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POST-SOCIALIST ANOMIE THROUGH THE LENS OF ECONOMIC MODERNIZATION AND THE FORMALIZATION OF SOCIAL CONTROL[3]

This paper inquires into how economic modernization impacts normative regulation by spurring, on the one hand (a) formal media of normative regulation (also known as formal social control) in the spheres of politics, economics and interpersonal relations and, on the other hand, (b) informality via the lower density of norms (also known as anomie). This work then asks how these two processes relate to one another. Evidence indicates that modernization is clearly linked to formal media of normative regulation in the spheres of politics (measured as greater government effectiveness), economics (i.e. lower proportion of shadow economy), and interpersonal relations (i.e. less reliance upon family and friendships). Moreso, our multi-level regression models, using World Values Survey data, report that political formality (government effectiveness) at the country level is linked to less anomie at the individual level. Overall, we suggest that economic growth initially brings normlessness through undermining informal social control. However, with greater economic stock, there is a tendency for greater political formalization, formal social control, which brings levels of anomie down. Furthermore, even after all controls, there is a strong anomie syndrome in post-communist societies.

Key words:
economic modernization, formality, informality, social control, anomie, post-socialism.
JEL: O1, Z1.

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Introduction

Anomie refers to uncertainty in social norms, social roles, and behavior. It signifies the lack of a frame to understand what is happening at the interpersonal, institutional, and societal levels. Naturally, we expect periods of rapid social change to be reflected in higher rates of anomie, and this is what research on anomie in the post-socialist context has identified. However, the complex roots of anomie have hardly been investigated in a manner that takes both individual and country-level characteristics into account. In particular, anomie is only one piece of a wider modernization pattern involving the formalization of normative control. By formalization in this sense, we refer to the shifting of society's principle medium of normative control over individuals from the informal, based on interpersonal close ties and face-to-face relationships, to the formal, based on abstract, rational, and codified institutions. We propose to explain anomie through a multi-level model that includes individual and country-level differences.

Therefore, in this article, we investigate how economic modernization relates to the formalization of normative regulation. First, we will demonstrate how formal social control and low normative density (anomie) relate to economic modernization. In addition, we demonstrate how individual anomie may also be predicted by country level differences in the formality of normative control.

Formality and Informality

In everyday life, most of us are keen-sensed when it comes to recognizing social settings that are more or less formal. This is hardly surprising, because our ability to socially flourish depends upon recognizing and adapting to different expectations within different social contexts. We adapt different modes of self-presentation, corresponding to formality and informality, within varied settings. These "interaction orders" (Goffman 1983, Morand 1995) represent ways of interacting with and presenting ourselves within the social world.

At its core, informality refers to "social situations or gatherings that are generally characterized by behavioral spontaneity, casualness, and interpersonal familiarity." In contrast, formality refers to such social settings that are more "regimented, deliberate, and impersonal in nature" (Morand, 1995: 831-2). We further these starting definitions with a set of oppositions that characterize the informal versus the formal: loose versus tight, casual versus strict, personal versus impersonal, immediate versus abstract, spontaneous versus routinized, emotional versus rational.

While this basic polarity may suffice for everyday conversation, it is necessary to refine it further for our scientific operationalization. In order to do so, we will first present three forms of

informality-formality found in the literature: one focused on interaction, one focused on bureaucratization, and one focused on normative regulation.

The first brand of informality-formality focuses primarily on interpersonal interaction. Erving Goffman used the terms “tightness” and “looseness” to describe it. In particular, he spoke of 'interaction orders,' the basic presence of two actors within one anothers' physical range of perception and response. These basic social situations, constitutive of social order, can be loose or tight. Goffman's depiction of a loose interaction order is that of a man on a park bench on a Sunday afternoon. In such a setting, one will loosen the tie, remove the shoes, may take a nap, may even wear torn or old clothing, and is even free to belch, quarrel, shout, or kiss another. Goffman contrasts this with a “tight” setting, that of a ceremony, where hardly any of the above are allowed. In the tight setting, activities should be 'situationally oriented' and show a constant devotion to the “spirit of the occasion” (Goffman, 1963: 198-199; from Morand, 1995: 832). Goffman's tightness and looseness thereby refer to interactional contexts, specifically the extent to which a wide diversity of behavior is allowed or whether behavior should rather strictly match situational routines and procedures.

The second brand of informality-formality is Weberian, focused on bureaucratization. Max Weber dealt in relevant ways with formality and informality through his approach to impersonality, bureaucracy, rationality, legitimacy, and officialdom (Weber 1978). Therein, the impersonality of bureaucracies and formal routines and procedures are key means for generating the sense of legitimacy of bureaucratic work (Weber 1947; from Morand 1995: 848). In this account, formality is the sign of “officialdom,” a principle means of legitimizing and expressing bureaucratic power (Morand 1995: 848). The process of rationalization results in the entrenchment of bureaucratic administrative methods, which are both effected through and symbolized through formality of procedures, relationships, and ultimately, control. While Weber dealt heavily with formality in these ways, the notion of informality was largely ignored.

The third brand of informality-formality in scientific literature emphasizes foremost the notion of normative regulation. Within the sociology of deviance, social control theory posits two types of such regulation: formal and informal “social control” (Hirschi 2002). Formal control is exercised abstractly, such as through the power of police and laws. In practice, informal social control is much more effective in controlling individual behavior: this is interpersonal control through valued relationships which transmit and sanction norms. Furthermore, social control theory posits the formalization of control over historical time; modernization processes uprooted the „mechanical“ informal relationships that transmit norms, replacing them with „organic“ interdependencies (Durkheim 1984). A recent article in the journal *Science* takes a similar approach,

depicting infomality-formality as indicating normative regulation. The authors have adapted Goffman's terms „tightness and looseness“ for cross-cultural social-psychological research. The authors define ‚tight‘ nations as those that "have strong norms and a low tolerance of deviant behavior" (Gelfand et al. 2011: 1100). Loose nations, in contrast, have weaker norms and a high tolerance of deviant behavior. No longer specifying concrete interactions, tightness and looseness here refer to cultural patterns of normative regulation. In an important step, the authors link this dimension of formality-informality to long-term historical pressures.

The three above types of formality-informality found in the literature exhibit two weaknesses. First of all, they mostly involve uni-dimensional, over-simplified definitions of informality-formality. For example, "tightness and looseness" as used by Gelfand includes both the normative density of a society and its tolerance of deviance within the same concept. These are analytically distinct, for we can imagine one the one hand societies that have many norms yet are tolerant of others' deviance (think of Buddhist societies, such as Thailand) and, on the other hand, societies with few norms, but which are rigidly enforced (for example, gangs which strictly adhere to a particular codes of loyalty, but to little else). We will resolve this problem below by differentiating the informality-formality concept. A second problem, especially in the interactionist literature, is that few efforts are made to link together formality and modernization. Formality is often depicted as a characteristic of a context without looking at how such contexts came to be historically patterned. We rectify this by explicitly recognizing formality as historically linked to modernization.

In order to proceed, we first complexify the uni-dimensional formality-informality concepts found in other literature. A first step is recognizing that each of the four "brands" of informality-formality share a common denominator: the relevance of normative regulation. Thereby, we will define formality-informality as normative regulation, but there are at least four distinct ways that this can be understood. Formality can refer to:

1. the *medium* of normative regulation. This is the formality known to us through social control theory. In this sense, we can refer to formal social control, whereby individuals are controlled through impersonal, abstract, institutions rather than through their face-to-face ties.

2. the *density* of normative regulation. This refers to the overall thickness of norms, instutions, and rules. A formal setting, such as a military parade, is one characterized by this

prevalance, whereas an informal setting in this sense is one that tends toward normlessness, or anomie.

3. a high *compliance* to norms. This means that an individual or group adheres to norms which exist. We can say that a formal person is one that follows the rules of a given social setting.

4. an enhanced *enforcement/reinforcement* of norms and their violations. This refers to institutional mechanisms of enforcing/reinforcing norms when they are violated or threatened. A formal setting, such as a jail, actively punishes those who violate the rules. Alternatively, a formal parent can be one that reminds children of their normative transgressions, thus reinforcing them.

This article proceeds by dealing with the first two of these four types of formality: as the medium of normative regulation and as the density of regulation. The remaining types of formality, compliance and enforcement, must be dealt with elsewhere.

Modernization

The second weakness in how scientific literature has handled formality and informality is that few approaches investigate formality from a historical, modernization, perspective. In the worst case, formality is viewed ideographically within individual interactional settings without looking at its patterning across time and space. This article addresses this problem by explicitly linking formality, in its two major forms, to modernization in separate steps. These aspects of formality depicted above may have contradictory relationships with modernization; as a result, the relationship can hardly be handled as uni-dimensional.

Modernization and informality may have a paradoxical relationship. On the one hand, modernization may cause increasing informality by lowering the density of normative regulation, in terms of erosion of traditional moral structures and the rise of anomie. On the other hand, modernization, leads to decreasing informality in terms of the medium of regulation, as one of its principle instruments is rationalization, whereby social life comes to be more and more characterized by codified, instrumental motives and organized bureaucratic control. This paradox justifies a closer look.

