Understanding the Individualism-Collectivism Cleavage and its Effects: Lessons from Cultural Psychology.

Yuriy Gorodnichenko
University of California, Berkeley and NBER

Gerard Roland
University of California, Berkeley and CEPR

Abstract: In this paper, we survey our recent work showing theoretically and empirically a link between individualist culture on one hand and long run growth and innovation. The individualism-collectivism cultural dimension is the only one that has a robust effect on measures of long run growth. We survey the cross-cultural psychology culture that finds that the individualism-collectivism cleavage is also the most important one in that literature. We discuss some of the implications of the lessons from the psychology literature on the economic and institutional effects of the individualism-collectivism cleavage.

1. Introduction

The central role of culture on economic development has been recognized at least since Max Weber who, in his classical work "The Protestant Ethic and the Spirit of Capitalism," argued that the protestant ethic of Calvinism was a very powerful force behind the development of capitalism in its early phases. Recently economic historians such as Landes (1998) and Mokyr (2010) have emphasized the crucial role of culture in explaining the industrial revolution.

Culture is now commonly defined as *the set of values and beliefs people have about how the world (both nature and society) works as well as the norms of behavior derived from that set of values*. Given that definition, culture is considered to affect not only social norms but also economic behavior such as the propensity to save or to innovate, fertility choices, labor supply decisions, investment in education, charitable contributions or the willingness to contribute to public goods. Culture is directly related to institutions in the sense that culture, like formal political or legal institutions as defined by North (1990), imposes constraints on individual behavior.

Much recent work on culture has emphasized the contrast between generalized and limited morality (see e.g. Tabellini, 2008). Generalized morality means that individuals support a set of social norms that are valid for all citizens in a given society, without excluding any particular group of people. Generalized morality is based implicitly on the notion that all humans have equal rights and duties and share a set of universal values. Limited morality in contrast views given norms of morality valid only within a given group such as the extended family, the clan or the tribe. When interacting with people outside one's extended family, these social norms do not apply and opportunistic and amoral behavior is considered morally acceptable and justified. The notion of limited morality goes back to the notion of "amoral familism" coined by Banfield (1958) in his study of life in a village in Southern Italy where he was struck that notions of good and bad applied only within the family but not in relation to those outside the family. The empirical measure of generalized morality used in the literature (see in particular Tabellini, 2008,

Glaeser et al. 2000; Guiso et al. 2006, 2008 and 2009; Grosjean, 2009) is the question on generalized trust from the World Values Survey and other similar surveys where people are asked "Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people?" High levels of trust are also associated with social capital and an active civil society characterized by active participation of citizens in all sorts of associations (Putnam, 1993; Knack and Keefer, 1997; Uslaner, 2005).

In recent work (Gorodnichenko and Roland, 2010 and 2011) we found that the individualism-collectivism cultural dimension has an important and robust causal effect on innovation and long run growth. We also found that other cultural dimensions not correlated with individualism and collectivism have no robust effect on long run growth. The question is thus how important the dimension of individualism and collectivism may be as a cultural dimension. There is a large literature in cultural psychology addressing that question and we will try to connect this literature to our research and more broadly to economics. Interestingly, the individualism-collectivism cleavage is considered the single most fruitful dimension in cross-cultural psychology (Heine, 2008, 2010, Oyserman et al. 2002).

In this paper, we present our findings on individualism, culture, innovation and growth. We survey some of the literature in cultural psychology showing the importance of the individualism-collectivism cultural dimension and discuss some of its possible economic implications.

2. Individualism and Collectivism.

How does one define individualism and collectivism? Broadly defined, individualism emphasizes personal freedom and achievement. Individualist culture therefore awards social status to personal accomplishments such as important discoveries, innovations, great artistic or humanitarian achievements and all actions that make an individual stand out. Collectivism, in contrast emphasizes embeddedness of individuals in a larger group. It encourages conformity and discourages individuals from dissenting and standing out. Platteau (2000) for example illustrates collective culture in the context of African

development. Specifically, he documents that productive individuals are seen with suspicion and are coaxed into sharing their surplus with the community. Collective punishments exist to penalize the rich. They take the form of social ostracism, loss of status, or even violence. Communities have for example frequently used accusations of witchcraft to punish greed and acquisitiveness as well as aspirations to move to other places. Behind these punishments is the fear that the community's cohesiveness will be undermined and that an individual who proves more successful will leave the village or will not redistribute any surplus food or production. Baland et al. (2007), Comola and Fafchamps (2010) and Jakiela and Ozier (2011) show how, in African villages, people who have accumulated some savings want to keep this information hidden from others and are even willing to pay to keep their savings hidden from others in their community.

The best known international measure of individualism and collectivism is that developed by Hofstede (2001) who used surveys of IBM employees in about 30 countries. The idea was to survey people with equivalent jobs in different countries in the same company so as to measure cultural differences. To avoid cultural biases in the way questions are framed, the translation of the survey into local languages was done by a team of English and local language speakers. With new waves of surveys and replication studies, Hofstede's measure of individualism has been expanded to almost 80 countries.[1] Hofstede's index, as well as the measure of individualism from other studies, uses a broad array of survey questions to establish cultural values. Factor analysis is used to summarize data and construct indices. In Hofstede's analysis, the index of individualism is the first factor in questions about the value of personal time, freedom, interesting and fulfilling work, etc. This component loads positively on valuing individual freedom, opportunity, achievement, advancement, recognition and loads negatively on valuing harmony, cooperation, relations with superiors.

In summary, the Hofstede individualism score measures the extent to which it is believed that individuals are supposed to take care of themselves as opposed to being strongly integrated and loyal to a

[1] The most current version of the data is available at http://www.geert-hofstede.com/.

cohesive group. Individuals in countries with a high level of the index value personal freedom and status, while individuals in countries with a low level of the index value harmony and conformity.

Although Hofstede's data were initially collected mostly with the purpose of understanding differences in IBM's corporate culture, the main advantage of this measure of individualism is that it has been validated in a number of studies.[2] For example, across various studies and measures of individualism (see Hofstede (2001) for a review) the United Kingdom, the USA and Netherlands are consistently among the most individualist countries, while Pakistan, Nigeria and Peru are among the most collectivist. Figure 1 represents a world map of Hofstede's individualism scores.

