Capitalism with Compassion: The Effect of Introducing Market-Based Wages on Attitudes Towards Free Markets and Socialism

Ran Abramitzky
Stanford University and NBER

Netanel Ben-Porath
Hebrew University

Shahar Lahad
Hebrew University

Victor Lavy
Hebrew University, University of Warwick and NBER

Michal Palgi
University of Haifa

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Abstract

We study the effects of labor market liberalization on attitudes towards free-market capitalism and socialism, exploiting a sharp reform whereby Israeli kibbutzim shifted away from equal sharing into market-based wages. Our identification strategy relies on the sharp and staggered implementation of this reform in different kibbutzim. We measure attitudes towards a market economy, capitalism, and socialism in surveys one of us (M. Palgi) has conducted annually over the past 25 years. The reform led to increased support of free-market policies such as full privatization and differential wages. It decreased support of socialist policies such as the joint ownership of production means and the Marxist principle from the ability to needs. Simultaneously, the reform also increased support for the safety net to support weak members through mutual assurance. These effects appear to be driven by an increase in living standards and work ethics that resulted from the reform. To study behavior associated with the attitudes we study, we document that the reform led to a shift in political preferences, resulting in a decreased support to left-wing political parties and increased support for center parties in national elections. Overall, we conclude that introducing market-based wages led to a shift in attitudes towards a market economy with compassion, revealing a change from their traditional democratic socialist model to a social democratic model.

Capitalism is the exploitation of man by man; socialism is exactly the opposite!

–Old anarchist joke

1. Introduction

We study the effects of labor market liberalization on attitudes towards free-market capitalism and socialism. Our setting is the Israeli kibbutzim, communities in Israel that have been considered among the most successful and longest-lived experiments in voluntary socialism. Starting in the late 1990s, kibbutzim shifted away from equal sharing and socialism for the first time in their history. Specifically, kibbutzim reformed their decades-long policy of equal sharing of incomes and wages and moved into market-based wages. We examine how this labor market liberalization affected kibbutz members' labor market norms and social values, such as their attitudes towards income equality, collective ownership of the means of production, and mutual assistance.

Our identification strategy exploits the sharp and staggered implementation of the labor market liberalization reform in different kibbutzim. We take advantage of the different timing of the reforms in kibbutzim and the difference in the years of exposure to the reform. We estimate a dynamic difference-in-differences specification that allows us to study the causal effect of the reform on norms and values while controlling for time, personal, and kibbutz attributes. Our identification assumption is that in the absence of the reforms, members in kibbutzim that reformed earlier or later would have been similar. We provide evidence that kibbutzim members who reformed at different times were identical in their characteristics, values, and attitudes before the reform took place.

We measure attitudes towards a market economy, capitalism, and socialism in surveys that one of us has conducted annually over the past 25 years. This data, used here for the first time in an economics paper, was conducted among kibbutz members through the Institution for the Research of the Kibbutz and the Cooperative Idea at the University of Haifa. This survey contains demographic characteristics such as gender, age, family status, education, and answers to respondents' attitudes, values, and norms. Our sample includes approximately 12,500 person-year observations from about 200 kibbutzim over the years 1993-2007. We link survey respondents to the dates in which their kibbutz reformed, allowing us to distinguish between kibbutzim that introduced labor market liberalization earlier and later.

We find that labor market liberalization led to increased support of open labor market policies such as competitive labor market mechanisms, increase pay for overtime work, and differential wages, and to decreased support of socialist policies such as the joint ownership of the means of production and the Marxist principle from ability to needs. At the same time, the reform

also led to increased support for the safety net in the form of mutual assistance for weak members and a decreased support for reducing pay for members who do not work full time. Kibbutz members started to embrace market mechanisms that enhance productivity while continuing to adhere to their core principles of mutual support and limited disparities.

The support for competitive labor market policies increased across the board in kibbutzim. Members of all ages, education levels, and genders improved their attitudes towards market-based policies, although their support varied. For example, we find that women reduce their support for equality while men increase their support for mutual responsibility. Men adopted a more favorable attitude towards collective ownership of production, while women favored transferring personal assets to private ownership.

The effects we document appear to be driven by an increase in living standards and work ethics that resulted from the reform. Equal sharing in the traditional kibbutz encourages shirking and free riding. While in the past strong idealism among founders helped kibbutzim reduce these problems, idealism decline over time, and the second and third generations became less idealistic than the founding generation (see Abramitzky 2018 for a discussion). By the 1990s, and before reforms started to occur, members began to complain about shirkers.[1] Our findings provide quantitative evidence that the reform improved the economic condition and kibbutzim's work ethics, as reported in surveys. These improved economic conditions and work ethics might have, in turn, contributed to the more favorable attitudes of kibbutz members towards open labor market policies.

To study behavior associated with the attitudes we study, we examine whether the change in attitudes induced by the liberalization of labor markets in kibbutzim translated into a change in kibbutz members' behavior as reflected in voting in national elections. Specifically, we focus on the voting patterns of kibbutzim to the Knesset, the Israeli parliament, and document that the reform led to a shift in political preferences, resulting in a decreased support to left-wing political parties, which has traditionally been identified with the socialist ideology, and an increase in voting for center political parties. We also document that this transformation is driven only by ideologically more moderate kibbutzim.

Overall, we conclude that introducing market-based wages led to a shift in attitudes towards a market economy with compassion, revealing a change from their traditional democratic

[1] For example, one member was quoted saying that "people like me who started as socialists concluded that you can work hard and get nothing while others don't work hard. It is so unfair." (see Muravchik 2003). Another member said that his kibbutz was a "paradise for parasites." And one member of Kibbutz Gesher told Mort and Brenner (2003, p. 76) that "[M]ost strong members said that they don't want to carry on their back those who don't earn, that they want to take care of themselves."

socialist model to a social democratic model. Although most kibbutz members support the differential pay reforms, they still want to maintain their mutual responsibility/assistance core principle. When reflecting on the way they want to live their lives and build their society, it appears that most members do not want to live in either a traditional socialist kibbutz or in a capitalist city. Most of them prefer something in the middle – a market economy but a compassionate society with a comprehensive safety net. This is also reflected in the fact that kibbutzim members leave the left, but still opt voting to the center rather than the right.

Against our prior, we find that even older and less educated people, who stand to lose from the change to market-determined wages, also increased their support for free labor market approach in the kibbutz though kept some support for equality and mutual assistance. This changed attitude could have been mediated by the belief that such reforms are necessary for the kibbutz's continued survival and because people witnessed improved economic conditions soon after the change.

Our paper contributes to four strands of literature. First, much has been written about the failure of socialism and its rejection worldwide (see, for example, discussion in Abramitzky 2018). At the same time, there is a growing concern with the increase in income inequality in more capitalist countries like the US and Israel. The middle class's social movements attempt to reduce social and economic disparities have increased. The 2011 social justice protest in Israel and Occupy Wall Street in the United States is just two examples. An influential work by Saez and Piketty (2003, 2006, 20113), Piketty (2014), and Saez and Zucman (2019, 2020) uncovered the rise in income and wealth inequality in the US and around the world. It brought attention to the problems of income inequality under capitalism.

Nevertheless, Ashok, Kuziemko & Washington (2015) show that while inequality in the US has risen, demand for redistribution remained flat or even decreased, especially among the elderly and African Americans. Our paper contributes to these discussions by providing evidence from one of the longest-lived and most successful democratic socialist communities. We document how kibbutz members that experience open markets developed norms and attitudes that support a model that is neither full capitalism nor full socialism. Instead, members whose kibbutz shifted away from full equality develop preferences for a social democratic model, the kind that countries like Norway and Sweden have developed.

Second, prior literature on the causal effect of policies and reforms on redistribution attitudes focuses on non-democratic countries. Alesina and Fuchs-Schündeln (2007) find that Eastern Germans' experience with socialism made them more supportive than West Germans of government intervention. However, they expect convergence to take place eventually. Abramitzky and Sin (2014) find that the collapse of Communism in Eastern Europe resulted in an increased

preference for western knowledge, as measured by Western titles' translations. In China's context, Cantoni et al. (2015) study the effect of textbook reform in China between 2004 and 2010 on students' political attitudes and find that the new curriculum led to more positive views of China's governance and increased skepticism toward free markets. Chen et al. (2017) show that parents' experiences with the wealth equalization movements during the Communist Revolution in China (1947-1956) affected their children's preference for redistribution. Specifically, the authors find that making these historical experiences salient for a random set of respondents turn the respondents to support government redistribution. These papers study non-democratic countries. We add to this literature by examining how attitudes and norms towards equality and capitalist and socialist policies are formed in a democratic setting. Our findings suggest that in an environment in which democracy is a given, experience with labor market liberalization enhances support for market-oriented capitalism while at the same time enhancing support for mechanisms to ensure a comprehensive safety net for those who stand to lose from exposure to markets.

Third, our paper contributes to the literature on how engagement with markets affects social values and political preferences. Earlier literature examined how personal experiences (as opposed to ideological dispositions) affect political preferences and attitudes. Specifically, a series of creative papers documented how growing up during the great depression of the 1930s or the great recession of 2008 shaped American's preferences for redistribution and social policy preferences (Giuliano and Spilimbergo 2013, Fishman et al. 2015, and Margalit 2013). More recently, building on a long and important literature going back to Montesquieu (1748) and Marx and Engels (1848), Margalit and Shayo (2020) conducted a large field experiment to evaluate the impact of financial markets. They found that participants assigned to an asset shifted rightward in their attitudes on economic fairness, inequality and redistribution, and the role of luck in economic success. Our paper adds to this literature by studying a non-experimental setting in which variation in the introduction of markets naturally occurred and documented how markets' experience affected norms and values.

Fourth, our paper also relates to the literature on the effect of economic shocks on voting behavior. An extensive literature has emphasized the importance of economic self-interest in forming political opinions and voting behavior. For example, people tend to vote for parties that advocate policies that can improve their material position (Hout et al. 1993, Cusack et al., 2006, Rueda 2007, Margalit 2009). However, experiences and ideological dispositions, independent of material self-gain, may affect economic voting, sometimes even against self-interest (Redlawsk 2002, Shayo 2009, Kitschelt & Rehm 2014, Margalit 2019). We contribute to this debate by providing empirical evidence about the role ideological attitudes play in electoral decision-making.

We show that even though labor market liberalization affected members' similarly material interests in all reformed kibbutzim, it did not affect voting behavior in kibbutzim that had the strongest socialist ideology before the pay reform. Thus, our results shed light on why voting patterns sometimes persist even after large shifts in economic interests (Kronsick & Alwin 1989, Taber & Lodge 2006).

Finally, while external validity should not be exaggerated, our paper may contribute to our understanding of the processes that might have taken place in the transitions of central and eastern European countries from centrally planned to market economies after the fall of the Iron Curtain (see Brainerd 1998), the abolition of village collectives in China in the 1980s, and Vietnam's labor market liberalization in the mid 1980s (see Moock, Patrinos, and Venkataraman (1998) and Svejnar (1999).

The paper is organized as follows. In the next section, we describe the background of the pay reform and ideology in kibbutzim. Section 3 presents the data, and section 4 the empirical methodology. We present the results in two sections, first the effect of labor pay liberalization on norms and social values (section 5), followed by evidence on the impact on political voting in national elections (section 6). Section 7 provides conclusions and discussion of external validity.

2. Brief background [2]

Kibbutzim are socialist communities in Israel that survived in Israel for over a century. Today, 180,000 members are living in 268 kibbutzim. Today kibbutz members account for less than 2% of the Jewish population in Israel. Still, kibbutz members have always played a large role in Israeli society and produced some of the country's ideological, political, and intellectual leaders. For most of their existence, kibbutzim were based on full income equality, collective ownership of property, and strong mutual assistance among members. In a traditional kibbutz, members received an equal share regardless of their contributions, according to the Marxist principle "From each according to his abilities to each according to his needs."

