Convergence and divergence of values in a more global world: evidence from the 1981 and 1990 World Values Surveys

Jonathan Ray Durbin

Iowa State University

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Convergence and divergence of values in a more global world: Evidence from the 1981 and 1990 World Values Surveys

by

Jonathan Ray Durbin

A thesis submitted to the graduate faculty in partial fulfillment of the requirements for the degree of

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Major Professor: Tom Rice

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Ames, Iowa

2000
This is to certify that the Master's thesis of

Jonathan Ray Durbin

has met the thesis requirements of Iowa State University

Signatures have been redacted for privacy
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CHAPTER 1: INTRODUCTION

The concept of "globalization" has received considerable attention in the last several years. Many scholars have addressed the economic and political consequences of a world that is more interdependent (global). The following pages are directly a result of these and other, more informal, discussions of the potential results of a world that is more interconnected. More specifically, does globalization make individuals and societies more alike, more likely to assert differences, or have no effect in either direction? Exploring this question is the purpose of this thesis. To this end, I will divide the following thesis into five sections. First, is a general introduction to the concept and study of globalization. Second, is a review of the literature relating to the theoretical effects of globalization on human values and culture. Third, is a discussion of the particular methodology used to examine the effects of globalization, i.e., convergence and divergence. Fourth, is a description of the general results of this analysis, some preliminary observations, and conclusions. Finally, the theoretical and real-world implications of the present study are discussed and general conclusions are presented.
Globalization: An Introduction

Globalization means different things for different people. As Riggs (1998) notes, globalization may have different dimensions depending on whether we examine globalization from an economic, political, social, psychological, cultural, or geographical realm. Specifically, he writes that the dimensions used to define globalization will be different depending on the social science discipline from which we study. Each of these different dimensions includes the concepts necessary for measuring the extent of globalization. Table 1 illustrates these different dimensions.

Table 1. The Several Dimensions of Globalization.

<table>
<thead>
<tr>
<th>Social Science Discipline</th>
<th>Indicators of Globalization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economics</td>
<td>trade, money, corporations, banking, capital</td>
</tr>
<tr>
<td>Political Science</td>
<td>governance, war, peace, IGOs, NGOs, regimes</td>
</tr>
<tr>
<td>Sociology</td>
<td>communities, conflict, classes, nations, agreements</td>
</tr>
<tr>
<td>Psychology</td>
<td>individuals as subjects and objects of global action</td>
</tr>
<tr>
<td>Anthropology</td>
<td>cultures overlapping, adapting, clashing, merging</td>
</tr>
<tr>
<td>Communications</td>
<td>information as knowledge and tools--the Internet</td>
</tr>
<tr>
<td>Geography</td>
<td>everything, provided it can be anchored in space</td>
</tr>
</tbody>
</table>

Many scholars have described globalization in these very terms. In fact, globalization is often described as the interdependence between nations that occurs as the result of the mobilization of goods and services, technology, people, and information on a global scale. More empirically, this mobilization is often measured as the volume and value of imports and exports, the transfer of capital, the extent of foreign travel, and international communication such as the Internet or satellite television (Almond & Powell, 1992).

Inkeles (1998) also writes that globalization is evident in the degree to which nations and individuals are interconnected and interdependent. Further, he notes that a single, worldwide social system is emerging based upon two distinct elements: global trade and global communication (p.195). Global communication is defined by Inkeles as the “transmission and exchange of information, ideas, techniques, art forms, tastes, values, and sentiments” (p. 195). Examples of such exchange are the worldwide postal, telephone, radio, television, satellite, and computer systems that increasingly link individuals and nations.

In addition, Gundlach & Nunnenkamp (1996) provide strong economic indicators of globalization. Like Inkeles, they also recognize global trade as an important indicator of
globalization. However, they also consider more specific economic measures like foreign direct investment and the extent of developing countries' share of global trade to be important indicators of globalization. Especially relevant to this paper is the increase in globalization from the early 1980s to 1990 summarized in Table 2 below. When adjusted for inflation, total global trade has nearly doubled from 1983 to 1990, while global foreign direct investment has increased by greater than 200 percent during the same period. Additionally, developing countries' share of global manufacturing trade has increased nearly 37 percent, from 13.1 percent of total trade.

Table 2. Economic Indicators of Globalization.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Global Trade 1983=100</th>
<th>Global Foreign Direct Investment 1983=100</th>
<th>Developing Countries' Share in Global Trade Manufactures (% of Total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1983</td>
<td>100.0</td>
<td>100.0</td>
<td>13.1</td>
</tr>
<tr>
<td>1984</td>
<td>105.8</td>
<td>102.8</td>
<td>12.7</td>
</tr>
<tr>
<td>1985</td>
<td>106.2</td>
<td>102.8</td>
<td>12.0</td>
</tr>
<tr>
<td>1986</td>
<td>117.4</td>
<td>125.7</td>
<td>13.1</td>
</tr>
<tr>
<td>1987</td>
<td>137.8</td>
<td>153.3</td>
<td>14.7</td>
</tr>
<tr>
<td>1988</td>
<td>157.0</td>
<td>176.6</td>
<td>15.6</td>
</tr>
<tr>
<td>1989</td>
<td>170.3</td>
<td>188.5</td>
<td>18.2</td>
</tr>
<tr>
<td>1990</td>
<td>192.3</td>
<td>216.4</td>
<td>17.9</td>
</tr>
</tbody>
</table>

in 1983 to almost 18 percent of the total by 1990. These authors conclude this is ample evidence of economic globalization.

Beyond these indicators of globalization, many authors suggest that the global flow of information and economic interdependence have some impact on social and individual attitudes and not just on issues of political or economic importance. As noted by Axelrod (1997), "recent advances in transportation, mass media, and information technology [make] many interactions largely independent of geographical distances" (p. 224). Van Der Pijl (1984) calls this global interaction: "transnational coalitions of social forces" that influence not only the political and economic structures of nations, but also have an impact on basic attitudes toward interpersonal relationships and the social structure of society. Rodrik (1997) echoes this dynamic impact by stating, "nations have legitimate reasons for worrying about what globalization does to their norms and social arrangements" (p. 48). Friedman (1999) contends that globalization is an "international system, with its own unique attributes" (p. 1).

Other authors see globalization not as an international system with its own attributes and influences, but as the continuation of modernization on a global scale. In his
earlier books suggesting the rise of postmodern and postmaterialist values, Ronald Inglehart (1977; 1989) defines post materialist values as 'higher-order' values such that they are the result of the relative security that comes from growing up with high levels of economic wealth. In his latest book chronicling the transition to these 'higher-order' values, Inglehart (1997) states that the root of this shift is the "gradual withering away of value systems dependent on scarcity" (p. 78). These 'value systems,' or cultures, are made up of the underlying attitudes, beliefs, skills, and knowledge of the people within a nation. In fact, Inglehart argues that postmaterialists are not non-materialists or anti-materialists (p. 35). Instead, postmaterialist values are those values that become important after material economic security is achieved (p. 35). Additionally, the achievement of economic security has caused these changes in values (p. 35). Inglehart states that culture usually changes slowly, but eventually does respond to changes in its external environment. He also argues that culture has an impact on the economic conditions of a society. However, he does not believe that the change to postmaterialist values can occur without the achievement of material security.

Writing several years earlier, Moore (1979) places a
similar emphasis on modernization as the key to changing values. He claims that there is no guarantee that societies will display similar values without modernization (p. 151). This is where globalization and modernization diverge. Globalization is expected to have an influence on the values and beliefs of individuals who are premodern, modern, and postmodern in terms of economic security. In other words, while Inglehart does not expect to see postmaterial values displayed among nations or individuals who have not achieved material security, the effects of globalization are independent of the level of economic security. It is the interaction of individuals and nations on a global scale that influences value change. Thus, we can expect globalization to affect global culture. The next section discusses the potential influence of globalization in creating a global value system.
CHAPTER 2: THE EFFECTS OF GLOBALIZATION

A Global Value System?

A second body of literature examines the impact of globalization on cultural homogeneity. That is, as globalization increases, do nations become more like one another, remain equal distances apart, or in response to the threat of assimilation become more protective of their own culture? According to Inglehart (1997), culture is the system of values, attitudes, beliefs, skills, and knowledge of the people within a nation. Amin (1997) argues that most social or political movements rely on the idea that cultural homogenization does occur. It is utterly deterministic (and entirely pessimistic) to assume that attitudes cannot be changed. Thus, many social movements attempt to change attitudes. For example, the socialist movement relied on the assumption that capitalism would erase national boundaries and that the resulting homogenization of society would lay the basis for class struggle and socialism at a world level (Amin, 1997, p. 85).

Pye (1966) asserted that for individual nations, development in isolation of other nations was impossible. He claimed that a world culture exists in styles of dress, music,
political, and social systems. Teague & Grahl (1991) suggest that there is a general expectation of a uniform transnational order that occurs by diffusion through a multinational political market. Globalization adds economic and social markets to this 'diffusion' into a uniform transnational order.

In addition, Thorns (1992) suggests that while nationalist movements illustrate existing heterogeneity within nations, economic interdependence and the spread of mass culture is pulling the world closer together. Further, Inkeles (1998) argues that this interdependence and mass culture requires a system of symbols and values that are mutually intelligible (pp. 203-204). Through these shared experiences, such as movies, television, music, and sporting events, is the emergence of a truly universal world culture in which ways of interacting with others is homogenized as we identify similar patterns of interpersonal relationships, marriage, commerce, etc. (p. 227).

Friedman (1999) argues that globalization is a cultural system that tends to be homogenizing. For example, he notes that unlike the Cold War system of competing value systems (democracy and capitalism versus communism and socialism), the globalization system is based on the triumph of free-market
capitalism. Thus to exist in this system, nations and individuals must adopt the values necessary for capitalism to thrive, i.e., free trade, competition, privatization, etc. From this perspective, Friedman predicts a more homogenous global culture as a result of globalization.

Or Continuing Diversity?

On the other hand, many other scholars are still unsure of the consequences of globalization on global culture. Amin (1989) fears that globalization has taken on an ethnocentric composition that believes that the Western model is the best way to solve current problems. Similarly, Gill (1997) sees globalization as a set of cultural practices and ideological understandings that seek universal applicability. He claims that globalization may allow more dominant countries the opportunity to broaden their cultural practices and lead to cultural homogenization on a world scale regardless of whether their cultural practices are best suited for other nations. Law (1997) provides an example of the arrogance of Western culture. He says that many subscribe to the view expressed by former President Bush that "our lifestyle is not negotiable" (p. 174). If the resolve in non-Western societies is not as strong, Law seems to suggest that cultural homogenization will occur.
Schafer (1996) takes a much more favorable approach to cultural homogenization. He claims that the world is becoming a much more dehumanized and impersonal place. As a result, he says we “need to strive for an ‘indivisible’ world since receiving and assimilating influences from abroad is mandatory if cultures are to mature and ripen properly” (p. 294).

Rodrik (1997) sees free trade among countries with different histories as requiring at least some willingness to accept the cultural norms of those countries around you. Recently, many authors have seen the success of the European Union as dependent on the reduction of political, economic, and social differences between the nations. Abramson & Inglehart’s (1995) discussion proposes a trend toward postmaterialist values that implies a convergence of attitudes both cross nationally and within national boundaries at least as related to the economic security derived from modernization.

Still others are not convinced that globalization has either a homogenizing influence or a divergent impact on world attitudes. These authors conclude that despite some evidence of convergence, there is also strong evidence of divergence. For example, Hannerz (1990), Appadurai (1990), and Lull (1995) suggest that globalization has an impact on the attitudes of individuals, but the various influences (mass media, tourism,
trade, political organizations) counteract the homogenizing influences of each other. The result might be what Axford (1995) calls 'virtual globality' whereas citizens may have become global consumers, but they still hold on to the attitudes or cultural practices with which they are familiar (p. 209).

Axelrod (1997) concludes that homogeneity within a nation can lead to global polarization since some regions may develop sharing the same culture, but at the same time have nothing in common with other regions. However, Axelrod also notes that with random long distance interactions (globalization), the heterogeneity caused by regional interaction cannot be maintained. Thus, he concludes that as the territory of interaction gets larger, the effect is a homogenization of culture. On the other hand, Resnick, Iacovou, Suchak, Bergstrom, and Riedl (1994) and Abramson, Arterton, and Orren (1988) suggest that the growth of electronic 'travel' will allow people to interact only with those who already hold similar beliefs or cultural practices. Axelrod (1997) allows for this view when he concludes, "self-selection could result in an even stronger tendency toward both 'local' convergence and global polarization" (p. 224). Thus, globalization may work against itself in producing a homogenous world culture.
Finally, Fukuyama (1999) argues that while there is some evidence of convergence of political and economic ideologies, there are deeper elements of culture that will resist homogenization. For example, in a global economic system there are a fixed number of political and economic systems that can ensure global competitiveness (p.1). However, as global communication systems allow us to see other cultures, we can define more clearly what we believe most valuable in our own culture (p.2). Thus, he argues individuals are able resist cultural homogeneity when those values conflict with what we hold dear. The next section discusses the current evidence of convergence or divergence as it relates to various elements of the social system.

Convergence and Divergence: The Evidence So Far

The preceding discussion leads me to the goals of this research. Based on the work of the above authors, it is safe to assume that globalization has an impact not only on economic and political dimensions, but also on cultural and social dimensions. The extent of this impact is the goal of this paper. First, given the existence of a global socioeconomic system, are nations and individuals becoming more similar in their values? If not, are they becoming farther apart in these values or are they staying the same
distance apart in relative terms? A discussion of the body of research relating specifically to these goals will more clearly outline my research hypotheses.

