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# SOCIAL DEVELOPMENT OR SOCIAL CRISIS: MODERNIZATION THEORY VERSUS WORLD-SYSTEMS ANALYSIS

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# SOCIAL DEVELOPMENT OR SOCIAL CRISIS: MODERNIZATION THEORY VERSUS WORLD-SYSTEMS ANALYSIS [2]

The study examines the contradictory claims of modernization theory and world-systems analysis regarding modern social change. While modernization theory argues a human development, world-systems analysis states a global crisis. The two theories are tested against empirical evidence from data of World Values Survey, World Bank, Freedom House, Transparency International, and GDELT Project. It was discovered that for the four analyzed waves during over fifteen years among all eight countries studied, statistically significant net social development was demonstrated only by China and by Turkey. No core country indicated a statistically significant social crisis. However, there are more substantial changes in particular dimensions. In economic dimension, all countries, but China (due to a rise in inequality), have evidence of social development. In cultural dimension, only two countries show a cumulative rise in emancipative values, while four other countries have a net rise of security values. In institutional dimension, United States have a relatively stable system, while for other countries it varies. Despite minor variations across the measured years, four countries enjoy a considerable cumulative increase in institutional freedoms and rights. Only two countries show a net inclination towards cooperative protests, as the majority of the countries gravitate towards conflict protest activities. Overall, it is evident that the studied countries are becoming more economically well-off, more free, but are increasingly inclined to protest more violently. Therefore, it is concluded that neither theory is universally sound, though both theories are right about cyclic change, and each theory is partially correct in the specified aspects.

Keywords: modernization theory, world-systems analysis, development, crisis

JEL Classification: Z

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*Introduction*

The dynamics of the modern world is described and interpreted in different ways. And the basic antithesis is between the statements of development versus crisis. Development as a progressive (though with precautions) social change is advocated by proponents of modernization theory(Inglehart 1997, Welzel 2013a), evolutionary macrosociology (Lenski 2005, Sanderson 2015), and someof globalization studies scholars (Bhagwati 2007; Held and McGrew 2002), while crisis as a regressive social change is argued by adherents of anti-globalization and alternative globalization scientists (Patomaki 2008; Robinson 2014), capitalism studies (Centeno and Cohen 2010; Harvey 2014), and world-systems perspective (Boswell and Chase-Dunn 2000; Wallerstein 2011). Though a number of studies have claims for or against development, the two most systematic and comprehensive explanatorydesignsare suggested by modernization theory claiming steady development and world-systems analysis stating an ongoing crisis. As these two approaches provide mutually exclusive statements on social reality – specifically on progressive or regressive social change – it is necessary to find out, which statements are closer to reality, as demonstrated by empirical data. This could be done via a kind of a decisive quasi-experiment in the spirit of post-positivist science, ideally leading to refuting of one theory and so far, not refuting another. Therefore, the idea of this research is to test the claims of these theories using empirical survey and statistical data to settle the theoretical dispute about the social change in the modern global world.Thus, the primary research question is: what is the dominant process in the modern world – social crisis or social development? And the related secondary research questions are:what is the modern dynamics of social crisis or social development? how this dynamic manifests in thesocietiesstudied?

*Theories Tested*

*Modernization theory*

Proponents of modernization theory R. Inglehart and C. Welzel (2005a) claim that socioeconomic development is spreading over the world and for advanced societies it brings more security, democratic freedom, good governance, gender equality, individual autonomy, self-expression, free choice, literally emancipation, and well-being. Certainly, the degree of manifestation of is trend varies across countries, being more pronounced in high-income postindustrial societies and less apparent in low-income industrializing societies. This resonates with reasoning of macrosociologist G. Lenski (2005), who links the historically observed technological development with accumulation of sociocultural information, and argues that technologically advanced societies usually possess democracy as a form of government and hence celebrate more tolerance and peace. Evidently, this approach suggests a model of a rather

progressive human development. As there are several alternative versions of this approach, in this study, we will apply the **modernization theory** in one of the most comprehensive and simultaneously empirically corroborated versions, represented by R. Inglehart and C. Welzel (Inglehart and Welzel 2005a; Welzel 2013a). Within this framework, **human development** is defined as the growth of autonomous human choice, promoted by socioeconomic modernization, a cultural shift toward self-expression values, and democratization (Inglehart and Welzel 2005a). As the focus of our study is social change on macro scale, of societies as totalities or world as a whole, country-level manifestations of individual human development should actually reflect collective social development. For this reason, further we use the term **social development**, or simply development, to denote macrosocial outcomes of human development, including socioeconomic modernization, the rise of self-expression values, and democratization.

*World-systems analysis*

On the contrary, world-systems scholars, namely I. Wallerstein (2004) state that the world system has embedded structural inequalities and mechanisms to reproduce them, so technological change doesn't fundamentally alter the numerous inequalities. Indeed, the positive changes are observed in economically advanced societies, which represent a privileged minority of the world's population. Moreover, the world revolution of 1968 was the turning point, which marked the end of supremacy of liberal ideology and the political and cultural support of the status quo: no longer people agreed to be satisfied with the creeping improvements in the belief of illusory benefits (Wallerstein 2004). Clearly, this perspective views the current historical phase as a crisis, with corresponding economic, political, and ideological outcomes. For this research, we will use **world-systems analysis** in one of the most encompassing versions, covering ideological aspect, presented by one of its founders I. Wallerstein (2004). This version will be complemented conceptions of G. Arrighi (1996) referring to hegemonic crisis and related social effects and of C. Chase-Dunn (1998) regarding systemic cycles (10-15-year price cycles, 15-25 year Kuznets debt cycles, and 40-60-year long business and accumulation cycles – K-waves) and world revolutions (recurring about every 10 years). Taking into account I. Wallerstein's (2004) understanding of **systemic crisis** and G. Arrighi's and B. Silver's interpretation of **hegemonic crisis** (1999), we focus on their social outcomes. Thereby, we define **social crisis**, or simply crisis, as economic, political, and social systemic transition, manifested in an increase of inequalities, conflicts, and security concerns. In the context of this inquiry, the concept of crisis is used as an antithesis to development.

*Confronting statements and previous studies*

As crisis comes after development, it is reasonable to take development with the totality of its dimensions as a starting point. Then, statements of crisis would confront statements of

development. In this sense, development serves as a thesis, while crisis – as an antithesis. On the most generic level, human development is comprised of economic, cultural, and institutional dimensions containing individual resources, emancipative values, and freedom rights and reflecting socioeconomic development, emancipative cultural change, and democratization or extension of rights respectively (Welzel et al.2003). This corresponds with the human empowerment model: existential conditions, psychological orientations, and institutional regulations, including action resources or capabilities, emancipative values or motivations, and civic entitlements or guarantees respectively (Welzel 2013a). Within the macrosocial concept of social development is it reasonable to use the original names of economic, cultural, and institutional dimensions. Further, we will analyze the inter-theory differences within them.

Within the framework of modernization theory, the progress in the **economic** dimension means better economic and security conditions. As survival values are a rational human reaction to existential threats, threats to survival should lead to increased emphasis on survival values, conducive to authoritarian institutions and xenophobia, intolerance, and extremism in a society (Inglehart and Welzel 2005a). Using this statement allows checking the direction of social change – either to development and respective emancipative values or to survival and related survival values.

Wars and revolutions periodically reset the rules of international politics and global exchange, while states and corporations break these rules; the result is a historical spiral of capitalism and socialism (Boswell and Chase-Dunn 2000). Within the frame of this research it means that the phases of increased inequality are altered by phases of a larger equity via massive popular protests. In a quantitative cross-national study testing impact of the twomodels predicted by the two theories on intrastate conflict, it was found that: neither the modernization nor the world-system model had a significant direct effect onthe model of political conflict; rather, their effects were indirect, mediated by domestic characteristics; to the extent that modernization decreased income inequality, it undermined a structural basis for political conflict; and to the extent that modernization reduced regime repressiveness, it provided a favorable situation for political conflict by reducing its costs; peripheralization increased conflict by increasing income inequality and vulnerability to economic fluctuations in the world economy (Moaddel 1994). Therefore, income inequality and structural position in the world-system should be taken into account.

In **cultural** dimension, mostly referring to values, modernization theory is clearly optimistic. The rise of self-expression values brought a shift from political cleavages based on social class conflict toward cleavages based on cultural issues and quality-of-life concerns (Inglehart and Welzel 2005a). Yet, some empirical observations seem to bring disturbances to this progressive picture. For instance, it has been found that the equalizing trend in income distribution has been

reversed since the 1980s, which nourishes threat perceptions and defensive reactions, providing a social base for new dogmas, including right-wing populism among marginalized groups (Inglehart and Welzel 2005a). Besides, the collapse of state-run economies brought uncertainty and (especially in the ex–Soviet Union) a sharp decline in standards of living, logically, that 81 percent of the ex-communist societies show declining levels of trust, only 43 percent of the high-income countries show declines in trust (Inglehart and Welzel 2005a). Though it the larger context it might sound as a characteristic of a postindustrial society, from our point of view, it does not fit the broader conception of human development, so this empirically observed trend by itself cannot be used as an ad hoc excuse, but rather a challenge to the theory in general.

In world-systems perspective, Giovanni Arrighi and Beverly Silver argue that the hegemonic crisis is marked by an increase of competition, social conflicts, and emergence of new configuration of power, ending up in a systemic chaos – economic, political, and social (1999). So, diverse social conflicts and related security concerns are a clear prediction of world-systems approach, contrasting modernization claims of the rise of self-expressions values.

In **institutional** dimension, proponents of modernization theory have noted another trend. Starting around 1987, a rise of democratization took place within a period of eight years, higher than the levels of democracy before 1987 and after 1996 (Inglehart and Welzel 2005a). In particular, modernization theory highlights the rise of political rights, especially in the domains of race and gender equality (Inglehart and Welzel 2005a). The advance in these two aspects is also mentioned in world-systems analysis (Wallerstein 2004) as an immediate effect of the world revolution of 1968. Thereby, on this point the two theories agree.