Beyond socialist ideology, mutual assistance among members has always been a key principle. The kibbutz bylaws (our translation from Hebrew) emphasize the commitment to "provide for the economic, social, cultural, educational, and personal needs of members and their dependents . . . [and] to ensure a decent standard of living for kibbutz members and their dependents." In early days, Malaria and other illnesses were severe. They left many members out of work (Near 1992). Itzhak Tabenkin, one of the pioneer leaders of the kibbutz movement, said

[2] For a more detailed background on kibbutzim and the pay reform, see Abramitzky (2018).

that “in the conquest of work in town and country, in the conquest of the soil, the need for the kvutza always appeared; for we were alone and powerless, divorced from our parents and our environment, and face o face with the difficulty of life—the search for employment, illness, and so forth.” (quoted in Abramitzky 2018).

Surveys conducted in kibbutzim in the late 1960s suggested the importance of both the principles of equality and mutual assistance. Among the values listed as most important were socialist values such as “collectivity and equality” and “developing a model socialist society,” alongside mutual assistance values such as “full social security” and “an adequate standard of living.” (Rosner 1990). Abramitzky (2018) added that: “As one member of Maagan Michael, a kibbutz that remained egalitarian, said when discussing the future of his kibbutz, “The bottom line is that everyone in Maagan Michael can live from cradle to grave with honor” and “there are no poor or neglected, as in other places. We have to preserve that reality” (Gavron 2000, p. 206). Another member of that kibbutz, who was in favor of moving away from sharing and allowing for more individualism, nevertheless remarked that she would still like the kibbutz to help weaker members and provide members with health and education services (p. 207).”

Our paper focuses on the effects of the shift away from equal sharing to market-based wages that took place in kibbutzim since the late 1990s. By then, many kibbutzim implemented wage reforms that abolished the core principle of income equality. They meant higher wages to members who brought to their kibbutz high income and lower wages to members who brought low income. Implicitly it also meant higher wages for more educated and skilled members. About 20 percent of kibbutzim still maintain full equality even today, but in most kibbutzim, earnings are based on market forces. This reform is described in detail in Abramitzky (2018), and Abramitzky and Lavy (2014, 2020) show how this pay reform affected students' performance in high schools and universities.

Important in our context is that despite the shift towards a more “capitalistic” model, the language used to describe reformed kibbutzim – “a safety net model” - suggests that even kibbutzim reformed still take care of weak members in need, revealing that mutual support remains a core objective in kibbutzim’s mission. Kibbutzim’s shift away from equal sharing led the government to appoint a public committee, the Ben-Rafael Committee, which extended the notion of what a kibbutz is to include both the “renewed kibbutz” and the “collective kibbutz.” This committee legitimized the renewed model of kibbutzim that still adhered to core kibbutz values and facilitated the transformation of kibbutzim that departed from the traditional collective model (Ben Rafael and Topel 2011). Despite the shift from a socialist to a capitalist model, Abramitzky (2018) writes that: “A member of Kibbutz Kfar Ruppin, which moved to a capitalist model relatively early, remarked

that it was important for the kibbutz to preserve cooperation and mutual aid even under the capitalist model, because "the capitalists have taught us that a worker who feels secure and who identifies with his company is more productive" (ibid., p. 222). Another member of Kfar Ruppin was asked whether it should still be called a kibbutz. He answered, "Call it what the hell you want. If people live together and help each other, I think that's a kibbutz!" (ibid., p. 227)."

Kibbutzim varied in their commitment to socialist values, with kibbutzim that belonged to the "Kibbutz Artzi" movement being more ideological than those who belonged to the "Takam", the other major movement. Kibbutz Artzi has traditionally been the more conservative in preserving the original values.

3. Data

We use data from a yearly survey conducted among kibbutz members by the Institution for the Research of the Kibbutz and the Cooperative Idea (IRK) in the University of Haifa. This survey contains demographic characteristics (gender, age, family status, level of education) and answers to personal and kibbutz state and opinions on different aspects of the reforms and kibbutz's way of life. We merge this data with IRK reports about the dates on which the pay reform was implemented in each kibbutz, allowing us to distinguish between kibbutzim that introduced labor market liberalization earlier and later.

The survey was implemented in most years since 1993 except in 2006. Until 1998 the survey was carried by filling paper questionnaires, and since then, it was changed to an online mode. The sample included 200 (out of 268) kibbutzim every year and targeted individuals randomly selected in each kibbutz. However, since it went online, the sample contained mostly people who responded to the call. We compared the means of demographic variables (age, gender education) of the sample to the means of all kibbutzim populations and find that the sample is overall representative. This evidence is presented in the online appendix Table A1.

Our sample includes approximately 12,500 person-year observations from about 200 kibbutzim over the years 1993-2007. We focus our analysis on these years because, during this period, the survey questionnaire was very similar. Sample statistics are presented in Table 1, including the number of kibbutzim that reformed by year, number of kibbutzim in the sample, number of survey respondents, and their number from kibbutzim that reformed. Kibbutzim only started to reform in the mid-1990s, so the sample includes all affected individuals in these kibbutzim.

In Table A2, we present descriptive statistics by "treatment" and "control" group. Each kibbutz is considered a control until after the year that it implemented the pay reform. We group

the data by periods: Until 1998, the year large numbers of kibbutzim started to implement the pay reform, 1999-2001, 2002-2004, and 2005-2007. Because the pay reforms only started in the late 1990s, the sample until 1998 (inclusive) included mostly control individuals, and from 1999 the treated group grew while the control group shrank. By 2007, the sample included 31.5 percent controlled individuals, while in the years of the sample (1993-2007), the sample included 77.57 percent controlled individuals. Since the survey is anonymous, we cannot link individuals' responses over time. Therefore, the data is structured as repeated cross-sections at the kibbutz level.

The Kibbutz survey questionnaire addresses various aspects of the kibbutz environment. We use questions from multiple sections related to attitudes and norms regarding social, economic, and ideology. The respondents are asked to rate in a 5-point Likert scale ranging from 1 (strongly oppose/disagree) to 5 (strongly support/disagree), the extent to which they support/agree with a series of statements. We also examine a set of items in the questionnaire where individuals are asked about their opinion regarding the kibbutz's economic and social status, its members' work ethics, inequality among members, compensating financially for overtime hours of work, differential salary by productivity.

In Table 3, we present the various measures, their means in the control group (column 1), and standard deviation (column 2). Some of the survey questions are irrelevant to this study (e.g., members' opinions on the kibbutz movement and newspaper). Therefore, we focus on the questions dealing with one of these three aspects: (1) Opinions regarding recent or planned reform elements such as paying money for extra work hours or differential salary. We refer to this group as labor market norms (2) The belief about the contribution of egalitarian-traditional kibbutz social norms such as overall equality. We refer to this group as social norms (3) The belief about the contribution of egalitarian-traditional kibbutz norms regarding collective ownership of the means of production or kibbutz's assets. We refer to this group as collectivism.

For The labor market norms, we build a summary measure using all the questions that regard it following Katz et al. (2006). The summary measure is computed by taking an equal-weighted average of Z-scores of each relevant question. The Z-score is calculated using the untreated observations' mean and standard deviations from the same survey year (namely, we use year-specific control group).

4. Empirical Strategy

Our empirical strategy takes advantage of the different timing of the reforms in different kibbutzim to estimate the effect of the reform itself while controlling for various time, personal, and kibbutz attributes. The first significant wave of reforms took place in 1998, and most of the kibbutzim

reformed in the following few years. A natural model for identification is a difference-in-differences model, where the period that determines before and after treatment is chosen based on sample size. This DID model was used in Abramitzky and Lavy (2014) and Abramitzky, Lavy, and Perez (forthcoming). The benefit of this model is its simplicity and transparency. However, this model has three important drawbacks in the context of this study. First, it does not exploit all available information. Using as treatment group only kibbutzim that reformed in early years (say up to 2000) will completely ignore information from kibbutzim that reformed post-2000 (the example we use above) even though some of this information can contribute to identification. Second, it uses some arbitrary boundaries. e.g., why not include kibbutzim that reformed in 2000 or 2001 in the treatment group? Moreover, these arbitrary boundaries impose the same treatment level regarding variations in years since the reform.

Instead, this paper uses an alternative DID specification to exploit all available information and variation in exposure to treatment (although Appendix XX shows that the main results are robust to the Abramitzky and Lavy (2014) identification strategy). We create a treatment variable that varies by year of survey and year of reform. It equals 0 for observations up to, including, the year of the reform of their kibbutz. We define kibbutz members as treated in all survey years after the year that the kibbutz reformed, and we define kibbutz members' control observations in all survey years up to the reform year. This data structure implies that the treatment group is staggering over time as more and more kibbutzim implement a reform. We view this model as a 'dynamic' difference-in-differences model because the thresholds vary by year of reform. Each kibbutz 'contributes' observations to the control group (before reformed) and the treatment group (after reformed). We also allow the treatment effect to vary by years since the reform was implemented, and we explain this specification when discussing these results. Another advantage of this model is that it improves statistical power. Having more statistical power would help explore the heterogeneity of effects, as discussed below.

Using this model, we regress the outcome variable on this treatment variable, a full set of a year of reform dummies (or kibbutz FE), a complete set of survey years dummies, and additional control variables. Like the standard DID specification, the treatment variable is solely identified by (reform year)*survey year interactions.

We estimate the following dynamic difference-in-differences model regression equation:

$$Q_{ikt} = \eta_k + \gamma_t \, \delta + X_{it} + \beta \, (Reformed_{kt}) + u_{ikt} \qquad (1)$$

Where Q_{ikt} is the answer for a specific question of person i from kibbutz k at survey year t. η_k are kibbutz fixed effects. X_{it} is a vector of demographic controls for individual i at survey year t. γ_t is

a survey year fixed effect, and $(Reformed_{kt})$ denotes whether the individual belongs to a kibbutz that was already reformed at year t. Standard errors are adjusted for clustering at the kibbutz level. The coefficient of interest β, therefore, identifies the extent to which the mean of Q_{ikt} in kibbutzim that reformed as of date *t* changes relative to the mean in the control group (kibbutzim that did not yet reform).

For the estimation in equation (1) to have a causal interpretation, the unobserved determinant of the answer to a question must be uncorrelated with the treatment indicator. The kibbutz fixed effects control for potential confounding factors that vary across kibbutzim but are fixed over time. The years fixed effects control for time-varying unobserved factors correlated with the answers to each question.

We have several measures for the category of labor market norms. To avoid bias due to multiple testing and increase power, which could be an issue when estimating treatment heterogeneity effects, we create a summary measure (an index) that combines the information from this category's outcomes. A typical method of combining variables in the literature is to take the standardized outcome variables' simple mean and standardize that mean. We follow Katz et al. (2006) in constructing these indices.

Sample Means and Balancing Between Treatment and Control Observations

We use the specification of equation (1) for balancing regressions. We use the predetermined variables (gender, age, education, age of arrival to the kibbutz, personal status) as dependent variables in these regressions, and test whether kibbutz members in treatment and control kibbutzim are different in their demographic characteristics (noting again that each kibbutz is considered a control until after the year that it implemented the pay reform). The regressions include kibbutz fixed effects, year dummy, and standard errors are clustered by the kibbutz.

Results are presented in Table 2. Column (1) shows the mean of all variables. There are 14 variables in the table, and only one of them, age, is statistically different from zero. However, the imbalance in age is relatively small, 1.34 (SE 0.53). In the rest of the observable characteristics, the control and treatment groups are small and statistically indistinguishable. Both groups include more females (52.49%), at the mean age is 46.53. The sample consists of few respondents with less than high school education or advanced degrees (3% and 6%, respectively), 28.66% are high school graduates, 34.74% have higher non-academic education 27.34% holds a bachelor's degree. The vast majority (84.39%) were born and raised in a kibbutz, founders, or joined through a youth movement as a motivated socialist group; the remainder, 15%, arrived at the kibbutz adults. Most of the

respondents are married (75.03%), some 14.61% are single, 6.04% are divorced, 3.69% are widowed, and the rest (0.63%) are single parents.

We note that when the early and late reforms were defined based on a fixed time gap (say those reformed in 1998-1999 versus those reformed in 2003-2005, the treatment and control groups were also very well balanced. These results are presented in online appendix Table A3. Overall. These findings that the two groups are balanced align with the evidence presented in Abramitzky and Lavy 2014, Abramitzky, Lavy and Segev 2020, Abramitzky, Lavy, and Perez Forthcoming.

