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# THE PINHAS SAPIR CENTER FOR DEVELOPMENT TEL AVIV UNIVERSITY

# She who Pays the Piper Calls the Number: Reparations and Gender Differences in Fertility Choice

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# She who Pays the Piper Calls the Number: Reparations and Gender Differences in Fertility Choice\*

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#### Abstract

We evaluate the effect of a shift in the balance of control over resources between spouses on fertility. We exploit a quasi-natural experiment in which some Holocaust survivors in Israel began receiving substantial and unexpected reparations starting in 1956, while others began receiving them in the 1990s or later, when their fertility was already completed. We find that households in which only the female was an early recipient of reparations and young, had between one-quarter to one-third fewer children than similar households in which the male was an early recipient. This result is driven solely by a difference in post-1956 fertility, suggesting a causal relationship.

Keywords: Fertility Choice, Intrahousehold Allocation, Bargaining Power, Reparations, Holocaust.

JEL: J13, J16, D13.

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# 1 Introduction

How does the allocation of resources within the household affect fertility? In this paper we study this question by looking at the repercussions of large and unexpected reparations received by Jewish Holocaust survivors in Israel. We leverage on the fact that some survivors began receiving reparations in the late 1950s, while others have only began receiving such reparations in the 1990s or later, when their fertility was already completed. We use two alternative empirical strategies: First, we compare households in which either the female or the male received reparations, either in the 1950s or in the 1990s or later. Second, we compare households in which both spouses received reparations, but in which one spouse began receiving reparations in the 1950s, while the other began receiving reparations in the 1990s or later. Importantly, both strategies address, by construction, the concern that health ramifications of the Holocaust could affect the estimates. We find that in households in which the female was the early recipient of reparations, and was young enough when entitled to the reparations, fertility was lower by about one-quarter to one-third of a child.

Following the mass murder of European Jewry during World War II (henceforth: WW II), or what later became known as the "Holocaust", survivors living in Israel began receiving reparations. By and large, they can be divided into three groups. The first group comprises those who either lived in Germany during WW II or could prove attachment to the "Germanic language and culture group", received reparations directly from Germany, mostly under the amendment of the German compensation law in 1956.<sup>1</sup> The second group comprises survivors who became Israeli citizens by 1953, who could not or did not want to prove attachment to the Germanic language and culture. This group began receiving reparations from the State of Israel in 1957. A third group, mostly those arriving in Israel after 1953, who could not prove attachment to the Germanic language and culture, fell between the cracks. This group began receiving reparations only in the 1990s or later. In Section 2, we elaborate on the historical process and discuss in length the eligibility criteria to reparations, either from Germany or from the State of Israel.

Given the historical background, we set 1956 as the latest year before individuals could anticipate whether they were eligible for reparations, either from Germany, or from the State of Israel. Hence, we assume that the decisions to get married and have children by

<sup>&</sup>lt;sup>1</sup>The German compensation law was not intended to compensate Holocaust survivors, but rather German populations who after the war lived in countries such as Poland, Czechoslovakia, Yugoslavia, Hungary and Romania, and were expelled during the war due to their German ethnicity. The way in which the law was formulated, however, made it also applicable to many Jews who belonged to the "Germanic language and culture group" and had lived in those countries.

1956, were made before individuals expected to receive reparations due to their experience during WW II.

An important aspect of these reparations for our analysis is that their level was presumably high enough to alter the division of power within the household. In particular, those receiving reparations from Germany, received a retroactive one-time payment equal to about the annual average labor income in Israel in 1956, and a lifetime monthly payment equal to about 30 percent of the average monthly earning during that period. Individuals who received reparations from Israel start receiving reparations in 1957, received a modest one-time payment and a lifetime monthly payment equal to about 10 percent of the average monthly earning during that period.

Receiving these reparations, however, required each eligible person to submit a claim. This raises a question regarding take up rates that can potentially threat our analysis. First, some survivors might have objected to receive money from Germany on the grounds that by doing this they forgive Germany for money. Secondly, some survivors might have been deterred from submitting a claim either due to the monetary cost associated with this procedure, or lack of awareness or ability to cope with submitting an application due to low level of education. To the extent that any of these reasons are also correlated with taste for family size, our estimates could be biased. In turn, we discuss these issues below.

Indeed, in the early 1950s voices were raised in Israel against direct negotiations between the State of Israel with Germany. The main argument, however, was that such negotiations would approve the renewal of Germany's status as part of the "community of nations" and give the impression that the Jewish people forgave the Germans in exchange for money. Nevertheless, according to Tovy (2015), before the climax of the debate there was no opposition to the actual receiving of money from Germany and not long after the reparations agreement was approved, most of the opposition to receiving money from Germany has abated.<sup>2</sup>

With regards to the monetary cost associated with submitting a claim, or lack of awareness or ability to do so, we rely on Katz (2015). He argues that the "United Restitution Organization", an organization that helped survivors in Israel to submit claims, employed professional experts and assisted survivors who could not afford to finance private lawyers for an affordable commission in a very efficient manner. Hence, while there were some survivors who could afford and purchased useful private legal services,

<sup>&</sup>lt;sup>2</sup>In an interview conducted with Dr. Jacob Tovy, he claimed that a short while after the agreement was signed, the portion of the public insisting that "German money" should not be received was an extreme low.

it is unlikely that the lack of opportunity to hire private services left out significant number of survivors who were unable to claim reparations.

To evaluate the effect of reparations on fertility, we use two samples which were put together by the Israeli Central Bureau of Statistics especially for this research. The primary resource for the first sample is the 1995 and 2008 censuses of the population. This sample includes detailed information on 20% of the Israeli population in each census year, and importantly, includes data on whether individuals received reparations from Germany. This sample was supplemented with information on recipience of reparations from Israel, that was provided by the Authority for the Rights of Holocaust Survivors in Israel. This sample was also supplemented with information on the number and age of the children of survivors, which allow us to build our fertility measures. The source for this information is the Population Registry of Israel. We refer to this sample as the "Census Sample".

The second sample builds on the universe of recipients of reparations from Israel, as provided by the Authority for the Rights of Holocaust Survivors in Israel. Like in the census sample, this sample was supplemented with information on the number and age of the children of survivors, which allow us to build our fertility measures. The source for this information is the Population Registry of Israel. We refer to this sample as the "Registry Sample". We elaborate on the construction of the data in Section 3.

Our first identification strategy compares one time married couples who got married by 1953 and in which in each household exactly one spouse received reparations, either in the late 1950s (henceforth: "early recipient") or in the 1990s or later (henceforth: "late recipient").<sup>3</sup> We apply this strategy to the census sample. We find that the number of children born after 1956 among households in which the female is young and an early recipient is lower by 0.3 to 0.4 kids, compared to households in which the male is an early recipient.<sup>4</sup> Importantly, both in the raw data as well as in our regression framework we find no difference in fertility prior to 1956, which we think of as a placebo. Taken together, we argue that reparations are likely to be responsible for the results we find.

Our second identification strategy compares households in which both spouses are Holocaust survivors and in which one spouse is an early recipient and the other spouse is a late recipient. We apply this strategy to a sub-sample of the Registry sample. We find that households in which the female is the early recipient had about 0.2 to 0.3 fewer children

<sup>&</sup>lt;sup>3</sup>We use only one time married couples because this is the only way to assure that all the children of the female are also the children of the male in the household.

<sup>&</sup>lt;sup>4</sup>"Young" is defined as a woman aged 25 years old or younger in 1956. The comparison group includes households in which the female meets this criterion.

after 1956. Again there is no effect on fertility by 1956, reassuring that we pick the effect of the reparations. Like in the census sample, the results are driven by women who were aged 25 years old or younger in 1956.

We conduct two robustness exercises. First, we use a larger sample based on the Registry sample. Specifically, we add to the sub-sample of the Registry described above two groups to the control group, namely households in which both spouses received reparations, either in the 1950s or in the 1990s or later. The results are even stronger. In particular, while women up to age 37 who are early recipients have had *more* children by 1956, they have had substantially fewer births after 1956, such that for women who are up to age 29, completed fertility (CEB) is lower by 0.1 to 0.2 children.<sup>5</sup> Secondly, we address expectations for reparations. Since the dialog between Germany and Israel began in 1952, we check the robustness of our results by assuming that fertility could have been affected since 1953. As expected, the results are quantitatively smaller, but the pattern remains: the number of children born after 1953, 1954, or 1955 is lower among households whose female was young and an early recipient of reparations.

One concern that comes to mind is the effect of the Holocaust on the health of the survivors, in general, and their fecundity in particular. We address this concern in three ways. First, the results in our first identification strategy suggests that differences in fertility emerged only after survivors became aware of the reparations, suggesting that by 1956, the fertility of women who are Holocaust survivors did not differ from the fertility of non survivors. Secondly, our identification strategies control for a possible effect of the health of the survivors: our first strategy uses as control men and women who are holocaust survivors and were late recipients, such that a possible health effect can be controlled for. Our second identification strategy compares households in which all spouses are survivors, negating a comparison of women who experienced the Holocaust to women who did not. Thirdly, we show that the fertility of women who are Holocaust survivors is very similar to the fertility of women living in Israel in which at least one spouse is of European origin who meet all of our sample selection criteria except for experiencing the Holocaust. We view this finding as alleviating concerns of external validity.

While our research has the advantage of evaluating a case in which the shift in resources within the household was substantial, and we have detailed information on the fertility

<sup>&</sup>lt;sup>5</sup>We refrain from using the "Full Registry Sample" because unless both spouses received reparations from Israel, we cannot tell if the other spouse received reparations from Germany or did not receive any reparations. Nevertheless, while our main "Registry sample" contains 3,144 observations, when we add households in which both spouses are early recipients and those in which both are late recipients, the sample size increases to 20,788. This goes a long way toward the "Full Registry Sample" which contains 29,288.

of these households, our retrospective construction of data does not allow us to explore the potential mechanisms that drive the results. Perhaps the most obvious mechanism is related to the tradeoff between raising children and female labor supply (Galor and Weil, 1996; Iyigun and Walsh, 2007). However, we do not have information on the labor supply of these women during the years in which they faced this tradeoff. Another potential mechanism is related to preference differences between men and women. For example, Doepke and Tertilt (2009) argue that women prefer fewer, but more educated children. Indeed, surveys suggest that husbands prefer more children than wives in both developing countries (Westoff, 2010) and in developed countries (Doepke and Kindermann, 2019). Tsur (2020, Ch.3) examines this directly and finds no evidence of quantity-quality tradeoff. Specifically, he augments the same samples used in this study with the completed years of schooling for the children of reparation recipients. He finds that children of females who were early recipients and young, ended up having the same number of years of schooling as children in households in which the male was early recipient of reparations.