However, for world-systems analysis, institutionalized democracy in general is highly questionable. The liberty of the majority, or democracy, requires the active participation of the majority, access to information, a mode of translating majority views to legislative bodies; it is doubtful that any existing state within the modern world-system is fully democratic in these senses (Wallerstein 2004). On the contrary, modernization theory claims a massive trend towards more democracy with respect to political institutions (Welzel et al.2003). So, it makes sense to test the direction of the democratization development.

In addition to these three domains, there is one more aspect, highly emphasized by world-systems scholars, which deserves to be taken into account – it might be named **agentic**. Being a constellation of local, national, and transnational protest movements, some of which occurred simultaneously, some were triggered by earlier examples, they were united by common agenda and signified opposition to oppressive national and global governance, and thus deserve to be marked as the world revolution of 2000s (Chase-Dunn and Lerro 2014: 349-350). Even though the non-core

rebellions and resistance movements were not directly connected with one another in earlier centuries, their synchronous consequences converged on the core states, and especially on the hegemon; this phenomenon of widespread synchronous resistance and rebellion is termed "world revolution" (Chase-Dunn and Khutkyy Forthcoming). World revolutions have become much more directly interconnected as social movements have become increasingly transnational, and popular groups and global parties have emerged to engage in politics on a global scale; they also have become more frequent, and now seem to be overlapping one another in time (Chase-Dunn and Khutkyy Forthcoming). It is evident, that from world-systems perspective mass protests seem more widespread.

*Research Hypotheses*

Basically, each theoretical approach suggests a different model of global dynamics. Modernization theory argues a more inclusive global socioeconomic and human development, while world-systems analysis emphasizes world inequality and global crisis.

Overall, within modernization theory development is stated to be the dominant trend of modern times: most countries are becoming considerably more prosperous, and the high levels of socioeconomic development bring cultural changes that emphasize human autonomy, creativity, self-expression, and democratization (Inglehart and Welzel 2005a).

However, it is acknowledged that worsening socioeconomic condition might activate the need for security and reverse the development trend in particular countries. So, modernization theory addresses the conceptual possibility of altering evolution and devolution.

World-systems analysis rests on the assumption that the modern world-system experiences a number of cycles. Particularly, 10-15-year price cycles, 15-25 year Kuznets debt cycles, and 40-60-year long business and accumulation cycles (K-waves) (Chase-Dunn 1998: 50). Those cycles are associated with a series of social outcomes. In the expansion phase, the established monopolies, secured by state power in a stabilized interstate system, create conditions for an efficient capital accumulation in core regions of the world economy, boosting economic growth, increasing profit rate, raising quality of life of wider population segments; in the contraction phase, the monopolies are broken down, economic competition increases, political environment becomes unstable and thus unfavorable for regular economic activities, profit rate decreases, almost all population suffers from the degrading life conditions (Wallerstein 2000: 436).

At the end of each long cycle, an increased rivalry for hegemony in the world-system occurs. Respectively, according to the views of G. Arrighi(1996), the modern world system goes through hegemonic cycles and actually currently is experiencing a hegemonic crisis. An alternative

more serious diagnosis states that since 1970s the capitalist world-system has been experiencing a systemic crisis (Wallerstein 2011: 35). Signs of either hegemonic or systemic crisis will speak for the benefit of world-systems perspective.

These defining statements make possible to put forward a series of hypotheses. If neither theory is right, then there should be no significant social change. If both theories are sound, then social development and social crisis alter depending on macro or global conditions. If modernization theory is right, then the global socioeconomic and human development should be manifested. If world-systems approach is correct, then the global crisis would be evident.

Research hypotheses:

- H0: There is no substantial social change, so both theories are wrong.
- H1: There are cyclical alternations of social development and social crisis phases, so both theories are correct.
- H2: There is a marked social development so modernization theory is correct.
- H3: There is a pronounced social crisis, so world-systems analysis is correct.

These hypotheses can be visualized as presented on Figure 1. The x-axe refers to the World Values Survey (further – WVS) waves, while the y-axe reflects predicted values of the social development index.

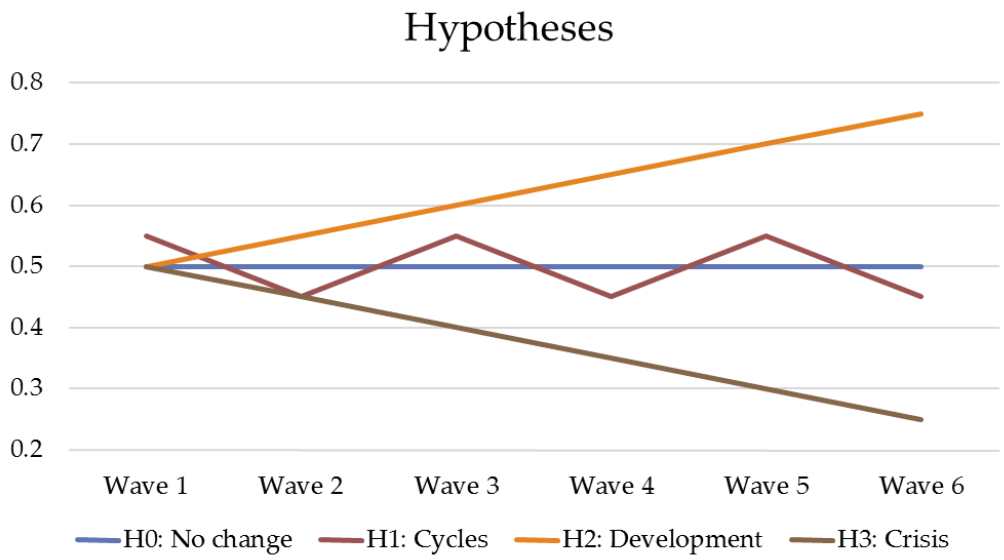


Figure 1. Research Hypotheses

*Measurement Approach*

Since our aim is to track the dynamics of social change with the longest period using the maximum number of relevant indicators and the biggest pool of countries. In World Values Survey many questions were not asked neither in all waves nor in all countries. Therefore, the goal was to find a balanced design with the most valid and full data possible. An indicator had to be present in a minimum of 4 waves (to cover at least two hypothetical rises and declines) to be included in the measurement scheme.

In this search, a number of indicators were abandoned, based on different reasons:questionable validity in relation to the phenomena measured; particularism of the social reality measured and few waves; shortage of waves, especially for the countries covered by other variables; no contradiction between the two theories.

In modernization studies, there are different approaches to measure the components of the **economic dimension**. After a profound analysis scholars decided to measure individual resources using Vanhanen's 'index of power resources', combining aggregate measures of physical and intellectual resources, and a measure of social complexity (Welzel et al.2003). However, we have not found any contradictions regarding intellectual resources in world-systems writings. Nevertheless, two measures are used by both perspectives though with opposite claims. Gross domestic product(further – GDP) per capitaand equality of distribution of resources were mentioned components of existential resources, as albeit incomplete (Welzel et al.2003). It should be noted that for this inquiry, Gross national income (further – GNI) per capita, purchasing power parity (further – PPP), is a more valid indicator of existential resources. This is because GNI covers more resources and purchasing power parity corrects for differences in prices among countries. Besides, for the measurement to be methodologically comparable across time, the values should be corrected for inflation – in a constant international currency, a standard is United States dollars (further – USD). Among measures of inequality, Gini index is a rather standard measure. Thus a Gini index of 0 represents perfect equality, while an index of 100 implies perfect inequality. Therefore, for the aim of comparison of statements of the two theories it is reasonable to use GNI per capita, PPP, constant 2011 international USD and Gini index.

The **cultural** dimension of development contains the widest set of variables. Other things being equal, the trend of socioeconomic development tends to make people more secular, tolerant, and trusting and to place more emphasis on self-expression, participation, and the quality of life; besides, interpersonal trust shows a significant positive linkage with both formal and effective democracy (Inglehart and Welzel 2005a). Communal values can be authoritarian and xenophobic Interpersonal, so trust does not necessarily reflect emancipative values and the forms of social capital motivated by them; nevertheless, interpersonal trust is also included in this syndrome of self-

expression values (Inglehart and Welzel 2005a). Another version of modernization theory applied for later waves of World Values Survey employs the concept of emancipative values with the same meaning and measurement as the former concept of self-expression values (Welzel 2013a). Based on these arguments, the measurement should include general trust, tolerance, and emancipatory values as well as their opposites – distrust, xenophobia, and security values.

General trust is usually (Inglehart and Welzel 2005b) measured by the question A165 asking whether people can be trusted. So it is reasonable to use this variable too. Tolerance and xenophobia are measured by a number of indicators. Among those relevant to our objectives, rather generic, present in a sufficient number of waves, and having opposite predictions by theories, there is only one indicator – acceptance or refusal of neighbors immigrants (A124_06), which will be used further.

World Values Survey employs three sets of questions on emancipative versus security values. The questions E001 and E002 asking about aims of country and the questions E004 and E005 asking about important things, have categories which are clearly dichotomous regarding security and self-expression values. What is important, they relate to opposing sets of values predicted by world-systems analysis. On the contrary, questions E003 and E004 asking about respondent's aims, have self-expression options "give people more say" and "protecting freedom of speech", which do not contradict with world-systemic views on the rising protest activity and therefore are not suitable for theory testing. On these grounds, the questions E003 and E004 are excluded from analysis, while the questions E001, E002, E005, and E006 are included in the measurement scheme.

Emancipative values also include a feeling of happiness, signing petitions, acceptance of homosexuality, and a priority on freedom and participation (Welzel 2013a). However, there are no direct contradictions with world-systems predictions regarding these phenomena, so they are omitted from analysis.