Kerr (1983) identifies six segments of society with substantial evidence of similarity: the content of knowledge, the mobilization of the resources of production, the organization of production, the patterns of work, patterns of living, and the patterns of the distribution of economic rewards (p. 72). He also notes three areas without significant similarity: economic structures, political structures, and patterns of belief.

Alex Inkeles (1998) provides a more detailed summary of the research regarding the social system. He describes five elements of the social system examined for evidence similarities among nations: 1) modes of production and patterns of resource use, 2) institutional arrays, forms, and processes, 3) structures and patterns of social relationships, 4) systems of popular attitudes, values, and behaviors, and 5) systems of political and economic control. Inkeles argues there is significant evidence of similarity among the various modes of production and patterns of resource utilization. This evidence is in the growing use of inanimate sources of power, the increasing reliance on science and technology, such as
transistors, computers, vaccinations, birth control, fertilizers, and bio-technological food sources, etc. (p. 20). Further, the growth of electronic communication, scientific medicine, rapid transit, and computerized record keeping symbolizes the incorporation of people into a technological network (p. 20).

The growing differentiation, specialization, and bureaucratization in institutional forms signify growing similarity in this second element of the social system (Inkeles, 1998, p. 21). Similar kinship systems, class structures, and leisure activities are indicators of converging structures of social relationships (p. 21). According to Inkeles, the systems of popular attitudes, values, and behavior show the least evidence of similarity except in the structure of opinion. That is, the distribution of opinion across certain stratification systems (such as socioeconomic status, race, gender, age, etc.) shows a similar structure, while average opinion (absent the controls stratification) provides little support for increasing global similarity (p. 22). He attributes these different conclusions to the idea that different life experiences among individuals of different stratification systems are expected to produce different values.
As in the modernization hypothesis, Inkeles suggests that as individual life experiences become more similar, so will attitudes, values, and basic dispositions. However, he does not believe these attitudes will ever become totally alike due to different cultural, national history, and socioeconomic conditions (p. 22).

Finally, Inkeles notes that while there is some similarity in systems of political and economic control, this similarity is primarily in the growing number of ways the state exerts control over its citizens (p. 23). He argues that substantial differences in the nature of the state, its organization, and the distribution of power still exist. The debate between the proper degree of centralization or decentralization illustrates these differences. In my view, globalization itself may impact this element of the social system since many scholars have found evidence that the growth of multinational corporations and global governing bodies forces nation-states to alter their structures, their distribution of power, and their very nature.

Inkeles also describes several forces that can lead to growing similarities among individuals and nations. He asserts that technological changes, such as computers, satellites, and industrialization, will induce similarity among nations and
individuals. Ecological changes, such as urbanization (or more recently suburbanization), encourage individuals to adapt values and relationships to fit better the needs of the new environment. Changes in the law (like civil rights) actually may require changes in values to avoid punishment for noncompliance.

Finally, centers of cultural influences like the mass media may induce changes in the conceptions of morality, freedom, individualism, etc. Globalization certainly can be considered a change in the social structure that requires individuals and nations to adapt to and adopt certain values and expectations. Thus, both Kerr (1983) and Inkeles (1998) argue that the available evidence suggests that some elements of the social system are similar in modern society, but that systems of popular attitudes, values, and behavior and systems of political and economic control continue to display distinct differences. In addition, Inkeles argues that these differences are the result of specific experiences of individuals or nations based on systems of stratification such as levels of wealth, education, etc.

Francis Fukuyama (1999) expands on the ideas discussed above by arguing that there exist certain values or attributes that are universal. Specifically, he identifies the desire for
material progress and market exchange (p. 1). He claims that in countries without market exchange, government is the source of restriction rather than the lack of an individual-level value structure (p. 1). He also argues that globalization will lead to a greater emphasis on individualism, especially as it relates to economic realms of life (p. 2). However, Fukuyama does not believe values will become universal in all realms of culture. In fact, he argues that economic interdependence and an emphasis placed on individualism will allow nations and individuals to emphasize cultural differences in many other elements of the social system. Thus, Fukuyama agrees with Moore (1979) and Inkeles (1998) when he argues that globalization will lead to greater similarity in some aspects of the social system (specifically economic values), but may have a smaller effect on others, such as, political control, religion, ethnicity, and social networks (p. 1). With this in mind, I expect that when exploring global value changes, those values that relate to work or economics will be more likely to become similar than values relating to social or political values.

The preceding discussion provides an in-depth exploration into the theoretical framework of globalization and its impact on culture. The first section discussed the evidence that
globalization exists or is occurring. Based on this evidence, the second section reviewed the literature that deals with the impact of globalization on the social system and culture. Finally, the third section specifically explored the current evidence that suggests that nations are becoming more similar in some elements of the social system, but are either becoming more diverse in other elements or resisting the forces of convergence and maintaining their unique cultural attributes.

This discussion leads me to the formal statements of purpose for this thesis:

1) The following analysis is intended to describe and explore global value change. Thus, I will discuss methodological options for examining value changes and relative similarity in dispersion. Through this discussion, it is hoped that a useful model for future analysis will be developed to take advantage of the growing cross-national data becoming available.

2) More specifically, I will seek to determine whether the values of nations and individuals are becoming more similar (converging), staying the same relative distance apart (maintaining diversity), or becoming less similar (diverging).

3) Given the evidence in the literature, I expect values pertaining to economic or individualistic goals to display
convergence. Likewise, I expect values relating to political and social goals either to maintain current diversity or to display divergence. The following section will better define the measures and methods necessary to achieve such goals. More importantly, it will provide better illustration of the various forms of value change.
CHAPTER 3: MEASURES AND METHODOLOGY

The following analysis of global value change uses data collected through the World Value Survey (WVS). This set of data provides an especially rich source of information on global values. It offers cross-national comparison over two time periods, 1981 and 1990. The 1981 survey was administered in twenty-four nations around the world while the 1990 survey was expanded to include forty-three nations representing nearly 70 percent of global population and ranging from very poor societies such as Nigeria, China, and India to the richest of societies like Switzerland, the United States, and Japan (Inglehart, 1997, Appendix 1). Of the countries available in these surveys, twenty-two were surveyed in both 1981 and 1990. These countries are included in Table 3.

Table 3. Countries Surveyed in Both the 1981 & 1990 World Value Surveys.

<table>
<thead>
<tr>
<th>Argentina</th>
<th>Belgium</th>
<th>Britain</th>
<th>Canada</th>
<th>Denmark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finland</td>
<td>France</td>
<td>Hungary</td>
<td>Iceland</td>
<td>Ireland</td>
</tr>
<tr>
<td>Italy</td>
<td>Japan</td>
<td>Mexico</td>
<td>Netherlands</td>
<td>Northern Ireland</td>
</tr>
<tr>
<td>Norway</td>
<td>South Africa</td>
<td>Spain</td>
<td>Sweden</td>
<td>United States</td>
</tr>
<tr>
<td>West Germany</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
However, due to inconsistencies in the data, South Korea and Denmark are not included in the current analysis. For a more complete discussion of these inconsistencies, see Inglehart (1997, Appendix 1). Thus, twenty countries are available for a time series analysis of value change.

In addition, the World Values Survey provides a large number of variables from which to choose for analysis. Nearly 200 questions were asked in both the 1981 and 1990 surveys. The topics include economic, social, political, moral, and religious beliefs, opinions, values, etc. However, not all of these questions were selected for the present analysis for two primary reasons. The first reason is purely economical. That is, the analysis of two hundred variables would require far more paper and time to explore than would be justified by the additional depth in description.

The second reason is more theoretical. Opinions and measures of satisfaction are far too fluid for a meaningful comparison of global value change. In other words, these types of beliefs are frequently changing in response to a variety of environmental factors. For example, a question that asks ‘how satisfied or dissatisfied with your job?’ may change several times in the same year as fluctuations in the economy influence demand for the employer’s product or causes the
respondent to lose his or her job. In addition, the answer to this type of question may depend on more deeply held values such as how much freedom people feel they should be allowed at work or how much they feel they should be getting paid for the type of work they do. Thus, the questions included in the present analysis include questions such as asking “how should business be managed?”, but do not include questions as to whether one’s current job meets these standards. The latter question may be helpful in explaining why values change, i.e., changing one’s underlying values to match his or her particular situation, but does not clearly represent what those underlying values are and how they have changed.

According to the previous discussion, I have selected seventy-six questions asked in both the 1981 and 1990 surveys. Nearly every question was asked in each country, which allows for an excellent cross-national comparison of value changes. For ease of explanation and as an initial test of secondary hypotheses, these questions were placed in four main categories. These categories are not intended to be definitive groupings of the variables, but instead to serve as more manageable groups of variables to test the hypothesis that economic values are expected to converge while social and political values are expected to maintain diversity or
diverge.

Clearly, a more scientific grouping of the questions such as factor analysis will provide a more firm foundation for placing these variables into broader categories. However, the groupings used here are based at least on theoretical relationships among the variables and should provide an acceptable substitution for more scientific groupings until these scientific groupings can be tested with further research. Thus, a brief description of each of the variables included each category follows.

The Individual, Work, and Economy category is defined by twenty-four variables ranging from questions involving the respondent's belief in the importance of individual development to the best structure of the nation's economy. The full range of questions are included in Table 4 below. Questions ranging from how important good housing is to a successful marriage and whether marriage is an outdated institution along with twenty other questions are included in the second broad category: Marriage and Family. Table 4 also provides a brief description of the twenty-two questions included in this category.

The Government and Politics category is made up of ten questions ranging from the acceptability of cheating on taxes
to the willingness to fight for one's country in the next war. As a political scientist I am disappointed in the lack of good questions relating to political values, but as a student of public policy I understand that each value in the other realms can and does have a large impact on governmental decision making. These variables are also included in Table 4.

Finally, Table 4 includes variables in the broader category: Morality, Religion, and Sexuality. These twenty questions range from the acceptance of abortion to whether killing it in self-defense is justifiable. This category offers the broadest range of values and if my hypotheses are

Table 4. Broad Theoretical Categories and Brief Variable Descriptions.

<table>
<thead>
<tr>
<th>Individual, Work, and Economy</th>
</tr>
</thead>
<tbody>
<tr>
<td>v99: Good Pay</td>
</tr>
<tr>
<td>Important Aspect of Job</td>
</tr>
<tr>
<td>v103: Chance of Promotion</td>
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<tr>
<td>Important</td>
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<tr>
<td>Aspect of Job</td>
</tr>
<tr>
<td>Important</td>
</tr>
<tr>
<td>Aspect of Job</td>
</tr>
<tr>
<td>v111: Responsible</td>
</tr>
<tr>
<td>Important</td>
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<tr>
<td>Aspect of Job</td>
</tr>
</tbody>
</table>
Table 4.  
(Continued)

|-------------------------------------|-------------------------------------|-----------------------------------------------|---------------------------------------|

**Marriage and Family**

<table>
<thead>
<tr>
<th>v198: Successful Marriage--Faithfulness</th>
<th>v199: Successful Marriage--Adequate Income</th>
<th>v200: Successful Marriage--Same Social Background</th>
<th>v201: Successful Marriage--Mutual Respect</th>
</tr>
</thead>
<tbody>
<tr>
<td>v202: Successful Marriage--Shared Religious Beliefs</td>
<td>v203: Successful Marriage--Good Housing</td>
<td>v204: Successful Marriage--Agreement on Politics</td>
<td>v205: Successful Marriage--Understanding and Tolerance</td>
</tr>
<tr>
<td>v206: Successful Marriage--Live Apart from In-Laws</td>
<td>v207: Successful Marriage--Happy Sexual Relationship</td>
<td>v208: Successful Marriage--Share Household Chores</td>
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<td>v210: Successful Marriage--Common Interests</td>
<td>v213: Ideal Family Size</td>
<td>v214: Child in Home with a Mother and Father</td>
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<tr>
<td>v304: Married Men/Women Having an Affair</td>
<td>v310: Divorce Justified?</td>
<td></td>
<td></td>
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<tr>
<td>Government and Politics</td>
<td>Morality, Religion, and Sexuality</td>
<td></td>
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<tr>
<td>v247: Freedom or Equality More Important?</td>
<td>v142: Good and Evil-- Guidelines or Absolutes?</td>
<td></td>
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<tr>
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<td>v175: God is Personal, Spirit, Does Not Exist?</td>
<td></td>
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<tr>
<td>v248: Views on Left/Right Scale</td>
<td>v237: Abortion for Mother’s Health?</td>
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<td>v249: Societal Change: Revolution Reform, or Defended</td>
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<td></td>
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<td>v263: Willingness to Fight for Country</td>
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<td>v268: More Respect for Authority in Society</td>
<td>v238: Abortion for Handicapped Child?</td>
<td></td>
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<td>v296: Claiming Government Benefits Not Entitled To</td>
<td></td>
<td></td>
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<tr>
<td>v298: Cheating on Taxes if Have the Chance</td>
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<tr>
<td>v311: Fighting with the Police Justified?</td>
<td></td>
<td></td>
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<tr>
<td>V315: Threatening Workers who Refuse to Join Strike</td>
<td>v300: Joyriding Justified?</td>
<td></td>
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<tr>
<td></td>
<td>v301:Marijuana Use Justified?</td>
<td></td>
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<tr>
<td></td>
<td>v302: Keeping Money Found Justified?</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>v303: Lying in Own Interest Justified?</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>v305: Sex Under Legal Age of Consent Justified?</td>
<td></td>
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<td></td>
<td>v306: Accepting a Bribe Justified?</td>
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<td>v307: Homosexuality Justified?</td>
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<td>v308: Prostitution Justified?</td>
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<td>v312: Euthanasia Justified?</td>
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<td>v313: Suicide Justified?</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>v314: Not Reporting Damaging a Parked Car Justified?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>v316: Killing in Self-Defense Justified?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

correct will show the greatest resistance to convergence.

