EMPLOYMENT STATUS: DO TRUST AND INDIVIDUALISM MATTER?

ABSTRACT

Trust and individualism are two important cultural traits in societies that have strong implications for economic outcomes. Both trust and individualism have been shown to promote economic growth across a wide swath of countries around the world. What is unknown is how these two measures interact. We propose to examine this interaction using the World Values Survey. Based on well-vetted measures of social trust and individualism generated from these surveys, we use Principal Component Analysis to examine the relationship between the interaction of these cultural traits and employment in various economies.

PROPOSAL NARRATIVE

Trust everyone unless you have reason not to." Lord Vinson

Background/Statement of the Problem/Significance of the Project

In recent decades, the economics discipline has started taking an increased interest in the role of cultural traits for development outcomes (Davis and Williamson, 2019; Gorodnichenko and Roland, 2017; Davis, 2016; Mathers and Williamson, 2011; Licht, et al. 2007; Guiso, et al. 2006; Tabellini 2008, 2009). Guiso et al. (2006; 23) define culture as "those customary beliefs and values that ethnic, religious, and social groups transmit fairly unchanged from generation to generation." Exploring differences in civic, social, and economic behavior between Northern and Southern Italy, Banfield (1958) and Putnam (1993) have stressed varied endowments of social capital across the regions to be the reason.

While culture's role has been explored for many outcomes, it has been not been done for occupational status. Do cultural traits matter for occupational status – being full-employed or being self-employed? In this paper, we bring in two well-explored traits of culture – trust and individualism – and study their impact on occupational choices. How does trust affect individual's decision to be self-employed or being full-employed? Does the extent of individualism of countries affect trust's impact on occupational choices? While trust has different meanings in the literature as explained later, a popular definition of *trust* is whether individuals in a country trust each other in general. The trait of *Individualism* enhance achievements of individuals, rewards people based on their own merit and give credit to personal freedom and achievement.

Trust has been shown to augment economic growth since with greater trust, formal institutions can be effectively and efficiently to the enforcement of economic agreements that comprise routine market activity. Business transactions can be done efficiently with minimized frictions in the presence of trust and business can spend their resources on attracting new business and other activities that promote economic growth ((Guiso, Sapienza, and Zingales, 2004; Knack & Keefer, 1997). Empirically, the relationship between trust and economic growth has been strongly established (Zak and Knack, 2001; Whiteley, 2000; Narayan and Pritchett, 1999 to mention a few). It also reduces uncertainty (Hohmann and Malieva 2005), can enhance entrepreneurship (Welter and Smallbone, 2006) and can improve education, legal, and bureaucratic institutions (Bjornskov and Meon 2012). Individualism has been shown to enhance entrepreneurial initiatives and mitigate gender inequality.

It is not necessarily true that countries with relative high levels of trust will have high individualism. For example, based on World Value Survey (WVS) data, a country like India has on average 31% of individuals who, in general, have responded that they trust most individuals. Yet, its individualism score (based on a constructed index explained later) is -0.01 which is low. The same is true for countries like Indonesia where Trust figures are about 40 percent but individualism score is -0.7. Thus, Trust's impact on self-employment or full employment should vary across countries depending on the level of individualism.

We explore the interactive effect of trust and individualism on occupational choices – self-employment and full-employment.

Literature Review

Institutions, Culture, and Economic Systems

Since Douglas North (1990) and Elinor Ostrom (1990) ushered institutionalism into economics, the discipline has been parsing out the causal direction (Tabellini 2008, 2010) that institutions (culture, values, beliefs, habits) have on economic systems. In particular institutions can reduce transaction costs, eliminate principal-

agent problems, improve collective action, and encourage economic growth. Robert Putnam (1993: 176) argued that social capital can bolster "the performance of the polity and the economy" by facilitating coordinated actions. Amartya Sen (1977: 332) argued that "no society would be viable without some norms and rules of conduct" and that "the development of trust in one another's words and promises can be a very important ingredient of market success" (1999: 262).

