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Does ethnicity affect normal people in non-political times?

A study that looks at the impact of ethnicity on peoples willingness to contribute to the funding of public goods in an ethnic diversified society.

By: Leonora Laukeland Kleiven

Supervisor: Kjetil Bjorvatn

Independent work in the Master's program in Business Administration, majoring in economics.

NORWEGIAN SCHOOL OF ECONOMICS

Summary

The intention with this study is to contribute to the field of research that looks at the impact of ethnic divergence in a country. More specifically, I investigate social cooperation in an ethnic diversified society by mainly analyzing how people contribute to the funding of public goods through an economic experiment. By doing this, I want to be able to answer if *"ethnicity matter for normal people in non-political times?"*

In the analyses, I have tried to invoke a co-ethnic bias in behavior both by letting players play identified games, where I changed the ethnic composition of the other group members, and by use of priming, intended to make different social categories more salient. The results shows that I do not find that people contribute more to the funding of public goods in a homogenous co-ethnic setting than in a mixed ethnic setting or that people is significantly affected by the treatment primes. I do not find any evidence in this study that people have co-ethnic preferences and that there is a negative effect of ethnicity on peoples willingness to contribute to the funding of public goods. Somewhat surprisingly I find that people contributes less in all games when primed with national identity treatment prime.

Foreword

This paper is written within the specialization in economics as part of a master`s degree at Norwegian School of Economics (NHH).
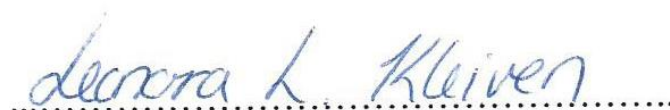
The topic of the study is based on my interest for social responsibility and for the challenges the developing countries faces today. I am very glad I had the opportunity to participate in an economic experiment that highlights cooperation in a diversified ethnic setting, one of the major issues concerning development in Africa today. From start to finish, it has been an interesting, challenging, educational and sometimes frustrating process but where I in the end have learned a lot about doing field experiments and not least about the country in question, Kenya. This has been very interesting as I visited the country for over one month in 2010.

First, I want to thank the economic department who let me participate in their project and gave me all the necessary data and information. A special thanks to my supervisor Kjetil Bjorvatn who along the way has provided me with valuable insight and guidance. I must also thank him for being very patient with me.

I will then like to thank my parents who always supports my choices and who are always there for me – and for being great grandparents.

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Dale, 15 May 2014.

Leonora Laukeland Kleiven

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1.0 Introduction

This chapter presents the motivation behind the research. Furthermore, the research question is presented and limitations and assumption specified. In addition, I will give a short overview over the structure of the thesis.

1.1 Motivation

I love travelling and during my visits to all parts of the world it always astonished me the big difference one finds between people, between rich and poor. Where some live in overwhelming luxury, others struggle from day to day to survive. In meeting with the locals, it always surprises me that those who have the least are the friendliest and seems the happiest independent of race or ethnic background.

But happy alone does not accelerate a country's economy. To reach UN Millennium goals cooperation and economic development are necessary in many parts of the world. To achieve economic development in a country there are many factors in play. A lot of research in recent year's points to the fact that ethnic divergence is a factor to the inequality one finds in the world today and in many African countries, ethnic divisions are a major issue.

Existing literature suggests that a high degree of ethnic division in a country is associated with slow economic growth (Easterly et al. 1997; Bates 1983), low public good provision (Alesina et al. 2005; Miguel et al. 2005), low quality legislators (Banarjee et al. 2009) and armed conflicts (Cederman et al. 2011). A key issue is therefore whether – and how- inter-group division can be rendered less salient to avoid the negative outcomes of ethnicity.

Other research find in contrast that co-ethnic preferences are not universal (Whitt et al. 2007) and Glennerster et al. (2013) find that diversity does not necessary need to hinder collective actions.

Concentrating on one country with a highly diversified population, Kenya, I want to look into how people cooperate by letting participants play different types of experimental games. The intention is that the results from this research can be a contribution to the field of research that looks at the impacts of ethnic divergence in a country.

1.2 Research question

The study is part of a bigger research project that seeks to understand what exactly makes ethnic fractionalization a barrier to cooperation across ethnic lines[1].

The purpose of my study is to investigate social cooperation in an ethnic diverse society (Kenya) by mainly analyzing how people contribute to the funding of public goods. With access to a lot of data and information it has been a challenge to narrow down the purpose of the study to one concrete focus area that captures the essence of cooperation in a diversified ethnic setting. With this as a background my research question is:

"Does ethnicity matter for normal people in non-political times?"

With normal people I mean that the study is based on a representative sample of the population in Kenya. With non-political times I mean that the summer of 2012 when the experiment was conducted were still far away from Election Day and the start of campaigning towards the upcoming election in 2013, something existing literature suggest may reinforce ethnic tensions (Eifert et al. 2010; Posner 2005).

To answer the research question I analyzed people's contributions in three different public good games with different ethnic composition, an anonymous-, mixed- and homogenous game. In the anonymous game participants have no information about the others players. In the mixed game participants play with a co-ethnic and a non-co-ethnic and in the homogenous game, all participants are categorized as being co-ethnics. A person's contribution level in the game is synonymous with this person's willingness to cooperate with other. I also look into findings from the dictator game to see if transfer in the dictator game somehow explain contribution level in the public good games.

In addition to document cooperation in within-group (co-ethnics) and cross-group-interactions (non-co-ethnics) it is also interesting to test if the (potential) differences one finds is subject to experimental manipulation by finding out if the differences can be dampened or intensified by

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[1] By making participants play different types of economic games, isolating different mechanisms, the research will attempt to answer whether or not ethnic fractionalization arise from innate cultural differences or if they are shaped by the surrounding political environment. This will be done by comparing data collected at different times both from Kenya and Tanzania.

priming subjects with different social identities. A key issue is therefore on whether – and how – inter group division can be rendered less salient. Investigating the impact of different social category norms through priming, and how it affects cooperation in an ethnic diverse society is new and may give valuable information about the problems associated with ethnicity. The point by including priming to the analyses also is to try to elicit ethnic bias in cooperenon in different ways; both by varying the ethnic identity of the groups the participants play against, and by priming.

The analyses is divided in three parts. In the first part, I concentrate on how people in the control group contribute to the funding of the public good across games. In the second part, I look for possible explanations for the result in the first part by including beliefs of others contribution in the analysis as well as results from the Dictator game. Finally, in the third part I introduce the different treatments and see how priming affects people's choice to cooperate.

1.3 Limitations and assumptions

The experiment was conducted as a field experiment with a total of 608 participants. Data from the experiment was collected and analyzed through statistical methods. The experiment was conducted at a certain point in time, July/August 2012. One can therefore expect that changes may occur or develop over time, especially related to the political climate in the country. The study takes this into consideration by including "non-political" times in the research question.

1.4 The structure of the thesis

The study consists of 14 chapters. In **chapter 1,** I present my motivation for choice of topic. The research question is presented and limitations and assumption specified. In addition, I give a short overview over the structure of the thesis. In **Chapter 2,** I present ethnicity as phenomenon and relate ethnicity to the African context before I review literature on the field. **Chapter 3** introduces the country of interest, Kenya, from colonial time to present day. In **Chapter 4,** I present the public good model and discuss how taxation can be a solution to provide a sufficient level of public goods in a country. **Chapter 5** presents the purpose of the study, the choice of research method and introduces how the different treatments was inserted in the games. **Chapter 6** presents the economic experiment, all the way from data collection to data validity. In **Chapter 7,** the results for the control group in the public good games is presented and discussed. **Chapter 8** provides possible explanations for the results found in

chapter 7 based on further econometric analysis by looking at beliefs of others contribution and findings from the dictator game. In **chapter 9,** I include priming in the analysis and look at how priming individuals with different salient category norms affects people's behavior in the public good games. **Chapter 10** presents and discusses the main findings from the research. **Chapter 11** concludes on the findings and **Chapter 12** discusses the implications from the research.

The paper ends with a bibliography in **Chapter 13** and appendices in **Chapter 14.** The chapter consists of 12 appendices, where appendix 14.1 to 14.11 contains supplementary information related to the results from part I, II and III. The last appendix, appendix14.12 contain the "Stata do-file" used to produce the results.

2.0 Theoretical framework

In this chapter I present ethnicity as phenomenon and it`s development as a concept. Then I look specifically at ethnicity in Africa before I review current literature on the field. As I see it, cooperation is dependent of a non-hostile climate between ethnic groups. I will therefore also focus a lot on ethnic conflicts in this chapter.

2.1 Ethnicity

Throughout the world, there has been an increasing focus on the importance of ethnicity as an explaining factor to many of the ongoing conflicts and problems in the world today, from underdevelopment in African countries to issues relating sovereignty in Sri Lanka.
Since the end of Cold War the concept of ethnicity have gained more attention, particularly in conflict studies, and according to Eriksen (2002), this expansive coverage among social scientists in the 80s and 90s are related to an extensive interest in globalization and modernization (Eriksen 2002). According to the Center for Systematic Peace, the proportion of conflicts labeled as ethnic has increased from 15 percent in 1953 to nearly 60 percent in 2005 (Stewart 2008), illustrating Eriksens` point above. And with a high level of ethnic conflicts it is reasonable to assume that cooperation between different ethnic groups also will be affected.

2.2 Theory

There exist numerous different definitions concerning ethnicity and ethnic identification. In 1922 the sociologist Max Weber wrote about ethnic groups in a novel way including in the definition a subjective element that previously had been absent, defining ethnic groups as;

"...those human groups that entertain a subjective belief in their common descent because of similarities of physical type or of customs or both, or because of memories of colonization and migration… furthermore it does not matter whether an objective blood relationship exists" (Weber cited in Swedberg 2005, p. 91).

In his definition, Weber differentiates between racial and ethnic identity by suggesting that a blood relationship is not necessary for ethnic identification. The Norwegian social anthropologist Barth; claims that ethnic distinction is based on social interactions and mutual acceptance to persist, but in which he emphasizes the players own self-perceptions as the key for ethnic distinction (Barth 1969) and Eriksen (1993, p 12) defines an ethnic group as;

"...an aspect of social relationship between agents who consider themselves as culturally distinctive from members of other groups with whom they have a minimum of regular interaction."

As noted from the above definitions, group culture is now important in defining ethnicity and ethnic identity in contrast to earlier views where one often confused race and racial identity with ethnicity. Today there exists a clear distinction between these two concepts. Racial identity is which racial background you have that you most identify with, whereas ethnicity is more about the cultural aspects of a group. People from different races and nationalities can thus belong to the same ethnic group. For example, Maasaii people living in Kenya and Tanzania have different nationalities but share an ethnic identity. At the same time, people living in the same country may belong to different ethnic groups. A Kikuyu and a Maasaii, both from Kenya, will oppose to being classified as having the same ethnic identity.

Another common division when defining ethnicity and ethnic identity is the distinction between an objective and subjective approach as noted in both Webers and Barths definition of ethnic identity. An objective perspective regards ethnic distinctions as an existing fact independent of the players' own knowledge and awareness. In contrast, the subjective approach to ethnicity emphasizes the shared sense of consciousness among a distinct group of people, which separates them from others (Eriksen 1993). Combining these perspectives one can say that ethnicity is about attribution of characteristics, both from others and self. According to Eriksen (1993) the definitions of ethnicity as objective or subjective are important as they give an; *"appreciation of systematic distinction between insiders and outsiders; between Us and Them"* (Eriksen 1993, p. 18). Moreover, he points to the fact that this distinction gives groups symbolic meaning (ibid).

2.3 Africa

Most African countries have a very diverse ethnic population. During colonial rule, borders were divided to serve the interests of the colonialists with no concerns for the people living there in the first place, and during this time the term ethnicity was not in use in African countries. Most of the politics and large social groupings were referred to as a tribe and this term was originally used to refer to a group of people who shared a common language, territory and custom. Later, the term was extended to also include groups of people with well- organized hierarchical political system under the leadership of a chief or a king (Tonah 2007).

During the colonial era the colonialist needed chiefs to help them rule and Braathen (2000) argues that the colonialists appointed chiefs from a particular ethnic group to be rulers and gave them benefits over other ethnic groups. The chieftaincy institutions that were established by the chiefs were also based on ethnicity, making one ethnic group superior and the others inferior (Braathen 2000). As noted by Bayart (1993, p. 42);

"Tribalists think, more or less consciously, that men and women of their tribe and clan are superior to others, and that as a result the others should serve and obey them. The tribalist tries to impose the hegemony, the predominance of his tribe and his clan."

Although colonial rule has ended the majority of the borders introduced during colonialism still exist today, and ethnic division are still a major issue in many African countries. In Africa ethnic division are associated with slow economic growth (Easterly et.al 1997; Bates 1983), low public goods provision (Alesina et al. 2005; Miguel et al. 2005), low quality legislators (Banjerjee et al. 2009) and conflicts (Cederman et al. 2011; Krebs 2007). Since 1960s at least 5 million Africans have been killed in civil wars and internal strife. Many more have lost their homes and are living as refugees or in exile (Wamwere 2001). Several of the reasons behind these conflicts have been grounded on ethnic discrepancy. In Rwanda in 1994, over 800 000 tootsies, or 11 percent of the population were killed over a three month period supposed to end the country's "tutsi problem" (ibid). The symbolic element of ethnic identity becomes even more evident in resources allocation. This is buttress by Bayart (1993) who argued that;*"interaction of identity becomes the structure of power and allocation of power and resources"* (Bayart 1993, p. 51).

Ethnic identity therefore dictates who gets what, when and how in society. Ethnicity *"is a means (now) for disadvantaged groups to claim a set of rights and privileges which the*

existing power structures have denied them" (Bell 1975, p.174) Based on this idea of ethnicity, ethnic conflict becomes inevitable.

2.4 Conflicts

The causes of ethnic conflicts are debated and most literature reviews on ethnic conflicts differentiate between two points of view: the natural on one side vs. the artificially or socially constructed on the other. The primordial or natural approach at the one extreme takes ethnic identity as given at birth and relies on a concept of kinship between members of an ethnic group (Brown 2001). Brown (2001) claims that although primordialism has been discredited in recent years it still plays a part in accounts of conflicts between ethnic groups. Former US president Bill Clinton argued that the end of the Cold War; *"lifted the lid from a cauldron of long-simmering hatred. Now, the entire global terrain is bloody with such conflicts"* (quoted in Brown 2001, p. 209).

On the other extreme, one finds the instrumentalist approach, which views ethnicity as instrumental. One of the proponents of this view, Barth, argues that; *"People act on the basis of ethnic categories only if they are perceived as useful [in the domain where the distinction is expected to give a return]"* (Barth 1969, p. 30).

This approach first came to prominence in the 1960s and 1970s in the United States, where community leaders found that turning to their cultural group was more effective in search for political power and resources than turning to their social classes (Smith 2001). For proponents of this view *"ethnicity and race are viewed as instrumental identities, organized as means to particular ends"* (Cornell et al. 1998, p. 61). In contrast to the primordial view, instrumentalists think that ethnic identification provides conditions rather than causes for conflicts and that ethnic difference alone is not sufficient to explain conflicts.

The distinction between instrumentalism and primordialisme is perceived as a useful division because it highlights the duality of the concept of ethnicity; *"ethnic organization must at the same time serve political goals and objectives and satisfy psychological needs about meaning and belonging"* (Eriksen 2002, p. 54).

The quotation above illustrates very well the complexity of ethnic conflicts. In order for ethnic conflict to arise and exist the involved parties must primarily be aware of their ethnic identity and then feel that the causes of the conflict are rooted in ethnic discrepancy.

2.5 Consequences of ethnic conflicts and rivalries

Independent of school of thought it is commonly accepted among scholars that a high level of different ethnicities in a country may lead to sub-optimal policy. The awareness of the issues concerning ethnicity and ethnic identification in the last decades has brought ethnicity at the center of focus for many researchers aiming to identify causes behind the lack of development in Africa.

On an overall level, Hameso (2001) argues that ethnic conflicts have dire consequences such as reducing planted areas, displacing person, hampering relief efforts and precluding economic reforms (Hameso 2001). In addition, he points to the fact that ethnic conflicts also have a negative brain drain effect and negative effects on educational and technological impacts in a country (ibid).

Other research finds that Africa's multi-ethnic environment is an important factor in explaining its low growth. From a macroperspective viewpoint Easterly et al., (1997) investigate the reasons behind Africa's "growth tragedy". In 1960 Africa's growth potential was ranked ahead of East-Asia, but time has shown that were East-Asia has experienced enormous growth, average GDP did not grow in Africa in the period 1965-1990 (Easterly et al., 1997). Their thesis is based upon that ethnic diversity shapes policies that again shape economic growth and they find that ethnic diversity adversely affects many public policies associated with economic growth and that the fact that Africa is more fractionalized than East Asia can explain around 1/3 of the growth difference between these two continents. In sum, they show that ethnic diversity differences are important for explaining Africa's growth tragedy versus Asia's miracle (Easterly et al., 1997).

Hjort (2011) on the other hand provides novel micro econometric evidence on the direct effect of ethnic division on productivity. His study is based on a flower plant production site in Kenya where the plant uses a randomly rotation process to assign workers to position. This leads to three types of teams: ethnically homogenous teams and teams in which one or both downstream workers belong to a tribe in rivalry to the upstream workers tribe.

Summarized, Hjort`s main finding (Hjort 2011, p. 1) is that;

"..inter-ethnic rivalries lower allocative efficiency in the private sector, that the economic cost of ethnic diversity vary with the political environment, and that in high-cost environments firms are forced to adopt "second best" policies to limit discrimination distortions."

As in the private sector, ethnic conflicts and rivalries will make it more difficult to agree on public policies that are good for a country. Firstly, incumbent governments will not implement stabilization policy where the costs are today and the gains come in the future because they anticipate that they may not be in power to harvest the gains although the benefits goes to the population they are supposed to serve. Not surprisingly, the same mentality seem to apply for voters also. Investigating voter's behavior in a simulated voting experiment in Uganda, Carlson, et al. (2011) aim to figure out whether voters unambiguously vote for candidates of their own ethnicity or not. She finds that voters put equal weight on ethnicity and earlier performance of the candidate. However, when they include an interaction effect between ethnicity and record they find that better performance among co-ethnics increase the probability of winning. But for voters who are not of a candidates co-ethnicity performance are of no importance. The implications is that co-ethnicity does not replace utility from a candidate`s quality, but also that a candidate cannot earn the votes of his non-co-ethnics by performing well. Together this indicates that voters will maximize their likelihood of future goods provision by voting ethnically (Carlson et al. 2011).

A second point is that ethnic conflict may lead to uncoordinated corruption, which Schleifer et al. (1993) show are more harmful than centralized corruption, increasing the level and negative consequences of corruption in a country.

Lastly, as will be the focus of this paper, ethnic discrepancy and contradictions, may make it more difficult to agree on public goods provision such as schools, health care, infrastructure and so on. Different priorities between different ethnic groups, all wanting to enrich themselves, does not provide a good environment for decision making harming the general population in a country. Miguel (2004) examines how central government nation-building policies affect interethnic cooperation by testing if ethnic diversity has an effect on local collective actions. He focuses on two neighboring countries with similar geography and histories, Kenya and Tanzania, and looks at contribution to the funding of public schools. He finds that the Tanzanians on average contribute more to the funding of public goods than the Kenyans and attributes this to the difference in nation-building policies. While the government in Tanzania has pursued active nation-building policies like a national language and a common educational curriculum after independence, the Kenyan leaders have been tribalists and instead fostered competition along ethnic lines (Miguel 2004). He finds that parents in Kenya are less willing to participate in *"community fund-raisers because of the*

lack of trust across ethnic groups and the absence of a feeling of ownership for the school" (Miguel 2004, p.359).

Where Miguel investigate a direct link between ethnicity and contribution to the funding of public schools Habyarimana, et al. (2007) try to identify the underlying mechanisms that drive the connection between ethnic heterogeneity and the under provision of public goods. The aim is to understand why some communities are able to generate high levels of public goods whereas others are not. A major implication of their findings is that generating higher levels of public goods provision in diverse communities does not necessarily require the segregation of ethnic groups. Indeed, they find that just the opposite are needed; policies that promote repeated social interactions and the free flow of information across ethnic lines (Habyarimana et al. 2007).

Most of these examples illustrate that it appears to be a clear negative effect of ethnicity in Africa. The same people affected by the negative outcomes of ethnic discrepancy and contradictions are the same people that contribute to maintaining the attitudes and thus the negative effects, due to their behavior. As this chapter has shown, issues revolving around ethnicity are complex. The concept of ethnicity can take on different meanings and be understood in different ways depending on the school of thought. The social climate also affects how ethnicity is perceived and experienced. Ethnicity can be emphasized or under-communicated, be associated with joy or disgust and be imposed or denied depending on the situation and context where ethnicity is experienced.

3.0 Case Study

In this chapter I present the country of interest in this study, Kenya. During 50 years of independence Kenya has experienced internal as well as external challenges. Giving a short overview of the main events in Kenya provides an insight into some of the problems the country has faced and still struggles with and gives an understanding of the issues associated with ethnicity today. I end the section with a short overview over Kenya's ethnography today.

3. 1 Kenya

The Republic of Kenya is located in eastern Africa populating around 43 million people (CIA 2013). Throughout the last century, Kenya has gone from being a colony of the United Kingdom to become an independent African state. The transformation to a well-functioning democracy with a stable economic development has not been easy and Kenya is today still facing many challenges. It is estimated that roughly 50% of the population live below the poverty line, the unemployment rate is as high as 40% and 13% of the population aged above 15 suffer from illiteracy (CIA 2013). In addition, corruption at all levels in society is a widespread problem and ethnic conflicts between different groups occasionally lead to violent clashes.

3.2 Colonial time

Based on commercial interests Britain formed in 1895 the British East African Protectorate, remaining a protectorate until 1920 when Kenya officially became an English colony (Anderson 2006). During the first period of British rule the British targeted at bringing Kenya under the imperial rule and improve the country`s condition by bettering the welfare of the population and developing the economy. Instead, white settlement in the region lead to massive exploitation of the native population and racial- discrimination and dominance. The natives lost many of their rights, among them the right to participate in national politics. African political participation was confined to local government only and thereby they had no real impact on national issues concerning themselves (Anderson 2006).

In the second period of colonial rule, from 1920 until independence African resistance against the imperial rule accelerated (BBC, 2013). The punitive and suppressive economic, social and political policies implemented by the imperialist`s provoked a growing resentment among the Kenyan population which led to the formation of the Kikuyu association in 1921 to fight for the rights of the Africans. The regime managed for many years to suppress and maintain control over the rebels, but after the Second World War resistance and violence towards white settler´s increased (ibid). The Kenyan African Union (KAU) formed in 1944 to campaign for African independence. In the 1950s, a secret Kikuyu guerilla group known as Mau Mau began violent campaigns against white settlers. At the same time the labor movement began protesting against the harsh conditions the workers were working under and a state of emergency was declared in October 1952. Following the riots, KAU was banned and Jomo Kenyatta who became KAU leader in 1947 was charged with management of Mau Mau and jailed. After thousands being brutally massacred the rebellions were put down in 1956, but the

state of emergency lasted until 1960. The same year Britain announced plans to prepare Kenya for majority rule. Jomo Kenyatta was freed in 1961 and the 12 of December 1963 Kenya attained their independence and Kenyatta became Kenya`s first prime minister. The following year the Republic of Kenya was formed with Kenyatta as president and Oginga Odinga as vice-president (ibid).

3.2 Post-colonization

After independence Kenya African National Union (KANU) became Kenya`s dominant political party and Jomo Kenyatta stayed as president until his death in 1978 (Hornsby 2013). His first vice-president Odinga which were a Luo left KANU in 1966 forming Kenya People´s Union (KPU), a socialist rival party. In the years that followed tension between the two parties and their different ethnic groups escalated and the assassination of government minister Tom Mboya in 1969 sparked ethnic unrest (ibid). After KPU supporters attacked a Kenyatta entourage at the opening of a hospital later that same year KPU were banned and Odinga arrested (BBC 2013). KANU then became the only party to contest election. When Kenyatta died in 1978 he was succeeded by his vice-president Daniel arap Moi. He made KANU the sole legal party and in 1982 Kenya was officially declared a one-party state by National Assembly. Opposition groups were suppressed and imprisoned. However, attempts to form an opposition to Moi continued through the 80s and challengers made progress because of the country´s economic crisis. The international community openly criticized the political arrests and human rights abuses and Moi succumbed to the pressure and released political prisoners in 1989 (BBC 2013; Hornsby 2013).

Violent unrest marked the beginning of the 1990s, and the opposition accused the government of corruption. In the wake of the unrest the Forum for the Restoration of Democracy (FORD) party was established (BBC 2013). The party was outlawed and the members were arrested. Foreign governments who contributed financial assistance to Kenya suspended aid and demanded political reforms and in late 1991 KANU agreed to introduce a multi-party political system. The new parties that emerged were essentially divided along ethnic lines, as the majority of the leadership and members came from one or two ethnic groups. Moi and KANU exploited internal contradictions between the new parties and used state funds to weaken and divide the opposition by infiltrating the parties to create destabilization and dissatisfaction among their supporters. In addition, in both the 1992 and 1997 elections restrictions on

opposition leaders' freedom of movement were imposed, so they could not visit all parts of the country (ibid).

In Kenya as in other fractionalized countries politicians are known to rely on ethnicity to perpetuate their dominance and hegemony in an atmosphere characterized by scarce resources, fear and prejudice. In the build-up of the 1992 elections, the contradictions between different ethnic groups led to tribal conflicts in the west of the country, which led to the killings of approximately 2,000, leaving many thousands more injured and even more people displaced from their homes. The economic consequences of the clashes were enormous as granaries, farms and shops went down in flames and food shortage was one of the far reaching economic consequences of the clashes making people dependent on international food aid and relief (ibid).

The violence in and between the different parties made the ethnically fractured opposition fail to dislodge KANU from power in the 92 elections. However, dissatisfaction with Kenya`s social and economic situation among most of the Kenyan population grew and in the build-up to the 97 elections the civil society conducted demonstrations throughout the country calling for democratic reforms and demanding constitutional changes reducing power of the president (Hornsby 2013). In the capital Nairobi, the demonstrations violent turn down by the regime was filmed and broadcasted by CNN, which led to unwanted publicity for the regime (BBC, 2013). Following the demonstrations and the associated killing of 20-25 demonstrators, the World Bank withheld disbursement of $5bn in structural adjustment credit (ibid).