To test for changes in these values, I employ an interrupted time series analysis of the mean values for 1981 and 1990. To achieve more theoretical and descriptive depth, the analysis is performed at both the individual and aggregate levels. The globalization hypothesis predicts changes in individual-level values; however, these values changes may be filtered through a national perspective. Thus, we might expect individual-level value change to move in an entirely opposite direction of aggregated value changes since national and local identities and the relative arbitrariness of national borders are likely to result in “pockets” of similar beliefs or values.

In other words, even if we find similar values at the individual level, we might still see continuing diversity or convergence at the aggregate level. By examining value change at both levels of measurement, we can avoid both the individual and ecological fallacies in our interpretation of global value change. Further, an examination of aggregate-level values allows us to assess the structure of values as they are stratified by nation. This assessment provides additional depth, for we are able not only to analyze the evidence of individual-level convergence or divergence, but
also to assess this evidence as it relates to the cross-national value structure.

A difference of means t-test was performed on the mean scores for 1981 and the mean scores for 1990 for each question at both the individual and aggregate level. This test allows us to assess the movement in average values from 1981 to 1990. From this assessment, we can describe changing values according to a variety of indicators such as more liberal, conservative, tolerant, individualistic, etc. In addition, an F-test is performed for each question to determine whether a statistical difference exists in the variance or spread of the data. From this test we can determine whether the average values are more similar, less similar, or exhibit no change in relative dispersion.

One final part is essential to the discussion of data, measures, and methodology. That is, a discussion of what is meant by the terms 'convergence,' 'divergence,' 'homogeneity,' and 'diversity.' As defined by Kerr (1983), convergence is the tendency for societies to grow more alike, to develop similarities in structures, processes, and performances. Divergence, then, is the tendency for societies to recede from each other, to develop greater dissimilarities in structures, processes, and performances. In short, convergence and
divergence refer to directions of movement over time either to more uniformity or homogeneity or to more diversity or heterogeneity. Thus, homogeneity and diversity refer to the existing conditions at a specific moment in time while convergence and divergence refer to movement toward these moments. Homogeneity exists when there is a uniform system of structures, processes, and performances while diversity or heterogeneity exists when there is variety in these structures, processes, and performances (p. 3).

Inkeles (1998) identifies six different types of convergence or divergence. In sum they represent the possibilities for value change over time. Each of these types has unique attributes valuable to the present analysis both in terms of theoretical depth in description as well as in power of explanation. The first type of convergence is simple convergence. In this form, all nations begin either above or below some common fixed destination at the first time point and move closer to the common point by the end of the second time point. An example of such convergence is 100 percent primary school enrollment (p. 30). At the time of first measurement (year 1), nations may all be below 100 percent enrollment with some farther from this point than others. At the time of the second measurement (year 2), however, all
nations may have moved closer to 100 percent enrollment.

Thus, even though individual nations may have been farther from the common destination at year 1, their movement converges toward a common point (in this case 100 percent). The level of uniformity or homogeneity is measured at year 1 and at year 2. Convergence occurs when the level of homogeneity at year 1 (as measured by the variance in the mean scores for all nations combined) is less than the homogeneity at year 2. Conversely, divergences occurs when the level of homogeneity at year 1 is greater than the level at year 2. Figure 1 illustrates this type of convergence and divergence more clearly.

The second type of convergence is convergence from different directions. In this case, convergence occurs when nations either increase or decrease from previous positions toward some common point. Some nations may be below the common point and have to increase their mean values, while others may be above the common point and have to decrease their mean values. What is important is that for convergence to have occurred, the variance between the mean scores at year 1 must be greater than the means scores at year 2 and some nations must have been below the new mean while others were below the
new mean. An example may be the preferred age at marriage (p. 31). Due to cultural differences, some countries may have preferred older people to marry while in other countries people much younger may be allowed and encouraged to marry. However, if in response to global awareness of these differences, both the countries with higher age preferences and the countries with lower preferences moved toward a middle ground, a convergence from different directions would be observed. In contrast, divergence is observed if, in response to these
differences, the countries move in opposite directions to preserve their differences or if either country moves away from the middle ground in order to reassert their cultural values. Figure 2 above illustrates such convergence or divergence.

However, convergence may also occur within very diverse values. Figure 3 shows the case in which values converge to a common point, but maintain real differences from that time forward. For example, there may be substantial convergence
around the value of allowing females to go outside the home, but there may remain significant differences in the situations in which they are allowed to go out alone or go out with a man (p. 33-34). Thus, convergence to the threshold of allowing females outside the home may actually mask important differences in how this value is applied. The present analysis does not evaluate such convergence except as a post hoc explanation for any lack of significant value change. To be sure of such convergence, at least three time periods must

Figure 3. Convergence Around Thresholds and Continuing Absolute Differences (Hypothetical Data).
be available for study. Figure 3 provides ample proof of the importance of an intermediate time period in assessing such threshold effects.

Convergence may also take different paths to the common point. For example, some nations may seek to decrease birth rates in response to declining death rates. However, others, like China, may seek to decrease birth rates to meet entirely different demands or stimuli. This type of convergence is especially relevant to the debate between globalization theory and modernization theory discussed above. Although the present analysis does not specifically test for these different stimuli, the previous discussion and review of the relevant literature suggests globalization will have effects independent of levels of economic wealth or modernization. In addition, the comparison of individual-level evidence and aggregate-level evidence should prove useful in distinguishing at least between the effects of living in a particular nation and the effects of interacting in a more interdependent world social system.

A fifth type of convergence is defined as qualitative indicators. These are those aspects of the cultural or social system that are not easily quantified. Examples of these types of indicators of convergence include legislative and
constitutional provisions or the spread of eating habits or popular culture. In fact, Boli (1979) argues that national constitutions are convergent in progressively incorporating guarantees by the state to provide its citizens with access to education and health care. However, as noted previously, many individuals may never interact in any meaningful way with someone from outside their own nation. Thus, while quantitative measures may show evidence of convergence, it may not apply to a vast number of individuals who do not interact globally.

The final type of convergence defined by Inkeles (1998) is that of parallel change. This type of convergence is most difficult to identify, but more readily applies to the examination of convergence in values. Parallel change implies differences in the level of uniformity, but not necessarily in a change of positions relative to one another. Figure 4 better illustrates such a situation. For example, all twenty nations in the present analysis may move in a positive direction with regard to the value of free market exchange to the development of individuals, but their relative distances from one another may not change. Thus, we may say that the value of free market exchange is becoming a more important value across nations, but the extent to which individual
nations value free market exchange remains as diverse as in earlier years.

Now that I have discussed the methodology and various types of convergence, it is time to test these hypotheses and analyze the results. First, I will restate the hypotheses in the light of the different types of convergence and the four categories of values discussed above. The first hypothesis is that economic or individualistic values are expected to converge. Second, it is likely that this convergence will be
simple in that value changes are likely to move from being less supportive of free market exchange and individualism to becoming more supportive of these values. Third, family, political, and moral values are expected to diverge or at least maintain diversity. In maintaining diversity, there may still be evidence of parallel change. In addition, divergence may be either simple or from different directions. Finally, any differences in the results of the individual and aggregate-level analyses will be addressed.
CHAPTER 4: RESULTS

In general, the results of the aggregate-level analysis suggest that nations are placing an increasing emphasis on individualism, freedom, and family life while becoming less concerned for values of political authority, political honesty, and general morality. However, many of these changes are not significantly different from previous values, indicating a fairly strong level of stability in values over time. In fact, only ten of the seventy-six variables examined here showed significantly different values from 1981 to 1990 at the .05 level of confidence.

With regard to values in the broader category of Individual, Work, and Economy, the twenty nations studied here identified good pay, pleasant co-workers, job security, the opportunity to achieve something, meeting abilities, and interesting as important aspect of a job. Of these qualities, good pay is most important and became substantially more important from 1981 to 1990. In contrast, the absence of pressure, promotions, job respect, good hours, the necessity to use initiative, the usefulness to society, generous holidays, the opportunity to meet people, and whether or not the job is responsible are qualities less important for
employment. This is in line with our hypothesis that development of the individual is more important in a globalized society. In addition, the nations in this study value efficiency, employee participation in the selection of managers, technological development, scientific advances, and the development of the individual. Of these values, only the value in efficiency increased significantly from 1981 to 1990. Again, these values are in line with the hypothesis of support for individualism as well as the additional value of free-market exchange. However, there is no evidence that support for these values increased from 1981 to 1990. In fact, at the .05 level of significance it is likely we would observe a significant difference in the means of one or two variables (1.2) by chance alone. Thus, we cannot be sure that the two Individual, Work, and Economy-related variables that showed a significant change in means were not due to chance. Table 5 displays the mean scores for each variable in this group.

Unlike my initial hypotheses, the general direction of movement for the 24 questions relating to work, economy, and individualism does not show significant evidence of convergence. In only three of the twenty-four questions were there significant differences between the variances among nations in 1981 compared to 1990. Again, this result is not
much greater than we would expect to occur by chance. Thus, in at least twenty-one values, the nations studied here maintained their level of diversity from 1981 to 1990. The three questions showing significant changes in variances were

Table 5. Aggregate-Level Results for Individual, Work, and Economy Variables.

<table>
<thead>
<tr>
<th>Variable Description</th>
<th>Sample Size</th>
<th>Mean 1981</th>
<th>Mean 1990</th>
<th>Variance 1981</th>
<th>Variance 1990</th>
<th>Change in Dispersion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good Pay Important to Job (1=yes, 2=no)</td>
<td>19</td>
<td>1.314</td>
<td>1.254**</td>
<td>0.009</td>
<td>0.007</td>
<td>Convergence</td>
</tr>
<tr>
<td>Pleasant People Important to Job (1=yes, 2=no)</td>
<td>19</td>
<td>1.323</td>
<td>1.305</td>
<td>0.014</td>
<td>0.019</td>
<td>Divergence</td>
</tr>
<tr>
<td>No Pressure Important to Job (1=yes, 2=no)</td>
<td>19</td>
<td>1.689</td>
<td>1.679</td>
<td>0.008</td>
<td>0.011</td>
<td>Divergence</td>
</tr>
<tr>
<td>Job Security Important to Job (1=yes, 2=no)</td>
<td>19</td>
<td>1.416</td>
<td>1.394</td>
<td>0.012</td>
<td>0.014</td>
<td>Divergence</td>
</tr>
<tr>
<td>Promotions Important to Job (1=yes, 2=no)</td>
<td>19</td>
<td>1.653</td>
<td>1.618</td>
<td>0.016</td>
<td>0.012</td>
<td>Convergence</td>
</tr>
<tr>
<td>Job Respected Important to Job (1=yes, 2=no)</td>
<td>19</td>
<td>1.674</td>
<td>1.650</td>
<td>0.011</td>
<td>0.013</td>
<td>Divergence</td>
</tr>
<tr>
<td>Good Hours Important to Job (1=yes, 2=no)</td>
<td>19</td>
<td>1.537</td>
<td>1.553</td>
<td>0.009</td>
<td>0.023</td>
<td>Divergence&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Use Initiative Important to Job (1=yes, 2=no)</td>
<td>19</td>
<td>1.579</td>
<td>1.521</td>
<td>0.010</td>
<td>0.014</td>
<td>Divergence</td>
</tr>
<tr>
<td>Useful to Society Important to Job (1=yes, 2=no)</td>
<td>19</td>
<td>1.618</td>
<td>1.603</td>
<td>0.013</td>
<td>0.011</td>
<td>Convergence</td>
</tr>
<tr>
<td>Generous Holidays Important to Job (1=yes, 2=no)</td>
<td>19</td>
<td>1.720</td>
<td>1.724</td>
<td>0.007</td>
<td>0.011</td>
<td>Divergence</td>
</tr>
<tr>
<td>Meeting People Important to Job (1=yes, 2=no)</td>
<td>19</td>
<td>1.575</td>
<td>1.548</td>
<td>0.004</td>
<td>0.014</td>
<td>Divergence&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Achieve Something Important to Job (1=yes, 2=no)</td>
<td>19</td>
<td>1.503</td>
<td>1.436</td>
<td>0.038</td>
<td>0.035</td>
<td>Convergence</td>
</tr>
<tr>
<td>Responsible Important to Job (1=yes, 2=no)</td>
<td>19</td>
<td>1.593</td>
<td>1.539</td>
<td>0.015</td>
<td>0.014</td>
<td>Convergence</td>
</tr>
<tr>
<td>Variable Description</td>
<td>Sample Size</td>
<td>Mean 1981</td>
<td>Mean 1990</td>
<td>Variance 1981</td>
<td>Variance 1990</td>
<td>Change in Dispersion</td>
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<td>----------------------------------------------------------</td>
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</tr>
<tr>
<td>Interesting Important to Job (1=yes, 2=no)</td>
<td>19</td>
<td>1.449</td>
<td>1.413</td>
<td>0.019</td>
<td>0.034</td>
<td>Divergence</td>
</tr>
<tr>
<td>Meets Abilities Important to Job (1=yes, 2=no)</td>
<td>19</td>
<td>1.504</td>
<td>1.449</td>
<td>0.017</td>
<td>0.015</td>
<td>Convergence</td>
</tr>
<tr>
<td>Efficient Worker Paid More (1=Fair, 2=Unfair)</td>
<td>19</td>
<td>1.338</td>
<td>1.245***</td>
<td>0.008</td>
<td>0.095</td>
<td>Divergence</td>
</tr>
<tr>
<td>How Business Managed? (1=By Owners, 2=By Owners &amp; Employees, 3=By Government, 4=Employees Own)</td>
<td>18</td>
<td>1.833</td>
<td>1.800</td>
<td>0.055</td>
<td>0.020</td>
<td>Convergence^a</td>
</tr>
<tr>
<td>Follow Instructions? (1=Should, 2=Depends, 3=Must be Convinced First)</td>
<td>19</td>
<td>1.958</td>
<td>1.992</td>
<td>0.044</td>
<td>0.039</td>
<td>Convergence</td>
</tr>
<tr>
<td>Less Emphasis on Money (1=Good, 2=Don't Mind, 3=Bad)</td>
<td>20</td>
<td>1.540</td>
<td>1.550</td>
<td>0.034</td>
<td>0.041</td>
<td>Divergence</td>
</tr>
<tr>
<td>Decrease in Importance of Work (1=Good, 2=Don't Mind, 3=Bad)</td>
<td>20</td>
<td>2.241</td>
<td>2.311</td>
<td>0.107</td>
<td>0.056</td>
<td>Convergence</td>
</tr>
<tr>
<td>Technological Development (1=Good, 2=Don't Mind, 3=Bad)</td>
<td>20</td>
<td>1.568</td>
<td>1.524</td>
<td>0.044</td>
<td>0.038</td>
<td>Convergence</td>
</tr>
<tr>
<td>Development of the Individual (1=Good, 2=Don't Mind, 3=Bad)</td>
<td>20</td>
<td>1.219</td>
<td>1.181</td>
<td>0.007</td>
<td>0.007</td>
<td>Convergence</td>
</tr>
<tr>
<td>Simple, Natural Lifestyle (1=Good, 2=Don't Mind, 3=Bad)</td>
<td>20</td>
<td>1.223</td>
<td>1.204</td>
<td>0.010</td>
<td>0.011</td>
<td>Convergence</td>
</tr>
<tr>
<td>Scientific Advances (1=Will Hurt, 2=Some of Each, 3=Will Help)</td>
<td>20</td>
<td>1.778</td>
<td>1.731</td>
<td>0.022</td>
<td>0.016</td>
<td>Convergence</td>
</tr>
</tbody>
</table>