INSERT FIGURE 1

A closely related data base is the one established by cross-cultural psychologist Shalom Schwartz, built with the purpose of establishing a core set of values that have a common cross-cultural meaning. Schwartz (1994, 2006) gathered survey responses from K-12 schoolteachers and college students for a total of 195 samples drawn from 78 nations and 70 cultural groups between 1998 and 2000. Each sample generally consists of 180-280 respondents for a total of over 75,000 responses. Schwartz's value survey consists of 56-57 value items that ask respondents to indicate the importance of each as "a guiding principle in *my* life." These items have an equivalent meaning across cultures and are then used to create cultural mappings. In particular, similarly to the individualist-collectivist dimension of cultures in Hofstede (2001), Schwartz differentiates cultures along the autonomy and embeddedness dimensions. In autonomous cultures, people are viewed as autonomous, bounded entities. They are encouraged to cultivate and express their own preferences, feelings, ideas, and abilities, and to find meaning in their own uniqueness by pursuing their own ideas and intellectual directions independently (intellectual autonomy) and by pursuing positive experiences for themselves (affective autonomy). In contrast, meaning in life for people in embedded cultures comes largely through social relationships, through identifying with the

[2] See for example Hoppe's (1990) study among members of parliaments, labor and employer leaders, academics and artists in 18 countries, Shane's (1995) study across 28 countries for international companies other than IBM, Merrit's (2000) study on commercial airline pilots in 19 countries, de Mooij's (2003) survey among consumers in 15 European countries and van Nimwegen's (2002) research among employees of ABN-AMRO bank in 19 countries.

group, participating in its shared way of life, and striving toward its shared goals. Embedded cultures emphasize maintaining the status quo and restraining actions that might disrupt in-group solidarity or the traditional order. Countries that score high on embeddedness also score low on intellectual and affective autonomy. Although measures of individualism in Hofstede and Schwartz are based on different sources and indentifying procedures, the correlation between Hofstede's individualism score and Schwartz's embeddedness and autonomy scores is fairly high, ranging between 0.55 and 0.65. The key advantage of using Hofstede's measure relative to Schwartz's measures is that Hofstede's measure of individualism is one-dimensional while Schwartz uses three (correlated) variables.

3. Economic and institutional effects of individualism and collectivism.

Individualist and collectivist culture are likely to have various economic effects which have only started to be explored. Here we report on some of our work examining the economic and institutional effects of individualism and collectivism.

Because individualist culture gives social status rewards to people who stand out, it may give a special, culturally motivated, incentive for innovation that is separate from the standard monetary incentive. On the other hand, individualism can make collective action more difficult because individuals pursue their own interest without internalizing collective interests. Collectivism, in contrast, makes collective action easier because individuals internalize group interests to a greater degree. However, it also encourages conformity and discourages individuals from standing out. This framework implies that individualism should encourage innovation more, but collectivism should have an advantage in coordinating production processes and in various forms of collective action.

We put these ingredients in an endogenous growth model. The model has two sectors. The final goods sector is competitive and produces final goods using labor and intermediate inputs. Collectivist culture is assumed to give a competitive edge in the production of final goods because collectivism makes

coordinated actions easier. Production of the final goods is also greater when the quality of intermediate inputs is higher. The intermediate goods sector is populated by entrepreneurs who produce differentiated, imperfectly substitutable inputs for the production of final goods. Entrepreneurs derive utility not only from consumption but also from social prestige associated with producing a higher than average quality of intermediate products. This social prestige is stronger in individualist cultures than in collectivist cultures. The quality of intermediate inputs is determined by the effort put into research, which in turn is a function of the monetary and social status rewards to innovation.

In this simple theoretical setting, we find ceteris paribus that while collectivism's increased coordination capacities leads to higher efficiency in the economy, individualism results in higher innovation because of the social status rewards to innovation. As a result, the higher innovation rate eventually leads to higher levels of productivity and output in the long run compared to a collectivist culture. In other words, while the advantages of collectivism affect static efficiency in the economy, the advantages of individualist culture affect dynamic efficiency and thus long run growth. Note that in a Malthusian economy where all resources are devoted to survival consumption, the collectivist economy will exhibit a higher level of output per capita.

The model also yields an interesting relationship between culture and institutions. Under bad institutions, a predatory government can seize the monetary returns from innovation. However, social status and prestige cannot be expropriated. Therefore, even in societies where institutions are relatively predatory, there will be more innovation in an individualist culture because of the social status reward to innovation.

Using Hofstede's measure of individualism, we regress the log of GDP per worker on individualism and find a strong and significant positive effect of individualism. We report in Gorodnichenko and Roland (2010) that a one standard deviation increase in individualism (say from the score of Venezuela to Greece, or from that of Brazil to Luxemburg) leads to a 60 to 87 percent increase in

the level of income, which is a quantitatively large effect. We also observe strong, positive correlations between individualism and measures of innovation. The results are similar when we use Schwartz's measures of individualism.

These are not simply correlations. In Gorodnichenko and Roland (2010, 2011), we provide evidence of a causal effect of individualism on innovation and measures of long run growth. We use as instrumental variable for culture the Euclidian distance between the frequency of blood types in a given country and the frequency of blood types in the USA, which is the most individualist country in our sample. The genetic data originate from Cavalli-Sforza et al. (1994), providing measures of genetic markers for roughly 2,000 groups of population across the globe. These data contain allele frequencies (alleles are variants taken by a gene) for various ethnic groups. We aggregate these data to country level using ethnic shares of population from Fearon (2003). We use these genetic data as an indirect measure of cultural transmission. Parents transmit their culture to their children but also transmit their genes. We do not have a direct measure of the former but we do have measures of the latter. Our blood distance measure should thus be seen as a proxy measure of cultural transmission.

Why can blood distance be a good instrumental variable? As we discuss in Gorodnichenko and Roland (2010), blood types are a neutral genetic marker and thus, it is hard to argue that differences in blood types can explain why some countries are richer than others. Neutral genetic markers are by definition not affecting general fitness and thus should satisfy the exclusion restriction as they have no direct effect on economic productivity. While genes might not in general satisfy the exclusion restriction, blood types, as neutral genetic markers, will. Note also that blood types are not known to be correlated with alleles that affect ability to work, think, etc. If blood types were able to affect fitness, there would be what geneticists call "linkage disequilibrium". The choice of blood type distance as an instrument should thus plausibly satisfy the exclusion restriction. If our genetic distance measure correlates well with our individualism score, then we will have a useful instrument. This is indeed the case and there is a strong negative correlation between blood distance on one hand and the individualism score of Hofstede.