For the first time since the legalizing of the opposition in 1992 this development led Moi and KANU on the defensive and the regime had to give in to the demands of certain constitutional changes ahead of the 1997 election (BBC 2013). These changes were however of limited character and fundamental questions such as reduction of the power of the president were put aside until after the election.

Moi and KANU won the election with 40% of the votes (BBC 2013). The requirements for constitutional changes, however, continued, and Moi were forced to create a commission to look into the possibility of a revision of the constitution. The Commission proposed a sharp reduction in the president's power, coupled with a strengthening of other state bodies, especially the Parliament. The hope was that this would lead to a more genuine democracy, but the Moi regime was not willing to give in to the demands.

The opposition continued to pressure the regime and in the 2002 election the opposition surprised everyone by standing together as one unit, and National Rainbow Coalition (NaRC) and Mwai Kibaki, won a landslide victory ending Daniel arap Moi´s 24-year rule and KANU`s four decades in power (ibid).

3.3 Last decade

The beginning of this century has shown that Kenya`s economy has been progressing mainly because of expansions in tourism, telecommunication, transport and construction and a recovery in agriculture (CIA 2013). However, despite the fact that Kenya is the biggest and most advanced economy in east and central Africa, the country still faces many problems and is reckoned as a poor developing country. The Human Development Index, a combined statistic measure that indicates how well a country performs in life expectancy, education, and income put Kenya at rank 145 out of 186 countries (Human Development Report 2013). The last ten years have been characterized by internal problems such as corruption, ethnic clashes over land resources, food shortages due to droughts and flooding and dissatisfaction with the countries leadership and the writing and approval of a new constitution as well as external problem with the Somali terrorist group al-Shabab (BBC 2013).

The disputed 2007 December election led to violent clashes between different ethnic groups, mainly Kikuyus and Luos, and the killings of approximately 2000 people. International attention and excitement toward the 2013 election, the first one held under the new constitution, was therefore huge. Uhuru Kenyatta, son of Jomo Kenyatta, got the majority of votes and was elected Kenya's new prime minister. The election did cause political tension rooted in ethnic discrepancy but the chaotic and violent ethnic clashes following the 2007 election were avoided (The Economist 2013). Yet, the country remains badly split, largely along ethnic lines. The years to come will show how far Kenya has come in their democratic processes.

3.4 Kenya`s ethnography

To be able to understand Kenya`s history [and the challenges the country faces today] one must understand the people of the country. With over 42 different ethnic groups, Kenya is one of the most fractionalized countries in the world. The African people indigenous to Kenya, who form 98% of the total population falls into three major cultural and linguistic groups, the Bantu, Nilotic and Cushitic. Although Cushitic and Nilotic peoples occupy most of the land area, over 70% of the population is Bantu (Nangulu 2013). These groups are again divided

into many more subgroups, each with a distinct history based on migration, evolution of the group, interaction with others groups, culture and social and political set-up (ibid). No particular ethnic group forms overall majority. The Kikuyu people, who account for around 22%, forms the largest single ethnic group in Kenya and have played a major role in the nation`s political and social development. The estimated proportions of other major and influential groups are Luhya 14%, Luo 13%, Kalenjin 12%, Kamba 11%, Kisii 6%, Meru 6%, other Africans 15% and non- Africans 1% (CIA 2013).

Despite the above classification of the different ethnic group's it´s hard to speak of a "pure" ethnic group in Kenya. Over the years, the groups have interacted through marriage, trade, association, assimilation, education, politics and new settlement patterns (Nangulu 2013). Ethnicity is however still maintained as a form of identity and belonging and as the review of the country's history shows it is very clear that ethnicity has played a very important role in the political arena in Kenya.

4.0 Public Goods

In this chapter I will address public goods. This research attempts to answer if ethnicity affects normal people in non-political times. To be able to answer this question I focus on social cooperation in an ethnic diversified population by looking at how people contribute to the funding of public goods. Public goods are central for the research and it is therefore natural to use some time and space explaining what a public good is, the complexity with public goods and how the society normally deals with financing of these goods.

4.1 Theory

Public goods are goods or services that can be consumed by several individuals simultaneously without diminishing the value of consumption to any of the individuals (Pindyck et al. 2005). This key characteristic of public goods is termed *non-rivalry* and implies that the additional marginal cost of serving another user is zero and is what most strongly distinguishes public goods from private goods. A pure public good is also characterized by its *non-excludability*, that is, a good cannot be withheld from those who do not pay for it without expensive precautions (ibid). Examples of such public goods or services includes fresh air, national defense, stabile social conditions, law enforcement, parks and other goods that benefit the whole population.

However, the non-excludability characteristic of public goods gives people incentive not to contribute to the funding of these goods and instead free ride on other peoples contributions as they cannot be excluded from the usage of the good, i.e., they do not pay for the benefits they receive from consuming the public good. The consequences of people free riding are that these goods normally will be under-supplied in the market since private firms cannot earn sufficient revenues from providing the social optimally level of these goods (Pindyck et al. 2005). Below I show a model which illustrate this issue.

4.2 Model
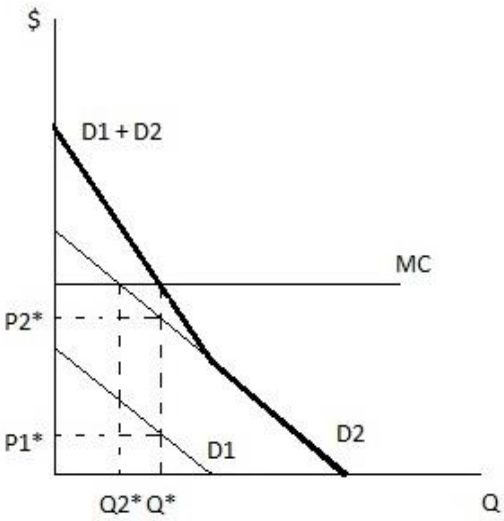
D1: demand of individual 1 for public good Q

D2: demand of individual 2 for public good Q

D1+D2: aggregated demand for individual 1 and individual 2 for public good Q

Q: quantity of the public good

P: price for the public good

MC: marginal cost of providing the public good Q

Figure 1. Illustration of the provision of public goods.

As seen from the model above, the aggregated demand in the economy for a public good is the vertical sum of individual demand curves and is summed vertically because all individuals have the same opportunity to consume the quantity provided due to the non-excludability condition. In the short term the equilibrium price for private goods are equal to the marginal cost.

But in contrast to private goods, the market price is no longer an efficient mechanism for public goods since the stock of public goods is never consumed away. If the equilibrium price for the public good in question was $P = MC$ then individual 1 would not pay for the public good. Individual 2 would only pay for Q2. Since $Q2 < Q^*$ the efficient level of the public good will not be met.

A suggested solution to this problem is to provide Q* and then charge each consumer a unit price equal to the individuals marginal value at Q*. For individual 1 that would be P1* and for individual 2, P2*. The high demand individual, individual 2, will pay a larger amount than individual 1 who has a lower willingness to pay for the good. The problem with this is that for a given quantity, individuals will always wish to pay the lowest price possible and therefore not self-select to their optimal price since they cannot be excluded from consuming the good anyway, showing that unlike price, quantity is not an effective market mechanism and the reason for why inefficiency arises in providing public goods.

To summarize the main problem concerning public goods is the non-excludability condition. Since no one can be excluded from using the good people have incentive to wait for others to purchase the public good so that they can free ride. Due to this imperfection there hardly ever exist any private markets for such goods, since no one is willing to purchase it. If however individual 2 decide to purchase it, the private market will provide a level of the public good equal to Q2, which is much lower than the social optimal level, Q*.

4.3 Provision of public goods

Deciding the extent of public goods is difficult when people have different preferences for diverse public goods. A general rule is that as long as the consumer surplus exceeds the total cost of providing the public good the good should be provided. In cases where this condition is not met, the good should not be provided. The question that arises then is how one can find peoples willingness to pay for public goods when it does not exists any market or price for these good? As social stable conditions and fresh air among other public goods are considered as necessities for most people in the society, provision of public goods requires collective actions in lack of a private market. The solution is that the government should provide these services, financed mainly through collection of taxes. The supply is therefore not decided by the individual consumer but by the society as a whole. But tax incomes and thus the level of provision of different public goods is dependent on the tax level and effectiveness of the taxation system in each country. Where rich western countries have developed well-functioned system for tax collection as well as good control practices the same efficiency is lacking in most developing countries. In addition, a high level of corruption in many developing countries is a widespread phenomenon, which in many cases will further lower tax incomes. According to International Monetary Foundation (IMF) a minimum tax level of 15

percent of gross domestic product (GDP) is necessary to secure funding of basic government tasks such as law and order, education and health (Bistandsaktuelt 2010). A challenge for poor countries is to tax more of the population and businesses. In the rich OECD countries tax incomes accounts for 36 percent of the GDP whereas in low-income countries this number is as low as 13 percent creating a huge development gap between the developed and underdeveloped parts of the world. Rural areas in poor developing countries is especially affected as they often receive a lower part of state subsides than more urban areas, which in turn leads to people in the countryside being more dependent on cooperation and local fund raising to fund public goods such as for examples schools and water wells.

4.4 Summary

In a setting with mixed ethnicities, both Kenya's history and current literature on the field show that there exist contradictions and attitudes that prevents cooperation across ethnic lines, and it is not unlikely that the problem with people free riding may be greater in an ethnic diversified society than in a more homogenous environment. People may place less weight on the utility of non-co-ethnics and have less altruism for people from other ethnic groups. In addition, coordination across ethnic groups may be more difficult than coordination within an ethnic group due to different languages, cultural practices and so on, which in turn also affects both their will and possibility to cooperate with others.

5.0 Methodology

In this chapter, I present the choice of research design before I end the chapter with a review of the use of primes as treatments.

5.1 Research design

Johannessen et al. (2010) explains that the research design is about designing, where the researcher starts with the research question and considers the best possible way to implement

the survey from start to finish. Punch (2005) points to the fact that the existing literature distinguishes between three uses of the term research design, ordered from general to specific. Central in all, the researcher must consider four question; what strategy to follow, within what framework, from whom to collect the data and finally how the data will be collected and analyzed. He explains that these four components of research design have the function of situating the researcher in the empirical world (ibid).

The research design chosen for the study are a randomized experiment in form of a lab experiment. A randomized experiment is characterized by randomly assigning different subjects to research groups, where each group in turn is offered a different treatment (Bloom, cited in Alasuutari et al. 2008). Instead of relying on survey evidence, which makes causal inference problematic, I am with this approach able to identify any behavioral changes directly through standard laboratory games.

The method was developed by Ronald A. Fisher during the early 1900s and was first widely used in the testing and development of new medicines. Since the 1960s the method has also been widely used in social research, from examining issues such as child nutrition to health insurance etc. (Bloom, cited in Alasuutari etal. 2008). Since the mid-90s, development economists have embraced experiments as a means for testing economic theories and hypotheses. According to Esther Duflo (2005) this trend started by a growing concern among researchers regarding the reliable identification of program effects in the face of complex and multiple channels of causality. In contrast to other methods, experiments make it possible to vary one factor at a time, and will therefore provide "internally" valid estimates of the causal effect (Duflo 2005).

Such a set-up is characterized by being very specific in that the researcher tries to rule out alternative interpretations of the result. The aim of experimental design is to test causal hypotheses by demonstrating that the cause preceded the effect in time, that the two co-vary, and that there are no alternative interpretations of why they vary other than that the cause was responsible for the effect (Shadish et al. 2001)

The basic idea is that the groups should have similar baseline characteristics before the intervention for the randomization to work. The outcomes of the different groups after intervention, those who receive treatment and those who do not, the comparison groups, also called the control group or counterfactual, are then compared to see if the treatments have had any impact (Deaton 2010).

Impact in experimental research can thus be defined as the difference in outcome between what was observed with the treatment and what would have been observed in the absence of the treatment (the counterfactual).

Duflo (2008) says that one of the biggest advantages with experiments is that they can provide insight where observational approaches are not available. An observational approach will in this case be difficult to implement as well as it is unsuitable because of the potential bias for people to avoid revealing their true preferences because of the tense nature associated with ethnicity in Kenya. Performed properly a randomized experiment will enable us to make assumption about the causal effect by eliminating biases and enable measurement of uncertainty (Bloom, cited in Alasuutari et al. 2008). In addition, differences can be quantified and the study is easily replicable for others ensuring the studies validity (ibid).

5.2 Model
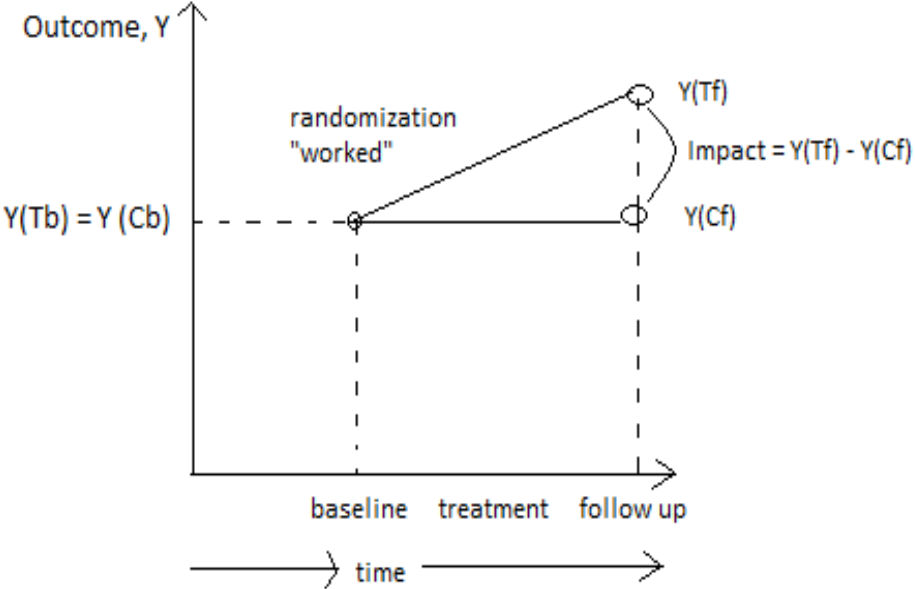
Figure 2. Graphical illustration of how to implement field experiment.

Y^{TB} = *average for people in the treatment group before any intervention*

Y^{CB} = *average for people in the control group before any intervention*

D = *1 means that person was treated*

D = *0 means not treated*

The basic idea in randomization is that the two groups in the experiment, the control group and the treated group, should have similar outcomes before the intervention:

$$Y^{TB}(D=1) - Y^{TC}(D=0) = 0 \implies Y^{TB}(D=1) = Y^{TC}(D=0)$$

At baseline, if randomization has worked, the two groups will have similar outcomes. As the graph shows the treatment is then inserted to one of the groups.

Y^{TF} = *mean average for outcome Y for those in the treatment group after the treatment and they were treated*

Y^{CF} = *average for the comparison group. What would have been the outcome if those in the treatment group had not received the treatment, counter to fact because it is never observed*

The difference between Y^{TF} and Y^{CF} is the impact of the treatment inserted in the experiment:

$$\text{Impact} = Y^{TF}(D=1) - Y^{TC}(D=0)$$

The observed difference in outcome at follow up is due to the intervention because that is the only variable that is different between the two groups, given that outcomes are similar at baseline.

5.3 Treatments

In the experiment, the participants played different versions of the public good game and each game were in turn played with three different treatments- and a control group. This was done to elicit ethnic bias in cooperation in different ways; both by varying the ethnic identity of the groups the participants played against and by priming different social identities. Benjamin et al. (2009) explains that social identity prescribes people's behavior and that it is possible to trigger people's social identities, which is the intention behind the different treatments in this research. The method is called priming and has been a long-standing idea in "self-categorization theory" in psychology (James et al. cited in Benjamin 2009).

Individuals in the experiment was randomly assigned to one of four groups: national priming, ethnic priming, political priming, or control group. The first treatment primes respondents with national identity. The second treatment primes respondents with ethnic identity and the last treatment primes respondent with political competition identity. The different treatments aims to trigger a certain behavior by reinforcing a certain mindset. In many cases one can say

that priming may simulate individuals response to political messaging, new reports, advertising and son on.

"The theory says that environmental cues called "primes" can temporarily make a certain social category more salient, causing a person`s behavior to tilt more towards the norms associated with the salient category" (Benjamin et al. 2009, p. 3).

He further explains that if the theory holds, researchers can identify the marginal effect of a particular social category by experimentally varying the salience of the category and seeing how an individual`s behavior changes (Benjamin et al. 2009). The purpose of the election of several treatments is to see how the different treatments in turn affect the participant's choices in the public goods game. A benefit from choosing several treatments is that it is possible to compare the data with each other and look for similarities and differences between the outcomes of the treatments and between the treatments and the control group.

6.0 The Experiment

In the following chapter I first explain how the data was collected and the procedure for the selection of respondents before I briefly describe the sample. Moreover, the preparation and conduct of the experiment are described and also how the data was processed and analyzed. I present the main expectations before I end the section with a thorough assessment of the quality of the method chosen in terms of data validity and data reliability.

6.1 Data collection

The research question greatly affects the choice of how to collect data (Johannessen et al. 2010). The purpose of this study is to analyze if ethnicity affect normal people in non-political times by looking into how people contributes to the funding of public goods and to see whether or not priming the subjects with different social identities have an effect of peoples willingness to contribute to the group fund. To be able to make statistical inferences about peoples willingness to contribute to the funding of public goods and the impact of the different treatments it will be most appropriate to collect data through a randomized experiment.

The project was conducted in collaboration with the The Busara Center for Behavioral Economics who used their social networks and community mobilizers to recruit participants. The recruiters knew the areas of interest well. They helped finding a space to rent for

recruitment, spreading information before and during the recruitment and brought people to the desk for registration. At no time in the recruiting process did they mention ethnicity as the purpose for the study. At all times they followed a prewritten script that stated that the purpose of the study is to gain better understanding of how people make their economic decision to avoid triggering a certain behavior among the participants. In post-game debriefs interviews there was minimal awareness of the focus of the study and no one mentioned ethnicity as the reason behind the behind the public good games, indicating that the study was developed and conducted as intended[2].

To ensure people met up on the appointed day and time participants received a call-in one or two days in advance in addition to a reminder text message the day before. At the call-in participants also answered different background question on themselves to be used in the upcoming analysis. People were given an economic incentive of 50 Ksh for showing up on time. Late-comers were compensated, but would not be able to participate in the study and were thus missing out on the probability of extra earnings providing an extra incentive for showing up on time.

The lab experiment was conducted over a relatively short period of time in July/August in Nairobi, Kenya. The collection of the research data was done in Busara research center in a quiet neighborhood not far from Kibera or downtown and was easy to reach by public transport making selection into attending the session not too bad. Participants typed their decision using touch-screen computers. Due to illiteracy among many participants, earphones were handed out and all instructions were given in Swahili through audio records. In addition, Kenyan staff was available at all time to clarify the set-up if needed.

6.2 Sample selection

Samples used in experimental trials should always try to mimic the population by being a miniature replica of the variation one finds in the population (Shadish et al. 2001). As the purpose of the study is to analyze if ethnicity affect normal people in non-political times by looking at how people in an ethnic diversified society cooperate the sampling and recruitment was stratified by ethnicity to be sure that the session and sample compositions would be similar to Nairobi`s ethnic composition, which mimics Kenya`s overall ethnic composition.

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[2] After the whole lab only a quarter believed ethnicity was the study's focus, and almost always in relation to "Choose your Dictator", the final game in the study, similar to the numbers mentioning age or education as the reason behind the study. Note that the "Choose your Dictator" game is not a part of this research.

To do so, the five largest ethnic groups in Kenya were selected, the Kikuyu, Luo, Kamba, Luhya and Kisii. Total these five groups constitute 82 percent of the population in Nairobi, Kenya, illustrated by the column "Total" in the figure below.
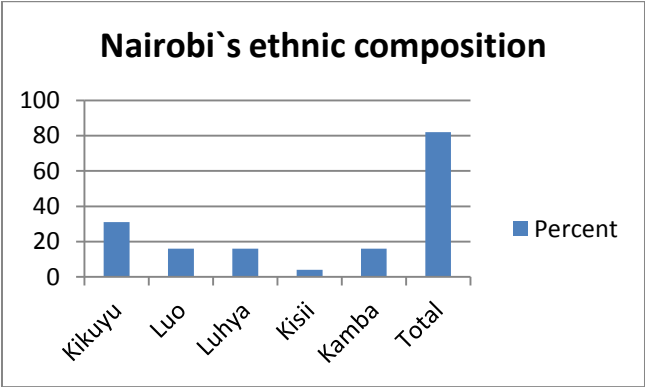
Figure 3. Ethnic composition in Nairobi, Kenya.

The target population among these ethnic groups consists of individuals living in informal settings and slum areas since as an economically disadvantaged population they tend to be the most dependent upon government public services and are most susceptible to politician strategies of vote buying and clientelism (World Bank Development Report 2004; Kramon 2011).

Busara`s subject pool composition from Kibera, the largest slum area in Nairobi, consisted mainly of Luo and Luhya, and were insufficient for the projects needs and the recruitment was therefore expanded to Viwandani to also get the Kikuyus and Kambas needed. Participants from Viwandani were given an extra economic incentive for showing up because of the long travel distance to the research center where the experiment took place.

6.3 Study Sample

The Busara lab subject pool consisted of over 2000 individuals in working class "slum" areas. The experiment collected a total of 608 (611) participants, where 62.03 percent came from the Kibera area and the remaining 37.97 percent came from the Viwandani area. Kibera is mainly Luo, Luhya and Kisii and Viwandani is mainly Kikuyu and Kamba.

During July and Augsust 2012, 32 lab session were conducted with approximately 20 participants in each. 26 subjects was however called in for each session to ensure that enough participants would turn up. Each session was designed to have a similar ethnic compostion

and in order to emulate Kenya's ethnic division each session required in addition a minimum number of participants from each ethnic group.

Participants was randomly assigned to one of four groups ending in this distribution: control group 150 individuals, treated with national identity prime 153 individuals, treated with ethnic identity prime 153 individuals and treated with political competition identity prime 152 individuals.

The anonymous public good game and the mixed public good game collected 608 observations each whereas the homogenous game only collected observations from 598 individuals.

6.4 Public Good Games

The thesis is that public good games captures an individual's willingness to contribute to the group fund in order to make everybody better off. The assumption is that a person's contribution level captures this person's willingness to cooperate with others and his or hers ability to overcome free riding. The game is constructed in such a way that participants must state how much they think others in their group will contribute to the funding of the public good before they make their own decision. The thesis is that subjects place greater weight on the utility of co-ethnics and have less trust in non-co-ethnics. Beliefs of others actions are important to understand this and can be an important factor in explaining own contribution and is therefore useful to include in the game set-up.

6.4.1 General set-up

Participants in the public goods games engaged in two sets of economic activities. The first set was anonymous. In this game participants were randomly paired with two other players and had no information about the individuals they were partnered with. The main outcome of interest here is how much an individual contributes to the group found in an anonymous setting. The second set of games was identified. Participants received some background information such as education, hometown and age about the participants they were partnered with. Each hometown chosen was characterized by a clear ethnic majority and was indirectly used as identifying the ethnicity of the other group members. The other characteristics, age and education was balanced across the profiles for each ethnic groups so that there on average are no confounders correlated with ethnicity. In the identified rounds participants played two different games. In the first identified game, the participants were in a mixed group with one co-ethnic and one non-co-ethnic profile. The main outcome of interest in this game is the

amount an individual is willing to contribute in a mixed group. In second identified game, the final round of the public good games, individuals were in a group with only co-ethnics. The main outcome of interest in this game is the amount that an individual is willing to contribute in a homogenous group.

Thus, exploiting the differences in the set-up of games (in the identified rounds) makes us able to see if there exist any differences in people's behavior when interacting (cooperating) with co-ethnics and non-co-ethnics.

In every game, individuals were given an endowment of 60 Ksh (approx. $0.7) and asked to state their beliefs about how much other groups members would contribute to the group fund. They were then asked how much they would contribute. Including beliefs of others contribution in the game set up makes it possible to reveal if people act in accordance with their own beliefs and is an important factor in explaining own contribution. By including beliefs of others contribution it is also possible to reveal if people deliberately choose to free ride on others.

Participants were informed that all contributions to the group fund would be added up and doubled by the researcher for then to be divided equally among the participants. Money that participants kept to themselves would not be added up but the participants would add them up to the other earnings made from the workshop.

For example, if participant A contributed 0 Ksh to the group basket and put 60 Ksh to own private basket and participant B and C each put 30 Ksh to the group basket and 30 Ksh to his or her own private basket the total of 60 Ksh placed in the group fund would automatically double to 120 Ksh. The 120 Ksh would then be divided equally among all three participants, even though participant A did not contribute to the funding of the group fund. Participant A would in total receive 100 Ksh, 60 Ksh from own saving and 40 Ksh from the group fund. Participant B and C would only receive 70 Ksh each, 30 Ksh from own saving and 40 Ksh from the group fund. If, in contrast all players had contributed 60 Ksh to the group fund, the total amount to be divided equally had been 360 Ksh, resulting in a payout of 120 Ksh to each participant.

This example illustrates that if everybody contributes to the funding of the public good everybody will benefit from it. However, public goods is as already mentioned characterized by being non-excludable and in such cases people will always have the incentive to free ride.

Free riding and egocentric behavior such as participants A`s behavior in the first example above will always reduce the contribution to the public good, resulting in a lower provision of public goods.

6.4.2 Co-ethnicity and Non-co-ethnicity

The empirical strategy adopted in the research depends on the ability to distinguish interactions (cooperation) among co-ethnics from interactions among non-co-ethnics. A correct division of the different ethnic groups will therefore be crucial for a rightful interpretation of the results. There are five ethnic groups in the sample; Kikuyu, Luo, Luhya, Kisii and Kamba. These ethnicities are grouped as being "co-ethnic" or "non-co-ethnic" by traditional alliances In the 2007 election the country's six most numerous ethnic groups where divided by party, people belonging to the Kikuyus and Kambas supported Kibaki for president while Luos, Luhyas and Kalenjins voters were supporting Odinga for president. The Kisiis was the only major group with roughly equal vote shares for both candidates, although a majority voted for Odinga.