** denotes t-test for difference of means significant at .05 level or greater.
*** denotes t-test for difference of means significant at .01 level or greater.
^a denotes F-test for difference of variance significant at .05 level or greater.
b denotes F-test for difference of variance significant at .01 level or greater.
important aspect of a job, and how business should be managed. Whether good hours or the opportunity to meet people was an
For the question of how business should be managed, the twenty	nations became more similar in their relative values. In
other words, they converged in these values. However,
regarding the importance of good hours and the opportunity to
meet someone in a job, the twenty nations diverged, as some
nations placed greater importance on these traits than others.
Table 5 above also details the changes in variances from 1981
to 1990 for the Individual, Work, and Economy-related
variables.

For Marriage and Family-related values, the general trend
is to consider faithfulness, mutual respect, understanding,
being away from in-laws, a happy sex life, and children as
very important to a successful marriage. In addition, adequate
income, good housing, sharing of household chores, and common
interests are considered rather important. Having the same
background, religion, or political views are not considered
important to a successful marriage. Of these values only the
importance of sharing household roles became significantly
more important from 1981 to 1990. All the others, except
religion, background, and politics, became more important, but
did not display statistically significant differences from
1981 to 1990. Further, the twenty nations hold that children need a home with both parents to grow up happily and thus do not approve of single women having children. They also expect parents to sacrifice their own well-being if necessary to benefit their children. In return, children are always expected to respect their parents regardless of their faults or qualities. However, some values appear to contradict one another. For example, in most nations marriage is not considered an outdated institution, but the married individuals having an affair or getting divorced appears to be increasingly tolerated behavior judging by the responses to questions 304 and 310 presented in table 6.

One variable that fits nicely with other empirical studies is the value of fewer number of children. For the nations studied here, the average number of children mentioned as the ideal family size decreased from nearly three children in 1981 to two and a half by 1990. While such a decrease appears small, it is statistically significant at the .05 level and perhaps even more striking is that the variance among nations became significantly smaller from 1981 to 1990. This means that the ideal family size (of between two and three children) is generally agreed upon among these twenty nations. This is consistent with decreasing birth rates in
Table 6. Aggregate-Level Results for Marriage and Family Variables.

<table>
<thead>
<tr>
<th>Variable Description</th>
<th>Sample Size</th>
<th>Mean 1981</th>
<th>Mean 1990</th>
<th>Variance 1981</th>
<th>Variance 1990</th>
<th>Change in Dispersion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faithfulness Important to Marriage (1=very, 2=rather, 3=not very)</td>
<td>18</td>
<td>1.192</td>
<td>1.160</td>
<td>0.007</td>
<td>0.006</td>
<td>Convergence</td>
</tr>
<tr>
<td>Adequate Income Important to Marriage (1=very, 2=rather, 3=not very)</td>
<td>18</td>
<td>1.730</td>
<td>1.720</td>
<td>0.016</td>
<td>0.025</td>
<td>Divergence</td>
</tr>
<tr>
<td>Same Background Important to Marriage (1=very, 2=rather, 3=not very)</td>
<td>18</td>
<td>2.175</td>
<td>2.198</td>
<td>0.011</td>
<td>0.014</td>
<td>Divergence</td>
</tr>
<tr>
<td>Mutual Respect Important to Marriage (1=very, 2=rather, 3=not very)</td>
<td>18</td>
<td>1.185</td>
<td>1.138</td>
<td>0.007</td>
<td>0.004</td>
<td>Convergence</td>
</tr>
<tr>
<td>Religion Important to Marriage (1=very, 2=rather, 3=not very)</td>
<td>18</td>
<td>2.145</td>
<td>2.174</td>
<td>0.030</td>
<td>0.046</td>
<td>Divergence</td>
</tr>
<tr>
<td>Good Housing Important to Marriage (1=very, 2=rather, 3=not very)</td>
<td>18</td>
<td>1.745</td>
<td>1.754</td>
<td>0.017</td>
<td>0.013</td>
<td>Convergence</td>
</tr>
<tr>
<td>Politics Important to Marriage (1=very, 2=rather, 3=not very)</td>
<td>18</td>
<td>2.509</td>
<td>2.574</td>
<td>0.032</td>
<td>0.012</td>
<td>Convergence</td>
</tr>
<tr>
<td>Understanding Important to Marriage (1=very, 2=rather, 3=not very)</td>
<td>18</td>
<td>1.224</td>
<td>1.200</td>
<td>0.007</td>
<td>0.003</td>
<td>Convergence</td>
</tr>
<tr>
<td>Away From In-Laws Important to Marriage (1=very, 2=rather, 3=not very)</td>
<td>18</td>
<td>1.835</td>
<td>1.793</td>
<td>0.097</td>
<td>0.052</td>
<td>Convergence</td>
</tr>
<tr>
<td>Happy Sex Life Important to Marriage (1=very, 2=rather, 3=not very)</td>
<td>18</td>
<td>1.381</td>
<td>1.379</td>
<td>0.019</td>
<td>0.019</td>
<td>Convergence</td>
</tr>
<tr>
<td>Share Household Chores Important to Marriage (1=very, 2=rather, 3=not very)</td>
<td>18</td>
<td>1.950</td>
<td>1.8036**</td>
<td>0.042</td>
<td>0.032</td>
<td>Convergence</td>
</tr>
<tr>
<td>Children Important to Marriage (1=very, 2=rather, 3=not very)</td>
<td>18</td>
<td>1.544</td>
<td>1.455</td>
<td>0.028</td>
<td>0.023</td>
<td>Convergence</td>
</tr>
<tr>
<td>Common Interests Important to Marriage (1=very, 2=rather, 3=not very)</td>
<td>18</td>
<td>1.703</td>
<td>1.696</td>
<td>0.022</td>
<td>0.020</td>
<td>Convergence</td>
</tr>
</tbody>
</table>
Table 6.
(Continued)

<table>
<thead>
<tr>
<th>Variable Description</th>
<th>Sample Size</th>
<th>Mean 1981</th>
<th>Mean 1990</th>
<th>Variance 1981</th>
<th>Variance 1990</th>
<th>Change in Dispersion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ideal Size of Family (actual number of children)</td>
<td>20</td>
<td>2.991</td>
<td>2.7127**</td>
<td>0.259</td>
<td>0.112</td>
<td>Convergence^a</td>
</tr>
<tr>
<td>Children Need Both Parents in Home (1=Agree, 2=Disagree)</td>
<td>19</td>
<td>1.211</td>
<td>1.1366**</td>
<td>0.011</td>
<td>0.006</td>
<td>Convergence</td>
</tr>
<tr>
<td>Marriage Outdated Institution (1=Yes, 2=No)</td>
<td>20</td>
<td>1.822</td>
<td>1.8610**</td>
<td>0.003</td>
<td>0.003</td>
<td>No Change</td>
</tr>
<tr>
<td>Woman as Single Parent (1=Approve, 2=Depends, 3=Disapprove)</td>
<td>20</td>
<td>2.000</td>
<td>2.014</td>
<td>0.081</td>
<td>0.088</td>
<td>Divergence</td>
</tr>
<tr>
<td>Children Respect Parents (1=Regardless of Qualities or Faults, 2=Must be Earned by Parents)</td>
<td>20</td>
<td>1.327</td>
<td>1.309</td>
<td>0.018</td>
<td>0.021</td>
<td>Divergence</td>
</tr>
<tr>
<td>Parents' Responsibilities (1=Sacrifice for child's well-being, 2=Neither, 3=Parents have own life)</td>
<td>20</td>
<td>1.564</td>
<td>1.507</td>
<td>0.039</td>
<td>0.032</td>
<td>Convergence</td>
</tr>
<tr>
<td>More Emphasis on Family Life (1=Good thing, 2=Both, 3=Bad)</td>
<td>20</td>
<td>1.162</td>
<td>1.123</td>
<td>0.007</td>
<td>0.008</td>
<td>Divergence</td>
</tr>
<tr>
<td>Married Man/Woman Have Affair (1=Never justified, 2-9=depends, 10=Always justified)</td>
<td>20</td>
<td>2.474</td>
<td>2.572</td>
<td>0.249</td>
<td>0.362</td>
<td>Divergence</td>
</tr>
<tr>
<td>Divorce (1=Never justified, 2-9=depends, 10=Always justified)</td>
<td>20</td>
<td>4.730</td>
<td>5.3289**</td>
<td>0.496</td>
<td>0.740</td>
<td>Divergence</td>
</tr>
</tbody>
</table>

** denotes t-test for difference of means significant at .05 level or greater.
*** denotes t-test for difference of means significant at .01 level or greater.
^a denotes F-test for difference of variance significant at .05 level or greater.
^b denotes F-test for difference of variance significant at .01 level or greater.
Table 6 above details the movement of these and the other variables relating to Marriage and Family regarding convergence, divergence, or maintaining diversity.

Politics and Government is the third broad category of values to be explored here. The general trend in these values is of valuing increased freedom and individualism as displayed by the proportion of those who do not mind a decreased emphasis placed on respect for authority or who find various methods of public dissent acceptable. Specifically, the mean scores for the nations in this study tend to lie slightly left of middle on the political spectrum. Although their citizens appear willing to fight for their country, they are also more tolerant of fighting with the police or threatening workers who do not join a strike. In addition, there is moderate acceptance of claiming governmental benefits not entitled to oneself or cheating on one's taxes. Finally, and somewhat disconcerting for political leaders or their opponents, political assassinations are acceptable for an average of about twenty-five percent of the citizens in these nations. Table 7 shows the results for each variable.

For the ten Government and Politics-related variables, eight maintained diversity from 1981 to 1990. The two variables showing significant differences in variances were on
the self-placement on the political spectrum and claiming government benefits to which you are not entitled. Self-placement on the political spectrum converged, displaying more uniformity in value placement in 1990, while claiming benefits diverged, displaying more diversity in beliefs. This is somewhat consistent to earlier predictions if we consider that a placement on the left portion of the political spectrum generally represents more individual rights and benefits. In addition, the acceptance of claiming government benefits even when one is not entitled to those benefits implies a greater tolerance for individual decision making and individual rights. However, more sophisticated analysis is needed to develop the relationship between these post-hoc explanations and actual relationships.

Beyond these two variables, the other eight variables maintained current diversity which is in accordance with the hypothesis that political values will either diverge or maintain diversity. However, if the preceding post hoc explanation proves salient, we would have expected divergence in all of the other variables. Although the results are not statistically significant, seven of the eight other variables did diverge slightly from 1981 to 1990 as shown in Table 7.
Table 7. Aggregate-level Results for Government and Politics Variables.

