com/polls/iam.

N(Great Britain)=934. Sample sizes for other countries approximated 1000 each.

for acting to protect the environment, “even if there are major costs.” Support for action to address climate change increased dramatically from 1997 to 1998, presumably at least partially in response to attention given the issue as the Kyoto Accords were being negotiated, in December of 1997. But again, caution is necessary before seeking to interpret these results. The countries surveyed differ greatly in level of economic development, cultural values, amount of schooling and other factors. The questions as worded in IIC-25 require multiple judgments of facts and preferences, either explicate or implicitly, before an answer can be given. It’s not obvious what is being communicated when we say, for example, that 71% of the population of Indonesia, or 51% of the population of the United States, agrees more with the second statement than with the first.

II.C.2.f. Summary

Support for environmental protection among Americans is very broad but may not be especially deep. When asked unprompted to name issues of concern, environmental issues receive far fewer mentions than do such issues as money, jobs, health, family and children. Americans express a high willingness-to-pay for environmental protection in the abstract, but when specific dollar commitments are solicited this support weakens. When forced to choose between “growth” and “environment,” large majorities of Americans choose “environment,” although their first preference is to affirm statements that deny that a choice needs to be made. Americans show strong support for modifying particular consumption practices to avoid harming the environment, but reject suggestions that their aggregate levels of consumption should be reduced. Surveys of public opinion in other countries show consistently high support for environmental protection, although some of the same qualifications just noted apply.