Thus, the Kikuyu and Kamba are grouped together as co-ethnics and the Luo and Luhya are grouped together as co-ethnics. The Kisii have traditionally been neutral and are considered to be non-co-ethnic to both ethnic groupings. In this study, they are assigned to Luo/Luhya sequence of treatment. In order to ensure that there were sufficient variations in partner backgrounds in the identified rounds to estimate the co-ethnic effect, it was created a set of background profiles from the initial sessions for respondents to be partnered with. This was also done to prevent potential resentment between participants within each session, about lower than expected transfers or contribution. In these identified rounds, respondent`s faced profiles from people of particular backgrounds. These profiles were randomly drawn from a set of profiles that contained information about education, age and hometown. Hometown allow for individuals to infer the profile participants ethnicity, since the hometowns selected have one dominant ethnicity. Thus, the identified public-good games captures how an individual`s willingness to contribute to the group fund varies according to other group members background profiles.

6.5 Data analysis

The randomized experiment produced a lot of data and I use STATA (data analysis and statistical software program) to analyze the data. I have divided the analysis in three parts. The main part focuses on contribution level in the different public good games which is my main focus area. Part two of the analysis tries to explain the findings from the first part and in

this section I also incorporate some data from the dictator game in the analysis. Lastly, in the third part, I look at how priming affects individual behavior in the public good games.

To be able to answer if ethnicity matter for normal people in non-political times I analyze the data by looking at how the independent variables, x, affects the dependent variable, y, in the public good games. When presenting the results from the randomized experiment I focus on linear regression estimates (OLS), using the player's contribution as the outcome. The primary specification in the econometric analysis simply regress the dependent variable on the treatment dummies and the aim is to interpret the estimated multiple regression equation;

$$\hat{y} = \beta^0 + \beta^1 x_1 + \beta^2 x_2 + ... + \beta^k x_k,$$

in terms of how changes in the different xjs affect the dependent variable y, holding all other (relevant) factors fixed.

The regression specification have indicator variables T_k, k =1,2,3 for individuals belonging to their respective treatment group, national identity prime, ethnic identity prime and political competition prime respectively.

When using OLS there are certain assumptions that must be fulfilled (Wooldridge 2008). Below I list the 5 assumption of the multiple regression model that must be valid for the analysis to be correct, also called the Gauss- Markov assumptions.

1: The population model can be stated as follows; $y_i = \beta_0 + \beta_1 x_{i1} + \beta_2 x_{i2} + ... + \beta_k x_{ik} + u_i$, where $\beta_0, ..., \beta_k$ are k +1 unknown population parameters, and u is an unobserved random error term.

2: We have a random sample of size n, $\{(x_{i1},...,x_{ik},y_i) : i = 1, ..,n\}$

3: No perfect collinearity: in the sample (and in the population), none of the independent variables are constant, and there are no exact linear relationships among the independent variables.

4: Zero conditional mean: $E(u|x1,x2,...,xk) = 0$, meaning that the model residuals (i.e., the over -and underpredictions) have a normal distribution with a mean of zero.

5: Constant variance: $Var(u|x1,x2,...,xk) = \sigma_i^2$.

(Wooldridge 2008)

If these assumptions are fulfilled the OLS estimators are BLUE (best linear unbiased estimators) meaning that the different tests I use in the analysis are valid and that it will be possible to generalize the regression results for the sample. From the collected data I find that the assumptions are met and using OLS to analyze the data would be appropriate.

6.6 Control Variables

As mentioned in the previous section the primary specification in the econometric analysis simply regress the dependent variables on the treatment dummies. In addition, I also estimate specifications where I use X_i as a vector of control variables. With multiple regression model and by adding more control variables one can explicitly control for other factors affecting y and it is more likely that the zero conditional mean assumption holds, and thus more likely that one are able to infer causality. Another advantage is that by controlling for more factors, one can explain more of the variation in y and thus make better predictions, and one can also incorporate more general functional forms (Wooldridge 2008). In the analysis I have chosen to look closer at different socio-economic categories.

The vector X_i includes the following variables:

- Gender
- Years of education (demeaned)
- Age (demeaned)

Concentrating on these variables, I can test if the data reveals any significant difference in behavior between men and females, between those with a different education level and between elder and young people.

In the analyze, in addition to run different regressions, I will focus a lot on comparing mean contribution both internal and across games to see if I find that there are any differences, both between the socio economic variables in each game and also between the different public good games. However, analyzing mean contribution tells us only something about how people on average contribute to the group fund. I will therefore also look at the histograms to see if the distribution reveals any new information that the mean does not capture.

6.7 Main expectations

In this section, I present the main expectations for the experiment. Based on previous research on the impact of ethnic divergence I expect to find an overall negative effect of ethnicity on peoples willingness to contribute to the group fund in the public good game and that;

- Individuals place greater weight on the utility of co-ethnics than on the utility of non-co-ethnics.

- Individuals are more generous towards co-ethnics and they contribute more to a homogenous co-ethnic group fund. The opposite holds for non-co-ethnic settings.

- The socio-economic variables affect willingness to contribute to the group fund differently.

- National priming will increase generosity and willingness to contribute to the group fund, both in the anonymous and in the identified rounds.

- Ethnic priming and political competition priming will increase generosity and the willingness to contribute to the group fund in a co-ethnic setting. In a non-co-ethnic setting, the opposite holds.

6.8 Testing hypotheses

To investigate if the main expectations are met I run different types of regression and I compare the mean both internal (socio-economic variables) and across the different games. When comparing the mean from the different games I see if there is a difference in participant's contribution to the funding of the public good. This is done by testing different hypotheses.

Testing hypotheses reveals if the difference in mean (both in- and between games) is statistically significant or not. According to Johannesen et al. (2010) significance testing means to investigate whether any differences between the sample (for example between those who have education level below median and those who have education level above median) can be generalized to include the population (Johannesen 2010), in other words, we test if the difference in mean from the sample can be generalized to be valid for the population.

The principle behind this is to formulate a hypothesis, called the null hypotheses (H_0), that there is no difference between the populations, and an alternative hypothesis (H_A) that says that there is a difference, i.e. that the actual value of a population parameter is less than, greater than, or not equal to the value stated in the null hypothesis.

In hypothesis testing, to make a decision, we conduct a study to test whether the null hypothesis is likely to be true. If H_0 is rejected, than H_a is automatically accepted (Johannesen et al. 2010). The level of significance in hypothesis testing is the criterion we use to decide whether the value stated in the null hypothesis is likely to be true. The result is called statistically significant if it has been predicted as unlikely to have occurred by chance alone, according to a pre-determined threshold probability, the significance level. General, if the p-value is less than the significance level (α), the p-value is judged to be small enough to reject H_0. Contrary, if the p-value is greater than α, H_0 is not rejected (Wooldrigde 2008).

Since hypothesis testing is based solely on a sample and not an entire population it is possible that a conclusion may be wrong. There are especially two potential errors one must be aware of, type I error; rejecting a true null hypothesis and type II error; not rejecting a false null hypothesis. It is especially type I error one are most worried about and one should always choose a low significance level to avoid making this error. For the hypothesis tests in this research a 5 % significance level are statistically significant by chance, and I can also accept a 10 % significance level.

In the following analysis I test if the differences I mean contribution in the public good games are statistically significant, both internal (the different social economic variables) in the different games and also across games. To do this I use analysis of variance (ANOVA) which is a collection of statistical models used to analyze the differences between group means. Anova assumes that all data are independent observation from the normal distribution. With analysis of variance the observed variance in a particular variable is partitioned into components attributable to different sources of variation (Johannesen et al. 2010). The problem that analysis of variance solves is to determine if the difference in group means do not differ more than random variation can explain (H_0) or if the difference is huge enough so that one can conclude that H_A is true.

For example, in the anonymous public good game Anova allows me to break up the group according to the socio-economic variables and then test if contribution is different across these variables (H_A) of not (H_0).

6.9 Validity

Validity is one of the main concerns with all research. In general, validity is an indication of how well the research has been conducted (Johannesen et al. 2010). Statistical conclusion validity is the degree to which conclusions about the relationship among variables based on the data are correct or "reasonable", and validity in data collection means that your findings truly represent the phenomenon you are claiming to measure (Alasuutari et al. 2008). In statistical conclusion, validity involves ensuring the use of adequate sampling procedures, appropriate statistical tests, and reliable measurement procedures. With five different experimental games, three distinct priming treatments and multiple subgroups of interest, issues of data mining and inappropriately sized statistical tests are major concerns and must be dealt with appropriately.

Validity can be divided in internal and external validity. Internal validity is according to Johannessen et al. (2010) about the extent to which the researcher procedures and findings correctly reflects the purpose of the study and represents reality. Internal validity is in this case about the degree to which conclusion about causal relationship can be made based on the measures used, the research setting and the whole research design.

Internal validity is affected by flaws within the study itself, such as not controlling some of the major variables or problems with the research instrument. The aim of this study is to investigate the impact of ethnicity on social cooperation and the game set-up have tried to isolate the effect on ethnicity in different ways, both by varying the composition of group members in the different public good games and by priming different aspect of social identities. This has been done to elicit ethnic bias in different way and to ensure the studies internal validity.

External validity on the other hand concerns the extent to which the internally valid results can be generalized to a larger group or other contents (Alasuutari et al. 2008). Field experiments are often like lab experiments, criticized for lacking external validity (Duflo 2005), i.e. it is not clear that the behavior observed in the experiment would apply when people make real decision outside the research setting. Another major factor is whether the

research participants (e.g. study sample) mimic the general population along relevant dimensions. Exploring if ethnicity has an impact on normal people in non-political times it is crucial that the study sample is representative for the overall population. In the study participants were first only recruited from the Kibera area but the subject pool were expanded to also include people from the Viwandani area to get a representative sample, which included participants from the five largest ethnic groupings in Kenya.

There are several others factors that can affect external validity among them, interaction among participants, experiment or researcher effect, and effect of the research environment (Alasuutari et al. 2008). Being aware of these factors in all phases of the experiments makes it easier to avoid and minimize these threats to external validity.

6.10 Reliability

According to Alasuutari et al. (2008) reliability addresses the consistency of the instrument's measurement. That is, would the testing instrument used generate the same result in similar circumstances? In experimental research this means that other researchers should be able to perform exactly the same experiment under the same conditions and get the same result and come to the same conclusions. This strengthens the results and is a necessary factor for the overall validity of the experiment. A prerequisite is that the measures should be stable and/or repeatable. If the random error variation in the measurements is so large that the there is hardly no stability in the measures one cannot explain anything.

In field experiments it is therefore essentially that participants understand the task they are set to do. One can never have a full guaranty that all participants act as in intended by the field experimenter but one can take certain precautions to limit potential deviations. In the experiment participants was thoroughly explained the game set up and also given examples of how to do the task. In addition, there were people available in the lab at all times to clarify potentially problems and misunderstandings.

To ensure the studies reliability it is also important to be open and share information about how the experiment was conducted and how the data was collected, as well as how the analysis was performed. Unfortunately, I did not have the possibility to participate in the execution of the experiment in Kenya and such the data collection, but both the procedure and how the data was collected have been very well documented before, under and after the implementation. I did also get the chance to talk to one of the field researcher, Ana Beatriz Aguilar Santos Borges, after she returned to Norway and got useful and complementary

information about the experiment, challenges they faced and her experience. This made me convinced that the data had been collected as intended. In post-game debriefs interviews hardly any participants mentioned ethnicity as the purpose of the study and only one quarter believed ethnicity was the study's focus, and almost always in relation to "Choose your Dictator", the last game participants participated in, which is not included in this analysis. When analyzing data I have had an open mind and not manipulated any data to fit expectation and in the appendix one will find all commands I have used to produce the results presented in the paper. Thus it will be easy for others to replicate the study as well as controlling the results, increasing the reliability of the research.

7.0 Experimental results, part I

Before I start the analysis I will introduce the specification used for running the regressions in the public good games. Then I focus on presenting summary statistics for the three different games before I expand the analysis by looking closer at the socio-economic categories; gender, age and level of education.

7.1 Public Good game

The public good (PG) game is played in three different set-ups; an anonymous play, a mixed play and a homogenous play. As previously mentioned, the main outcome of interest in the anonymous PG game is how much an individual contributes to the group fund without any information about the other group members. For the mixed PG game the main outcome of interest is how much an individual contributes to the group fund in a mixed group, with one co-ethnic and one non co-ethnic. Lastly, in the homogenous PG game the main outcome of interest is how much an individual contributes in a homogenous group, with only co-ethnics.

Each game is played with one control group and three different treatments. Main focus in this section is on presenting results for the control group for the anonymous-, mixed- and homogenous game. I will come back to and discuss the treatments effects later in the paper.

When presenting the results I focused on linear regression estimates (OLS), using the player's contribution as the outcome. The primary specification in the econometric analysis simply regress the dependent variable on the treatment dummies.

First specification:

$$Y_i = \alpha + \sum_{k=1}^{3} \beta_k T_k + \varepsilon_i$$

Y_i = pg_contribution   (in the anonymous PG game)

Y_i = pgidmix_contribution   (in the mixed PG game)

Y_i = pgidhom_contribution   (in the homogenous PG game)

This specification takes the variable Y_i, which is a given outcome for participant *i*, and regresses it on the treatment variables, i.e., Y_i, captures an individual`s willingness to cooperate with others. Recall that T_1 is the national treatment dummy, T_2 is the ethnic treatment dummy and T_3 is the political competition treatment dummy. As usual, ε_i is an idiosyncratic error term. In this part of the analysis I rule out the treatment dummies and concentrate only on the control group.

In addition, I estimate specification where I use X_i as a vector of control variables.

Second specification with control:

$$Y_i = \alpha + \sum_{k=1}^{3} \beta_k T_k + \beta_4 X_i + \varepsilon_i$$

The vector X_i includes the following variables; gender, age and years of education (demeaned)

7.1.1 Contribution to the group fund

The main outcome of interest in this section is how much people in the control group on average contribute to the group fund in the different games. Table 1 below presents mean contribution and is given in percent of how much an individual could possible contribute to the group fund.

Table 1: Public good Game: Summary statistics for the control group

	Anonymous	Mixed	Homogenous
Overall	47.89	49.94	48.08
	(25.20)	(27.26)	(27.89)

Female	48.95	50.21	49.47
	(25.75)	(29.57)	(28.65)
Male	46.71	49.65	46.53
	(24.70)	(24.66)	(27.15)
Age: 35 and under	46.86	48.98	47.25
	(25.13)	(27.21)	(27.27)
Age: over 35	50.38	52.27	50.08
	(25.48)	(27.57)	(29.57)
Below Median Education	50.00	50.93	50.79
	(25.04)	(27.48)	(29.87)
Above Median Education	46.36	49.23	46.11
	(25.34)	(27.25)	(26.37)
Observations	150	150	150

Mean coefficients; sd in parentheses. Note: contribution level is given in percent.

As seen from table 1, mean contribution for the variable "overall", that is, all individuals in the control group, are pretty much similar across the different games. People in the anonymous game contribute on average 47.89 percent of their endowments, people in the mixed game contribute on average 49.94 percent of their endowments and for the homogenous game average contribution equals 48.08 percent. Rounded upward these contributions approximately equal 50 percent, meaning that people in the control group on average gives 30 Ksh to the group fund. Giving the game set-up explained in section 6.4.1 this leads to individual payments of approximately 90 Ksh in all games. On the contrary, if all three participants had fully cooperated and contributed 100 percent of their endowments, 60 Ksh, everyone would have benefitted and individual payments would have been equal to 120 Ksh. This would have been equal to an increase in individual earnings of 33percent! This simple example shows that cooperating always will increase potential earnings given that everybody fully cooperates.

However, if one participant, call him participant A, decided not to cooperate and contributes nothing to the group fund and the other two participants, B and C, fully cooperates, participant A would get a payment of: 60 Ksh + ((60+60)*2))/3) Ksh = 140 Ksh.

Payment to individual A would in this case be higher than if he/she also had fully contributed to the group fund and this will always give people incentives not to fully cooperate and instead free ride on others contributions. Participant B and C would in this scenario only get: ((60+60)*2))/3) Ksh = 80 Ksh each. This would in turn prevent them to fully cooperate in fear of somebody else free riding on them, and the example illustrates very well the problems associated with public-goods. As there is no way of excluding people from consuming any public good people will always have the incentive to free-ride on others.

Instead of people fully cooperating or fully free-riding on others Ledyard (1995) finds that subjects in (one-shoot) public good games experiments generally contributes between 40 and 60 percent of their endowments. Summary statistics from these games played in an ethnic diversified setting is consistent with Ledyard findings as mean contributions for all subgroups lays in the range from 46 to 53 percent and indicates that people in an ethnic diversified setting do not behave any differently than others. On average people do not fully cooperate or fully free ride on others.

Result 1. On average people in the anonymous-, mixed- and homogenous public good games contribute roughly 50 percent of their endowments to the group fund.

7.1.2 Difference between games

Surprisingly, mean contribution is highest for the mixed public good game compared to both of the other two games. Based on conclusion form other research (Hjort 2011; Miguel 2004) I expected that players in these PG games would place greater weight on the utility of co-ethnics than compared to non-co-ethnics and thus that I would find that mean contribution would be highest in the homogenous PG game. But based on the data in the control group there seems to be no discrimination along ethnic lines for public goods. Comparing average contribution for the variable "Overall" across the different games in appendix 14.1, I find that the difference in willingness to contribute to the group fund for the control group is not statistically significant between the different games, i.e., I find no evidence that supports that

individuals place greater weight on the utility of co-ethnics compared to non-co-ethnics. If anything, contributions in the mixed game are higher than in both the homogenous- and the anonymous game, contrary to what one would think if ethnic diversity had a negative impact on people's willingness to cooperate.

Although not statistically significant the negative finding on ethnic preference is striking and suggests that one cannot easily jump from the observation of ethnic divides to the conclusion that there are fundamental ethnic preferences and beliefs that will apply to all situations.

Result 2. The difference in contribution across the different games is not statistically significant.

Especially the lack of greater giving in the homogenous public-good game came about as unexpected and my main expectation that individuals are more generous towards co-ethnics and that they therefore contribute more to a homogenous co-ethnic group fund are proven wrong.

7.1.3 Distribution between games

Looking closer at the histograms for the control group I obtained additional information about participants' behavior in the respective games, information that is not captured by only looking at the mean. From the histograms in figure 4 at the next page, I see that there are only small differences in the distribution between games indicating that the distribution in the control group may be more or less equal to one another.
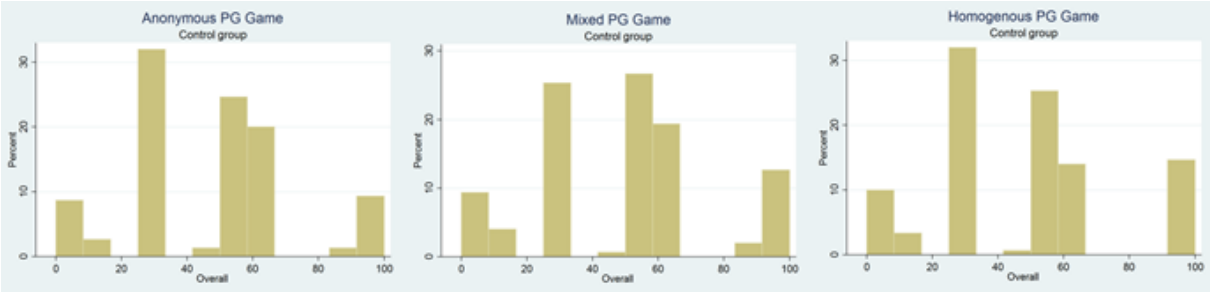
Figure 4. Distribution control group.

As shown in the histograms above, roughly 10 percent of the people in the control group in all games exposes a truly egocentric behavior and contributes nothing to the group found. At the

other extremity, there are on average more than 10 percent of the individuals who makes a group wealth-maximizing decision and put everything they have into the group basket. This percentage is higher for both the mixed and homogenous PG game than for the anonymous PG game. However, one sees that most contributions in all games are centered around 50 percent, although a high percentage in every game only contribute around 30 percent of their endowments. Testing if the distribution across games is equal to one another by running a Kolmogorov-Smirnov test, appendix 14.2, I get high p-values for all comparisons, indicating that I can keep H_0 that states that there are no difference in distributions across games. This means that the observed difference in the histograms is not huge enough to conclude that here is a statistically significant difference in the distribution between the three different games.

Result 3. The difference in distribution across the different games for the control group are not statistically significant.

As I found no statistically significant difference in mean contribution, this result is not unexpected. As I see it, it only provides more strength behind result 2.

7.1.4 Summary contribution to the group fund

When looking closer at the control group I find that people on average contribute roughly 50 percent of their endowments and this is similar to what one find in other public goods game independent of ethnic setting or not. Contrary to what one should expect I find somewhat surprisingly that people in the homogenous public good game contributes less to the group fund compared to people in the two other games. However, I find that the difference in average contribution between the anonymous-, mixed- and homogenous public good game is not statistically significant. Looking at the histograms for the control group, I find that the observed difference in distribution across games is not huge enough to conclude that the difference is statistically significant. Together these two test indicates that people in the control group on average behave similarly in the different public goods games. I find no evidence of co-ethnic preferences.

7.2. Socio-economic variables

Concentrating on socio-economic categories, I want to see if there exist a systematic difference in average contribution between people in the control group by dividing them by gender, age and level of education.

7.2.1 Contribution to the group fund

Looking back at table 1, I see that there are some differences in mean contribution for the social-economic categories. In the anonymous public good game I find that for the gender category females exposes a more cooperative behavior than males and contribute on average slightly more. Looking at the age variables I see that those aged 35 or below contributes on average less to the group fund than those aged over 35. Related to level of education I find that people with a higher level of education on average contributes less than those with a lower level of education. On average people with education level above median exposes the most selfish behavior in the group by contributing least to the funding of the group fund in the anonymous public good game. These findings above are also valid for the mixed- and the homogenous public good game.

So far, these findings are in line with what I have presented as one of my main expectation, namely that the socio-economic variables affect willingness to contribute to the group fund differently. My expectation related to the socio-economic categories is solely based on my own subjective assumptions; 1) Men are more involved in politics in Kenya and are therefore being more strongly affected by ethnic divergences than women since the politic arena have been greatly influenced by ethnic contradictions, 2) Older people have a different mindset than younger people due to experience and, 3) Education level will somehow be reflected in how people make choices.

Table 2. Public-good game: Socio-economic categories in the control group

	(1) Anonymous PG game	(2) Mixed PG game	(3) Homogenous PG game
Female	0.914	0.247	2.564
	(4.252)	(4.628)	(4.731)
Age – (demeaned)	0.144	0.200	0.181
	(0.201)	(0.219)	(0.224)

Education (demeaned)	-0.626	-0.0229	-0.0742
	(0.628)	(0.683)	(0.698)
Constant	42.73***	43.35***	40.86***
	(7.273)	(7.917)	(8.093)
Observations	150	150	150

Standard errors in parentheses $^* p < 0.10,$ $^{**} p < 0.05,$ $^{***} p < 0.01$

Running a regression with the socio-economic variables, table 2 above, I find that in the anonymous PG game females on average contribute 0.914 percentage points more than males, increase in age increases contribution by 0.14 percentage points and a higher education level, a bit surprisingly, seem to lower contribution by 0.626 percentage points. None of these findings are however statistically significant at any reasonable significance level. Looking at the mixed PG game the regression result shows that the difference between the subgroups are on average less than in the anonymous PG game. In the homogenous PG game one sees that females contribute 2.564 percentage points more than males. For age and education level the difference in contribution is similar to the findings in the anonymous- and mixed PG game. As for the anonymous PG game, none of the findings for the mixed- and homogenous PG game is statistically significant either.

From data, table 1 and table 2, I observe that there are differences in mean contribution for the social-economic categories: gender, age and education in all games. Testing if mean contribution in each social-economic category: female vs. male, aged above or below 35[3] and education level is equal to one another, H_0, in appendix 14.3, I get high p-values in all games indicating that the observed difference in mean contribution is not statistically significant different from each other. The observed differences in mean contribution is not huge enough to conclude that females behave differently than men, that those aged above 35 years act any different than those below the age of 35 or that level of education significantly affect mean contribution in any of the games. Put differently, the socio-economic characteristics of the subject pool do not matter for contribution behavior. Since contributions are different, motivations to contribute may be different between subjects, but these motives are unrelated to the socio-economic characteristics of the participants. My expectation that I would find a difference between the socio-economic categories was also proven wrong.

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[3] People in the sample are aged 18 to 68. To be able to do many of the analysis I choose to divide people in the two age groups. Equal and below age 35 and age above 35.

Result 4. The difference in contribution level for the socio-economic categories in each game separately is not statistically significantly.

7.2.2 Mean contribution across games

As for the variable "Overall" I compare if mean contribution for the gender, age and education-level categories across games are similar (appendix 14.4). The test produce high p-values for all variables indicating that willingness to contribute to the group fund between the social economic categories is not statistically different between the different games. This indicates that females, males, people aged below 35 etc. behave more or less in the same way across games. Although I observe that mean contribution for all socio-economic variables changes across games I don't find any evidence that supports that this change is huge enough to conclude that the observed difference is statistically significant.

Results 5. The differences in mean contribution for the social-economic categories across games are not statistically significant.

7.2.3 Distribution

Although I have found that the average in means between the socio-economic variables is not statistically different from each other in any of the games played it may be that the distributions for each socio-economic variable reveals some new information. I start by briefly discuss the overall picture in each game.

7.2.3.1 Anonymous public good game

Starting with the anonymous PG game, figure 5 below, one sees that the distribution for males vs. females and age below 35 vs. age above 35 respectively looks pretty much similar to each other. The histogram for the education dummy shows that a high percentage of those with above median education level exposes a selfish behavior and contribute less than 50 percent of their endowments whereas most of those with below median education are more cooperative and contribute more than 50 percent of their endowments.
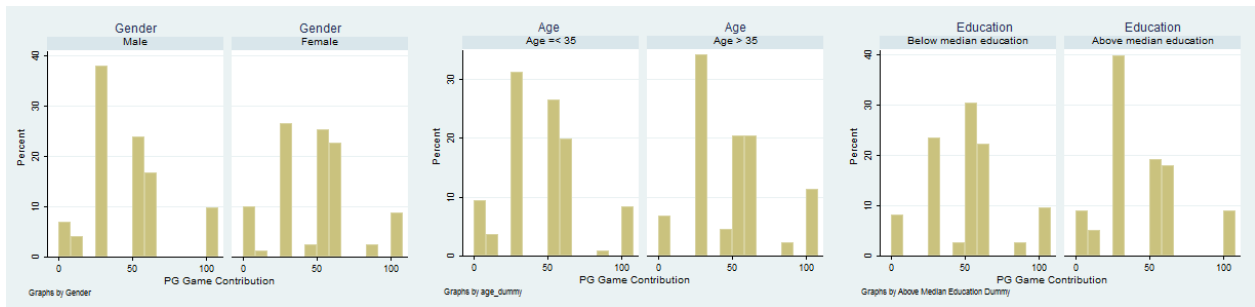
Figure 5. Anonymous public good game, histograms.