<table>
<thead>
<tr>
<th>Variable Description</th>
<th>Sample Size</th>
<th>Mean 1981</th>
<th>Mean 1990</th>
<th>Variance 1981</th>
<th>Variance 1990</th>
<th>Change in Dispersion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which is More Important? (l=Freedom, 2=Depends, 3=Equality)</td>
<td>20</td>
<td>1.801</td>
<td>1.800</td>
<td>0.028</td>
<td>0.033</td>
<td>Divergence</td>
</tr>
<tr>
<td>Self-Placement on Ideological Spectrum (l=Left, 10=Right)</td>
<td>19</td>
<td>5.691</td>
<td>5.514</td>
<td>0.423</td>
<td>0.188</td>
<td>Convergence&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Feelings Toward Society (1=Must Be Radically Changed, 2=Reformed, 3=Defended Against Subversive Forces)</td>
<td>16</td>
<td>2.155</td>
<td>2.119</td>
<td>0.017</td>
<td>0.010</td>
<td>Convergence</td>
</tr>
<tr>
<td>Willing to Fight for Country? (1=Yes, 2=No)</td>
<td>20</td>
<td>1.362</td>
<td>1.350</td>
<td>0.034</td>
<td>0.037</td>
<td>Divergence</td>
</tr>
<tr>
<td>Greater Respect for Authority in Future (1=Good, 2=Don't Mind, 3=Bad)</td>
<td>20</td>
<td>1.611</td>
<td>1.692</td>
<td>0.154</td>
<td>0.188</td>
<td>Divergence</td>
</tr>
<tr>
<td>Claiming Benefits Not Entitled To (1=Never Justified, 2-9=Depends, 10=Always Justified)</td>
<td>20</td>
<td>1.966</td>
<td>2.364</td>
<td>0.306</td>
<td>0.937</td>
<td>Divergence&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Cheating on Taxes (1=Never Justified, 2-9=Depends, 10=Always Justified)</td>
<td>19</td>
<td>2.640</td>
<td>2.678</td>
<td>0.387</td>
<td>0.412</td>
<td>Divergence</td>
</tr>
<tr>
<td>Fighting with Police (1=Never Justified, 2-9=Depends, 10=Always Justified)</td>
<td>19</td>
<td>2.258</td>
<td>2.592</td>
<td>0.267</td>
<td>0.392</td>
<td>Divergence</td>
</tr>
<tr>
<td>Threatening Workers Refusing to Join Strike (1=Never Justified, 2-9=Depends, 10=Always Justified)</td>
<td>19</td>
<td>1.831</td>
<td>1.859</td>
<td>0.155</td>
<td>0.286</td>
<td>Divergence</td>
</tr>
<tr>
<td>Political Assassinations (1=Never Justified, 2-9=Depends, 1=Always Justified)</td>
<td>20</td>
<td>1.592</td>
<td>1.821</td>
<td>0.167</td>
<td>0.232</td>
<td>Divergence</td>
</tr>
</tbody>
</table>

** denotes t-test for difference of means significant at .05 level or greater.
*** denotes t-test for difference of means significant at .01 level or greater.
a denotes F-test for difference of variance significant at .05 level or greater.
b denotes F-test for difference of variance significant at .01 level or greater.
The final group of variables for the aggregate analysis are related to Morality, Religion, and Sexuality. In these variables we see a general increase in individual choice, but a corresponding decrease in honesty or what is generally referred to as morality. The abortion issue is an extremely volatile public policy issue in the United States and in many other nations. However, it appears there is a general consensus among the twenty nations studied here that abortion is acceptable if the mother's health is in danger or if the child will be handicapped, but not acceptable simply if the mother is unmarried or if the parents do not want an additional child. Also, individual choice is more acceptable in such issues as homosexuality, euthanasia, and suicide. All three of these values have generated important public policy dilemmas. However, this general tolerance of individual choice also applies to values relating to general honesty or morality such as avoiding the fare on public transportation, buying stolen goods, joyriding, or using marijuana. Further, keeping money that is found, lying in one's own interest, and not reporting hitting a parked car are considered somewhat justifiable by the twenty nations in this study. Each of these 'tolerances' may have important public policy implications that may require cross-national collaboration to
deal with efficiently.

The two questions relating to religion reveal that good and evil are considered to be dependent on circumstances rather than absolute guidelines from which we decide to act. Also, if God is acknowledged to exist (as is the case by an average of about 90 percent of respondents in each nation) the feeling is that God is a spirit or unknown rather than a personal being. However, of these 20 variables only three showed significant changes from 1981 to 1990. The acceptability of homosexuality, suicide, and euthanasia all increased significantly during this time period. Table 8 details these changes as well as for the other variables relating to morality, religion, and sexuality.

The variances relating to the above variables moved according to the previously hypothesized direction. That is, fully eighty percent of the variables showed weak evidence of divergence. However, only one of these was statistically significant at the .05 level. Thus, we must conclude that these values maintained their diversity over this time period. Nevertheless, values relating to the acceptability of joyriding became more diverse from 1981 to 1990 even though it is possible this result is due to chance. These results are consistent with the hypothesis that social values will
### Table 8. Aggregate-Level Results for Morality, Religion, and Sexuality Variables.

<table>
<thead>
<tr>
<th>Variable Descriptions</th>
<th>Sample Size</th>
<th>Mean 1981</th>
<th>Mean 1990</th>
<th>Variance 1981</th>
<th>Variance 1990</th>
<th>Change in Dispersion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good &amp; Evil</td>
<td>20</td>
<td>2.379</td>
<td>2.308</td>
<td>0.037</td>
<td>0.052</td>
<td>Divergence</td>
</tr>
<tr>
<td>(1=Absolute Guidelines, 2=Neither, 3=Circumstances Dictate)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>What is God?</td>
<td>19</td>
<td>1.958</td>
<td>1.946</td>
<td>0.130</td>
<td>0.148</td>
<td>Divergence</td>
</tr>
<tr>
<td>(1=Personal, 2=Spirit or Life Force, 3=Unsure, 4=No God)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Abortion OK: Mother's Health (1=Yes, 2=No)</td>
<td>20</td>
<td>1.121</td>
<td>1.117</td>
<td>0.011</td>
<td>0.008</td>
<td>Convergence</td>
</tr>
<tr>
<td>Abortion OK: Handicapped Child (1=Yes, 2=No)</td>
<td>20</td>
<td>1.253</td>
<td>1.299</td>
<td>0.027</td>
<td>0.028</td>
<td>Divergence</td>
</tr>
<tr>
<td>Abortion OK: Mother Unmarried (1=Yes, 2=No)</td>
<td>20</td>
<td>1.695</td>
<td>1.698</td>
<td>0.039</td>
<td>0.022</td>
<td>Convergence</td>
</tr>
<tr>
<td>Abortion OK: No Want Child (1=Yes, 2=No)</td>
<td>20</td>
<td>1.644</td>
<td>1.665</td>
<td>0.049</td>
<td>0.026</td>
<td>Convergence</td>
</tr>
<tr>
<td>Avoid Transport Fare (1=Never Justified, 2-9=Depends, 10=Never Justified)</td>
<td>19</td>
<td>2.133</td>
<td>2.331</td>
<td>0.240</td>
<td>0.365</td>
<td>Divergence</td>
</tr>
<tr>
<td>Buying Stolen Goods (1=Never Justified, 2-9=Depends, 10=Never Justified)</td>
<td>20</td>
<td>1.702</td>
<td>1.821</td>
<td>0.155</td>
<td>0.242</td>
<td>Divergence</td>
</tr>
<tr>
<td>Joyriding (1=Never Justified, 2-9=Depends, 10=Never Justified)</td>
<td>19</td>
<td>1.352</td>
<td>1.455</td>
<td>0.050</td>
<td>0.196</td>
<td>Divergence</td>
</tr>
<tr>
<td>Using Marijuana (1=Never Justified, 2-9=Depends, 10=Never Justified)</td>
<td>20</td>
<td>1.705</td>
<td>1.700</td>
<td>0.174</td>
<td>0.181</td>
<td>Divergence</td>
</tr>
<tr>
<td>Keeping Money Found (1=Never Justified, 2-9=Depends, 10=Never Justified)</td>
<td>19</td>
<td>2.922</td>
<td>3.329</td>
<td>0.711</td>
<td>0.970</td>
<td>Divergence</td>
</tr>
<tr>
<td>Lying in Own Interest (1=Never Justified, 2-9=Depends, 10=Never Justified)</td>
<td>20</td>
<td>2.654</td>
<td>2.849</td>
<td>0.336</td>
<td>0.526</td>
<td>Divergence</td>
</tr>
<tr>
<td>Sex Under Legal Age of Consent (1=Never Justified, 2-9=Depends, 10=Never Justified)</td>
<td>20</td>
<td>2.494</td>
<td>2.695</td>
<td>1.034</td>
<td>1.145</td>
<td>Divergence</td>
</tr>
</tbody>
</table>
Table 8.  
(Continued)

<table>
<thead>
<tr>
<th>Variable Descriptions</th>
<th>Sample Size</th>
<th>Mean 1981</th>
<th>Mean 1990</th>
<th>Variance 1981</th>
<th>Variance 1990</th>
<th>Change in Dispersion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accepting Bribes (1=Never Justified, 2-9=Depends, 10=Never Justified)</td>
<td>20</td>
<td>1.764</td>
<td>1.755</td>
<td>0.146</td>
<td>0.197</td>
<td>Divergence</td>
</tr>
<tr>
<td>Homosexuality (1=Never Justified, 2-9=Depends, 10=Never Justified)</td>
<td>20</td>
<td>3.073</td>
<td>3.7771**</td>
<td>0.992</td>
<td>1.385</td>
<td>Divergence</td>
</tr>
<tr>
<td>Prostitution (1=Never Justified, 2-9=Depends, 10=Never Justified)</td>
<td>20</td>
<td>2.598</td>
<td>2.914</td>
<td>0.576</td>
<td>0.801</td>
<td>Divergence</td>
</tr>
<tr>
<td>Euthanasia (1=Never Justified, 2-9=Depends, 10=Never Justified)</td>
<td>20</td>
<td>3.762</td>
<td>4.4431**</td>
<td>0.951</td>
<td>0.848</td>
<td>Convergence</td>
</tr>
<tr>
<td>Suicide (1=Never Justified, 2-9=Depends, 10=Never Justified)</td>
<td>20</td>
<td>2.399</td>
<td>2.8175**</td>
<td>0.294</td>
<td>0.482</td>
<td>Divergence</td>
</tr>
<tr>
<td>Not Reporting Hitting Parked Car (1=Never Justified, 2-9=Depends, 10=Never Justified)</td>
<td>19</td>
<td>2.004</td>
<td>2.093</td>
<td>0.167</td>
<td>0.366</td>
<td>Divergence</td>
</tr>
<tr>
<td>Killing in Self-Defense (1=Never Justified, 2-9=Depends, 10=Never Justified)</td>
<td>20</td>
<td>5.140</td>
<td>5.395</td>
<td>0.684</td>
<td>0.534</td>
<td>Convergence</td>
</tr>
</tbody>
</table>

** denotes t-test for difference of means significant at .05 level or greater.  
*** denotes t-test for difference of means significant at .01 level or greater.  
a denotes F-test for difference of variance significant at .05 level or greater.  
b denotes F-test for difference of variance significant at .01 level or greater.

maintain diversity or become more diverse as individualism is embraced as a global value. Table 8 displays the differences in variances from 1981 to 1990 for the variables relating to morals, religion, and sexuality.

The main conclusion from the preceding analysis is that individualism is becoming a more universal value. In addition,
values appear to be becoming more liberal in that they are more tolerant of individual choices. The possible exception to this observation is with values relating to family and marriage. The values in this category appear to be more traditional in scope. For example, there is a strong belief that children need a home with both parents in order to grow up happy. Also, children are expected to respect their parents regardless of their qualities or faults.

Finally, most values show a remarkable stability over time as shown by the fact that only ten of the seventy-six variables examined showed significant changes over time. Further, only nine variables showed a significant difference in variance, with four displaying divergence and five displaying convergence. Thus, the vast majority of variables maintained or did not show significant differences in variance from 1981 to 1990. Again this illustrates the stability of values over time.

But what is lacking from this discussion is an examination of the internal variability of values among these nations. That is, the preceding analysis shows little change in values as stratified by nation, but we cannot conclude from these results that individuals are maintaining diversity. As a result, an examination of individual-level value change is the
next section of this study.

**Individual-Level Analysis**

In general, the results of the individual-level analysis also suggest an increasing emphasis on individualism, freedom, and family life as well as less concern for values of political authority, political honesty, and general morality. However, unlike the results from the aggregate-level analysis, nearly every variable showed a significant change in variance over this period. Of these variables, twenty-nine displayed divergence while thirty showed convergence. Although the most of the statistical significance can be attributed to large samples sizes (ranging from 23,026 to 32,003 individuals), these findings show that the use of aggregate-level analysis alone would have resulted in misleading conclusions. Thus, a more detailed exploration of the individual-level results follows.

As in the aggregate-level analysis, values in the broader category of Individual, Work, and Economy, identified good pay, pleasant co-workers, job security, the opportunity to achieve something, meeting abilities, and interesting as important aspect of a job. Of these qualities, good pay is still identified as the most important aspect of a job. Likewise, the absence of pressure, promotions, job respect,
good hours, the necessity to use initiative, the usefulness to society, generous holidays, the opportunity to meet people, and whether or not the job is responsible are qualities less important for employment. However, among these less important qualities, only good hours and generous holidays became less valued aspects of employment. All the others, showed a significant increase in importance over this period. In addition, the individual-level analysis confirms the value of efficiency, employee participation in the selection of managers, technological development, scientific advances, and development of the individual.