In the **institutional** dimension, political rights and legal guarantees are estimated. Confidence in public institutions is often used to measure democracy. However, it was found that public confidence in institutions has no consistent impact on democracy (Inglehart and Welzel 2005a). Therefore, confidence in national institutions (parliament, government, courts, the police, and others) as well as international institutions (United Nations) should not be used in analysis. One of the most elaborate and grounded approaches is to calculate effective democracy combining formal democracy (using the Freedom House scores for civil and political rights) and elite integrity (using the estimates from Transparency International on elite corruption) (Welzel et al.2003). This solution sounds reasonable, so we will use it. The Freedom House Freedom rating evaluates

political rights (assessing electoral process, political pluralism and participation, functioning of government) and civil liberties (including: freedom of expression and belief, associational and organizational rights, rule of law, personal autonomy and individual rights) (Freedom House 2016a). The Transparency International Corruption Perceptions Index aggregates data from a number of different sources that provide perceptions of business people and country experts of the level of corruption in the public sector (Transparency International 2016). For Peru for 1996 exact data was unavailable, so the closest year values were used as an estimation.

In the **agentic** dimension, both theories under examination appeal to democratic participation as an important trend. Participation in voluntary associations is often used to measure democratic participation. Nevertheless, it was found that voluntary activity in associations and norm obedience, turn out to have no consistent impact on democracy, whereas another indicator, interpersonal trust, has a significant impact on democracy (Inglehart and Welzel 2005a). So, the seemingly relevant indicators of participation in voluntary associations should be excluded from this analysis. One measurement approach employed in modernization theory is calculating the social movement activity index, counting those who have participated in the past in peaceful demonstrations, boycotts, or petitions (Welzel 2013b). However, such measurement mixes diverse participation forms, though the theories emphasize different ones. Proponents of modernization theory highlight signing petitions as a major freedom-expression activity and consider elite-challenging violent mass actions (participating in a strike or occupying a building) as unconventional, rare, and do not showing a consistent increase (Inglehart and Welzel 2005a). Definitely, in effective democracies there should be peaceful and legal mass actions, expressing people's interests in institutionalized ways. On the contrary, adherents of world-systems analysis view massive movements and protests as a primary driving force of social change, regardless of methods they apply. So, the attitudes towards or real actions of participating in a strike or occupying a building should be indicative of the predictions of the theories. Unfortunately, WVS stopped asking these questions after the $4^{th}$ wave.

So it is useful to use external source of protest data. There is an extended Conflict and Society dataset (ICPSR 2016), but it covers the years of 1850-1970. Another dataset – European Protest and Coercion Data (NSD 2016) – is newer, but still covers 1980-1995. One of the most relevant and comprehensive is the SPEED Civil Unrest Monitoring Data (SPEED Project 2016), but the latest data is still dated 2005. Finally, the GDELT Project (2016) covers the period from January 1, 1979 to February 17, 2014 and includes virtually all countries. Thereby, its data (yearly number of protest events by country) will be used as an indicator of protest activity.

All the variables, relevant to our core concepts,have been specified earlier in this paper () (for more details on each variable, see Appendix 1). For consistency of comparison, these are the questions that were asked at least in 4 waves (3-6) of World Values Survey in the same countries (A165; A24_06; E001; E002; E005; E006). In addition, 5 country-level statistical indicators, mentioned earlier in the text (GNI per capita PPP; Gini Index;Freedom Rating; Corruption Perceptions Index; Cooperative vs. Conflict Protest Activity according to GDELT data),were used. The complete measurement scheme is visualized in Figure 2.

The indicators of social development versus social crisis include: Prosperity vs. Poverty (measured by GNI per capita PPP); Income Equality vs. Inequality (measured by Gini Index); Trust vs. Distrust in People (A165); Tolerance vs. Intolerance to Foreigners (Acceptance vs. Refusal of Neighbors Immigrants, A24_06); Emancipative vs. Security Values (E001, E002, E005, E006);Formal Democracy vs. Elitism (Freedom Rating); Elite Integrity vs. Corruption (Corruption Perceptions Index); Cooperative vs. Conflict Protest Activity according to GDELT data.

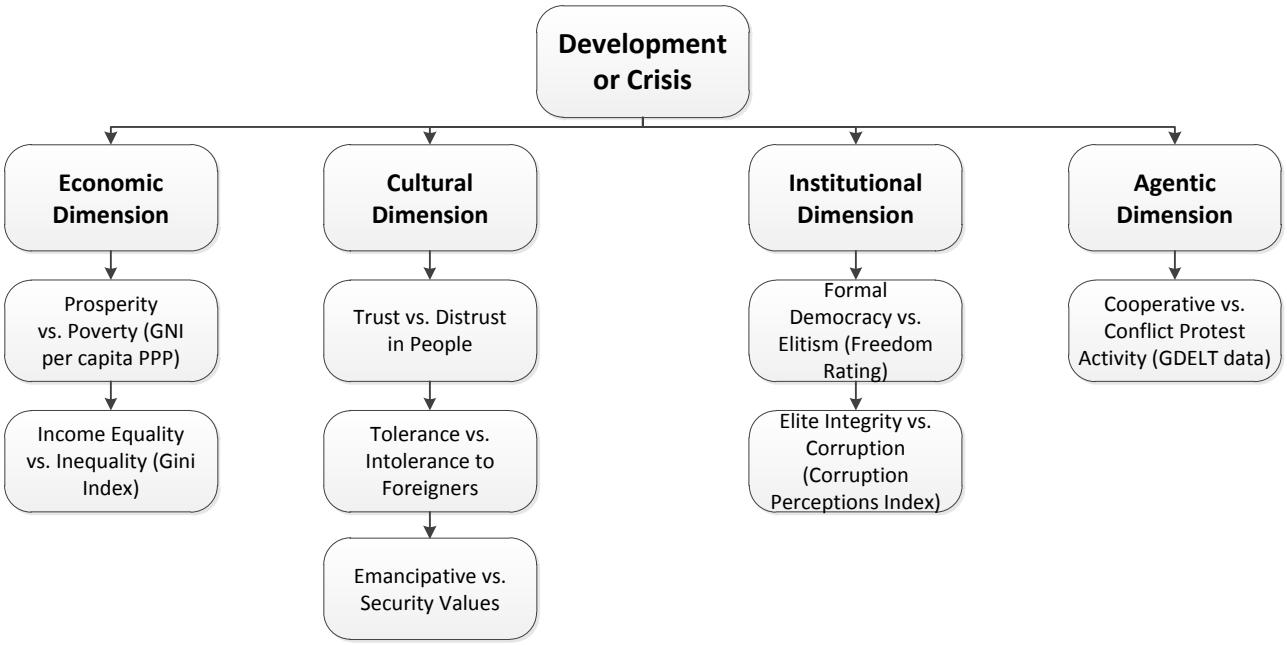


Figure 2.Social development versus social crisis measurement indicators

In order to make the indicators comparable, we reverse scales, if necessary, and standardize converting to a scale from 0 to 1, where 0 corresponds to the lowest theoretically possible value and 1 to the highest theoretically possible value. Z-scores are not used for a number of reasons (Welzel 2013). Further, for our objectives, we apply compository logic, combining variables which complement each other conceptually. This implies that it does not matter, how much do they correlate, but rather how well do they explain other phenomena, in other words, instead of internal scale reliability, it is relevant to consider external index validity (Welzel 2013). Finally, the index and sub-indexes are calculated as arithmetic means of component variable arithmetic means.

*Countries Chosen*

The largest number of countries can be used for the shortest reasonable period – 4 waves (3-6). For all the relevant indicators and for these waves 8 countries satisfy the requirements: Chile, China, South Korea, Mexico, Peru, Spain, Turkey, and the United States.

Within the frame of modernization theory, each of them can be classified into one of the 5 types: "Postindustrial Democracies" (except ex-communist), "Developing Societies" (except ex-communist), "Western Ex-communist Societies" (not former members of the Soviet Union, having a Western Christian tradition), "Eastern Ex-communist Societies" (mostly Christian-Orthodox or Islamic tradition), "Low-income Societies" (except ex-communist) (Inglehart and Welzel 2005b). To relate modernization theory classification with the world-systems classification, ex-communist societies were treated as developing societies; thus, for the purpose of this study it does not matter that much, was it Mexico or Ukraine – both are treated as developing or semiperipheral. According to this simplified classification, among the countries in our sample, Spain and the United States are postindustrial; Chile, South Korea, Mexico, and Turkey are developing; while China and Peru are low-income. By no means this pool of countries can be treated as representative. They are only cases. Nevertheless, if a theory has a strong statement about reality, even one counter-case can be used to refute it.

As it was demonstrated in previous study (Khutkyy 2014), the most optimal decision for clustering societies with relation to structural position in the modern world-system is to use the criteria of PPP GNI per capita values. For almost all cases World Bank's World Development Indicators online database was used (2016a). For several others the International Monetary Fund World Economic Outlook data was applied (2013). The baseline year for sorting societies was 1995 – the key year of 3rd WVS wave. It turned out that the 8 societies represent all zones of the modern world-system: core (United States), semiperiphery (Chile, South Korea, Mexico, Spain, and Turkey), and periphery (China and Peru).

| Waves and Countries | Zone | Type | 1995-1996 | 1999-2001 | 2005-2007 | 2010-2012 |
|---|---|---|---|---|---|---|
| *Chile* | *Semiperiphery* | *Developing* | *1996* | *2000* | *2006* | *2011* |
| *China* | *Periphery* | *Low-income* | *1995* | *2001* | *2007* | *2012* |
| *South Korea* | *Semiperiphery* | *Developing* | *1996* | *2001* | *2005* | *2010* |
| *Mexico* | *Semiperiphery* | *Developing* | *1996* | *2000* | *2005* | *2012* |
| *Peru* | *Periphery* | *Low-income* | *1996* | *2001* | *2006* | *2012* |
| *Spain* | *Semiperiphery* | *Post-industrial* | *1995* | *2000* | *2007* | *2011* |
| *Turkey* | *Semiperiphery* | *Developing* | *1996* | *2001* | *2007* | *2011* |
| *United States* | *Core* | *Post-industrial* | *1995* | *1999* | *2006* | *2011* |

Table 1.Countries with zones, types, and respective waves and years of survey

*Data, and Sample*

Data collection methodology is the use of secondary population survey data. Data collection methods include standardized face-to-face interviews or standardized face-to-face CAPI interviews. The data sets of World Values Survey (2016) 6 waves (1981-1984, 1989-1993, 1994-1998, 1999-2004, 2005-2009, and 2010-2014) have been used for the inquiry. The sample includes 8 countries with up to 47,158 respondents. All national samples are representative for the adult populations of the respective countries; each national sample is 1000 respondents or more. For details about each country's sample see Appendix 2. Sample error of any national sample does not exceed 3.2%. In some cases, sample errors were calculated using the available statistics. Sample errors of all national samples are presented in Appendix 3.