We thus perform instrumental variable estimation and find results similar, if not stronger, to estimates obtained in least squares regressions and they clearly suggest a causal effect of individualism on growth. However, it might still be the case that blood distance affects long run growth via other channels than individualism and collectivism. To address these concerns, we control for a variety of additional factors, use a series of sub-sample analyses, and employ alternative instrumental variables. First, we rule out colonization effects by showing that the effect of individualism on long run growth still works when we exclude countries in the Americas and Oceania where there was important settler colonization after 1500. The effect of individualism holds at the level of individual continents and even only for European and/or developed countries which are members of the Organization for Economic Cooperation and Development (OECD). Second, other possible channels might be institutions, human capital, other measures of individualism and geographical distance. Indeed one can argue that these variables may be correlated with our measure of genetic distance. Even if we control for those variables, we find that individualism still has an important effect on output per worker and innovation. Likewise, our results do not change in any way when we control for measures of ethno-linguistic fractionalization, legal origins, geographical controls such as distance from the equator or being landlocked. More generally, our results are robust to using other measures of genetic distance, other distance metrics, blood distance to other countries, blood frequencies as separate instruments and other instrumental variables such as linguistic variables (e.g., "pronoun drop dummy" which is based on evidence (Kashima and Kashima, (12)) that cultures with languages prohibiting pronoun drops are more individualist).

Still, one may conceive that it is some other cultural dimension correlated with individualism that really affects innovation and output per worker. We find that generalized trust, a measure often used in previous research on culture, has no significant effect on long run growth. Furthermore, in Gorodnichenko and Roland (2011) we look at a broad spectrum of other available measures of culture and conclude that there is no significant or robust effect on growth from cultural dimensions that are independent from the individualism-collectivism cleavage.

Finally, we use recent advances in cross-cultural psychology, which provides some direct evidence of an effect of genes on culture, to verify the causal effect of individualism on long run growth. Three separate research strands can be brought together here. First of all, it has been found that collectivism is stronger in countries where a higher percentage of people have a short (S) allele in the polymorphism 5-HTTLPR of the serotonin transporter gene SLC6A4, putting them at greater risk for depression when exposed to life stressors. Second, collectivism is also stronger in countries with a higher frequency of the G allele in polymorphism A118G in the μ-opoid receptor gene, leading to higher stress in case of social rejection. Third, collectivism is also stronger in countries with a historically higher pathogen prevalence, i.e. in countries that were historically more prone to a number of contagious diseases. Studies establishing these links emphasize that collectivism provides strong psychological support networks to deal with depression and stronger protection from social rejection. Similarly, more collectivist values emphasizing tradition and putting stronger limits on individual behavior, and showing less openness towards foreigners provide protection against disease spread. Using these three variables in turn as instruments, we find robust and significant effects of individualism on log output per worker. It might be less clear a priori whether these variables satisfy the exclusion restriction. However, when we use each of these instrumental variables jointly with our other instrumental variable of blood distance, the overidentifying restriction tests cannot reject the exclusion restriction and thus, at least on statistical grounds, we cannot reject the validity of these additional instrumental variables.

To summarize, our research has found a strong and robust causal effect of individualism on innovation and long run growth. Other cultural variables do not appear to play a significant role. Thus, culture is important in understanding long run growth but the difference between individualism and collectivism appears to be the most important dimension that is relevant to understand differences in level of development. The rich literature in cultural psychology may help us understand better the content of the individualism-collectivism cleavage.

4. Lessons from cultural psychology

In cultural psychology, the differences between individualism and collectivism have deep roots that affect different forms of behavior: they relate to different visions of self, differences in cognitive behavior, behavioral and motivational differences as well as relational differences. A large literature covers these issues.

Different visions of self.

The perception of Self is fundamental to human behavior. It is rooted in interactions with others and in the seizing of meanings from interacting with one's social environment. According to Markus and Kitayama (1991), the roots of the individualism-collectivism cultural cleavage can be found in fundamentally different perceptions of Self. They distinguish between the *independent* and the *interdependent* self, where the former is associated to individualism and the latter to collectivism.

The independent self derives its identity only from the inner attributes of the individual. These attributes are considered to reflect the essence of the individual, to be stable across time and context and the combination of these attributes is seen as unique to the individual. These individual inner attributes are significant for defining, regulating and thus predicting the behavior of an individual. The interdependent self, in contrast derives its identity essentially from relations with others. The Self is not a separate identity but is embedded in a larger social group and can be understood only in relation to that larger group. From the point of view of the interdependent self, individual behavior is derived from one's role in different social contexts and from the perception of others' reaction to one's behavior as well as from the perceived effect of one's own actions on others.

These different self-perceptions are not merely abstract conceptual categories. They have been documented extensively in cross-cultural psychological research. For example, in surveys, individuals from individualist countries (the US, UK, Australia, Canada, Sweden, etc.) describe themselves through

statements about their inner psychological characteristics, personality traits and abilities. In contrast individuals from collectivist cultures (Africans, Malaysians, East Asians, native Americans, etc.) describe themselves through their relational roles in society. For example, a study by Ma and Schoenemann (1997) contrasting American college students with various surveys among Masai and Samburu tribes in Kenya found that 48% of American self-descriptions were statements about psychological characteristics against only 2% for Kenyans. In contrast, 60% of Kenyan self-descriptions contained statements about roles and memberships, against only 7% for Americans.

These differences in self-perception have many implications: they relate to how people learn about themselves, how important they consider self-consistency, differences in self-serving bias and the need to view oneself in a positive light, different control strategies and differences in emotional responses.

A first difference relates to self-knowledge. The independent self seeks to know him/herself through inner search of the introspective type. In contrast, the interdependent self seeks to know him/herself through the evaluation of others. In collectivist cultures, people are constantly aware of how others are viewing them which is not the case in an individualist culture. This is called "objective self-awareness". Interesting tests in relation to this were conducted by Heine et al. (2008). Students in Japanese universities and in North America (University of Pennsylvania and University of British Columbia) were presented with tests in a normal classroom and in a classroom with a mirror. The presence of a mirror had no effect on the behavior of Japanese students: propensity to be self-critical or propensity to cheat on a tasks they were given (typing in as many words on emotions as possible in 2 minutes with a timer but no supervision) . In contrast, students from Northern America were more self-critical in front of the mirror and they were also less likely to cheat. These results are consistent with the view that Japanese are constantly in a state of objective self-awareness. The presence of a stimulus to enhance objective self-awareness thus has no effect on behavior. In contrast, the stimulus provided by the mirror had an effect on Northern American students who were hypothesized not to be in a constant a state of objective self-awareness.