7.2.3.2 Mixed public good game

In the mixed PG game, figure 6 below, it appears that the biggest difference in distribution is found between males and females. For females there seem to be a general flattening of the distribution compared to males. In the summary statistics I found that females on average contribute more than males and the histogram shows that there is a substantial fraction more females who contribute 100 percent of their endowments than males. The majority of males contribute little over 50 percent of their endowments to the group fund. Looking at the histograms for age and education there does not seem to be any difference in distribution between age group and education-level.
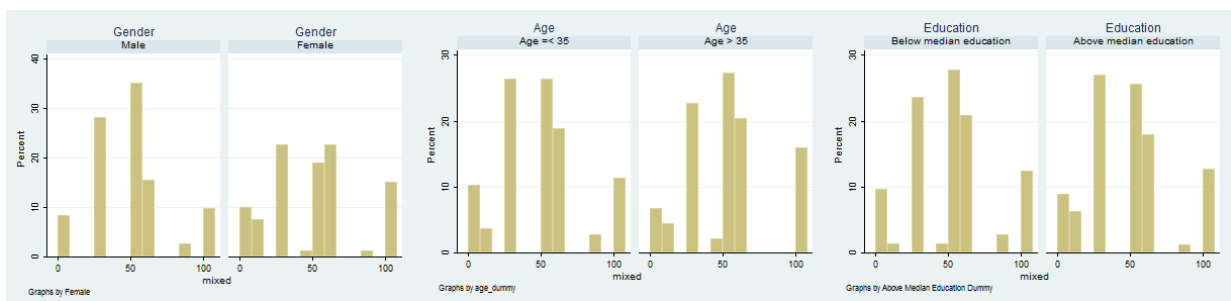
Figure 6. Mixed public good game, histograms.

7.2.3.3 Homogenous public good game

For the homogenous PG game, figure 7 below, the histograms shows that the difference in distribution is very small for the socio-economic variables; gender, age and education in this game. The only thing worth mentioning is that is seems that more people above the age of 35 contributes 100 percent to the group fund than those who are younger.
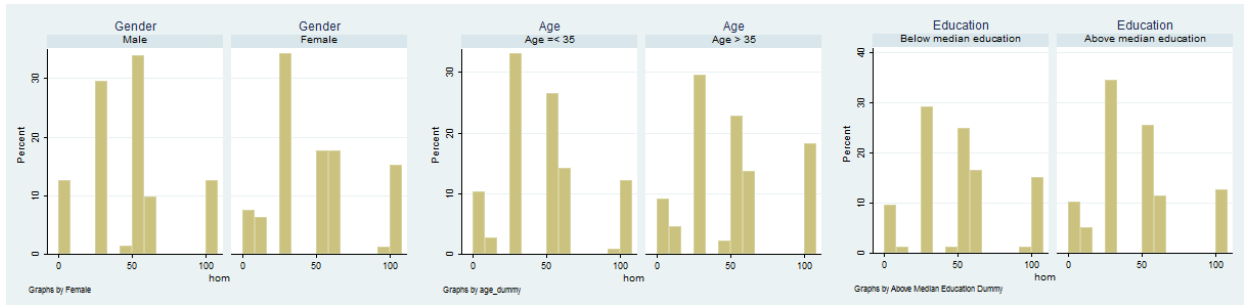
Figure 7. Homogenous public good game, histograms.

When I formally test if the distributions in each social-economic category is equal to one another with a Kolmogorov-Smirnov test, appendix 14.5, I get high p-values for the socio-economic categories gender and age in all games, and I can conclude that there does not exists a statistically significant different pattern between the distribution between male and female or between people aged under or above 35 in any of the games played.

Results 6. The distribution between male and female, age below or above 35 are not statistically significant different from each other in any of the three games played.

Although there are variations in for example how woman contribute to the funding of public goods vs. men these variations are not big enough to conclude that woman in the sample behave any differently than men. For the mixed- and the homogenous public good games the Kolmogorov-Smirnov test also produces a high p-value for education indicating that one finds no difference in distribution across education-level in these two games either and I can conclude that for the mixed and the homogenous games I do not find any statistically significant difference in distribution in any of the socio-economic categories. The test concludes on the other hand that the difference in distribution among those with below median education and those with above median education are statistically significantly in the anonymous public good game.

Result 7. The difference in distribution between those with below median education and those with above median education is statistically significant, but only in the anonymous game.

As I only find that there is a statistically significant difference in distribution for education level in the anonymous game and not in the identified rounds it is impossible to say anything about what is causing this difference.

7.2.4 Robustness checks

Table 3. Public-good Game: Contribution below 50%

	(1) Anonymous PG game	(2) Mixed PG game	(3) Homogenous PG game
Female	-0.0515	0.0519	0.0487
	(0.0837)	(0.0832)	(0.0850)
Age - based on recruitment information	0.000801	-0.00336	-0.00200
	(0.00396)	(0.00394)	(0.00402)
Education (demeaned)	0.0210*	-0.00238	0.000880
	(0.0124)	(0.0123)	(0.0125)
Constant	0.448***	0.475***	0.499***
	(0.143)	(0.142)	(0.145)
Observations	150	150	150

Standard errors in parentheses * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

To check if the findings from the histograms and the Kolmogorov-Smirnov test are accurate I create a dummy variable which equals 1 for contributions below 50% and then I run a regression based on this variable. The results is shown in table 3 above, and I find that the coefficient for education (demeaned) is positive and statistically significant for the anonymous public-good game, reflecting the findings from the histograms. More people with above median education level in the anonymous PG game tend to contribute less than 50 percent of their endowments than those with education level below median and this finding is statistically significant at a 10 % significance level. Another interesting finding with this table is that one sees that some variables changes sign compared to table 2 and that this change is not consistent across games. But for all variables except educ_dm in the anonymous game the findings are not statistically significant and I will not discuss them further.

Result 8. More people with above median education level in the anonymous PG game tend to contribute less than 50 percent of their endowments than those with education level below median and this finding is statistically significant at a 10 % significance level

7.3 Summary results, part I

People contribute on average roughly 50 percent of their endowments in all games which lead to individual payments of 90 Ksh. I find no evidence that ethnicity, or any of the socio-economic background categories affect willingness to cooperate. Contrary to what one should believe there appears to be a negative effect of ethnicity on contribution as people contribute more to the group fund in a mixed ethnic setting than in a homogenous ethnic setting. This indicates that there may be other factors than just ethnicity that explains the level of contribution which again may indicate that ethnic divergence is not a sole obstacle to local fund raising initiatives in Kenya. Focusing on socio-economic categories; I find that in all games are females more cooperative than males, that higher age increase cooperation and that those with education level below median are more cooperative than those with a higher level of education. None of these findings is however statistically significant at any reasonable significance level. Trying to establish if social economic categories affect contribution in the public good games in any way, I test for equality of mean in each game separately and across games. But in neither scenario do I find that the observed differences in these social-economic categories are statistically significant. Neither when I look closer at the distribution do I find that there is a difference. Testing the observed difference in distribution I find that it is only a statistically significant difference between people with different education level in the anonymous game.

8.0 Experimental results, part II

In this section, I first look at beliefs of others contribution before I include the dictator game (DG) in the analysis. The aim is to see if I find a relation between beliefs of others contribution and own contribution and altruism and contribution that can help me explain the results from part I.

8.1 Beliefs of others contribution

In the public goods games beliefs about others` contribution are included in the dataset as they can be an important factor in explaining own contributions. In the game set-up participants

were asked to state how much they believed others in the group would contribute to the group fund before they made their own decision. The difference between own contribution and beliefs about others contributions is often interpreted as capturing the degree of free riding. Fischbacher et al. (2010) shows that most people have a desire to contribute less than they think others are contributing, and that this over time leads to an unraveling of cooperation in voluntary public good games. By including this variable it will be easier to see if participants act in accordance with their own beliefs and behave as conditional cooperators or if participants consciously try to free ride on others.

The game specifications are similar to the first and second specification in the public-good game in part I but where Y_i is replaced with "beliefs of others contribution" instead of "own contribution".

8.1.1 Results
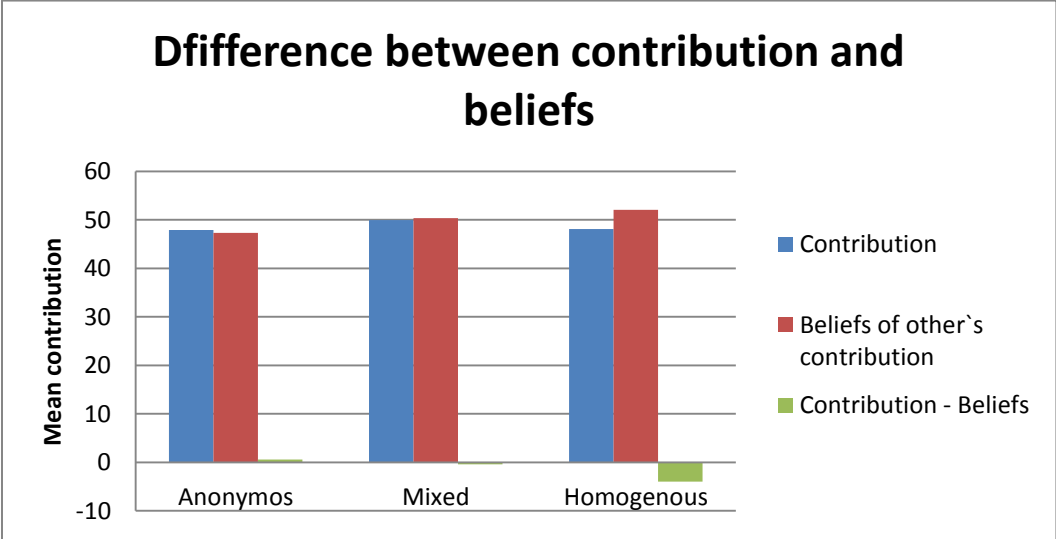
Figure 8. Difference between own contribution and beliefs of others contribution for the control group.

Presenting a visual of the summary statistics for the control group as a whole in figure 8 above one see that the difference between own contribution and beliefs of others contribution is relative small. Participants in the anonymous PG game contribute on average a bit more than what they expect others in the same group will contribute to the group fund, and there is on average no evidence of people free riding in this game.

Participants in the mixed- and the homogenous PG game however contribute less than what they expect others will contribute, in line with Fischbacher et al. (2010). On average it appears that participants in the control group in the identified games deliberately choose to

free ride on others. In the homogenous game, given that all people in this group are categorized to belong to the same ethnic group one should expect that there would be a minimum of free riding in this game. But the negative gap is somewhat surprisingly biggest for the homogenous PG game, by about 4 percentage points and I find evidence that people on average free ride on others in both the mixed- and homogenous public good game. When I test the difference in mean between own contribution and beliefs of others in appendix 14.6, I however find that the difference is not statistically significant.

Result 9. I find evidence that people on average free ride on others in both the mixed and homogenous public good game. But the finding is not statistically significant.

Although the test reveals that the difference in own contribution and beliefs of others contribution on average not is statistically significant it is interesting to look a bit closer at the data. Game specification allows me to take a closer look at how individuals contributed in the identified games and I can distinguish between beliefs of participant A and participant B in the identified games where this distinction is interesting. In the mixed PG game there exist a co-ethnic and a non-co-ethnic profile based on traditional alliances. The distinction of group member A and group member B does not tell me which is the co-ethnic profile or non-co-ethnic profile but I find that there exist a relatively huge difference in mean contribution between beliefs of group member A and group member B. Belief about group member A`s contribution equals 48.08 percent and belief about group member B`s contribution equals 52.67 percent, a difference equal to 4.6 percentage points. Own contribution, 49.94 percent, is midway between these and it is therefore reasonable to say that people in the mixed PG game on average behave as conditional cooperators.

In the homogenous PG game all participants belong to the same ethnic profile. But also in this game I find a difference between group member A and B, 48.75 percent versus 55.25 percent. Own contribution is only 48.08 percent and I find that there is a relative huge difference between own contribution and beliefs of participant B`s contribution. Again I find clear evidence against my initial expectations that people place greater weight on the utility of co-ethnic compared to non-co-ethnics. The result from this game may again indicate that difference in ethnic profile alone does not explain all the difference in beliefs in the mixed PG

game. Remember that a participants profile in addition to ethnicity include information about age and education level and the findings from the homogenous PG game indicates that age and education level also seem to have an impact on beliefs of others contribution. It may seem that information about age and level is weighted stronger than information about ethnicity.

Result 10. On average it appears that people in the mixed public good game acts as conditional cooperators. Results from the homogenous public-good game indicates that profile fixed effects such as age and education level are also important factors in explaining beliefs of others contribution.

8.1.2 Distribution
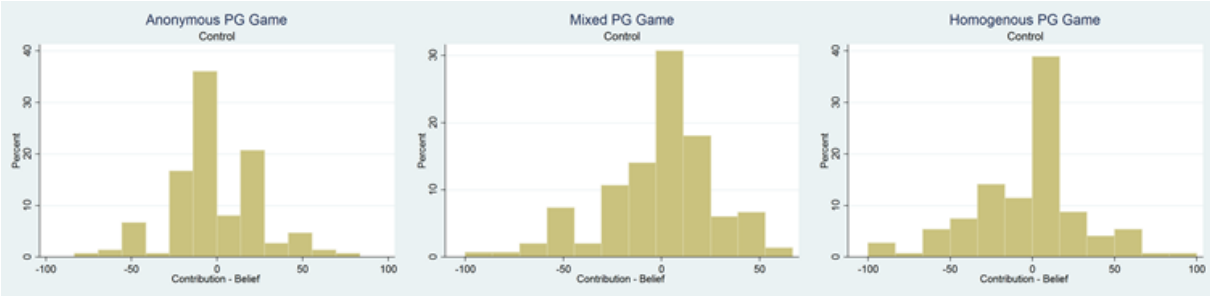
Figure 9. Distribution of the difference between own contribution and beliefs of others contribution.

The distribution of beliefs of others is in itself not very interesting. Instead I will look at the distribution for the difference between own contribution and beliefs of others contribution. Looking at figure 9 above I see that there exist internal differences between own contribution and beliefs of others in all games. The histograms show that the gap is centered around zero in all games but at the same time that there exist differences between people in the control group across games. The mixed- and homogenous PG games are more skewed to the left compared to the anonymous game, which reflects the findings from figure 8. When I compare the differences in distribution across games with a Kolmogorov-Smirnov test, appendix 14.7, I find that the observed difference in distribution between own contribution and beliefs of others contribution from figure 9 above is only statistically significant when I compare the anonymous public good game with the mixed public good game.

Result 11. The difference in distribution between own contribution and beliefs of others contribution across games is only statistically significant between the anonymous- and the mixed public good game.

8.1.3 Summary beliefs of others contribution

The difference between own contribution and beliefs of others contribution is relatively small for the control group. Overall, it appears that people does act somewhat in accordance with how they expect to be treated back. The difference is negative for both the mixed and the homogenous public good game and surprisingly the biggest gap is found in the homogenous public good game. If ethnic consideration and patrionalism were the sole determinant of expectation of others contribution one should expect to see more consistency between own contribution and beliefs of others contribution in the homogenous game than in the other games, as participants in this game only exists of co-ethnics. As this is not the case, other profile fixed effects such as age and level of education also seem to strongly influent people's beliefs of others contribution.

8.2 Dictator Game

Prior to participation in the public good games the same players participated in a dictator game. In the dictator game participants were informed that they were randomly paired with one other partner. He or she, (the dictator) received an endowment of 50 Ksh and could decide how much to give away to the other participant. The dictators would get to keep whatever they did not give away.

The idea behind the game is that contribution level captures an individual`s willingness to share with others, which is a proxy for the weight assigned to others welfare. One can say that contribution level captures people's altruism towards others. The dictator game is included in the analysis as I find it interesting to see whether or not there is a relationship between peoples altruism towards others in the dictator game and willingness to cooperate in the public good games.

8.2.1 Game Set-Up

The game was played in two different informational settings. In the first round of the dictator game the participants were anonymously paired with other workshop participants and none of the participants had any information of whom they were partnered with. The main outcome of

interest here is generosity towards an anonymous partner. In the following two rounds, participants were paired with profiles from their co-ethnic group based on traditional alliances as in the public-good game[4]. The main outcome of interest in this game is generosity towards co-ethnics.

In the dictator game, data from the different game rounds are pooled together and standard errors are clustered at the individual level. In other words, the vectors of observation from the anonymous dictator game and for the dictator game with co-ethnics are stacked together:

$$Y_{ij} = \text{dga\_transfer}_{ij}$$

Where $j = 1, 2, 3$ for the anonymous, first co-ethnic and second co-ethnic round respectively.

Primary specification for the dictator game:

$$Y_{ij} = \alpha + \alpha_p + \beta_1 CE_{ij} + \sum_{k=1}^{3} \beta_{1+k} T_k + \sum_{k=1}^{3} \beta_{4+k} T_k * CE_{ij} + \varepsilon_{ij}$$

Where CE_{ij} is an indicator variable for whether round j is a round where individual *i* faces a co-ethnic profile. Further, α, the average transfer in the control group in the anonymous round is added as well as the profile fixed effects α_p, which only apply in the co-ethnic setting.

As for the public good game there is also a specification with control variables:

$$Y_{ij} = \alpha + \alpha_p + \beta_1 CE_{ij} + \sum_{k=1}^{3} \beta_{1+k} T_k + \sum_{k=1}^{3} \beta_{4+k} T_k * CE_{ij} + \beta_8 X_i + \varepsilon_{ij}$$

The vector X_i includes the same socio-economic categories as in the public good game:

- Gender

- Age

- Years of education (demeaned)

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[4] In the identified dictator games it was only played games with co-ethnics, due to a programming glitch.

8.2.2 Results

Table 4. Dictator Game: Average transfers

	(1) Anonymous	(2) Co-ethnic
Control	43.72	41.91
	(17.69)	(20.14)
Female	45.16	44.43
	(19.15)	(22.25)
Male	42.11	39.08
	(15.89)	(17.12)
Age equal or below 35	43.55	-
	(18.04)	(-)
Age above 35	44.14	41.91
	(17.02)	(20.14)
Under Median Education	43.62	44.15
	(21.81)	(23.03)
Above Median Education	43.79	40.29
	(14.12)	(17.67)
Observations	150	282[5]

Mean coefficients; sd in parentheses. Note: mean coefficients are given in percent.

From table 4 above one sees that in the anonymous dictator game people in the control group on average give away 43.72 percent of their endowments, keeping roughly 56 percent to themselves. In the co-ethnic dictator game people in the control group on average only gives away 41.91 percent of their endowments, and I find that people in the anonymous game on average show a higher level of altruism than people in the co-ethnic games. Similar to the results for the control group in the public good game I find that there is a surprisingly negative effect of ethnicity in the dictator game also. But when I test if the means are different across games I find that the difference in average giving anonymously versus the two identified games are not statistically significant for the control group (appendix 14.8).

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[5] The co-ethnic dictator game has a total of only 282 observations instead of 300 in the control group due to 1) drop of some individuals since not paired with a co-ethnic due to mistakes in tribe assignment 2) programming mistake; in one of the 12 profiles people did not have the chance to enter transfer decision and 3) some overlap between the two co-ethnic groups.

When I split the analysis and compare mean transfer separately for the socio-economic variables across games I find that there are no difference in mean transfer between the anonymous and the identified games for any of the socio-economic variables (appendix 14.9). The difference in mean transfer is not huge enough to conclude that the difference is statistically significant. The only variable where the difference in mean is close to be statistically significant is for those who have education level above median.

Nonetheless, I observe that there is a difference in mean and that this negative difference between the anonymous and identified game goes in the same direction as observed in the public good games.

Result 12. People in the anonymous dictator game show more generosity towards others than people in the co-ethnic dictator game. The observed difference in mean transfer between the anonymous and the identified games is however not statistically significant for any of the variables.

Until now I have only focused on differences between the games and observed that as in the public good game there is a negative effect of ethnicity. When I look at each game separately in summary statistics from table 4, I see that there also exist internal differences in the socio-economic variables. Females show a higher level of altruism than males in the anonymous game. For the socio-economic categories age and education there is only a very small difference.

In the identified games females also here transfer more than males and this difference is greater than in the anonymous game. For age I cannot complete a comparison as there are no observations for people aged below 35, and for education I find that there is still a relative small difference in mean between those with below and above median education, as in the anonymous dictator game.

Table 5. Dictator game: Generosity

	(1)	(2)

	Anonymous DG game	Identified DG game
Female	2.771	4.502*
	(2.997)	(2.437)
Age - based on recruitment information	0.0768	
	(0.142)	
Education (demeaned)	-0.0981	-0.520
	(0.442)	(0.325)
Constant	39.77***	39.49***
	(5.126)	(1.748)
Observations	150	282

Standard errors in parentheses $^* p < 0.10$, $^{**} p < 0.05$, $^{***} p < 0.01$

Running a regression with females, age and education as independent variables, table 5, I find that it is only the variable female in the identified DG game that is statistically significant. This means that the difference in mean contribution between females and males are statistically significant at a 10 percent significance level. I find that females show more generosity towards others than males in the identified game.

Result 13. There are differences in means for the socio-economic categories in both games but the difference in altruism is only statistically significant for females in the identified dictator game.

8.2.3 Comparing Public-good Game with Dictator Game

Until now I have only looked at the public good game and the dictator game separately which in turn have shown that there are some similarities between the games. It is therefore interesting to find out if these similarities come about as a chance or if I find that there in fact is so that behavior in the dictator game can explain behavior in the public good games. Does a higher level of altruism in the dictator game leads to a higher contribution level in the public good games or are there no co-effects? Expecting a positive relationship between transfer in the dictator games and contribution in the public good games can be reasonable as peoples

altruism towards others may indicate that people put a higher consideration on other peoples welfare and are thus more inclined to cooperate with others. They will therefore contribute more to the funding of the group fund in the public good game. I start by looking at the correlation between the two games.

The correlation coefficient measures the strength and direction of a linear relationship between two variables on a scatterplot, as shown in figure 10. Dictator game transfer is put on the x – axis as it is reasonable to assume that generosity towards others may help explain people's willingness to contribute to the funding of the public
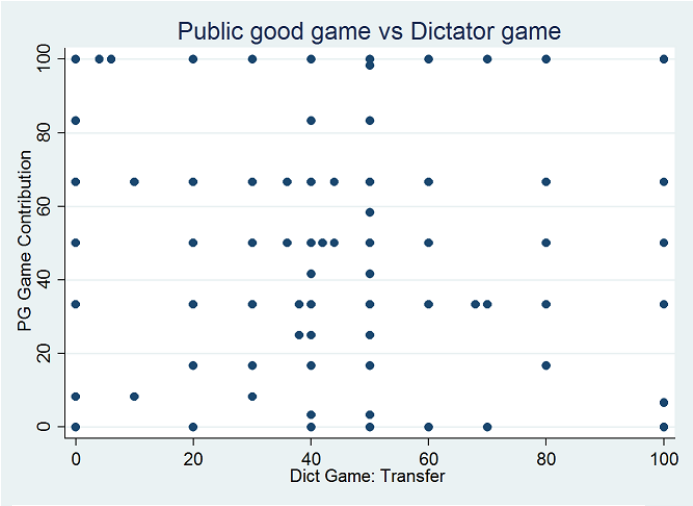
Figure 10. Scatterplot of correlation between PG and DG

good. As seen from the scatterplot in figure 10, there are no systematic pattern between transfers in the dictator game and contribution in the public good game. The observations are spread and there is no indication of a positive linear relationship as was expected.

Testing the correlation between transfer in the dictator game and contribution in the public good games for the control group reveals a correlation coefficient of 0.1678. A correlation coefficient of 1 indicates total positive correlation, if 0 there is no correlation and -1 is total negative correlation. 0.1678 indicate that there is a very weak positive correlation between transfers in the dictator game and contribution in the public good game.

Result 14. There is no indication that there is a relationship between transfer in the dictator game and contribution level in the public good games.

However, when I split the analysis and look at the anonymous games and the identified games separately the pictures changes.

When I compare contribution in the control group in the anonymous public good game with transfer in the anonymous dictator game, I get a correlation coefficient of 0.3498, indicating

that there is a weak uphill linear relationship between transfers in the DG and contribution in the PG game. Looking at the socio economic categories in the anonymous game I find that the strongest positive relationship, 0.5282, is found for people with below median education.

Comparing the mixed public good game with the identified dictator game, I get a correlation coefficient of 0.3072. Here, the strongest correlation, 0.4326 is found for people with above median education.

Lastly, while comparing the homogenous PG game with the identified DG I find a correlation coefficient of 0.0499, which indicate that there is hardly any correlation effect at all. Looking closer at the socio-economic categories, I find that for females there is a weak negative linear relationship. This is also the case for people with below median education. For males, there is a relative strong positive linear relationship.

Result 15. Comparing the anonymous games and the identified games separately I find evidence of weak linear relationship in the socio economic categories.

To summarize this section I found that when testing the correlation between transfer and contribution in the anonymous and identified games I do not find a clear pattern. The correlation coefficient does not indicate a strong positive linear relationship in any of the games. When comparing the socio-economic categories I find that people behave differently in all games and there is no socio-economic variable that is consistently independent of game comparisons. It appears that there are no strong relationship between peoples altruism and peoples willingness to contribute to the group fund. I can therefore not conclude that contribution level found in the results from part I are affected by transfer in the dictator game.

8.2.4 Regression

Although I have not found a very strong correlation effect between transfer in the dictator game and contribution in the public good game, transfer may none the less have an effect on people's contribution level in the public good games. Table 6 below presents the results from

running a regression where I include transfer in the dictator game as an independent variable in the public good games analysis.

Table 6. Public good game: summary statistics when transfer in dictator game is included

	(1) Overall	(2) Anonymous game	(3) Identified game 1	(4) Identified game 2
Female	9.748	17.96	8.906	5.084
	(6.513)	(19.39)	(15.87)	(9.091)
Education (demeaned)	-0.913	2.167	-0.0592	-0.329
	(0.873)	(2.787)	(2.540)	(1.323)
Dict Game: Transfer	0.377***	0.560	0.534**	0.301**
	(0.111)	(0.346)	(0.246)	(0.152)
dg_transfer_fem	-0.221	-0.284	-0.222	-0.147
	(0.146)	(0.444)	(0.374)	(0.207)
dg_transfer_edu	0.0113	-0.0574	-0.00550	-0.00622
	(0.0189)	(0.0623)	(0.0565)	(0.0283)
Constant	32.68***	19.48	28.98***	37.04***
	(4.824)	(15.12)	(9.910)	(6.506)
Observations	435	54	90	181

Standard errors in parentheses * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

The first column is general and I do not divide between non-identified and identified games. In the second column I only look at the anonymous games, i.e. the anonymous public good game and the anonymous dictator game. In the two last columns I look at the identified games, where column 3 looks specifically at the identified dictator game and the mixed public good game, and column 4 looks at the identified dictator game and the homogenous public good game.