Employing non-survey data, for each country, we used scores for the years corresponding to respective WVS surveys.

A reliable conventional source of economic data (GNI and GINI) is World Development Indicators (The World Bank 2016a, The World Bank 2016b). The source of GNI per capita PPP data is the World Bank International Comparison Program database. For GINI Index data are based on primary household survey data obtained from government statistical agencies and World Bank country departments. For some countries for particular years GINI index values were unavailable. In those cases, the closest in time value was used. This was the case for China, South Korea, Peru, Spain, Turkey, and the United States. For South Korea, World Bank estimations of GINI were unavailable, so they were borrowed from Quandl (2016) and OECD (2016) datasets.

The Freedom Rating data comes from a broad range of sources, including news articles, academic analyses, reports from nongovernmental organizations, and individual professional contacts; the final scores represent the consensus of the analysts, advisers, and staff, and are intended to be comparable from year to year and across countries and regions (Freedom House 2016a). The Corruption Perceptions Index aggregates data from a number of different sources that provide perceptions of business people and country experts of the level of corruption in the public sector (Transparency International 2016).

The GDELT Event Database contains over a quarter-billion records organized into a set of tab-delimited files by date (GDELT 2016). Annual number of protest events were calculated. To compensate the exponential increase in the availability of global news material over time, the number of events per country was weighted by the total annual number of events.

*Data Analysis Methodology*

With the aim to evaluate dynamics of change described in hypotheses, time series and case studies analysis of the World Values Survey 2-6 waves and additional statistical indicators has been conducted.The statistical significance of differences between index values were checked comparing with their margin errors. All statements about statistical significance are based on the 0.05 significance level.

The World Bank Development Indicators (GNI per capita PPP and GINI Index) are precise macroeconomic statistical measures, therefore every non-zero differences between their values and statistically significant. The same refers to values of the GDELT data. The methodological description of the Freedom Rating contains no information about confidence intervals; however, it is noted that usually index value change is due to significant advance in freedoms or rights, so one should assume all non-zero differences between the values of the Freedom Rating as statistically significant. The Corruption Perceptions Index is constructed from a number of surveys, thereby has a sample error. For some cases it was provided in the data file, in other cases it was calculated using the available statistics.

The analysis approach is to study within each country separately, employing the sequence of social change in general, in the 4 dimensions, and by each of the 8 indicators.

*Obtained Findings*

The following analysis of social change focuses on comparison of social change in various dimensions between countries. For details see Appendix 4.

*Comparison between countries*

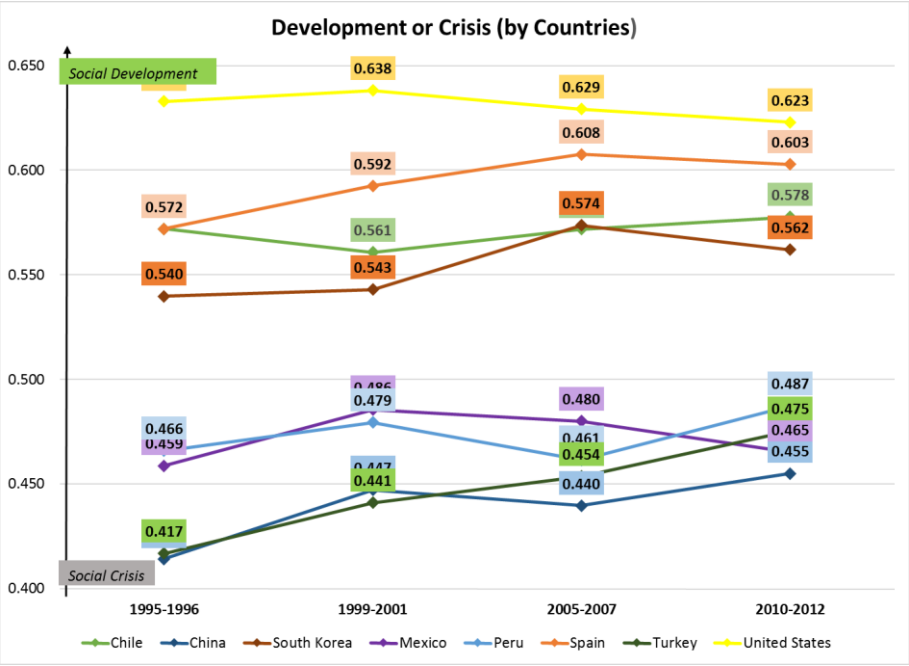

Figure 3.Dynamics of overall social change by countries

Of all countries, statistically significant net social development over the 15-year period was demonstrated only by China (by 4.09%) and by Turkey (by 5.85%). Besides, there was a temporary social development in South Korea in 2001 (by 3.07%). Thereby, the data shows that the observed countries from the semiperiphery (developing) and from the periphery (low-income) are advancing at a greater pace than countries from the core (postindustrial).

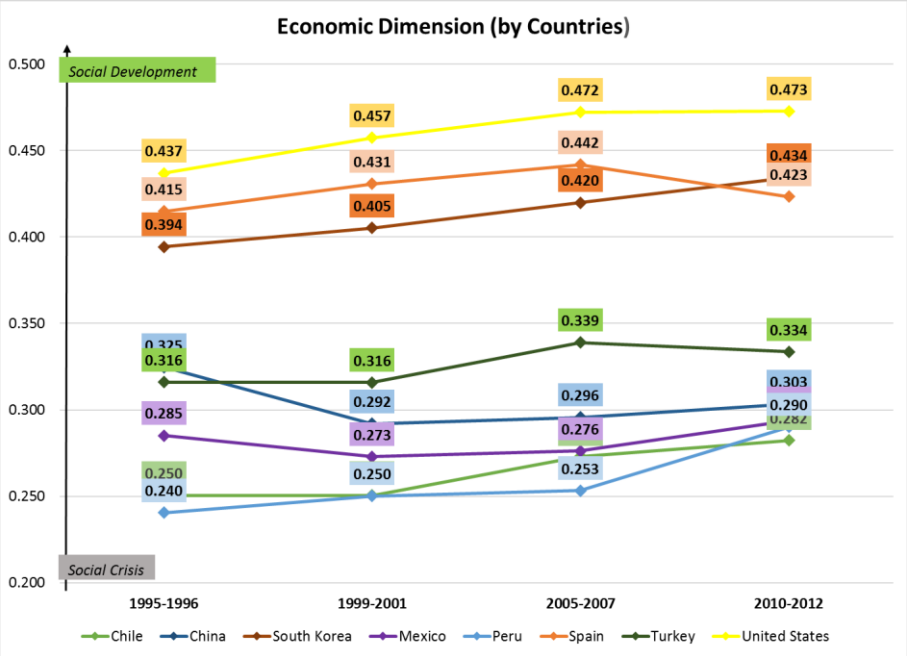


Figure 4.Dynamics of social change in economic dimension by countries

In economic dimension, all countries, but China (due to a rise in inequality), have evidence of social development with Peru leading with a net 4.97% ascension.

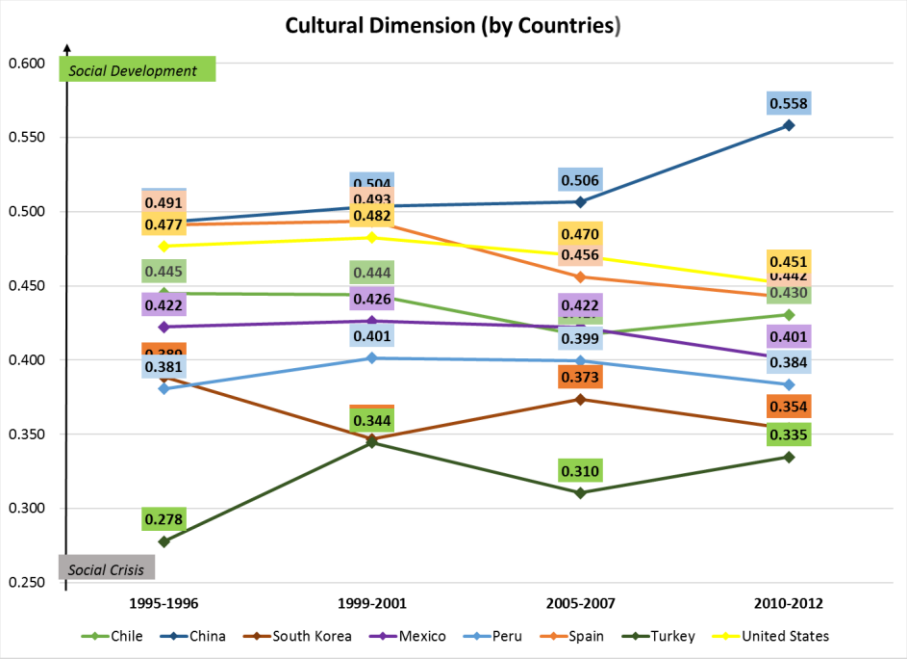


Figure 5.Dynamics of social change in cultural dimension by countries

In cultural dimension, only two countries show a cumulative rise in emancipative values: China by 6.51% and Turkey by 5.7%. Four other countries have a net rise of security values: South Korea (by 3.49%), Mexico (by 2.14%), Spain (by 4.87%), and the United States (by 2.54%). It should be noted, that the dynamics in cultural dimension is subject to a visible volatility.