There are indeed other cases where scholars have linked formality questions with modernization. A notable example is Norbert Elias' *The Civilizing Process* (1979), which describes the enhancement of self-control over historical time, primarily dealing with the spheres of manners and interpersonal relations. Elias shows how people came to view others' perceptions as a constraint

on their own behaviour through shame. The historical pattern he identified was driven primarily by interclass mimicry and distanciation, with the result of increasing self control and formality of individuals in front of others. In another example, individualization literature (see Beck and Beck-Gernsheim 2002) has noted the rise of increasingly differentiated persons, more and more liberated from traditional ascribed statuses and control, so that the salience of choice becomes more and more powerful. This importance of individual choice meshes with social control argumentation mentioned in an above paragraph: individuals become less controlled by their relationships. In this way, they feel more free but are at the same time more reliant upon abstract market and state-institutions that help them manage risks. Yet one of our critiques of individualization theories is that they tend to view the individual-society relationship in analytical isolation, not integrated within an overall modernization analysis. Our answer is to deal with formalization simultaneously in the social, political, and economic spheres, using the same logic and language.

By modernization, this project focuses on economic development and how it links to another modernization component, rationalization. In other settings, urbanization, technological development, and industrialization should also be included within the modernization complex, but these are beyond the scope of this article. We have chosen to limit the dimensions of modernization we consider in order to allow us to isolate the specific effects of economic development on formalization, for it is conceivable that different subcomponents of modernization have different effects. By rationalization, we refer to the growing importance of quantified, instrumental, goal-oriented, 'scientific' thinking. In contrast, non-rational thinking is focused on qualities and non-universalizable aspects, such as emotions. We look at rationalization in this project through its close cousin: formalization.

Anomie

The conventional understanding in social sciences of the term "anomie" includes first of all "... a state of ethical normlessness or deregulation, pertaining either to an individual or a society. This lack of normative regulation leaves individuals without adequate ethical guidance as to their conduct and undercuts social integration" (Morrison 2001: 10). As a result, in an anomic society, people behave on their own as per the specific situation and their personal whims and do not take into account such societal constraints as laws or a moral code. This is a presumed theoretical background of many ‚social ills,' such as deviance, crime, suicide, cynicism, alienation, and alcoholism and other dependencies.

The term "anomie" was introduced to a wide audience by Durkheim at the end of 19th

century[4]. In his studies of the division of labor and suicide, he developed the concept of anomie in order to explain the global social shift from a traditional society to an industrial one as well as to understand the foundations of delinquent behavior (Durkheim 1970; 1984).

Another major contribution to the theory of anomie was provided by Robert Merton. He emphasized role of the social stratification and contradiction between ambitious material goals and the limited means to achieve them in the highly competitive US society (Merton 1938; 1964).

There are some similarities and distinctions between Durkheimian and Mertonian approaches to anomie. The major difference in light of the goals of this paper is that the main accent of Durkheim‘s concept is on “normlessness”, the lack of the certain regulations and institutions, while Merton’s understanding of anomie is concentrated on the foundation of asocial behavior based on a mismatch between social ideals and the means to achieve them[5]. This paper’s approach is closer to the Durkheimian concept.

During the last decades, the concept of anomie has been widely applied within many of the social sciences (sociology, psychology, criminology, political science, economics, management) to numerous social phenomena – criminality (Agnew 1992; Bernburg 2002; Konty 2005; Passas 2000), suicide (Graeff & Mehlkop 2007), demographic issues (Philipov, Speder & Billari 2006; Bjarnason 2009; Yoshida 2010), racial relations (Huschka & Mau 2006), work and business ethics (Tsahuridu 2006; Saini & Krush 2008) and many other issues. The main peculiarity of these and most other studies of anomie is an attempt to understand the social causes of acute societal problems related with serious inter-group clashes, social pathologies, and distortions in individual behavior.

Among new developments in anomie theory and empirical studies is the Institutional Anomie Theory based on Merton's approach (Messner & Rosenfeld 1994 and 2006; Messner, Thome & Rosenfeld 2008; Bjerregaard & Cochran 2008; Burkatzki 2008). Herein, the basic concept for the explanation of anomie is the overemphasis on economic goals essential for the “American Dream”, coupled with a devaluation of society’s non-economic institutions (family, education, polity). High crime rates are the result.

Usually, anomie is estimated as an ‘evil’ that leads to criminality and other negative consequences at the social and individual levels. Only a few studies show a more balanced approach by analyzing anomie as essential by-product of social change that includes both negative and

4 Some scholars outlined that before E.Durkheim this term was developed by Jean Marie Guyau and E.Durkheim incorporated Guyau’s approach into his concept of anomie (Orru, 1983, Besnard, 1988).

5 See analysis of these similarities and dissimilarities in: Besnard, 1988; Hilbert, 1989 and Zhao & Cao, 2010.

positive elements. Among them, for example, is a book based on a wide comparative project including quantitative and qualitative data: Comparative Anomie Research: Hidden Barriers - Hidden Potential for Social Development (edited by Atteslander, Gransow, Western 1999).

Hypotheses

Our theoretical interests in the interesection of formalization, modernization, and anomie are neatly summarized within three hypotheses. The first two ponder the effects of economic modernization on our two forms of formality: formality as medium of normative regulation (also known as formal social control; see H1), and formality as the high density of normative regulation (versus anomie; see H2a and H2b). The third hypothesis investigates how these two forms of formality interact in relation to modernization.

H1. Regarding formality as the medium of normative regulation, we expect that different spheres (the economic, political, and private) become more formally governed with economic development. Formal codified rational control over these spheres becomes more salient, and informal control through interpersonal relationships becomes less important. This notion has echoes in classical sociological theory, for instance within Weber's (2003) discussion of rationalization, whereby he worries that the rationality beneficial to the economic sphere comes to dominate non-economic spheres as well. Social control theory, with Durkheimian roots, also highlights the shift from a society integrated through direct ties to one integrated through abstract interrelations. Therefore, s*ocieties that are more economically developed should be more economically, politically, and privately formally governened.*

H2a. Regarding formality as the density of normative regulation, we expect that anomie declines in societies that are economically developed. As per Nobert Elias and Max Weber, individual behavior becomes more and more controlled as modernization progresses, further regulating additional life spheres. Therefore, *overall more economically developed societies should be less anomic, since this signifies that as more spheres of life become thickly regulated.*

H2b. While we suppose that economic wealth implies greater normative thickness, we also suppose that the process of economic change equates to greater anomie. Rapid social change embodies social uprooting. In additional to the dislocations caused by new forms of economic

organization, such as factories, the shift to a formalized system of control through rational laws and state institutions implies a, at least temporary, normative breakdown as informal controls are dismantled. Therefore, *societies with greater economic growth should be more anomic.*

H3. We expect the two forms of normative formalization to interact. Specifically, anomie should be lower among individuals living in societies with a greater degree of economic, political, and social formal control. Economic development bringers greater social complexity, and this complexity should be managed by rational, formal institutions; otherwise individuals will lack the appropriate frame to manage information and their own behavior. *Individuals should experience more anomie if they live in a society that is less formally governed, even after controlling for other relevant factors.*

Methods, Data, and Operationalization

Each of our hypotheses is tested through a combination of data from the World Values Survey (2009) and other sources. The data sources are described below, according to the operationalization of the various hypotheses.

Operationalizing H1: Modernization and formality as the medium of normative regulation (social control)

H1 states that s*ocieties that are more economically developed should be more economically, politically, and privately formally governened.* In this paper, economic development of a society will be measured by a country's average GDP per capita between 2001 and 20056.

This hypothesis refers to formality as the *medium* of normative regulation, which is the governing of social behavior through codified, rational and impersonal sources, such as legal institutions. Informality is hereby associated with the informal inter-personal dependencies regulating social behavior. We look at this formality across three spheres. Economically, we measure the informality-formality of regulation by using country-level estimates of the size of the shadow economy in countries across the world according to the World Bank (Schneider, Buehn, and Montegnegro 2010), averaged between 2001 and 2005. A society with a large shadow economy is one whose economic sector is largely outside the bounds of modern bureaucratic-rational control.

6 The vast majority is assembled from the World Bank. Gaps were filled through the International Monetary Fund, UNdata „A world of information“, and the CIA Factbook).

Politically, informality-formality is operationalized through a society's government efficiency in 2005 (rated by IMD's „World Competitiveness“ rankings). A high degree of efficiency signifies the presence of rational functioning political leadership, as opposed to the informality of political nepotism; it indicates a political system more controlled by modern bureaucratic state ideals rather than by close interpersonal relations. Informality-formality of personal behavior regulation is measured by a 2005 WVS-based additive index combining whether or not the individual lives his/her life according to parents' and friends' expectations. This index represents informal social control (see Swader 2010) as opposed to formalized control. We have taken the country-level means of individual social values scores in order to compare them with the other country-level indicators. This 2005 World Values Survey data are the reason that the other country-level data are matched at 2005.