Another potential mechanism could be related to spousal time allocation to childrearing. Rasul (2008) provides a theory in which limited commitment within the household regarding the costs associated with childrearing is key to why women's empowerment leads to lower fertility and provides supporting evidence from Malaysia. This hypothesis is plausible, though we do not have data to assess or refute it. Finally, Ashraf et al. (2014, 2020) use an experimental design to show that women prefer fewer children and that the mechanism is related to better knowledge by women regarding maternal mortality and morbidity cost. Similarly, Hazan et al. (2022) show that granting women property rights in 19th century America led to lower fertility, which is driven by states that experienced higher maternal mortality rates. We note that even though Israel was a developing country in the 1950s, mortality rates at ages 25 to 59 among Israeli women who were born in Europe, were lower than in Western countries (see Staetsky and Hinde, 2015, Figure 3). As such, maternal health considerations seems unlikely to have played an important role.

On a broader level, our paper is related to the literature on the two way relationship between women's empowerment and development (Duflo, 2012; Doepke and Tertilt, 2018, 2019; Hazan et al., 2019; Bandiera et al., 2020). Given that Israel in the 1950s was a developing country, our paper has implications for the developing world today. Specifically, our paper suggests that women's empowerment in general, and directing cash transfers to mothers in particular, can lead to lower fertility, in countries where fertility is still high and women's power within the household is relatively low. We proceed as follows. Section 2 expands the discussion on the historical events and institutional settings. Section 3 describes our data sources and the construction of our samples. Section 4 discusses the empirical strategy to identify the effect of reparations on fertility choice and presents balancing analysis. Section 5 presents the results and discusses their interpretation. Section 6 offers concluding remarks.

# 2 Reparations and the Personal Compensation of Holocaust Survivors in Israel

Loosely speaking, there are three main groups of Israeli survivors with respect to eligibility for reparations. The first included survivors who immigrated to Israel from Germany or belonged to the "Germanic language and culture group". The second group included survivors, who immigrated to Israel prior to October 1953 from countries other than Germany and did not manage, or wished to prove that they belonged to the first group. Finally, the third group consisted of survivors who were not entitled to any reparations until 1996. They arrived in Israel after October 1953, were not from Germany and did not belong to the Germanic language and culture group. In what follows, we provide a description of how this partition into groups came about.

#### 2.1 The Reparations Agreement

The rise of the Nazis to power in Germany and the subsequent German conquest of Europe during World War II led to the persecution of European Jewry and the mass murder of about six million Jews, in what became known as the Holocaust. Immediately following the war, in September 1945, the allied powers demanded compensation from Germany. A parallel demand was made toward the end of 1945 to compensate survivors of the Holocaust. Following the establishment of the State of Israel in 1948, the Israeli government hoped that the allied powers would also present the demand for compensation of Holocaust survivors. However, it soon became clear that the US, Britain, and France had no intention of taking an active role in advancing Israel's demands and did not make normalization of diplomatic relations with West Germany, conditional on compensation of Jewish Holocaust survivors. As a result, the Israeli government appealed directly to the West German government.<sup>6</sup>

<sup>&</sup>lt;sup>6</sup>The historical review as well as some of the information on eligibility is based on Shinar (1967), Dorner (2008), Teitelbaum (2008), Nachum and Bruner (2009), and Tovy (2015).

In May 1951, government representatives from Israel met for the first time with West German Chancellor Konrad Adenauer and in March 1952 official negotiations began in parallel between West German representatives and two delegations: one representing the Israeli government and the other representing the "Claims Conference", which was negotiating on behalf of Jews living outside of Israel. The former delegation focused on obtaining collective compensation to finance the absorption of refugees who had survived the Holocaust, while the latter focused on obtaining personal compensation and compensation for damages to the Jewish communities that had been wiped out in Europe.

Prior to the signing of the reparations agreement, which was set to take place on September 10, 1952, the West German government suddenly communicated a demand that in exchange for the reparations, the Israeli government would take on the obligation to pay personal reparations to Holocaust survivors who had become Israeli citizens. The Israeli government agreed to this demand without giving it any in-depth thought, due to concern over the possible failure of the negotiations over collective reparations, which were considered essential for the development of the nascent Israeli economy.<sup>7</sup>

In parallel, the Claims Conference signed an agreement with the German government for personal reparations to the Holocaust survivors. While this agreement was meant to include only survivors not residing in Israel, some Israeli citizens nonetheless benefited from the agreement. Specifically, this agreement covered survivors who had lived within Germany's 1937 borders and did not live in the countries of the Communist Bloc at the time the agreement was signed. Some of these survivors resided in Israel in 1952 and therefore were entitled to compensation according to the agreement.

#### 2.2 The German Compensation Law

In 1949, a law for the compensation of Holocaust survivors was passed in West Germany. The law applied to Jews of German origin who were victimized during the rise of the Nazis to power. In practice, only a few Jewish claims were approved based on this law. Following the signing of the reparations agreement in September 1952, a process began to improve the situation of Jewish Holocaust survivors according to German law. At the end of September 1953, a year after the reparations agreement was signed, a law was passed in West Germany that provided compensation for Holocaust victims. This law did not constitute a sufficient response either, and many victims discovered that

<sup>&</sup>lt;sup>7</sup>Over the years, it became clear that the burden the Israeli government had taken upon itself was several times larger than the amount it had received as part of the reparations agreement (Dorner, 2008).

they were not eligible for compensation. Only after the law was amended in 1956 did a large group of Holocaust victims begin receiving compensation from Germany. The compensation law came to be referred to as the "Federal Compensation Law for Victims of National Socialist Oppression" (henceforth: "BEG").

The 1956 amendment expanded the eligibility for individual compensation based on this law and included, in addition to residents of Germany during the Second World War, individuals who could prove they were part of the "Germanic language and culture group". The original purpose of this amendment was to compensate individuals of German ethnic background (mostly non-Jews) who had lived in countries like Poland, Czechoslovakia, Yugoslavia, Hungary, and Romania, and were expelled during the war due to their German ethnicity. The way in which the law was formulated, however, made it also applicable to many Jews who belonged to the Germanic language and culture group and had lived in those countries. Finally, we note that the latest date for submitting a request for compensation from Germany was set to December 31, 1969.

#### 2.3 The Israeli Compensation Law

Even though the Israeli government released West Germany from the obligation to compensate many Holocaust survivors who had become Israeli citizens, it was not particularly enthusiastic about compensating those survivors itself. Moreover, the Israeli government's waiver of the right of its citizens to sue the German government for damages was not widely known, and the convoluted formulation of the agreements with Germany made it difficult for the public to understand their meaning. In practice, the waiver only began to be understood once claims submitted to Germany by survivors who were Israeli citizens were rejected one after another. As the survivors' protests gained momentum, the government was forced in 1957 to enact the "Disabled Victims of Nazi Persecution Law" (henceforth: "the DNP law"), which provided a partial solution for Israeli citizens who were Holocaust survivors and had lost their eligibility for compensation directly from West Germany as part of the reparations agreement.

The aforementioned solution was partial in two respects. First, from the standpoint of eligibility, the law conditioned receipt of reparations on immigration to Israel before the enactment of the first German compensation law in October 1953. The law also denied eligibility to individuals who had immigrated from Germany, since they could apply for compensation from Germany.<sup>8</sup> Second, from the standpoint of generosity, the aver-

<sup>&</sup>lt;sup>8</sup>This is in contrast to Jews who lived in countries like Poland, Czechoslovakia, Yugoslavia, Hungary, and Romania whose eligibility for the German compensation was more complicated since they had to prove that they belonged to the Germanic language and culture group.

age monthly reparations paid by the Israeli government for many years was only about one-third of the amount paid by Germany. Moreover, while the compensation paid by Germany was retroactive to the beginning of the war, the Israeli government paid compensation retroactively only to April 1954. The terms of eligibility for the disability benefit were similar to those of the German law, namely a minimum disability–physical or emotional–of 25 percent and, as in the case of the German compensation, the amount increased with the level of disability.

#### 2.4 Later Agreements and Legislation

Over the years, the Israeli government tried unsuccessfully to persuade the German government to compensate the neglected group – victims of the Nazis not of Germanic background who immigrated to Israel after 1953 – insisting not to change the rule that excluded this group from eligibility for compensation that Israel itself paid. Eventually, some of those who belonged to this group began receiving German compensation starting from 1996, following negotiations that began in the early 1990s between the Claims Conference and the German government upon the fall of the Iron Curtain and the unification of Germany. The negotiations led to the establishment of the "Section 2 Fund", which provided compensation to Holocaust survivors who lived under severe conditions for a minimum period determined by the type of conditions.<sup>9</sup> The level of compensation was lower than under the BEG.<sup>10</sup>

In 2007, Israel passed the Benefits Law in order to provide a solution to Holocaust survivors who did not meet the criteria of the Section 2 Fund or had difficulty proving that they spent the minimum time under the conditions defined. Under this law, it was sufficient to prove that a person lived under difficult conditions (in a ghetto or hiding) for at least one day. These survivors were entitled to a lower level of compensation than under the other categories of eligibility.

Finally, as a result of the recommendations of the Dorner Committee in June 2008, the benefits paid to survivors under the DNP law were increased substantially, and today they are similar to the compensation received under BEG. In 2014, the conditions for those who were until then entitled to compensation under the Benefits Law were equalized to those for compensation under the DNP law. The same legislation provided those

<sup>&</sup>lt;sup>9</sup>Those who were in concentration camps, or confined for at least 3 months in a ghetto, or were 6 months in hiding under difficult conditions.