5. Effect on Norms and Social Values

Figure 1 illustrates the main results. It shows the point estimate and the confidence intervals of the pay reform's effects on perceptions of how individuals should be compensated for their work and social norms regarding equality and redistribution. The reforms increased support for market forces governing labor market outcomes for kibbutz members. Furthermore, while the reform resulted in less support for collective ownership of property and overall income equality, it increased support in mutual responsibility and assistance to weak members. These findings are consistent with a shift in preferences towards a "capitalism with compassion" model.

Regression analysis supports the findings in the figures. In Table 3, panel A, we present the effect of the transition to a competitive labor market on 'labor market norms'. We use four different measures of such norms, and we also aggregate them into one summary measure (and index). The first measure is support for paying for overtime work. The mean of this measure before the labor market liberalization reforms was 3.32. The estimated effect is 0.26, and the standard error (SE), which is clustered at the kibbutz level, is 0.06. This effect amount to an 8 percent increase relative to the pre-reform mean. Next, in the second row of the table, we show that the estimated effect on support for reducing pay for working less than the norm is practically zero. This result is the first sign of the overall pattern in the evidence we present in the paper: embracing market mechanisms that enhance productivity while still caring about social cohesion and controlled disparities.

The third and fourth rows' estimates show the dramatic increase in support for competitive labor market mechanisms following the labor market liberalization. The estimated support for full privatization increased by 0.41, a 22 percent relative to the pre-reform mean. An almost identical increase is estimated to support differential wages among members of the kibbutz following the reforms. These two labor market norms are related. Hence, it is encouraging to see a similar estimated effect for both even though the pre-reform level of support for differential wages was much higher (43 percent) than full privatization support. The impact on the summary measure of

labor market norms is positive and statistically significant, as expected, given the evidence discussed above.

Next, we present evidence on the impact of labor market liberalization on social norms. Two such measures and the estimated effect are positive though smaller in effect size than labor market norms. These results are presented in Figure 2 and panel B in Table 3. The reforms decreased support for overall equality among members of the community but increased support for mutual responsibility – the idea that the community should take care of its weaker members. This latter social norm can be viewed as joint community insurance against bad times. These effects are relatively modest, with only 4 percent increased support for each norm, though they are statistically significant. These estimated effect sizes are in line in direction and size with the estimated reduced support for pay 'sanctions' for those who work less (a change of 6 percent).

Next, we study the effect on a third-social norm – the support for the Marxist principle 'From each according to his ability, to each according to his needs.'. In the kibbutz, this principle corresponds to the support of free access to and equal distribution of goods, capital, and services. It is a norm that was a building block in kibbutzim from the outset in the early part of the 20th century, and it lasted for the next century until the introduction of the labor market reforms we study in this paper. The support for this social norm was not affected by the reform. The estimated effect is practically zero, -0.003 (se=0.006). So while our estimates reveal support for a 'capitalism with compassion' model –increased support for free and competitive labor markets coupled with an increase in support for mutual assistance for weak members – this compassion did not include increased support for this very 'communist' norm.

In panel C of Table 3, we present the labor market liberalization effect on two distinct rules that characterized communist societies, the collective ownership of both the means of production and personal assets. We find that the liberalization did not impact the support of joint ownership of the means of production. To understand this finding, we should note that the pay reform did not deal with the collective ownership of production means, leaving it intact. All kibbutz members continued to own jointly the agriculture inputs (land, orchards, livestock, and so on), manufacturing plants, and tourism assets (hotels and resorts). The joint ownership of these means of production still exists in most kibbutzim. The evidence of no effect on attitudes towards property rights in the kibbutz is a striking contrast to the decision to 'free' the physical and human capital of each individual in the kibbutz from the existing contract of collective ownership of other means of production. One interpretation and explanation of such only 'halfway' going is that kibbutz members still viewed the joint ownership of these assets as a means for mutual assurance and a

mechanism to hold together the social structure they still value. This interpretation is consistent with the findings in panel A of increased support for mutual assistance.

At the same time, Panel C also shows a decline in support of collective ownership of assets and the transfer ownership of personal private assets to individuals. The mean of this variable before the reform is 2.63 (recalling that the scale is 1-5), and it declines by 0.14 (se=0.05). This estimate reveals the well-known recent tendency in kibbutzim to increase support in allowing families to own their own apartments rather than own them collectively, again demonstrating the increase in kibbutzim's individualism.

Heterogeneity in Estimated Effects

A reasonable prior is that the labor market liberalization will mostly affect individuals' norms and attitudes that stand to benefit following the change to market-determined wages. The primary potential beneficiaries from this change are those members of working age, educated, and skilled. For example, it is well documented that the older cohorts in kibbutzim were more likely to object to the reform, vote against it, and even contest it in court). Another group who stood to lose from the reform were adults of working age with lower human capital, education, and skills. We next test whether the reform affected disproportionally older, less educated members or otherwise could expect to lose from the reform. Surprisingly, we find only a small difference in the effects across these groups, suggesting that even members who stood to lose from the reform understood that such reforms are necessary for the kibbutz's continued survival.[3]

Age: Older kibbutz members stood to lose from the reform, and indeed many older members objected to it.[4] Table 4 columns 1-3 present estimates by stratifying the sample into three age groups: 18-35, 36-60, 61 plus. The first group includes young adults, the second mostly working-age adults, and the third group is individuals towards or in retirement. The change in labor norms is very similar across the three age groups, as seen from the estimated effects on the summary

[3] Bursztyn et al. (2020) study in a lab experiment how social norms can change rapidly when new information becomes available. They also estimate heterogeneous treatment effects by race, gender, age, marital status, education, and income. Their findings show that the direction of the treatment effect is the same in all subgroups, and differences in the magnitude of the effects between subgroups are never statistically significant. Ashok, Kuziemko, and Washington (2015) study the effect of increases in economic inequality in the US on support for redistribution> Overall they find no average effect but demonstrate substantial heterogeneity by demographic groups. In particular, by age and race.

[4] Gavron (2000) interviewed a few veteran kibbutz members. One said: "[T]hey have stolen the kibbutz away from me" and, "I came here to live a certain way of life, and it has been turned on its head. If the others want a non-kibbutz, so be it, but at least they should give me—and anyone else who wants it—the option of living the old way" (Gavron 2000, p. 101).

measure of all four norms: 0.24, 0.26, 0.34. Based on the estimates on individual items, it seems that the older group's estimated effect is somewhat higher, perhaps because the pre-reform means of this group are lower throughout. This typical pattern also carries to panel B's first social norm, as support for more equality in the kibbutz increased equally in all three age groups. Some differences emerge, however, in effect on the second and third norms. The increase in support for mutual assistance comes mainly from the younger and older age groups with no impact on the sizeable working-age group. We first note that this norm's mean support was already very high before the reform for all three groups (being for all three groups 3.8). Second, perhaps this age group (36-60) is less vulnerable on average to economic shocks, and therefore, its members did not want to expand their support for mutual assurance. Another divergence from a typical pattern across age groups is the increased (reduced) support of the young adult (mid-age) group to the norm of 'from each according to his ability to each according to his needs. Perhaps it is expected as the former is likely to benefit from such a norm (while still forming human capital in school) while the latter will have to pay for it. All three age groups started from a high level of support for collective ownership of production assets (a pre-reform mean around 4), and it remained unchanged. The decline in support for private ownership of personal assets does not vary by age.

Overall, the similarity across age groups in pre-reform norms and their effect is somewhat unexpected given the impression that the debate over the reforms was strife between generations. It is also surprising because the older generation founded the kibbutz and build its ideology. Perhaps what we witness here is 'survival' instincts that overpower 'dreams' of the past. The older cohorts in the kibbutz may have realized that the kibbutz should follow a sound economic policy based on incentives and free markets to sustain their pensions.

On its face, the fact that we don't find any significant treatment effect between the age groups stands in contrast to Alesina and Fuchs-Schündeln's (2007) findings. They find that seven years after the fall of the Berlin wall, support for government intervention increased markedly with age amongst people who lived in communist eastern Germany, differently from our findings. However, one should note that Alesina's and Fuchs-Schündeln's study takes place in a completely different social context. Specifically, the context in which they measure preferences has changed from a communist regime to liberal democracy. It is plausible that the elderly, having perhaps more difficulties adjusting their values and behavior, would demonstrate more reluctance towards a sharp change within this context.

In contrast, we examine labor market liberalization that took place within the same democratic regime. Not only did the kibbutzim members did not have to change their beliefs and political behavior entirely, but even before the liberalization, they often interacted with people from

non-kibbutzim communities. Some of them have even spent a few years living outside the kibbutz in other parts of Israel. It is safe to assume that life in the post-reform kibbutz changed much less than in East Germany following the collapse of communism.

Gender: Women tended to work in lower-paying occupations (Abramitzky and Lavy 2014), so we expected that they might stand less to gain from the pay reforms than men. In Table 5, we present results by gender. In the pre-reform period, men and women shared the same norms regarding pay incentives in the labor market (paying for overtime and based on productivity) and supporting full privatization in the kibbutz. The labor market liberalization reform also affected equally these norms of men and women. However, women reveal less support for reducing pay for those who work less. This effect is significantly different from that of men, which is positive but not precisely estimated. The estimates on social norms reveal two significant differences by gender. Following the labor reforms, women reduce their support for equality while men increase their support relative to women for mutual assurance. Gender differences are apparent concerning assets ownership norms: men adopt a more favorable attitude towards collective ownership of production, while women become more in favor of transferring personal assets to private ownership.

Education: Since market wages meant higher earnings for more educated members, we expected less support among less-educated members. In Table 6, columns 1-4 present results by level of education. We stratified the sample into two groups. The first includes individuals with up to secondary school completion and the second with some post-secondary schooling. First, we note the striking similarity in the pre-reform means in the labor market norms, social norms, and ownership norms between the two education groups. This similarity means that these norms are not correlated with education but determined by other factors that shape the norms in the same way for both education groups.

Second, the reform's effect is similar across education groups: we find a similar increase in support for the three main measures of the free labor market: paying for overtime, differential wages, full privatization. For example, the impact on the summary measure of the labor norms is almost identical for the two groups, which is 0.34 for the lower schooling group and 0.28 for the higher one. The more educated group increased its support for mutual assistance, just as the lower education group did. The two groups' attitude towards collective ownership of assets was not changed. However, the higher education group reduced its support for private ownership of personal assets. The overall similarity by education group in the effect of the wage reform is quite striking because the higher education group benefited much more from allowing wages to be determined freely in the labor market by workers' productivity. Yet, the lower education group norms and attitudes changed almost by the same magnitudes.

Winners/Losers: The survey included a question about the self-perception of individuals as winners/losers as a result of the reform. The benchmark pre-reform norms of winners are marginally higher than the means (by about 12-15 percent) of losers, as seen in Table 7. This result is similar to that obtained when comparing the norms' means between the two education groups. It strengthens our conclusion that before the reform, individuals' ideological norms were not related to factors that determined the winning or losing status in the post-reform years.

But the reform affected the different labor market norms of these two groups very differently. The winners increased their support in three central labor norms against no change among losers. This difference is most noticeable for the reform's estimated effect on support for full privatization and differential wages. These divergent effects are perhaps expected since the increased salaries of winners are very salient and real.

Founders and Kibbutz Children Generations: The length of time people live in an environment may affect how deeply rooted are norms and ideology. This is not the case in the kibbutz environment. Table 8 presents evidence for two groups distinguished by the age of arrival to the kibbutz, born or as a child versus as an adult. In the first group, we include the kibbutz founders and those born or who arrived at a young age. In the second group, we have those who came as adults. The pre-reform means are the same for the two groups in all norms and measures of ideology. Perhaps this similarity should not come as a surprise because those who join the kibbutz are selective. After all, they joined the kibbutz because they believe in its fundamental norms. However, it is remarkable to see that the reform strengthens the support for the free labor market and privatization norms of people in the first group. At the same time, it does not affect those of the second. This difference probably results from the more resolved ideology of members of the second group who made a pro-active choice to live in a kibbutz.

Strength of Ideology: Table 9 presents evidence from two sub-samples distinguished by the socialist ideology's strength. Two kibbutzim movements polarize this distinction: the Artzi movement, with the strongest socialist/ communist ideology. The Takam movement, more moderate socialism. Surprisingly, the pay reform's impact is very similar in all labor, social, and collectivist norms and values.