Trust may be the most important dimension of culture or social capital (Coleman 1990; Fukuyama 1996; Newton 1997, p. 576; Ostrom 1998; Uslaner 1999, p. 122; Tonkiss 2000; Zak and Knack 2001). Francis Fukuyama (1996) claims that a nation's well-being and its ability to compete depends on the level of trust in society. Kenneth Arrow (1972: 357) argued that "[i]t can be plausibly argued that much of the economic backwardness in the world can be explained by the lack of mutual confidence." He claimed that high levels of trust allow formal institutions to invest less in enforcement of the every-day agreements that comprise routine market activity (Arrow 1972: 345). With less need for contracts and legal regulations (Fukuyama 1996: 26), businesses and other institutions can focus on attracting new business and other activities that promote economic growth (Guiso, Sapienza, and Zingales 2004; Knack and Keefer, 1997).

Trust: What is Trust and how is it Measured?

A variety of definitions of trust exist (Fukuyama 1996, p. 26; Misztal 1996, p. 16; Delhey and Newton 2005, p. 311; Dasgupta 1997, p. 5 in Ostrom 1998, p. 12; Luhmann 2000, pp. 1, 27). At a societal level Guiso et al. (2008) define trust as the propensity of a population to trust people that they do not know personally. Social trust is the belief that most other people can be trusted to behave in an honest way (Bergh and Bjornskov, 2011). "Trust is based on a perception of the probability that other agents will behave in a way that is expected (Gambetta, 1998).

Recent literature delineates three levels of trust: thick trust, generalized trust and institutional trust Roth (2009). Thick trust is generated by family networks and includes people one knows well. Generalized trust includes secondary relations between people who do not know each other and includes everyday

interactions in modern society. Institutional trust is the confidence that people have in societal institutions including the state, the police, armed forces and major companies.

For the purposes of this research we are relying on a question that has been asked by the World Values Survey (WVS) since 1981 and is found to be a good indicator of trust at an aggregate, societal level. The percent of a population that answers in the affirmative to the question "In general, do you think most people can be trusted or can't you be too careful?" The question has proven to be a valid measure of honesty, trust, and trustworthiness. It correlates strongly with return rates in wallet-drop experiments (Knack and Keefer, 1997), is a simple question to answer (Nannestad 2008: 419), and correlates well with experimental behavior (Glaeser et al. 2000). See below for further explanation of the use of this variable.

How Does Trust affect Economic Outcomes?

Trust has been shown empirically to be a foundational aspect of culture in terms of its effect on economic outcomes. Trust has been found to be related to the quality of the institutions at the regional level within countries (Putnam 1993 and Knack 2002) at the cross-country level (Uslaner 2002 and Bjornskov 2010) or both (Tabellini 2008). Uslaner (2002) shows that social trust is strongly associated with a number of other outcomes, such as corruption and violent crime.

Trust lowers risk and uncertainty (Hohmann and Malieva 2005), increases efficiency (Tabellini 2010), improves education, legal, and bureaucratic institutions (Bjornskov and Meon 2012), spurs entrepreneurship (Lumann 200) and it reduces frictions in market exchanges thereby reducing the need for external enforcement of contracts (Dixit 2004). Trust reduces transaction costs. These reductions in transaction costs are sources for long run economic development (Roth, 2009) and entrepreneurship (Welter et Smallbone, 2006). Horvath (2013) shows a link between trust and long-term growth, particularly among countries with a weak rule of law.

Other research has found a positive relationship between interpersonal trust and economic growth (Knack and Keefer 1997; La Porta et al. 1999; Whiteley 2000; Zak and Knack 2001; Beugelsdijk et al.

2004). Countries with high levels of social trust even without other elements of social capital have grown faster than other comparable countries (Whiteley 2000; Zak and Knack 2001; Beugelsdijk, de Groot, and van Schaik 2004). Mikucka et al. (2017) examined cross country variation in economic growth over time among developing, transition, and developed countries, found that increasing social trust and declining income inequality results in economic growth and an improvement in subjective well-being.