The primary difference between the results of the aggregate-level analysis and the individual-level analysis is in the level of dispersion or variance in response. Of the twenty-four variables relating to economic values, seven displayed convergence, six showed divergence, and eleven showed no significant change in variance. One variable that showed divergence in the aggregate analysis, pleasant co-workers as an important aspect of a job, displayed significant convergence at the individual-level. Overall, the findings here still do not appear to support the hypothesis that economic, work, or individual related values will tend to become more similar in a more global world. Although nearly
every variable showed a significant change from 1981 to 1990, no clear pattern of convergence or divergence is evident. Table 9 shows the movement for each variable in this broad theoretical category.

Table 9. Individual-Level Results for Individual, Work, and Economy Variables.

<table>
<thead>
<tr>
<th>Variable Description</th>
<th>Mean 1981</th>
<th>Mean 1990</th>
<th>Variance 1981</th>
<th>Variance 1990</th>
<th>Change in Dispersion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good Pay Important to Job (1=yes, 2=no)</td>
<td>1.335</td>
<td>1.266***</td>
<td>0.223</td>
<td>0.195</td>
<td>Convergenceb</td>
</tr>
<tr>
<td></td>
<td>n=32003</td>
<td>n=28941</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pleasant People Important to Job (1=yes, 2=no)</td>
<td>1.357</td>
<td>1.329***</td>
<td>0.229</td>
<td>0.221</td>
<td>Convergenceb</td>
</tr>
<tr>
<td></td>
<td>n=32003</td>
<td>n=28941</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Pressure Important to Job (1=yes, 2=no)</td>
<td>1.705</td>
<td>1.636**</td>
<td>0.208</td>
<td>0.212</td>
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<tr>
<td>Job Security Important to Job (1=yes, 2=no)</td>
<td>1.413</td>
<td>1.390***</td>
<td>0.242</td>
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<td>Promotions Important to Job (1=yes, 2=no)</td>
<td>1.655</td>
<td>1.625***</td>
<td>0.226</td>
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<td>Job Respected Important to Job (1=yes, 2=no)</td>
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<tr>
<td>Good Hours Important to Job (1=yes, 2=no)</td>
<td>1.555</td>
<td>1.573***</td>
<td>0.247</td>
<td>0.245</td>
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<td>n=32003</td>
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<td>Use Initiative Important to Job (1=yes, 2=no)</td>
<td>1.574</td>
<td>1.530***</td>
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<td>Useful to Society Important to Job (1=yes, 2=no)</td>
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<td>1.613***</td>
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<td>Generous Holidays Important to Job (1=yes, 2=no)</td>
<td>1.721</td>
<td>1.729**</td>
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<tr>
<td>Meeting People Important to Job (1=yes, 2=no)</td>
<td>1.585</td>
<td>1.575**</td>
<td>0.243</td>
<td>0.244</td>
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<td>Achieve Something Important to Job (1=yes, 2=no)</td>
<td>1.497</td>
<td>1.447***</td>
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<td>Responsible Important to Job (1=yes, 2=no)</td>
<td>1.580</td>
<td>1.534***</td>
<td>0.244</td>
<td>0.249</td>
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<tr>
<td>Interesting Important to Job (1=yes, 2=no)</td>
<td>1.455</td>
<td>1.421***</td>
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<td>0.244</td>
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<td>n=32003</td>
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Table 9. (Continued)

<table>
<thead>
<tr>
<th>Variable Description</th>
<th>Mean 1981</th>
<th>Mean 1990</th>
<th>Variance 1981</th>
<th>Variance 1990</th>
<th>Change in Dispersion</th>
</tr>
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<tbody>
<tr>
<td>Meets Abilities Important to Job (1=yes, 2=no)</td>
<td>1.477</td>
<td>1.453***</td>
<td>0.249</td>
<td>0.248</td>
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<tr>
<td>Efficient Worker Paid More (1=Fair, 2=Unfair)</td>
<td>1.324</td>
<td>1.228***</td>
<td>0.219</td>
<td>0.176</td>
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<td></td>
<td>n=29132</td>
<td>n=25382</td>
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<tr>
<td>How Business Managed?</td>
<td>1.828</td>
<td>1.817</td>
<td>0.850</td>
<td>0.801</td>
<td>Convergenceb</td>
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<tr>
<td>(1=By Owners, 2=By Owners &amp; Employees, 3=By Government, 4=Employees Own)</td>
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<td></td>
<td>n=26228</td>
<td>n=26229</td>
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<tr>
<td>Follow Instructions?</td>
<td>2.008</td>
<td>1.971***</td>
<td>0.755</td>
<td>0.771</td>
<td>Divergencea</td>
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<tr>
<td>(1=Should, 2=Depends, 3=Must be Convinced First)</td>
<td>n=30650</td>
<td>n=26358</td>
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<tr>
<td>Less Emphasis on Money</td>
<td>1.573</td>
<td>1.562</td>
<td>0.605</td>
<td>0.616</td>
<td>Divergence</td>
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<tr>
<td>(1=Good, 2=Don't Mind, 3=Bad)</td>
<td>n=31228</td>
<td>n=28442</td>
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</tr>
<tr>
<td>Decrease in Importance of Work (1=Good, 2=Don't Mind, 3=Bad)</td>
<td>2.256</td>
<td>2.299***</td>
<td>0.719</td>
<td>0.769</td>
<td>Divergenceb</td>
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<tr>
<td></td>
<td>n=31361</td>
<td>n=28195</td>
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<tr>
<td>Technological Development</td>
<td>1.543</td>
<td>1.504***</td>
<td>0.561</td>
<td>0.551</td>
<td>Convergenceb</td>
</tr>
<tr>
<td>(1=Good, 2=Don't Mind, 3=Bad)</td>
<td>n=30985</td>
<td>n=28202</td>
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<tr>
<td>Development of the Individual (1=Good, 2=Don't Mind, 3=Bad)</td>
<td>1.226</td>
<td>1.187***</td>
<td>0.269</td>
<td>0.234</td>
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<td></td>
<td>n=31287</td>
<td>n=28495</td>
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<tr>
<td>Simple, Natural Lifestyle</td>
<td>1.236</td>
<td>1.221***</td>
<td>0.296</td>
<td>0.274</td>
<td>Convergenceb</td>
</tr>
<tr>
<td>(1=Good, 2=Don't Mind, 3=Bad)</td>
<td>n=31482</td>
<td>n=28599</td>
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<tr>
<td>Scientific Advances</td>
<td>1.772</td>
<td>1.718***</td>
<td>0.573</td>
<td>0.537</td>
<td>Convergenceb</td>
</tr>
<tr>
<td>(1=Will Hurt, 2=Some of Each, 3=Will Help)</td>
<td>n=30042</td>
<td>n=26699</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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*** denotes t-test for difference of means significant at .01 level or greater.
a denotes F-test for difference of variance significant at .05 level or greater.
b denotes F-test for difference of variance significant at .01 level or greater.

The individual-level results for Marriage and Family-related values also show a general trend to consider faithfulness, mutual respect, understanding, being away from in-laws, a happy sex life, and children as very important to a
successful marriage. In addition, adequate income, good housing, sharing of household chores and common interests are considered rather important while having the same background, religion, or political views are not considered important to a successful marriage. Of these values, having an adequate income, shared backgrounds, or common religious and political views became less important from 1981 to 1990. Each of the other values became more important over this same period. Likewise, the value of a home in which both parents live is considered more important in order for children to grow up happily. Thus, most do not approve of single women having children. They also display an increasing expectation that parents sacrifice their own well-being if necessary to benefit their children. In return, children are always expected to respect their parents regardless of their faults or qualities.

In each of the other variables, the movement was the same as displayed in the aggregate-level analysis. That is, marriage is less likely to be considered an outdated institution, but having an affair or getting a divorce are considered more acceptable behavior. Further, two or three children are considered ideal and these children are expected to respect their parents regardless of individual qualities or faults. Table 10 displays these findings.
Table 10. Individual-level Results for Marriage and Family Variables.

<table>
<thead>
<tr>
<th>Variable Description</th>
<th>Mean 1981</th>
<th>Mean 1990</th>
<th>Variance 1981</th>
<th>Variance 1990</th>
<th>Change in Dispersion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faithfulness Important to Marriage (1=very, 2=rather, 3=not very)</td>
<td>1.210</td>
<td>1.188***</td>
<td>0.221</td>
<td>0.193</td>
<td>Convergenceb</td>
</tr>
<tr>
<td>Adequate Income Important to Marriage (1=very, 2=rather, 3=not very)</td>
<td>1.719</td>
<td>1.728***</td>
<td>0.445</td>
<td>0.428</td>
<td>Convergenceb</td>
</tr>
<tr>
<td>Same Background Important to Marriage (1=very, 2=rather, 3=not very)</td>
<td>2.171</td>
<td>2.218***</td>
<td>0.590</td>
<td>0.567</td>
<td>Convergenceb</td>
</tr>
<tr>
<td>Mutual Respect Important to Marriage (1=very, 2=rather, 3=not very)</td>
<td>1.190</td>
<td>1.152***</td>
<td>0.189</td>
<td>0.149</td>
<td>Convergenceb</td>
</tr>
<tr>
<td>Religion Important to Marriage (1=very, 2=rather, 3=not very)</td>
<td>2.168</td>
<td>2.213***</td>
<td>0.666</td>
<td>0.643</td>
<td>Convergenceb</td>
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<tr>
<td>Good Housing Important to Marriage (1=very, 2=rather, 3=not very)</td>
<td>1.757</td>
<td>1.783***</td>
<td>0.460</td>
<td>0.420</td>
<td>Convergenceb</td>
</tr>
<tr>
<td>Politics Important to Marriage (1=very, 2=rather, 3=not very)</td>
<td>2.501</td>
<td>2.564***</td>
<td>0.480</td>
<td>0.420</td>
<td>Convergenceb</td>
</tr>
<tr>
<td>Understanding Important to Marriage (1=very, 2=rather, 3=not very)</td>
<td>1.233</td>
<td>1.212***</td>
<td>0.222</td>
<td>0.196</td>
<td>Convergenceb</td>
</tr>
<tr>
<td>Away From In-Laws Important to Marriage (1=very, 2=rather, 3=not very)</td>
<td>1.855</td>
<td>1.826***</td>
<td>0.691</td>
<td>0.672</td>
<td>Convergenceb</td>
</tr>
<tr>
<td>Happy Sex Life Important to Marriage (1=very, 2=rather, 3=not very)</td>
<td>1.419</td>
<td>1.408**</td>
<td>0.354</td>
<td>0.324</td>
<td>Convergenceb</td>
</tr>
<tr>
<td>Share Household Chores Important to Marriage (1=very, 2=rather, 3=not very)</td>
<td>1.999</td>
<td>1.850***</td>
<td>0.612</td>
<td>0.551</td>
<td>Convergenceb</td>
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<tr>
<td>Children Important to Marriage (1=very, 2=rather, 3=not very)</td>
<td>1.556</td>
<td>1.484***</td>
<td>0.507</td>
<td>0.460</td>
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<tr>
<td>Common Interests Important to Marriage (1=very, 2=rather, 3=not very)</td>
<td>1.677</td>
<td>1.682</td>
<td>0.460</td>
<td>0.436</td>
<td>Convergenceb</td>
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<tr>
<td>Ideal Size of Family (actual number of children)</td>
<td>2.914</td>
<td>2.623***</td>
<td>2.897</td>
<td>1.254</td>
<td>Convergenceb</td>
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<tr>
<td>Children Need Both Parents in Home (1=Agree, 2=Disagree)</td>
<td>1.181</td>
<td>1.121***</td>
<td>0.148</td>
<td>0.106</td>
<td>Convergenceb</td>
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</table>
Table 10. (Continued)

<table>
<thead>
<tr>
<th>Variable Description</th>
<th>Mean 1981</th>
<th>Mean 1990</th>
<th>Variance 1981</th>
<th>Variance 1990</th>
<th>Change in Dispersion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marriage Outdated Institution (1=Yes, 2=No)</td>
<td>1.818</td>
<td>1.853***</td>
<td>0.149</td>
<td>0.125</td>
<td>Convergence^b</td>
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<tr>
<td>Woman as Single Parent (1=Approve, 2=Depends, 3=Disapprove)</td>
<td>2.023</td>
<td>2.020</td>
<td>0.740</td>
<td>0.757</td>
<td>Divergence^a</td>
</tr>
<tr>
<td>Children Respect Parents (1=Regardless of Qualities or Faults, 2=Must be Earned by Parents)</td>
<td>1.314</td>
<td>1.286***</td>
<td>0.215</td>
<td>0.204</td>
<td>Convergence^b</td>
</tr>
<tr>
<td>Parents' Responsibilities (1=Sacrifice for child's well-being, 2=Neither, 3=Parents have own life)</td>
<td>1.588</td>
<td>1.505***</td>
<td>0.726</td>
<td>0.635</td>
<td>Convergence^b</td>
</tr>
<tr>
<td>More Emphasis on Family Life (1=Good thing, 2=Both, 3=Bad)</td>
<td>1.158</td>
<td>1.122***</td>
<td>0.196</td>
<td>0.152</td>
<td>Convergence^b</td>
</tr>
<tr>
<td>Married Man/Woman Have Affair (1=Never justified, 2-9= depends, 10=Always justified)</td>
<td>2.596</td>
<td>2.729***</td>
<td>5.198</td>
<td>5.631</td>
<td>Divergence^b</td>
</tr>
<tr>
<td>Divorce (1=Never justified, 2-9= depends, 10=Always justified)</td>
<td>4.834</td>
<td>5.337***</td>
<td>8.128</td>
<td>8.283</td>
<td>Divergence</td>
</tr>
</tbody>
</table>

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*** denotes t-test for difference of means significant at .01 level or greater.
a denotes F-test for difference of variance significant at .05 level or greater.
b denotes F-test for difference of variance significant at .01 level or greater.