5. Mechanisms

We have shown above that the labor market liberalization reform significantly enhanced the cultural transition in kibbutzim from cooperative toward more capitalistic values. For example, the endorsement of further privatization reforms, adopting productivity-based wages, less support for collective ownership of production means, and the Marxist principle 'contributing according to

ability, receiving according to needs'. Simultaneously, the reform also increased support for the safety net to support weak members through mutual assistance. These relatively quick updates in individuals' norms and values are unusual given the persistence of cultural traits and kibbutzim norms for over half a century. It is also different from other related experiences discussed in recent literature that documented the persistence of cultural traits and norms over extended periods in other contexts (Voigtländer and Voth 2012; Fernández 2007; Giuliano 2007; Algan and Cahuc 2010; Alesina, Giuliano, and Nunn 2013). However, much remains unknown about what factors might lead long-standing social norms to change, or even more so, to change quickly. This section examines several factors that might have affected the speed of updates in individuals' norms and values.

The change in norms and social values could also result from changes in living standards that improved in the post-reform period. In a traditional kibbutz based on full equal sharing, higher effort is not rewarded with higher earnings, and this might have reduced incentives to work hard and encouraged shirking (Abramitzky 2018). To examine these channels of effect, we use four questions in the survey that asked about the current economic, work ethics of members, the social relationships, and equality among members in the kibbutz. On a 1-5 scale, the options ranged from 'not good at all' to 'very good'.

The labor market liberalization increased the financial reward for effort and improves incentives to work hard. Indeed, Figure 2 shows that the pay reform improved members' (perceived) work ethics and increased living standards. Table 11 shows that these patterns hold in regressions analysis following the reform, interviewees thought the economic conditions of the kibbutz improved significantly. The pre-reform means of the kibbutz's economic conditions assessment was 2.94, and it increased by 0.2 (se=0.07), a 7 percent improvement. A more dramatic improvement is seen in how people assess the work ethics in the kibbutz. This assessment increased by 0.41, implying a 13 percent increase relative to 3.11 in the pre-labor liberalization reform. The change in work ethics likely translated to improved labor productivity, which in turn contributed to kibbutzim's economic situation. These improvements should be seen in the context of the intense debate in kibbutzim about communal production, work ethics, free riding, and high provision of public goods (Abramitzky 2018). Against these two statistically significant improvements, it is interesting to note that kibbutz members did not think that the social relationship among the kibbutz members improved following the labor liberalization reform. The labor market reforms may have improved incentives but at the price of social relationships. The effect on equality among members, referring to economic disparities, is negative but only marginally significant. The estimated effect is also very small. The relatively minor changed perception about equality following the pay reform

stands in contrast to the inequality in earnings that emerged when market forces freely set wages. Perhaps members were discreet about their earnings and revealed consumption behavior did not reflect the widening income inequality yet. For example, expanding or building new houses was allowed only many years after the pay liberalization.

The extent of updates of norms and social values depends naturally on the prevalence of 'new winds' of ideology before the reform. The higher the support before the reform, the lower the extent and speed of updates post-reform, if only for the 'ceiling effect' (when all kibbutz members reach the utmost support for these norms and social values). This mechanism should lead to a negative relationship between the effect of the reform and pre-reform levels of support. Table 9 presents results from regressions where we add an interaction term between the treatment variable and the support for norms and social values before the year of reform. We measure this 'lagged' support as an average of the past 2, 3, and 4 years. We do not include a 'main' effect of the lagged values in the regressions because its impact is absorbed by the kibbutz fixed effect.

These results are presented in Table 10. For most of the norms and social values, the interaction term estimate is negative and statistically significant. Simultaneously, the treatment main-effect is still significant with the sign it had in a specification without the interaction term with the lagged support. It is important to note that we should distinguish between voting in favor of the reform and supporting free market and capitalistic ideas. Some people likely voted for the reform because of the economic crisis and the reality of almost kibbutz bankruptcy while still believing in socialist-leftist norms and values.

However, another potential factor that can lead to such a negative relationship between the support for free market norms and social values and the reform's effect is how the referendum result was a surprise. A special majority voting of two-thirds (in some cases three-fourths) was needed to approve the reform. Anecdotal evidence suggests that in many kibbutzim, the referendum's outcome on the reform was uncertain. In many cases, multiple referendums were held until the needed special majority vote was reached. Therefore, the 'extent' of surprise in the referendum result might have led to updates in individuals' perceptions of what people around them think about norms and values. The larger was the support for the reform before the referendum, the smaller was the likelihood that it was a 'surprise'; and vice versa. Therefore, the extent to which pro-capitalism expressions were negatively judged and sanctioned by others was perhaps negatively correlated with the saliency of the support for the reform before the referendum. Therefore, the update about how extensive this support is could have induced faster changes in the social acceptability of holding and expressing opinions moving away from communist and socialist norms. Bursztyn et al. (2020) provide experimental evidence of this mechanism from a lab experiment, arguing that

aggregators of private opinions in a society, such as elections, might erode social norms quickly when new public information arrives naturally as an election outcome.[5]

6. Effect on Political Voting

This section examines whether the change in *attitudes* induced by the liberalization of labor markets in kibbutzim translated into a change in kibbutz members' *behavior* as reflected in voting in national elections. Specifically, we focus on kibbutzim's voting patterns to the Knesset, the Israeli parliament, and study how labor market liberalization affected the percentage of votes cast in kibbutzim to the left, center, and right political parties.

Brief Political Background

The Israeli governance system is a parliamentary one. Citizens do not vote for the prime minister directly but rather for the Knesset, the national parliament. The voting to the Knesset takes place in a multi-party system. Every election, over a dozen parties contend for legislative sits, and usually, more than 10 of them win some out of the 120 Knesset sits. Thus, the Israeli parties' map changes between elections, some parties are not reelected, and new appear in parliament. Post-election negotiations lead to a multi-party coalition of at least 61 parliament members, led by a to-be prime minister. The rest of the parties serve as opposition parties.

Since the mid-nineties, the Israeli parliament has three main political camps – the left, the center, and the right – where the two former ones are allied against the latter one. The kibbutzim movement is historically very strongly affiliated with the left camp. Israel was founded by socialist labor movements with close connections with the kibbutz movement who held socialist ideology, and materialized it for decades. According to the two main movements that constituted it, the kibbutzim diverged in their support to different parties within the left camp. The more ideological part, the kibbutz Artzi movement, favored Mapam, a communist party that supported the Soviet Union's early days. Takam, the more moderate movement, supported the historic Mapai party that governed Israeli unchallengedly until 1977. Mapai advocated for more restrained socialist policies, and unlike its smaller ally, wished to create strong bonds with the US.

These historic parties still have representation in contemporary Israeli politics. Mapai has turned into the labor party, and Mapam, jointly with the Ratz party, created the Meretz party in

[5] Bursztyn et al. (2020) examine this possibility using two experiments. They first show via revealed preference experiments that Donald Trump's rise in popularity and eventual victory increased individuals' willingness to publicly express xenophobic views. Secondly, they show that individuals are sanctioned less negatively if they publicly expressed a xenophobic view in an environment where that view is more popular.

1992. These two parties are the main leftist parties in Israel. They have won parliamentary seats consistently from 1992, and in many elections, they were the only leftist parties contending. However, their relevant strength has weakened steadily. While in 1992, they had together 56 legislative seats, in the final elections of 2020, they have won only 6. In the meantime, the two other political camps gained popularity. The center parties had no parliament seats in 1992, but in the last election, they gained 33 seats. In comparison, the right camp grew more moderately, the number of seats they hold increased from 58 to 65 during the same period.

Data and Estimation

We focus on the six national elections between 1996 and 2013, a period that parallels our analysis of survey questions more or less.[6] Our research is based on data from the Central Elections Committee of Israel published for the general public. For every election to the Knesset, the data includes locality and election poll, the number of eligible voters, and votes cast to each political party running. The vast majority of the Israeli kibbutzim had local polls in all six elections. However, 19 kibbutzim did not have voting polls for at least one election, most likely because of a small number of eligible voters. We drop these kibbutzim from the sample because we cannot distinguish kibbutz members' votes from no-kibbutz members in these voting pools. We remain with 231 kibbutzim with local voting polls for all six elections.[1]

We used the data for the parties that have won seats in parliament, dropping parties that did not. As the parties' map constantly changes in Israel, to create a political variable that persists stably through time, we make three political categories according to Israel's major political camps – left, center, and right. We refer each party that won sits at least once in our period to one of these categories. Our categorization is based on Shenhav's (1985, unpublished, updated by the author in unpublished work up to the 2020 elections) political parties' map, as well as the parties' self-proclaimed political affiliation.[7]

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[6] We cannot include the elections of 1992 in our sample, as no center parties were contending at that year, which makes it incomparable to the rest of the years in our sample.

[7] In more detail, we categorize as left the Labor movement and Meretz party that won sits in all election, the party Am Ehad that split from the Labor in 1999 and united with it again after 2003 and all Arabs parties. In the center, we label through the years: The Third Way, The Center Party, Shinui, Kadima and Yesh Atid. None of them won sits for more than three elections during our period of interest. Finally, on the right, we include the Likud party that won sits every year, Israel Beiteinu, Moledet, and all strictly religious Jewish parties, including ultra-orthodox parties.

We note that we exclude two parties that have won seats. One party is Israel Behaliya, that won sits 1996-2003. This party was indeed affiliated with the right to some extent. But not only did it merge between capitalist and socialist economic ideology, it was also highly sectorial, and its electorate consisted almost exclusively of immigrants from the Soviet Union. We also exclude Gil party that have won sits in 2006. Gil

No party has changed its political orientation during the analysis period. Some parties disappeared from the sample in some elections (dissolved or not getting enough votes) while new parties emerged. For example, in the 1999 election, Shinui and The Center Party were classified as the center. However, in 2003 The Center Party did not win any seats leaving Shinui as the only center party in parliament. In 2006 Shinui did not win parliament seats, and instead, a new center party, Kadima, was formed and elected to parliament.

Our objective is to identify the effect of the labor liberalization reform on voting patterns in kibbutzim. We want to assess whether, in the post-reform elections, support for left parties declined and center/right parties' increased. Accordingly, we define three outcome variables in the kibbutz level: percentage of voting for all parties that are part of each category out of all valid votes that were cast. We are also interested in the voting turnout, defined as the proportion of voters among the eligible.

Table 12 presents summary statistics for all variables we use to study the effect of reforms on political orientation and voting. Panel A presents descriptive statistics for the treatment group and panel B for the control group. These two groups' composition is changing from election to election because more kibbutzim reformed as time passes. The variables are the number of kibbutzim, the unweighted average number of eligible voters per kibbutz, voting turnout rate, and proportion of votes for left, center, and right parties. The first column in panel A shows clearly the increased number of kibbutzim over election years as more kibbutzim reformed over time and the respective decline in the number of control kibbutzim. Columns 2 shows that the number of eligible voters per kibbutz increases over time in both groups, though at a higher rate, kibbutzim that reformed, reflecting the fact that the kibbutzim that reformed early are smaller. Once we delete from the sample the kibbutzim that reformed before 1998, the mean number of voters per kibbutz is very similar in the treatment and control group. A vast majority of kibbutzim members vote for left parties. However, this support declined continuously throughout the period, both in treatment and control groups. Against this trend, we see an increase in the vote share of center parties. We emphasize that though this is a trend that reflects a general shift in the political camp's popularity in Israel, we focus our interest only on decreasing voting to the left and increasing voting to the center explained by the work market liberalization in the kibbutzim.

was an outlier in Israel's politics. Its main agenda was advocating for senior citizens' rights, and the voting for it was later by and large identified as an act of protest. Therefore, deriving political affiliation from voting to Gil is pointless.

A concern about our parties' categorization to the three groups (left, center, right) is misclassifications, even though we relied on expert classification. First, we note that the only borderline case is the Israel Behaliya, which represented mostly immigrants from previously Soviet republics during the study period. To examine how robust are the evidence concerning marginal changes in the classification of political parties, we estimated the models presented below while altering our categorization in few plausible ways. We have added Israel Behaliya as a rightist party; we dropped all Arab parties, ultra-orthodox parties, and all religious parties from our regressions. The estimates we obtained from these modified definitions of the dependent variables showed no significant deviation from the results we present below, which points to their robustness.