<sup>&</sup>lt;sup>10</sup>For completeness, we note that in 2007 Israel has passed a law to provide a solution to Holocaust survivors who did not meet the criteria of the Section 2 Fund or had difficulty proving that they spent the minimum time under the conditions defined. This law, however, has no effect on our analysis.

receiving benefits from the Section 2 Fund with complementary payments to equalize their benefits to those under the DNP law.

#### 2.5 Recipients in Israel

In sum, the reparations agreement, the German legislation, and the Israeli legislation led to three main groups of Holocaust survivors in Israel. The first consisted of survivors who immigrated to Israel from Germany or belonged to the Germanic language and culture group who were entitled, for the most part since 1956, to the most generous compensation–a retroactive one-time payment equal to about one average yearly salary, and a lifetime monthly payment equal to about 30 percent of the average wage during that period. This group is labeled as "A" in Figure 1.

The second group consisted of survivors who immigrated to Israel prior to October 1953 from countries other than Germany and did not manage or did not wish to prove that they belonged to the "Germanic language and culture group". Since 1957, Individuals in this group were entitled to a modest one-time sum (retroactive to 1954) and a lifetime monthly payment equal to about 10 percent of the average wage in the economy. This group is labeled "B" in Figure 1.

Finally, the third group consisted of survivors who were not entitled to any compensation until 1996. These individuals were not German nor did they belong to the Germanic language and culture group. They either arrived in Israel after October 1953 or were not able to overcome the hurdles of the Israeli or the German bureaucracy during the 1950s and 1960s. This group can be divided into two sub-groups: The first began to receive compensation after the agreements to establish the Section 2 fund at the end of 1995. The second began to receive compensation only in 2008, according to the 2007 Benefits Law.

With regards to our empirical analysis, two important questions come to mind. First, what is the take up rate. There are at least two potential threats to our analysis. First, some survivors might have objected to receive money from Germany on the grounds that by doing this they legitimize Germany after the Holocaust. Secondly, the monetary and information cost associated with submitting a claim might have deter poorer and or less educated survivors from doing so. We discuss these two issues below.

One potential difference between recipients and non-recipients might be related to the motivation to apply. In the early 1950s a large public protest and political debate occurred over direct negotiation with Germany. This protest raises the concern that those who opposed the negotiation did not apply for a rent as a matter of obstinacy or conscience. If so, then the unwillingness to apply might be related to other characteristics

that could be correlated to fertility taste. Tovy (2015, pp. 250-51) claims that the profound debate over the reparation was not whether the Jewish state should take money from Germany, but rather on the format of the negotiation. The opposition challenged the government's intention to negotiate directly with Germany, but supported the right to claim reparations using a third party as an intermediary. The opposition believed that a direct negotiation would approve the renewal of Germany's status as part of the "community of nations" and give the impression that the Jewish people forgave the Germans in exchange for money. In the heat of debate, the "Herut" party, which led the opposition to the negotiation, abandoned the profound issue in the debate and gave the impression that receiving money from Germany is wrong under any circumstance. However, after the negotiation was completed and the agreement signed, most of the criticism in Israel was on the material concessions that Israel made and less on the agreement itself. Tovy (2015) notes that a few years after the agreement, the leadership of "Herut" had become reconciled to the agreement and the loud debate abated. We conclude that individuals who refused to apply for the German compensation were in the margins of the survivors, and that this phenomenon was too small to pose a threat to the identification.<sup>11</sup>

Another possible threat to the identification is a potential correlation between the income and education of the survivors and their capacity to purchase mediation services from lawyers and agencies that could promote their claim for compensation. While it is difficult to rule out or control for such information, we herein rely on the historical context, based on Katz (2015). That study discusses the public and private bodies that were involved in handling the personal claims against Germany in the 1950s and 1960s. According to Katz (2015) the "United Restitution Organization" ("URO") was very dominant in assisting survivors to claim compensation in early years, and private lawyers started to offer such services only later, especially since 1957. Katz (2015) argues that the URO employed experts and assisted survivors who could not afford to finance private lawyers for an affordable commission in a very efficient manner. At some point, URO was recognized by Germany as the official institution that represents survivors in their claims. Based on Katz (2015), it is difficult to conclude that private lawyers provided any value added to their customers. Perhaps even to the contrary, some survivors who had paid considerable amounts to lawyers ended up deceived, having their claims seriously delayed. While there were probably some survivors who could afford and did purchase useful private legal services, it is unlikely that the opportunity to hire private services extensively left out significant number of survivors who unable to claim compensation.

<sup>&</sup>lt;sup>11</sup>Furthermore, In an interview we conducted with Dr. Jacob Tovy, he claimed that a short while after the agreement was signed, the portion of the public insisting that "German money" should not be received was an extreme minority.

The second important question for the purposes of this study concerns the expectations regarding compensation held by the survivors after the war, primarily because this information is used to set the cutoff year that represents the beginning of treatment in the empirical analysis. It seems unlikely that any of the survivors had expected compensation prior to March 1952 when the negotiations formally began and it is reasonable to assume that during the negotiations some of the survivors did expect to receive compensation. Nonetheless, it is fairly certain that during that period, no one knew which group would be entitled to receive reparations, and certainly there was large uncertainty regarding the amount of reparations.

The Israeli government agreed to release West Germany from its obligation to pay individual compensation to Israeli citizens only in September 1952. But even then, the public possessed only partial information about eligibility. The full picture became clear only after claims for compensation submitted by survivors who were Israeli citizens were rejected by Germany one after another during 1956. Based on this timeline of events, we set 1956 as the latest year before individuals could infer if they were eligible for reparations, either from Germany, or from the State of Israel. We further explore the robustness of our findings to earlier cutoffs.

## 3 Data and Summary Statistics

Data for this project was put together by the Central Bureau of Statistics in Israel (henceforth: CBS). The Bureau has created for us two different samples, which we refer to as the "Census Sample" and the "Registry Sample", according to the primary source of the sample. Each sample allow us to identify Holocaust survivors living in Israel and receiving reparations, either from Germany or from Israel, either in the 1950s or since the 1990s. Each of these primary sources was supplemented from the Population Registry. This registry allows the CBS to identify the children of survivors and their date of birth, and therefore the construction of the fertility history for each woman in our samples. In what follows, we describe each of the two samples in detail. For each sample, we describe its construction, its pros and cons, and then move to describe the summary statistics.

#### 3.1 The Census Sample

The Israeli censuses of the population of 1995 and 2008, allow us to identify recipients of reparations from Germany. Each respondent to the census was asked whether he or

she receives a pension or compensation from abroad. Using the information on country of birth and year of immigration, we restrict the sample to include only recipients who immigrated from Europe to Israel in the years following the Nazi rise to power. Hence, we identify recipients from Germany with a high level of likelihood, as we explain below. According to the survey, 94% of the individuals that immigrated to Israel before 1969, were born before 1946 and received compensation or a pension from abroad arrived from Europe, primarily from Germany, Poland and Romania. This represents 7,128 individuals and since the survey sampled 20% of the population, the number of recipients in the population in 1995 should be about 35,000. This estimate accords well with the administrative data of the Holocaust Survivors Authority (Dorner, 2008).<sup>12</sup>

The analysis suggests that it is plausible to identify European immigrants as individuals that immigrated before 1969, were born before 1946, and receive compensation or a reparations from abroad in the form of compensation from Germany, with only a small resulting measurement error. Additionally, we can identify those receiving reparations from Israel, who were part of the 20% sample of each of the 1995 and 2008 censuses, given the information obtained from the Authority for the Rights of Holocaust Survivors in Israel (see below).

The advantage of the Census Sample is the relatively rich information it includes, perhaps most importantly is the information on the number of years of schooling for each spouse. Additionally, in the very first years of the State of Israel, the Population Registry was not 100% accurate. As such, it is not clear that when the CBS put together the samples for this research it was able to locate all the kids for each Holocaust survivor, mostly those who had born before 1956. However, because the census asked about the number of children ever born, we know how many children are missing in the Population Registry for each Holocaust survivor who was surveyed in the 1995 or in the 2008 censuses. Recall that this is required so that we can code whether these kids were born by 1956, or after 1956, the date which we take as the latest year before individuals could infer if they were eligible for reparations. We will return to this issue when we discuss the Registry sample below.

The disadvantage of the census sample is its reduced number of observations – only 7,451 households in which at least one spouse received any type of reparation. We further narrow this sample in order to apply our first identification strategy. This is done by

<sup>&</sup>lt;sup>12</sup>Note that the Dorner Committee estimated that in 2008 there were about 20,000 recipients of reparations from Germany. A similar number of recipients is arrived at using the number of recipients according to the 1995 Census and assuming an annual mortality rate of 5%. According to Table 3.26 in the 2015 Statistical Abstract of Israel (Central Bureau of Statistics), the average mortality rate during 1995-2008 among 75-year-old – the median age of reparations recipients in 1995 – was approximately 5%.

keeping only households in which exactly one of the spouses is a Holocaust survivor. This leaves us with a sample of 3,906 households in which exactly one spouse receives any type of reparations, either from Germany or Israel, either in the 1950s or the 1990s.

Table 1.A reports the mean and standard deviation for the dependent variables and the main control variables for the census sample, for households in which the female is aged 25 years old or younger. These statistics are broken down by the four groups that allow us to implement our differences-in-differences estimation. Children ever born equals to 2.469 among the group of households in which the female is an early recipient of reparations, and is the lowest among the four groups, while it equals to 2.774 among the group of households in which the male is an early recipient of reparations, and is the highest among the four groups. The last column of the table shows the differences-in-differences estimate without any control. It equals to -0.386 children. The next line shows the number of children born after 1956. Again, the lowest number is among households in which the female is the early recipient , 1.156, while it's about 1.4 to 1.5 in the other three groups. The difference-in-differences estimate without any control equals to -0.398 children. Both these estimates are statistically significant. The third line shows the number of children born by 1956. Here we see that in all four groups the numbers are between 1.2 and 1.3, the differences-in-differences estimate without any control is both economically small, only 0.012, and statistically insignificant.

