BI NORWEGIAN BUSINESS SCHOOL

- Preliminary Master Thesis Report -

(Historical) Income Inequality and Social Capital.

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INTRODUCTION TO AREA OF STUDY

According to Robert Putnam's (1993) definition, social capital refers to "features of social organizations, such as trust, norms, and networks that can improve the efficiency of society by facilitating coordinated actions" (p. 167; see also Kawachi et al. 1997). Generalized trust is thereby typically considered a key component of social capital, and refers to the features of social life "that enable participants to act together more effectively to pursue shared objectives" (Putnam 1995: 664-665). This "generalized trust" does not refer to how much someone trusts his or her personal friends or family members, but rather his/her trust in a more generalized other. That is, the generalized trust variable refers to how much a person trusts unspecified persons.

Other scholars have in their definition of social capital put more stress on the norms and networks that enable people to act collectively (Stolle and Rochon 1998; Woolcock &Narayan 2000). Several authors thereby point out that not all networks and not all relationships are conducive to social capital, but only those characterized by trust and reciprocity among sets of individuals (Beard 2007; Cassar, Crowley and Wydick 2007). In similar vein, Paxton (2002, 2007) suggests that one should differentiate between associations with high or low levels of organizational embeddedness (measured via the extent to members' multiple memberships; see also Coffé and Geys 2008; Geys and Murdoch 2010).

The concept of social capital has attracted increasing attention in academic work as well as among public policy-makers (and the media). From an economic perspective, at least part of this interest is due to social capital's apparent importance for economic outcomes (Knack & Keefer 1997; Zak and Knack 2001; Guiso et al. 2014; for a critical discussion, see Berggren et al. 2008). Clearly, however, when social capital matters so much for economic outcomes, it becomes important to understand its determinants, where it comes from and how it can be developed and/or maintained (Burt 1997). Both the increasing attention to social capital and its role for economic outcomes has played a great role in motivating me to find the relationship between income inequality and social capital. In the remainder of this preliminary master thesis report, I will first bring forward the exact research question to be analysed. Then, I will discuss the concept of social capital in the Scandinavian (and more general) context, and provide a detailed literature review on previous work into the relation between economic inequality and social capital. Finally, I briefly discuss the key aspects of the data and empirical methodology, which I will use during my master thesis research.

Keywords: Social capital, trust, Inequality and Economic growth.

RESEARCH QUESTION

In my master thesis, I seek to explore the relationship between social capital and income inequality, and thereby focus on the effect inequality has on the development and/or maintenance of social capital. The main research question will be:

"Does income inequality affect social capital?"

In addressing this research question, I will present how income inequality and social capital have developed historically, and how these developments relate to each other. My empirical focus will be on Norwegian municipalities. There are several reasons why Scandinavian countries offer an especially interesting testing ground for research on social capital. It is, for instance, argued that the observed high levels of social capital in the Scandinavian countries can be explained by their high degree of equality, low level corruption and predominance of universal non-discriminating welfare systems (Rothstein & Stolle 2003). My analysis aims to look deeper into one these alleged driving forces: i.e. the role of income (in)equality. I have contacted the NSD's Kommunedatabasen and I have received access for a year to all available data that is of relevance to this study.

SOCIAL CAPITAL: A LOOK INTO SCANDINAVIAN COUNTRIES

Robert Putnam (2000) argues that social capital has been in steady decline in recent decades in the United States. Among the factors he employed to measure this are reducing trust levels among US citizens, falling memberships in voluntary associations and declining volunteerism. However, his work does not appear to align with the Scandinavian situation. It is commonly acknowledged that Scandinavia continues to perform well with regard to many aspects of social capital, such as the level of generalized trust and the density of membership in associations. Contrary to developments in the United States, therefore, there is little evidence of a decline in social capital in Scandinavia over the past years (Rothstein 2001; Delhey and Newton 2005).

The theory of social capital quickly got attention in the Scandinavian debate among politicians and public intellectuals as well as among social scientists such as Bo Rothstein (e.g., Rothstein 1995), Per Selle and Dag Wollebæk (e.g., Wollebæk & Selle 2003, 2012), and Christian Bjørnskov (e.g., Bjørnskov 2003). One important reason for this is the Social Democratic type of encompassing and universal welfare state. The Scandinavian welfare state model has been designed to serve the whole population's demand for many different types of social insurance and social services. Schools, health care and care for the elderly have been considered a responsibility of the combined efforts of local and central government (Esping-Andersen 1990). This often led to strong debates about the role of such an encompassing welfare state for social capital.