To analyze the reform effect on political voting, we estimate a dynamic difference-in-differences model similar to the one we have used in the previous sections of the paper, only this time we focus on the kibbutz level:

$$Q_{kt} = \eta_k + \gamma_t + \beta\,(Reformed_{kt}) + u_{kt} \qquad (2)$$

Q_{kt} is the percentage of votes cast in kibbutz k to all parties that constitute a political category at time t (or voting turnout). η_k are kibbutz fixed effects, and γ_t is the elections year fixed effect. $(Reformed_{kt})$ denotes whether the kibbutz k is already reformed at year t, after considering the varying delay parameter.

To estimate equation (2), we use panel data constructed from 231 kibbutzim for the six elections. All kibbutzim serve as control before implementing the reform and become treated afterward (in our sample, only 11 kibbutzim are treated already from 1966). We experiment with three versions of the kibbutz conversion date from control to treatment: at the year of reform (t), at t+1, and t+2. We present below the treatment estimate for each of these delay models. However, note that periodic election (every four years) implies that a kibbutz can effectively be treated only in the first election held after it reformed. Therefore, the delay between the year of reform and the next election year imposes a 'mechanical' delay in measuring treatment effect, which interacts with our set delay.

Demonstrating with a real-world example, kibbutz Beit Nir reformed in 1999. When we allow treatment at the *year of reform,* Beit Nir will be considered a control in 1996 and treated in 1999. However, in the specifications where we set the delayed treatment to 1 or 2, Beit Nir will be considered a control in the 1999 elections as well, and it will become treated for the first time only in the elections of 2003.

To summarize, we run regressions for each of the four dependent variables, each being examined for three different years after the *reform* treatment variable. Finally, we use two

alternative samples for estimating these 12 separate regressions. The first includes all kibbutzim, including the 34 who did not reform yet as of 2018. The second sample excludes these kibbutzim. We note that 9 of the 197 kibbutzim that did reform until 2018 did so after 2013, meaning they are always controlled in both samples. The results based on the full sample are presented in Table 13, columns 1-2.

Results

We find that the labor market liberalization in kibbutzim reduced voting in national elections to left-wing parties, which have long been associated with the socialist ideology. The estimated effect on voting for a left party is negative and statistically significant. The estimate does not vary much depending on the delay allowed since the year of reform. The reform reduced the voting share for the left by 2 percentage points. Against the mean in control kibbutzim over all years (80 percent), the effect size is a 2.5 percent decline.

Kibbutz members did not shift to political parties on the far right of the political map. The estimated impact on voting for a right-wing party and on the turnover rate is practically zero. Right-oriented political parties in Israel are identified by non-compromising stand about the conflict with the Palestinians. They are also more conservative in their opinions of religion and state relations and of civil rights, which places them as far as possible on these issues from the left.

Instead, we find that kibbutz members increased their support to parties on the center. The effect on voting for a center party is positive and statistically significant, and again no variation in the impact by time delay since the reform. The estimated increase of 1.3 percentage point implies a considerable effect size, about 13 percent increase because the counterfactual mean is low, 10 percent voting mean in kibbutzim to center parties before they reformed. The center-oriented parties share much of the ideology on these issues with the left parties, which is one reason for their typical joint alliance against the right. However, parties on the center are much less identified with the socialist ideology in terms of economic and social policies they endorsed, their relations with labor unions, and their historical connections with Zionist socialist movements. Thus, these results are consistent with the change in kibbutz members' values and perceptions following the labor market liberalization that we documented in the previous section.

A move from the left to the center mainly reflects economic attitudes and preferences. This may explain why the pay reform did not induce any voting shift towards right-oriented parties. While kibbutz members turned to a more capitalistic value set, they remained in disagreement with the right parties on many other issues. Green et al. (2004) argue that affiliation with a political camp is not just an instrumental bond, but rather one that has a role in shaping one's identity. This explains

why voters in kibbutzim were reluctant to 'cross' camps. Instead, they opted to shift within the boundaries of their original political orientation to more free markets-supporting parties. This pattern is consistent with the 'capitalism with compassion' attitude we have found in the previous section. Kibbutzim's members did not move away from their political and heritage altogether but rather position themselves in a new way within it.

A threat to our interpretation of the labor reform effect on voting patterns is extension neighborhoods that kibbutzim have been permitted to build starting from 1995 (Alterman and Drori, 2018, Abramitzky, 2018). These were communal residential settlements inhabited by non-kibbutz members (in some cases, children of kibbutz members and, in other instances outsiders) who gained or purchased a land lot to build houses. These settlements were built outside the kibbutz, either adjacent or with some distance from it. These inhabitants used the kibbutz voting poll, and we cannot separate their votes from those of kibbutz members. However, based on a sample of 62 such settlements for which we have the date of establishment, we see that in reformed kibbutzim, the construction of settlements takes place 5-6 years after the year of reform. To assess how our results are affected by settlement construction, we kept in the sample only kibbutzim that reformed up to two years before an election (and we kept them in the sample only until their first elections after their reforms). According to our data, this ensures that expansion construction's effect on voting patterns should be negligible. The number of kibbutzim in the sample declined to 198 versus 231 in the full sample. The number of observations reduced by almost half, from 1,386 to 716.

Results based on this truncated sample are presented in columns 3-4 of Table 13. The estimated effect of the reform on the voting pattern is very similar to those obtained based on the sample that includes all elections. For example, the estimated effect on voting left is -2.119 (se=0.645) versus -2.061 (se=0.594). The estimated effect on voting center is 1.105 (se=0.564) versus 1.334 (se=0.498). These findings suggest that our results are not confounded by the voting patterns of inhabitants who resided in the new extension neighborhoods.

Heterogeneity by Ideological Movements

Since there are substantial ideological differences between kibbutzim associated with the more ideological Artzi movement and the less ideological Takam movement, we checked whether the labor reforms' impact differed by movement.[8] In table 13, in column (5), we present the results for

[8] Generally speaking, kibbutzim that belonged to the "Kibbutz Artzi" movement were more committed to their ideology. For example, they opposed "exploitation" or hiring of outside hired workers, allowing

the same specifications as column (1) when we restrict the sample to include only Takam kibbutzim, and in column (6) we present results for the more ideological Artzi movement.

Strikingly, we find that less ideological kibbutzim drive the change in voting. The change of voting behavior increases markedly when we restrict the sample to Takam kibbutzim but almost vanishes when we focus only on Artzi kibbutzim. They also do not change when we focus only on the first election after the reform, which excludes the possibility that our results are affected by the population of expansion neighborhoods. Thus, the post-reform change in the voting pattern we have identified is almost exclusively driven by the less ideological Takam kibbutzim.

This result is intriguing because, as we have shown, the labor liberalization reforms affected the values and beliefs similarly in Takam and Artzi kibbutzim. We suggest three explanations for these divergent findings. First, in line with Green et al. (2004), the Artzi kibbutzim population is more identified with the most leftist parties, specifically with Meretz, which may make it more difficult for them to switch parties. Second, it is likely that the Artzi kibbutzim population held a more leftist position regarding the Israeli-Palestinian conflict. Therefore, the reform's lack of effect on their political voting might have reflected their unwillingness to compromise on this issue. Lastly, and perhaps most importantly to our inquiry, we note that even though the reform's impact on norms and values was similar in the Takam and Artzi kibbutzim, their pre-reform benchmark differed. Specifically, Artzi members' political positions were further to the left relative to those of Takam members. So, even though the Artzi kibbutzim population changed norms and values towards free-market orientation, they were still closer to the leftist parties on economic issues and, as a result, did not change their voting pattern.

To further examine the role of ideology in determining political behavior, we estimated the reform's effect while allowing for its interaction with the pre-reform benchmark support for norms and social values. We computed the average support for each of the 'ideological' outcomes based on annual surveys in the five years that preceded the reform[9]. For all of the norms and social values measures, except for the following three, the estimated interaction parameters were small and not statistically different from zero. The exceptions where the treatment-interaction estimates are statistically significant are overall equality, mutual responsibility, and collective ownership of

members to receive gifts from non- members, more pro-Soviet during the Cold War (some celebrated Soviet occasions such as Stalin's birthday). The debate over ideology was also a major source of conflicts within kibbutzim and at its pick it led in the 1950's to a rift that culminated in a split of many kibbutzim to two different kibbutzim. However, the two movements are now united again, and many Artzi kibbutzim adopted also free market orientation.

[9] We measure the average answers for times t=-5 until t=-1, meaning 5 years before the reform until one year before the reform.

production means. The results for these measures are shown in online appendix Table A6. The findings suggest that the reduction of voting for the left parties is stronger in kibbutzim with lower levels of pre-reform support for collective ownership of the means of production. This pattern makes sense. Since collective ownership of the production means represents a core socialist economic principle, those holding this belief more firmly tend not to change their political affiliation even though they increased their support after the reform for free market practices. The results for the other two social norms point in the same direction. More substantial pre-reform support for overall equality and mutual responsibility in the kibbutz moderate the voting shift towards center parties significantly.

These results are consistent with the interpretation of our findings as support for a hybrid capitalist-socialist model. Following the labor market liberalization, kibbutz members increased their support for market-oriented policies that they believed would improve their financial circumstances. Yet, they were more reluctant to shift their political voting in the same direction. Such reluctance increased with the strength of ideology before the reform. These results are also consistent with the findings reported above that the Artzi kibbutzim, the more ideological kibbutz movement, were less inclined to change voting patterns after the reform for ideological reasons. Our results point to the importance of ideology, rather than pure self-economic interest, in determining political inclination. They also identify which elements of the socialist doctrine are essential in the study case of the kibbutzim.

Heterogeneity by the Strength of the Pre-Reform Economic Crises

Throughout the 1980s and the 1990s, most of the kibbutzim experienced a severe economic and credit crisis. In this section, we examine whether the reform's effect on political voting varied by the extent of the financial crisis that preceded the reforms. To this end, we estimated a model that included an interaction between the magnitude of the economic crisis and the reform indicator. As a measure of the kibbutzim's financial situation, we use the scale formed by the government in 1994. It had 1-4 ranks, where 1 indicates kibbutzim with the highest economic crisis and 4 shows kibbutzim that were not affected at all. We created an indicator with value 1 for the first group and value 0 for the latter group. We added to the regression an interaction between this indicator and the reform indicator. The kibbutzim fixed effects absorb the main effect of the indicator of the size of the economic crisis.

We find that the reform's main treatment effect in this model is very similar to the results we presented above. These results are shown in the online appendix, Table A7. Interestingly, we also find that the size of the economic crisis affected post-reform voting behavior. Members in

kibbutzim that were hardest hit by the financial crisis did not lower their support for left parties. This result contrast with our earlier findings that the effect of the reform on labor norms and social values did not vary by the extent of the financial crisis.

7. Conclusions

To Be Added

8. References

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Table 1: Number of Kibbutzim that Reformed and Sample Sizes of Respondents, By Survey Year

Year	Number of Reformed Kibbutzim	Number of Kibbutzim in the Analysis Sample	Number of Survey Respondents	Number of Survey Respondents From Kibbutzim that Reformed
1993	0	207	758	1
1994	0	204	800	0
1995	1	216	937	2
1996	9	202	902	4
1997	14	203	873	13
1998	16	202	806	49
1999	13	208	967	92
2000	23	209	1046	144
2001	24	200	918	213
2002	27	197	915	257
2003	11	195	802	336
2004	20	204	895	440
2005	9	197	800	490
2007	7	210	1130	774

Notes: This table presents statistics of the sample by survey year. In column 1 we present the number of kibbutzim which reformed each year. In column 2 we present the number of kibbutzim with at least one respondent on that year's survey.