The control variables also show that the sample is balanced in terms of the male and the female age: the average male is between 29 and 30 years old, the average female is almost identical across the groups at about 23.5 years old. Likewise, the duration of marriage in 1956 is very similar across groups, and vary between 3.5 and 4 years, on average. The four groups are also very similar in terms of their average year of immigration to Israel, measured in terms of the number of years in Israel in 1972. Finally, the sample is also balanced in terms of the education of the female, which is about 10 years among the group in which the female is the early recipient , and about 10.3 among the groups where the male is the early recipient or in the group where the male is a late recipient. Among the group where the female is a late recipient , female years of schooling is somewhat lower, at 9.7 years, but the differences are not statistically significant. Finally, male education is also similar across groups, about 10 to 10.5 years, with the exception of the group in which the male is an early recipient, where average years of schooling is about 9.1 years.<sup>13</sup>

Table 1.B repeats Table 1.A for women aged 26 years old and older. The table shows that

<sup>&</sup>lt;sup>13</sup>Note that while the DiD in education is not balanced, the difference in female education, (1)-(2), is balanced. Importantly, (1)-(2) is the difference that is responsible for the negative DiD in children born after 1956.

for older women, the sample is less balanced across the four groups. In particular, while the differences-in-differences estimate without any control on children ever born is -0.156 children, it is driven by an estimate of -0.215 children on the number of children born by 1956. This might be driven by the differences in the age of the spouses: females who are early recipients are older by about 1.5 years than females who are late recipients, and the same is true for male recipients. This is also translated into differences in the duration of marriage in 1957.

Figure 2 plots the number of children born after 1956 (top panel) and the number of children born by 1956 (bottom panel), by age of the female for each of the four groups. The top left panel compares households in which the female is an early recipient with households in which the male is an early recipient. The figure makes it very clear that fertility was much higher in the latter group, as long as the female in the household was age 25 or younger. For females age 26 and older, fertility after 1956 is nearly identical in each age. The top right panel compares the number of children born after 1956 among households in which the female is a later recipient and households in which the male is a later recipient.

The bottom panel of the figure shows the number of children born by 1956. Whether we compare early recipient households, or late recipient households, fertility is almost identical at all ages. We take Figure 2 as evidence that the recipience of reparations by females in the 1950s increased their say in the household and led to lower fertility. In Section 5 below, we report formal regression results that confirm this conclusion.

We end this section by showing that the fecundity of Holocaust survivors was not impaired by the direct exposure to the Holocaust. Using the census sample, we make comparison of fertility between women who are Holocaust survivors (female early recipient and female late recipient), and women who were not exposed directly to the Holocaust, by using an auxiliary sample. Specifically, we take the Census sample of one time married Jewish Israeli couples, who got married by 1954 and immigrated to Israel before 1972 with exactly one Holocaust Survivor. We then exclude households where the husband is the survivor and add from the Israeli censuses of 1995 and 2008 one time married Jewish Israeli couples, who got married by 1954 and immigrated to Israel before 1972 where at least one spouse immigrated from Europe and both spouses are *not* Holocaust survivors.<sup>14</sup>

Using this auxiliary sample, in Table 3 we compare the fertility of women who experienced the Holocaust, namely households in which the female is an early or a late re-

<sup>&</sup>lt;sup>14</sup>These are the same criteria to enter the census sample, with the exception that both spouses are *not* Holocaust survivors.

cipient of reparations, to the fertility of the comparison group: one time married Jewish Israeli couples, who got married by 1954 and immigrated to Israel before 1972, where at least one spouse immigrated from Europe and both spouses are not Holocaust survivors. The table reports results from regressions where the dependent variable is a dummy that takes the value of 1 if the number of children ever born, CEB, meets the condition stated for each column, and 0 otherwise. For example, in column 1 the condition is CEB=0, which implies that the dummy takes the value of 1, if that household ended up childless. The right hand side variable of interest is a dummy that takes the value of 1 if the female in the household is a Holocaust survivor, "Female Holocaust".

In column 1, the coefficient on the "Female Holocaust" dummy is -.023 and statistically insignificant. That is, the fraction childless couples is lower among Holocaust survivors by 2.3 percentage points, but the estimate is statistically insignificant. In column 2 we see that the fraction of households who are Holocaust survivors with up to one child is larger by 2.2 percentage points, but like in Column 1, this estimate is statistically insignificant. Taken together, Columns 1 and 2 make the case that fecundity was unaffected by a direct exposure to the Holocaust. Columns 3 and 4 show that households where the female is a Holocaust survivor indeed have had fewer children. They are 4.2 percentage points more likely to have either two or three children, and 2 percentage points more likely to have or three children, and 2 percentage points more likely to have points for the Holocaust, we would have expected to see more childless women, and perhaps more women with just one child, which is clearly not the case.

#### 3.2 The Registry Sample

The primary source for building the "Registry Sample" is the Authority for the Rights of Holocaust Survivors in Israel. The Authority has, over the years, managed survivors' requests for reparations and processed the actual payment process. As a result, the Authority possesses information on all individuals who have received benefits from Israel over the years and exactly when they started receiving them. Using this information, we define individuals who began receiving reparations in the late 1950s and those who began receiving reparations only since the 1990s. Therefore, its main advantage is that it has the universe of individuals receiving reparations from the State of Israel. As such, the "Full Registry Sample" is relatively large, containing 29,288 observations. However, this sample has three important shortcomings.

The first issue is the lack of information regarding the education of the recipient and

her/his spouse. This may be correlated with both becoming an early recipient of reparations as well as with fertility choice, and may induce omitted variable bias in our estimates.

Secondly, it does not have information on whether spouses of those receiving reparations from Israel, received reparations from Germany. This information is contained in the censuses of 1995 and 2008, but, as discussed in the Introduction, this is available for only 20% of the population in each census year. This may lead to erroneous assignment into treatment and control groups. For example, suppose we observe a household in which the male is a late recipient of reparation from Israel. We may assign this household to a control group, but his wife might have received reparation from Germany, suggesting that this household should be in the treatment group. Figure A.1 panel (a) shows a simple table with the eight possible types of households.

To overcome this limitation, we drop all observations in which only one spouse received reparations from Israel, either in the 1950s or the 1990s or later. Panel (b) of Figure A.1 shows the four types of households that remain under this choice. This leaves us with 20,788 observations, suggesting that the majority of households in the Registry sample are couples in which both spouses are Holocaust survivors who received reparations from Israel at some point in time.

Our treated group comprises households in which the female is an early recipient and the male is a late recipient of reparations. However, it is not clear what groups represent the ideal control group. One alternative is to use all households with two recipients: both spouses are early recipients, both spouses are late recipient, and households in which the male is an early recipient and the female is a late recipient (Panel (b) of Figure A.1). A second alternative is to use only households in which the male is an early recipient (Panel (c) of Figure A.1). Although this leaves us with a sample of 3,144 observations, we think it makes the control group more similar to the treated in terms of the amount and timing of the income that is due to the recipience of reparations. We choose to report results using both alternatives, although we highlight the results using the smaller sample, and relegate the results using the larger sample to the robustness section.

Finally, as pointed out above, the third shortcoming of the Registry sample is the undercounting of kids from the population registry. This problem is more severe in the early years of the State of Israel and disappears for children who were born since the late 1950s.<sup>15</sup>

<sup>&</sup>lt;sup>15</sup>Although the timing of the recipience of reparations in the 1950s and the solution to the undercounting

To overcome the undercounting of children we compared the difference in the number of children born before 1956 for women who appear in both the Census sample and the Registry sample. We then computed the average difference by the age of the female, and added this average to all women in the registry sample according to their age. Notice that had we included age fixed effects to the analysis, instead of controlling linearly for age, the correction would be washed by the age fixed effects.

Tables 2.A and 2.B, show summary statistics for narrower sample of 3,144 observation. Table 2.A shows the mean and standard deviation for the dependent variables and the main control variables for the registry sample, for households in which the female is aged 25 years old or younger. These statistics are broken down by the two groups that we compare: households in which the female is an early recipient and the male is a late recipient, and households in which the male is an early recipient and the female is a late recipient. Children ever born is slightly larger among the group in which the female is an early recipient, but the difference is only 0.027 children and is statistically insignificant. Female early recipients had fewer children born after 1956, 2.068 compared to 2.187 among households in which the male is an early recipient, but the difference is, again, statistically insignificant. In contract, by 1956, households in which is the female is an early recipient, have had 0.147 more children, and this difference is statistically significant. This difference might be attributed to differences in the age of the females in the two groups, with females being older by slightly more than half a year in the group where the female is an early recipient. The other noticeable difference between the two groups is the number of years the female has been in Israel as of 1972. In the group in which the female is an early recipient, the female years in Israel is larger by almost two years.

Table 2.B repeats Table 2.A for women aged 26 years old and older. We see no meaningful differences in the number of children ever born, or number of children born after 1956. The number of children born by 1956 is larger by 0.077 among households in which the female is an early recipient. The other noticeable differences are in the number of years the male and the female are in Israel in 1972. In both cases, the number of years in Israel is larger by about 3.6 and 3.4 years, respectively, among households in which the female is an early recipient.

of children coincides, this is likely a mare coincidence. See also footnote 15 in Manski and Mayshar (2003) on the problem of identifying children to their mothers in this time period.

## 4 Empirical Strategy

As described in the Introduction, we aim to study the effect of bargaining power within the household on fertility choice. We assume that the large and unexpected reparations that were received, either by the female or the male in the household, increased the power of the recipient within the household. Whether a larger burden of childbearing and childrearing is burned by the female, whether females prefer fewer children than males, or whether both presumptions are true, we expect that households in which the female is the recipient of the reparations in the household would have fewer children. This is, of course, only relevant for households that can still adjust the number of children. Hence, only households that received reparations in the 1950s are "treated", with households that received reparations in the 1990s serving as a control group.