A link between social trust and better bureaucratic decisions hence better governance is also an important determinant of growth (e.g., Dollar and Kraay 2003; Rodrik, Subramanian, and Trebbi 2004). Bergh and Bjornskov 2011: high trust countries are able to finance higher total government expenditures and raise larger revenues, and that high trust countries are characterized by less market regulations.

Individualism: What is Individualism and How is it Measured?

In addition to trust, the socio-cultural aspects of individualism have a strong effect on economic outcomes. Geert Hofstede's (1980) research in cross-cultural psychology identified the individualism-collectivism dichotomy for analyzing one aspect of society's culture on the values of its members and how these values relate to individual behavior. He defined individualistic societies as having "loose ties" in which individuals often only relate to immediate family. People are expected to look after themselves and their immediate family. Such societies emphasize the "I" versus the "we". "Individualism emphasizes personal freedom and achievement" (Gorodnichenko and Roland 2011). As a result, cultures that are more individualist reward higher social status to personal accomplishments such as significant discoveries, innovations, or great artistic achievements.

Hofstede developed an index of individualism that 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 cohesive group. The measure has been used by multiple studies (Gorodnichenko and Roland, 2011 and 2017; Cline and Williamson, 2016; Davis and Williamson, 2016). The measure provides information on

cultural values at national rather than individual level (Hofstede, 2001; Hofstede 1980). "Individuals in countries with a high level of the individualism index value personal freedom and status" opportunity, achievement, advancement and recognition (Gorodnichenko and Roland 2011: 16). To able to exploit individual level data, following Davis and Williamson (2018) and Beugelsdijk, Maseland and van Hoorn (2015)[1], we construct an individual-level proxy of individualism. We utilize the following four questions from the WVS to construct the index 1) Private ownership of business and industry should be increased vs. government ownership of business and industry should be increased, 2) One of my main goals in life has been to make my parents proud, 3) whether abortion is justified, and 4) whether homosexuality is justified. Principle Component analysis is used to create the individualism measure based on the four questions. The index is standardized.

How Does Individualism affect Economic Outcomes?

Empirical evidence suggests that individualism is positively related to economic growth through various channels. Cline and Williamson (2017) find that individualism is positively correlated to contract enforcement. Gorodnichenko and Roland (2011) find that countries having a more individualist culture experience a higher level of long-run growth than countries with a more collectivist culture due to higher levels of innovation and productivity. Hanson (2012) examined annual earnings across second-generation US immigrants and finds that individualism among ancestors is positively related to annual earnings. Davis and Williamson (2018) find that individualism in societies promotes gender equality.

Objectives

[1] Beugelsdijk et al mentions that the four questions capture the traits identified in Hofstede's measure – the traits are that of autonomy, the right to a private life, weak family ties, less conformity, and capitalism and market imperfection. The WVS individualism measure is highly correlated with Hofstede's original measure (0.77).

While culture's role has been explored for many outcomes, it has not been done for occupational status. This research will examine whether or not cultural traits matter for occupational status—employed full time or being self-employed?

Specific Objectives:

- To determine how trust & individualism affect an individual's decision to be self-employed or being full-employed?
- To determine if individualism of countries affects trust's impact on occupational choices?
- To explore possible interactions between individualism and trust.

Research Methods

This section describes key variables of interest that includes employment variables, trust and individualism. This research relies almost entirely on the World Value Survey (WVS) database. The survey started in 1981 and has been conducted in six waves so far. The database comprises of nearly 100 countries and includes numerous questions on beliefs, values, and opinions about social, economic, and political issues. Along with such topics, it also includes information about demographics (sex, age, education, etc.) and self-reported economic characteristics (income, social class, etc.) of individual survey respondents. We consider all six waves of data – 1981-1984, 1990-1994, 1995-1998, 1999-2004 and 2010-2014 – which gives us almost 300,000 observations to analyze. Because each wave included more countries, the sample is unbalanced in terms of both countries as well as individual-level responses.