Theoretically, the relation between welfare states and civic engagement can go both ways. On the one hand, strong welfare states have been argued to 'crowd out' social capital because it works to reduce the value of, and need for, families, communities, and social networks (van Oorschot and Arts 2005). On the other hand, the Social Democratic type of welfare state may well be a result of a society with traditionally strong norms of social trust and mutual reciprocity (Rothstein 1998). Scholars in the latter tradition have argued that "a well-developed welfare state creates the structural and cultural conditions for a thriving and pluralist civil society" because it sets "examples of taking responsibility for the good of others, and of behaving solidaristically and impartially" (Van Oorschot and Arts 2005, p. 6). Despite this theoretical ambiguity, only few studies have attempted to address the issue empirically (exceptions include Kumlin and Rothstein 2005; Van Oorschot and Arts 2005; Kääriäinen and Lehtonen 2006). Moreover, most of these studies also limit themselves to measures of overall civic engagement and do not differentiate types of civic engagement (for a partial exception, see Kääriäinen and Lehtonen 2006).

An additional reason for the interest in the theory of social capital in the Scandinavian countries was its close connection to another political concept, namely 'civil society'. A few years before the publication of Robert Putnam's *Making Democracy Work* in 1993, an intense debate about the development of Swedish civil society started. The argument made was that many European, and especially the Scandinavian, countries were characterized by an unusually close collaboration between the state and major interest organizations in the planning, preparation and implementation of public policies (Rothstein & Stolle 2013).

When looking at a cross-section of countries, trust levels are generally found to be highest in Scandinavia, and voluntary association membership figures also do well in comparison to the rest of the Western world. This has lead to increased attention to factors related to such social capital. Figure 1 below - taken from Rothstein & Uslainer (2005) – documents the relationship between trust (as an indicator of social capital) and income inequality. It shows the connection between trust and the Deininger-Squire measure of economic inequality aggregated to the country level for 43 countries in the 1990s. It also displays the strength of the correlation between both variables as reflected in the slope (and predictive power; or R^2) of a simple linear regression equation. The strong negative relation is a common result in the literature as research has repeatedly shown that income equality is positively correlated to social capital, particularly social participation and trust (Verba et al. 1978; see also next section). This finding also aligns with my writings above, whereby the countries that scores highest on social trust also rank highest on economic equality - such as the Scandinavian countries.



Figure 1

Figure 2^1 shows a similar pattern when using the Gini coefficient as a measure of income inequality and the share of trusting individuals as an indicator of social capital. The figure shows that Norway has a high level of trust and low-income inequality. Again, this is suggestive of the relation I intend to investigate in this master thesis.



Figure 2

¹ Figure from social capital blog; *https://socialcapital.wordpress.com/tag/income-inequality/*: Access date 09.12.2016.

Importantly, while suggestive about the direction of the relation between social capital and income inequality, neither figure is able to say much about the direction of causality. They merely illustrate the correlation between both variables. Whether social capital causes lower income inequality or income inequality causes lower social capital cannot be ascertained from these simple plots (i.e. there is potential for reverse causality). I will return this important causality issue more extensively in future sections.

LITERATURE REVIEW

In this section, I will discuss some of the contributions from academic researchers on the interrelation between social capital and income inequality in general.

When analyzing the relationship between social capital and inequality, scholars generally refer explicitly to the fact that the accumulation of social capital results in higher levels of economic growth (Knack & Keefer 1997; Zak and Knack 2001; Bjørnskov 2003). Alesina & Ferrara (2002, p. 207-208) specifically argue that "when people trust each other, transaction costs in economic activities are reduced, large organizations function better, governments are more efficient, financial development is faster: more trust may spur economic success". In similar vein, Gould & Hijzen (2016) maintain that trust facilitates economic interactions in the private sphere by reducing transaction costs and by mitigating principal-agent problems. This stimulates economic growth. In other words, society benefits from the capacity of individuals to trust and cooperate together (Putnam 1993; Alesina and La Ferrara 2002; Beard 2007). Empirical evidence has been largely supportive of this trust-growth relationship (for a critical discussion, see Berggren et al. 2008), which makes it important to understand to what extent income inequality affects social capital. Indeed, if inequality decreases social capital, it would constitute an (indirect) way through which inequality impacts economic growth and performance (Gould and Hijzen 2016).