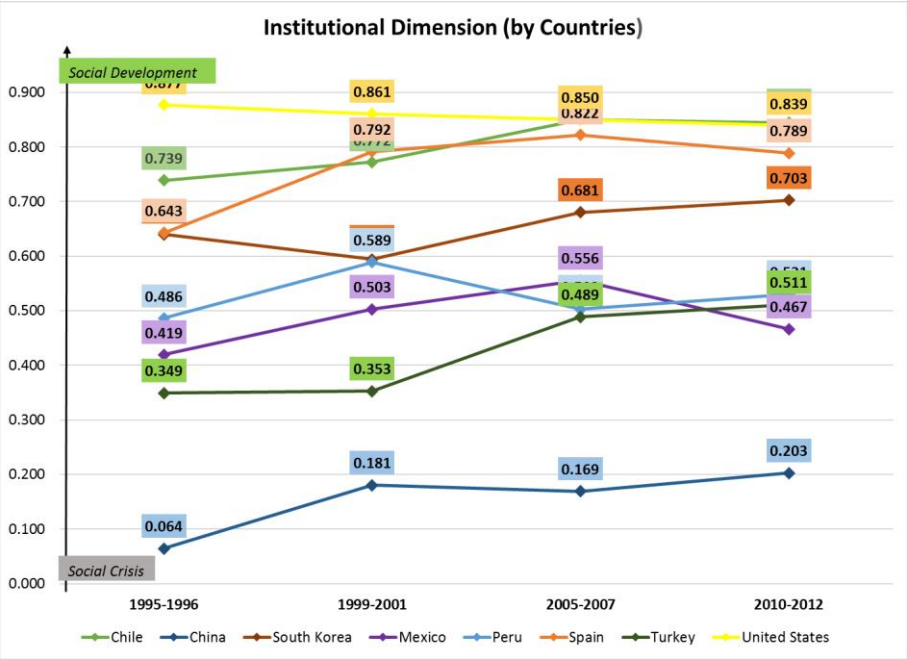


Figure 6.Dynamics of social change in institutional dimension by countries

In institutional dimension, United States have a relatively stable system, while for other countries it varies. Despite minor variations across the measured years, four countries enjoy a

considerable cumulative increase in institutional freedoms and rights: Chile by 10.56%, China by 13.83%, Mexico by 4.72%, and Turkey by 16.17%.

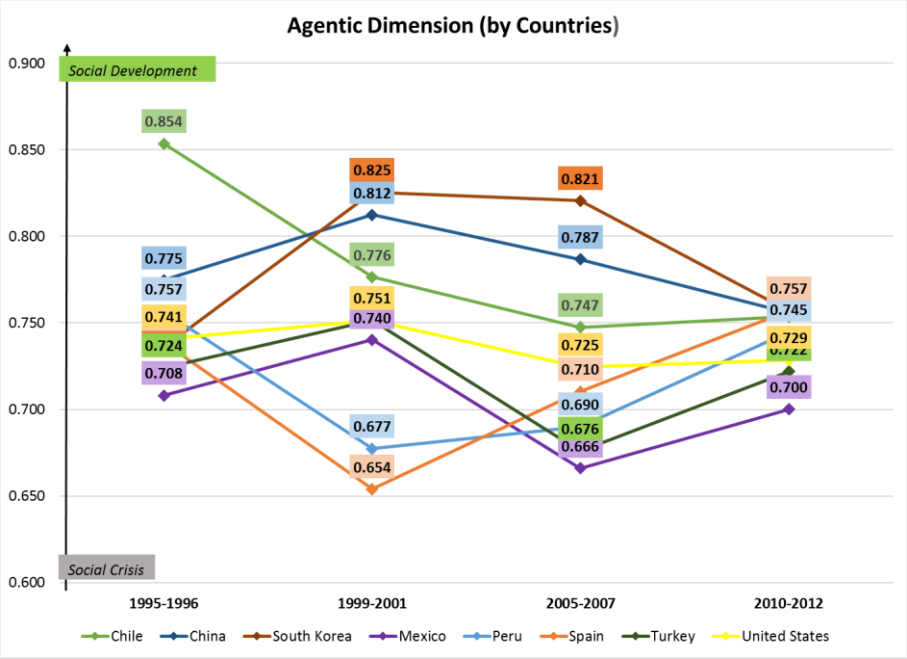


Figure 7.Dynamics of social change in agentic dimension by countries

Agentic dimension is volatile too. Nevertheless, only two countries show a net inclination towards cooperative protests: South Korea by 2.09% and Spain by 1.8%. The majority of the countries gravitate towards conflict protest activities: Chile has a net shift of 10%, China – 1.86%, Mexico – 0.81%, Peru – 1.18%, Turkey – 0.22%, and the United States – 1.2%.

Overall, it is evident that the studied countries are becoming more economically well-off, more free, but are increasingly inclined to protest more violently.

*Analysis of individual countries*

The examination of change within individual countries allows an inquiry treating each country as a unique case.

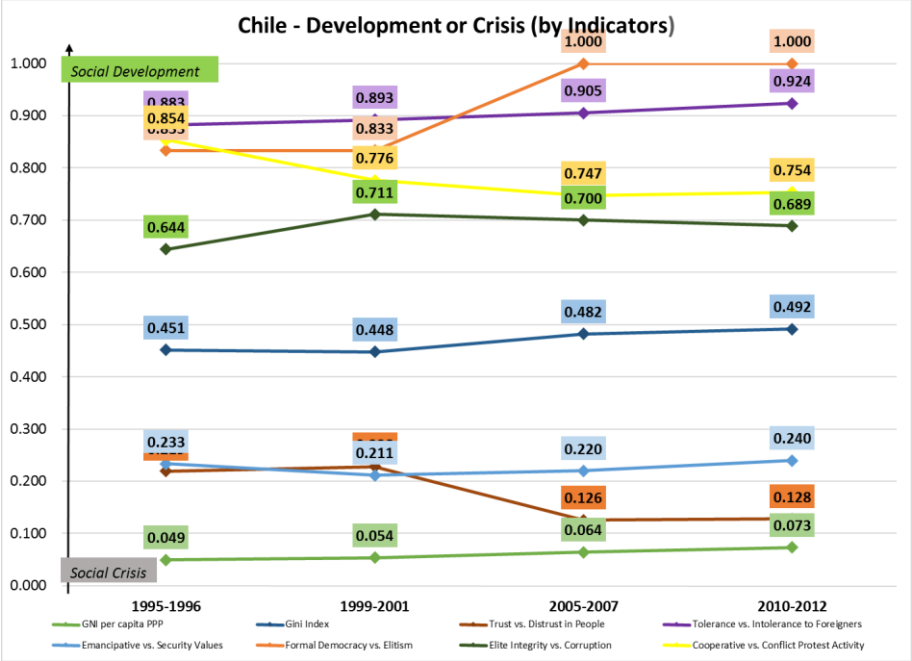


Figure 8.Social change in Chile by indicators

Chile demonstrated a clear rise in economic dimension: a net 2.35% increase of GNI per capita PPP and a net 4.03% increase of GINI index. In addition, due to an advance in formal democracy in 2007, it gained a 16.67% net increase in this parameter. Tolerance to foreigners increased every wave reaching a 4.13% net rise. Nevertheless, protest activity became increasingly conflict-oriented, reaching 10% shift over the 15 years of observations. Overall, Chile is more wealthy, equal, tolerant, democratic, but people protest in a more conflict way.

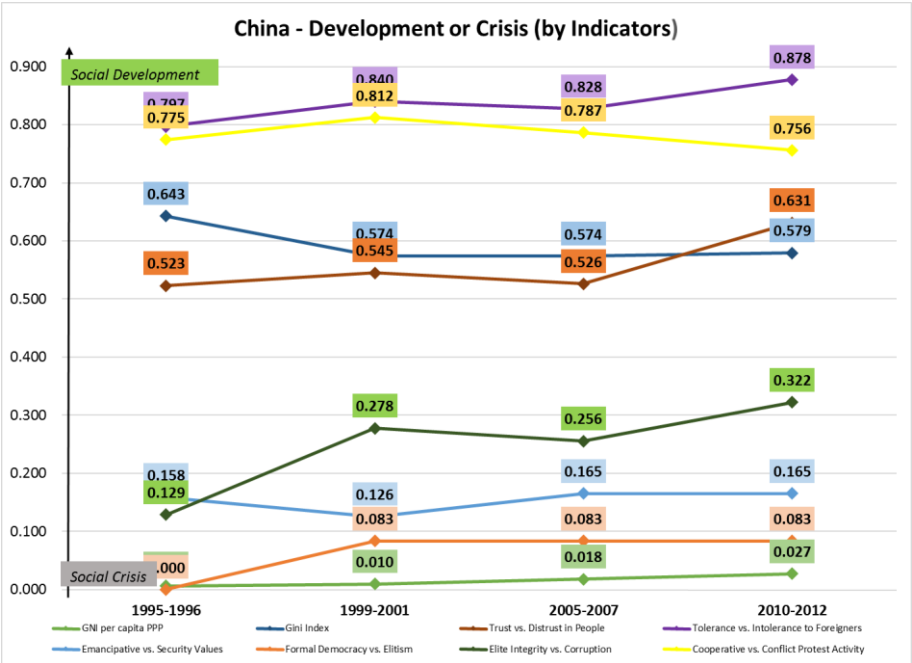


Figure 9.Social change in China by indicators

China also shows a rise in economic well-being – a net 2.08% increase in GNI per capita PPP, accompanied by a net 6.38% decline in equality, indicated by the GINI Index values. Trust to people cumulatively increased by 10.81% and tolerance to foreigners by 8.03%. Due to accomplishments in 2001, China has raised its overall formal democracy index by 8.33% and decreased its elite corruption by 14.89%. In that same year protests turned from conflict to cooperative by 3.78%. Despite these developments, overall during the time of study, protest activities are cumulatively more conflict by 1.86%. Thereby, China is becoming more economically well-off, but unequal, more trusting, tolerant, democratic, but conflictingly protesting.