Using country-level correlation analysis and scatterplots of the above variables, we will examine the relationship between economic development and these forms of formality, thereby answering hypothesis one.

Operationalizing H2: Modernization and formality as the density of normative regulation (anomie)

H2a claims that *overall more economically developed societies should be less anomic, since this signifies that as more spheres of life become thickly regulated*, while H2b supposes that *societies with greater economic growth should be more anomic.* Economic development is still operationalized as average GDP per capita. In addition, we will measure economic growth as the average country GDP yearly growth rates between 2001 and 2005.7

Hypotheses 2a and 2b refer to formality as the *density* of normative regulation, whereby formal settings are more rigidly regulated and have more norms that govern them, compared to those which are informal. Here, informality is equivalent to anomie.

While anomie research possesses highly stylized theoretical concepts, its methodology is less developed. In particular, the operationalization and measurement of anomie is a problem. There are three major approaches to the measurement of anomie. The first includes indirect macro-indicators. For example, in one of the comparative studies of anomie within Institutional Anomie Theory (Bjerregaard and Cochran: 2008 "Want Amid Plenty: Developing and Testing a Cross-National Measure of Anomie") there were three major indicators of anomie: the GDP per capita, the Gini coefficient, and the Economic Freedom Index elaborated by the Heritage foundation. The authors developed an explanation that these indicators are strongly related with the "American

7 These data are from the World Bank database.

Dream" and therefore can measure the level of (Mertonian) anomie in various countries. The second approach deals with a series of questions describing some consequences of anomie, describing anti-social attitudes and behaviors: "Respondents in each nation are asked to answer the questions as follows: Please tell me for each of the following statements whether you think it can always be justified, never be justified, or something in between: a) claiming government benefits which you are not entitled to; b) avoiding a fare on public transport; c) cheating on tax if you have the chance; d) buying something you knew was stolen; e) someone accepting a bribe in the course of their duties" (Zhao & Cao, 2010, p.1217). Alternatively, researchers may issue a battery of questions asking about their feelings of anomie, alienation, and loneliness (Huschka and Mau 2006). The third approach deals with the gap between "is" and "ought" in specific realms. For example, Arts, Hermkens & Van Wijk (1995) revealed this gap in education, size of family, efforts, working conditions, length of service and responsibility by means of a survey with the adult population in various countries, including transformation states.

Each of these approaches enjoys certain advantages and has some imperfections. For example, the first allows the measure of economic pressures but ignores subjective aspects of anomie. The second captures human attitudes but mixes up anomie with its consequences, and we cannot analyze the impact of anomie on a deviant behavior if indicators of that behavior are already included into the dependent variable. The third provides an opportunity to study the normative gap in the human mind but it is sensitive to respondents' aspirations and satisfactions: higher aspirations lead to a higher level of anomie even when other variables stay unchanged.

The principal meaning of an anomie in our study is uncertainty: about (a) social norms in any sector of a society; (b) about one's personal behavior in any sector; and (c) in assessing a sector of society, including knowledge of it and happiness with its state of being.

We will follow the approach developed by H.Meulemann (2004) in his study of the uncertainty of religious beliefs in European countries. Therefore, we will measure anomie as the lack of a clear answer on question in a variety of spheres. Thereby, our ideal indicator of anomie will be the percentage "don't know" answers of a given individual. We will check for such anomie indications in three spheres: economics, politics, and private life.

The advantages of this approach are as follows: i) it captures the subjective aspect of anomie and ii) it provides a direct measurement of anomie through reflecting uncertainty in people's minds in particular social realms. Here data from the World Values Survey (5th wave: 2005) will be used to measure the anomie level. Yet we will first test our anomie construction within the recent 2011 round of the World Values Survey in Russia because of explict anomie indicators not existing in previous rounds. First, three separate "don't know" indices are constructed from 2011 World Values

Survey in Russia based on a respondent's proportion of 'don't know' answers to the following questions:

a. In Politics

i. The government should take more responsibility to ensure that everyone is provided for.
ii. How much confidence do you have in political parties?
iii. How much confidence do you have in the justice system?
iv. Good way to govern: Having a strong leader who does not have to bother with parliament or elections.
v. Good way to govern: Having a democratic political system

b. In Social Integration

i. Wealth can grow so that there is enough for everyone.
ii. How much confidence do you have in major companies?
iii. Incomes should be made more equal.
iv. Private ownership of business and industry should be increased.
v. Competition is good. It stimulates people to work hard and develop new ideas.

c. In Individual Values

i. Family important?
ii. Friends important?
iii. Most people can be trusted.
iv. Do most people try to take advantage of you?
v. It is important to this person to do something good for society.

The result of the above construction is three „don't know anomie“ scales, each representing the proportion of don’t know responses in the five questions on politics, economics, and individual values. In the next step, we validate this scale using comparable data. The 2011 WVS wave for Russia and its neighbors also contained a special 5-question battery on anomie: a question on powerlessness, on social isolation, on normlessness, on perceived norm violation need, and on work

estrangement (Huschka & Mau 2006). This scale provides us with the opportunity to test the validity of our constructed „don't know" anomie (DKA) scale. We find that, indeed, there is ground to continue to use the DKA scale across the whole of WVS countries. As we would expect, since the scales measure anomie in different ways, factoring together the DKA and the 5-item battery reveals different factor loadings for the two scales. Yet, the DKA scale correlates with with 4 of 5 items in our anomie index, with highly significant correlation coefficients at around .05 in the correct directions.

Any anomie scale should theoretically correlate with deviance. While social isolation and work estrangement from the 5-item comparison battery are better predictors, the "don't know scale" can predict deviance nearly as well as some explicit anomie indicators from the battery. These correlations range from .03 to .06 (n~5500), and are highly significant. Our DKA scale correlates with the justifiability of receiving government benefits illegally, not paying for ticket on public transport, theft, cheating on taxes, taking bribes, beating one's wife, using violence against others. We highlight here that we are not focusing on the amount of explained variance of our predictors (the size of the correlation), but rather on that they are significant, and in the right theoretical direction. Our DKA scale passes this litmus test.[8]

Because of the DKA scale's correlation to a standard anomie battery and its correlations to deviance almost as strong as the anomie battery's, in line with theoretical expectations, there is strong justification for using the DKA scale more widely, beyond the Russian WVS sample.

In the next step, we then replicate this don't know scale with the full WVS at the individual level in 2005. Unfortunately, in the conversion we had to measure all system-missings instead of all "don't knows" because of a lack of refined data in 2005, which may reduce the accuracy of the scale. In addition, we had to replace one Schwartz item used in Russia (do something good for society) with another Schwartz item with (help people nearby). As a result we end up with 3 separate DKA scales, one for politics, one for economics, and one for social questions. However, we have found that their inter-correlations are quite high (.37 to .64) at the individual level, and they load together in a factor analysis, so we have combined them into one integrated DKA index. The integrated anomie index was constructed as a respondent's mean of his/her political, economic, and social values anomie scores, which are themselves constructed as simple proportions of don't know responses (out of five key questions) in these spheres.

8 We were mainly interested in a 'litmus test,' which asked about the correct (a) significance and (b) direction of the correlation between anomie and deviance. Theoretically, anomie should be linked to deviance, and this empirical confirmation demonstrates that the DKA scale functions as it theoretically should. In this case, we do not forward the claim that anomie is the *main* predictor of deviance, and therefore we are not concerned about the amount of explained variance between these two items in this paper.

Does this 2005 DKA index behave as it should, as a representative of anomie? Indeed it does. This index positively correlates with unhappiness, low life satisfaction, low perceived freedom of choice in life, and a lack of subjective agency (each of these at between .10 and .12, highly significant).

To test hypotheses H2a and H2b, we examine country level correlations and scatter-plots of country anomie means versus economic development and economic growth.

Operationalizing H3: Links between anomie and social control in relation to economic modernization

According to H3, *individuals should experience more anomie if they live in a society that is regulated by a less formal control medium, even after accounting for other relevant factors.* The operationalizations of anomie and economic, political, and private formal control remain the same, as do economic development and economic growth.

We answer this hypothesis through the development of a multi-level regression model, where individuals are nested within countries. We predict individual level anomie scores through a variety of individual and country-level characteristics, to include a variety of controls (Please see Table 1 for a description of all variables used in this analysis).

The dependent variable is an individual's anomie score, centered at the grand mean (so that zero means average anomie) and standardized. Furthermore, because of a positive-skewed distribution, we have taken the square-root of this score, which yields approximately normally distributed residuals.

Among independent variables, we control for two possible confounders of our 'don't know' method of measuring anomie. First, people with less education are more likely to not know an answer, so we control for educational level (centered at completion of basic technical or vocational high school). Second, people who are less interested in the process of participating in the survey may be more likely to answer 'don't know' or refuse for answer. Therefore, we also control for „disinterestedness," the interviewer's assessment of the respondent's survey interest (where zero equals „very interested").