Different concepts of the self lead to differences in the degree of self-consistency. The independent self puts great emphasis on self-consistency and considers the latter important for self-esteem, even if it comes at the cost of rigidity. Indeed, absence of self-consistency would signal a flawed self which would be hurting self-esteem. In contrast, the interdependent self emphasizes adjustment to contexts and flexibility at the cost of self-consistency. It is this adaptability that is crucial for self-esteem, in line with the concept of interdependent self. Studies have shown that Japanese self-descriptions of self depend on who is present in the room but American self-descriptions do not (Kanawaga, Cross and Markus, 2001). For example, Japanese students tend to be more self-critical when a professor is present. Koreans change their self-description depending on a situation they are presented with (being with parents, romantic partner, professor, friends, etc.) but not Americans (Suh, 2002). As a consequence of these differences, East Asians are more ready to endorse contradictory views of their personality (for example introverted and extraverted at the same time) (Choi and Choi, 2002) as well as more contradictory beliefs about reality (naïve dialecticism, see Peng and Nisbett, 1999).

People from individualist cultures also have a higher need for "self-enhancement" and have a stronger self-serving bias than people from collectivist cultures. The need for self-enhancement means that one is motivated to see oneself in a more positive light. Indeed, discovering bad traits in oneself is more damaging for the self-esteem of the independent self because these traits will be seen as inherent to the personality. In contrast, the need for self-enhancement is less strong for the interdependent self who views him/herself as much more malleable. Studies have shown that the more collectivist Mexicans, native Americans, Chileans and Fijians have less positive self-views than Westerners (see the studies cited in Heine, 2010). In a similar spirit, East Asians have much less of a self-serving bias than Westerners (Mezulis et al. 2004).

Another implication of differences in the concept of self is related to what is called primary and secondary control. Primary control relates to actions to change the world whereas secondary control relates to actions to adjust oneself to the surrounding world. In the individualist culture, the independent

self is stable and the world is malleable. Individuals will thus engage in primary control strategies to achieve their goals and wishes. In contrast, in the collectivist culture, the interdependent self is malleable whereas the world in stable. Individuals will thus tend to engage in secondary control strategies by controlling the psychological impact of reality on them instead of attempting to change reality. Studies have shown that Americans tend to report more primary control experiences than the Japanese but feel less powerful and proud about their adjusting experiences than the latter (Morling et al. 2002).

Emotional responses differ also in line with differences in the concept of the self. The interdependent self is concerned more with interpersonal harmony whereas the independent self is concerned with how events affect the individual and helps him or her stand out. For example, among Japanese more positive feelings are reported that are associated to interpersonally-engaged emotions (respect, friendly exchanges) whereas Americans report more positive feelings associated to interpersonally disengaged emotions (pride, feeling superior) (Kitayama et al., 2000). These differences in emotional responses are also reflected in a higher correlation between life-satisfaction scores and respect for social norms in more collectivist cultures (Suh et al. 1998).

Analytic and holistic thinking.

Different visions of the Self are associated to different cognitive modes. Individualist culture is associated to analytic thinking whereas collectivist thinking is associated to forms of holistic thinking. The independent self naturally tends to focus on objects perceived as existing independently from their context and understood in terms of their "essence" or their underlying attributes. These attributes are then used for classification. Abstract rules are derived for predicting the behavior of objects based on their internal attributes. The perception of the environment follows thus essentially the same logic as the perception of self. This kind of analytical thinking goes back at least to Plato. The interdependent self in contrast naturally looks at the relations between objects, the environment and the context and focuses less on objects themselves.

There is a large amount of evidence from psychology, including from neuro-psychology showing that, in contrast to East Asians, Americans and Westerners pay less attention to the background than to objects. A well-known example in psychology is the "rod and frame" test. An individual is put in a dark room with a glowing rod and a colored frame. The individual is asked to place the rod upright. At the same time, the position of the frame may be changed by the experimenters. Westerners will tend to place the rod upright independently of the position or movement of the frame whereas East Asians will tend to make sure that the rod is upright in relation to the frame (see e.g. Ji, Peng and Nisbett, 2000; Kitayama et al. 2003). A similar test is the "embedded figure" test where people are asked to find an object in a picture. The figure test is designed to measure an individual's ability to separate an object from its background. Malays and Russians were seen to perform less well on that test than Americans and Germans (see e.g. Kühnen et al. 2001). In another test, people are shown objects with different backgrounds. The background-switching makes it more difficult for East Asians to recall the particular object (Masuda and Nisbett, 2001). Many other similar tests showed that people coming from more collectivist cultures pay more attention to fields than to objects. This difference in the attention to field can also be found in forms of artistic expression. Western portraits tend to be larger and occupy a larger proportion of the space than Asian portraits (Masuda et al. 2008).

Analytical and holistic forms of thinking lead to different styles of reasoning. Analytical thinking groups objects together according to a specific rule whereas holistic thinking leads to classifications based on a contextual or a functional relationship. For example, analytical thinking would lead to group together a notebook and a magazine whereas holistic thinking would lead to group together a notebook and a pencil (see Ji et al. 2004). The notebook and the magazine are both made of paper and are objects with multiple pages whereas the notebook and the pencil are functionally related as a pencil will be used to write in the notebook.

Other cognitive differences can be found among different cultures. One difference is related to language learning among young children. Among English-learners, the majority of new words learned by

young children are nouns. Since this phenomenon was widespread among English-speaking children, it was even thought that this was a universal phenomenon. A possible justification is that nouns are concrete and more easily learned. However, studies found that this "noun bias" is not present among Chinese and Koreans. Chinese toddlers tend even to learn more verbs than nouns (Tardif, 1996). Another phenomenon that was thought to be universal is the fundamental attribution error: the tendency to explain behavior excessively by someone's intrinsic attributes rather than by the situation involved. It turns out that there is now a body of evidence showing that this bias is not present in collectivist cultures where the situation is taken more into account than the dispositions of individual (see e.g., Norenzayan et al. 2002).