From a theoretical perspective, income inequality can affect social capital for a number of reasons. First, and most commonly brought forward in the literature,

income inequality reflects a source of socio-economic diversity in society (Rothstein and Uslaner 2005; Barone and Mocetti 2016; Gould and Hijzen 2016). This is important since people are generally assumed to have an aversion to heterogeneity in their social relations (Woolcock & Narayan 2000; Alesina and La Ferrera 2002).² Hence, higher economic inequality leads to more important 'social barriers' between distinct population groups, which makes that individuals will start to feel less familiar with, and less likely to connect with, other people in their surroundings. This, in turn, makes it difficult to trust others, and will induce a tendency to undermine social capital more generally. The central reason why inequality reduces trust according to this argument thus is that as differences between people are larger, uncertainty increases and trust in other people subsequently goes down.

Second, economic disparities in society may reduce a person's sense of fairness. Especially when income inequality if perceived as the result of personal connections or luck rather than merit, inequality may trigger a belief of unfair advantages for others (Barone and Mocetti 2016; Gould and Hijzen 2016). This belief, again, will work to undermine social capital. Finally, inequality among groups in the population (e.g. with respect to race, ethnicity, income, religion, language, local identity, and so on) may trigger conflicts about redistribution and the financing of public goods (Barone and Mocetti 2016; Holm 2016) as well as about (cultural or political) dominance. Those who have power and/or resources are afraid to loose these 'assets', while the others strive to attain them (Boix and Posner 1998). Such conflicts can weaken social ties and limit the formation of social capital (Delhey and Newton 2005; Coffé and Geys 2006).

All three sets of arguments thus lead to the same theoretical prediction:

Hypothesis: Increased income inequality reduces social capital.³

² This is often linked to the so-called 'homophily principle', which is the propensity of individuals to form interpersonal relations predominantly with individuals having similar social characteristics (Blau, 1977; McPherson et al., 2001).

³ Many of the studies that examine the negative socio-economic implications of income inequality likewise presume that the effects of income inequality are mediated by its negative relation to social trust (Wilkinson and Pickett 2009).

In the empirical literature addressing this hypothesis, most attention has been awarded to the relation between income inequality and generalised trust, while other indicators of social capital have only received very limited attention. The evidence is mixed. Some studies confirm that there is a strong, negative relationship between trust and inequality. This is true for studies using crosscountry data (Knack and Keefer 1997; Zak and Knack 2001; Rothstein and Uslaner 2005) as well as data covering regions in the US (Alesina and La Ferrera, 2002; Twenge et al., 2014; Tesei, 2015). However, Leigh (2006) finds no significant relation between income inequality and trust using data from Australia, while Coffé and Geys (2006) find no connection between income inequality and a more general measure of social capital in data from Flemish municipalities. Similarly, Steijn & Lancee (2011, p. 7) find "no significant effect of inequality on trust when taking into account national wealth" in a sample of Western industrialized countries, which they argue suggests that "in Western countries the amount of resources rather than its distribution explains trust".

Studies that rely on cross-sectional data may lead to inaccurate inferences and furthermore face the critical issue that causal interpretation of the obtained results is equivocal at best (Barone and Mocetti 2016). First, there is a substantial risk of biased inferences due to omitted variable bias, since it is nearly impossible in cross-sectional studies to control for all relevant cultural, social, institutional and other variables that may affect both inequality and social capital. Second, there is the possibility of reverse causality. Whether this leads to upward or downward biased coefficient estimates is a priori unclear. On the one hand, high social capital might induce a redistribution of wealth by supporting the expansion of the welfare state (Bergh & Bjørnskov 2013; see also the discussion in the previous section), and thereby *reduce* inequality in societies. On the other hand, some studies maintain that the growth of social capital facilitates more income inequality. Gould & Hijzen (2016), for instance, argue that variation in trust across areas promotes high economic growth in some places (i.e. those with high trust), but not in others (i.e. those with low trust). This contributed according to these authors to the increasing income inequality across the US states.