Our first identification strategy is differences in differences one. Using a sample of households in which exactly one member received reparations, either in the 1950s or in the 1990s, we estimate regressions of the following structure:

(1) 
$$n_i = \alpha + E_i + F_i + \beta(E_i \times F_i) + X'_i \gamma + \epsilon_i$$

where  $n_i$  is a measure of fertility in household *i*,  $E_i$  is a dummy that takes the value of 1 if a member of the household is an early recipient , and 0 otherwise.  $F_i$  is a dummy that takes the value of 1 if the member of the household who received reparation is the female, and 0 otherwise. The interaction term,  $E_i \times F_i$ , measures whether households in which the wife is an early recipient of reparations indeed had lower fertility. Thus, the coefficient of interest is  $\beta$ .  $X'_i$  is a vector of household characteristics that may affect the demand for children, including the duration of marriage, years since immigration to Israel, age of both spouses in the household, years of schooling for both spouses in the household, as well as a set of dummies for country of origin for each spouse.

As described above, our sample comprises women who in 1956 were in different stages of their fertility. If the treated and the comparison groups are balanced,, then fertility that had taken place prior to the reparations being expected should be similar among the four groups. We therefore estimate Equation (1) using three outcomes. First we take  $n_i$ to measure the number of children born by 1956. Secondly, we take  $n_i$  to measure the number of children born after 1956, and finally, we let  $n_i$  measure the number of children ever born. We expect to find  $\hat{\beta} = 0$  when  $n_i$  is measure the number of children born by 1956, whereas we expect to find  $\hat{\beta} < 0$  when  $n_i$  is either the number of children born after 1956 or the number of children ever born. In line with the raw data presented in Figure 2, we also allow the effect to vary by the age of the female in 1956. We do so because it is the younger women who had more time to adjust their fertility. Hence we add an interaction term,  $E_i \times F_i \times Y_i$ , to Equation (1), where  $Y_i$  is a dummy that takes the value of 1 if the female in the household was 25 years old or younger, and 0 otherwise.<sup>16</sup> We also report results where we vary the threshold for being "young".

Our second identification strategy compares couples in which both spouses are Holocaust survivors, and in which one is an early recipient of reparations, while the other is a late recipient of reparation. Let  $EF_i$  be a dummy that takes the value of 1 if the female was the early recipient of the reparations in the household, and 0 otherwise, the corresponding specification is:

(2) 
$$n_i = \theta + \delta E F_i + X'_i \mu + \nu_i$$

The parameter of interest is  $\delta$  which measures whether households, in which the female is the early recipient, have had lower fertility, compared to households in which the male is the early recipient. Like in our first identification strategy, we use the number of children born by 1956, the number of children born after 1956 and the number of children ever born as outcomes.

Finally, we also allow the effect to vary by the age of the female in the household. This entails adding the interaction term  $EF_i \times Y_i$  to Equation (2).<sup>17</sup>

### 5 Results

This section reports our results. Tables 4 and 5 present our results using our first identification strategy. Table 4, Columns 1 and 2 show the results of estimating specifications that correspond to Equation (1) when the dependent variable is the number of children ever born. Column 1 shows results without controlling for personal characteristics of the male and female in the household. It shows that the estimate on "Female × Early" is -0.109, but it is statistically insignificant. Column 2 adds these personal characteristics. The estimate is -0.078, but again statistically insignificant. Columns 3 and 4 repeat Columns 1 and 2, but change the dependent variable to be the number of children born by 1956. The results here should serve as placebo, or balancing check, since by 1956, Holocaust survivors were not expected to receive any personal compensation. Column

<sup>&</sup>lt;sup>16</sup>Clearly, we also include the dummy  $Y_i$  and the double interactions,  $E_i \times Y_i$ , and  $F_i \times Y_i$ .

<sup>&</sup>lt;sup>17</sup>Clearly, the regressions also include the dummy  $Y_i$ .

3 shows that women who are early recipient have had 0.136 fewer kids up to 1956. Column 4 shows that this coefficient shrinks to -0.083 and becomes statistically insignificant when we control for personal characteristics of both spouses. Finally, Columns 5 and 6 repeat Columns 1 and 2 when the dependent variable is the number of children born after 1956. As expected, the coefficients are negative, but they are quantitatively small and statistically insignificant.

Figure 2 suggests that fertility after 1956 was indeed lower in households in which the female is both an early recipient of reparations and young. Likewise, in terms of personal characteristics, the sample of women aged 25 and younger is more balanced compared to older women (See Tables 1.A 1.B). Hence, Table 5 explores the effect of a female early recipient on fertility by age. Each entry in the table reports the coefficient on the triple interaction  $E_i \times F_i \times Y_i$ , where  $Y_i$ , labeled as "Younger *a*", is a dummy variable that is equal to 1 if the female is up to age *a* (inclusive), and 0 otherwise. In Panel A the dependent variable is the number of children born by 1956, and in Panel C the dependent variable is the number of children born after 1956.

Panel A shows that women who were aged 25 or younger in 1956 (Column (3)), ended up having 0.424 fewer children over their lifetime. This estimate is not only statistically significant, but also quantitatively large. Given that the average number of children ever born among women who were up to age 25 in 1956 is 2.644, this estimate represents a decline of 16% in completed fertility.

Panel B shows that by 1956, female early recipients of reparations had similar number of children to other groups. This is reassuring because by 1956, individuals did not expect to receive reparations. Finally, Panel C shows that young women who were early recipients had lower fertility after 1956. The coefficient in Column 2 suggests that women who were up to age 23, have had 0.420 fewer children after 1956, and the coefficient in Column 3 suggests that women who are up to age 25, have had 0.329 fewer children after 1956. Since women who are up to age 25 in 1956 gave birth to 1.42 children after 1956, this estimate represents a decline of 23% in their fertility after receiving reparations.

We conduct further analysis to examine at what parity the change in fertility took place. In Table 6, the dependent variable is a dummy that is equal to 1 if the female ended up childless (Column (1)), have had up to 1 child (Column (2)), had either two ro three children (Column (3)), or had up to three children. *Youngera* = 1 if the female is age 25 or younger. The results suggest that female who were early recipient and not older than 25 years old, were 15.4% more likely to end up with a family of up to one child, compared to females whose spouse is the early recipient of reparations.

Turning to our second identification strategy, Tables 7 and 8 follow the same structure as Tables 4 and 5. Similar to Table 4, Table 7 shows that when looking at women of all ages, there is no effect of reparations on fertility among women who are early recipients. In particular, these women have had the same number of children ever born (Columns (1) and (2)), they have given birth to more children before 1956 (Columns (3) and (4)), but to fewer children after 1956 (Columns (5) and (6)).

Table 8, however, paints a more nuanced picture. In particular, Panel A suggests that females who were early recipients and were up to age 21 (23) had given birth to 0.334 (0.215) fewer children over their lifetime. These estimates are statistically significant, quantitatively large, and comparable to the corresponding estimates from Table 5. Moreover, this result hold even for women who were up to age 29, though the coefficient is smaller (0.132). Importantly, similar to Table 5, Panel B shows that by 1956, there were no differences in the fertility of young women with the estimates in Columns (1) to (5) being very small and statistically insignificant. Finally, Panel C shows that the negative effect on children ever born is due to lower fertility after 1956. The estimates are negative in all columns and statistically significant when "young" is defined as younger than 21, 23, and 29.<sup>18</sup> Finally, we note that the results reported in Tables 5 and 8 are very similar, both qualitatively and quantitatively, although there is no overlap between the samples used.

#### 5.1 Robustness

We conduct two types of robustness tests. First, we use the larger registry sample. Second we examine the robustness of choosing 1956 as the latest year before individuals could anticipate receiving any personal compensation. As discussed in Section 3, in the Registry data, we can use a larger control group (Panel b of Figure A.1. The sample now comprises all households in which both spouses are Holocaust survivors. The treatment group is identical to the treatment group used in Tables 7 and 8, namely households in which the female is an early recipient and the husband is a late recipient. The control group, however, include in addition to households in which the female is a late recipient and the husband is an early recipient, also households in which both spouses are early recipients and households in which both spouses are late recipients (see Panel (*b*) of Figure A.1).

Tables 9 and 10, follows the structure of Tables 7 and 8 using this larger sample. Table 9 shows that when looking at women of all ages, it is important to control for household

<sup>&</sup>lt;sup>18</sup>They are also significant when "young" is 33 and 37, though for these ages, there is no effect on children ever born.

characteristics. Without controlling for these, we see that women who are early recipients gave birth to more children by 1956, to fewer children after 1956, such that they ended up having nearly one-half fewer children over their lifetime. However, with control for household characteristics we find no effect of female receiving reparation early on fertility.

Table 10, however, presents a more subtle picture. Panel A shows that women who were early recipients and were up to age 21, 23, 25, 27, or 29, had given birth to 0.1-0.2 fewer children over their lifetime. These estimates are statistically significant. Panel B shows that women who were early recipients and were up to age 23, 25, 27, 29, 33 or 37, have had more children by 1956. Finally, Panel C shows that after the recipience of reparations, women of almost all ages who were early recipients decreased their fertility by 0.15 to 0.3 children. We conclude that being a young woman with more bargaining power has led women to decrease their fertility in a manner that for some age group is also reflected in the number of children ever born.

Finally, Table 11 examines our choice of the year 1956 as the cutoff. Given that the reparation agreement between Germany and Israel for collective compensation was signed in late 1952, individuals' expectations to receive personal compensation might have already emerged then. We therefore repeat columns 2 and 3 in Table 5, Panel C, but change the cutoff year to be 1955, or 1954 or 1953. When the cutoff is changed to 1955, the dependent variable becomes children born after 1955, and women's age is defined as in 1955. We similarly adjust the dependent variable and women's age when using 1954 and 1953. We see that changing the cutoff to 1955 has no effect on the size or precision of the estimates. When we change the cutoff to 1954 (1953), the coefficients get smaller and remain statistically significant when young is defined as up to age 23 years old. Overall, we conclude that our results are robust to the choice of the exact timing individuals are assumed to become aware of the expectations of receiving reparations. We note however, that we are not surprised that the coefficients are getting smaller as we move away from 1956, because our summary statistics as presented in Table 1.A and Figure 2 suggest that by 1956, fertility was very similar between households in which the female was young and early recipient of reparations, and households in which the male was an early recipient and his wife was young.