Another difference is that people from individualist cultures pay more attention to the literal explicit meaning of words whereas people from collectivist cultures pay attention to the implicit meaning of words as well as expressed from the tone and the body language. For example, Miyamoto and Schwarz (2006) found that Japanese use answering machines less than Americans because the non verbal feedback present in a normal telephone conversation is absent.

Behavioral and motivational differences

There are a number of behavioral differences that derive from the different cultural perceptions of the self. One relates to differences in effort provision by individuals. According to the view of the independent self, the fundamental attributes of the individual do not vary much over his or her lifetime whereas according to the view of the interdependent self, the individual is much more malleable and can change and improve through individual effort. In collectivist cultures, the response to a failure will thus tend to be to provide more effort so as to achieve success. One example would be taking more remedial courses in response to bad class grades. In a collectivist culture, individual achievements are seen as resulting more from effort more than from ability. In contrast, in individualist cultures, there is much more emphasis on individual ability as a cause of success. The response to failure will thus be more to look for an alternative task or occupation that is better suited to one's innate talents. Psychological

experiments have not only established these differences in behavior but have also established some interesting implications. Individuals from collectivist cultures can for example be manipulated into thinking that ability is important for a task, which will not be the case for subjects from individualist cultures who think that way already. Symmetrically, individuals from individualist cultures, but not from collectivist cultures, can be manipulated into thinking that effort is important for a task (Heine et al. 2001).

A key motivational difference between individualist and collectivist culture is the need to stick out versus to fit in. Both motivations are present everywhere but the former is stronger in individualist than in collectivist cultures where the motivation to fit in is stronger in the latter relative to the individualist culture. This difference has been tested in numerous experiments (see e.g. Kim and Markus, 1999). For example, Americans and East Asians where given the choice of a pen. A majority of pens were from one color and a minority of pens were from another color. Americans tended to choose a pen with the minority color whereas East Asians tended to choose a pen with the majority color. Similarly, when asked to rate different types of shapes, Americans tend to rate the unusual and rare shapes as more desirable whereas East Asians tend to rate the more common shapes as more desirable. These behavioral differences tend to be exploited by advertisers. Advertisements targeting Americans show how buying an object will make them unique whereas advertisements targeting East Asians will emphasize how buying an object will make one conform to others (see the empirical evidence in Kim and Markus, 1999).

Motivational differences extend to choice-making in general. The independent self emphasizes autonomy of choice without taking others into account whereas the interdependent self is more concerned with goal groups and is more willing to adjust his or her behavior for a better coordination of the group with which he is associated. For example, in collectivist cultures, an individual's choice of a spouse or a job is more often made by the family than by the individual compared to individualist cultures. Studies have shown that European-American children prefer the tasks they chose themselves whereas Asian-American children prefer tasks chosen for them by members of their close community but react

negatively when a stranger from outside their community makes a choice for them (Iyengar and Lepper, 1999).

Relational differences

A distinction that is relevant to understand the relational differences between individualism and collectivism is the notion of ingroup versus outgroup. The independent self will tend to behave in the same way with everybody when interacting whereas the interdependent self will behave differently with important, privileged relationships (the ingroup) than with others with whom relationships are less important or frequent (the outgroup). This can already be seen in reactions to choice-making, as discussed above: those from collectivist cultures welcome choices made for them by somebody from the ingroup but will resent choices made for them by somebody from an outgroup. In contrast, those from individualist cultures will react the same negative way when somebody makes a choice for them, whether they are from the outgroup or the ingroup. Studies have also found less "loafing" (free-riding in a group) among the more collectivist Chinese and Israelis when doing tasks within the ingroup than within the outgroup whereas among Americans, the level of loafing was the same whether with the ingroup or the outgroup (Earley, 1993). People from collectivist cultures have also been shown to strive to show more conformity when in presence of members of the ingroup.

This difference in behavior with respect to the ingroup and the outgroup may, at least partly, explain why there is more generalized trust in individualist cultures than in collectivist cultures (see Yamagishi and Yamagishi, 1994). This is a potentially important implication in economics as there is a large literature in economics documenting effects of trust on economic outcomes. There is a positive correlation between trust and individualism and these behavioral difference may explain why.

The distinction between the ingroup and the outgroup also has implications with respect to relational mobility. One should expect a higher level of relational mobility in individualist cultures and a lower level of mobility in collectivist cultures. Indeed, in an individualist culture, a relationship can be seen like

a form of reciprocal exchange. It is formed and maintained if it is mutually beneficial and it can be dissolved if it seizes to be beneficial to one or the parties. Existing relationships are by definition rewarding so people change relationships depending on their evolving circumstances and interests. In the collectivist culture however, one is born into a fixed relational network towards which one has obligations. Because of this, one will not tend to join new interpersonal networks. Because of the obligations towards existing networks, existing relationships are then often less rewarding. This is a side effect of the largely non voluntary character of people's relational network.

To summarize, there is a large body of research in cross-cultural psychology documenting the differences between individualist and collectivist culture covering differences in the view of the world, differences in cognition, motivational and behavioral differences. Scholars working in the field suggest that the individualism-collectivism cleavage is indeed the main cultural cleavage observed. Table 1 summarizes the differences between individualism and collectivism studies in cross-cultural psychology.

INSERT TABLE 1

The question is raised of what are the possible differences between individualism and collectivism that may have economic relevance. The research in Gorodnichenko and Roland (2010) suggests that it is relevant in terms of cultural incentives to innovate. We end this section by discussing possible implications of the cross-cultural psychology research on economic performance. This is done with the help of Table 2.

INSERT TABLE 2

The advantage of individualism in innovation in Gorodnichenko and Roland (2010) can be revisited to grasp its psychological foundations. The need to stand out and the social status rewards associated with individual achievement derived from the independent self and the need for self-enhancement. Individuals see in these achievements a confirmation of their exceptional personality traits and talents and this is why they are motivated to discover these traits through their achievements. Other people who share the same

culture will admire these achievements and consider them to result from extraordinary personalities. This is how individual achievements give social status. The drive towards individual achievement is less pressing in the collectivist culture where the drive towards conformity takes instead an overwhelming importance. The stronger an individual's ability to conform, the more he or she can be proud of his or her own malleability and the effort invested in achieving excellence in serving the group's goals. This ability will be recognized and admired by the group, delivering social status rewards to the individual.