Consistent with this discussion, Putnam (1993) in Italy explains that savings banks located in high-social capital areas distribute more of their profits as gifts to

their local communities. Østergaard et al. (2015) likewise find that savings banks located in the areas with the highest level of social capital raise 25 per cent more deposits locally and donate 27 per cent more compared to banks in the poorest social capital areas. This can be interpreted as an example where social capital widens out inequality. A similar interpretation can be taken from a 2014 Forbes article on wealthy Americans and charity, which explained that the richest class of Americans only donates 5% of their income (Savchuk 2014). Moreover, these donations go predominantly into servicing their own particular communities, and thus continue (or even strengthen) the uneven development in the overall society. Again, this would suggest that low social capital contributes to high inequalities.

The first study attempting to tackle these endogeneity concerns if Gustavsson & Jordahl (2008). They use Swedish individual-level panel data covering the 1994-1998 period from the Swedish Election Studies, and match this to county-level information on income inequality. Identification of causal effects derives from an IV estimation strategy with county (or individual) fixed effects, and including a measure of international demand as the exogenous instrument (this is argued to affect Swedish counties differently depending on their industrial structure). They conclude that income inequality brings about a reduction in trust – especially when looking at inequality in disposable income (rather than market income) and for inequality at the bottom end of the distribution.

Bergh & Bjørnskov (2013) instead employ a structural equations model on a sample of 104 countries. The instruments used for income inequality in their analysis are GDP (and its squared term)⁴, the degree of democracy (and its squared term), dummies for religiosity and dummy for common law countries. The findings show that trust facilitates welfare state policies that reduce net income inequality. Yet, in contrast to Gustavsson & Jordahl (2008), net inequality bears no significant relation to trust in this cross-section of countries. Still, the point estimates are consistently negative (as expected), and do reach statistical significance at conventional levels when regarding inequality in market income rather than net, disposable income.

⁴ These instruments are inspired by the Kuznets curve linking economic growth to inequality.

Barone & Mocetti (2016) build on WVS data for the period 1980-2006, which is aggregated to the country level and merged with income inequality measures obtained from the World Bank. In similar vein to Gustavsson & Jordahl (2008), they instrument income inequality with a measure of country-specific exposure to technological change. The findings suggest that income inequality reduces trust only in developed countries and at the top end of the income distribution.

Finally, Gould & Hijzen (2016) employ individual-level data from the American National Election Studies (1980-2010) and European Social Surveys (2002-2012). These are matched with inequality data at the state level from the US Census (for the US dataset) and at the country level from the OECD (for the European dataset). No clear identification strategy is presented beyond the inclusion of numerous individual- and country-level control variables. The results are largely consistent with Gustavsson & Jordahl (2008), and suggest a significant negative relation between income inequality and trust at the bottom end of the income distribution.

DATA AND METHODOLOGY:

DATA:

While most previous studies of the relation between economic inequality and social capital analyse country- or regional-level data, my analysis will use municipality-level data and cover all 428 municipalities currently existing in Norway. To the best of my knowledge, only one other study has previously investigated my research question with data at this level of government (Coffé and Geys 2006). In relation to that study, I use a different measure of social capital, study a different institutional setting and employ an IV approach to tackle the endogeneity of income inequality.

To measure social capital, I will use information about donations to the annual "*TV-aksjonen*". This nation-wide action aims to collect donations for a specific cause on an annual basis since 1974. Data about the level of donations aggregated to the municipality level are available since 1987 from NSD's *Kommunedatabasen*. In this period, donations ranged from 125 to 225 million NOK (in 2008 prices), but with substantial variation in the level of (per capita)

contributions across the Norwegian municipalities. This measure of philanthropy is close in spirit to the use of information about (per capita) blood donations as an indicator of social capital by, for instance, Putnam (2000), Guiso et al. (2004), Buonanno et al. (2009) and Nannicini et al. (2013).

To measure income inequality, I rely on data provided by Statistics Norway on the number of individuals aged 17 and older in a given municipality whose income reached a specific level (collected in six categories ranging from 0-99.999NOK to more than 500.000NOK). This information is available at the municipality level since 1993, and allows constructing the income distribution within each municipality. As such, I can employ it to calculate several measures of income inequality (such as the Gini coefficient and the ratio of top-to-bottom income earners).