# 6 Concluding Remarks

This paper provides evidence on the effect of control over resources in the household on fertility choice. We used a quasi natural experiment in which some Holocaust survivors

in Israel began receiving substantial and unexpected reparations starting in 1956, while others began receiving them in the 1990s or later, when their fertility was already completed. We found that households in which only the female was an early recipient of reparations and was young enough had about one-quarter to one-third fewer children than similar households in which the male was an early recipient. We showed that this result was driven solely by a difference in post-1956 fertility, suggesting a causal relationship between recipience of the reparations and fertility choice.

We draw two lessons from our results. First, our results are consistent with economic theory and a growing body of empirical literature on the importance of the division of resources within the household. We emphasized that our setting has the advantage of analyzing a very large shock to the exogenous income of one spouse in the household, and examines one of the most important outcome families make, namely fertility. Secondly, we believe that our results may be relevant for other contexts as well. The population used in this research is European, and as such, our findings may be relevant for European countries. Economically, Israel of the late 1950s and the 1960s was a developing country. As such our findings may also be relevant for developing countries.

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Figure 1: Mapping Reparations Recipients



*Notes:* The three groups of reparations recipients. Groups A and B began receiving reparations in the 1950s and are labeled "Early". Group C began receiving reparations in the 1990s and are labeled "Late".



Figure 2: The Number of Children Born by 1956 and After 1956 by Household Type and Age of the Female in 1956

*Notes:* This figure plots the number of children born after 1956 and by 1956 by household type and age of the female in 1956. The top left panel, (a), shows the number of children born after 1956, comparing households in which either the female or the male are early recipient s. The top right panel, (b), shows the number of children born after 1956, comparing households in which either the female or the male are late recipient s. The bottom left panel, (c), shows the number of children born by 1956, comparing households in which either the female or the male are early recipient s. Finally, the bottom right panel, (d), shows the number of children born by 1956, comparing households in which either the female or the male are late recipient s. Finally, the bottom right panel, (d), shows the number of children born by 1956, comparing households in which either the female or the male are late recipient s. Finally, the bottom right panel, (d), shows the number of children born by 1956, comparing households in which either the female or the male are late recipient s.

Table 1.ABalancing Test. Census Sample with Exactly One Holocaust Survivor, Female Age 25 and<br/>Younger in 1956

		rounger	111 1000	,			
	(1)	(2)	(3)	(4)	(1)-(2)	(3)-(4)	[(1)-(2)]-
	Female	Female	Male	Male			[(3)-(4)]
	Early	Late	Early	Late	ΔFemale	ΔMale	$\Delta$ -in- $\Delta$
Children Ever Born	2.469	2.662	2.774	2.582	-0.194	0.192*	-0.386**
	(0.854)	(1.153)	(1.182)	(0.983)	(0.155)	(0.108)	(0.187)
Children After 1956	1.156	1.463	1.488	1.397	-0.307**	0.091	-0.398**
	(0.718)	(1.058)	(1.044)	(1.011)	(0.141)	(0.103)	(0.176)
Children By 1956	1.313	1.199	1.286	1.184	0.113	0.102	0.012
	(0.833)	(0.862)	(0.910)	(0.794)	(0.121)	(0.085)	(0.147)
Male Age in 1956	29.734	28.957	30.048	29.385	0.778	0.663*	0.115
	(4.487)	(3.647)	(3.112)	(3.892)	(0.543)	(0.362)	(0.642)
Female Age in 1956	23.656	23.485	23.649	23.536	0.171	0.113	0.058
	(1.275)	(1.568)	(1.381)	(1.425)	(0.213)	(0.142)	(0.252)
Male Yrs. in Israel in 1972	29.688	27.619	24.863	21.582	2.068	3.282***	-1.213
	(10.854)	(11.984)	(7.658)	(8.141)	(1.660)	(0.800)	(1.687)
Female Yrs. in Israel in 1972	23.813	21.714	29.494	26.268	2.098**	3.226***	-1.128
	(7.122)	(7.203)	(10.913)	(12.311)	(1.015)	(1.183)	(1.751)
Duration of Marriage in 1956	4.000	3.701	3.655	3.556	0.299	0.098	0.200
	(1.662)	(1.591)	(1.536)	(1.535)	(0.227)	(0.155)	(0.272)
Total Income from Rents	21.563	0.000	19.405	0.000	21.563***	19.405***	2.158**
	(9.955)	(0.000)	(10.012)	(0.000)	(0.652)	(0.647)	(0.995)
Male Schooling	10.547	10.113	9.143	10.469	0.434	-1.326***	1.760**
	(3.915)	(4.348)	(4.158)	(4.035)	(0.602)	(0.411)	(0.722)
Female Schooling	10.047	9.658	10.321	10.351	0.389	-0.030	0.419
	(3.819)	(3.688)	(3.390)	(3.620)	(0.525)	(0.355)	(0.626)
Obs.	64	231	168	239	_	_	-

*Notes*: Standard deviations in parentheses. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01. Census Sample with Exactly One Holocaust Survivor, women ages 25 and younger in 1956. Total income from rents is the total amount received from early reparations in each household, as a percent of the average salary in the economy.

 Table 1.B

 Balancing Test. Census Sample with Exactly One Holocaust Survivor, Female Age 26 and

 Above in 1956

		110000					
	(1)	(2)	(3)	(4)	(1)-(2)	(3)-(4)	[(1)-(2)]-
	Female	Female	Male	Male			[(3)-(4)]
	Early	Late	Early	Late	∆Female	ΔMale	$\Delta$ -in- $\Delta$
Children Ever Born	2.166	2.238	2.259	2.176	-0.072	0.083	-0.156**
	(1.070)	(0.963)	(1.099)	(1.101)	(0.055)	(0.051)	(0.077)
Children After 1956	0.471	0.502	0.433	0.523	-0.031	-0.090**	0.059
	(0.701)	(0.725)	(0.745)	(0.776)	(0.039)	(0.035)	(0.053)
Children By 1956	1.695	1.736	1.826	1.653	-0.042	0.173***	-0.215***
	(0.955)	(0.868)	(0.983)	(0.974)	(0.050)	(0.046)	(0.068)
Male Age in 1956	37.279	35.762	37.234	34.971	1.517***	2.264***	-0.746**
	(5.588)	(5.699)	(5.379)	(4.573)	(0.311)	(0.232)	(0.380)
Female Age in 1956	32.621	31.080	32.998	31.473	1.541***	1.525***	0.016
	(4.450)	(3.783)	(5.017)	(4.075)	(0.224)	(0.213)	(0.315)
Male Yrs. in Israel in 1972	29.012	23.786	24.282	19.673	5.226***	4.609***	0.617
	(12.560)	(13.599)	(12.400)	(10.517)	(0.724)	(0.535)	(0.881)
Female Yrs. in Israel in 1972	24.206	20.466	26.647	22.345	3.740***	4.302***	-0.563
	(8.795)	(9.827)	(14.628)	(13.831)	(0.517)	(0.663)	(0.894)
Duration of Marriage in 1956	8.204	7.781	9.076	7.870	0.423**	1.206***	-0.783***
	(3.659)	(3.244)	(4.302)	(3.633)	(0.188)	(0.185)	(0.271)
Total Income from Rents	21.309	0.000	24.082	0.000	21.309***	24.082***	-2.773***
	(9.923)	(0.000)	(9.134)	(0.000)	(0.354)	(0.301)	(0.465)
Male Schooling	10.829	10.376	10.875	10.311	0.453**	0.564***	-0.111
	(3.594)	(4.496)	(4.384)	(4.410)	(0.227)	(0.205)	(0.309)
Female Schooling	10.092	9.586	10.186	9.760	0.507***	0.426**	0.081
	(3.299)	(3.605)	(3.717)	(3.762)	(0.191)	(0.174)	(0.262)
Obs.	573	785	926	920	_	_	_

*Notes*: Standard deviations in parentheses. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01. Census Sample with Exactly One Holocaust Survivor, women ages 26 and above in 1956. Total income from rents is the total amount received from early reparations in each household, as a percent of the average salary in the economy.

Table 2.ABalancing Test. Registry Sample with Two Holocaust Survivors, Female Age 25 or Younger in1956

	(1)	(2)	(1)-(2)
	Female Early	Male Early	۸
	Male Late	Female Late	
Children Ever Born	2.730	2.703	0.027
	(1.256)	(1.247)	(0.087)
Children After 1956	2.068	2.187	-0.119
	(1.287)	(1.316)	(0.0907)
Children By 1956	0.663	0.516	0.147***
	(0.686)	(0.639)	(0.0460)
Male Age in 1956	27.459	27.845	-0.386
	(4.704)	(4.451)	(0.318)
Female Age in 1956	21.576	21.041	0.535**
	(2.831)	(3.230)	(0.213)
Male Yrs. in Israel in 1972	23.654	23.674	-0.0198
	(2.994)	(3.983)	(0.249)
Female Yrs. in Israel in 1972	23.262	21.307	1.955***
	(2.157)	(5.066)	(0.282)
Obs.	370	466	_

*Notes*: Standard deviations in parentheses. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01. Registry Sample with Two Holocaust Survivors, one began receiving in the 1950s, "Early", while the other began receiving in the 1990s, "late". Women ages 25 or younger in 1956.

Table 2.BBalancing Test. Registry Sample with Two Holocaust Survivors, Female Age 26 and Above in1956

	(1)	(2)	(1)-(2)
	Female Early	Male Early	Δ
	Male Late	Female Late	
Children Ever Born	2.205	2.162	0.043
	(1.024)	(1.150)	(0.0453)
Children After 1956	0.460	0.494	-0.0339
	(0.721)	(0.898)	(0.0337)
Children By 1956	1.745	1.668	0.0770**
	(0.826)	(0.824)	(0.0344)
Male Age in 1956	38.211	38.043	0.168
	(6.719)	(6.143)	(0.270)
Female Age in 1956	33.043	32.916	0.127
	(4.968)	(4.744)	(0.203)
Male Yrs. in Israel in 1972	24.008	20.416	3.592***
	(3.673)	(7.214)	(0.234)
Female Yrs. in Israel in 1972	23.749	20.363	3.386***
	(3.176)	(7.952)	(0.246)
Obs.	1,239	1,069	_

*Notes*: Standard deviations in parentheses. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01. Registry Sample with Two Holocaust Survivors, one began receiving in the 1950s, "Early", while the other began receiving in the 1990s, "late". Women ages 26 and above in 1956.