The difference between individualism and collectivism in the drive towards individual achievement versus conformity should in principle affect comparative advantage and specialization in international trade. Countries with more individualist cultures should become specialized in sectors that are innovation-intensive whereas countries with more collectivist cultures should specialize in sectors that are more coordination-intensive, i.e. where production requires a complex assembly process and success in coordination of multiple activities is a key prerequisite of efficient plant operation. Preliminary research that we did in this direction tends to confirm the existence of these types of comparative advantage linked to individualism and collectivism.

There are other implications that are important from the point of view of institutions. A first, very natural implication, is that in an individualist culture, property should be individual whereas in an collectivist culture, it should be more group-based. This distinction has been made by English historian MacFarlane who found that the culture of individualism existed in England as early as the thirteenth century and maybe earlier. One of the main pieces of evidence brought by Macfarlane is that property of land in medieval England belonged to individuals not families, in contrast to what was the case at the time in continental Europe for example. Parents had the right to disinherit their children, women enjoyed property rights which was then very rare in the world. Land was more frequently than anywhere else sold rather than transmitted to the children and economic relations were more monetized than was the case in other countries. The basic family structure was already the nuclear family and links to the local

community were quite weak. Macfarlane's perspective is interesting because it suggests that cultural differences across countries may be much older than often thought by Historians of the modern world.

While individualism leads naturally to the notion of individual property, it leads also to the use of formal law as the principal conflict resolution mechanism. Indeed, individuals who are in conflict with each other will require an arbitration authority based on anonymous rules that should apply to all in the expectation that conflicts may arise between anonymous individuals. Protection of formal law becomes of paramount importance when individuals have no group protection and must fend for themselves. In contrast, in a collectivist culture, a difference must be made between conflicts in the ingroup and conflicts in the outgroup. Conflicts within the ingroup should be resolved informally via authority relationships within a kin group. In contrast, conflicts outside the ingroup would require some formal conflict resolution mechanism. However, things might be more complicated than under individualism because ingroup solidarity can easily transform a conflict between individuals belonging to different clans or tribes into a conflict between different clans. Moreover, as different clans might have different sizes, one side might prefer to use violence or the threat of violence instead of arbitration to solve a conflict.

Individualism and collectivism lead also to different views about government. The individualist view of government would tend to be wary of possible infringements of government on the individual's drive to self-achievement. Therefore, while individualist culture welcomes law, and thus the judicial branch of government as a tool for conflict resolution between individuals, it is distrustful of the executive power of government and wishes to impose constraints on the latter. Government is thus seen from the point of view of the individual and its effects on individuals. Individualist culture is also open to institutional innovations and experiments in governance reform, in the spirit of constraining the executive, that are decided democratically and that can also be reversed democratically in case of failure. The collectivist culture on the other hand insists more on the importance of having a benevolent government, as opposed to a malevolent one, as the benevolent government is meant to play a crucial role in creating stability and order between different tribes and clans. Benevolence is a crucial characteristic here as active intervention

of a social welfare-maximizing ruler is required to keep order between the different collectivities. The need to impose constraints on the executive is quite alien to this way of thinking. Moreover, the use of competitive elections to gain power, while very appealing to individualist culture that values competition between individuals, would appear distasteful and a threat to harmony in the eyes of a collectivist.

Individualist culture is more likely to suffer from collective action problems than collectivist culture. Only individual incentives will lead individualists to engage in collective action whereas in a collectivist culture people will more easily volunteer. The fact that collective action is easier under a collectivist culture does not however mean that there will be more decisions to engage in collective action. People from a collectivist culture would for example not want to rebel against a benevolent dictator because of the absence of perceived gains and the obvious risks of instability. In an individualist culture, people may however rebel, despite stronger collective action failures, even against a benevolent dictator if particular groups consider that their interests are being infringed on and, as said above, want to experiment with institutional innovation that constrains the powers of the executive. Nevertheless, it would seem that collectivism should have an advantage in public good provision and in a relatively efficient coordination of government activities conditional on the quality of the executive.

The values of freedom, equality and fraternity will also be viewed differently by an individualist and a collectivist culture. Freedom is of paramount value in an individualist culture as it is necessary to provide conditions for self-achievement. Equality before the law is also of paramount importance for the same reasons since inequality before the law would infringe on the freedoms of those groups that are less protected by the law. The value of freedom will be valued less in a collectivist society as more individual freedoms may threaten the harmony within groups. Given the different attitude towards the importance of protection from the law, equality will also be less valued and hierarchy will be valued more as the latter will be seen to bring more harmony to the community, especially if the latter is governed by a benevolent patriarch. As for the value of fraternity, this will be present in both cultures but with a very different foundation. In an individualist culture, engaging in fraternal action to help others will be based on ethical

rules defining responsibilities of an individual and rules of ethical behavior that define how a good person should behave. In a collectivist culture, similar actions will be based on obligations towards the group. The difference might seem subtle but it is an important one as ethical obligations in an individualist culture will be the same towards all: an individual is expected to behave in the same way towards all other individuals. In contrast, in a collectivist culture, obligations within the group and community will be important and possibly more demanding but they will be much more loosely defined, or even not at all, towards people who are outside the community.

Attitudes towards immigration will also be different in an individualist and a collectivist culture. An individualist society will be much more open towards immigration as the supply of talent and labor to society will be viewed positively. A collectivist society will however be much more closed towards immigration as the arrival of individuals or groups who do not belong to an existing group within society may be seen as a threat to social stability.

Family ties will also be different in different cultures. They will be weak in an individualist society and strong in a collectivist society. Individualist societies will be characterized by nuclear families where the children leave home as soon as they are independent whereas collectivist societies will be more characterized by coexistence of several generations within the household and stronger ties towards the larger family clan. As a consequence also, social relations in an individualist society will be more market-based as individuals cannot rely as much as in a collectivist society on help from the larger family group.

Geographical mobility should also be higher in an individualist society relative to a collectivist one. In an individualist society, individuals will want to engage in professional and social relationships that bring them the maximum of opportunity without being burdened by stifling obligations. In a collectivist society, the network of reciprocal obligations within groups is instead a burden to geographical mobility.

One implication that seems to come directly from the different views about the respective role of effort and ability is related to labor contracts and labor allocation. In the individualist view, performance

is more related to ability than effort. If a worker has a low performance, the individualist reaction would be to reallocate the worker to another position or, more easily, to fire him or her. In the collectivist view, low performance will be explained mainly by lack of effort. Supervisors would thus feel that they have the duty to coax more effort out of the worker. Long term relationships are useful from that point of view because supervisors will be better able to monitor workers as they know them better and workers will in turn work harder. Individualist culture would thus seem to favor flexibility in job allocation whereas collectivist culture would tend to favor long term contracts. This is an interpretation of the differences in labor market institutions that has to our knowledge not been put forward.