I also have access to historical data from 1887 indicating the number of men aged 25 and older in a given municipality whose income reached a specific level (collected in five income categories). This can be employed as an instrument for current income inequality. First, it is likely to be strongly correlated with current inequality since there often exist persistent effects of socio-economic settings from the past. Historical data thus remain linked to current outcomes (Tabellini 2010). At the same time, this historical income inequality cannot reasonably be expected to directly determine social capital today and certainly cannot be affected by today's level of social capital.

Since donations to TV-aksjonen will also be influenced by other factors – such as the wealth of the municipality – the data set will be extended with information about these control variables.

METHODOLOGY:

As an initial analysis, I will aggregate all data to the municipality level and run simple OLS regressions linking donations as the dependent variable to (current) income inequality as the main independent variable. This correlates the cross-sectional variation in both variables, as has been done in the majority of the foregoing literature.

Then, as a second step, I will exploit the time dimension available in the dataset to run fixed effects panel regressions (Gustavsson & Jordahl 2008; Gould & Hijzen

2016). These allow for stronger inferences since they control for any unobserved heterogeneity across municipalities that is fixed over time.

Finally, I will estimate an IV model (Gustavsson & Jordahl 2008; Barone & Mocetti 2016) where historical income inequality is used as an instrument for current inequality. Since the historical data are only available for one year, this requires returning to a cross-sectional analysis.

References:

- Alesina, Alberto, and Eliana La Ferrara. 2002. "Who Trusts Others?" Journal of Public Economics 85: 207-234.
- Barone, G. and Mocetti, S. (2016), Inequality and trust: New evidence from panel data. Economic Inquiry, 54: 794–809.
- Bergh, Andreas and Bjørnskov, Christian, (2013). Trust, Welfare States and Income Equality: What Causes What? IFN Working Paper No. 994.
- Beard, Victoria A. 2007. "Household Contributions to Community Development in Indonesia." World Development 35:607-62.
- Berggren, N., M. Elinder and H. Jordahl (2008). Trust and Growth: A Shaky Relationship. *Empirical Economics* 35(2): 251-274.
- Bjørnskov, Christian. 2003. "The Happy Few: Cross-Country Evidence on Social Capital and Life Satisfaction." Kyklos 56:3-16.
- Blau, P. (1977). Inequality and Heterogeneity. New York: Free Press.
- Buonanno, P., Montolio, D., & Vanin, P. (2009). Does social capital reduce crime? Journal of Law and Economics, 52(1), 145-170.
- Burt, Ronald S. 1997. "The Contingent Value of Social Capital." Administrative Science Quarterly 42: 339-365.
- Cassar, Alessandra, Luke Crowley, and Bruce Wydick. 2007. "The effect of social capital on group loan repayment: Evidence from field experiments." The Economic Journal 117: F85-F106.
- Coffé, H. and B. Geys 2006. Community Heterogeneity: A Burden for the Creation of Social Capital? Social Science Quarterly, 87(5), 1053-1072.
- Coffé, H. and B. Geys 2008. "Measuring the Bridging Nature of Voluntary Organizations: The Importance of Association Size." Sociology 42(2): 357-369.
- Dahl, R. A. (1971). *Polyarchy: Participation and Opposition*. New Haven: Yale University Press.
- Delhey, J. and Newton, K. (2005). Predicting Cross-National Levels of Social Trust: Global Pattern or Nordic Exceptionalism? European Sociological Review, 21 (4), 311-327.