We include a number of basic individual demographic control variables, to include age (centered at the mean of 42), gender, income, subjective social class, whether or not a respondent is working, and marital status.

Also, we presume a specific affect of various individual variables upon anomie. Since religion claims to provide answers and life and provide an interpretive frame for life decisions, we

presume that church membership may diminish anomie. Furthermore, in line with informal social control theory, interpersonal relationships act has media of norm transmission, at least within traditional societies. Thereby, the more that individuals strive to make their parents proud and live up to their friends' expectations, the lower should be their level of anomie. Furthermore, „post-materialist“ values, at least within developed societies, should provide for a specific interpretive frame that highlights the enhancement of the quality of life and democratic and tolerant values (see Inglehart and Baker 2000, Inglehart and Welzel, 2005). Such 'modern' values are measured here by the 4-item post-materialist values index. Furthermore, we would expect those with a 'nihilistic' mindset, negating the meaningfulness of life, should also be anomic because of their rejection of more overarching interpretive frames. We measure this through a respondent's lack of thinking about „the meaning of life.“ Finally, it is also expected that a person's exposure to information resources would affect anomie, either by reducing it through enhanced knowledge or by increasing it through overstimulation. We measure this through 'information multiplicity,' a 0 to 7 index, whereby 7 indicates that an individual as used each of the following as information sources in the past week: daily newspaper, radio or TV news broadcasts, printed magazines, in-depth radio or TV news reports, books, internet, or talking with friends or colleagues.

Table 1 Description of Key Variables

	N	Mean	Std. Deviation	Min/Max
Individual Level				
Age (centered at 42)	64271	-0.12	16.70	-27/56
Female	33317 (51.7%) of 64413	n.a.	n.a.	0/1
Education (-3 to +4, centered at completion of basic technical/vocational high school)	63981	0.35	2.35	-3/4
Income (0 to 9)	57573	3.70	2.28	0/9
Subjective Social Class. (0 to 4)	56498	1.65	0.99	0/4
working	60912	0.54	0.50	0/1
Marital Status. REF=Married or living together as such	40461 (62.9%) of 64285	n.a.	n.a.	REF
Divorced or Separated	3528 (5.5%)	n.a.	n.a.	0/1
Widowed	4010 (6.2%)	n.a.	n.a.	0/1
Single/Never Married	16286 (25.3)	n.a.	n.a.	0/1
Church membership	63883	0.61	0.80	0/2
Parents proud	61747	2.14	0.78	0/3
Friends' expectations	61538	1.50	0.89	0/3
Post-Materialist Values	61097	0.00	1.00	-1.23/1.96
Nihilism (never think about meaning of life)	62955	0.78	0.85	0/3
Information Multiplicity	56379	3.80	1.80	0/7
Disinterest in interview process (control; 0 'not very interested' to 2 'very interested')	62571	0.58	0.66	0/2
Integrated Anomie Score	64493	0.053	0.114	0/1
Country Level				
Country Type. REF=Developing	28266 (43.8%) of 64493	n.a.	n.a.	REF
Post-Communist	16194 (25.1%)	n.a.	n.a.	0/1
OECD	17798 (27.6%)	n.a.	n.a.	0/1
Political formality (Government efficiency 2005)	62424	0.06	0.96	-.95/2.18
Economic Informality (Percentage of Shadow Economy)	59689	0.29	13.90	-19.5/38.1
Social Informality (Average value of making parents proud and living up to friends' expectations)	61955	0.34	0.92	-1.87/2.31
Gini-coefficient average 2001-2005	59219	0.86	8.70	1-10 -12.7/24.8
GDP growth average 2001-2005	64493	0.30	2.10	-4/5.4
log GDP per capita 2001-2005	64493	-0.12	0.69	-1.59/1

At the country-level, we first control for 'country type' in order to check for specific post-socialist, OECD, and developing country effects. In the event of multiple membership, for instance OECD and post-socialist, the post-socialist label was assigned. As per previous research, we expect enhanced anomie in post-socialist societies. Next, we include our three country-level indicators for formality of control in economic, political, and private sectors. Economic informality, as before, represents country-level average percentage of shadow economy between 2001 and 2005. It is centered at the mean of 28 percent. Political formality is represented by the government efficiency index, centered at zero. Social informality (in the private sphere) is measured by the country-level 2005 WVS mean (standardized and normalized) of an additive index of the importance of living up to friends' expectations and making one's parents proud. Finally, we also introduce three country-level economic variables. As reported above, we measure economic development through the average 2001-2005 GDP per capita, using the log of the cross-country mean. Economic growth is tapped through the country-mean centered (4.4 percent) average GDP growth between 2001 and 2005. In addition, we measure the effect of the Gini-coefficient in order to test the presumable effect of inequality as representing a form of Mertonian anomie. We use the 2001-2005 average Gini-coefficient, mean centered (38,8).9

Results of Analysis

Country-level correlation analysis indicates that economic modernization levels are strongly linked to both political (correlation .86) and economic (correlation .58) formalization. However, it is also linked strongly to diminishing informal control in the personal sphere (correlation .64). These findings are harmonious with Hypothesis 1. Overall modernization stock is tied to a formal medium of control. Three scatterplots illustrate the distribution of countries by GDP per capita according to three very different spheres of formalization. Each of the trends clearly shows declining informality with increased levels of economic development (see Figures 1, 2, and 3).

9 These data are sourced primarily from Euromonitor International. In addition, World Bank Data, and information from the CIA Factbook are used.