Balancing: Survivor Status and Children Ever Born.									
Dep. Variable:	CEB=0	CEB≤1	$2 \le CEB \le 3$	CEB≤3					
	(1)	(2)	(3)	(4)					
Female Holocaust	-0.023	0.022	0.042**	0.020**					
	(0.017)	(0.017)	(0.017)	(0.008)					
Early	0.022	-0.001	0.011	0.009					
	(0.046)	(0.046)	(0.046)	(0.021)					
Controls	Yes	Yes	Yes	Yes					
Observations	6,733	6,733	6,733	6,733					
R-squared	0.185	0.205	0.146	0.063					

Table 3

*Notes.* Standard errors in parentheses. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01. The sample is from the Israeli Censuses of 1995 and 2008, merged with information from the Authority for the Rights of Holocaust Survivors. It takes the Census sample of one time married Jewish Israeli couples, who got married by 1954 and immigrated to Israel before 1972 with exactly one Holocaust Survivor. It excludes those households where the husband is the survivor and adds from the Israeli censuses of 1995 and 2008 one time married Jewish Israeli couples, who got married by 1954 and immigrated to Israel before 1972 where at least one spouse immigrated from Europe and both spouses are not Holocaust survivors. CEB=0 is a dummy equals to 1 if the household has no children, CEB≤1 is a dummy equals to 1 if the household has at most 1 child, 2<CEB<3 is a dummy equals to 1 if the household has either 2 or 3 children, CEB<3 is a dummy equals to 1 if the household has at most 3 children. Female is an indicator equals to 1 if the female in the household is a Holocaust survivor and 0 otherwise. Early is an indicator equals to 1 if reparations were received since the late 1950s, and 0 otherwise. Controls include the duration of marriage in 1956 as well as individual control for the male and the female including age, years of schooling, years since immigration as of 1956, and a set of dummies for the country of origin.

The Effect of Reputation on Fertuiny. Census Sumple with exactly one molocaust Survivor.									
Dep. Variable:	Children	Ever Born	Children B	orn By 1956	.956 Children Born Af				
	(1)	(2)	(3)	(4)	(5)	(6)			
Female×Early	-0.109	-0.078	-0.136**	-0.083	-0.091	-0.077			
	(0.076)	(0.068)	(0.063)	(0.059)	(0.057)	(0.047)			
Female	0.033	0.017	0.058	0.067	0.017	0.013			
	(0.050)	(0.048)	(0.041)	(0.041)	(0.037)	(0.033)			
Early	0.153*	0.083	0.087	0.072	0.108*	0.056			
	(0.083)	(0.075)	(0.068)	(0.065)	(0.063)	(0.052)			
# Children Born by 1956					Yes	Yes			
Control Characteristics	No	Yes	No	Yes	No	Yes			
Observations	3,906	3,906	3,906	3,906	3,906	3,906			
R-squared	0.008	0.243	0.007	0.149	0.011	0.348			

Table 4The Effect of Reparation on Fertility. Census Sample with exactly one Holocaust Survivor.

*Notes*. Standard errors in parentheses. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01. The sample is from the Israeli Censuses of 1995 and 2008, merged with information from the Authority for the Rights of Holocaust Survivors. The sample comprises one time married Jewish Israeli couples, who got married by 1954 and immigrated to Israel before 1972. In each household exactly one spouse received reparations, either in the late 1950s, or in the 1990s or later. Female is an indicator equals to 1 if the female in the household is a Holocaust survivor, identified as such if she ever received reparation, and 0 otherwise. Early is an indicator equals to 1 if reparations were received from the late 1950s, and 0 otherwise. Control Characteristics include the duration of marriage in 1956 as well as individual control for the male and the female including age, years of schooling, years since immigration as of 1956, and a set of dummies for the country of origin.

The Effect of Reparation on Fertility, by Age. Census Sample with exactly one Holocaust Survivor.									
	<i>a</i> = 21	<i>a</i> = 23	a = 25	<i>a</i> = 27	<i>a</i> = 29	<i>a</i> = 33	<i>a</i> = 37	<i>a</i> = 41	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
	Ι	Dependent	Variable in	Panel A: I	Number o	f Children	Ever Born	n	
Female×Early×Younger <i>a</i>	0.572	-0.269	-0.424**	-0.078	0.039	-0.016	0.111	0.280	
	(0.656)	(0.281)	(0.191)	(0.151)	(0.137)	(0.154)	(0.254)	(0.425)	
R-squared	0.245	0.247	0.248	0.246	0.246	0.244	0.248	0.247	
	Dependent Variable in Panel B: Number of Children Born By 1956								
Female×Early×Younger <i>a</i>	0.324	0.274	0.179	0.095	0.150	0.173	0.145	0.120	
	(0.570)	(0.243)	(0.166)	(0.131)	(0.119)	(0.133)	(0.220)	(0.367)	
R-squared	0.151	0.158	0.158	0.157	0.157	0.151	0.162	0.164	
	Dep	oendent Va	riable in Pa	nel C: Nu	mber of C	hildren Bo	orn After 1	.956	
Female×Early×Younger <i>a</i>	-0.059	-0.420**	-0.329**	-0.092	-0.018	0.008	0.077	-0.014	
	(0.458)	(0.195)	(0.133)	(0.105)	(0.096)	(0.107)	(0.177)	(0.296)	
# Children Born by 1956	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
R-squared	0.351	0.359	0.362	0.358	0.353	0.353	0.358	0.357	
# of Obs. (All Panels)	3,906	3,906	3,906	3,906	3,906	3,906	3,906	3,906	

 Table 5

 The Effect of Reparation on Fertility, by Age, Census Sample with exactly one Holocaust Survivor

*Notes*. Standard errors in parentheses. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01. The sample is from the Israeli Censuses of 1995 and 2008, merged with information from the Authority for the Rights of Holocaust Survivors. The sample comprises one time married Jewish Israeli couples, who got married by 1954 and immigrated to Israel before 1972. In each household exactly one spouse received reparations, either in the late 1950s, or in the 1990s or later. All specifications include controls for age, years since immigration as of 1956, and a set of dummies for the country of origin for the female and the male separately. Panel C also controls for the number of children born by 1956. Each entry reports the coefficient on the interaction between Female Early and a dummy that takes the value of 1 if the female in the household is up to age *a*. Ages vary by columns. For example, in Column (3), "*a* = 25" implies that Younger *a* is equal to 1 for all women who are up to age 25 (inclusive). All specifications include the Younger *a* dummy, and the interactions for Early × Younger *a* and Female × Younger *a*.

The Effect of Reparation of Faring. Census Sample with exactly one holocaust Sarotoon.									
Dep. Variable:	CEB=0	CEB≤1	$2 \le CEB \le 3$	CEB≤3					
	(1)	(2)	(3)	(4)					
Female×Early×Younger 25	0.054	0.154*	-0.123	0.031					
	(0.078)	(0.083)	(0.084)	(0.036)					
Female×Early	-0.015	0.002	0.009	0.011					
	(0.030)	(0.032)	(0.033)	(0.014)					
Female	0.005	-0.001	0.002	0.001					
	(0.021)	(0.023)	(0.023)	(0.010)					
Early	0.031	-0.023	0.012	-0.011					
	(0.034)	(0.036)	(0.037)	(0.016)					
Controls	Yes	Yes	Yes	Yes					
Observations	3,906	3,906	3,906	3,906					
R-squared	0.184	0.203	0.156	0.047					

 Table 6

 THe Effect of Reparation by Parity. Census Sample with exactly one Holocaust Survivor.

*Notes.* Standard errors in parentheses. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01. The sample is from the Israeli Censuses of 1995 and 2008, merged with information from the Authority for the Rights of Holocaust Survivors. The sample comprises one time married Jewish Israeli couples, who got married by 1954 and immigrated to Israel before 1972. In each household exactly one spouse received reparations, either in the late 1950s, or in the 1990s or later. CEB=0 is a dummy equals to 1 if the household has no children, CEB $\leq 1$  is a dummy equals to 1 if the household has at most 1 child,  $2\leq$ CEB $\leq 3$  is a dummy equals to 1 if the household has either 2 or 3 children, CEB $\leq 3$  is a dummy equals to 1 if the household has at most 3 children. Female is an indicator equals to 1 if the female in the household is the recipient of reparations and 0 otherwise. Early is an indicator equals to 1 if reparations were received since the late 1950s, and 0 otherwise. Female Early is the interaction between Female and Early. Controls include the duration of marriage in 1956 as well as individual control for the male and the female including age, years of schooling, years since immigration as of 1956, and a set of dummies for the country of origin.

	The Effect of Reparation on Ferturity. Registry Sumple with Two Holocausi Survivors								
Dep. Variable:	Children	Ever Born	Children B	orn By 1956	Children Bo	rn After 1956			
	(1)	(2)	(3)	(4)	(5)	(6)			
Female×Early	-0.000	-0.003	0.178***	0.067**	-0.178***	-0.062*			
	(0.041)	(0.041)	(0.033)	(0.028)	(0.043)	(0.033)			
# Children Born by 1956					Yes	Yes			
Control Characteristics	No	Yes	No	Yes	No	Yes			
Observations	3,144	3,144	3,144	3,144	3,144	3,144			
R-squared	0.000	0.128	0.009	0.351	0.005	0.499			

 Table 7

 The Effect of Reparation on Fertility. Registry Sample with Two Holocaust Survivors

*Notes*. Standard errors in parentheses. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01. The sample is from the Authority for the Rights of Holocaust Survivors in Israel. The sample comprises one time married Jewish Israeli couples who immigrated to Israel before 1972. Both spouses are Holocaust survivors, in which one began receiving reparations in the 1950s, while the other began receiving reparations only in the 1990s or later. Control Characteristics include age, years since immigration as of 1956, and a set of dummies for the country of origin for the female and the male separately.