Table 2: Sample Observable Characteristics

Variable	Control Mean	Standard Deviation	Estimated treatment-control difference	Standard Error of the difference
A. Personal Characteristics:				
Female Ratio	52.49	49.94	-0.18	2.10
Age	46.53	14.84	1.34*	0.53
B. Education: Highest Completed (%):				
Primary	3.09	17.29	-0.27	0.52
High school	28.66	45.22	-1.53	1.87
Non-academic	34.74	47.62	1.56	1.75
Bachelors degree	27.34	44.57	-0.18	1.71
Advance degrees	6.17	24.06	0.43	1.12
C. Age of Arrival to the Kibbutz (%):				
Born/raised	84.39	36.29	-1.88	1.62
As an adult	15.61	36.29	1.88	1.62
D. Personal Status (%):				
Single	14.61	35.33	0.03	1.22
Single parent	0.63	7.91	0.39	0.34
Married	75.03	43.29	-0.23	1.87
Divorced	6.04	23.83	-0.15	1.10
Widowed	3.69	18.85	-0.04	0.77
E. Kibbutz Association Affiliation (%):				
More ideological movement (Artzi)	44.12	49.66	0.00	0.00
Less ideological movement (Takam)	55.88	49.66	0.00	0.00
Observations	9655			

Notes: This table presents means and standard errors of the observable explanatory variables for each year. Column 1-2 presents the mean and standard deviation for control kibbutzim (not yet reformed). Columns 3-4 presents the coefficient and standard error based on a regression of the variable as a dependent variable and the treatment indicator, full set of survey year dummies, and the relevant demographic controls as the explanatory variables with kibbutz fixed effects. Column 5 presents the number of observations where an indicator for the variable takes the value 1 (e.g. number of observations who are single). Born/raised group consists of those who were born, raised, founded or those who joined with a motivated and socialist group of young adults such as a youth movement or a 'Gar'in'.

Table 3: Effect of 'Market Wage' Reform on Labor Market and Social Norms

	Control Group		Estimation	
	Mean	Standard Deviation	Estimated Coefficient	Standard Error
A. Labor Market Norms				
Paying for overtime	3.32	(1.60)	0.26*	(0.06)
Reduce pay for underworking	3.50	(1.52)	-0.05	(0.07)
Support for full privatization	1.89	(1.34)	0.41*	(0.07)
Support for differential wages	2.71	(1.63)	0.62*	(0.06)
Labor index	-0.00	(0.83)	0.32*	(0.04)
B. Social Norms				
Overall equality	3.44	(1.09)	-0.15*	(0.06)
Mutual responsibility	3.86	(1.04)	0.17*	(0.05)
From each according to his ability, to each according to his needs	2.77	(1.32)	-0.03	(0.06)
C. Collectivism				
Collective ownership of means of production	4.03	(0.87)	0.05	(0.04)
Collective ownership of assets	2.63	(1.37)	-0.14*	(0.05)
Observations	11597		13984	

Notes: This table presents means and point estimates of the answers to the survey questions of individuals in control (not yet reformed) kibbutzim. All estimated coefficients are based on a regression of the survey response of individuals to questions as a dependent variable and the treatment indicator, full set of survey year dummies, and demographic controls as the explanatory variables with kibbutz fixed effects. Standard deviations and standard errors are presented in parentheses. Standard errors are adjusted for clustering at the kibbutz level.

Table 4: Effect of the 'Market Wage' Reform on Labor Market and Social Norms, By Age

	Control Mean			Estimated Coefficient		
	18-35	36-60	61+	18-35	36-60	61+
A. Labor Market Norms						
Paying for overtime	3.63	3.4	2.64	0.18*	0.13	0.32*
	(1.51)	(1.59)	(1.57)	(0.10)	(0.08)	(0.14)
Reduce pay for underworking	3.73	3.55	2.97	-0.18	-0.10	0.12
	(1.40)	(1.51)	(1.59)	(0.14)	(0.09)	(0.20)
Support for full privatization	2.08	1.96	1.51	0.42*	0.41*	0.36*
	(1.38)	(1.40)	(1.06)	(0.13)	(0.08)	(0.09)
Support for differential wages	3.07	2.80	2.01	0.34*	0.43*	0.91*
	(1.58)	(1.65)	(1.44)	(0.12)	(0.08)	(0.10)
Labor index	0.18	0.06	-0.39	0.24*	0.26*	0.34*
	(0.79)	(0.84)	(0.74)	(0.06)	(0.04)	(0.06)
B. Social Norms						
Overall equality	3.34	3.37	3.69	-0.16	-0.20*	-0.18*
	(1.17)	(1.11)	(0.95)	(0.13)	(0.07)	(0.09)
Mutual responsibility	3.83	3.86	3.89	0.29*	0.08	0.20*
	(1.01)	(1.03)	(1.07)	(0.11)	(0.08)	(0.10)
From each according to his ability, to each according to his needs	2.68	2.67	3.05	0.28*	-0.20*	-0.06
	(1.30)	(1.33)	(1.29)	(0.15)	(0.09)	(0.10)
C. Collectivism						
Collective ownership of the means of production	3.85	4.06	4.16	0.08	0.04	-0.00
	(0.92)	(0.85)	(0.85)	(0.11)	(0.06)	(0.08)
Collective ownership of assets	2.64	2.51	2.85	-0.18	-0.16*	-0.23*
	(1.35)	(1.33)	(1.42)	(0.15)	(0.07)	(0.11)
Observations	817	1635	855	1256	3454	2142

Notes: Columns 1-3 present means and standard deviations (in parentheses) for control kibbutzim. Columns 4-6 presents coefficients of the treatment indicator and its standard errors (in parentheses), by grouped age categories. All estimated coefficients are based on a regression of the survey response of individuals to questions as a dependent variable and the treatment indicator, full set of survey year dummies, and demographic controls as the explanatory variables with kibbutz fixed effects. Standard errors are adjusted for clustering at the kibbutz level.

Table 5: Effect of the 'Market Wage' Reform on Labor Market and Social Norms, By Gender

	Control Mean		Estimated Coefficient	
	Male	Female	Male	Female
A. Labor Market Norms				
Paying for overtime	3.22	3.40	0.25*	0.21*
	(1.63)	(1.57)	(0.08)	(0.07)
Reduce pay for underworking	3.47	3.52	0.09	-0.19*
	(1.53)	(1.51)	(0.11)	(0.09)
Support for full privatization	1.90	1.88	0.41*	0.41*
	(1.36)	(1.33)	(0.10)	(0.08)
Support for differential wages	2.64	2.76	0.62*	0.57*
	(1.64)	(1.62)	(0.08)	(0.08)
Labor index	-0.03	0.02	0.34*	0.28*
	(0.85)	(0.81)	(0.05)	(0.04)
B. Social Norms				
Overall equality	3.52	3.36	-0.06	-0.19*
	(1.10)	(1.08)	(0.09)	(0.07)
Mutual responsibility	3.83	3.89	0.30*	0.05
	(1.06)	(1.02)	(0.07)	(0.07)
From each according to his ability, to each according to his needs	2.86	2.66	-0.02	-0.02
	(1.35)	(1.28)	(0.09)	(0.08)
C. Collectivism				
Collective ownership of the means of production	4.04	4.04	0.13*	-0.04
	(0.90)	(0.84)	(0.06)	-0.06
Collective ownership of assets	2.76	2.50	-0.09	-0.16*
	(1.41)	(1.31)	(0.09)	(0.08)
Observations	1613	1640	3314	3538

Notes: Columns 1-3 present means and standard deviations (in parentheses) for control kibbutzim. Columns 4-6 presents coefficients of the treatment indicator and its standard errors (in parentheses), by gender. All estimated coefficients are based on a regression of the survey response of individuals to questions as a dependent variable and the treatment indicator, full set of survey year dummies, and demographic controls as the explanatory variables with kibbutz fixed effects. Standard errors are adjusted for clustering at the kibbutz level.

Table 6: Effect of the 'Market Wage' Reform on Labor Market and Social Norms, By Education Level

	Control Mean		Estimated Coefficient	
	No academic education	Academic educuation	No academic education	Academic educuation
A. Labor Market Norms				
Paying for overtime	3.39	3.37	0.28*	0.22*
	(1.59)	(1.58)	(0.07)	(0.10)
Reduce pay for underworking	3.49	3.50	0.02	-0.21*
	(1.52)	(1.51)	(0.09)	(0.10)
Support for full privatization	1.85	1.96	0.43*	0.41*
	(1.33)	(1.36)	(0.08)	(0.09)
Support for differential wages	2.62	2.85	0.64*	0.54*
	(1.62)	(1.64)	(0.08)	(0.08)
Labor index	-0.01	0.02	0.34*	0.28*
	(0.80)	(0.81)	(0.04)	(0.05)
B. Social Norms				
Overall equality	3.48	3.40	-0.14*	-0.18*
	(1.06)	(1.14)	(0.07)	(0.09)
Mutual responsibility	3.88	3.82	0.18*	0.17*
	(1.02)	(1.07)	(0.06)	(0.09)
From each according to his ability, to each according to his needs	2.79	2.75	-0.01	-0.11
	(1.30)	(1.35)	(0.08)	(0.08)
C. Collectivism				
Collective ownership of the means of production	4.03	4.04	0.06	0.01
	(0.87)	(0.88)	(0.05)	(0.08)
Collective ownership of assets	2.58	2.69	-0.06	-0.25*
	(1.36)	(1.37)	(0.07)	(0.09)
Observations	1892	1334	4082	2770

Notes: Columns 1-3 present means and standard deviations (in parentheses) for control kibbutzim. Columns 4-6 presents coefficients of the treatment indicator and its standard errors (in parentheses), by level of education. All estimated coefficients are based on a regression of the survey response of individuals to questions as a dependent variable and the treatment indicator, full set of survey year dummies, and demographic controls as the explanatory variables with kibbutz fixed effects. Standard errors are adjusted for clustering at the kibbutz level.

Table 7: Effect of the 'Market Wage' Reform on Labor Market and Social Norms, By Winners/Losers

	Control Mean		Estimated Coefficient	
	Winners	Losers	Winners	Losers
A. Labor Market Norms				
Paying for overtime	3.93	3.47	0.05	0.10
	(1.39)	(1.54)	(0.07)	(0.11)
Reduce pay for underworking	4.02	3.47	-0.28*	0.03
	(1.29)	(1.49)	(0.11)	(0.17)
Support for full privatization	2.18	1.85	0.19*	0.06
	(1.49)	(1.34)	(0.11)	(0.12)
Support for differential wages	3.26	2.68	0.31*	0.16
	(1.63)	(1.64)	(0.07)	(0.12)
Labor index	0.24	-0.06	0.09	0.04
	(0.77)	(0.76)	(0.05)	(0.06)
B. Social Norms				
Overall equality	3.24	3.48	-0.17*	0.00
	(1.13)	(1.15)	(0.08)	(0.13)
Mutual responsibility	3.87	3.80	0.13*	0.10
	(1.03)	(1.11)	(0.08)	(0.11)
From each according to his ability, to each according to his needs	2.53	2.71	-0.12	0.31*
	(1.33)	(1.35)	(0.09)	(0.13)
C. Collectivism				
Collective ownership of the means of production	4.06	3.99	0.01	0.08
	(0.80)	(0.94)	(0.07)	(0.11)
Collective ownership of assets	2.35	2.59	-0.14*	0.02
	(1.28)	(1.37)	(0.08)	(0.14)
Observations	871	598	2657	1426

Notes: Columns 1-3 present means and standard deviations (in parentheses) for control kibbutzim. Columns 4-6 presents coefficients of the treatment indicator and its standard errors (in parentheses), by winners/losers. All estimated coefficients are based on a regression of the survey response of individuals to questions as a dependent variable and the treatment indicator, full set of survey year dummies, and demographic controls as the explanatory variables with kibbutz fixed effects. Standard errors are adjusted for clustering at the kibbutz level. Winners are defined as those either self-reporting to benefit from the reform, or those who have high wages and self-report their wage is fair. losers are defined as those either self-reporting to be harmed by the reform, or those who have low wages and self-report their wage is unfair.