Figure 1. Shadow Economy size by GDP per capita

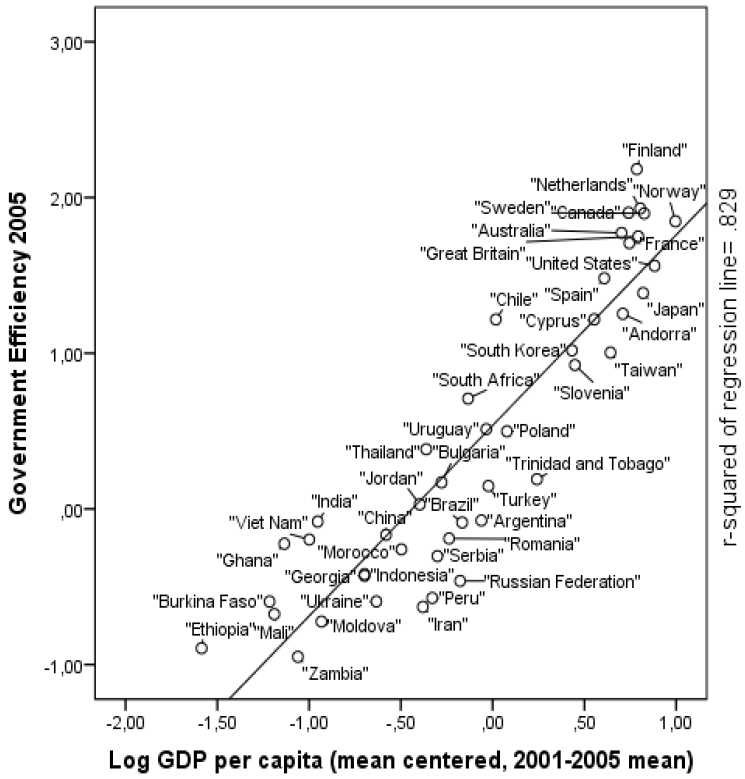


Figure 2. Government Efficiency by GDP per capita

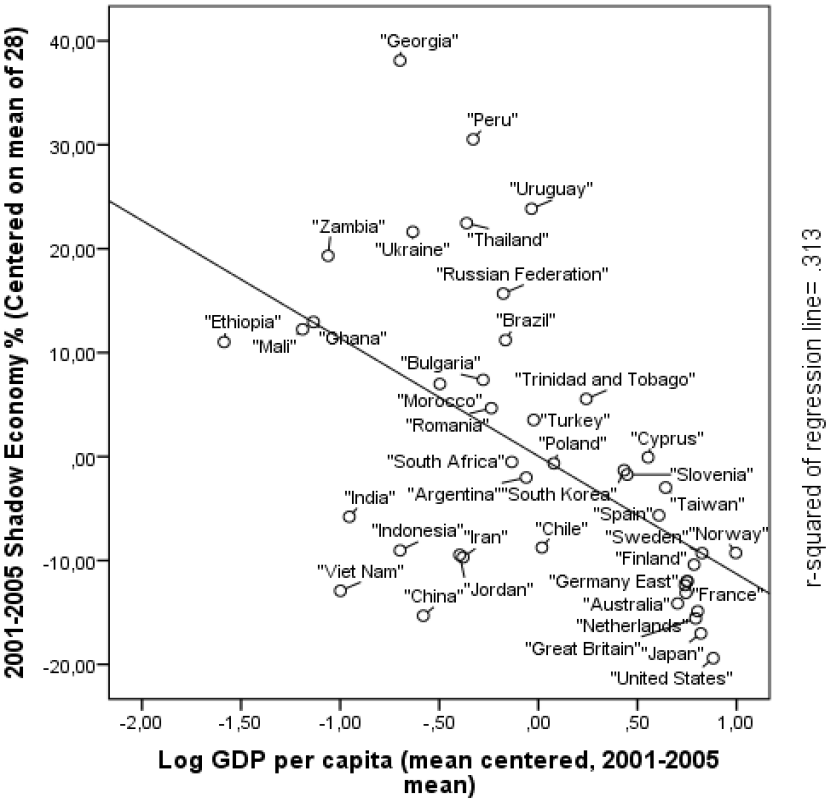
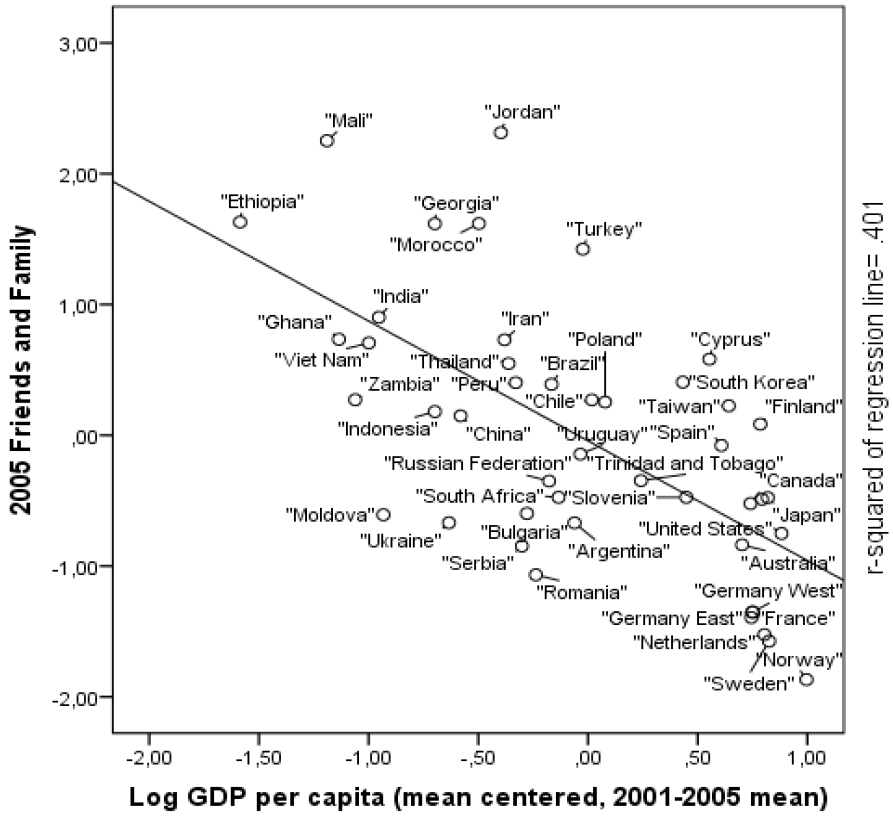


Figure 3. Importance of friends' and parents' expectations by GDP per capita



A descriptive analysis indicates that there is a high variation in the anomie level (measured by means of the mentioned DKA method) between countries. There are countries with very low level of anomie (S.Korea, Thailand, Cyprus) and states where anomie is much higher: India, China, Russia.

Correlation analysis and scatterplots illustrate that anomie correlates negatively with modernization (-.36 correlation coefficient) if we measure this via log GDP per capita. This confirms H2a. However, this relationship is reversed if we look at economic growth (.35 correlation). This finding shows us that stable modern societies are not very anomic, but the process of becoming modern, represented by GDP growth, may spur anomie. This is a confirmation of hypothesis 2b.

Figure 4. Anomie by GDP per capita, 2001-2005

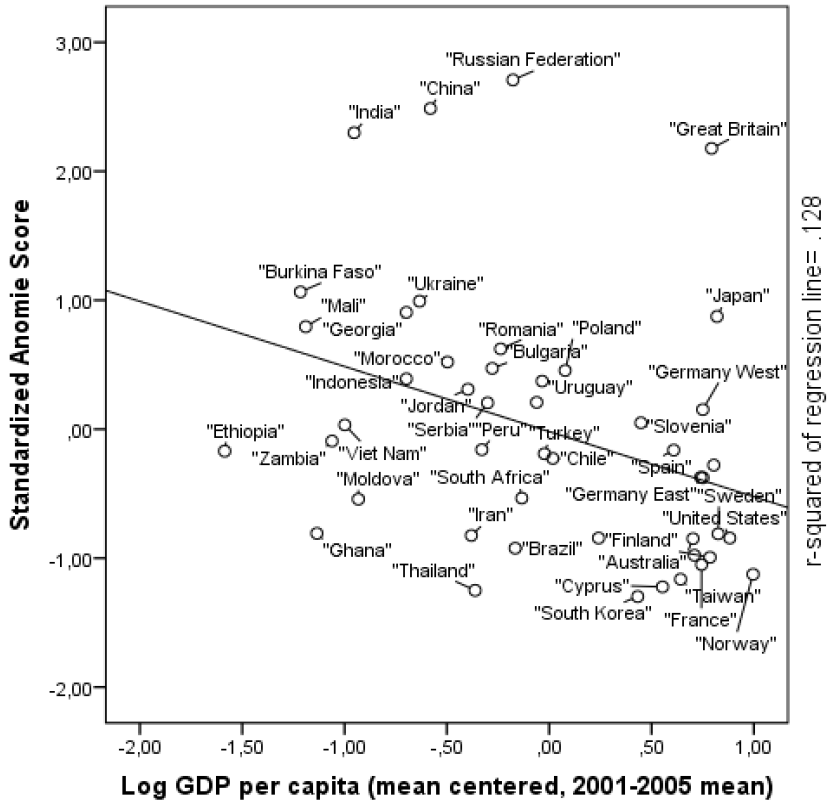
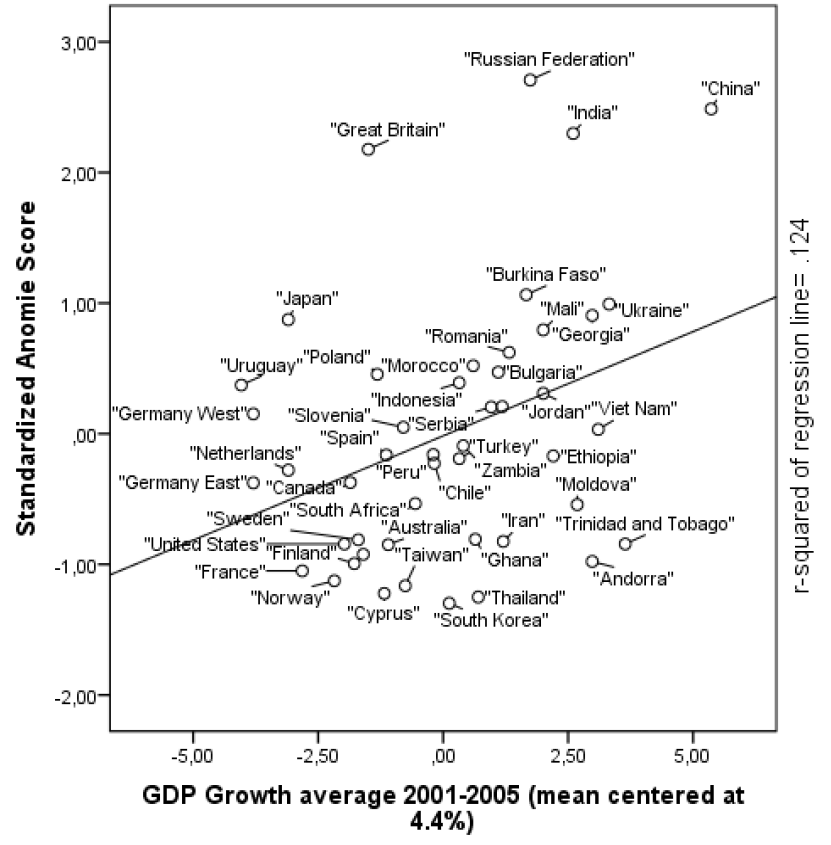


Figure 5. Anomie by GDP Growth in 2001-2005



We have also run series of multi-level linear regression models, incorporating individual and country-level data, in order to determine the role of various factors in determining individual levels of DKA anomie. We have estimated a total of 7 models beyond the empty model, with the 7th being our ideal in terms of parsimony and explantory power (See Table 2).

Model 0 is our empty model. It tells is simply that the variance in our dependent variable, individual anomie scores, is partitioned as 20% based on between-country differences, with the remaining 80 percent as individual variance.