Result 16. I find that transfer in the dictator game (the variable "Dict Game: Transfer) positively affect people's willingness to contribute to the groups fund in all games and the finding is statistically significant for all games except the anonymous public good game.

8.3 Summary results, part II

In part II of the analysis I wanted to look at both beliefs of others contribution and transfer in the dictator game to see if I could find an explanation to the results in part I of the analysis. I started by looking at beliefs of others contributions and I found that on average the difference

between own contribution and beliefs of others contribution is relatively small for the control group in any of the games played. There is evidence of people free riding in both the mixed and homogenous public good games. It appears that all profile fixed effects, not only ethnicity (hometown) have a strong impact on peoples beliefs of others contribution. Although I see that there is variation between people in the control group, beliefs of others contribution appears on average to be a benchmark for peoples own contribution.

In the dictator game I found that people in the anonymous game on average show more generosity and altruism than people do in the co-ethnic games. Similar to results from the public good game I observe that there is a negative effect on ethnicity from the anonymous dictator game to the identified dictator game; however, this finding is not statistically significant. Investigating if behavior in the dictator games affected people's behavior in the public good games I wanted to test if there is a correlation between transfer in the dictator game and contribution in the public good games. When testing the different games up against each other I do not find a clear pattern, neither between the different games or the socio-economic categories. Overall, the correlation coefficient does not indicate a strong linear relationship in any of the games. However when I include transfer as an independent variable in the public good games analysis and run a regression I do find that transfer in the dictator game have a positive statistically significant effect on contribution in all games. Correlation does not necessarily imply causality and in this case I find that although there is no strong evidence of a linear relationship I find evidence that transfer in the dictator game affect contribution in the public god games positively.

9.0 Experimental results, part III

In the last part of the assignment I introduce the different treatments to the analysis. In addition to document cooperation in within-group (between co-ethnics) and cross-group interactions (between non-co-ethnics) the focus in this study is also to see how much cooperative behavior, and co-ethnic preferences are potentially affected by priming different aspects of individual identity.

9.1 Priming

The question is if priming people with different social identities affect people's willingness to contribute to the group fund differently in the public goods games.

The category salience is randomly assigned to the participants in the experiment to elicit each treatment group preferences in the public good games. Priming the participants with different social categories (treatments) was inserted between games and was randomly allocated within each session. Eight different questions for each prime were developed and piloted to make the priming subtle rather than blatant to limit experimenter demand effects. The different primes were developed to trigger a certain attitude. National priming attempts to stoke national feeling and pride by asking questions such as; *"Kenya's flower industry has been growing rapidly at 20% per year. In your opinion, which is the most beautiful Kenyan flower?"* Ethnic priming in contrast reminds subjects of cultural differences within Kenya by asking questions such as; *"This greeting comes from which region: Orie?"*. Political competition priming highlights political division and participation; *"How many political candidates are running for the Presidency?"* The last prime, the neutral priming (= control group), which the results from part I and part II are based upon, focus on issues in daily life in Nairobi; *"How often do you ride a matatu (minibus) every week?"* Any differences in responses will be attributed to the different treatments (primes).

As one of the main interest lies in the comparison of treatment effects across game rounds the primary specification pools the data form the different game rounds and I estimate one single regression on the anonymous rounds and the two co-ethnic rounds together. Standard errors are clustered at the individual level. Y_{ij} is the public good game contribution.

The primary specification:

$$Y_{ij} = \alpha + \beta_1 Mix_{ij} + \beta_2 Hom_{ij} + \sum_{k=1}^{3} \beta_{2+k} T_k + \sum_{k=1}^{3} \beta_{5+k} T_k * Mix_{ij} + \sum_{k=1}^{3} \beta_{8+k} T_k * Hom_{ij} + \varepsilon_{ij}$$

9.1.2 Results

Based on the primary specification from the previous page I will in this section look at how the treatment primes affects people's behavior in the public good games.

Table 7. Public good Game: Effect of priming

	(1)	(2)	(3)

	Anonymous PG game	Mixed PG game	Homogenous Pg game
National Prime	-4.697	-4.814	-3.742
	(3.110)	(3.331)	(3.470)
Ethnic Prime	0.325	-0.816	4.874
	(3.110)	(3.331)	(3.470)
Political Comp. Prime	-1.716	-3.157	3.370
	(3.115)	(3.336)	(3.475)
Constant	47.89***	49.94***	48.08***
	(2.210)	(2.367)	(2.465)
Observations	608	608	608

Standard errors in parentheses. Note: mean coefficients are given in percent [*] $p < 0.10$, [**] $p < 0.05$, [***] $p < 0.01$

Looking at the result from the regressions in table 7 above where I include the different treatment effects I find that priming individuals with national identity has a substantial negative impact on contribution in all public good games, contrary to what I initial expected and presented as one of my main expectations. The finding is not statistically significant, but the result comes nonetheless about as unexpected and surprising as the purpose of the prime is to invoke national pride, and one should therefore expect to see an increase in average contribution. What exactly drives this negative impact is unclear but it may be that priming individuals with national identity invokes a national identity based on distrust and selfishness instead of pride and cooperation. Looking back at Kenya's history of political conflict, corruption and high inequality this may not be a bad explanation as building up national pride never has been a part of the country's politics.

From the review over Kenya's history one learned that ethnic divides have been and still are central to Kenya politics with parties and coalitions organized along ethnic lines. To the extent that political competition and ethnic division are closely related in peoples thinking, one should expect to find that the ethnic identity treatment prime and the political competition identity treatment prime have similar effects on contribution in the different games. From table 7 I see that the two primes have similar effects on contribution in both the mixed- and the homogenous public good game. The ethnic- and political competition treatment primes affect contribution negatively in the mixed PG game and positively in the homogenous PG game. Barth, and proponents of the instrumental approach to ethnicity argues that people act

on the basis of ethnic categories only if they are perceived as useful (Barth, 1969). A substantial increase in contribution when primed with ethnic- and political competition identity in the homogenous game may give support to this view. However, none of these findings is statistically significant at any reasonable significance level. One question one may ask is if the priming has been too subtle? When priming individuals there will always be a trade-off in priming to strong and invoke a certain behavior versus priming to discrete, and where one find that the treatment primes has no impact. It could also be that the result only reflects that election date was still far away when the data was collected. Closer to the Election Day when political campaigning ramps up one should expect that the impact of these treatment primes will be greater.

Result 17. National identity treatment prime lower peoples contribution to the group fund in all games. Ethnic- and political competition treatment primes affect contribution differently in all games. However none of the findings are statistically significant.

9.1.3 Distribution
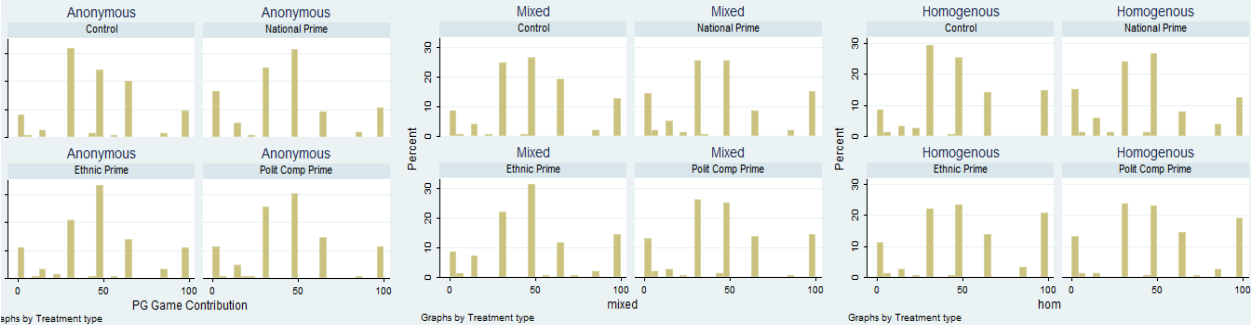
Figure 11. Effect of priming on the distribution

Looking at the distribution for the anonymous-, mixed- and homogenous public good games, I see at the histograms for the different treatment primes does not look very much different from the control group in any of the games. Some contribute nothing and some contribute all, but most contributions are as in the control group centered around 50 percent. We have already learned that national identity prime lowers overall contribution and looking closer at the histograms I see that when subjects are primed with national identity this leads surprisingly to more people contributing nothing to the group fund in all games, where one in

fact should expect it to be the other way around. As mentioned earlier, by triggering a national identity one should expect that more people would be inclined to contribute more to the welfare of the group and thus contribute more to the group fund. Ethnic priming and political competition priming also leads to more people contributing nothing to the group fund compared to the control group, but this increase are not as huge as for the national identity prime and more in line with what one could expect given the nature of the prime.

When I test if the distributions are equal to each other with a Kolmogorov-Smirnov test, appendix 14.10, I get high p-values indicating that all distributions; treatments versus the control group and the different treatments set up against each other, are not statistically significantly different from each other. Based on the tests, I find that it is only the difference in distribution between the control group and the national identity treatment prime in the anonymous game, and the difference in distribution between the national identity treatment prime and the ethnic identity treatment prime in the homogenous games that are close to being statistically significant at a 10 percent significance level.

Result 18. The difference in distribution for the control group compared to the different treatments and the different treatments set up against each other are not statistically significant different from each other in any of the games played.

But, when I split the test on equality of distribution on the socio economic categories I do find that there are some differences in how people behave in the different games when priming is introduced. See appendix 14.11.

In the anonymous public good game I find that the distribution for people aged below 35 are different when primed with national identity compared to both ethnic identity and political competition identity. For people with education level above median I also find the same pattern as for people aged below 35.

In the mixed public good game I get high p-values for all tests and I find no evidence that the socio-economic categories have an effect on the distribution.

In the homogenous public good game I find that the distribution for females are different when primed with national identity compared to both ethnic identity and political competition

identity. And also that the distribution for people aged below 35 are different when primed with national identity compared to both ethnic identity and political competition identity.

Result 19. When I look at each socio-economic category separately I find evidence that the treatment primes affect the distribution of some of the variables differently in both the anonymous- and the homogenous public good game.

9.1.4 Robustness

From the histograms, I observed that there was an increase in people who contributed nothing to the group fund and I want to test if this observation is statistically significant.

Table 8. Effect of priming: Contribution equals zero.

	(1) Anonymous	(2) Mixed	(3) Homogenous
National Prime	0.0834^{**}	0.0193	0.0237^{*}
	(0.0369)	(0.0126)	(0.0126)
Ethnic Prime	0.0311	-0.000631	0.0125
	(0.0369)	(0.0126)	(0.0126)
Political Comp. Prime	0.0318	0.0155	0.0155
	(0.0369)	(0.0127)	(0.0127)
Constant	0.0800^{***}	0.0290^{***}	0.0245^{***}
	(0.0262)	(0.00896)	(0.00897)
Observations	608	1814	1814

Standard errors in parentheses $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$

Running a regression only for contribution which equal zero, i.e. $Y_{ij}=0$, I find that all treatment primes leads to an increase in people who contributes nothing to the group fund compared to the control group, except the ethnic identity treatment prime in the mixed public good game. The coefficients are however only statistically significant for the national identity treatment prime in the anonymous and the homogenous public good game.

Result 20. When primed with national identity there are more people who contributs nothing to the group fund in both the anonymous and the homogenous public good game, compared to people in the control group, and this finding is statistically significant.

9.1.5 Beliefs of other`s contribution

Table 9. Beliefs of other`s contribution

	(1) Anonymous	(2) Mixed	(3) Homogenous
National Prime	4.448*	3.321	3.114
	(2.349)	(2.760)	(2.861)
Ethnic Prime	4.536*	4.824*	1.220
	(2.349)	(2.760)	(2.847)
Political Comp. Prime	4.559*	3.559	3.884
	(2.352)	(2.765)	(2.881)
Constant	47.30***	50.37***	52.07***
	(1.669)	(1.961)	(2.027)
Observations	608	608	598

Standard errors in parentheses $^*p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$

Looking at the effect of priming on beliefs of others contribution, I see from table 11 above that beliefs of others contribution increases for all treatments in all games compared to the control group. The increase is statistically significant for all treatments primes in the anonymous public good game and for the ethnic identity treatment prime in the mixed public good game. From table 7, "Public good Game. Effect of priming", I found that the different treatments mostly affects peoples own contribution negatively. When I find in table 11 that peoples beliefs of others are affected positively when treated with national-, ethnic-, and political identity, it suggests that the difference between own contribution and beliefs of others contribution on average will be greater. This indicates that there is a higher level of free riding in the public good games when primed with national-, ethnic- or political competition identity compared to the control group.

I investigate this further by running a regression where Y_{ij} is the difference between own contribution and beliefs. The results are shown in table 10 below. I see that the treatments in fact affect the gap in own contribution and beliefs of others negatively compared to in the control group but the coefficients are only statistically significant for the national- and political competition prime in the both the anonymous and the mixed public good game. It may be that the national prime which was intended to make people think about themselves as Kenyans in a positive way has made them think about all the problems Kenya are facing instead, including political tension. So possibly, the national prime has worked in the same direction as the political prime.

Table 10. Difference between own contribution and beliefs of others contribution

	(1) Anonymous	(2) Mixed	(3) Homogenous
National Prime	-9.146***	-8.134**	-6.423
	(3.300)	(3.552)	(3.899)
Ethnic Prime	-4.211	-5.640	3.667
	(3.300)	(3.552)	(3.880)
Political Comp. Prime	-6.274*	-6.716*	-0.236
	(3.306)	(3.558)	(3.926)
Constant	0.589	-0.422	-4.004
	(2.345)	(2.524)	(2.762)
Observations	608	608	598

Standard errors in parentheses * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Result 21. I find that there is a higher level of free riding in the public good games when the treatment primes are introduced compared to what I have found in the control group. But the finding is only statistically significant for the national- and political competition prime in both the anonymous- and mixed public good game.

9.2 Summary results, part III
To summarize part III of the analysis I find that when individuals are primed with national identity this surprisingly lowers contribution to the group fund. For the ethnic and political competition prime the direction of the impact vary across games. The lower contribution level

in the national priming case in the homogenous public good game appears to be relatively pronounced relative to the ethnic priming in the same game. However, none of the effects caused by the treatments primes are large or statistically significant when contribution level is the outcome.

The histograms indicates that there are some differences between the treatments but when running a Kolmogorov-Smirnov test I find that the distributions are not statistically significanty different from each other. From the histograms, I also see that priming leads to more people contributing nothing to the group fund. Running a regression with contribution zero I find that when primed with national identity there are more people in the anonymous- and the homogenous public good game who contributes nothing to the group fund compared to the control group and this finding is statistically significant. Beliefs of others contribution is positively affected by the primes and as own contribution mostly is affected negatively this leads to a higher level of free riding when treated with national-, ethnic and political competition identity compared to the control group. For the anonymous- and mixed public good game I find that the national identity treatment prime and the political competition identity treatment prime has a negative causal impact on the levels of free riding in these two games compared to the control group. Summarized I find that priming individuals have some effects on people's behavior in the public good games, and some of the effects goes in a different direction than what I initial expected before I started the research.

10.0 Summary

The purpose of this study has been to investigate social cooperation in an ethnic diversified society by mainly analyzing how people contribute to the funding of public goods. In doing this, I wanted to be able to answer the question "*does ethnicity matter for normal people in non-political times?*"

To make the reader understand the complexity and challenges associated with ethnicity I started the research by a thorough review of the concept of ethnicity before I looked more specifically at different research related to the topic. From the literature reviews I concluded that most research on the topic find that ethnicity has a negative effect on peoples willingness to cooperate with each other and that ethnicity in many cases prevents and destroy collective actions. Concentrating on the country of interest in this research, Kenya, one observes that ethnic divides have been and are still very central in the Kenyan political arena with parties

and coalitions traditionally organized along ethnic lines. Combined with the findings from the literature review I therefore expected to find that ethnicity would influence people's willingness to contribute to the group fund negatively in the public good game, i.e., that people would contribute more in a homogenous game than in both the anonymous game and the mixed game. I further expected that priming individuals with different social identities would affect people's willingness to contribute to the group fund differently, for example, that a person primed with national identity would be more inclined to contribute more to the group fund than a person primed with ethnic identity did.

The experiment itself was conducted summer 2012, in a relative calm period of time in Kenya where Election Day to the upcoming presidential election was still far away. The experiment attempted to invoke a co-ethnic bias in two different ways; by letting the players play identified games where the ethnic composition of the other group members were changed and by the use of priming which intended to make the ethnic identity more salient, and the data was analyzed through statistical methods.

The results shows somewhat surprisingly that ethnicity does not have the expected effect on peoples willingness to contribute to the group fund. I found no evidence from the study that supports that individual's place greater weight on the utility of co-ethnics than on the utility of non-co-ethnics, or that individuals are more generous towards co-ethnics and that they contribute more to a homogenous co-ethnic group fund. Contrary to my initial expectations, although not statistically significant, I found that, individuals in the control group on average contribute more to the funding of the group fund in the mixed public good games compared to the homogenous public good game.

When I looked at the effect of the different treatment primes I found that the ethnic prime which intended to remind subjects of cultural differences within Kenya, did not have a statistically significantly effect on people's willingness to cooperate. I also experimented with a political competition prime, intended to capture whether political tensions make people less prone to cooperate. There is some evidence of increased free riding, but only in the anonymous public good game. Finally, I also investigated whether invoking a feeling of national pride would make people more willing to cooperate. Surprisingly, however, the national prime tends to make people less cooperative in all games, one possible explanation being that the national prime made people think about what divides Kenyans (like the political prime) rather than what unites Kenyans.

11.0 Conclusion

The negative effect of ethnic preferences is striking, particularly since it is found across different approaches, both by comparing the different games and by priming. If the finding was only established by the use of the identified games people could argue that the results came about as an experimenter demand effect, i.e., that the participants behaved in a certain way because they understood what the experiment was looking at. If the finding was only established by the use of priming, people could argue that this only reflects that the priming was too weak. However, both of these arguments become less likely when the negative effect of ethnic preferences is found both across approaches and games.

Based on the result and argumentation above I conclude that I do not find that ethnicity matter for normal people in non-political times.

12.0 Implications

In this research I find contrary to my main expectations that ethnicity does not matter for normal people in non-political times. The result indicates that one should not so easily jump from the observation of ethnic divides to the conclusion that there are fundamental ethnic preferences and beliefs that apply to all situations. In Kenya, I find that neither ethnic composition or ethnic priming affects peoples willingness to cooperate. For further research on the topic it would be interesting to look if this missing negative effect of ethnicity is only valid for research related to cooperation? Will one for example find similar results in other countries? Is so, what will this mean for the way we address ethnicity? And lastly, how will the result change closer to Election Day when political campaigning ramps up?

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14.0 Appendix

In this chapter I present the different appendices. Appendix 14.1 to 14.11 refers to different tests I have done in the analysis. I have chosen to present them separately in the appendix so it will be easy for the reader to follow what kind of test have been performed to get the different results. The chapter ends with appendix 14.12 who shows the dofile which includes all the commands I have used to produce the results.

14.1 Test mean contribution across games.

Between the anonymous- and mixed public good game

. ttest contr_c = contr_comp

Paired t test

```
------------------------------------------------------------------------
Variable |    Obs      Mean    Std. Err.   Std. Dev.   [95% Conf. Interval]
---------+--------------------------------------------------------------
 contr_c |    150    47.88889   2.057444   25.19844   43.82335   51.95442
 contr_~p |   150    49.94444   2.226176   27.26497   45.54549    54.3434
---------+--------------------------------------------------------------
    diff |    150   -2.055556   2.128335   26.06667  -6.261173   2.150061
------------------------------------------------------------------------
```

     mean(diff) = mean(contr_c - contr_comp)   t = -0.9658

Ho: mean(diff) = 0   degrees of freedom =   149

Ha: mean(diff) < 0   Ha: mean(diff) != 0   Ha: mean(diff) > 0

Pr(T < t) = 0.1679   Pr(|T| > |t|) = 0.3357   Pr(T > t) = 0.8321

P-value of 0.3357 indicate that the observed difference is not statistically significant.

Between the anonymous and homogenous public good game

. ttest contr_c = contr_ch

Paired t test

```
------------------------------------------------------------------------------
Variable |   Obs      Mean    Std. Err.  Std. Dev.  [95% Conf. Interval]
---------+--------------------------------------------------------------------
 contr_c |   150   47.88889   2.057444   25.19844   43.82335   51.95442
contr_ch |   150   48.07778   2.277522   27.89384   43.57736   52.57819
---------+--------------------------------------------------------------------
    diff |   150  -.1888891   2.293499   28.08951  -4.720874   4.343096
------------------------------------------------------------------------------
```

mean(diff) = mean(contr_c - contr_ch)   t = -0.0824

Ho: mean(diff) = 0   degrees of freedom =   149

Ha: mean(diff) < 0   Ha: mean(diff) != 0   Ha: mean(diff) > 0

Pr(T < t) = 0.4672   Pr(|T| > |t|) = 0.9345   Pr(T > t) = 0.5328

P-value of 0.9345 indicate that the observed difference is not statistically significant.

Between the mixed and the homogenous public good game

. ttest contr_comp = contr_ch

Paired t test

Variable | Obs   Mean   Std. Err.   Std. Dev.   [95% Conf. Interval]

---------+--

contr_~p | 150   49.94444   2.226176   27.26497   45.54549   54.3434

contr_ch | 150   48.07778   2.277522   27.89384   43.57736   52.57819

---------+--

  diff | 150   1.866667   1.951176   23.89693   -1.988884   5.722217

----

    mean(diff) = mean(contr_comp - contr_ch)   t =   0.9567

 Ho: mean(diff) = 0   degrees of freedom =   149

 Ha: mean(diff) < 0   Ha: mean(diff) != 0   Ha: mean(diff) > 0

 Pr(T < t) = 0.8299   Pr(|T| > |t|) = 0.3403   Pr(T > t) = 0.1701

P-value of 0.3403 indicate that the observed difference is not statistically significant.

14.2. Kolmogorov – Smirnov test for equality of distribution.

In addition to compare mean contribution I want to explain the impact on overall distribution using the Kolmogorov-Smirnov test. The Kolmogorov–Smirnov test is a nonparametric test for the equality of continuous, one-dimensional probability distributions that can be used to compare a sample with a reference probability distribution (one-sample K–S test), or too compare two samples (two-sample K–S test) (Wikipedia 2014). The two-sample Kolomogorov-Smirnov test is one of the most useful and general nonparametric methods for comparing two samples, as it is sensitive to differences in both location and shape of the empirical cumulative distribution functions of the two samples (ibid). In the two-sample K-S test the null hypotheses states that the samples are drawn from the same distribution. Note that while the two-sample test checks whether the two data samples come from the same distribution, it does not specify what that common distribution is (e.g. normal or not normal). (Wikipedia 2014)

Anonymous PG game vs. Mixed PG game
ksmirnov pg_contr if treat1 & game==1 | game==2, by(game) exact

Two-sample Kolmogorov-Smirnov test for equality of distribution functions

Smaller group	D	P-value	Exact
1:	0.0529	0.510	
2:	-0.0692	0.316	
Combined K-S:	0.0692	0.611	0.582

P-value of 0.582. The observed differences in distribution between people in the control group in the anonymous PG game and in the mixed PG game are not statistically significant.

Anonymous PG game vs. Homogenous PG game

. ksmirnov pg_contr if treat1 & game==1 | game==3, by(game) exact

Two-sample Kolmogorov-Smirnov test for equality of distribution functions

Smaller group	D	P-value	Exact
1:	0.0890	0.150	
3:	-0.0623	0.395	
Combined K-S:	0.0890	0.298	0.279

P-value of 0.279. The observed differences in distribution between people in the control group in the anonymous PG game and in the homogenous are not statistically significant.

Mixed PG game vs. Homogenous PG game

. ksmirnov pg_contr if treat1 & game==2 | game==3, by(game) exact

Two-sample Kolmogorov-Smirnov test for equality of distribution functions

Smaller group	D	P-value	Exact
2:	0.0361	0.456	
3:	-0.0070	0.971	
Combined K-S:	0.0361	0.827	

P-value of 0.827. The observed differences in distribution between people in the control group in the mixed PG game and in the homogenous are not statistically significant.