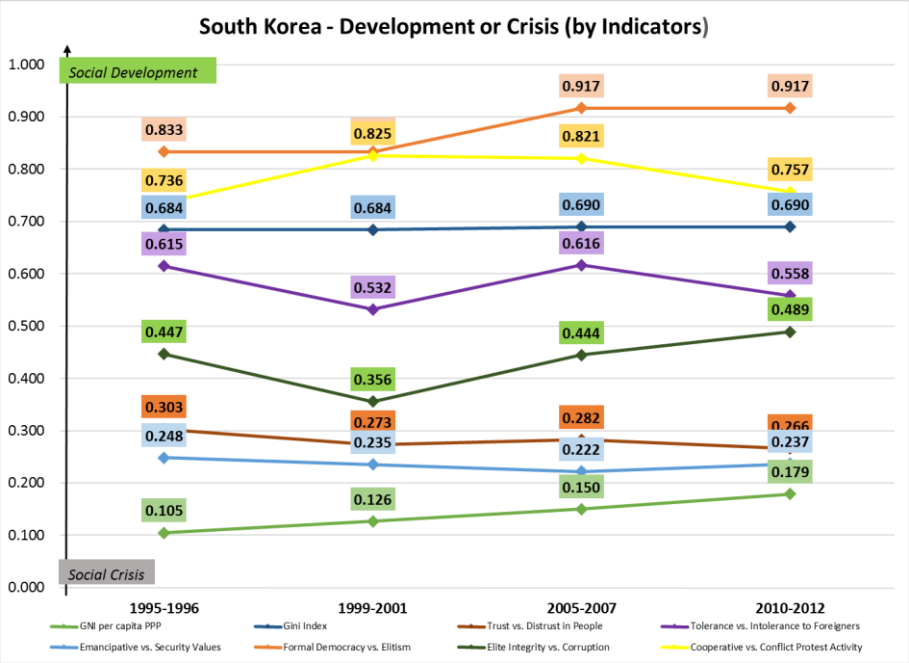


Figure 10.Social change in South Korea by indicators

South Korea is growing economically gaining a cumulative 7.4% increase of GNI per capita PPP and simultaneously becoming more equal, as indicated by a 0.59% rise in GINI Index. Nevertheless, people demonstrate a more pronounced security values: a 3.72% net drop in trust in people, a 5.64% net decline in tolerance to foreigners, a 1.12% fall of emancipative values. Still, formal democracy is on the rise: every wave and cumulatively by 8.33%. South Koreans turn to cooperative and conflict protest activities with a resulting 2.09% shift towards cooperative protests. So, South Korea is more wealthy, equal, democratic, cooperative in protests, but more concerned with security issues.

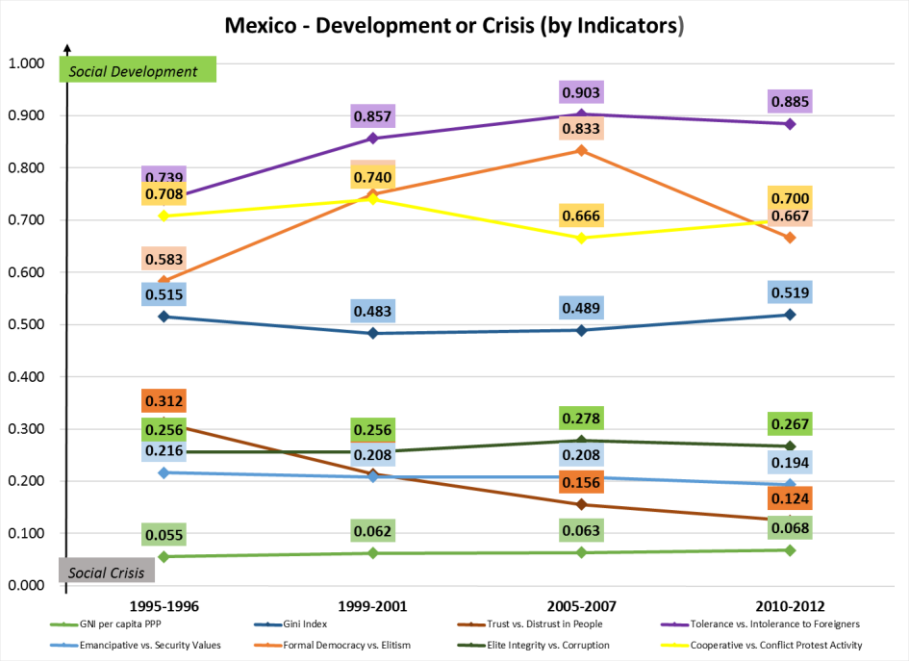


Figure 11.Social change in Mexico by indicators

Mexico is more prosperous, every wave and cumulatively (1.27%). Inequality varies from year to year, yielding only a net 0.4% increase over the observed period. Over the four waves, Mexicans have become cumulatively more distrustful (by 18.73%), but tolerant (by 14.59%), and concerned with security issues (by 2.29%). With some oscillations, formal democracy has risen by 8.33% and protests have become somewhat more conflict by 0.81%. So, Mexico has become more prosperous, equal, tolerant, democratic, but distrustful and conflict in protests.

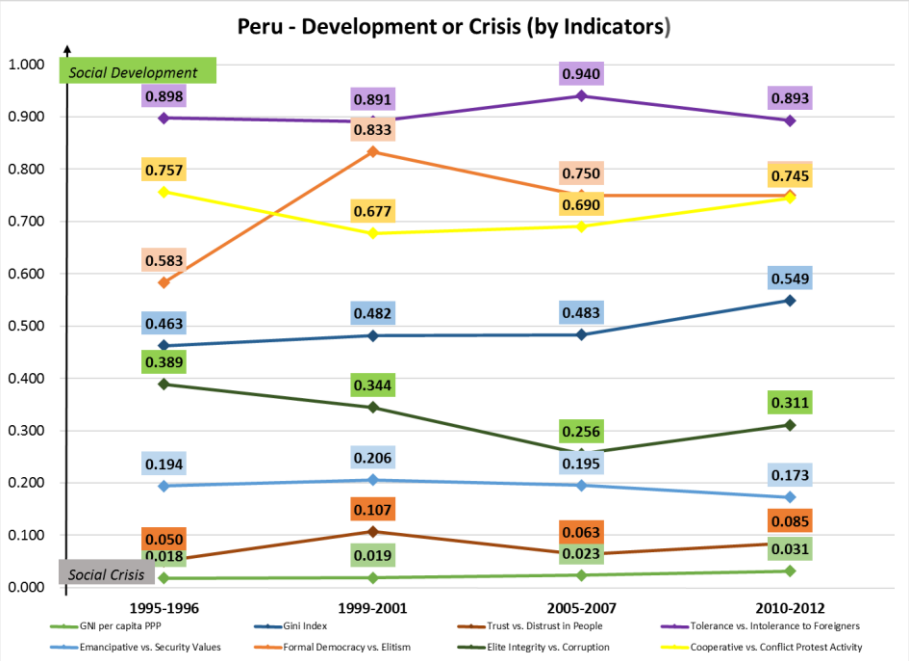


Figure 12.Social change in Peru by indicators

Peru is growing economically – the overall rise in GNI per capita PPP is 1.33%. At the same time, it is becoming more equal – the cumulative increase of GINI Index is 8.61%. Over the four waves formal democracy has increased by 16.67%. However, Mexicans are more concerned with security (a net increase by 2.14%) and are more conflict-oriented in protests (a net increase by 1.18%). So, Peru is more wealthy, equal, democratic, but experiencing a rise of security values and conflict protests.

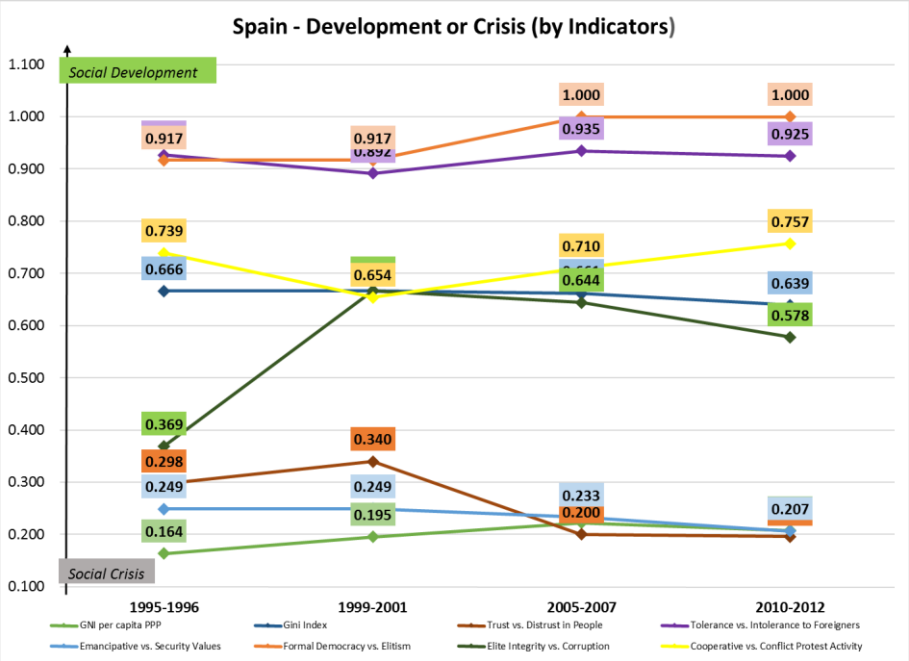


Figure 13.Social change in Spain by indicators

Despite the latest decline in economy, overall Spain has gained a 4.4% increase in GNI per capita PPP. Unfortunately, it is accompanied by a rising inequality – by a net 2.72%. No wonder, people are more distrustful (a net 10.18% increase) and concerned with security (a net 4.23% increase). Regardless of these negative changes in attitudes, formal democracy has increased by 8.33% and protest pattern is more cooperative by 1.8%. Thereby, Spain is more well-off, democratic, cooperative in conflicts, but more unequal, distrustful, and concerned with security.