What is most striking about the individual-level analysis of Marriage and Family-related values is that in nineteen of the twenty-two variables, values became more similar from 1981 to 1990. The only values that became more diverse were whether it is appropriate for a woman to be a single parent, whether it is justifiable for married individuals to have an affair, and whether divorce is acceptable. For these variables, the conflict between autonomy or individual choice
and family or collective-based values seems to divide many individuals and create more diversity in beliefs. However, as shown in Table 10 above, for the nineteen other variables, the consensus in beliefs appears stronger in 1990 compared to 1981.

Those values relating to Politics and Government show an increased emphasis placed on freedom and individualism. A decline in the value placed on authority and increases in the acceptability of various methods of public dissent showed the importance placed on individual autonomy. As in the aggregate analysis, most individuals place themselves slightly left of middle on the political spectrum; and although more willing to fight for their country, they are also more tolerant of fighting with the police or threatening workers who do not join a strike. Moreover, it also seems it is more acceptable to cheat on one's taxes or claim governmental benefits even if one is not entitled to these benefits. Finally, political assassinations became slightly more acceptable from 1981 to 1990. However, fully 75 percent of individuals still consider such assassinations unacceptable compared to 82 percent in 1981.

For these ten Government and Politics-related variables, six showed divergence while three converged from 1981 to 1990.
Self-placement on the political spectrum converged over this period with more individuals placing their beliefs near the center of the spectrum. Individuals also became more similar in their belief that reform is the most appropriate method of political change. However, more individuals agreed to fight for their country if necessary. The values described by the other seven variables showed the same level of or less consensus in 1990 than in 1981. The individuals in this sample were less likely to agree whether freedom or equality are more important values, whether more respect for authority would be good or bad, and whether claiming undeserved government benefits, cheating on taxes, fighting with the police, threatening workers who refuse to join a strike, or political assassinations are acceptable means of behavior. It seems individual behavior is considered more relative to certain circumstances which is consistent with our expectation that a consensus on the value of the individual will result in diverse values regarding the political system. Table 11 displays the results of the individual level responses relating to political and government values.

The final group of variables in this analysis are related to Morality, Religion, and Sexuality. As in the aggregate analysis, we see a general increase in individual choice, but
Table 11. Individual-level Results for Politics and Government Variables.

<table>
<thead>
<tr>
<th>Variable Description</th>
<th>Mean 1981</th>
<th>Mean 1990</th>
<th>Variance 1981</th>
<th>Variance 1990</th>
<th>Change in Dispersion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which More Important? (l=Freedom, 2=Depends, 3=Equality)</td>
<td>1.635</td>
<td>1.793***</td>
<td>0.880</td>
<td>0.893</td>
<td>Divergence</td>
</tr>
<tr>
<td>Self-Placement on Ideological Spectrum (l=Left, 10=Right)</td>
<td>5.621</td>
<td>5.370***</td>
<td>4.377</td>
<td>4.032</td>
<td>Convergence</td>
</tr>
<tr>
<td>Feelings Toward Society (1=Must Be Radically Changed, 2=Reformed, 3=Defended Against Subversive Forces)</td>
<td>2.183</td>
<td>2.113***</td>
<td>0.267</td>
<td>0.222</td>
<td>Convergence</td>
</tr>
<tr>
<td>Willing to Fight for Country? (1=Yes, 2=No)</td>
<td>1.395</td>
<td>1.362***</td>
<td>0.239</td>
<td>0.231</td>
<td>Convergence</td>
</tr>
<tr>
<td>Greater Respect for Authority in Future (1=Good, 2=Don't Mind, 3=Bad)</td>
<td>1.672</td>
<td>1.724***</td>
<td>0.686</td>
<td>0.707</td>
<td>Divergence</td>
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<tr>
<td>Claiming Benefits Not Entitled To (1=Never Justified, 2-9=Depends, 10=Always Justified)</td>
<td>2.011</td>
<td>2.363***</td>
<td>3.940</td>
<td>5.217</td>
<td>Divergence</td>
</tr>
<tr>
<td>Cheating on Taxes (1=Never Justified, 2-9=Depends, 10=Always Justified)</td>
<td>2.484</td>
<td>2.626***</td>
<td>5.541</td>
<td>5.949</td>
<td>Divergence</td>
</tr>
<tr>
<td>Fighting with Police (1=Never Justified, 2-9=Depends, 10=Always Justified)</td>
<td>2.219</td>
<td>2.665***</td>
<td>4.166</td>
<td>5.208</td>
<td>Divergence</td>
</tr>
<tr>
<td>Threatening Workers Refusing to Join Strike (1=Never Justified, 2-9=Depends, 10=Always Justified)</td>
<td>1.785</td>
<td>1.862***</td>
<td>2.989</td>
<td>3.404</td>
<td>Divergence</td>
</tr>
<tr>
<td>Political Assassinations (1=Never Justified, 2-9=Depends, 10=Always Justified)</td>
<td>1.582</td>
<td>1.819***</td>
<td>2.487</td>
<td>3.404</td>
<td>Divergence</td>
</tr>
</tbody>
</table>

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a denotes F-test for difference of variance significant at .05 level or greater.
b denotes F-test for difference of variance significant at .01 level or greater.
handicapped, but not acceptable if the mother is unmarried or if the parents do not want an additional child. Also, individual choice is more highly valued in such issues as prostitution, homosexuality, euthanasia, suicide, and sex between individuals under the legal age of consent. The move to greater tolerance of these types of behavior may be embraced or considered enlightened by those concerned with civil rights or liberties. However, this general tolerance of individual choice also seems to apply to values less likely to be embraced by such advocates. These values are those regarding general honesty or morality such as avoiding the fare on public transportation, buying stolen goods, joyriding, using marijuana, keeping money that is found, lying in one's own interest, and not reporting hitting a parked car. Each of these activities are considered somewhat more justifiable by the respondents of this survey. Table 12 details these changes as well as for the other variables relating to morality, religion, and sexuality.

In accordance to my initial hypotheses, fifteen of the twenty variables in this category showed evidence of divergence. Thus, it appears that as individualism is embraced as a value, some activities or behavior that would normally be considered unacceptable become less so. In sum, when
Table 12. Individual-level Results for Morality, Religion, and Sexuality Variables.

<table>
<thead>
<tr>
<th>Variable Description</th>
<th>Mean 1981</th>
<th>Mean 1990</th>
<th>Variance 1981</th>
<th>Variance 1990</th>
<th>Change in Dispersion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good &amp; Evil (1=Absolute Guidelines, 2=Neither, 3=Circumstances Dictate)</td>
<td>2.393</td>
<td>2.304***</td>
<td>0.778</td>
<td>0.843</td>
<td>Divergenceb</td>
</tr>
<tr>
<td>What is God? (1=Personal, 2=Spirit or Life Force, 3=Unsure, 4=No God)</td>
<td>2.020</td>
<td>1.983***</td>
<td>0.939</td>
<td>0.960</td>
<td>Divergencea</td>
</tr>
<tr>
<td>Abortion OK: Mother's Health (1=Yes, 2=No)</td>
<td>1.099</td>
<td>1.101</td>
<td>0.089</td>
<td>0.091</td>
<td>Divergencea</td>
</tr>
<tr>
<td>Abortion OK: Handicapped Child (1=Yes, 2=No)</td>
<td>1.220</td>
<td>1.270***</td>
<td>0.171</td>
<td>0.197</td>
<td>Divergenceb</td>
</tr>
<tr>
<td>Abortion OK: Mother Unmarried (1=Yes, 2=No)</td>
<td>1.695</td>
<td>1.694</td>
<td>0.212</td>
<td>0.213</td>
<td>Divergence</td>
</tr>
<tr>
<td>Abortion OK: No Want Child (1=Yes, 2=No)</td>
<td>1.625</td>
<td>1.651***</td>
<td>0.234</td>
<td>0.228</td>
<td>Divergenceb</td>
</tr>
<tr>
<td>Avoid Transport Fare (1=Never Justified, 2-9=Depends, 10=Never Justified)</td>
<td>2.097</td>
<td>2.317***</td>
<td>4.113</td>
<td>4.644</td>
<td>Divergenceb</td>
</tr>
<tr>
<td>Buying Stolen Goods (1=Never Justified, 2-9=Depends, 10=Never Justified)</td>
<td>1.685</td>
<td>1.878***</td>
<td>2.605</td>
<td>3.497</td>
<td>Divergenceb</td>
</tr>
<tr>
<td>Joyriding (1=Never Justified, 2-9=Depends, 10=Never Justified)</td>
<td>1.378</td>
<td>1.447***</td>
<td>1.513</td>
<td>1.918</td>
<td>Divergenceb</td>
</tr>
<tr>
<td>Using Marijuana (1=Never Justified, 2-9=Depends, 10=Never Justified)</td>
<td>1.658</td>
<td>1.737***</td>
<td>2.962</td>
<td>3.471</td>
<td>Divergenceb</td>
</tr>
<tr>
<td>Keeping Money Found (1=Never Justified, 2-9=Depends, 10=Never Justified)</td>
<td>2.952</td>
<td>3.435***</td>
<td>7.017</td>
<td>7.969</td>
<td>Divergenceb</td>
</tr>
<tr>
<td>Lying in Own Interest (1=Never Justified, 2-9=Depends, 10=Never Justified)</td>
<td>2.686</td>
<td>2.936***</td>
<td>5.027</td>
<td>5.570</td>
<td>Divergenceb</td>
</tr>
<tr>
<td>Sex Under Legal Age of Consent (1=Never Justified, 2-9=Depends, 10=Never Justified)</td>
<td>2.496</td>
<td>2.718***</td>
<td>5.789</td>
<td>6.656</td>
<td>Divergenceb</td>
</tr>
<tr>
<td>Accepting Bribes (1=Never Justified, 2-9=Depends, 10=Never Justified)</td>
<td>1.810</td>
<td>1.783</td>
<td>2.856</td>
<td>2.876</td>
<td>Divergence</td>
</tr>
<tr>
<td>Homosexuality (1=Never Justified, 2-9=Depends, 10=Never Justified)</td>
<td>2.998</td>
<td>3.690***</td>
<td>7.767</td>
<td>9.647</td>
<td>Divergenceb</td>
</tr>
</tbody>
</table>
**individualism is accepted as a core value, the diversity of values relating to other issues becomes more significant as morality is judged through relative definitions of individual circumstances rather than through absolute guidelines for action. Table 12 displays the results of such a phenomena for the twenty variables relating to morals, religion, and sexuality.**

<table>
<thead>
<tr>
<th>Variable Description</th>
<th>Mean 1981</th>
<th>Mean 1990</th>
<th>Variance 1981</th>
<th>Variance 1990</th>
<th>Change in Dispersion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prostitution (1=Never Justified, 2-9=Depends, 10=Never Justified)</td>
<td>2.667 n=30682</td>
<td>2.910*** n=28012</td>
<td>6.012</td>
<td>6.719</td>
<td>Divergenceb</td>
</tr>
<tr>
<td>Euthanasia (1=Never Justified, 2-9=Depends, 10=Never Justified)</td>
<td>3.899 n=30231</td>
<td>4.476*** n=27145</td>
<td>9.548</td>
<td>9.474</td>
<td>Convergence</td>
</tr>
<tr>
<td>Suicide (1=Never Justified, 2-9=Depends, 10=Never Justified)</td>
<td>2.477 n=30447</td>
<td>2.857*** n=27501</td>
<td>5.406</td>
<td>6.482</td>
<td>Divergencerb</td>
</tr>
<tr>
<td>Not Reporting Hitting Parked Car (1=Never Justified, 2-9=Depends, 10=Never Justified)</td>
<td>2.046 n=30981</td>
<td>2.130*** n=26738</td>
<td>4.012</td>
<td>3.952</td>
<td>Convergence</td>
</tr>
<tr>
<td>Killing in Self-Defense (1=Never Justified, 2-9=Depends, 10=Never Justified)</td>
<td>5.083 n=30450</td>
<td>5.378*** n=27538</td>
<td>10.765</td>
<td>10.426</td>
<td>Convergenceb</td>
</tr>
</tbody>
</table>

** denotes t-test for difference of means significant at .05 level or greater.
*** denotes t-test for difference of means significant at .01 level or greater.
a denotes F-test for difference of variance significant at .05 level or greater.
b denotes F-test for difference of variance significant at .01 level or greater.
CHAPTER 5: DISCUSSION AND CONCLUSION

The above results produce several important implications for the study of global value change and globalization. First, the value of aggregate and individual level analysis cannot be overlooked. Each type of analysis provides additional depth in understanding that would be lost if only one method of analysis were employed. Second, the relative stability of many of the values analyzed here in both their substantive meaning as well as in their relative diversity of beliefs is important to recognize as we discuss a global culture and increasing interdependence among the nations of the world. Moreover, a discussion of the various types of convergence or divergence may prove insightful as we seek to discover thresholds of global values and areas where absolute differences still exist. Third, the study of global value change has important implications for the future of global economic, political, and social interactions as nations search for public policies that are acceptable, globally, yet still promote free and fair trade among nations. Also, the study of global values can help predict those issues and types of behavior that will produce the most conflict with regard to public policy, and those issues that are likely to meet with less opposition. Finally,
further research is necessary to examine the relationships between modernization, globalization, and value change. Moreover, more research is necessary to distinguish between period effects and long-term trends. The following sections discuss these concerns more fully.