Certainly there are other implications of the differences between individualism and collectivism that one could explore. This very preliminary discussion nevertheless suggests nevertheless several important links between individualism and institutional or economic variables. Thus, individualism will create a demand for protection of property rights, for the rule of law, for institutions that limit the powers of the executive. Individualism will be associated with more openness towards immigration, higher geographical mobility, weaker family ties and more market-based social relations. Collectivism will be associated with higher ability for coordination and comparative advantage at coordination-intensive production, higher ability to overcome collective action problems possibly leading to better public good provision and higher efficiency of government organization. Collectivism will be associated to higher demand for political and social stability and a lower taste for institutional experimentation. How relevant all these distinctions are is obviously a matter of empirical verification. Even more difficult is to disentangle causal links between these different variables.

Conclusion

The cross-cultural psychology literature has established that the individualism-collectivism cleavage is a fundamental one with many facets. This literature also helps us better understand the meanings of individualism and collectivism as a cultural cleavage. Our initial research has found a strong causal link

from individualism to innovation and long run growth. The cross-cultural psychology literature suggests various avenues for further research. This distinction, which is very fruitful in the psychology literature, certainly has many implications in terms of understanding cross-cultural differences along economic and institutional dimensions. The discussion in this paper is only a first small step in that direction.

References

Baland, J.M, C. Guirkinger and C. Mali (2007) "Pretending to be Poor: Borrowing to Escape forced solidarity in Credit Cooperatives in Cameroon" Mimeo Universite Notre Dame de la Paix Namur.

Banfield, E.C. (1958). The Moral Basis of a Backward Society. Free Press.

Cavalli-Sforza, L. L., P. Menozzi, and A. Piazza (1994). *The History and Geography of Human Genes.* Princeton University Press.

Choi, I., & Choi, Y. (2002). Culture and self-concept flexibility. *Personality and Social Psychology Bulletin, 28*, 1508-1517.

Comola and Fafchamps (2010) "Are Gifts and Loans between Households Voluntary?" mimeo Oxford.

Earley, P. C. (1993). East meets West meets Mideast: Further explorations of collectivistic and individualist work groups. *Academy of Management Journal, 36*, 319-348.

Fearon, J.(2003) "Ethnic and Cultural Diversity by Country," *Journal of Economic Growth* 8(2), 195-222.

Gorodnichenko, Y. and G. Roland (2010). "Culture, Institutions and the Wealth of Nations", CEPR Discussion Paper No 8013.

Gorodnichenko, Y. and G. Roland (2011) "Which Dimensions of Culture Matter for Long-Run Growth?" *American Economic Review Papers and Proceedings* 101(3): 492-498.

Grosjean, P. (2009) "The Contributions of Spatial Proximity and History to Cultural Integration: A Gravity Approach", mimeo, UC Berkeley.

Guiso, L., P. Sapienza and L. Zingales (2006) "Does Culture Affect Economic Outcomes?," Journal of Economic Perspectives, 20 (2),23-49.

Guiso, Luigi, Paola Sapienza, and Luigi Zingales (2008), "Social Capital as Good Culture", Journal of the European Economic Association 6: **xxx-xxx**.

Guiso, L., P. Sapienza and L. Zingales (2009) "Cultural Biases in Economic Exchange," Quarterly Journal of Economics 124(3), 1095-1131.

Heine, Steve J. (2008) *Cultural psychology*. W. W. Norton & Company.

Heine, Steve J. (2010) "Cultural Psychology" in *Handbook of Social Psychology*, Susan T. Fiske, Daniel T. Gilbert, Gardner Lindzey (ed.) , pp. 1423-1465.

Heine, S. J., Takemoto, T., Moskalenko, S., Lasaleta, J., & Henrich, J. (2008). Mirrors in the head: Cultural variation in objective self-awareness. *Personality and Social Psychology Bulletin, 34*, 879-887.

Heine, S. J., Kitayama, S., Lehman, D. R., Takata, T., Ide, E., Leung, C., & Matsumoto, H. (2001). Divergent consequences of success and failure in Japan and North America: An investigation of self-improving motivations and malleable selves. *Journal of Personality and Social Psychology, 81*, 599-615.

Hofstede, G. (2001) *Culture's Consequences: Comparing Values, Behaviors, and Organizations Across Nations*. 2nd edition. Sage Publications. Iyengar, S. S., & Lepper, M. R. (1999). Rethinking the value of choice: A cultural perspective on intrinsic motivation. *Journal of Personality and Social Psychology, 76*, 349-366.

Jakiela, P. and O. Ozier (2011) "Does Africa Need a Rotten Kin Theorem? Experimental evidence from Village Economies" mimeo, UC Berkeley.

Ji, L. J., Peng, K., & Nisbett, R. E. (2000). Culture, control, and perception of relationships in the environment. *Journal of Personality and Social Psychology, 78*, 943-955.

Ji, L. J., Zhang, Z., & Nisbett, R. E. (2004). Is it culture or is it language? Examination of language effects in cross-cultural research on categorization. *Journal of Personality and Social Psychology, 87*, 57-65.

Kanagawa, C., Cross, S. E., & Markus, H. R. (2001). "Who am I?": The cultural psychology of the conceptual self. *Personality and Social Psychology Bulletin, 27*, 90-103.

Kim, H. S., & Markus, H. R. (1999). Deviance or uniqueness, harmony or conformity? A cultural analysis. *Journal of Personality and Social Psychology, 77*, 785-800.

Kitayama, S., Duffy, S., Kawamura, T., & Larsen, J. T. (2003). Perceiving an object and its context in different cultures: A cultural look at New Look. *Psychological Science, 14*, 201-206.