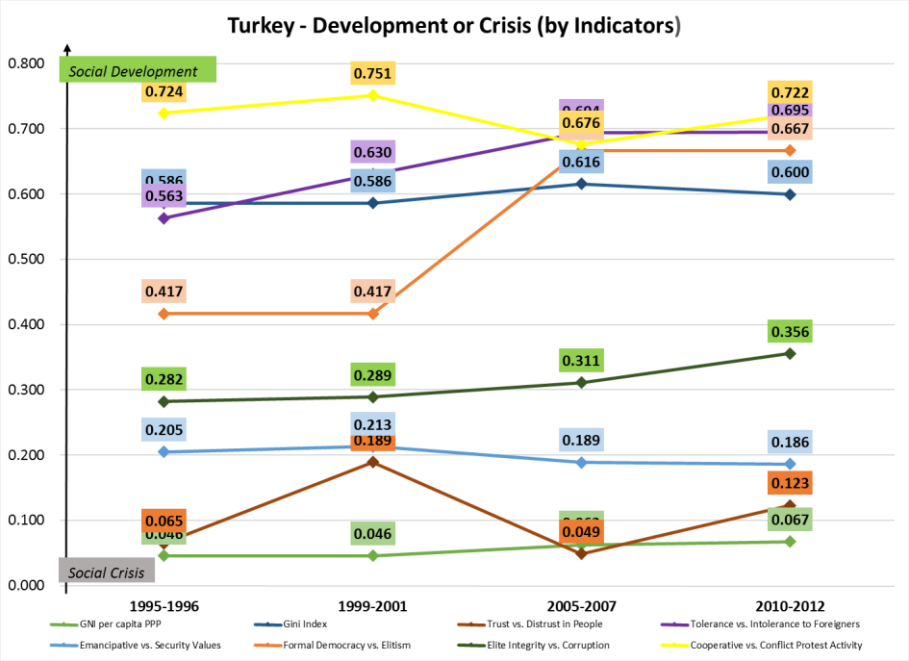


Figure 14.Social change in Turkey by indicators

Turkey demonstrates a rather volatile social change, but the results are rather positive. Its GNI per capita PPP has cumulatively risen by 2.15%, GINI Index increased by 1.36%, trust in people has increased by a net 5.79%, tolerance to foreigners by a net 13.17%, and formal democracy gained a 25% boost. On the other side, there is a 1.86% increase in security values, and a 0.22% increase in conflict protests. Overall, Turkey is more prosperous, equal, trusting, tolerant, democratic, but concerned with security and protesting in a conflict way.

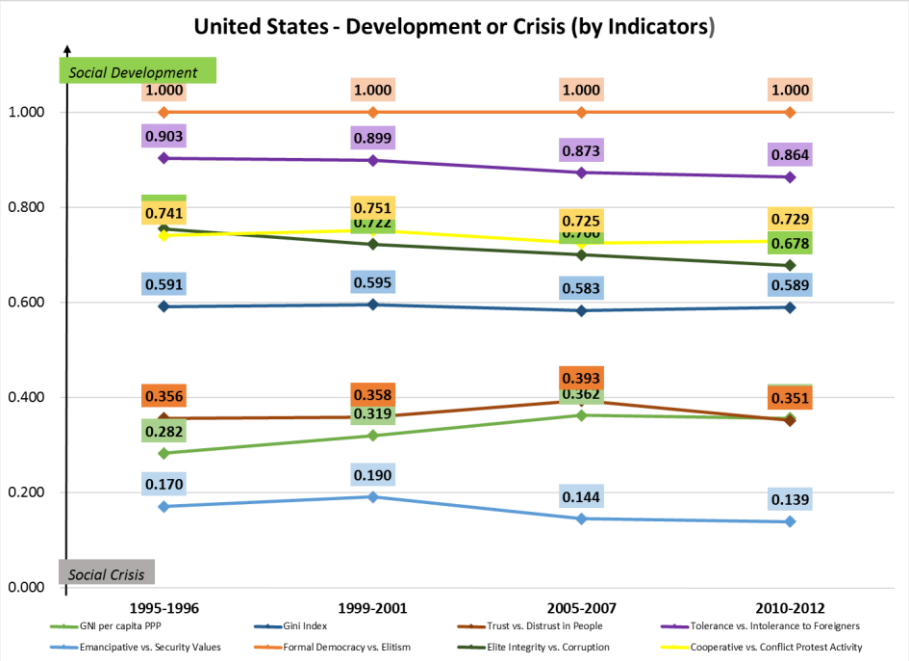


Figure 15.Social change in the United States by indicators

The United States have experienced some fluctuations during the studied years. In terms of social development, the only achievement in the cumulative 7.37% increase in GNI per capita PPP. The rest significant change is negative: a net 0.2% decline in GINI Index, a net 0.49% decline in trust, a net 3.95% drop in tolerance, a net 3.17% downfall in emancipative values, and a net 1.2% fall in cooperative protest patterns. One should conclude that the United States are more prosperous, but more unequal, distrustful, intolerant, more concerned with security and more conflict-oriented in protests.

*Conclusion and Discussion*

This theory comparison has a number of empirical limitations: the findings are relevant only within the time frame specified and for the countries selected. Still, if these cases confront theories, the latter should be adjusted accordingly.

As a result of this study we should conclude that both modernization theory and world-systems are wrong in generic claims of universal patterns of social change: there is neither universal social development nor universal social crisis. Statistically significant net social development was demonstrated only by China and by Turkey. No core country indicated a statistically significant social crisis. The data showed that the observed countries from the semiperiphery (developing) and from the periphery (low-income) are advancing at a greater pace than countries from the core (postindustrial).

Still, in particular aspects the perspectives are wright. In economic dimension, all countries, but China (due to a rise in inequality), have evidence of social development. In cultural dimension, only two countries show a cumulative rise in emancipative values: China and Turkey. Four other countries have a net rise of security values: South Korea, Mexico, Spain, and the United States. It should be noted, that the dynamics in cultural dimension is subject to a visible volatility. In institutional dimension, United States have a relatively stable system, while for other countries it varies. Despite minor variations across the measured years, four countries enjoy a considerable cumulative increase in institutional freedoms and rights: Chile, China, Mexico, and Turkey. Agentic dimension is volatile too. Nevertheless, only two countries show a net inclination towards cooperative protests: South Korea and Spain. The majority of the countries gravitate towards conflict protest activities: Chile, China, Mexico, Peru, Turkey, and the United States.

Overall, it is evident that the studied countries are becoming more economically well-off, more free, but are increasingly inclined to protest more violently. Both theories proved to be correct about cyclic change in cultural and agentic dimensions. There is a potential for theoretical synthesis: both theories can incorporate cycles and notions of inequality, democracy, and protests.

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*Appendices*

Appendix 1. Constructs and empirical indicators

| Constructs | Empirical indicators |
|---|---|
| Economic Dimension | |
| Prosperity vs. Poverty | GNI per capita, PPP constant 2011 international USD (The World Bank 2016a). GNI per capita based on purchasing power parity (PPP). PPP GNI is gross national income (GNI) converted to international dollars using purchasing power parity rates. An international dollar has the same purchasing power over GNI as a U.S. dollar has in the United States. GNI is the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad. Data are in constant 2011 international dollars. (The variable is normalized as a scale from 0 to 1, using the highest empirical value for 2012 as a maximum). |
| Income Equality vs. Inequality | GINI index (The World Bank 2016a). Measures the extent to which the distribution of income (or, in some cases, consumption expenditure) among individuals or households within an economy deviates from a perfectly equal distribution. A Lorenz curve plots the cumulative percentages of total income received against the cumulative number of recipients, starting with the poorest individual or household. The Gini index measures the area between the Lorenz curve and a hypothetical line of absolute equality, expressed as a percentage of the maximum area under the line. Thus a Gini index of 0 represents perfect equality, while an index of 100 implies perfect inequality. (The variable is reversed and normalized as a scale from 0 to 1). |
| Cultural dimension | |
| Trust vs. Distrust in People | A165 Most people can be trusted (waves 1, 2, 3, 4, 5, 6). Question text: Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people. (The categories are 1 – "most people can be trusted" to 2 – "can't be too careful" / "need to be very careful"; the variable is reversed and normalized as a scale from 0 to 1). |
| Tolerance vs. Intolerance to Foreigners | A124_06 Neighbours: Immigrants/foreign workers (waves 1, 2, 3, 4, 5, 6). Question text: On this list are various groups of people. Could you please sort out any that you would not like to have as neighbors? Immigrants. (The categories are 0 – "not mentioned" and 1 – "mentioned"; the variable is reversed and normalized as a scale from 0 to 1). |
| Emancipative vs. Security Values | |
| Emancipative vs. Security Aims of Country First Choice | E001 Aims of country: first choice (waves 2, 3, 4, 5, 6). Question text: People sometimes talk about what the aims of this country should be for the next ten years. On this card are listed some of the goals which different people would give top priority. Would you please say which one of these you, |