Table 8: Effect of the 'Market Wage' Reform on Labor Market and Social Norms, By Age of Arrival

	Control Mean		Estimated Coefficient	
	Born/raised	As an adult	Born/raised	As an adult
A. Labor Market Norms				
Paying for overtime	3.27	3.45	0.25*	0.35*
	(1.60)	(1.58)	(0.07)	(0.12)
Reduce pay for underworking	3.47	3.54	-0.05	-0.02
	(1.52)	(1.53)	(0.08)	(0.20)
Support for full privatization	1.87	1.96	0.38*	0.52*
	(1.32)	(1.41)	(0.07)	(0.17)
Support for differential wages	2.68	2.76	0.61*	0.55*
	(1.63)	(1.64)	(0.07)	(0.13)
Labor index	-0.03	0.12	0.31*	0.38*
	(0.82)	(0.85)	(0.04)	(0.07)
B. Social Norms				
Overall equality	3.45	3.45	-0.18*	0.25*
	(1.09)	(1.12)	(0.06)	(0.14)
Mutual responsibility	3.90	3.66	0.16*	0.42*
	(1.02)	(1.09)	-0.06	(0.14)
From each according to his ability, to each according to his needs	2.76	2.86	-0.06	0.03
	(1.32)	(1.33)	(0.07)	(0.18)
C. Collectivism				
Collective ownership of the means of production	4.05	3.97	0.05	0.21*
	(0.87)	(0.85)	(0.05)	(0.12)
Collective ownership of assets	2.65	2.59	-0.20*	0.09
	(1.36)	(1.39)	(0.06)	(0.16)
Observations	2550	388	5101	999

Notes: Columns 1-3 present means and standard deviations (in parentheses) for control kibbutzim. Columns 4-6 presents coefficients of the treatment indicator and its standard errors (in parentheses), by age of arrival. All estimated coefficients are based on a regression of the survey response of individuals to questions as a dependent variable and the treatment indicator, full set of survey year dummies, and demographic controls as the explanatory variables with kibbutz fixed effects. Standard errors are adjusted for clustering at the kibbutz level. Born/raised group consists of those who were born, raised, founded or those who joined with a motivated and socialist group of young adults such as a youth movement or a 'Gar'in'.

Table 9: Effect of the 'Market Wage' Reform on Labor Market and Social Norms, By Movement

	Control Mean		Estimated Coefficient	
	More ideological movement (Artzi)	Less ideological movement (Takam)	More ideological movement (Artzi)	Less ideological movement (Takam)
A. Labor Market Norms				
Paying for overtime	3.22	3.39	0.16	0.33*
	(1.63)	(1.58)	(0.10)	(0.08)
Reduce pay for underworking	3.39	3.58	-0.03	0.01
	(1.55)	(1.49)	(0.11)	(0.09)
Support for full privatization	1.79	1.98	0.48*	0.38*
	(1.28)	(1.39)	(0.11)	(0.08)
Support for differential wages	2.60	2.79	0.61*	0.63*
	(1.63)	(1.63)	(0.10)	(0.08)
Labor index	-0.09	0.07	0.32*	0.33*
	(0.82)	(0.83)	(0.06)	(0.05)
B. Social Norms				
Overall equality	3.47	3.42	-0.13	-0.15*
	(1.09)	(1.09)	(0.08)	(0.08)
Mutual responsibility	3.93	3.79	0.12	0.21*
	(1.03)	(1.04)	(0.08)	(0.07)
From each according to his ability, to each according to his needs	2.84	2.70	-0.11	0.02
	(1.35)	(1.30)	(0.10)	(0.08)
C. Collectivism				
Collective ownership of the means of production	4.09	3.98	0.03	0.07
	(0.87)	(0.87)	(0.07)	(0.05)
Collective ownership of assets	2.62	2.64	-0.21*	-0.08
	(1.38)	(1.35)	(0.08)	(0.07)
Observations	1566	1741	2775	4077

Notes: Columns 1-3 present means and standard deviations (in parentheses) for control kibbutzim. Columns 4-6 presents coefficients of the treatment indicator and its standard errors (in parentheses), by movement. All estimated coefficients are based on a regression of the survey response of individuals to questions as a dependent variable and the treatment indicator, full set of survey year dummies, and demographic controls as the explanatory variables with kibbutz fixed effects. Standard errors are adjusted for clustering at the kibbutz level.

Table 10: Effect and Interaction Between Treatment and Past Years Means

	Estimated Effect w&o Interaction	Means Based on Past 2 Years		Means Based on Past 3 Years		Means Based on Past 4 Years	
		Main Effect	Interaction	Main Effect	Interaction	Main Effect	Interaction
A. Labor Market Norms							
Paying for overtime	0.26*	0.74*	-0.11*	1.22*	-0.23*	1.47*	-0.30*
	(0.06)	(0.24)	(0.05)	(0.25)	(0.06)	(0.26)	(0.06)
Reduce pay for underworking	-0.05	-0.07	0.01	0.11	-0.04	0.47	-0.14
	(0.07)	(0.44)	(0.11)	(0.50)	(0.12)	(0.47)	(0.12)
Support for full privatization	0.41*	0.06	0.13*	0.16	0.09*	0.33*	0.02
	(0.07)	(0.11)	(0.04)	(0.12)	(0.05)	(0.13)	(0.05)
Support for differential wages	0.62*	0.59*	-0.00	0.71*	-0.04	0.75*	-0.04
	(0.06)	(0.15)	(0.04)	(0.17)	(0.04)	(0.17)	(0.04)
Labor index	0.32*	0.22*	0.20*	0.25*	0.17*	0.27*	0.13*
	(0.04)	(0.04)	(0.04)	(0.04)	(0.05)	(0.04)	(0.06)
B. Social Norms							
Overall equality	-0.15*	0.47*	-0.18*	0.92*	-0.32*	1.31*	-0.45*
	(0.06)	(0.16)	(0.04)	(0.18)	(0.05)	(0.20)	(0.06)
Mutual responsibility	0.17*	0.86*	-0.18*	1.12*	-0.24*	1.50*	-0.34*
	(0.05)	(0.23)	(0.06)	(0.28)	(0.07)	(0.32)	(0.08)
C. Collectivism							
From each according to his ability, to each according to his needs	-0.03	0.43*	-0.17*	0.54*	-0.22*	0.89*	-0.37*
	(0.06)	(0.14)	(0.05)	(0.17)	(0.07)	(0.20)	(0.08)
Collective ownership of the means of production	0.05	0.79*	-0.19*	1.19*	-0.29*	1.32*	-0.32*
	(0.04)	(0.18)	(0.04)	(0.24)	(0.06)	(0.31)	(0.08)
Collective ownership of assets	-0.14*	0.16	-0.13*	0.36*	-0.21*	0.49*	-0.27*
	(0.05)	(0.12)	(0.05)	(0.12)	(0.05)	(0.13)	(0.05)

Notes: This table presents the coefficients of the treatment dummy and the interaction between treatment and past years mean answers to the question based on a regression of the survey response of individuals to questions as a dependent variable and the treatment indicator, full set of survey year dummies, and demographic controls as the explanatory variables with kibbutz fixed effects. Standard errors are presented in parentheses. Standard errors are adjusted for clustering at the kibbutz level.

Table 11: Effect of the 'Market Wage' Reform on the On the Economic and Social Conditions of the Kibbutz

	Control Group		Estimation	
	Mean	Standard Deviation	Estimated Coefficient	Standard Error
Economics	2.94	(1.17)	0.21*	(0.07)
Social	2.99	(0.93)	0.05	(0.05)
Work ethics	3.11	(0.88)	0.49*	(0.04)
Equality among members	2.60	(0.97)	-0.06	(0.04)
Observations	11640		14027	

Notes: This table presents means and standard deviations of the answers to the survey questions of individuals in control (not yet reformed) kibbutzim. All estimated coefficients are based on a regression of the question answers as a dependent variable and the treatment indicator, survey year dummies, and demographic controls as the explanatory variables with kibbutz fixed effects. Standard deviations and standard errors are presented in parentheses. Standard errors are adjusted for clustering at the kibbutz level.

Table 12: Descriptive Electoral Statistics for Treatment and Control Groups, By Voting Year

Year	Number of Kibbutzim	Number of Eligible Voters per Kibbutz	Proportion Voting Turnout	Propotion Voting for Parties		
				Left	Center	Right
Panel A: Treated						
1996	11	216.273	77.869	78.116	8.550	11.547
1999	53	321.340	74.866	78.586	8.166	4.867
2003	135	383.881	70.904	72.237	11.194	10.349
2006	166	406.343	66.102	61.476	21.043	5.310
2009	181	432.597	67.378	50.294	33.874	11.001
2013	188	476.926	70.836	57.830	26.801	9.528
Panel B: Control						
1996	220	406.459	80.682	89.689	4.183	4.636
1999	178	427.522	75.766	86.319	5.307	3.016
2003	96	453.729	71.867	77.659	8.521	7.857
2006	65	485.662	67.132	67.990	18.162	4.015
2009	50	502.500	67.464	52.461	33.447	9.091
2013	43	530.651	68.633	64.093	22.546	8.028

Notes: This table presents statistics of the sample by voting year. The sample includes all Takam an Artzi Kibbutzim that had voting polls in each on the 6 elections between 1996-2013. Kibbutzim are considered Treated starting from the year of the reform (year since reform, =0). Other then the "Kibbutzim" column, which depicts for every year how many Kibbutzim were in each sample, all other statistics describe average figure per Kibbutz in each sample.

Table 13 Effect of the 'Market Wage' Reform on Electoral Voting of Kibbutz Members

Sample:		**All Elections**		**One Post-Reform Election Only**		**Samples stratified by Kibbutz Ideological**	
Political Category	Years since reform	All Kubbutzim	Ever Reformed Kibbutzim	All Kubbutzim	Ever Reformed Kibbutzim	All Kibbutzim in Takam Movement (Left)	All Kibbutzim in Artzi Movement (Very Left)
Left	0	-2.061	-1.559	-2.119	-2.460	-3.090	-0.224
		(0.593)	(0.626)	(0.645)	(0.645)	(0.767)	(0.892)
	1	-2.086	-1.567			-2.695	-0.793
		(0.571)	(0.596)			(0.735)	(0.920)
	2	-1.677	-1.025			-1.964	-0.722
		(0.555)	(0.561)			(0.701)	(0.923)
Center	0	1.334	0.983	1.105	0.857	2.312	-0.110
		(0.497)	(0.494)	(0.564)	(0.484)	(0.689)	(0.652)
	1	1.434	1.107			2.124	0.469
		(0.477)	(0.457)			(0.663)	(0.690)
	2	1.263	0.906			1.667	0.596
		(0.452)	(0.424)			(0.613)	(0.683)
Right	0	0.160	0.122	0.335	0.737	0.429	-0.103
		(0.350)	(0.340)	(0.386)	(0.377)	(0.449)	(0.509)
	1	-0.152	-0.279			-0.181	-0.046
		(0.341)	(0.329)			(0.457)	(0.448)
	2	-0.148	-0.270			-0.321	-0.140
		(0.374)	(0.366)			(0.512)	(0.457)
Voter Turnou	0	-0.572	-0.094	-0.821	-0.333	-0.469	-1.058
		(0.385)	(0.421)	(0.388)	(0.478)	(0.488)	(0.651)
	1	-0.490	0.021			-0.230	-1.108
		(0.376)	(0.403)			(0.459)	(0.696)
	2	-0.819	-0.454			-0.808	-0.705
		(0.399)	(0.451)			(0.519)	(0.652)
Kibbutzim		231	197	198	164	155	76
Observations		1386	1182	716	512	930	456

Notes: This table presents the coefficient and robust standard errors of the effect of reforms on the percent of votes cast for different political categories and voter turnout. All samples include fixed effects by Kibbutz control, as well as time-specific control for every election. All Kibbutzim sample includes all Takam and Artzi Kibbutzim with local polls for all six elections between 1996-2013, while ever reformed sample excludes Kibbutzim that never reformed. Year since reform variable allows variation regarding how many years after being reformed Kibbutz is considered treated.