Model 1 begins with the introduction of basic individual-level sociodemographic characteristics: age, sex, education, income, subjective social class, working status, and marital status. As for most further models, age results in enhanced anomie. Furthermore, one of this study's most enduring findings is introduced here: females are much more likely be experience anomie than males. Equally important, also within further models, is that higher education, income, and social class predict less anomie. Those who are working have slightly less anomie, while widowed persons have more anomie than those who are married. In addition, our important control variable, disinteredness in the survey, correlates with greater anomie.

Model 2 introduces country-level groupings for the post-communists and OECD countries, with developing countries as the reference category. Indeed, people from post-communist countries have anomie scores at .28 standard deviations higher than those from developing countries.

Model 3 adds the effects of important individual values and church membership. Herein, we find that church membership, behaving in ways pleasing to friends and parents (i.e. informal social control), and post-materialist values diminish anomie levels, while respondents who are nihilist have higher anomie values.

Model 4 introduces the individual-level variable of information multiplicity, or the variety of sources from which one gets regular information. Indeed each additional information source used in the past week reduces anomie. Importantly, the addition of this variable has negated the effects of both church membership and working status (this holds throughout further models), suggesting that people who do not attend church and do not work have fewer sources of information, and this accounted for their higher anomie levels.

Model 5 introduces all remaining country-level variables, to include gini coefficients, gdp per capita, gdp growth rates, and political, economic, and social informal control indicators. This model is the least parsimonious of those presented. It also possesses multi-collinearity problems because of the high correlation between government efficency, gdp per capita, and gdp growth.

Further modeling steps attempt to reduce the number of explanatory variables to the most relevant. Model 6 is thus a much reduced model in terms of parameters, but has more explanatory

relevance. Herein, we have removed marital status, because the only significant category is „widowed“ in comparison to married. This category effect, while expected, is not of major theoretical or practical relevance to us, and it does not seem to seriously impact the other indicators, so we have removed it. We have also removed church membership and working status, since their affects appear to be due to another variable (information multiplicity). In all of our testing, the effects of level 2 economic and social informality, as well as the gini-coefficient, on anomie were negligible, so we have removed these indicators. This left us with the closely correlated government efficiency, gdp per capita, and gdp growth variables. We have tested each of them individually with the reduced model 6, and the most effective indicator was government efficiency. In addition, we can theoretically assume in line with modernization literature that economic stock (gdp per capita) leads to political formalization, and this formalization can be more readily linked to anomie outcomes through its direct affect on structuring the normative environment of populations. Therefore, we have used government efficiency rather than gdp per capita or gdp growth. The resulting parsimonious model 6 provides us with the 'usual suspects' of female, low education, low income, and low social class as predicting greater anomie. In addition, the friends' expectations, post-materialist values, nihilism, and information predictors also remain stable compared to model 5. 'Disinterest' is not significant in this model. Also important here is that people living in societies more efficiently governed have much lower levels of anomie. Yet, after controlling for all of these, post-communists still have greater levels of anomie.

Model 6, while parsimonious, allows only the intercepts to vary based on various characteristics. It does not allow for varying slopes. With this in mind, there are two types of complexity helpful to introduce into Model 7 at this point. First, several coefficients may have different effects in different countries because of differing national contexts. After testing, we have allowed the coefficients of gender, income, education, and distinterest to vary randomly at the country level. In the interest of parsimony, we do not interpret these random effects because they are not the focus of our investigation, but we recognize their influence and therefore add them to the model as controls. Furthermore, we have reason to believe that the 'post-communist' effect is not merely additive. In other words, we posit there is an interaction effect, whereby particular post-communist syndromes make the anomie outcome more extreme. We have tested this by adding interactions between post-communist/OECD (with developing countries as the reference category) and social class, parents proud, nihilism, disinterest, and information. Indeed, because of these interactions, we are provided with a more complex, but fuller picture.

Our final Model 7[10] is represented by the following formula:

$$\begin{aligned}
\text{ZsqrtAnomie}_{ij} = {} & \beta_{0j} + \beta_1\text{Age}_{ij} + \beta_{2j}\text{Education}_{ij} + \beta_{3j}\text{Income}_{ij} + \beta_4\text{socialclass}_{ij} + \beta_5\text{PC}_{ij} + \beta_6\text{OECD}_j + \beta_7\text{Parents}_{ij} + \beta_8\text{Friends}_{ij} + \beta_9\text{ZPM}_{ij} + \beta_{10}\text{Nihilism}_{ij} + \\
& \beta_{11}\text{L2govefficiency}_j + \beta_{12j}\text{disinterest}_{ij} + \beta_{13j}\text{female}_{ij} + \beta_{14}\text{PC.socialclass}_{ij} + \beta_{15}\text{OECD.socialclass}_{ij} + \beta_{16}\text{PC.Parents}_{ij} + \beta_{17}\text{OECD.Parents}_{ij} + \\
& \beta_{18}\text{PC.Nihilism}_{ij} + \beta_{19}\text{OECD.Nihilism}_{ij} + \beta_{20}\text{PC.disinterest}_{ij} + \beta_{21}\text{OECD.disinterest}_{ij} + \beta_{22}\text{PC.female}_{ij} + \beta_{23}\text{OECD.female}_{ij} + \beta_{24}\text{Information}_{ij} + \\
& \beta_{25}\text{PC.Information}_{ij} + \beta_{26}\text{OECD.Information}_{ij} + e_{ij}
\end{aligned}$$

$$\beta_{0j} = \beta_0 + u_{0j}$$
$$\beta_{2j} = \beta_2 + u_{2j}$$
$$\beta_{3j} = \beta_3 + u_{3j}$$
$$\beta_{12j} = \beta_{12} + u_{12j}$$
$$\beta_{13j} = \beta_{13} + u_{13j}$$

Referring to Table 2, we provide an interpretation of these results, to begin with for people *in developing countries*. Age remains a minor predictor of anomie. Being female, however, exhibits a stronger effect (one that varies by country), resulting in an average of .09 standard deviations enhancement of anomie. Greater education (this effect also varies by country) and subjective social class each exhibit a moderate diminishment of anomie. In the meanwhile, the power of income is greater. Someone with the highest income level is likely to have on average .135 standard deviations less in anomie, although this effect may be somewhat higher or lower in different societies. In addition, as per the expectations of social control theory, orienting one's behavior toward one's friends seems to provide a normative grounding, resulting in a much lower degree of anomie. In contrast, the effect of being 'parent-centered' is insignificant. Being a post-materialist tends to matter as well, diminishing the level of anomie. The largest 'value' impact is provided by nihilism, whereby someone who never thinks about the meaning of life will have a level of anomie .168 standard deviations higher. Another powerful anomie indicator is the multiplicity of information sources (interaction). A person who accesses 7 different types of information resources each week has an anomie level .15 standard deviations lower. Furthermore, our control for survey dinterestedness results in higher levels of anomie, as expected. In addition, for persons in developing societies with higher government efficiency, there will be a strong reduction in anomie.

For those living in OECD countries, overall results are similar as in the developing world, with a few exceptions. After controlling for all other factors, OECD and developing nation citizens possess similar levels of anomie. However, OECD citizens are likely to experience *more* anomie if they strive to make their parents proud, whereas this factor was insignificant in developing countries. According to our data, the OECD is more friendship than family-oriented, so it is possible that a strong parent orientation in such societies leads to a clash in values with the prevailing system and therefore greater anomie. Furthermore, while nihilsm spurs anomie among people in developing and post-communist societies, it actually reduces anomie slightly among

10 The residuals of this model approximate a normal distribution.

people living in the OECD. Again, OECD societies are less traditional in this sense; data reveal that the OECD has the highest level of nihilism. Therefore, not thinking about the meaning of life is part of the belief system and therefore does not constitute anomie in the OECD.

For people in post-communist societies, even after controlling for other factors, levels of anomie are much higher. After taking other factors into account, living in a post-communist society increases individual anomie by a strong .21 standard deviations compared to living in a developing society. In addition, the negative effect of social class on anomie is *three times* steeper in post-socialist societies compared to developing and OECD countries. Yet even more striking is that the already strong impact of information multiplicity in reducing anomie is doubled for the post-communists, compared to others. Those who use the maximum number of information sources per week benefit from a large .364 standard deviation drop in anomie. Also the effect of survey distinterest is more than twice as strong in post-socialist societies: those who are not interested in the survey have anomie scores higher by .21 standard deviations. In addition, women in post-socialist societies are especially disadvantaged in anomie; compared to both developing and OECD societies, the negative effect of being female is twice as high for post-socialists.

Table 2. Results of Multi-level Linear Regression Modelling.