a. Dependent Variables

Our two main dependent variables are constructed based on the employment questions in the WVS survey. We consider the dummies of self-employment and full-time employment. This is based on the respondents of individuals about their occupation status. About 11% of the individuals in our sample are self-employed. Approximately 33 percent of the sample is engaged in full-time employment. As we can see from Figure 1,

many countries have average rate of self-employment below 10%. Very few countries have the rates above 30%.

b. Independent Variables

One of our main variables of independent variables of interest is Trust. Following an extensive set of studies (Mikucka et al. 2017; Uslaner, 2003; Johnson and Mislin, 2012; Tabellini, 2010; Tabellini 2008), we construct the measure of trust based on the question "Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people?".[2] We construct a dummy taking the value 1 if individuals respond *most people can be trusted; 0 otherwise.* The mean for the dummy is about 25%.

The other independent variable of interest is a measure of individualism. One of the most commonly used measure of individualism is Hofstede's measure that has been used by multiple studies (Gorodnichenko and Roland, 2017; Cline and Williamson, 2016; Davis and Williamson, 2016). The measure provides information on cultural values at national rather than individual level (Hofstede, 2001; Hofstede 1980). To able to exploit individual level data, following Davis and Williamson (2018) and Beugelsdijk, Maseland and van Hoorn (2015)[3], we construct an individual-level proxy of individualism. We utilize the following four questions from the WVS to construct the index: 1) Private ownership of business and industry should be increased vs. government ownership of business and industry should be increased, 2) One of my main goals in life has been to make my parents proud, 3) whether abortion is justified, and 4) whether homosexuality is

[2] This measure correlates with other measures of trust in society (Knack and Keefer 1997), is not difficult to answer (Nannestad 2008: 419) and has been verified through experimental evidence of actual trusting behavior Sapienza et al. 2007; Cox et al. 2009).

[3] Beugelsdijk et al mentions that the four questions capture the traits identified in Hofstede's measure – the traits are that of autonomy, the right to a private life, weak family ties, less conformity, and capitalism and market imperfection. The WVS individualism measure is highly correlated with Hofstede's original measure (0.77).

justified. Principle Component analysis[4] is used to create the individualism measure based on the four questions. The index is standardized.

c. Control Variables

Our benchmark control variables consist of educational attainment, being a female, class of individuals, town size and age. Town size of 500k and higher is considered as a dummy which is represented by 1. Anything otherwise is coded a zero. Class of individuals are self-reported by individuals. The classes can be upper middle class, lower middle class, working class and lower class.

Based on our hypothesis, we want to explore how trust's impact on employment status is conditional on trust. Formally, we model occupational choices (Occ_{ict}) of individual *i* living in country *c* at time (wave) *t* as depending on interpersonal trust ($Trust_{ict}$) and individualism (Ind_{ict}) and set of individual level covariates (X_{ict}). We aim to start with a probit fixed set of specifications.

Final Products and Dissemination

The findings of this research will be disseminated through either a poster display or oral presentation at UW-L Celebration of Student Research and Creativity. Additionally, the results will be written up and submitted to the following potential journals for publication: *Kyklos and Economic Letters*

Budget Justification

Budget Item	Amount
Stipend	$1,500
Final Product Materials	$200
Total	**$1,700**

Explanation of Budget Items

[4] The main idea of **principal component analysis** (**PCA**) is to reduce the dimensionality of a data set consisting of many variables correlated with each other, either heavily or lightly, while retaining the variation present in the dataset, up to the maximum extent.

Stipend: The research will take a considerable amount of time learning the data, and the statistical software used in analyzing the data. We expect this to take several months as it will be the equivalent of taking an econometrics course applied to a specific problem. We based the stipend amount on the UW-L URCC grant specifications for undergraduate research.

Final Product Materials: We plan to use the $200 for supplies to construct the poster upon completion of the research. These supplies may include poster board, markets and glue as well as any printing that needs to be done.