14.3 Test mean contribution for the social categories in every game.

Anonymous PG game

Gender

. ttest pg_contr if treat1 & Hom == 0 & Mix == 0, by(gender)

Two-sample t test with equal variances

Group	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf. Interval]	
Male	71	46.71361	2.93132	24.69974	40.86728	52.55995
Female	79	48.94515	2.897067	25.7497	43.17753	54.71276
combined	150	47.88889	2.057444	25.19844	43.82335	51.95442
diff		-2.231533	4.13058		-10.39407	5.931

----

diff = mean(Male) - mean(Female)   t = -0.5402

Ho: diff = 0   degrees of freedom =   148

Ha: diff < 0   Ha: diff != 0   Ha: diff > 0

Pr(T < t) = 0.2949   Pr(|T| > |t|) = 0.5898   Pr(T > t) = 0.7051

Age

. ttest pg_contr if treat1 & Hom ==0 & Mix == 0, by(age_dummy)

Two-sample t test with equal variances

Group	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf. Interval]	
0	106	46.85534	2.440908	25.13069	42.01548	51.69521
1	44	50.37879	3.840804	25.47701	42.63307	58.12451

```
---------+--------------------------------------------------------------

combined |    150   47.88889   2.057444   25.19844   43.82335   51.95442

---------+--------------------------------------------------------------

    diff |        -3.523442   4.524958             -12.46531   5.418429

--------------------------------------------------------------------------

    diff = mean(0) - mean(1)                        t =  -0.7787

Ho: diff = 0                          degrees of freedom =     148
```

```
   Ha: diff < 0           Ha: diff != 0          Ha: diff > 0

 Pr(T < t) = 0.2187     Pr(|T| > |t|) = 0.4374      Pr(T > t) = 0.7813
```

Education level
. ttest pg_contr if treat1 & Hom == 0 & Mix == 0, by(educ_dummy1)

Two-sample t test with equal variances

```
--------------------------------------------------------------------------

  Group |    Obs      Mean   Std. Err.  Std. Dev.  [95% Conf. Interval]

---------+--------------------------------------------------------------

      0 |    63        50   3.155344   25.04476   43.69256   56.30744

      1 |    87   46.36015   2.717086   25.34329   40.95876   51.76154

---------+--------------------------------------------------------------

combined |    150   47.88889   2.057444   25.19844   43.82335   51.95442

---------+--------------------------------------------------------------

    diff |        3.639847   4.171937             -4.604412   11.88411

--------------------------------------------------------------------------

    diff = mean(0) - mean(1)                        t =   0.8725

Ho: diff = 0                          degrees of freedom =     148

   Ha: diff < 0           Ha: diff != 0          Ha: diff > 0

 Pr(T < t) = 0.8078     Pr(|T| > |t|) = 0.3844      Pr(T > t) = 0.1922
```

Mixed PG game

Gender

. ttest mixed if treat1, by(gender)

Two-sample t test with equal variances

Group	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf. Interval]	
Male	71	49.64789	2.926347	24.65784	43.81147	55.4843
Female	79	50.21097	3.326614	29.56759	43.58819	56.83375
combined	150	49.94444	2.226176	27.26497	45.54549	54.3434
diff		-.563083	4.473495		-9.403258	8.277092

----

diff = mean(Male) - mean(Female)   t = -0.1259

Ho: diff = 0   degrees of freedom =   148

  Ha: diff < 0   Ha: diff != 0   Ha: diff > 0

 Pr(T < t) = 0.4500   Pr(|T| > |t|) = 0.9000   Pr(T > t) = 0.5500

Age

. ttest mixed if treat1, by(age_dummy)

Two-sample t test with equal variances

Group	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf. Interval]	
0	106	48.97799	2.642804	27.20933	43.73779	54.21818
1	44	52.27273	4.156644	27.57206	43.89005	60.6554

Mixed PG game

```
---------+-----------------------------------------------------------------

combined |   150   49.94444   2.226176   27.26497   45.54549   54.3434

---------+-----------------------------------------------------------------

   diff |         -3.29474   4.898589            -12.97495   6.385471

-----------------------------------------------------------------------------

   diff = mean(0) - mean(1)                       t =  -0.6726

Ho: diff = 0                        degrees of freedom =     148
```

     Ha: diff < 0   Ha: diff != 0   Ha: diff > 0

 Pr(T < t) = 0.2511   Pr(|T| > |t|) = 0.5023   Pr(T > t) = 0.7489

Education level

. ttest mixed if treat1, by(educ_dummy1)

Two-sample t test with equal variances

```
-----------------------------------------------------------------------------

  Group |   Obs     Mean   Std. Err.   Std. Dev.   [95% Conf. Interval]

---------+-----------------------------------------------------------------

    0 |   63   50.92593   3.462216   27.48049   44.00505   57.8468

    1 |   87   49.23372   2.92099   27.24518   43.42698   55.04045

---------+-----------------------------------------------------------------

combined |   150   49.94444   2.226176   27.26497   45.54549   54.3434

---------+-----------------------------------------------------------------

   diff |        1.69221   4.523534            -7.246847   10.63127

-----------------------------------------------------------------------------

   diff = mean(0) - mean(1)                       t =   0.3741

Ho: diff = 0                        degrees of freedom =     148
```

     Ha: diff < 0   Ha: diff != 0   Ha: diff > 0

 Pr(T < t) = 0.6456   Pr(|T| > |t|) = 0.7089   Pr(T > t) = 0.3544

Homogenous Public-good Game

Gender

. ttest hom if treat1, by(gender)

Two-sample t test with equal variances

Group	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf. Interval]
Male	71	46.52582	3.222113	27.15	40.09952 52.95212
Female	79	49.47257	3.222985	28.64651	43.0561 55.88904
combined	150	48.07778	2.277522	27.89384	43.57736 52.57819
diff		-2.946752	4.570508		-11.97863 6.085131

----

diff = mean(Male) - mean(Female)   t = -0.6447

Ho: diff = 0   degrees of freedom = 148

Ha: diff < 0	Ha: diff != 0	Ha: diff > 0
Pr(T < t) = 0.2600	Pr(|T| > |t|) = 0.5201	Pr(T > t) = 0.7400

Age

. ttest hom if treat1, by(age_dummy)

Two-sample t test with equal variances

Group	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf. Interval]
0	106	47.24843	2.648791	27.27097	41.99636 52.50049
1	44	50.07576	4.457587	29.56829	41.08618 59.06534

```
combined |   150   48.07778   2.277522   27.89384   43.57736   52.57819

---------+-----------------------------------------------------------------

    diff |       -2.82733   5.013845            -12.7353   7.080641

-----------------------------------------------------------------------------

    diff = mean(0) - mean(1)                       t =  -0.5639
Ho: diff = 0                          degrees of freedom =    148


   Ha: diff < 0            Ha: diff != 0            Ha: diff > 0
 Pr(T < t) = 0.2868      Pr(|T| > |t|) = 0.5737      Pr(T > t) = 0.7132
```

Education level

. ttest hom if treat1, by(educ_dummy1)

Two-sample t test with equal variances

```
-----------------------------------------------------------------------------

   Group |   Obs      Mean   Std. Err.  Std. Dev.  [95% Conf. Interval]

---------+-----------------------------------------------------------------

       0 |    63   50.79365   3.763024   29.86807   43.27147   58.31583

       1 |    87   46.11111   2.827585   26.37396   40.49006   51.73216

---------+-----------------------------------------------------------------

combined |   150   48.07778   2.277522   27.89384   43.57736   52.57819

---------+-----------------------------------------------------------------

    diff |        4.68254   4.61403            -4.435349   13.80043

-----------------------------------------------------------------------------

    diff = mean(0) - mean(1)                       t =   1.0148
Ho: diff = 0                          degrees of freedom =    148


   Ha: diff < 0            Ha: diff != 0            Ha: diff > 0
 Pr(T < t) = 0.8441      Pr(|T| > |t|) = 0.3118      Pr(T > t) = 0.1559
```

14.4 Test mean contribution for the social categories across games

Gender; Female

Anonymous versus mixed PG game
. ttest contr_cf = contr_cfm

Paired t test

Variable	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf. Interval]	
contr_cf	79	48.94515	2.897067	25.7497	43.17753	54.71276
contr~fm	79	50.21097	3.326614	29.56759	43.58819	56.83375
diff	79	-1.265823	3.303204	29.35952	-7.841996	5.31035

----

mean(diff) = mean(contr_cf - contr_cfm)   t = -0.3832

Ho: mean(diff) = 0   degrees of freedom =   78

Ha: mean(diff) < 0	Ha: mean(diff) != 0	Ha: mean(diff) > 0
Pr(T < t) = 0.3513	Pr(|T| > |t|) = 0.7026	Pr(T > t) = 0.6487

Anonymous versus homogenous PG game
. ttest contr_cf = contr_cfh

Paired t test

Variable	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf. Interval]	
contr_cf	79	48.94515	2.897067	25.7497	43.17753	54.71276
contr~fh	79	49.47257	3.222985	28.64651	43.0561	55.88904

```
  diff |    79   -.5274261   3.494758   31.06209   -7.484956   6.430103
```

```
    mean(diff) = mean(contr_cf - contr_cfh)                t =  -0.1509
```

Ho: mean(diff) = 0   degrees of freedom =   78

Ha: mean(diff) < 0   Ha: mean(diff) != 0   Ha: mean(diff) > 0

Pr(T < t) = 0.4402   Pr(|T| > |t|) = 0.8804   Pr(T > t) = 0.5598

Mixed versus homogenous PG game
. ttest contr_cfm = contr_cfh

Paired t test

Variable | Obs   Mean   Std. Err.   Std. Dev.   [95% Conf. Interval]

----------+--

contr~fm | 79   50.21097   3.326614   29.56759   43.58819   56.83375

contr~fh | 79   49.47257   3.222985   28.64651   43.0561   55.88904

----------+--

```
  diff |    79   .7383966   3.170982   28.18431   -5.574544   7.051338
```

```
    mean(diff) = mean(contr_cfm - contr_cfh)               t =   0.2329
```

Ho: mean(diff) = 0   degrees of freedom =   78

Ha: mean(diff) < 0   Ha: mean(diff) != 0   Ha: mean(diff) > 0

Pr(T < t) = 0.5918   Pr(|T| > |t|) = 0.8165   Pr(T > t) = 0.4082

Gender; Male

Anonymous versus mixed PG game
. ttest contr_cm = contr_cmm

Paired t test

Variable | Obs   Mean   Std. Err. Std. Dev. [95% Conf. Interval]

---------+---

contr_cm | 71   46.71361   2.93132   24.69974   40.86728   52.55995

contr~mm | 71   49.64789   2.926347   24.65784   43.81147   55.4843

---------+---

  diff | 71   -2.934273   2.61179   22.00733   -8.143323   2.274778

----

   mean(diff) = mean(contr_cm - contr_cmm)   t = -1.1235

 Ho: mean(diff) = 0   degrees of freedom =   70

 Ha: mean(diff) < 0   Ha: mean(diff) != 0   Ha: mean(diff) > 0

 Pr(T < t) = 0.1325   Pr(|T| > |t|) = 0.2651   Pr(T > t) = 0.8675

I used the the same procedure to compare mean for the other socio-economic categories; age and education level. Instead of listing all test here, which will take a lot of space, I refer to appendix 14.12 for a control of the result.

14.5 Kolmogorov –Smirnov test for equality of distribution.

Anonymous Public-good Game.

Gender: male versus female.

Smaller group	D	P-value	Exact
0:	0.1132	0.383	
1:	-0.0449	0.860	
Combined K-S:	0.1132	0.724	0.665

P-value of 0.665. The observed difference in distribution between male and female are not statistically significant. Contribution across gender has the same distribution.

Age: age equal and below age 35 versus age above 35

Smaller group	D	P-value	Exact
0:	0.0639	0.776	
1:	-0.0111	0.992	
Combined K-S:	0.0639	1.000	0.998

P-value of 0.998. Contribution across age have the same distribution.

Education: below median education versus above median education.

Smaller group	D	P-value	Exact
0:	0.0000	1.000	
1:	-0.2190	0.028	
Combined K-S:	0.2190	0.055	0.045

P-value of 0.045. Contribution across level of education do not have the same distribution.

Mixed Public-good Game

Gender: female versus male

Smaller group	D	P-value	Exact
0:	0.1107	0.400	
1:	-0.1054	0.436	
Combined K-S:	0.1107	0.749	0.691

P-value of 0.691. Contribution across gender have the same distribution.

Age: age equal and below age 35 versus age above 35

Smaller group	D	P-value	Exact
0:	0.0648	0.770	
1:	0.0000	1.000	
Combined K-S:	0.0648	1.000	0.998

P-value of 0.998. Contribution across age have the same distribution

Education: below median education versus above median education.

Smaller group	D	P-value	Exact
0:	0.0075	0.996	
1:	-0.0759	0.650	
Combined K-S:	0.0759	0.982	0.964

P-value of 0.964. Contribution across level of education have the same distribution.

Homogenous Public -good game

Gender: female versus male

Smaller group	D	P-value	Exact

0:	0.1164	0.363	
1:	-0.0585	0.774	
Combined K-S:	0.1164	0.691	0.631

P-value of 0.6311. Contribution across gender have the same distribution.

Age: age equal and below age 35 versus age above 35

Smaller group	D	P-value	Exact

0:	0.0592	0.804	
1:	-0.0060	0.998	
Combined K-S:	0.0592	1.000	1.000

P-value of 1.0. Contribution across age have the same distribution

Education: below median education versus above median education.

Smaller group	D	P-value	Exact

0:	0.0000	1.000	
1:	-0.0972	0.493	
Combined K-S:	0.0972	0.871	0.829

P-value of 0.829. Contribution across level of education have the same distribution.

14.6 Test if the difference between mean contribution and beliefs of others are equal to each

Anonymous public good game

ttest contr_c = contr_b, unpaired

Two-sample t test with equal variances

```
-------------------------------------------------------------------------------

Variable |   Obs      Mean   Std. Err.  Std. Dev.  [95% Conf. Interval]

---------+---------------------------------------------------------------

 contr_c |   150   47.88889   2.057444   25.19844   43.82335   51.95442

 contr_b |   150      47.3   1.533913   18.78652   44.26897   50.33103

---------+---------------------------------------------------------------

combined |   300   47.59444   1.281122   22.18969   45.07329   50.1156

---------+---------------------------------------------------------------

    diff |        .5888881   2.566313             -4.461505   5.639281

-------------------------------------------------------------------------------

    diff = mean(contr_c) - mean(contr_b)                t =  0.2295

Ho: diff = 0                         degrees of freedom =    298


   Ha: diff < 0           Ha: diff != 0            Ha: diff > 0
 Pr(T < t) = 0.5907    Pr(|T| > |t|) = 0.8187     Pr(T > t) = 0.4093
```

P-value of 0.88 indicate that the difference between own contribution and beliefs of others contribution is not statistically significant, i.e. we can keep H_0 that says there are no difference in own contribution and beliefs.

Mixed public good game

ttest contr_comp = bmixo, unpaired

Two-sample t test with equal variances

```
-------------------------------------------------------------------------------

Variable |   Obs      Mean    Std. Err.  Std. Dev.   [95% Conf. Interval]

---------+-------------------------------------------------------------------

contr_~p |   150   49.94444   2.226176   27.26497   45.54549   54.3434

  bmixo |   150   50.36667   1.825086   22.35265   46.76027   53.97306

---------+-------------------------------------------------------------------

combined |   300   50.15556   1.436983   24.88927   47.32767   52.98344

---------+-------------------------------------------------------------------

   diff |        -.4222229   2.87868             -6.08734   5.242894

-------------------------------------------------------------------------------

   diff = mean(contr_comp) - mean(bmixo)                 t =  -0.1467

Ho: diff = 0                          degrees of freedom =    298


  Ha: diff < 0            Ha: diff != 0           Ha: diff > 0

 Pr(T < t) = 0.4417     Pr(|T| > |t|) = 0.8835      Pr(T > t) = 0.5583
```

P-value of 0.88 indicate that the difference between own contribution and beliefs of others contribution is not statistically significant, i.e. we can keep H_0 that says there are no difference in own contribution and beliefs.

Homogenous public good game

ttest contr_ch = bhomo, unpaired

Two-sample t test with equal variances

Variable	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf. Interval]	
contr_ch	150	48.07778	2.277522	27.89384	43.57736	52.57819
bhomo	149	52.06935	1.936853	23.6423	48.24189	55.89681
combined	299	50.06689	1.497638	25.89658	47.1196	53.01418
diff		-3.991574	2.991378		-9.878557	1.895409

----

diff = mean(contr_ch) - mean(bhomo)   t = -1.3344

Ho: diff = 0   degrees of freedom =   297

Ha: diff < 0	Ha: diff != 0	Ha: diff > 0
Pr(T < t) = 0.0916	Pr(|T| > |t|) = 0.1831	Pr(T > t) = 0.9084

P-value of 0.18 indicate that the difference between own contribution and beliefs of others contribution is not statistically significant, i.e. we can keep H_0 that says there are no difference in own contribution and beliefs.

14.7 Kolmogorov-Smirnov test for the equality of distribution between own contribution and beliefs of others contribution across the different games

Anonymous public good game vs. the mixed publig good game

ksmirnov pg_contr_min_belief if treat1 & game1==1 | game1==2, by(game1) exact

Two-sample Kolmogorov-Smirnov test for equality of distribution functions

Smaller group	D	P-value	Exact
1:	0.0098	0.977	
2:	-0.1149	0.042	
Combined K-S:	0.1149	0.083	0.076

P-value of 0.083 indicates that there is a difference in distribution between own contribution and beliefs of others between the anonymous- and the mixed public good game. The difference is statistically significant at a 10 percent significance level.

Anonymous public good game vs. the homogenous public good game

ksmirnov pg_contr_min_belief if T_nat ==0 & T_eth==0 & T_pc==0 & game1==1 | game1==3, by(game1) exact

Two-sample Kolmogorov-Smirnov test for equality of distribution functions

Smaller group	D	P-value	Exact
1:	0.0472	0.585	
3:	-0.1092	0.057	
Combined K-S:	0.1092	0.115	0.105

P-value of 0.115 indicates that there is not a difference in distribution between own contribution and beliefs of others between the anonymous- and the homogenous public good game.

Mixed public good game vs. the homogenous public good game

ksmirnov pg_contr_min_belief if T_nat ==0 & T_eth==0 & T_pc==0 & game1==2 | game1==3,
by(game1) exact

Two-sample Kolmogorov-Smirnov test for equality of distribution functions

Smaller group	D	P-value	Exact
2:	0.0253	0.858	
3:	-0.1028	0.079	
Combined K-S:	0.1028	0.158	0.146

P-value of 0.158 indicates that there is not a difference in distribution between own
contribution and beliefs of others between the mixed- and the homogenous public good game.

14.8 Comparing mean contribution for the control group for the anonymous versus the identified (co-ethnic) Dictator Game

. ttest dictc == dictci, unpaired

Two-sample t test with equal variances

Variable | Obs   Mean   Std. Err. Std. Dev.   [95% Conf. Interval]

---------+--

  dictc | 150   43.72   1.444208   17.68787   40.86623   46.57377

  dictci | 282   41.9078   1.199396   20.14128   39.54686   44.26874

---------+--

combined | 432   42.53704   .9296937   19.32332   40.70974   44.36433

---------+--

  diff | 1.812199   1.953096   -2.026604   5.651001

----

  diff = mean(dictc) - mean(dictci)   t =   0.9279

Ho: diff = 0   degrees of freedom =   430

  Ha: diff < 0   Ha: diff != 0   Ha: diff > 0

 Pr(T < t) = 0.8230   Pr(|T| > |t|) = 0.3540   Pr(T > t) = 0.1770

The test produce a p-value of 0.3540, i.e., I do not find that the difference in mean contribution for the control group is statistically significant between the anonymous and the identified games.

14.9 Comparing mean contribution for the socio-economic categories for the anonymous versus the identified (co-ethnic) Dictator Game

Gender: females

ttest dictf = dictfi, unpaired

Two-sample t test with equal variances

```
----------------------------------------------------------------------

Variable |    Obs      Mean    Std. Err.  Std. Dev.   [95% Conf. Interval]

---------+------------------------------------------------------------

  dictf |    79   45.16456   2.154261   19.14749   40.87575   49.45336

  dictfi |   149   44.42953    1.82308   22.25353    40.8269   48.03216

---------+------------------------------------------------------------

combined |   228   44.68421   1.403277   21.18902    41.9191   47.44933

---------+------------------------------------------------------------

   diff |         .7350268   2.955092              -5.088029   6.558083

----------------------------------------------------------------------

   diff = mean(dictf) - mean(dictfi)                    t =   0.2487
```

Ho: diff = 0   degrees of freedom =   226

   Ha: diff < 0   Ha: diff != 0   Ha: diff > 0

 Pr(T < t) = 0.5981   Pr(|T| > |t|) = 0.8038   Pr(T > t) = 0.4019

<u>P-value of 0.8 indicates that the difference in mean contribution for females in the anonymous dictator game compared to the identified dictator game is far from being statistically significant. I find no evidence that females behave differently in these two games.</u>

Gender; males

ttest dictm = dictmi, unpaired

Two-sample t test with equal variances

Variable | Obs   Mean   Std. Err. Std. Dev. [95% Conf. Interval]

---------+--

  dictm | 71   42.11268   1.885617   15.88849   38.35193   45.87342

  dictmi | 133   39.08271   1.484562   17.1208   36.1461   42.01932

---------+--

combined | 204   40.13725   1.171024   16.72557   37.82832   42.44618

---------+--

   diff | 3.029969   2.455173   -1.811086   7.871025

----

   diff = mean(dictm) - mean(dictmi)   t =   1.2341

Ho: diff = 0   degrees of freedom =   202

  Ha: diff < 0   Ha: diff != 0   Ha: diff > 0

 Pr(T < t) = 0.8907   Pr(|T| > |t|) = 0.2186   Pr(T > t) = 0.1093

P-value of 0.22 indicates that the difference in mean contribution for males in the anonymous dictator game compared to the identified dictator game is not statistically significant. I find no evidence that males behave differently in these two games.

Age: age equal or below 35
-no observations for the identified games

Age: age above 35
ttest dictapluss = dictaplussi, unpaired

Two-sample t test with equal variances

```
-----------------------------------------------------------------------------
Variable |   Obs      Mean   Std. Err.  Std. Dev.  [95% Conf. Interval]
---------+-------------------------------------------------------------------
 dictap~s |    44   44.13636  2.565339   17.01653   38.96286   49.30986
 dictap~i |   282   41.9078   1.199396   20.14128   39.54686   44.26874
---------+-------------------------------------------------------------------
 combined |   326   42.20859  1.093262   19.73936   40.05782   44.35935
---------+-------------------------------------------------------------------
     diff |        2.228562   3.202107             -4.070984   8.528109
-----------------------------------------------------------------------------
     diff = mean(dictapluss) - mean(dictaplussi)           t =   0.6960
Ho: diff = 0                            degrees of freedom =     324
```

  Ha: diff < 0   Ha: diff != 0   Ha: diff > 0

 Pr(T < t) = 0.7565   Pr(|T| > |t|) = 0.4869   Pr(T > t) = 0.2435

P-value of 0.487 indicates that the difference in mean contribution for people aged 35 or below in the anonymous dictator game compared to the identified dictator game is far from being statistically significant. I find no evidence that people in this age group behave differently in these two games.

Education: below median education

ttest dictedul = dicteduli, unpaired

Two-sample t test with equal variances

Variable	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf. Interval]	
dictedul	63	43.61905	2.747193	21.80517	38.12749	49.11061
dicte~li	118	44.15254	2.119993	23.02901	39.95401	48.35108
combined	181	43.96685	1.676214	22.55115	40.65929	47.27441
diff		-.5334948	3.528408		-7.496121	6.429131

----

diff = mean(dictedul) - mean(dicteduli)   t = -0.1512

Ho: diff = 0   degrees of freedom =   179

   Ha: diff < 0   Ha: diff != 0   Ha: diff > 0

 Pr(T < t) = 0.4400   Pr(|T| > |t|) = 0.8800   Pr(T > t) = 0.5600

P-value of 0.8 indicates that the difference in mean contribution for people with below median education in the anonymous dictator game compared to the identified dictator game is far from being statistically significant. I find no evidence that people who have below median education behave differently in these two games.

Education: above median education

ttest dicteduh = dicteduhi, unpaired

Two-sample t test with equal variances

Variable | Obs   Mean   Std. Err. Std. Dev.   [95% Conf. Interval]

---------+--

dicteduh | 87   43.7931   1.513385   14.11591   40.78459   46.80161

dicte~hi | 164   40.29268   1.380183   17.67497   37.56734   43.01803

---------+--

combined | 251   41.50598   1.046754   16.5837   39.4444   43.56756

---------+--

  diff | 3.500421   2.192784   -.8183494   7.81919

----

  diff = mean(dicteduh) - mean(dicteduhi)   t =   1.5963

Ho: diff = 0   degrees of freedom =   249

  Ha: diff < 0   Ha: diff != 0   Ha: diff > 0

 Pr(T < t) = 0.9442   Pr(|T| > |t|) = 0.1117   Pr(T > t) = 0.0558

P-value of 0.11 indicates that the difference in mean contribution for people with above median education in the anonymous dictator game compared to the identified dictator game is close to beiing statistically significant.

14.10 Comparing distribution for the control group when the different treatments are included

This test is very comprehensive. In this appendix, I only show the procedure for how I have performed the test with one example from the anonymous game; the control group vs. national identity treatment prime. The set-up for the mixed – and homogenous public good game are similar to the set up for the anonymous public good game. As I include the do-file I do not show all tests here, but I refer to appendix 14.12 for a full overview and to see that the tests have been performed.

Anonymous public good game

Control group vs. national identity treatment prime
ksmirnov pg_contr if Mix==0 & Hom==0 & treatment==0|treatment==1, by(treatment) exact

Two-sample Kolmogorov-Smirnov test for equality of distribution functions

Smaller group	D	P-value	Exact
Control:	0.0468	0.609	
National Prime:	-0.1125	0.057	
Combined K-S:	0.1125	0.115	0.105

P-value of 0.115 indicates that the difference in distribution between the control group and the group treated with national identity prime are not statistically significant. The difference in distribution is not huge enough to conclude that the histogram for the people in the control group are different than for people treated with the national identity prime.

Control group vs. ethnic identity treatment prime

Control group vs. political competition treatment prime

National identity treatment prime vs. ethnic identity treatment prime

National identity treatment prime vs. political competition treatment prime

Ethnic identity treatment prime vs. political competition treatment prime

Appendix 14.11 Comparing distribution for the different socio-economic categories when the different treatments are included

This test is very comprehensive and follows the same structure as the test above. The only difference is that I also look at each socio-economic variable separately. In this appendix, I only show the procedure for how I have performed the test. The set-up for the mixed – and homogenous public good game are similar to the set up for the anonymous public good game. As I the dofile in the appendix I do not show any tests here, but I refer to appendix 14.12 for a full overview and control that the test have been performed.