	Model 0 (Empty)		Model 1		Model 2		Model 3		Model 4	
	Estimate	S. E.	Estimate	S. E.	Estimate	S. E.	Estimate	S. E.	Estimate	S. E.
Fixed effects										
Intercept	-0.029	0.063	**-0.129**	0.053	**-0.189**	0.071	**-0.162**	0.056	0.106	0.055
Individual Level										
Age (centered at 42)			**0.0017**	0.0003	**0.0017**	0.0003	0.001	0.0003	0.001	0.0003
Female			**0.137**	0.008	**0.137**	0.008	**0.105**	0.007	**0.099**	0.007
Education (-3 to +4, centered at completion of basic technical/vocational high school)			**-0.044**	0.002	**-0.044**	0.002	**-0.025**	0.002	**-0.015**	0.002
Income (0 to 9)			**-0.018**	0.002	**-0.018**	0.002	**-0.015**	0.002	-0.01	0.002
Subjective Social Class. (0 to 4)			**-0.041**	0.005	**-0.041**	0.005	**-0.028**	0.004	**-0.022**	0.005
working			**-0.022**	0.008	**-0.022**	0.008	**-0.023**	0.008	-0.015	0.008
Marital Status. REF=Married or living together as such										
Divorced or Separated			-0.027	0.017	-0.027	0.017	-0.026	0.016	-0.017	0.016
Widowed			**0.154**	0.017	**0.153**	0.017	**0.094**	0.016	**0.102**	0.017
Single/Never Married			0.01	0.01	0.01	0.01	0.006	0.009	**0.021**	0.01
Church membership							**-0.013**	0.005	-0.007	0.005
Parents proud							**-0.015**	0.005	**-0.014**	0.005
Friends' expectations							**-0.031**	0.004	**-0.032**	0.005
Post-Materialist Values							**-0.029**	0.004	**-0.026**	0.004
Nihilism (never think about meaning of life)							**0.038**	0.004	**0.037**	0.005
Information Multiplicity (0 to 7)									**-0.032**	0.002
Disinterest in interview process (control; 0 'not very interested' to 2 'very interested')			**0.144**	0.006	**0.144**	0.006	**0.075**	0.006	**0.069**	0.006
Country Level										
Country Type. REF=Developing										
Post-Communist					**0.279**	0.112	0.163	0.086	**0.191**	0.082
OECD					-0.059	0.115	-0.092	0.086	-0.059	0.085
Government efficiency 2005										
Economic Informality (Percentage of Shadow Economy)										
Social Informality (Average value of making parents proud and living up to friends' expectations)										
Gini-coefficient average 2001-2005										
GDP growth average 2001-2005										
log GDP per capita 2001-2005										
PC*social class										
OECD*social class										
PC*parents										
OECD*parents										
PC*nihilism										
OECD*nihilism										
PC*disinterest										
OECD*disinterest										
PC*information										
OECD*information										
PC*female										
OECD*female										
Random effect variances										
Country Level intercept	0.186	0.038	0.107	0.024	0.09	0.02	0.05	0.011	0.045	0.01
Individual income by country (slope)										
Individual education by country (slope)										
Individual disinterest by country (slope)										
Female by country (slope)										
Total variance										
Country Level	0.186	0.038	0.107	0.024	0.09	0.02	0.05	0.011	0.045	0.01
Individual Level	0.788	0.004	0.648	0.004	0.648	0.004	0.491	0.003	0.471	0.003
Variance partition										
Country Level	19.1%		14.2%		12.2%		9.2%		8.7%	
Individual Level	80.9%		85.8%		87.8%		90.8%		91.3%	
-2 Log-likelihood (-2LL)	167951		115033		115025		90700		78061	
Deviance from Model M0			52918		52926		77251		89890	
Degrees of freedom	3		13		15		20		21	
N=	64488		47756		47756		42566		37364	

	Model 5		Model 6		Model 7	
	Estimate	S. E.	Estimate	S. E.	Estimate	S. E.
Fixed effects						
Intercept	-0.078	0.099	-0.102	0.052	-0.088	0.055
Individual Level						
Age (centered at 42)	**0.0011**	0.0003	**0.0013**	0.0002	**0.0014**	0.0002
Female	**0.102**	0.008	**0.109**	0.007	**0.091**	0.02
Education (-3 to +4, centered at completion of basic technical/vocational high school)	**-0.017**	0.002	**-0.017**	0.002	**-0.016**	0.004
Income (0 to 9)	**-0.013**	0.002	**-0.013**	0.002	**-0.015**	0.005
Subjective Social Class. (0 to 4)	**-0.023**	0.005	**-0.021**	0.005	**-0.016**	0.006
working	-0.011	0.009				
Marital Status. REF=Married or living together as such						
Divorced or Separated	-0.011	0.018				
Widowed	**0.105**	0.019				
Single/Never Married	**0.022**	0.011				
Church membership	-0.007	0.006				
Parents proud	-0.011	0.006	-0.011	0.006	-0.015	0.008
Friends' expectations	**-0.036**	0.005	**-0.036**	0.005	**-0.034**	0.005
Post-Materialist Values	**-0.029**	0.004	**-0.026**	0.004	**-0.023**	0.004
Nihilism (never think about meaning of life)	**0.039**	0.005	**0.044**	0.005	**0.056**	0.007
Information Multiplicity (0 to 7)	**-0.032**	0.003	**-0.033**	0.002	**-0.025**	0.003
Disinterest in interview process (control; 0 'not very interested' to 2 'very interested')	**0.071**	0.007	0.07	0.006	**0.047**	0.016
Country Level						
Country Type. REF=Developing						
Post-Communist	**0.27**	0.117	**0.207**	0.081	**0.209**	0.076
OECD	**0.251**	0.15	0.123	0.126	0.086	0.107
Government efficiency 2005	-0.206	0.134	**-0.125**	0.059	**-0.149**	0.044
Economic Informality (Percentage of Shadow Economy)	-0.003	0.003				
Social Informality (Average value of making parents proud and living up to friends' expectations)	0.049	0.056				
Gini-coefficient average 2001-2005	-0.001	0.005				
GDP growth average 2001-2005	0.003	0.032				
log GDP per capita 2001-2005	0.048	0.161				
PC*social class					**-0.032**	0.011
OECD*social class					0.008	0.012
PC*parents					-0.001	0.013
OECD*parents					**0.026**	0.013
PC*nihilism					0.016	0.011
OECD*nihilism					**-0.066**	0.011
PC*disinterest					**0.06**	0.025
OECD*disinterest					0.016	0.026
PC*information					**-0.027**	0.006
OECD*information					0.008	0.006
PC*female					**0.08**	0.0294
OECD*female					0.007	0.03
Random effect variances						
Country Level intercept	0.035	0.009	0.04	0.001	0.054	0.014
Individual income by country (slope)					0.0005	0.0001
Individual education by country (slope)					0.0008	0.0002
Individual disinterest by country (slope)					0.004	0.0013
Female by country (slope)					0.0061	0.0019
Total variance						
Country Level	0.035	0.009	0.04	0.001	0.0654	
Individual Level	0.489	0.004	0.481	0.004	0.47	0.003
Variance partition						
Country Level	6.7%		7.7%		12.2%	
Individual Level	93.3%		92.3%		87.8%	
-2 Log-likelihood (-2LL)	65164		78814		78113	
Deviance from Model M0	102787		89137		89838	
Degrees of freedom	27		17		33	
N=	30637		37336		37336	

Conclusions

We have demonstrated the importance of two different forms of formality in relation to modernization. First, consistent with H1, formality in the medium of normative control in the economic, political, and social spheres correlates with economic development, measured by GDP per capita. In addition, as suggested by H2a, formality as the heightened density of norms also correlates with a high degree of economic development, since anomie is lower in rich societies. However, this relationship is reversed if we consider the modernization pace. In other words, when looking at GDP growth, modernization speed tends to spur anomie (H2b).

According to H3, individuals should experience more anomie if they live in a society that is regulated by a less formal control medium, even after accounting for other relevant factors. Indeed, our multi-level analysis findings demonstrate the strong impact of inefficient governance (political informality) on anomie. While country-level social and economic informality were insignificant in explaining individual anomie, we in fact found that informal social control is an important individual-level predictor. Specifically, people who try to live their lives according to their friends' expectations exhibit lower levels of anomie. Our modeling revealed a number of other key factors relevant to the prediction of higher levels of anomie: being female, of lower education, lower subjective social class, and of lower income. In addition, a very strong post-socialist effect was discovered. Post-socialist women and lower classes are especially disadvantaged, and information deprivation in post-socialist societies is an accurate predictor of higher levels of anomie.

Our research suggests that economic transformation is linked to a shift in forms of social control. Initially, high economic growth upsets the normative order of societies based on informal interpersonal normative regulation. However, with rising economic stock (GDP per capita) social institutions may develop that can counter-balance this normative disruption by a new form of order based primarily on political control. Government efficiency can be a powerful source of normative regulation in advanced societies, and inefficiency and political corruption in particular tend to spur anomie. The likely mechanism of this relationship is that political informality, also known as nepotism and cronyism, leads to instable and irrationally governed states. This instability may lead to a lack of shared social norms which could be communicated by a coherent political leadership.

In addition, this paper demonstrates the efficiency of using a „don't know anomie“ scale as a possible tool in exploring anomie. Even when controlling for education and respondent disinterest, this tool remains correlated in theoretically relevant ways to a variety of social phenomena, from deviance justifiability, to life satisfaction, to agency, to trust. A fruitful direction for future research would be exploring the relationship between the DKA syndrome and societal rates of suicide and

crime, in addition to individual deviance.