Kitayama, S., Markus, H. R., & Kurokawa, M. (2000). Culture, emotion, and well-being: Good feelings in Japan and the United States. *Cognition and Emotion, 14*, 93-124.
Knack, S., and P. Keefer (1997) "Does Social Capital Have an Economic Payoff? A Cross-Country Investigation," *Quarterly Journal of Economics* 112(4), 1251-1288.
Kühnen, U., Hannover, B., Schubert, B. (2001). The semantic-procedural interface model of the self: The role of self-knowledge for context-dependent versus context-independent modes of thinking. *Journal of Personality and Social Psychology, 80*, 397-409.
Landes, D. S. (1998) *The Wealth and Poverty of Nations*. Norton Publishers, New York.
Ma, V., & Schoeneman, T. J. (1997). Individualism versus collectivism: A comparison of Kenyan and American self-concepts. *Basic and Applied Social Psychology, 19*, 261-273.
Macfarlane, A. (1978) The *Origins of English Individualism: Family, Property and Social Transition*. Blackwell, Oxford.
Masuda, T., Gonzalez, R., Kwan, L., & Nisbett, R. E. (2008). Culture and aesthetic preference: Comparing the attention to context of East Asians and European Americans. *Personality and Social Psychology Bulletin, 34,* 1260-1275.
Masuda, T., & Nisbett, R. E. (2001). Attending holistically vs. analytically: Comparing the context sensitivity of Japanese and Americans. *Journal of Personality and Social Psychology, 81*, 922–934.
Mezulis, A. H., Abramson, L. Y., Hyde, J. S., & Hankin, B. L. (2004). Is there a universal positive bias in attributions?: A meta-analytic review of individual, developmental, and cultural differences in the self-serving attributional bias. *Psychological Bulletin, 130*, 711-747.
Morling, B., Kitayama, S., & Miyamoto, Y. (2002). Cultural practices emphasize influence in the United States and adjustment in Japan. *Personality and Social Psychology Bulletin, 28*, 311-323.
Mokyr, J. (2010) "Culture, Institutions and Modern Growth" presentation at the conference *Understanding Institutions and Development: The Legacy and Work of Douglass C. North* St Louis Nov.4-6 2010.
Miyamoto, Y., & Schwarz, N. (2006). When conveying a message may hurt the relationship: Cultural differences in the difficulty of using an answering machine. *Journal of Experimental Social Psychology, 42*, 540-547.
Norenzayan, A., Choi, I., & Nisbett, R.E. (2002). Cultural similarities and differences in social inference: Evidence from behavioral predictions and lay theories of behavior. *Personality and Social Psychology Bulletin, 28,* 109-120.
Oyserman, D., Coon, H. M., & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analyses *Psychological Bulletin, 128*, 3-72.
Peng, K., & Nisbett, R. E. (1999). Culture, dialectics, and reasoning about contradiction. *American Psychologist, 54*, 741-754.
Platteau, Jean-Philippe , (2000) *Institutions, Social Norms and Economic Development*, Harwood Academic Publishers Newark New Jersey.
Putnam, R.D. (1994) *Making democracy work: Civic traditions in modern Italy*. Princeton Univ. Press.
Roland, G. (2004) "Understanding Institutional Change: Fast-moving and Slow-moving Institutions." *Studies in Comparative International Development* 38: 109-131.
Suh, E. M. (2002). Culture, identity consistency, and subjective well-being. *Journal of Personality and Social Psychology, 83,* 1378-1391.
Suh, E., Diener, E., Oishi, S., & Triandis, H. C. (1998). The shifting basis of life satisfaction judgments across cultures: Emotions versus norms. *Journal of Personality and Social Psychology, 74*, 482-493.
Tabellini, G. (2008) "Institutions and Culture. Presidential Address European Economic Association," *Journal of the European Economic Association* 6: 255-294.
Tardif, T. (1996). Nouns are not always learned before verbs: Evidence from Mandarin speakers' early vocabularies. *Developmental Psychology, 32*, 492-504.
Uslaner, E. (2005) "Trust as a Moral Value", in Dario Castiglione, Jan W. van Deth, and Guglielmo Wolleb, eds., Handbook of Social Capital, Oxford University Press.
Yamagishi, T., & Yamagishi, M. (1994) Trust and commitment in the United States and Japan. *Motivation and Emotion, 18,* 9-66.

Table 1. Cross-cultural psychological differences between individualism and collectivism.

	individualism	collectivism
Vision of self	**Independent self**	**Interdependent self**
Mode of self-knowledge	Through introspection	Through evaluation of others
Self-consistency and adaptability	Emphasis on self-consistency at the cost of rigidity	Emphasis on adaptability at the cost of self-consistency
Need for self-enhancement and self-serving bias	Strong, critical for self-esteem	Less important, emphasis on malleability of self
Control strategies	Primary control: change the world	Secondary control: adapt self to environment
Emotional rewards	Associated with actions helping individual to stand out	Associated with interpersonal harmony
Forms of thinking	**Analytical**	**Holistic**
Attention focus	Objects more than background	Objects together with background
Style of reasoning	Associations based on abstract logical rules	Associations based on contextueal or functional relationship
Biases	Fundamental attribution error, noun bias	No fundamental attribution error or noun bias
Comprehension	Attention to explicit meaning of words	Attention to implicit meaning, tone and body espressions
Behavioral differences		
Effort versus ability	Emphasis on ability, reallocation of tasks in response to failure	Emphasis on effort, more effort in response to failure
Stick out or fit in	Sticking out very important	Conformity of overarching importance
choice	Autonomy of choice	Choice taking group interests into account
Relational differences	**Equal behavior**	**Ingroup versus outgroup**
Choices imposed by others	Resented	Liked if from ingroup, strongly resented from outgroup
Loafing	Equal with all	Less with ingroup than with outgroup
Trust	Equal with all	Ingroup more than outgroup
Relational mobility	high	Low

Table 2. Economically relevant behavioral differences between individualism and collectivism.

	individualism	collectivism
Innovation (economic or social)	Social status reward from standing out leads to more innovation	Conformity leads to less innovation
Coordination	Only via individual incentives	Internalization of group goals
specialization	Innovation-intensive	Coordination-intensive
Property	Individual	Group-based
Conflict resolution	Via formal law	Informal inside group and formal outside group
Attitude towards government	Mistrust, impose constraints	Stronger distinction between benevolent and bad ruler
Collective action ability	Weak without incentives	Strong
Value of freedom	Stronger	Weaker
Value of equality	Stronger, law-based	Weaker, group-based
Value of fraternity	Ethically based	Group-based
Attitude towards immigration	Open	Closed
Family ties	Weak	Strong, hierarchical
Social relations	More market-based	Lineage and market-based
Geographical mobility	High	Low
Labor contracts	flexible	Long term

Figure 1. Hofstede's (2001) measure of individualism.