**Differences in Aggregate and Individual-Level Results**

The above results showed markedly different trends of global value change depending on the level of analysis. The results of the aggregate-level analysis found statistically significant evidence of convergence or divergence in only nine of the seventy-six variables. Of these, four variables displayed divergence while five displayed convergence. However, these results are only slightly greater than we would expect to occur by chance. The small sample sizes (at most, twenty nations) made it unlikely that differences in diversity would achieve statistical significance. Thus, the main conclusion from the aggregate-level analysis is that these nations maintained their level of diversity in values from 1981 to 1990.

Due to much larger sample sizes (ranging from 23,099 to 32,003 cases), the individual-level analysis showed statistically significant changes in diversity for 76 percent of the variables. Of these significant changes in diversity,
thirty variables showed convergence and twenty-nine showed divergence. However, when including those variables that showed no significant change in diversity, the general trend of movement at the individual-level is toward convergence, with thirty-nine variables displaying some movement toward greater similarity and thirty-seven displaying some movement of increasing diversity.

The implication of the above differences in the results of the different levels of analysis is that if only the aggregate level of analysis had been employed, we would have likely concluded that nations are generally maintaining diversity and may be moving toward increasing diversity in response to globalization. However, we would be wrong to say that individuals are becoming more diverse in their values. The results from the individual-level analysis show that there is no overall trend in the diversity among individuals, but that they are becoming more similar in marriage and family related values, more diverse on political and morality based values, and more similar on some economic related values and more dissimilar on others. Through the examination of the individual-level results we increase the depth of our understanding of global value change. In fact, we find that simply stratifying individuals by nation will have a
significant impact on our interpretation of global value change. In addition, it becomes clear that both levels of analysis provide additional depth in understanding global value changes. The additional depth that is available through the aggregate-level analysis is discussed in the following section.

Patterns of Convergence and Divergence

One important benefit of the aggregate-level analysis is in its structural compatibility with graphical presentation. As was discussed earlier, value change may occur in several different patterns. Convergence or divergence may be simple, occur from different directions, display thresholds rather than absolute differences, or exhibit parallel changes. By stratifying respondents by nation, we are able to explore such differences with additional depth. The individual-level analysis provides two points of reference: the mean value for 1981 and the mean value for 1990. By separating respondents by nation, we increase the points of reference tenfold. Thus, what we lose in the ability to describe individual differences in values and the level of diversity within national boundaries, we gain in level of understanding of which type of value change is occurring.

To illustrate this benefit of the aggregate-level
analysis, I picked four variables from the aggregate-level analysis that showed either significant differences in the mean value from 1981 to 1990, the variance from 1981 to 1990, or both. The selection of these variables is relevant to the conclusions drawn from this study. That is, at least some of the values examined in this study displayed the type of changes illustrated by these graphical presentations. The variables chosen include whether it is fair to pay a more efficient worker more than another worker in the same occupation, whether claiming governmental benefits to which one is not entitled is justified, the ideal number of children, and whether agreeing on politics is important to a successful marriage. Figure 5 illustrates the observed changes for variables that displayed parallel change. That is, those variables that showed significantly different means from 1981 to 1990, but showed no significant difference in the level of diversity among nations. For example, the mean value for whether it is fair to pay a more efficient worker more than another decreases from 1.338 in 1981 to 1.245 in 1990. This is an increase in the proportion of individuals in each country who believe such a pay discrepancy is fair. However, the variance among nations was 0.008 in 1981 and 0.009 in 1990, which shows very little difference in the range of values.
cross-nationally from 1981 to 1990. As shown in Figure 5, it quickly becomes apparent which nations do not move along the general trend. In this case, three nations appear as exceptions to the general movement of value change. Of these, only Japan moved opposite the general trend and showed a marked increase in its mean value from 1981 to 1990. The mean value for Norway was nearly identical in 1981 and 1990 (1.44 and 1.46) and the mean value for Sweden actually moved in the same direction as the other nations, but without a large shift.
in average value. Thus, the graphical presentation more conducive to the aggregate-level analysis provides the benefit of exposing nations that do not fit the overall model of value change.

Figure 6 shows the case in which values became more diverse among nations, but the average value of all nations combined was not significantly different from 1981 to 1990. In this case, claiming undeserved governmental benefits did not become more acceptable or less acceptable for all nations.

Figure 6. Divergence from Different Directions in the Acceptance of Claiming Undeserved Government Benefits.
Instead, in some nations it became more acceptable to claim such benefits, while in others it became less acceptable. Such a change is described as divergence from different directions since some nations are above the average value and others are below the average value and became more diverse over time.

Again, this type of data presentation provides additional insight into the dynamics of value change. It appears that two nations, Mexico and Finland, became significantly more likely to believe claiming government benefits was acceptable even if one is not entitled to those benefits while most other nations did not change much in these values over time. Such changes in values suggest a more detailed analysis of the socioeconomic and political conditions in Mexico and Finland during the period from 1981 to 1990 may prove useful in identifying the causes of value change. In addition, France appears to be a unique case in that the mean value is fairly steadily above the mean values for the other nations. Thus, a more detailed look into the dynamics of French political culture may prove insightful.

Figure 7 displays the change in the ideal number of children from 1981 to 1990. In this case, the mean value decreased significantly from 1981 to 1990 and the cross-national variance also decreased over the same time. This
situation is consistent with the concept of simple convergence in which nearly every country moved in the same direction, valuing fewer children as the ideal family size. Although some nations clearly moved faster than others, and some nations did not significantly change, the general trend is of valuing fewer children in making up the ideal family size.

Finally, Figure 8 shows the case of converging from different directions. While the overall mean value did not
significantly change from 1981 to 1990, the variance in response decreased significantly as nations above the group mean showed a tendency to place increasing value in agreement on politics as important to a successful marriage and nations below the group mean tending to place less value in such agreement.

Overall, the aggregate-level analysis provides greater depth in explanation of global value change by allowing for
the distinction between the various types of value change.

Specifically, such analysis allows us to conclude that these nations exhibit evidence of parallel change in values relating to the acceptability of fighting with the police, homosexuality, euthanasia, suicide, and divorce, the importance of sharing household chores to a successful marriage, whether marriage is an outdated institution, the importance of good pay to a job, and whether efficiency is an acceptable method of determining pay scales. In addition, simple convergence is shown in values related to the ideal family size with regard to children and whether children need both parents in the home in order to grow up happily. In both cases, a common final destination seems agreeable cross-nationally and each nation is moving toward that point. Finally, convergence or divergence from different directions is exhibited by those values such as self-placement on the political spectrum, claiming undeserved government benefits, joyriding, not reporting hitting a parked car, the value of politics and understanding to a successful marriage, the importance of meeting people as an aspect of a job, and the appropriate management of business.
Value Stability and Change

However grand the above conclusions appear, an additional aspect of value change that can be derived from the present study is the relative stability of values over time. For this discussion, the individual-level results are most compelling. Despite the large sample sizes used for the individual-level analysis, seven of the seventy-six variables showed no significant difference in the mean value from 1981 to 1990. In fact, even in those variables with statistically significant differences, most were in the degree of consensus regarding a particular response rather than a move to a different response category.

However, five variables either changed to another category as the most common response or the primary category of response lost enough respondents to make it no longer the most common response. One such variable asks how business should be managed. In 1981, the response was nearly evenly split between category one: "owners should run their business or appoint the managers," and category two: "owners and employees should participate in the selection of managers." However, in 1990 there were six percent more individuals who considered the latter style to be more effective, making this the most common response.
A similar switch occurred with regard to the question: what is God? While in 1981 there was an even split between considering God to be either a "personal being" or "some sort of spirit or life force," in 1990, five percent more individuals said they considered God a personal being than said God was a spirit or life force. In addition, the importance of good housing to a successful marriage was considered rather important to nearly 54 percent of respondents in 1990 compared to 48 percent in 1981. However, two other values are no longer shared by a majority of respondents. For example, keeping money that is found is no longer considered 'never justified' by most individuals. Nearly 59 percent of individuals in 1990 considered it acceptable under some circumstances to keep money they found while only 49 percent thought so in 1981. Also, homosexuality is considered acceptable, at least in some circumstances, for nearly 55 percent of respondents in 1990 compared to only 45 percent in 1981. Thus, these variables show a significant shift in substantive meaning over this period.

Fifteen other variables changed in the degree of consensus and uniformity, but did not change in their substantive meaning. These variables are defined as those showing an increase or decrease of at least five percent in
the most common category from 1981 to 1990. Paying a more efficient worker more money became more acceptable from 1981 to 1990, as did the importance of good pay or the opportunity to achieve something to a job. More individuals would consider a decrease in the emphasis of work in their lives to be a bad thing and consider reform the best method of changing society as opposed to revolutionary or reactionary tactics. A greater majority of individuals agreed that children need both parents in the home in order to grow up happily and fewer people considered it acceptable to have an abortion to avoid giving birth to a handicapped child. Perhaps most striking and disturbing is the fact that fewer people consider it never justifiable to claim government benefits they are not entitled to, avoid the fare on public transportation, lie in their own interest, or fight with the police.

In addition, the acceptability of political assassinations grew significantly over this period. Is the increased tolerance for these activities related to the increased tolerance for prostitution, euthanasia, or suicide that is also evident from these data? Perhaps a relationship exists between the value placed on individualism and the tolerance displayed for deviance from typical behavior. Future research will have to address these questions in
greater detail.

The fifty-six other variables examined showed no substantive change in values from 1981 to 1990. In part, this is to be expected since values are more stable than mere opinions such as "for whom are you likely to vote in the next presidential election?" But does this stability in values represent thresholds, in which we are likely to discover some real differences among individuals and nations, or end points that symbolize the extent to which we can expect uniformity in global culture? Further research is necessary to distinguish between the period effects examined here and the possible long-term implications of global value changes.

Future Research Goals

Thankfully, the World Values Survey group is in the process of completing a third stage of the current survey. Combined with the data here, this third survey will help in the evaluation of period versus long-term value changes. It will also be useful in identifying whether the convergence and divergence discovered in the present study is a long-term trend or a result of period effects. Further, it will help identify thresholds and absolute differences among nations since at the very least a third time period is necessary for such determinations. In addition to the use of this third
time period, several other research goals should be employed in the future.

First, a more sophisticated categorization of the variables is necessary. While the present separation of variables into broader categories of economic, family, political, and morality values is at least theoretically useful, such categorization needs to be tested to address both internal and external validity concerns. Perhaps an index of individualism would provide further insight into the phenomena of value change and the convergence of values. Or perhaps individualism should be treated as an independent variable as we seek for the most appropriate characteristics of individuals and nations with which to study. Other possibilities include socioeconomic status, age, ethnicity, and religion, etc. Are these groups of individuals becoming more similar or more different? Which characteristic produces the largest amount of variance in responses, which produces the most similar responses? All these questions are important to further understanding of global value change.

Finally, it is important to test whether those nations or individuals who are most global are also most likely to hold similar values. The results here suggest globalization has an impact on value change independent of the effects of economic
security or well-being, but more formal tests are necessary to
determine the extent of such an impact beyond that can be
attributed to economic situation.

Implications for Global Interactions

Finally, the preceding discussion has implications for
globalization itself. The growing economic, political, and
social interdependence among individuals and nations will
require nations to adopt policies and procedures that are
acceptable globally. Free trade requires nations to work
together on labor, environmental, and financial policies and
the extent to which nations hold similar values will certainly
influence such interactions.

The present study suggests that in some issues consensus
may be attainable, but in others conflict is surely to arise.
Marriage and family values appear to be converging in the
twenty nations studied suggesting universal policies relating
to this area may be easier to achieve than those relating to
politics or morality in which these twenty nations displayed a
growing lack of consensus in a variety of issues. In addition,
although it was expected that economic issues display the most
evidence of convergence, half of the values relating to these
values grew more diverse from 1981 to 1990.

I suspect much of this diversity is created by an
embracing of individualism as a core value, but further research is necessary to make this connection more solidly. Another emphasis of future research should be to connect the holding of certain values to subsequent behavior and more specifically, to the creation of public policy. Are those nations that display more tolerance in their value orientations also more likely to enact policies congruent to such beliefs? In other words, how do values become behavior? Additionally, to what extent do the least global nations hold similar values? Does globalization (along with modernization) leave some nations and individuals out of the picture? To what extent does this gap between the global and those who are isolated affect values and behavior? The future research possibilities are bright and diverse only to be surpassed by the importance of their results.

Conclusion

This paper is the culmination of an initial exploration into the dynamics of value change at the global level. Globalization appears to have an impact that is beyond that of modernization or economic determinism. Specifically, in the current globalized world, values relating to marriage and family relationships are converging while values relating to politics and morality are becoming increasingly diverse.
Moreover, a global cultural system that appears to have embraced individualism as a core value, produces somewhat different values about the important aspects of a job or what type of lifestyle is most valuable. In addition, although convergence is the most common trend in individual values, grouping individuals by nation reverses the trend to one of divergence in values. Clearly, globalization does not have an equal impact on everyone and the nation of residence plays an important role in these unequal effects.

In sum, this thesis was designed to give an introduction into the study of convergence and divergence in values as well as to provide a model for exploring such questions in the future. In this quest, I hope I have provided some interesting possibilities for the future students of society and its values.
REFERENCES


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