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Figure 1: Mean of Self-Employed Individuals by Countries

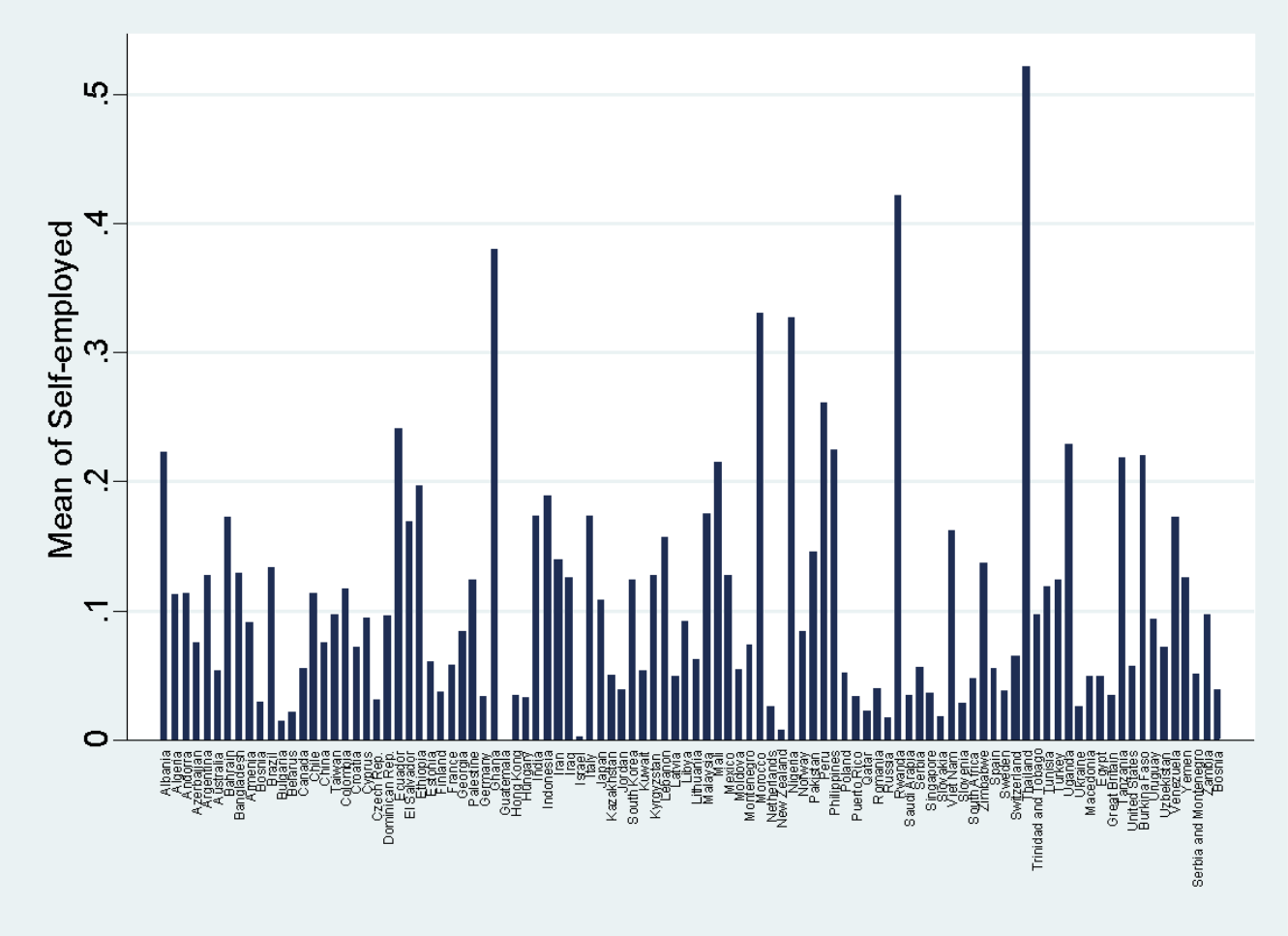

Figure 2: Mean Trust by Countries