Anonymous game

Females

Control group vs. national identity treatment prime

Control group vs. ethnic identity treatment prime

Control group vs. political competition treatment prime

National identity treatment prime vs. ethnic identity treatment prime

National identity treatment prime vs. political competition treatment prime

Ethnic identity treatment prime vs. political competition treatment prime

Males

Control group vs. national identity treatment prime

Control group vs. ethnic identity treatment prime

Control group vs. political competition treatment prime

National identity treatment prime vs. ethnic identity treatment prime

National identity treatment prime vs. political competition treatment prime

Ethnic identity treatment prime vs. political competition treatment prime

14.12 Commands used in Stata to produce the result – dofile

```
clear
set mem 50m
cap log close

cd "C:\Users\OP\Desktop\Data\"
log using Master.txt, text replace

/*PUBLIC GOOD GAME*/
* Load data into memory
use public.dta

/*PART I OF THE ANALYSIS*/

/******************** Summary statistics for the control group
********************/

/* Note: In the anonymous PG game, mean contribution are already
transformed to percent in the original dataset. For the mixed-
and homogenous PG game i have to transform the result to percent as
this was not given */


/********** Anonymous PG game **********/
gen contr_c = pg_contr if treat1 & Hom == 0 & Mix == 0
gen contr_cf = pg_contr if treat1 & female & Hom == 0 & Mix == 0
gen contr_cm = pg_contr if treat1 & !female & Hom == 0 & Mix == 0
gen contr_c35 = pg_contr if treat1 & age_rc <= 35 & Hom == 0 & Mix == 0
gen contr_c35pluss = pg_contr if treat1 & age_rc > 35 & Hom == 0 & Mix
== 0
gen contr_cedul = pg_contr if treat1 & educ_dm < 0 & Hom == 0 & Mix ==
0
gen contr_ceduh = pg_contr if treat1 & educ_dm > 0 & Hom == 0 & Mix ==
0

label variable contr_c "Overall"
label variable contr_cf "Female"
label variable contr_cm "Male"
label variable contr_c35 "Age: 35 and under"
label variable contr_c35pluss "Age: over 35"
label variable contr_cedul "Below Median Education"
label variable contr_ceduh "Above Median Education"


estpost tabstat contr_c contr_cf contr_cm contr_c35 contr_c35pluss
contr_cedul contr_ceduh, s(mean sd) column(s)
est store Contribution


/************* Mixed PG game *************/
gen contr_comp = pgidmix_contribution if treat1
gen contr_cfm = pgidmix_contribution if treat1 & female
gen contr_cmm = pgidmix_contribution if treat1 & !female
gen contr_c35m = pgidmix_contribution if treat1 & age_rc <= 35
gen contr_c35plussm = pgidmix_contribution if treat1 & age_rc > 35
gen contr_cedulm = pgidmix_contribution if treat1 & educ_dm < 0
gen contr_ceduhm = pgidmix_contribution if treat1 & educ_dm > 0
```

```
/* transform to percent*/
replace contr_comp = (100 * contr_comp)/ 60
replace contr_cfm = (100 * contr_cfm) / 60
replace contr_cmm = (100 * contr_cmm) / 60
replace contr_c35m = (100 * contr_c35m) / 60
replace contr_c35plussm = (100 * contr_c35plussm) / 60
replace contr_cedulm = (100 * contr_cedulm) / 60
replace contr_ceduhm = (100 * contr_ceduhm) / 60

label variable contr_comp "Overall"
label variable contr_cfm "Female"
label variable contr_cmm "Male"
label variable contr_c35m "Age: 35 and under"
label variable contr_c35plussm "Age: over 35"
label variable contr_cedulm "Below Median Education"
label variable contr_ceduhm "Above Median Education"


estpost tabstat contr_comp contr_cfm contr_cmm contr_c35m
contr_c35plussm contr_cedulm contr_ceduhm, s(mean sd) column(s)
est store Contributionm


/************* Homogenous PG game ***************/
gen contr_ch = pgidhom_contribution if treat1
gen contr_cfh = pgidhom_contribution if treat1 & female
gen contr_cmh = pgidhom_contribution if treat1 & !female
gen contr_c35h = pgidhom_contribution if treat1 & age_rc <= 35
gen contr_c35plussh = pgidhom_contribution if treat1 & age_rc > 35
gen contr_cedulh = pgidhom_contribution if treat1 & educ_dm < 0
gen contr_ceduhh = pgidhom_contribution if treat1 & educ_dm > 0

/* transform to percent*/
replace contr_ch = (100 * contr_ch)/ 60
replace contr_cfh = (100 * contr_cfh) / 60
replace contr_cmh = (100 * contr_cmh) / 60
replace contr_c35h = (100 * contr_c35h) / 60
replace contr_c35plussh = (100 * contr_c35plussh) / 60
replace contr_cedulh = (100 * contr_cedulh) / 60
replace contr_ceduhh = (100 * contr_ceduhh) / 60


label variable contr_ch "Overall"
label variable contr_cfh "Female"
label variable contr_cmh "Male"
label variable contr_c35h "Age: 35 and under"
label variable contr_c35plussh "Age: over 35"
label variable contr_cedulh "Below Median Education"
label variable contr_ceduhh "Above Median Education"


estpost tabstat contr_ch contr_cfh contr_cmh contr_c35h contr_c35plussh
contr_cedulh contr_ceduhh, s(mean sd) column(s)
est store Contributionh

esttab Contribution Contributionm Contributionh using Table1.rtf,
replace label title(Table 1. Public good Game: summary statistics for
```

```
the control group) main(mean) aux(sd) nostar mtitle(Anonymous "Mixed
PG" "Homogenous")

/*** Test if mean contribution are equal across games for the control
group ***/
/* Control group, overall */
ttest contr_c = contr_comp
ttest contr_c = contr_ch
ttest contr_comp = contr_ch


/*** Distribution for the control group,overall, across game ***/
hist contr_c, percent title (Anonymous PG Game) subtitle (Control
group)
graph export Anonymous.wmf, replace
hist contr_comp, percent title (Mixed PG Game) subtitle (Control group)
graph export Mixed.wmf, replace
hist contr_ch, percent title (Homogenous PG Game) subtitle (Control
group)
graph export Homogenous.wmf, replace

/* I have created a new variable that distinguish the three different
games from each other
to use in the Kolmogorov-Smirnov; equality of distribution test */
gen game= .
replace game = 1 if (Mix==0 & Hom==0)
replace game = 2 if (Mix==1)
replace game = 3 if (Hom==1)

/* Control if I have made a correct division of the games */
tabulate game

/* Kolmogorov-Smirnov test, equality of dstribution */
/* Anonymous PG game vs Mixed PG game */
ksmirnov pg_contr if treat1 & game==1 | game==2, by(game) exact

/* Anonymous PG game vs Homogenous PG game */
ksmirnov pg_contr if treat1 & game==1 | game==3, by(game) exact

/* Mixed PG game vs Homogenous PG game */
ksmirnov pg_contr if treat1 & game==2 | game==3, by(game) exact


/*************** SOCIO-ECONOMIC VARIABLES ************/

/*Create two variables that give me contribution in the mixed PG and
the homogenous PG game
in percent instead of in money value to use in the analysis*/
gen mixed = (pgidmix_contribution * 100)/60
gen hom = (pgidhom_contribution * 100)/60

/* Regression socio-economic variables */
/*********** Anonymous Public-good Game *********/
eststo: reg pg_contr female age_rc educ_dm if Hom == 0 & Mix == 0 &
treat1
est store Anonymous
/*********** Mixed Public-good Game ************/
eststo: reg mixed female age_rc educ_dm if T_nat == 0 & T_pc == 0 &
T_eth == 0
```

```
est store Mixed
/*********** Homogenous Public-good Game ********/
eststo: reg hom female age_rc educ_dm if T_nat == 0 & T_pc == 0 & T_eth
== 0
est store Homogenous

esttab Anonymous Mixed Homogenous using Table2.rtf, label title("Table
2. Public good Game: Socio-economic categories in the control group")
star(* 0.10 ** 0.05 *** 0.01) mtitle("Anonymous PG game" "Mixed PG
game" "Homogenous Pg game") se replace
eststo clear

/* Test if mean contributions for the socio-economic categories are
equal to one another in each game */
gen age_dummy = (age_rc > 35)
gen educ_dummy1 = (educ_dm > 0.0059279)
/* Note: 0.0059279 is the median for educ_dm, which the tables is based
upon. I therefore have
to use educ_dummy1 in my calculations instead of educ_dummy from the
dataset */

/* Anonymous PG game */
ttest pg_contr if treat1 & Hom == 0 & Mix == 0, by(gender)
ttest pg_contr if treat1 & Hom ==0 & Mix == 0, by(age_dummy)
ttest pg_contr if treat1 & Hom == 0 & Mix == 0, by(educ_dummy1)
/* Mixed PG game */
ttest mixed if treat1, by(gender)
ttest mixed if treat1, by(age_dummy)
ttest mixed if treat1, by(educ_dummy1)
/* Homogenous PG game */
ttest hom if treat1, by(gender)
ttest hom if treat1, by(age_dummy)
ttest hom if treat1, by(educ_dummy1)

/*Test if mean contribution for the socio-economic variables are equal
across games*/
/* Females */
ttest contr_cf = contr_cfm
ttest contr_cf = contr_cfh
ttest contr_cfm = contr_cfh
/* Males */
ttest contr_cm = contr_cmm
ttest contr_cm = contr_cmh
ttest contr_cmm = contr_cmh
/* Age <= 35 */
ttest contr_c35 = contr_c35m
ttest contr_c35 = contr_c35h
ttest contr_c35m = contr_c35h
/* Age > 35 */
ttest contr_c35pluss = contr_c35plussm
ttest contr_c35pluss = contr_c35plussh
ttest contr_c35plussm = contr_c35plussh
/* Education_dm < 0 */
ttest contr_cedul = contr_cedulm
ttest contr_cedul = contr_cedulh
ttest contr_cedulm = contr_cedulh
/* Education_dm > 0 */
ttest contr_ceduh = contr_ceduhm
```

```
ttest contr_ceduh = contr_ceduhh
ttest contr_ceduhm = contr_ceduhh




/********* Distribution for the socio economic variables in the
different games **********/
/* Anonymous PG game */
hist pg_contr if treat1 & Hom == 0 & Mix == 0, percent by(female) title
("Gender, Male, Female")
graph export AnonymousGender.wmf, replace
hist pg_contr if treat1 & Hom == 0 & Mix == 0, percent by(age_dummy)
title ("Age, Age =< 35, Age > 35")
graph export AnonymousAge.wmf, replace
hist pg_contr if treat1 & Hom == 0 & Mix == 0, percent by(educ_dummy)
title ("Education, Below medidan education, Above median education")
graph export AnonymousEducation.wmf, replace
/*Mixed PG Game ***************/
hist mixed if T_nat == 0 & T_pc == 0 & T_eth == 0, percent by(female)
title (Gender)
graph export MixedGender.wmf, replace
hist mixed if T_nat == 0 & T_pc == 0 & T_eth == 0, percent
by(age_dummy) title (Age)
graph export MixedAge.wmf, replace
hist mixed if T_nat == 0 & T_pc == 0 & T_eth == 0, percent
by(educ_dummy) title (Education)
graph export MixedEducation.wmf, replace
/* Homogenous PG Game*/
hist hom if T_nat == 0 & T_pc == 0 & T_eth == 0, percent by(female)
title (Gender)
graph export HomogenousGender.wmf, replace
hist hom if T_nat == 0 & T_pc == 0 & T_eth == 0, percent by(age_dummy)
title (Age)
graph export HomogenousAge.wmf, replace
hist hom if T_nat == 0 & T_pc == 0 & T_eth == 0, percent by(educ_dummy)
title (Education)
graph export HomogenousEducation.wmf, replace

/* Kolmogorov-Smirnov test, test if distributions are equal for the
socio-economic variables*/
/***Anonymous public good game***/
/*Gender*/
ksmirnov pg_contr if Mix == 0 & Hom == 0 & treat1, by(female) exact
/*Age*/
ksmirnov pg_contr if Mix == 0 & Hom == 0 & treat1, by(age_dummy) exact
/*Education*/
ksmirnov pg_contr if Mix == 0 & Hom == 0 & treat1, by(educ_dummy) exact
/*** Mixed public good game***/
/*Gender*/
ksmirnov mixed if T_nat == 0 & T_pc == 0 & T_eth == 0, by(female) exact
/*Age*/
ksmirnov mixed if T_nat == 0 & T_pc == 0 & T_eth == 0, by(age_dummy)
exact
/*Education*/
ksmirnov mixed if T_nat == 0 & T_pc == 0 & T_eth == 0, by(educ_dummy)
exact
/***Homogenpus public good game** */
/*Gender*/
```

```
ksmirnov hom if T_nat == 0 & T_pc == 0 & T_eth == 0, by(female) exact
/*Age*/
ksmirnov hom if T_nat == 0 & T_pc == 0 & T_eth == 0, by(age_dummy)
exact
/*Education*/
ksmirnov hom if T_nat == 0 & T_pc == 0 & T_eth == 0, by(educ_dummy)
exact


/* Note: for figure 5, 6 & 7 I had to edit the graphs manually in stata
editor so that for example 0 and 1
in the gender caterogy was transformed to male and female, 0 and 1 in
tha age category to age=<35 and age > 35
respectively and for the education category 0 to below median education
and 1 to above median education, making it
more understandable for the reader*/




/*************** Robustness checks, control for the above findings
***************/

/* Regression "contribution below 50%" */
/* Anonymous PG game */
gen pg_contrlow = pg_contr < 50
eststo: reg pg_contrlow female age_rc educ_dm if treat1 & Hom == 0 &
Mix == 0
est store Anonbelow
/* Mixed PG game */
gen mixedlow = mixed < 50
eststo: reg mixedlow female age_rc educ_dm if T_nat == 0 & T_pc == 0 &
T_eth == 0
est store Mixedbelow
/* Homogenous PG game */
gen homlow = hom < 50
eststo: reg homlow female age_rc educ_dm if T_nat == 0 & T_pc == 0 &
T_eth == 0
est store Homlow

esttab Anonbelow Mixedbelow Homlow using Table3.rtf, label title("Table
3. Public Good-game: Contribution below 50%")star(* 0.10 ** 0.05 ***
0.01) mtitle("Anonymous PG game" "Mixed PG game" "Homogenous PG game")
se replace
eststo clear


/*PART II OF THE ANALYSIS*/

/************** Anonymous Public Good Game ****************/
/******************* Contribution*******************/
estpost tabstat contr_c contr_cf contr_cm contr_c35 contr_c35pluss
contr_cedul contr_ceduh, s(mean sd) column(s)
est store Contribution


/**********Beliefs about others contribution***********/
gen contr_b = pg_belief_av if treat1 & Hom == 0 & Mix == 0
gen contr_bf = pg_belief_av if treat1 & female & Hom == 0 & Mix == 0
gen contr_bm = pg_belief_av if treat1 & !female & Hom == 0 & Mix == 0
```

```
gen contr_b35 = pg_belief_av if treat1 & age_rc <= 35 & Hom == 0 & Mix
== 0
gen contr_b35pluss = pg_belief_av if treat1 & age_rc > 35 & Hom == 0 &
Mix == 0
gen contr_bedul = pg_belief_av if treat1 & educ_dm < 0 & Hom == 0 & Mix
== 0
gen contr_beduh = pg_belief_av if treat1 & educ_dm > 0 & Hom == 0 & Mix
== 0

label variable contr_b "Overall"
label variable contr_bf "Female"
label variable contr_bm "Male"
label variable contr_b35 "Age: 35 and under"
label variable contr_b35pluss "Age: over 35"
label variable contr_bedul "Below Median Education"
label variable contr_beduh "Above Median Education"

estpost tabstat contr_b contr_bf contr_bm contr_b35 contr_b35pluss
contr_bedul contr_beduh, s(mean sd) column(s)
est store Belief

/************ Beliefs - contribution ************/
gen diffcb = pg_contr_min_belief if treat1 & Hom == 0 & Mix == 0
gen difff = pg_contr_min_belief if treat1 & female & Hom == 0 & Mix ==
0
gen diffm = pg_contr_min_belief if treat1 & !female & Hom == 0 & Mix ==
0
gen diff35 = pg_contr_min_belief if treat1 & age_rc <= 35 & Hom == 0 &
Mix == 0
gen diff35pluss = pg_contr_min_belief if treat1 & age_rc > 35 & Hom ==
0 & Mix == 0
gen diffedul = pg_contr_min_belief if treat1 & educ_dm < 0 & Hom == 0 &
Mix == 0
gen diffeduh = pg_contr_min_belief if treat1 & educ_dm > 0 & Hom == 0 &
Mix == 0

label variable diffcb "Overall"
label variable difff "Female"
label variable diffm "Male"
label variable diff35 "Age: 35 and under"
label variable diff35pluss "Age: over 35"
label variable diffedul "Below Median Education"
label variable diffeduh "Above Median Education"

estpost tabstat diffcb difff diffm diff35 diff35pluss diffedul
diffeduh, s(mean sd) column(s)
est store Beliefs

esttab Contribution Belief Beliefs using Table4021.rtf, replace label
title("Table 14: Anonymous Public-good Game: summary statistics for the
control group") main(mean) aux(sd) nostar mtitle(Contribution "Belief"
"Beliefs")


/***************** Mixed Public Good Game *******************/
/***** Contribution ******/
estpost tabstat contr_comp contr_cfm contr_cmm contr_c35m
contr_c35plussm contr_cedulm contr_ceduhm, s(mean sd) column(s)
```

```
est store Contributionm

/***** Beliefs of others contribution *****/
gen bmixo = pg_belief_av if Mix == 1 & T_nat ==0 & T_eth==0 & T_pc==0
gen bmixf = pg_belief_av if Mix == 1 & T_nat ==0 & T_eth==0 & T_pc==0 &
female
gen bmixm = pg_belief_av if Mix == 1 & T_nat ==0 & T_eth==0 & T_pc==0 &
!female
gen bmix35 = pg_belief_av if Mix == 1 & T_nat ==0 & T_eth==0 & T_pc==0
& age_rc <= 35
gen bmix35pluss = pg_belief_av if Mix == 1 & T_nat ==0 & T_eth==0 &
T_pc==0 & age_rc > 35
gen bmixedul = pg_belief_av if Mix == 1 & T_nat ==0 & T_eth==0 &
T_pc==0 & educ_dm < 0
gen bmixeduh = pg_belief_av if Mix == 1 & T_nat ==0 & T_eth==0 &
T_pc==0 & educ_dm > 0

estpost tabstat bmixo bmixf bmixm bmix35 bmix35pluss bmixedul bmixeduh,
s(mean sd) column(s)
est store Beliefm

/******* Contribution - beliefs *******/
gen mdiffo = pg_contr_min_belief if Mix == 1 & T_nat ==0 & T_eth==0 &
T_pc==0
gen mdifff = pg_contr_min_belief if Mix == 1 & T_nat ==0 & T_eth==0 &
T_pc==0 & female
gen mdiffm = pg_contr_min_belief if Mix == 1 & T_nat ==0 & T_eth==0 &
T_pc==0 & !female
gen mdiffa = pg_contr_min_belief if Mix == 1 & T_nat ==0 & T_eth==0 &
T_pc==0 & age_rc <= 35
gen mdiffapluss = pg_contr_min_belief if Mix == 1 & T_nat ==0 &
T_eth==0 & T_pc==0 & age_rc > 35
gen mdiffedul = pg_contr_min_belief if Mix == 1 & T_nat ==0 & T_eth==0
& T_pc==0 & educ_dm < 0
gen mdiffeduh = pg_contr_min_belief if Mix == 1 & T_nat ==0 & T_eth==0
& T_pc==0 & educ_dm > 0

estpost tabstat mdiffo mdifff mdiffm mdiffa mdiffapluss mdiffedul
mdiffeduh, s(mean sd) column(s)
est store Diffm

esttab Contributionm Beliefm Diffm using Table4.rtf, replace label
title("Table 15: Mixed Public-good Game: summary statistics for the
control group") main(mean) aux(sd) nostar mtitle(Contribution "Belief"
"Beliefs")

/*NOTE: Missing variables for age in table 14. Missing age_rc <= 35 &
age__rc>35 in table 15, I find this variable and include it manually in
the table*/
gen beliefmix = ((pgmixbeliefa + pgmixbeliefb)/2)
gen beliefm = beliefmix/60 *100
gen beliefma = beliefm if age_rc<=35 & T_nat ==0 & T_eth==0 & T_pc==0
gen beliefapluss = beliefm if age_rc>35 & T_nat ==0 & T_eth==0 &
T_pc==0
sum beliefma
sum beliefapluss

gen diffa = bmix35 - beliefma
```

```
sum diffa

sum pg_contr_min_belief if Mix == 1 & T_nat ==0 & T_eth==0 & T_pc==0 &
age_rc <= 35

/************* Homogenous public Good Game ******************/
/******** Contribution ********/
estpost tabstat contr_ch contr_cfh contr_cmh contr_c35h contr_c35plussh
contr_cedulh contr_ceduhh, s(mean sd) column(s)
est store Contributionh

/******** Beliefs of others contribution **********/
gen bhomo = pg_belief_av if Hom == 1 & T_nat ==0 & T_eth==0 & T_pc==0
gen bhomf = pg_belief_av if Hom == 1 & T_nat ==0 & T_eth==0 & T_pc==0 &
female
gen bhomm = pg_belief_av if Hom == 1 & T_nat ==0 & T_eth==0 & T_pc==0 &
!female
gen bhom35 = pg_belief_av if Hom == 1 & T_nat ==0 & T_eth==0 & T_pc==0
& age_rc <= 35
gen bhom35pluss = pg_belief_av if Hom == 1 & T_nat ==0 & T_eth==0 &
T_pc==0 & age_rc > 35
gen bhomedul = pg_belief_av if Hom == 1 & T_nat ==0 & T_eth==0 &
T_pc==0 & educ_dm < 0
gen bmhomeduh = pg_belief_av if Hom == 1 & T_nat ==0 & T_eth==0 &
T_pc==0 & educ_dummy > 0

estpost tabstat bhomo bhomf bhomm bhom35 bhom35pluss bhomedul
bmhomeduh, s(mean sd) column(s)
est store Beliefh

/******* Contribution - beliefs *******/
gen hdiffo = pg_contr_min_belief if Hom == 1 & T_nat ==0 & T_eth==0 &
T_pc==0
gen hdifff = pg_contr_min_belief if Hom == 1 & T_nat ==0 & T_eth==0 &
T_pc==0 & female
gen hdiffm = pg_contr_min_belief if Hom == 1 & T_nat ==0 & T_eth==0 &
T_pc==0 & !female
gen hdiffa = pg_contr_min_belief if Hom == 1 & T_nat ==0 & T_eth==0 &
T_pc==0 & age_rc <= 35
gen hdiffapluss = pg_contr_min_belief if Hom == 1 & T_nat ==0 &
T_eth==0 & T_pc==0 & age_rc > 35
gen hdiffedul = pg_contr_min_belief if Hom == 1 & T_nat ==0 & T_eth==0
& T_pc==0 & educ_dm < 0
gen hdiffeduh = pg_contr_min_belief if Hom == 1 & T_nat ==0 & T_eth==0
& T_pc==0 & educ_dm > 0

estpost tabstat hdiffo hdifff hdiffm hdiffa hdiffapluss hdiffedul
hdiffeduh, s(mean sd) column(s)
est store Diffh

esttab Contributionh Beliefh Diffh using Table4019.rtf, replace label
title("Table 16: Homogenous Public-good Game: summary statistics for
the control group") main(mean) aux(sd) nostar mtitle(Contribution
"Belief" "Beliefs")

/*Missing age_rc <= 35 in table 16, I find this variable and include it
manually in the table*/
gen beliefhom = ((pghombeliefa + pghombeliefb)/2)
```

```
gen beliefh = beliefhom/60 *100
sum beliefh if age_rc<=35 & T_nat ==0 & T_eth==0 & T_pc==0

/* Test if the difference in mean contribution and beliefs of ohters
contribution is statistically significant */
/*Anonymous public good game*/
ttest contr_c = contr_b, unpaired
/*Mixed public good game*/
ttest contr_comp = bmixo, unpaired
/*Homogenous public good game*/
ttest contr_ch = bhomo, unpaired

/* Distribution - difference between own contribution and beliefs of
others contribution" */
histogram pg_contr_min_belief if treat1 & Mix==0 & Hom==0, percent
title("Anonymous PG Game") subtitle("Control")
graph export Contributionbeliefanon.wmf, replace
histogram pg_contr_min_belief if Mix==1 & T_nat ==0 & T_eth==0 &
T_pc==0, percent title("Mixed PG Game") subtitle("Control")
graph export Contributionbeliefmix.wmf, replace
histogram pg_contr_min_belief if Hom==1 & T_nat ==0 & T_eth==0 &
T_pc==0, percent title("Homogenous PG Game") subtitle("Control")
graph export Contributionbeliefhom.wmf, replace


/* I have created a new variable that distinguish the three different
games from each other
to use in the Kolmogorov-Smirnov test, equality of distribution */
gen game1= .
replace game1 = 1 if (Mix==0 & Hom==0)
replace game1 = 2 if (Mix==1)
replace game1 = 3 if (Hom==1)

/* Control if I have made a correct division of the games */
tabulate game1

/* Kolmogorov-Smirnov test, equality of dstribution */
/* Anonymous PG game vs Mixed PG game */
ksmirnov pg_contr_min_belief if treat1 & game1==1 | game1==2, by(game1)
exact
/* Anonymous PG game vs Homogenous PG game */
ksmirnov pg_contr_min_belief if T_nat ==0 & T_eth==0 & T_pc==0 &
game1==1 | game1==3, by(game1) exact
/* Mixed PG game vs Homogenous PG game */
ksmirnov pg_contr_min_belief if T_nat ==0 & T_eth==0 & T_pc==0 &
game1==2 | game1==3, by(game1) exact


/*  DICTATOR GAME */
clear
/* In this analysis i need to use another dataset*/
use "dictator game.dta"

/* Control group, summary statistics for the Anonymous Game */
gen dictc = dg_transfer if T_nat==0 & T_eth==0 & T_pc== 0 & CE_dg == 0
gen dictf = dg_transfer if female & T_nat==0 & T_eth==0 & T_pc== 0 &
CE_dg == 0
```

```
gen dictm = dg_transfer if !female & T_nat==0 & T_eth==0 & T_pc== 0 &
CE_dg == 0
gen dicta = dg_transfer if age_rc <= 35 & T_nat==0 & T_eth==0 & T_pc==
0 & CE_dg == 0
gen dictapluss = dg_transfer if age_rc > 35 & T_nat==0 & T_eth==0 &
