A Short Review of Generalized Trust

Prateek Raj *University College London**

I Introduction

Trust has become an important area of study in social sciences. Sociologist Edward Banfield wrote his pioneering book Moral Basis of Backward Society in 1958, and described a Hobbesian lack of social trust in southern Italy towards people outside of strict family circles. He attributed the region's present day underdevelopment to the "amoral familism", that made people act distrustfully towards non-family members, expecting others to do the same. Contrastingly, Tocqueville in his book Democracy in America (1840) (Tocqueville, 1862) gave a flattering description of civic culture in the United States noting, "Each American knows when to sacrifice some of his private interests to save the rest". Emphasizing the importance of civic culture he wrote "science of association is the mother of science; the progress of all the rest depends upon the progress it has made". Among economists, Arrow (1969) was among the first to identify the value of trust, and he wrote "norms of social behavior, including ethical and moral codes" may compensate for market failure and "in the absence of trust many opportunities for mutually beneficial cooperation would have to be, foregone." Over the last few decades, a considerable macroeconomic literature has emerged that shows trust has economic significance (Knack and Keefer, 1997; La Porta et al., 1997; Zak and Knack, 2001) and levels of trust are different across groups and regions, which are persistent (Putnam, Leonardi and Nanetti,

*UCL School of Management, p.raj.12@ucl.ac.uk.

1994; Uslaner, 2002; Guiso, Sapienza and Zingales, 2008b; Tabellini, 2008a; Durante, 2009; Nunn and Wantchekon, 2011) and only gradually change (Alesina and La Ferrara, 2002; Giavazzi, Petkov and Schiantarelli, 2014).

I.1 Theoretical and Empirical literature

Drawing upon influential sociological research being conducted on social capital (Granovetter, 1973, 1985; Coleman, 1988), in 1990s two influential sociological works, Putnam, Leonardi and Nanetti (1994) and Fukuyama (1995), emphasized the role of trust on economic development. But, some economists (e.g. Solow (1995)) pointed at the problems in measuring trust as a macroeconomic variable. Some empirical papers (Knack and Keefer, 1997; La Porta et al., 1997; Zak and Knack, 2001) began to measure trust using the international World Values Survey (WVS), that asked respondents "Generally speaking, would you say that most people can be trusted, or that you can't be too careful in dealing with people?" The greater the proportion of people in a country answering yes to the question, the greater the general trust in the country was considered to be. A country's level of trust was found to be correlated with its economic growth (Knack and Keefer, 1997), and with efficiency in large organizations (La Porta et al., 1997). Zak and Knack (2001) developed a moral hazard model, where ability of trust in an investment broker increased investment and income growth, and showed that trust and factors that could affect trust (like formal and informal institutions and social homogeneity) were correlated with income growth.

There were also efforts by theorists to define trust. A large literature in sociology and management (surveyed by Rousseau et al. (1998)) attempted to understand trust between relationships. Mayer, Davis and Schoorman (1995) focused on the aspect of vulnerability that trusting someone entails in social exchanges. Yamagishi and Yamagishi (1994) made the distinction between impersonal vs. relationship based trust, and compared Japan and USA to argue that Japanese society relied more on relationship based trust, while United States had higher levels of generalized trust. Gambetta et al. (2000) considered trust to be a subjective probability and Dasgupta (2000) theorized reputation for honesty as a sought after but fragile commodity. Dasgupta also argued that expectations regarding honest and dishonest conduct could be self-fulfilling affecting trust, while Putnam, Leonardi and Nanetti (1994) found that generalized trust was persistent, and linked high present day generalized trust in North Italy to persistent civic norms that had developed in the region because of existence of medieval city republics.

Persistence of trust (Putnam, Leonardi and Nanetti, 1994) sparked the interest of researchers in its origins. Alesina and La Ferrara (2002) using individual level General Social Survey (GSS) data of US localities, found that generalized trust was lower in individuals who had a history of traumatic experience, who belonged to historically discriminated groups, who were economically and educationally unsuccessful, or who were living in neighbourhoods that were racially mixed or had high income inequality. Alesina and La Ferrara (2002) found no significant effect of religion or ethnic origin on trust. Uslaner (2002) argued that trusting others was a persistent moral value in individuals that was passed on by parents and was highly correlated with charity and voluntary work. He argued that trusting attitude was unaffected by personal experience or membership to civic groups (unlike Putnam, Leonardi and Nanetti (1994) who hypothesized that civic groups generated trust). Guiso, Sapienza and Zingales (2006), using GSS data found a strong positive correlation between generalized trust of US immigrants and the level of generalized trust (measured by WVS) in their country of origin, hinting towards persistence. Guiso, Sapienza and Zingales (2008b) found strong empirical evidence of historical persistence of trust attitude, as city republic experience during medieval era in North Italy was strongly and positively correlated to present levels of trust and social capital in the region, as hypothesized by Putnam, Leonardi and Nanetti (1994). Tabellini (2008a) also also found evidence of persistence, with higher levels of trust found in second generation US immigrants originating from countries with more democratic institutions over a century ago. Nunn and Wantchekon (2011) similarly found that experience of slavery had a persistent effect on mistrust in Africa. Durante (2009) similarly showed that annual variability of weather conditions during 1500- 1750 stimulated trust in Europe.