- Geys, Benny, and Zuzana Murdoch. 2008. "How to Make Head or Tail of Bridging and Bonding? Addressing the Methodological Ambiguity." British Journal of Sociology 59(3): 435-454.
- Gould, Eric D. and Alexander Hijzen (2016) "Growing Apart, Losing Trust? The Impact of Inequality on Social Capital" (*IMF working paper*)
- Guiso Luigi, Sapienza Paola, Zingales Luingi 2004 "The Role of Social Capital in Financial Development" American Economic Review, 94(3), 526-556.
- Gustavsson, M. and H. Jordahl (2008), "Inequality and trust in Sweden: Some inequalities are more harmful than others", *Journal of Public Economics*, 92(1-2), 348-365.
- Holm, J. (2016). A Model of Redistribution under Social Identification in Heterogeneous Federations. *Journal of Public Economics* 143: 39-48.
- Kawachi, I et al (1997). "Social capital, income inequality, and mortality." American Journal of Public Health 87(9), 1491-1498.
- Knack, Stephen & Keefer, Philip 1997 "Does social capital have economic payoff? "A cross-country investigation, The Quarterly journal of Economics, 112(4), 1251-1288.
- Kumlin, S. and Rothstein, B. (2005). Making and Breaking Social Capital: The Impact of Welfare-State Institutions. Comparative Political Studies, 38, 339-365.
- Kääriänen, Juha, and Heikki Lehtonen. 2006. "The Variety of Social Capital in Welfare State Regimes: A Comparative Study of 21 Countries." European Societies 8(1): 27-57.
- McPherson, M., Smith-Lovin, L., & Cook, J.M. (2001). Birds of a feather: Homophily in social networks. *Annual Review of Sociology*, 27, 415-444.
- Nannicini, T., Stella, A., Tabellini, G., & Troiano, U. (2013). Social capital and political accountability. American Economic Journal: Economic Policy, 5(2), 222-250.
- Paxton, Pamela. 2002. "Social Capital and Democracy: An Interdependent Relationship." American Sociological Review 67: 254-277.
- Paxton, Pamela. 2007. "Association Membership and Generalized Trust: A Multilevel Model Across 31 Countries." Social Forces 86(1): 47-76.
- Persson, T., Tabellini, G., 1994. Is inequality harmful for growth? American Economic Review 84 (3), 600-621.
- Putnam, R.D. (with Robert Leonardi and Raffaella Y Nanetti) (1993) Making democracy work: Civic traditions in modern Italy. Princeton University Press, Princeton, New Jersey.
- Putnam, R.D. (2000). Bowling alone: Collapse and revival of American community. New York: Simon & Schuster.
- Rothstein, B. and Stolle, D. (2003), Introduction: Social Capital in Scandinavia. Scandinavian Political Studies, 26: 1-26.

- Rothstein, B. and E.M. Uslaner (2005) All for all: Equality, Corruption and Social Trust, World Politics, 58(1): 41-72.
- Sarracino, Francesco and Mikucka, Malgorzata (2016). "Social Capital in Europe from 1990 to 2012: Trends and Convergence," *Social Indicators Research*, February 1-26.
- Savchuk, K. (2014). Wealthy Americans are giving less of their incomes to charity while poor are giving more. *Forbes* "http://www.forbes.com/sites/katiasavchuk/2014/10/06/wealthy-americans-are-giving-less-of-their-incomes-to-charity-while-poor-are-donating-more/#267efb9d5b6d". Accessed on 12/12/2016
- Steijn, S. and Lancee, B. (2011). "Does income inequality negatively affect general trust? Examining three potential problems with the inequality-trust hypothesis." GINI Discussion Paper No. 20. Amsterdam: AIAS.
- Stolle, Dietlind, and Thomas Rochon. 1998. "Are all Associations Alike? Member Diversity, Associational Type, and the Creation of Social Capital." American Behavioral Scientist 42(1): 47-65.
- Tabellini, Guido (2010), Culture and Institutions: Economic Development in the Regions of Europe, Journal of the European Economic Association, 8(4), 677-716.
- Van Oorschot, W. and Arts, W. (2005). The Social Capital of European Welfare States: The Crowding Out Hypothesis Revisited. Journal of European Social Policy, 15(1), 5-26.
- Wilkinson, R. G. and Pickett, K. E. (2009). The spirit level. Why more equal societies almost always do better. London: Allen Lane.
- Wollebaek, Dag, and Per Selle. 2012. "Keeping it Simple: The Scope of Organizational Activity and Generalized Trust." Journal of Civil Society 8(1): 91-99.
- Wollebaek, D. and Selle, P. (2003). The importance of passive membership for social capital formation. In Hooghe, M. and Stolle, D. (Eds) Generating social capital. Civil society and institutions in comparative perspective. New York: Palgrave Macmillan, pp. 67-88.
- Woolcock, Michael, and Deepa Narayan. 2000. "Social Capital: Implications for Development Theory, Research, and Policy." The World Bank Research Observer 15: 225-249.
- Zak, P.J. and S. Knack (2001), "Trust and growth", *Economic Journal*, 111 (470), 291-321.
- Østergaard, C., Schindele, I. & Vale, B. (2015). Social capital and the viability of stakeholder-oriented firms: Evidence from savings banks. Review of Finance, 20(5), 1673-1718.

APPENDIX





Richer countries have higher levels of trust