This research raises several questions. Especially prominent is the large post-communist effect, even after controlling for other relevant factors. Some of these might perhaps be explained by further quantified indicators of post-socialist instututional breakdown, only partially tapped by the notion of 'government efficiency.' Furthermore, it is not readily apparent why females would have higher levels of anomie, even after controlling for family status (to include number of children), income, working status, education, and social class.

The present contribution takes a needed step in formulating the complex relationship between modernization and the formalization of norms, a particularly important area of research for rapidly changing societies.

Bibliography

Agnew, R. 1992. "Foundation for a General Strain Theory of Crime and Delinquency". *Criminology*. 30 (1), pp. 47-87.

Arts, W., Hermkens, P. & Van Wijk, P. 1995. "Anomie, Distributive Injustice and Dissatisfaction with Material Well-Being in Eastern Europe: A Comparative Study". *International Journal of Comparative Sociology*. 36 (1-2), pp.1-16.

Atteslander, P., Gransow, B. & Western, J. (eds). 1999. *Comparative Anomie Research: Hidden Barriers - Hidden Potential for Social Development*. Ashgate, Singapore, Sidney, Aldershot, UK, Brookfield, USA.

Beck, Ulrich, and Elisabeth Beck-Gernsheim. 2002. *Individualization: Institutionalized Individualism and its Social and Political Consequences*. London: Sage.

Bernburg J.G. 2002. "Anomie, social change and crime". *The British Journal of Criminology*. 42 (4), pp. 729-742.

Besnard, Ph. 1988. "The True Nature of Anomie". *Sociological Theory*. 6 (1), Spring, pp. 91-95.

Bjarnason, T. 2009. "Anomie among European Adolescents: Conceptual and Empirical Clarification of a Multilevel Sociological Concept". *Sociological Forum*. 24 (1), March, pp.135-161.

Bjerregaard, B. & Cochran, J.K. 2008. "Want Amid Plenty: Developing and Testing a Cross-National Measure of Anomie". *International Journal of Conflict and Violence*. 2 (2), pp. 182 – 193.

Burkatzki, E. 2008. "Is the Market Eroding Moral Norms? A Micro-Analytical Validation of Some Ideas of Anomie Theory" *International Journal of Conflict and Violence*. 2 (2), pp. 268 – 287.

Durkheim, E. 1970. *Suicide*. New York, The Free Press.

Durkheim, E. 1984. *The Division of Labour in Society*. Basingstoke, Macmillan.

Elias, Norbert. 1979 [1939]. *The Civilizing Process: The History of Manners*. Basel Blackwell: Blackwell Publishing.

Gelfand, Michele J. et al. 2011. "Differences Between Tight and Loose Cultures: A 33-Nation Study." *Science*, 332: 1100-4.

Genov, N. 1998. “Transformation and Anomie: Problems of Quality of Life in Bulgaria”. *Social Indicators Research*. 43, pp. 197–209.

Graeff, P. and Mehlkop G. 2007. “When Anomie Becomes a Reason for Suicide: A New Macro-sociological Approach in the Durkheimian Tradition”. *European Sociological Review*. 23 (4), pp. 521–535.

Golovakha, E.I., Panina N.V. 2008. “Postsovetskaya Anomia v Rossii i Ukraine: Sovremennoe Sostoyanie i Puti Preodolenia“ (Post-soviet Anomie in Russia and Ukraine: Current State and Path to Overcome). *Obshestvennye Nauki i Sovremennost’ (Social Sciences and Contemporary Society)*. 6, pp.5-10.

Hilbert R.A. 1989. “Durkheim and Merton on Anomie: An Unexplored Contrast and Its Derivatives”. *Social Problems.* 36 (3), June, pp. 242-250.

Hirschi, Travis (2002). *Causes of Delinquency*. London: Transaction Publishers.

Huschka, D. & Mau, S. 2006. “Social Anomie and Racial Segregation in South Africa”. *Social Indicators Research*. Vol 76, pp.467–498

Goffman, E. (1963). *Behavior in public places: Notes on the social organization of gathering*. New York: The Free Press.

Goffman, E. (1983). „The interaction order.“ *American Sociological Review*, 48: 1-17.

Inglehart, Ronald, and Wayne E. Baker (2000). "Modernization, Cultural Change, and the Persistence of Traditional Values." *American Sociological Review* 65:19-51.

Inglehart, Ronald, and Christian Welzel. 2005. *Modernization, Cultural Change and Democracy*. Cambridge: Cambridge University Press.

Konty, M. 2005. "Microanomie: the Cognitive Foundations of the Relationship Between Anomie and Deviance.“ *Criminology*. 43 (1), February, pp. 107-131.

Kosals Leonid (2011). “Social Anomie in Transformation Countries: Comparative View”. A.Kalyta and L.Tepperman (eds.). *Reading Sociology: Canadian Perspectives.* Don Mills: Oxford University Press.

Meulemann, Heiner (2004). “Enforced Secularization - Spontaneous Revival? Religious Belief, Unbelief, Uncertainty and Indifference in East and West European Countries 1991-1998.“ *European Sociological Review.* 20 (1), February, pp. 47-61.

Merton, R.K. (1938). “Social structure and anomie”. *American Sociological Review*, 3, pp. 672-682.

Merton, R.K. (1964). “Anomie, Anomia and Social Interaction”. in Clinard. M.B. (Editor). *Anomie and Deviant Behavior*. New York. Free Press of Glencoe, pp. 213-243.

Messner, S.F., Thome, H. & Rosenfeld, R. 2008. “Institutions, Anomie, and Violent Crime: Clarifying and Elaborating Institutional-Anomie Theory”. I*nternational Journal of Conflict and Violence*. Vol 2, No 2, pp. 163 – 181.

Messner, S.F. & Rosenfeld, R. 2006. „The Present and Future of Institutional Anomie Theory.“ In: *Taking Stock: The Status of Criminological Theory*, vol. 15 of Advances in Criminological Theory, ed. Francis T. Cullen, John Paul Wright, and Kristie R. Blevins. New Brunswick: Transaction, pp. 127–148.

Morand, David A. 1995. “The Role of Behavioral Formality and Informality in the Enactment of Bureaucratic versus Organic Organizations.” *The Academy of Management Review* 20 (4), Oct. 1995, pp. 831-872.

Morrison, W. 2001. “Anomie”. In: McLaughlin, Eugene (Editor). *Sage Dictionary of Criminology*. London, GBR: Sage Publications, Incorporated, pp.10-12.

Orru, M. 1983. “The Ethics of Anomie: Jean Marie Guyau and Émile Durkheim”. *The British Journal of Sociology.* 34 (4), December, pp. 499-518.

Passas, N. 2000. “Global Anomie, Dysnomie, and Economic Crime: Hidden Consequences of Neoliberalism and Globalization in Russia and Around the World.“ *Social Justice*. 27 (2), pp.17-44.

Philipov D., Speder Z. & Billari F.C. 2006. “Soon, later, or ever? The impact of Anomie and Social Capital on Fertility Intentions in Bulgaria (2002) and Hungary (2001)”. *Population Studies*. 60 (3), pp. 289-308.

Saini, A. & Krush, M. 2008. “Anomie and the Marketing Function: The Role of Control Mechanisms”. *Journal of Business Ethics*. 83, pp.845–862.

Schneider, Friedrich, Buehn, Andreas and Montegnegro, Claudio E. (2010). *Shadow Economies all over the World: New Estimates for 162 Countries from 1999 to 2007*. World Bank.

Swader, Christopher S. (2009). “Adaptation as ‘Selling out’? Capitalism and the Commodification of Values in Post-Communist Russia and Eastern Germany.” *Journal of International Relations and Development*, 12, 387-395.

Toennies, Ferdinand (1988). *Community and Society* (Gemeinschaft und Gesellschaft). New Brunswick, New Jersey: Transaction Publishers.

Tsahuridu E.E. 2006. “Anomie and Ethics at Work”. *Journal of Business Ethics*, Vol 69, No. 2, December, pp. 163-174.

Weber, Max (1947). *The theory of social and economic organization* (A. M. Henderson & T. Parsons, Trans.). New York: Oxford University Press.

Weber, Max (1978). *Economy and Society*. Berkely: University of California Press.

Weber, Max (2003). *The Protestant Ethic and the Spirit of Capitalism*. Mineola, New York: Dover Publications.

World Values Survey Association. 2009. “World Values Survey 1981-2008 Official Aggregate v.20090914.” Aggregate File Producer: ASEP/JDS, Madrid. www.worldvaluessurvey.org.

Yoshida A. 2010. *Cultural Lag, Anomie, and Single Women in Japan*. PhD Thesis. Norman, Oklahoma, University of Oklahoma, Graduate College, p.229.

Zhao R. & Cao L. (2010). “Social Change and Anomie: A Cross-National Study”. *Social Forces*. Vol 88, March, pp.1209-1230

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