Tabellini (2008b) developed a theoretical model to explain the persistence and found that impersonal values supporting trust between socially distant individuals could persist by creating a strong incentive for parents to invest in such value education, and by generating institutions that support such values ((Alesina and La Ferrara, 2002) found high social distance to be a barrier to trust). Guiso, Sapienza and Zingales (2008a) developed a model complimentary to the value based model of Tabellini (2008b), showing that beliefs regarding honesty of others could be persistent and transferred between generations. Giavazzi, Petkov and Schiantarelli (2014) using GSS data studied the persistence of trust attitude (and other cultural traits) among US immigrants in detail, and found that trust attitude brought by first generation US immigrants did not persist (unlike some other cultural traits) among fourth generation US immigrants, but second generation US immigrants showed some persistence.

So, body of evidence suggests that values and beliefs regarding trust passed down by parents do persist among individuals (Putnam, Leonardi and Nanetti, 1994; Uslaner, 2002; Guiso, Sapienza and Zingales, 2008b; Tabellini, 2008a; Durante, 2009; Nunn and Wantchekon, 2011), but values and beliefs themselves can gradually change depending on individual experiences (Alesina and La Ferrara, 2002; Giavazzi, Petkov and Schiantarelli, 2014). Dohmen et al. (2012) looking at German Socio-Economic Panel (SOEP) data find similar results where risk and trust attitudes of children was affected by attitude of parents as well as prevailing attitude in the region.

I.2 Experimental literature

During the time a large body of empirical and theoretical literature was emerging, experimental literature was also emerging that highlighted the nature of trust at a micro level. Berg, Dickhaut and McCabe (1995) developed the influential investment game, which has become a standard in literature as a means to understand and model (Zak and Knack, 2001; Guiso, Sapienza and Zingales, 2008a) trust and honesty (trustworthiness). In the game an investor decides to invest a particular amount with a trustee which gets multiplied and the trustee decides how much of money to return to the investor. An investor that invests a larger amount is considered more trusting, while a trustee that returns a larger amount is considered more honest, where the standard Nash equilibrium outcome is for investor to not invest, and for trustee to not return. The origins of the investment game can be traced to other stage games, like dictator game, ultimatum game, prisoner's dilemma game, trust game (Kreps, 1996), centipede game (Rosenthal, 1981) and exchange game (Fehr, Kirchsteiger and Riedl, 1993) each of which have been used by researchers to understand behavior that does not match the standard rational framework of economics.

The experimental literature (starting with Berg, Dickhaut and McCabe (1995)) has found that unlike the standard game theory equilibrium, investors do invest and trustees do return. But, it is not necessarily clear if trusting and honest conduct reflects social preferences such as altruism or a norm of reciprocity (Cox, 2004), and if the social preferences are components of trust or separate from it. So, researchers have explored the preferences that underpin individual behavior to understand trust. Influential set of papers (on inequity aversion by Fehr and Schmidt (1999)); on altruistic punishment by Fehr and Gächter (2000, 2002); on altruism by Fehr and Fischbacher (2003); on betrayal aversion by Bohnet and Zeckhauser (2004); on reciprocity by Falk and Fischbacher (2006)) developed robust theories of fairness, altruism and reciprocity, and explored the behavioral underpinnings of trust. Classic paper by Fehr and Schmidt (1999) argued that inequity aversion could explain cooperation as individuals get motivated to inflict costly punishment to free riders. Exploring biological underpinnings of trust, Kosfeld et al. (2005) found that higher oxytocin increases trusting attitude. Another influential paper Henrich et al. (2001) looked at 15 small scale societies and showed that in the sampled societies individuals showed other regarding preferences and deviated from the standard "homo-economicus" model.

The social preference based framework is important for understanding human behavior, and it poses a question whether surveys like WVS measure trust or other preferences. But, the behavior based theories do not convincingly explain why there exists considerable heterogeneity in trusting behavior across societies and their determinants as measured in WVS surveys or trust games (Johnson and Mislin, 2011). The body of literature (surveyed by Fehr (2009)) has nonetheless convincingly shown that social preferences of individuals (which may or may not be universal) are an important component of what gets observed as trusting or honest conduct, and a narrow focus on economic preferences or beliefs is not enough to understand the topic, but more work needs to be done to understand how heterogeneity emerges in preferences and beliefs across societies and groups.

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