The Effect of Reparation on Fertility, by Age. Registry Sample with Two Holocaust Survivors										
	<i>a</i> = 21	<i>a</i> = 23	<i>a</i> = 25	<i>a</i> = 27	<i>a</i> = 29	<i>a</i> = 33	<i>a</i> = 37	a = 41		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
		Dependent	Variable ir	n Panel A:	Number of	f Children H	Ever Born			
Female×Early×Younger <i>a</i>	-0.334***	-0.215**	-0.069	-0.041	-0.132*	-0.097	-0.065	-0.063		
	(0.121)	(0.101)	(0.090)	(0.083)	(0.079)	(0.086)	(0.119)	(0.181)		
R-squared	0.130	0.131	0.129	0.128	0.128	0.128	0.129	0.127		
	Dependent Variable in Panel B: Number of Children Born By 1956									
Female×Early×Younger <i>a</i>	-0.046	-0.020	0.046	0.064	-0.031	0.071	0.143*	-0.055		
	(0.084)	(0.070)	(0.062)	(0.058)	(0.056)	(0.061)	(0.083)	(0.125)		
R-squared	0.351	0.352	0.351	0.343	0.332	0.336	0.351	0.355		
	De	pendent Va	riable in P	anel C: Nı	umber of Cl	hildren Bor	n After 195	6		
Female×Early×Younger <i>a</i>	-0.294***	-0.232***	-0.109	-0.095	-0.158**	-0.157**	-0.190**	-0.110		
	(0.096)	(0.080)	(0.071)	(0.066)	(0.064)	(0.069)	(0.094)	(0.144)		
# Children Born by 1956	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
R-squared	0.497	0.504	0.499	0.493	0.481	0.489	0.502	0.495		
# of Obs. (All Panels)	3,144	3,144	3,144	3,144	3,144	3,144	3,144	3,144		

 Table 8

 The Effect of Reparation on Fertility, by Age. Registry Sample with Two Holocaust Survivors

*Notes.* Standard errors in parentheses. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01. The sample is from the Authority for the Rights of Holocaust Survivors in Israel. The sample comprises one time married Jewish Israeli couples who immigrated to Israel before 1972. Both spouses are Holocaust survivors, in which one began receiving reparations in the 1950s, while the other began receiving reparations only in the 1990s or later. All specifications include controls for age, years since immigration as of 1956, and a set of dummies for the country of origin for the female and the male separately. Panel C also controls for the number of children born by 1956. Each entry reports the coefficient on the interaction between Female Early and a dummy that takes the value of 1 if the female in the household is up to age *a*. Ages vary by columns. For example, in Column (3), "a = 25" implies that Younger *a* is equal to 1 for all women who are up to age 25 (inclusive). All specifications include the Younger *a* dummy, and the interactions for Early×Younger *a* and Female×Younger *a*.

Dep. Variable:	Children E	Ever Born	Children B	orn By 1956	Children Bo	rn After 1956
	(1)	(2)	(3)	(4)	(5)	(6)
Female×Early	-0.477***	0.030	0.590***	0.050***	-1.067***	-0.015
	(0.023)	(0.022)	(0.014)	(0.012)	(0.025)	(0.019)
# Children Born by 1956					Yes	Yes
Control Characteristics	No	Yes	No	Yes	No	Yes
Observations	20,788	20,788	20,788	20,788	20,788	20,788
R-squared	0.020	0.304	0.077	0.473	0.083	0.552

 Table 9

 The Effect of Reparation on Fertility. Registry Sample with Two Holocaust Survivors

*Notes.* Standard errors in parentheses. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01. The sample is from the Authority for the Rights of Holocaust Survivors in Israel. The sample comprises one time married Jewish Israeli couples who immigrated to Israel before 1972, and in which both spouses are Holocaust survivors, who received reparations from the State of Israel. There are four groups: (i) Both spouses are early recipients, (ii) both spouses are late recipients, (iii) the female is an early recipient and the male is a late recipient, and (iv) the female is a late recipient and the male is an early recipient. Control Characteristics include age, years since immigration as of 1956, and a set of dummies for the country of origin for the female and the male separately.

The Effect of Reparation on Fertility, by Age. Registry Sample with Two Holocaust Survivors										
	<i>a</i> = 21	<i>a</i> = 23	<i>a</i> = 25	<i>a</i> = 27	<i>a</i> = 29	<i>a</i> = 33	<i>a</i> = 37	<i>a</i> = 41		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
		Depende	nt Variable	in Panel A: I	Number of C	Children Eve	er Born			
Female×Early×Younger <i>a</i>	-0.201***	-0.159***	-0.113**	-0.151***	-0.177***	-0.073	-0.024	-0.028		
	(0.071)	(0.057)	(0.048)	(0.044)	(0.079)	(0.103)	(0.142)	(0.217)		
R-squared	0.305	0.306	0.304	0.304	0.304	0.304	0.304	0.304		
	Dependent Variable in Panel B: Number of Children Born By 1956									
Female×Early×Younger <i>a</i>	-0.045	0.062***	0.147***	0.169***	0.156***	0.155***	0.146***	0.093		
	(0.039)	(0.031)	(0.026)	(0.024)	(0.024)	(0.026)	(0.037)	(0.058)		
R-squared	0.470	0.478	0.474	0.460	0.449	0.462	0.475	0.471		
		Dependent	Variable in I	Panel C: Nu	mber of Chil	dren Born A	After 1956			
Female×Early×Younger <i>a</i>	-0.161***	-0.215***	-0.244***	-0.297***	-0.308***	-0.208***	-0.155**	-0.110		
	(0.062)	(0.050)	(0.093)	(0.039)	(0.037)	(0.042)	(0.060)	(0.093)		
# Children Born by 1956	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
R-squared	0.554	0.559	0.553	0.548	0.544	0.550	0.554	0.551		
# of Obs. (All Panels)	20,788	20,788	20,788	20,788	20,788	20,788	20,788	20,788		

 Table 10

 The Effect of Reparation on Fertility, by Age, Registry Sample with Two Holocaust Survivors

*Notes.* Standard errors in parentheses. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01. The sample is from the Authority for the Rights of Holocaust Survivors in Israel. The sample comprises one time married Jewish Israeli couples who immigrated to Israel before 1972, and in which both spouses are Holocaust survivors, who received reparations from the State of Israel. There are four groups: (i) Both spouses are early recipients, (ii) both spouses are late recipients, (iii) the female is an early recipient and the male is a late recipient, and (iv) the female is a late recipient and the male is an early recipient. All specifications include controls for age, years since immigration as of 1956, and a set of dummies for the country of origin for the female and the male separately. Panel C also controls for the number of children born by 1956. Each entry reports the coefficient on the interaction between Female Early and a dummy that takes the value of 1 if the female in the household is up to age *a*. Ages vary by columns. For example, in Column (3), "a = 25" implies that Younger *a* is equal to 1 for all women who are up to age 25 (inclusive). All specifications include the Younger *a* dummy, and the interactions for Early×Younger *a* and Female×Younger *a*.

Dep. Variable	Children Born After 1953, 1954, and 1955					
Cutoff Year	After 1955		After 1954		After 1953	
	(1)	(2)	(3)	(4)	(5)	(6)
Female×Early×Younger 23	-0.531***		-0.279*		-0.288**	
	(0.167)		(0.149)		(0.134)	
Female×Early×Younger 25		-0.346***		-0.061		-0.069
		(0.122)		(0.118)		(0.114)
# Children Born by 1956	Yes	Yes	Yes	Yes	Yes	Yes
Control Characteristics	Yes	Yes	Yes	Yes	Yes	Yes
Observations	3,906	3,906	3,906	3,906	3,906	3,906
R-squared	0.383	0.380	0.415	0.412	0.435	0.431

Table 11				
Robustness: Year in Which Reparations were Anticipated. Census Sample with exactly one Holocaust Survivo	r			

*Notes.* Standard errors in parentheses. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01. The sample is from the Israeli Censuses of 1995 and 2008, merged with information from the Authority for the Rights of Holocaust Survivors. It contains houseohlds with exactly one spouse who is a Holocaust survivor, who began receiving reparations either in the late 1950s, or in the 1990s or later. Younger *a* is an indicator equals to 1 if the female in the household was aged *a* or younger in 1953/4/5 and 0 otherwise. All specifications include the Female dummy, Early dummy, and the Younger *a* dummy, as well as the interactions for Early×Female, Early×Younger *a*, and Female×Younger *a*. Control Characteristics include the duration of marriage in 1956 as well as individual control for the male and the female including age, years of schooling, years since immigration as of 1956, and a set of dummies for the country of origin.

Female	Early	Late	Never	
Male				
Early				
	Both Early	Female Late	Female Never	
	N=4,810	Male Early	Male Early	
		N=1,535	N=1,981	
Late				
	Female Early	Both Late	Female Never	
	Male Late	N=12,834	Male Late	
	N=1,609		N=5,127	
Never				
	Female Early	Female Late		
	Male Never	Male Never		
	N=519	N=873		

Figure A.1: Registry Sample and Sub-Samples

(a) Full Registry Sample, 29,288 Observations

Female	Early	Late	Never
Male			
Early			
	Both Early	Female Late	Female Never
	N=4,810	Male Early	Male Early
		N=1,535	
Late			
	Female Early	Both Late	Female Never
	Male Late	N=12,834	Male Late
	N=1,609		
Never			
	Female Early	Female Late	
	Male Never	Male Never	

(b) Registry Sample with Exactly Two Recipients in each Household, 20,788 Observations

Female	Early	Late	Never
Male			
Early			
	Both Early	Female Late	Female Never
		Male Early	Male Early
		N=1,535	
Late			
	Female Early	Both Late	Female Never
	Male Late		Male Late
	N=1,609		
Never			
	Female Early	Female Late	
	Male Never	Male Never	

(c) Registry with Exactly Two Recipients in each Household, one Spouse is an Early Recipient, and One Spouse is a Late Recipient, 3,144 Observations

*Notes:* Black fill=Treated, Grey fill=control, White fill=not used.