| | |
|---|---|
| | yourself, consider the most important? First choice. (The categories are 1 – "a high level of economic growth", 2 – "strong defense forces", 3 – "people have more say about how things are done", 4 – "trying to make our cities and countryside more beautiful"; are recoded: 1 and 2 into 1, 3 and 4 into 2; the variable is normalized as a scale from 0 to 1). |
| Emancipative vs. Security Aims of Country Second Choice | E002 Aims of country: second choice (waves 2, 3, 4, 5, 6). Question text: People sometimes talk about what the aims of this country should be for the next ten years. On this card are listed some of the goals which different people would give top priority. Would you please say which one of these you, yourself, consider the most important? Second choice. (The categories are 1 – "a high level of economic growth", 2 – "strong defense forces", 3 – "people have more say about how things are done", 4 – "trying to make our cities and countryside more beautiful"; are recoded: 1 and 2 into 1, 3 and 4 into 2; the variable is normalized as a scale from 0 to 1). |
| Emancipative vs. Security Important Goals First Choice | E005 Most important: first choice (waves 2, 3, 4, 5, 6). Question text: Here is another list. In your opinion, which one of these is most important? And what would be the next most important? First choice. (The categories are 1 – "a stable economy", 2 – "progress toward a less impersonal and more humane society", 3 – "ideas count more than money", 4 – "the fight against crime"; are recoded: 1 and 4 into 1, 2 and 3 into 2; the variable is normalized as a scale from 0 to 1). |
| Emancipative vs. Security Important Goals Second Choice | E006 Most important: second choice (waves 2, 3, 4, 5, 6). Question text: Here is another list. In your opinion, which one of these is most important? And what would be the next most important? Second choice. (The categories are 1 – "a stable economy", 2 – "progress toward a less impersonal and more humane society", 3 – "ideas count more than money", 4 – "the fight against crime"; are recoded: 1 and 4 into 1, 2 and 3 into 2; the variable is normalized as a scale from 0 to 1). |
| Institutional Dimension | |
| Formal Democracy vs. Elitism | Freedom Rating (Freedom House 2016a). Freedom in the World is produced each year by a team of in-house and external analysts and expert advisers from the academic, think tank, and human rights communities. Freedom in the World uses a three-tiered rating system, consisting of scores, ratings, and status. Each rating of 1 through 7, with 1 representing the greatest degree of freedom and 7 the smallest degree of freedom, corresponds to a specific range of total scores. Final rating is an arithmetic mean of the two ratings. (The variable is reversed and normalized as a scale from 0 to 1). |
| Elite Integrity vs. Corruption | Corruption Perceptions Index (Transparency International 2016).The CPI draws upon a number of available sources which capture perceptions of corruption. Each source is then standardised to be compatible with other available sources, for aggregation to the CPI scale. Each country's CPI score is calculated as a simple average of all the available rescaled scores for that country (note, we do not use any of the imputed values as a score for the aggregated CPI). A country will only be given a score if there are at least three data sources available |

| | |
|---|---|
| | from which to calculate this average. The CPI score will be reported alongside a standard error and confidence interval which reflects the variance in the value of the source data that comprises the CPI score. Values range from 10 (completely clean) to 0 (highly corrupt). (The variable is normalized as a scale from 0 to 1). |
| Agentic Dimension | |
| Cooperative vs. Conflict Protest Activity | GDELT Project data (2016). The data is based on monitoring of news. The 20 types of protests are recoded into 4 quad categories: verbal cooperation, material cooperation, verbal conflict, and material conflict. The percentage of joint verbal cooperation and material cooperation protests towards the total number of protests per year is counted as a measure of cooperative activity, which can vary between 0 and 1. |

Appendix 2. Survey Samples

| Countries/Waves | 1995-1996 | 1999-2001 | 2005-2007 | 2010-2012 |
|---|---|---|---|---|
| Chile | 1000 | 1200 | 1000 | 1000 |
| China | 1500 | 1000 | 1991 | 2300 |
| South Korea | 1249 | 1200 | 1200 | 1200 |
| Mexico | 1510 | 1535 | 1560 | 2000 |
| Peru | 1211 | 1501 | 1500 | 1210 |
| Spain | 1211 | 1209 | 1200 | 1189 |
| Turkey | 1907 | 3401 | 1346 | 1605 |
| United States | 1542 | 1200 | 1249 | 2232 |

Appendix 3. Sample Errors

| Countries/Waves | 1995-1996 | 1999-2001 | 2005-2007 | 2010-2012 |
|---|---|---|---|---|
| Chile | 0.032 | 0.029 | 0.032 | 0.032 |
| China | 0.026 | 0.032 | 0.022 | 0.021 |
| South Korea | 0.028 | 0.029 | 0.029 | 0.029 |
| Mexico | 0.026 | 0.026 | 0.026 | 0.022 |
| Peru | 0.029 | 0.026 | 0.025 | 0.029 |
| Spain | 0.029 | 0.020 | 0.020 | 0.029 |
| Turkey | 0.023 | 0.017 | 0.024 | 0.022 |
| United States | 0.025 | 0.029 | 0.028 | 0.021 |

Appendix 4. Social Change Values

GNI per capita PPP

| Countries/Waves | 1995-1996 | 1999-2001 | 2005-2007 | 2010-2012 |
|---|---|---|---|---|
| Chile | 0.049 | 0.054 | 0.064 | 0.073 |
| China | 0.006 | 0.010 | 0.018 | 0.027 |
| South Korea | 0.105 | 0.126 | 0.150 | 0.179 |
| Mexico | 0.055 | 0.062 | 0.063 | 0.068 |
| Peru | 0.018 | 0.019 | 0.023 | 0.031 |
| Spain | 0.164 | 0.195 | 0.222 | 0.208 |
| Turkey | 0.046 | 0.046 | 0.062 | 0.067 |
| United States | 0.282 | 0.319 | 0.362 | 0.356 |

GINI Index

| Countries/Waves | 1995-1996 | 1999-2001 | 2005-2007 | 2010-2012 |
|---|---|---|---|---|
| Chile | 0.451 | 0.448 | 0.482 | 0.492 |
| China | 0.643 | 0.574 | 0.574 | 0.579 |
| South Korea | 0.684 | 0.684 | 0.690 | 0.690 |
| Mexico | 0.515 | 0.483 | 0.489 | 0.519 |
| Peru | 0.463 | 0.482 | 0.483 | 0.549 |
| Spain | 0.666 | 0.666 | 0.661 | 0.639 |
| Turkey | 0.586 | 0.586 | 0.616 | 0.600 |
| United States | 0.591 | 0.595 | 0.583 | 0.589 |

Trust vs. Distrust in People

| *Value* | 1995-1996 | 1999-2001 | 2005-2007 | 2010-2012 |
|---|---|---|---|---|
| Chile | 0.219 | 0.228 | 0.126 | 0.128 |
| China | 0.523 | 0.545 | 0.526 | 0.631 |
| South Korea | 0.303 | 0.273 | 0.282 | 0.266 |
| Mexico | 0.312 | 0.213 | 0.156 | 0.124 |
| Peru | 0.050 | 0.107 | 0.063 | 0.085 |
| Spain | 0.298 | 0.340 | 0.200 | 0.196 |
| Turkey | 0.065 | 0.189 | 0.049 | 0.123 |
| United States | 0.356 | 0.358 | 0.393 | 0.351 |

Tolerance vs. Intolerance to Foreigners

| *Value* | 1995-1996 | 1999-2001 | 2005-2007 | 2010-2012 |
|---|---|---|---|---|
| Chile | 0.883 | 0.893 | 0.905 | 0.924 |
| China | 0.797 | 0.840 | 0.828 | 0.878 |
| South Korea | 0.615 | 0.532 | 0.616 | 0.558 |
| Mexico | 0.739 | 0.857 | 0.903 | 0.885 |
| Peru | 0.898 | 0.891 | 0.940 | 0.893 |
| Spain | 0.927 | 0.892 | 0.935 | 0.925 |
| Turkey | 0.563 | 0.630 | 0.694 | 0.695 |
| United States | 0.903 | 0.899 | 0.873 | 0.864 |

Emancipative vs. Security Values

| *Value* | 1995-1996 | 1999-2001 | 2005-2007 | 2010-2012 |
|---|---|---|---|---|
| Chile | 0.233 | 0.211 | 0.220 | 0.240 |
| China | 0.158 | 0.126 | 0.165 | 0.165 |
| South Korea | 0.248 | 0.235 | 0.222 | 0.237 |
| Mexico | 0.216 | 0.208 | 0.208 | 0.194 |
| Peru | 0.194 | 0.206 | 0.195 | 0.173 |
| Spain | 0.249 | 0.249 | 0.233 | 0.207 |
| Turkey | 0.205 | 0.213 | 0.189 | 0.186 |
| United States | 0.170 | 0.190 | 0.144 | 0.139 |

Formal Democracy vs. Elitism

| Countries/Waves | 1995-1996 | 1999-2001 | 2005-2007 | 2010-2012 |
|---|---|---|---|---|
| Chile | 0.833 | 0.833 | 1.000 | 1.000 |
| China | 0.000 | 0.083 | 0.083 | 0.083 |
| South Korea | 0.833 | 0.833 | 0.917 | 0.917 |
| Mexico | 0.583 | 0.750 | 0.833 | 0.667 |
| Peru | 0.583 | 0.833 | 0.750 | 0.750 |
| Spain | 0.917 | 0.917 | 1.000 | 1.000 |
| Turkey | 0.417 | 0.417 | 0.667 | 0.667 |
| United States | 1.000 | 1.000 | 1.000 | 1.000 |

Elite Integrity vs. Corruption

| *Value* | 1995-1996 | 1999-2001 | 2005-2007 | 2010-2012 |
|---|---|---|---|---|
| Chile | 0.644 | 0.711 | 0.700 | 0.689 |
| China | 0.129 | 0.278 | 0.256 | 0.322 |
| South Korea | 0.447 | 0.356 | 0.444 | 0.489 |
| Mexico | 0.256 | 0.256 | 0.278 | 0.267 |
| Peru | 0.389 | 0.344 | 0.256 | 0.311 |
| Spain | 0.369 | 0.667 | 0.644 | 0.578 |
| Turkey | 0.282 | 0.289 | 0.311 | 0.356 |
| United States | 0.754 | 0.722 | 0.700 | 0.678 |

Cooperative vs. Conflict Protest Activity

| Countries/Waves | 1995-1996 | 1999-2001 | 2005-2007 | 2010-2012 |
|---|---|---|---|---|
| Chile | 0.854 | 0.776 | 0.747 | 0.754 |
| China | 0.775 | 0.812 | 0.787 | 0.756 |
| South Korea | 0.736 | 0.825 | 0.821 | 0.757 |
| Mexico | 0.708 | 0.740 | 0.666 | 0.700 |
| Peru | 0.757 | 0.677 | 0.690 | 0.745 |
| Spain | 0.739 | 0.654 | 0.710 | 0.757 |
| Turkey | 0.724 | 0.751 | 0.676 | 0.722 |
| United States | 0.741 | 0.751 | 0.725 | 0.729 |

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