T_pc== 0 & CE_dg == 0
gen dictedul = dg_transfer if educ_dm < 0 & T_nat==0 & T_eth==0 &
T_pc== 0 & CE_dg == 0
gen dicteduh = dg_transfer if educ_dm > 0 & T_nat==0 & T_eth==0 &
T_pc== 0 & CE_dg == 0

label variable dictc "Control"
label variable dictf "Female"
label variable dictm "Male"
label variable dicta "Age equal or below 35"
label variable dictapluss "Age above 35"
label variable dictedul "Under Median Education"
label variable dicteduh "Above Median Education"

estpost tabstat dictc dictf dictm dicta dictapluss dictedul dicteduh,
s(mean sd) column(s)
est store Dictatoranon

/* Control group, summary statistics for Identified Games */
gen dictci = dg_transfer if T_nat==0 & T_eth==0 & T_pc== 0 & CE_dg == 1
gen dictfi = dg_transfer if female & T_nat==0 & T_eth==0 & T_pc== 0 &
CE_dg == 1
gen dictmi = dg_transfer if !female & T_nat==0 & T_eth==0 & T_pc== 0 &
CE_dg == 1
gen dictai = dg_transfer if age_rc <= 35 & T_nat==0 & T_eth==0 & T_pc==
0 & CE_dg == 1
gen dictaplussi = dg_transfer if age_rc > 35 & T_nat==0 & T_eth==0 &
T_pc== 0 & CE_dg == 1
gen dicteduli = dg_transfer if educ_dm < 0 & T_nat==0 & T_eth==0 &
T_pc== 0 & CE_dg == 1
gen dicteduhi = dg_transfer if educ_dm > 0 & T_nat==0 & T_eth==0 &
T_pc== 0 & CE_dg == 1

label variable dictci "Control"
label variable dictfi "Female"
label variable dictmi "Male"
label variable dictai "Age equal or below 35"
label variable dictaplussi "Age above 35"
label variable dicteduli "Under Median Education"
label variable dicteduhi "Above Median Education"

estpost tabstat dictci dictfi dictmi dictai dictaplussi dicteduli
dicteduhi, s(mean sd) column(s)
est store Dictatoridentified

esttab Dictatoranon Dictatoridentified using Table7.rtf, replace label
title("Table 4. Dictator Game: Average transfers") main(mean)aux(sd)
nostar mtitle("Anonymous" "Co-ethnic")
est store clear

/* Test if mean transfer are different across games */
/* Note, I have excluded "age equal or below 35" because of no
observation in the identified game*/
```

```
/* Control group */
ttest dictc = dictci, unpaired
/* Female */
ttest dictf = dictfi, unpaired
/* Male */
ttest dictm = dictmi, unpaired
/* Age above 35 */
ttest dictapluss = dictaplussi, unpaired
/* Below median education */
ttest dictedul = dicteduli, unpaired
/* Above median education */
ttest dicteduh = dicteduhi, unpaired

/* Effect of socio-economic variables on transfer */
eststo: reg dictc female age_rc educ_dm
est store Anondg
eststo: reg dictci female educ_dm
est store Homdg

esttab Anondg Homdg using Table8.rtf, label title("Table 5. Dictator
game: Generostiy")star(* 0.10 ** 0.05 *** 0.01) mtitle("Anonymous DG
game" "Identified DG game") se replace
est store clear

/**** CORRELATION****/
/*To test for correlation between transfer in the DG and contribution
in the PG
I had to merge data from the public-good game and the dictator game*/
clear
use MergeKenya1.dta

/*Public good game vs Dictator game*/
/*Note. As part II of the analysis tries to explain the results from
Part I only focus on correlation in the control group */

/* Dictator game vs Public-good game*/
graph twoway scatter pg_contr dg_transfer if T_nat==0 & T_eth==0 &
T_pc==0, title(Public good game vs Dictator game)
graph export ComparingPGDG.wmf, replace
corr pg_contr dg_transfer if T_nat==0 & T_eth==0 & T_pc==0

corr pg_contr dg_transfer if female & T_nat==0 & T_eth==0 & T_pc==0
corr pg_contr dg_transfer if !female & T_nat==0 & T_eth==0 & T_pc==0
corr pg_contr dg_transfer if educ_dm > 0 & T_nat==0 & T_eth==0 &
T_pc==0
corr pg_contr dg_transfer if educ_dm < 0 & T_nat==0 & T_eth==0 &
T_pc==0

/* Anonymous games*/
graph twoway scatter pg_contr dg_transfer if Mix==0 & Hom== 0 & CE_dg
== 0 & T_nat==0 & T_eth==0 & T_pc==0, title(Anonymous game: PG vs DG)
graph export ComparingAnon.wmf, replace
corr pg_contr dg_transfer if Mix==0 & Hom==0 & CE_dg == 0 & T_nat==0 &
T_eth==0 & T_pc==0
corr pg_contr dg_transfer if female & T_nat==0 & T_eth==0 & T_pc==0 &
Mix==0 & Hom== 0 & CE_dg == 0
corr pg_contr dg_transfer if !female & T_nat==0 & T_eth==0 & T_pc==0 &
Mix==0 & Hom== 0 & CE_dg == 0
```

```
corr pg_contr dg_transfer if educ_dm > 0 & T_nat==0 & T_eth==0 &
T_pc==0 & Mix==0 & Hom== 0 & CE_dg == 0
corr pg_contr dg_transfer if educ_dm < 0 & T_nat==0 & T_eth==0 &
T_pc==0 & Mix==0 & Hom== 0 & CE_dg == 0
/*Identfied games*/
/*Mixed*/
graph twoway scatter pg_contr dg_transfer if Mix==1 & CE_dg == 1 &
T_nat==0 & T_eth==0 & T_pc==0, title(Identified game(mixed): PG vs DG)
graph export Comparingmix.wmf, replace
corr pg_contr dg_transfer if Mix==1 & CE_dg == 1 & T_nat==0 & T_eth==0
& T_pc==0
corr pg_contr dg_transfer if female & T_nat==0 & T_eth==0 & T_pc==0 &
Mix==1 & CE_dg == 1
corr pg_contr dg_transfer if !female & T_nat==0 & T_eth==0 & T_pc==0 &
Mix==1 & CE_dg == 1
corr pg_contr dg_transfer if educ_dm > 0 & T_nat==0 & T_eth==0 &
T_pc==0 & Mix==1 & CE_dg == 1
corr pg_contr dg_transfer if educ_dm < 0 & T_nat==0 & T_eth==0 &
T_pc==0 & Mix==1 & CE_dg == 1
/*Homogenous*/
graph twoway scatter pg_contr dg_transfer if Hom==1 & CE_dg == 1 &
T_nat==0 & T_eth==0 & T_pc==0, title(Identified game(homogenous): PG vs
DG)
graph export Comparingom.wmf, replace
corr pg_contr dg_transfer if Hom==1 & CE_dg == 1 & T_nat==0 & T_eth==0
& T_pc==0
corr pg_contr dg_transfer if female & T_nat==0 & T_eth==0 & T_pc==0 &
Hom==1 & CE_dg == 1
corr pg_contr dg_transfer if !female & T_nat==0 & T_eth==0 & T_pc==0 &
Hom==1 & CE_dg == 1
corr pg_contr dg_transfer if educ_dm > 0 & female & T_nat==0 & T_eth==0
& T_pc==0 & Hom==1 & CE_dg == 1
corr pg_contr dg_transfer if educ_dm < 0 & female & T_nat==0 & T_eth==0
& T_pc==0 & Hom==1 & CE_dg == 1


/*REGRESSIONS*/
gen dg_transfer_fem = dg_transfer*female
gen dg_transfer_edu = dg_transfer*educ_dm

eststo: reg pg_contr female educ_dm dg_transfer dg_transfer_fem
dg_transfer_edu if T_nat==0 & T_eth==0 & T_pc==0
est store Public
eststo: reg pg_contr female educ_dm dg_transfer dg_transfer_fem
dg_transfer_edu if T_nat==0 & T_eth==0 & T_pc==0 & Mix==0 & Hom==0 &
CE_dg==0
est store AnonymousPGDG
eststo: reg pg_contr female educ_dm dg_transfer dg_transfer_fem
dg_transfer_edu if T_nat==0 & T_eth==0 & T_pc==0 & Mix==1 & CE_dg==1
est store Identified1
eststo: reg pg_contr female educ_dm dg_transfer dg_transfer_fem
dg_transfer_edu if T_nat==0 & T_eth==0 & T_pc==0 & Hom==0 & CE_dg==1
est store Identified2

esttab Public AnonymousPGDG Identified1 Identified2 using Table21.rtf,
label title("Table 6. Public good game: summary statistics when
transfer in dictator game is included") star(* 0.10 ** 0.05 *** 0.01)
mtitle("Overall" "Anonymous game" "Identified game 1" "Identified game
2") se replace
```

```
eststo clear


/* PART III OF THE ANALYSIS */
/** - focuses on the effect of priming **/
clear
use "public.dta"

/****************** Effect of priming ******************/
gen mixed = (pgidmix_contribution * 100)/60
gen hom = (pgidhom_contribution * 100)/60

eststo: reg pg_contr T_nat T_eth T_pc if Hom == 0 & Mix == 0
est store PrimingAnon
eststo:reg mixed T_nat T_eth T_pc
est store PrimingMix
eststo:reg hom T_nat T_eth T_pc
est store PrimingHom

esttab PrimingAnon PrimingMix PrimingHom using Table10.rtf, label
title("Table 7. Public-Good game, effect of priming") star(* 0.10 **
0.05 *** 0.01) mtitle("Anonymous PG game" "Mixed PG game" "Homogenous
Pg game") se replace
eststo clear

/*Distribution*/
hist pg_contr if Hom == 0 & Mix == 0, percent by(treatment)
title(Anonymous)
graph export PrimingAnonymous.wmf, replace
hist mixed, percent by(treatment) title(Mixed)
graph export PrimingMixed.wmf, replace
hist hom, percent by(treatment) title(Homogenous)
graph export PrimingHomogenous.wmf, replace

/* In the data, the different treatments are identified from 0-3, where
treatment =0 is the control group, tretament= 1 is national identiy
prime,
treatment=2 is ethnic identity prime and tretament=3 is political
competition prime*/
tabulate treatment
/* Test if the different treatments affect distribution equally */
/* Anonymous PG game */
ksmirnov pg_contr if Mix==0 & Hom==0 & treatment==0|treatment==1,
by(treatment) exact
ksmirnov pg_contr if Mix==0 & Hom==0 & treatment==0|treatment==2,
by(treatment) exact
ksmirnov pg_contr if Mix==0 & Hom==0 & treatment==0|treatment==3,
by(treatment) exact
ksmirnov pg_contr if Mix==0 & Hom==0 & treatment==1|treatment==2,
by(treatment) exact
ksmirnov pg_contr if Mix==0 & Hom==0 & treatment==1|treatment==3,
by(treatment) exact
ksmirnov pg_contr if Mix==0 & Hom==0 & treatment==2|treatment==3,
by(treatment) exact
/*Socio-economic categories*/
/*Female*/
ksmirnov pg_contr if female & Mix==0 & Hom==0 &
treatment==0|treatment==1, by(treatment) exact
```

```
ksmirnov pg_contr if female & Mix==0 & Hom==0 &
treatment==0|treatment==2, by(treatment) exact
ksmirnov pg_contr if female & Mix==0 & Hom==0 &
treatment==0|treatment==3, by(treatment) exact
ksmirnov pg_contr if female & Mix==0 & Hom==0 &
treatment==1|treatment==2, by(treatment) exact
ksmirnov pg_contr if female & Mix==0 & Hom==0 &
treatment==1|treatment==3, by(treatment) exact
ksmirnov pg_contr if female & Mix==0 & Hom==0 &
treatment==2|treatment==3, by(treatment) exact
/*Male*/
ksmirnov pg_contr if !female & Mix==0 & Hom==0 &
treatment==0|treatment==1, by(treatment) exact
ksmirnov pg_contr if !female & Mix==0 & Hom==0 &
treatment==0|treatment==2, by(treatment) exact
ksmirnov pg_contr if !female & Mix==0 & Hom==0 &
treatment==0|treatment==3, by(treatment) exact
ksmirnov pg_contr if !female & Mix==0 & Hom==0 &
treatment==1|treatment==2, by(treatment) exact
ksmirnov pg_contr if !female & Mix==0 & Hom==0 &
treatment==1|treatment==3, by(treatment) exact
ksmirnov pg_contr if !female & Mix==0 & Hom==0 &
treatment==2|treatment==3, by(treatment) exact
/* Age equal or below 35 */
ksmirnov pg_contr if age_rc <= 35 & Mix==0 & Hom==0 &
treatment==0|treatment==1, by(treatment) exact
ksmirnov pg_contr if age_rc <= 35 & Mix==0 & Hom==0 &
treatment==0|treatment==2, by(treatment) exact
ksmirnov pg_contr if age_rc <= 35 & Mix==0 & Hom==0 &
treatment==0|treatment==3, by(treatment) exact
ksmirnov pg_contr if age_rc <= 35 & Mix==0 & Hom==0 &
treatment==1|treatment==2, by(treatment) exact
ksmirnov pg_contr if age_rc <= 35 & Mix==0 & Hom==0 &
treatment==1|treatment==3, by(treatment) exact
ksmirnov pg_contr if age_rc <= 35 & Mix==0 & Hom==0 &
treatment==2|treatment==3, by(treatment) exact
/* Age above 35 */
ksmirnov pg_contr if age_rc > 35 & Mix==0 & Hom==0 &
treatment==0|treatment==1, by(treatment) exact
ksmirnov pg_contr if age_rc > 35 & Mix==0 & Hom==0 &
treatment==0|treatment==2, by(treatment) exact
ksmirnov pg_contr if age_rc > 35 & Mix==0 & Hom==0 &
treatment==0|treatment==3, by(treatment) exact
ksmirnov pg_contr if age_rc > 35 & Mix==0 & Hom==0 &
treatment==1|treatment==2, by(treatment) exact
ksmirnov pg_contr if age_rc > 35 & Mix==0 & Hom==0 &
treatment==1|treatment==3, by(treatment) exact
ksmirnov pg_contr if age_rc > 35 & Mix==0 & Hom==0 &
treatment==2|treatment==3, by(treatment) exact
/* Education below median */
ksmirnov pg_contr if educ_dm < 0 & Mix==0 & Hom==0 &
treatment==0|treatment==1, by(treatment) exact
ksmirnov pg_contr if educ_dm < 0 & Mix==0 & Hom==0 &
treatment==0|treatment==2, by(treatment) exact
ksmirnov pg_contr if educ_dm < 0 & Mix==0 & Hom==0 &
treatment==0|treatment==3, by(treatment) exact
ksmirnov pg_contr if educ_dm < 0 & Mix==0 & Hom==0 &
treatment==1|treatment==2, by(treatment) exact
```

```
ksmirnov pg_contr if educ_dm < 0 & Mix==0 & Hom==0 &
treatment==1|treatment==3, by(treatment) exact
ksmirnov pg_contr if educ_dm < 0 & Mix==0 & Hom==0 &
treatment==2|treatment==3, by(treatment) exact
/* Education above median */
ksmirnov pg_contr if educ_dm > 0 & Mix==0 & Hom==0 &
treatment==0|treatment==1, by(treatment) exact
ksmirnov pg_contr if educ_dm > 0 & Mix==0 & Hom==0 &
treatment==0|treatment==2, by(treatment) exact
ksmirnov pg_contr if educ_dm > 0 & Mix==0 & Hom==0 &
treatment==0|treatment==3, by(treatment) exact
ksmirnov pg_contr if educ_dm > 0 & Mix==0 & Hom==0 &
treatment==1|treatment==2, by(treatment) exact
ksmirnov pg_contr if educ_dm > 0 & Mix==0 & Hom==0 &
treatment==1|treatment==3, by(treatment) exact
ksmirnov pg_contr if educ_dm > 0 & Mix==0 & Hom==0 &
treatment==2|treatment==3, by(treatment) exact


/* Mixed PG game */
ksmirnov pgidmix_contribution if treatment==0|treatment==1,
by(treatment) exact
ksmirnov pgidmix_contribution if treatment==0|treatment==2,
by(treatment) exact
ksmirnov pgidmix_contribution if treatment==0|treatment==3,
by(treatment) exact
ksmirnov pgidmix_contribution if treatment==1|treatment==2,
by(treatment) exact
ksmirnov pgidmix_contribution if treatment==1|treatment==3,
by(treatment) exact
ksmirnov pgidmix_contribution if treatment==2|treatment==3,
by(treatment) exact
/*Socio-economic categories*/
/*Female*/
ksmirnov pgidmix_contribution if female & treatment==0|treatment==1,
by(treatment) exact
ksmirnov pgidmix_contribution if female & treatment==0|treatment==2,
by(treatment) exact
ksmirnov pgidmix_contribution if female & treatment==0|treatment==3,
by(treatment) exact
ksmirnov pgidmix_contribution if female & treatment==1|treatment==2,
by(treatment) exact
ksmirnov pgidmix_contribution if female & treatment==1|treatment==3,
by(treatment) exact
ksmirnov pgidmix_contribution if female & treatment==2|treatment==3,
by(treatment) exact
/*Male*/
ksmirnov pgidmix_contribution if !female & treatment==0|treatment==1,
by(treatment) exact
ksmirnov pgidmix_contribution if !female & treatment==0|treatment==2,
by(treatment) exact
ksmirnov pgidmix_contribution if !female & treatment==0|treatment==3,
by(treatment) exact
ksmirnov pgidmix_contribution if !female & treatment==1|treatment==2,
by(treatment) exact
ksmirnov pgidmix_contribution if !female & treatment==1|treatment==3,
by(treatment) exact
ksmirnov pgidmix_contribution if !female & treatment==2|treatment==3,
by(treatment) exact
```

```
/* Age equal or below 35 */
ksmirnov pgidmix_contribution if age_rc <= 35 &
treatment==0|treatment==1, by(treatment) exact
ksmirnov pgidmix_contribution if age_rc <= 35 &
treatment==0|treatment==2, by(treatment) exact
ksmirnov pgidmix_contribution if age_rc <= 35 &
treatment==0|treatment==3, by(treatment) exact
ksmirnov pgidmix_contribution if age_rc <= 35 &
treatment==1|treatment==2, by(treatment) exact
ksmirnov pgidmix_contribution if age_rc <= 35 &
treatment==1|treatment==3, by(treatment) exact
ksmirnov pgidmix_contribution if age_rc <= 35 &
treatment==2|treatment==3, by(treatment) exact
/* Age above 35 */
ksmirnov pgidmix_contribution if age_rc > 35 &
treatment==0|treatment==1, by(treatment) exact
ksmirnov pgidmix_contribution if age_rc > 35 &
treatment==0|treatment==2, by(treatment) exact
ksmirnov pgidmix_contribution if age_rc > 35 &
treatment==0|treatment==3, by(treatment) exact
ksmirnov pgidmix_contribution if age_rc > 35 &
treatment==1|treatment==2, by(treatment) exact
ksmirnov pgidmix_contribution if age_rc > 35 &
treatment==1|treatment==3, by(treatment) exact
ksmirnov pgidmix_contribution if age_rc > 35 &
treatment==2|treatment==3, by(treatment) exact
/* Education below median */
ksmirnov pgidmix_contribution if educ_dm < 0 &
treatment==0|treatment==1, by(treatment) exact
ksmirnov pgidmix_contribution if educ_dm < 0 &
treatment==0|treatment==2, by(treatment) exact
ksmirnov pgidmix_contribution if educ_dm < 0 &
treatment==0|treatment==3, by(treatment) exact
ksmirnov pgidmix_contribution if educ_dm < 0 &
treatment==1|treatment==2, by(treatment) exact
ksmirnov pgidmix_contribution if educ_dm < 0 &
treatment==1|treatment==3, by(treatment) exact
ksmirnov pgidmix_contribution if educ_dm < 0 &
treatment==2|treatment==3, by(treatment) exact
/* Education above median */
ksmirnov pgidmix_contribution if educ_dm > 0 &
treatment==0|treatment==1, by(treatment) exact
ksmirnov pgidmix_contribution if educ_dm > 0 &
treatment==0|treatment==2, by(treatment) exact
ksmirnov pgidmix_contribution if educ_dm > 0 &
treatment==0|treatment==3, by(treatment) exact
ksmirnov pgidmix_contribution if educ_dm > 0 &
treatment==1|treatment==2, by(treatment) exact
ksmirnov pgidmix_contribution if educ_dm > 0 &
treatment==1|treatment==3, by(treatment) exact
ksmirnov pgidmix_contribution if educ_dm > 0 &
treatment==2|treatment==3, by(treatment) exact

/* Homogenous PG game */
ksmirnov pgidhom_contribution if treatment==0|treatment==1,
by(treatment) exact
ksmirnov pgidhom_contribution if treatment==0|treatment==2,
by(treatment) exact
```

```
ksmirnov pgidhom_contribution if treatment==0|treatment==3,
by(treatment) exact
ksmirnov pgidhom_contribution if treatment==1|treatment==2,
by(treatment) exact
ksmirnov pgidhom_contribution if treatment==1|treatment==3,
by(treatment) exact
ksmirnov pgidhom_contribution if treatment==2|treatment==3,
by(treatment) exact
/*Socio-economic categories*/
/*Female*/
ksmirnov pgidhom_contribution if female & treatment==0|treatment==1,
by(treatment) exact
ksmirnov pgidhom_contribution if female & treatment==0|treatment==2,
by(treatment) exact
ksmirnov pgidhom_contribution if female & treatment==0|treatment==3,
by(treatment) exact
ksmirnov pgidhom_contribution if female & treatment==1|treatment==2,
by(treatment) exact
ksmirnov pgidhom_contribution if female & treatment==1|treatment==3,
by(treatment) exact
ksmirnov pgidhom_contribution if female & treatment==2|treatment==3,
by(treatment) exact
/*Male*/
ksmirnov pgidhom_contribution if !female & treatment==0|treatment==1,
by(treatment) exact
ksmirnov pgidhom_contribution if !female & treatment==0|treatment==2,
by(treatment) exact
ksmirnov pgidhom_contribution if !female & treatment==0|treatment==3,
by(treatment) exact
ksmirnov pgidhom_contribution if !female & treatment==1|treatment==2,
by(treatment) exact
ksmirnov pgidhom_contribution if !female & treatment==1|treatment==3,
by(treatment) exact
ksmirnov pgidhom_contribution if !female & treatment==2|treatment==3,
by(treatment) exact
/* Age equal or below 35 */
ksmirnov pgidhom_contribution if age_rc <= 35 &
treatment==0|treatment==1, by(treatment) exact
ksmirnov pgidhom_contribution if age_rc <= 35 &
treatment==0|treatment==2, by(treatment) exact
ksmirnov pgidhom_contribution if age_rc <= 35 &
treatment==0|treatment==3, by(treatment) exact
ksmirnov pgidhom_contribution if age_rc <= 35 &
treatment==1|treatment==2, by(treatment) exact
ksmirnov pgidhom_contribution if age_rc <= 35 &
treatment==1|treatment==3, by(treatment) exact
ksmirnov pgidhom_contribution if age_rc <= 35 &
treatment==2|treatment==3, by(treatment) exact
/* Age above 35 */
ksmirnov pgidhom_contribution if age_rc > 35 &
treatment==0|treatment==1, by(treatment) exact
ksmirnov pgidhom_contribution if age_rc > 35 &
treatment==0|treatment==2, by(treatment) exact
ksmirnov pgidhom_contribution if age_rc > 35 &
treatment==0|treatment==3, by(treatment) exact
ksmirnov pgidhom_contribution if age_rc > 35 &
treatment==1|treatment==2, by(treatment) exact
```

```
ksmirnov pgidhom_contribution if age_rc > 35 &
treatment==1|treatment==3, by(treatment) exact
ksmirnov pgidhom_contribution if age_rc > 35 &
treatment==2|treatment==3, by(treatment) exact
/* Education below median */
ksmirnov pgidhom_contribution if educ_dm < 0 &
treatment==0|treatment==1, by(treatment) exact
ksmirnov pgidhom_contribution if educ_dm < 0 &
treatment==0|treatment==2, by(treatment) exact
ksmirnov pgidhom_contribution if educ_dm < 0 &
treatment==0|treatment==3, by(treatment) exact
ksmirnov pgidhom_contribution if educ_dm < 0 &
treatment==1|treatment==2, by(treatment) exact
ksmirnov pgidhom_contribution if educ_dm < 0 &
treatment==1|treatment==3, by(treatment) exact
ksmirnov pgidhom_contribution if educ_dm < 0 &
treatment==2|treatment==3, by(treatment) exact
/* Education above median */
ksmirnov pgidhom_contribution if educ_dm > 0 &
treatment==0|treatment==1, by(treatment) exact
ksmirnov pgidhom_contribution if educ_dm > 0 &
treatment==0|treatment==2, by(treatment) exact
ksmirnov pgidhom_contribution if educ_dm > 0 &
treatment==0|treatment==3, by(treatment) exact
ksmirnov pgidhom_contribution if educ_dm > 0 &
treatment==1|treatment==2, by(treatment) exact
ksmirnov pgidhom_contribution if educ_dm > 0 &
treatment==1|treatment==3, by(treatment) exact
ksmirnov pgidhom_contribution if educ_dm > 0 &
treatment==2|treatment==3, by(treatment) exact


/*** Robustness ***/
/* Contribution equals zero*/
gen contr0 = pg_contr == 0
label variable contr0 "Contribution equals zero"
gen contr0m = pgidmix_contribution == 0
label variable contr0m "Contribution equals zero"
gen contr0h = pgidhom_contribution == 0
label variable contr0h "Contribution equals zero"

eststo:reg contr0 T_nat T_eth T_pc if Hom == 0 & Mix == 0
est store Anon0
eststo:reg contr0m T_nat T_eth T_pc
est store Mix0
eststo:reg contr0h T_nat T_eth T_pc
est store Hom0

esttab Anon0 Mix0 Hom0 using Table11.rtf, label title("Table 8. Effect
of priming: Conrtibution equals 0.") mtitle ("Anonymous" "Mixed"
"Homogenous") star(* 0.10 ** 0.05 *** 0.01) order(T_nat T_eth T_pc) se
replace
est store clear

/* Beliefs of others contribution */
eststo:reg pg_belief_av T_nat T_eth T_pc if Hom == 0 & Mix == 0
est store Anonbel
```

```
gen belmixx = pg_belief_av if Mix == 1
gen belhomm = pg_belief_av if Hom == 1

eststo: reg belmixx T_nat T_eth T_pc
est store Mixbel

eststo: reg belhomm T_nat T_eth T_pc
est store Hombel

esttab Anonbel Mixbel Hombel using Table14.rtf, label title("Table 9.
Beliefs of other`s contribution") mtitle ("Anonymous" "Mixed"
"Homogenous") star(* 0.10 ** 0.05 *** 0.01) order(T_nat T_eth T_pc) se
replace
eststo clear

/* Differenc Contribution - belief`s of others contribution */
eststo: reg pg_contr_min_belief T_nat T_eth T_pc if Mix==0 & Hom==0
est store diffAnon
eststo: reg pg_contr_min_belief T_nat T_eth T_pc if Mix==1
est store diffMix
eststo:reg pg_contr_min_belief T_nat T_eth T_pc if Hom == 1
est store diffHom

esttab diffAnon diffMix diffHom using Table15.rtf, label title("Table
10. Difference between own contribution and beleif`s of others
contribution") mtitle ("Anonymous" "Mixed" "Homogenous") star(* 0.10 **
0.05 *** 0.01) order(T_nat T_eth T_pc) se replace
eststo clear

clear
cap log close
```