Table A2: Sample Observable Characteristics, by Years (Grouped)

	Part 1: 1993-1998	Part 2: 1999-2001			Part 3: 2002-2004			Part 4: 2005-2007		
Variable	Mean	Treated Mean	Control Mean	Difference	Treated Mean	Control Mean	Difference	Treated Mean	Control Mean	Difference
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
A. Personal Characteristics:										
Female	52.76	55.01	52.62	2.28	56.92	50.03	7.39*	50.47	49.85	0.76
	(49.93)	(49.80)	(49.94)	(2.68)	(49.54)	(50.02)	(2.70)	(50.02)	(50.04)	(2.86)
Age	45.03	50.44	48.29	1.51	49.29	46.53	2.35*	54.95	51.46	3.16*
	(14.57)	(13.13)	(14.37)	(0.94)	(14.86)	(15.53)	(0.86)	(13.65)	(14.92)	(0.96)
B. Education: Highest Completed (%):										
Primary	3.86	2.55	2.61	-0.05	1.49	2.07	-0.63	1.79	0.92	0.79
	(19.27)	(15.79)	(15.96)	(0.87)	(12.14)	(14.25)	(0.66)	(13.25)	(9.57)	(0.57)
High school	28.88	34.80	30.41	5.59*	24.60	27.20	-2.25	21.59	22.62	-1.27
	(45.33)	(47.69)	(46.01)	(2.83)	(43.09)	(44.51)	(2.28)	(41.16)	(41.87)	(2.24)
Non-academic	36.66	33.41	33.49	-0.32	32.67	32.58	0.10	37.50	30.31	7.33*
	(48.19)	(47.22)	(47.20)	(3.10)	(46.92)	(46.88)	(2.40)	(48.43)	(45.99)	(2.46)
Bachelors degree	27.48	21.11	24.55	-3.97	31.08	29.02	1.80	27.52	34.15	-6.27*
	(44.65)	(40.86)	(43.05)	(2.77)	(46.30)	(45.40)	(2.52)	(44.68)	(47.46)	(2.43)
Advance degrees	3.12	8.12	8.94	-1.25	10.16	9.13	0.98	11.61	12.00	-0.58
	(17.39)	(27.35)	(28.54)	(1.66)	(30.23)	(28.82)	(1.71)	(32.04)	(32.52)	(2.03)
C. Age of Arrival to the Kibbutz (%):										
Born/raised	80.89	86.06	88.93	-3.54	82.32	88.50	-7.12*	81.18	85.41	-3.34
	(39.32)	(34.68)	(31.38)	(2.40)	(38.17)	(31.91)	(2.09)	(39.10)	(35.33)	(2.05)
As an adult	19.11	13.94	11.07	3.54	17.68	11.50	7.12*	18.82	14.59	3.34
	(39.32)	(34.68)	(31.38)	(2.40)	(38.17)	(31.91)	(2.09)	(39.10)	(35.33)	(2.05)

Notes: This table presents means and standard errors of the observable explanatory variables for each year. Column 1 presents the mean for all kibbutzim (both reformed and unreformed). Columns 2-4, 5-6, 8-9 present the mean for the reformed (treated) or control kibbutzim and the standard deviations in parentheses. Columns 4,7,9 presents the treatment coefficient (and SE in parentheses) based on a regression of the variable as a dependent variable and the treatment indicator, full set of survey year dummies and clustering by kibbutz. Born/raised group consists of those who were born, raised, founded or those who joined with a motivated and socialist group of young adults such as a youth movement or a 'Gar'in'.

Table A2: Sample Observable Characteristics, by Years (Grouped), Continued

Variable	Part 1: 1993-1998	Part 2: 1999-2001			Part 3: 2002-2004			Part 4: 2005-2007		
	Mean	Treated Mean	Control Mean	Difference	Treated Mean	Control Mean	Difference	Treated Mean	Control Mean	Difference
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
D. Personal Status (%):										
Single	14.70	7.87	13.64	-4.69*	11.36	17.68	-5.46	5.80	9.62	-3.54
	(35.41)	(26.95)	(34.33)	(2.01)	(31.75)	(38.17)	(1.88)	(23.39)	(29.51)	(1.70)
Single parent	0.52	2.02	0.81	1.18	1.36	0.57	0.82	1.43	0.90	0.52
	(7.16)	(14.09)	(8.96)	(0.76)	(11.58)	(7.55)	(0.60)	(11.88)	(9.46)	(0.52)
Married	76.10	73.71	75.03	-2.06	74.66	70.87	3.01	79.97	77.89	1.77
	(42.65)	(44.07)	(43.29)	(3.10)	(43.52)	(45.45)	(2.33)	(40.04)	(41.53)	(2.46)
Divorced	5.18	10.11	6.35	3.60	8.06	7.63	0.21	7.71	7.52	0.36
	(22.16)	(30.18)	(24.40)	(2.16)	(27.23)	(26.56)	(1.42)	(26.69)	(26.39)	(1.83)
Widowed	3.51	6.29	4.17	1.98	4.56	3.24	1.41	5.09	4.06	0.89
	(18.41)	(24.31)	(19.99)	(1.44)	(20.88)	(17.72)	(1.03)	(21.98)	(19.75)	(1.16)
E. Kibbutz Association Affiliation (%):										
More ideological movement (Artzi)	39.48	18.26	49.07	-31.71*	37.46	48.64	-10.80	32.52	47.00	-14.16*
	(48.89)	(38.68)	(50.00)	(6.26)	(48.43)	(50.00)	(7.63)	(46.86)	(49.95)	(8.43)
Less ideological movement (Takam)	60.52	81.74	50.93	31.71*	62.54	51.36	10.80	67.48	53.00	14.16*
	(48.89)	(38.68)	(50.00)	(6.26)	(48.43)	(50.00)	(7.63)	(46.86)	(49.95)	(8.43)
Observations	5076	449	2482		1033	1579		1264	666	

Notes: This table presents means and standard errors of the observable explanatory variables for each year. Column 1 presents the mean for all kibbutzim (both reformed and unreformed). Columns 2-4, 5-6, 8-9 present the mean for the reformed (treated) or control kibbutzim and the standard deviations in parentheses. Columns 4,7,9 presents the treatment coefficient (and SE in parentheses) based on a regression of the variable as a dependent variable and the treatment indicator, full set of survey year dummies and clustering by kibbutz.

Table A3: Early Vs. Late Reformed Observable Characteristics, by Years (Grouped)

	Part 1: 1993-1998			Part 2: 1999-2001			Part 3: 2002-2004			Part 4: 2005-2007		
Variable	Early Mean	Late Mean	Difference	Early Mean	Late Mean	Difference	Early Mean	Late Mean	Difference	Early Mean	Late Mean	Difference
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
A. Personal Characteristics:												
Female	53.75	50.79	2.68	54.39	52.64	1.51	59.14	48.68	10.46	47.80	47.15	0.67
	(49.91)	(50.02)	(3.75)	(49.91)	(49.97)	(5.26)	(49.29)	(50.03)	(5.10)	(50.09)	(49.98)	(5.64)
Age	45.50	44.75	0.77	50.21	47.48	2.51	48.69	46.45	2.21	55.46	54.14	0.90
	(14.44)	(15.14)	(1.61)	(13.53)	(14.34)	(1.84)	(14.17)	(15.09)	(2.10)	(13.26)	(13.85)	(1.79)
B. Education: Highest Completed (%):												
Primary	1.52	7.59	-6.19	4.41	3.44	0.90	2.20	1.46	0.75	1.14	0.79	0.36
	(12.24)	(26.50)	(1.65)	(20.57)	(18.25)	(1.64)	(14.70)	(11.99)	(1.93)	(10.63)	(8.85)	(1.14)
High school	30.15	28.45	0.74	33.92	32.19	2.03	29.12	27.44	1.84	25.57	25.72	-0.53
	(45.94)	(45.14)	(3.65)	(47.45)	(46.76)	(4.38)	(45.56)	(44.67)	(5.13)	(43.75)	(43.77)	(4.23)
Non-academic	35.57	32.94	3.04	34.36	34.60	-0.18	34.07	33.68	0.02	43.18	35.70	7.78
	(47.93)	(47.03)	(2.85)	(47.60)	(47.61)	(4.43)	(47.52)	(47.31)	(4.68)	(49.67)	(47.97)	(5.14)
Bachelors degree	29.50	27.38	2.71	21.15	20.65	0.20	28.57	25.36	3.33	21.59	25.46	-3.85
	(45.65)	(44.61)	(2.93)	(40.92)	(40.52)	(3.99)	(45.30)	(43.55)	(5.48)	(41.26)	(43.62)	(4.75)
Advance degrees	3.25	3.64	-0.31	6.17	9.12	-2.95	6.04	12.06	-5.95	8.52	12.34	-3.74
	(17.76)	(18.73)	(0.98)	(24.11)	(28.82)	(2.40)	(23.90)	(32.60)	(3.76)	(28.00)	(32.93)	(2.80)
C. Age of Arrival to the Kibbutz (%):												
Born/raised	81.02	79.86	1.74	86.98	89.96	-3.10	77.02	88.22	-10.56	79.49	83.03	-2.43
	(39.26)	(40.13)	(3.49)	(33.74)	(30.08)	(3.65)	(42.20)	(32.27)	(5.63)	(40.51)	(37.59)	(3.72)
As an adult	18.98	20.14	-1.74	13.02	10.04	3.10	22.98	11.78	10.56	20.51	16.97	2.43
	(39.26)	(40.13)	(3.49)	(33.74)	(30.08)	(3.65)	(42.20)	(32.27)	(5.63)	(40.51)	(37.59)	(3.72)

Notes: This table presents means and standard errors of the observable explanatory variables for each year for kibbutzim which reformed early (1998-1999) versus late (2003-2005). Columns 1-2, 4-5, 7-8, 10-11 present the mean (and SD in parentheses). Columns 3,6,9,12 presents the coefficient of the indicator for early reform (and SE in parentheses) based on a regression of the variable as a dependent variable and the early reform indicator, full set of survey year dummies and clustering by kibbutz. Born/raised group consists of those who were born, raised, founded or those who joined with a motivated and socialist group of young adults such as a youth movement or a 'Gar'in'.

Table A3: Early Vs. Late Reformed Observable Characteristics, by Years (Grouped)

	Part 1: 1993-1998			Part 2: 1999-2001			Part 3: 2002-2004			Part 4: 2005-2007		
Variable	Early Mean	Late Mean	Difference	Early Mean	Late Mean	Difference	Early Mean	Late Mean	Difference	Early Mean	Late Mean	Difference
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
D. Personal Status (%):												
Single	15.30	16.17	-0.83	8.02	15.21	-6.93*	11.35	17.11	-5.43	4.40	6.77	-2.05
	(36.04)	(36.84)	(2.76)	(27.21)	(35.94)	(3.56)	(31.81)	(37.70)	(3.97)	(20.56)	(25.16)	(2.62)
Single parent	0.00	0.43	-0.42*	0.42	0.83	-0.41	0.54	0.41	0.10	0.00	1.04	-1.02*
	(0.00)	(6.51)	(0.19)	(6.50)	(9.06)	(0.58)	(7.35)	(6.38)	(0.61)	(0.00)	(10.17)	(0.44)
Married	75.22	72.98	2.19	78.06	72.89	5.00	76.22	72.10	3.72	85.71	79.95	5.50
	(43.22)	(44.43)	(3.60)	(41.47)	(44.49)	(4.64)	(42.69)	(44.90)	(5.98)	(35.09)	(40.09)	(4.24)
Divorced	4.53	6.49	-1.97	9.28	5.62	3.64	8.65	7.13	1.61	7.14	8.07	-0.82
	(20.81)	(24.65)	(1.98)	(29.08)	(23.05)	(3.12)	(28.18)	(25.76)	(4.01)	(25.82)	(27.28)	(2.62)
Widowed	4.96	3.94	1.04	4.22	5.45	-1.31	3.24	3.26	0.00	2.75	4.17	-1.61
	(21.73)	(19.46)	(1.95)	(20.15)	(22.73)	(1.90)	(17.76)	(17.77)	(1.97)	(16.39)	(20.01)	(1.56)
E. Kibbutz Association Affiliation (%):												
More ideological movement (Artzi)	15.42	44.03	-28.68*	10.88	37.46	-26.46*	13.98	37.32	-23.49*	13.19	36.27	-23.49*
	(36.15)	(49.67)	(11.92)	(31.20)	(48.44)	(11.17)	(34.77)	(48.42)	(12.05)	(33.93)	(48.14)	(11.12)
Less ideological movement (Takam)	84.58	55.97	28.68*	89.12	62.54	26.46*	86.02	62.68	23.49*	86.81	63.73	23.49*
	(36.15)	(49.67)	(11.92)	(31.20)	(48.44)	(11.17)	(34.77)	(48.42)	(12.05)	(33.93)	(48.14)	(11.12)
Observations	239	606		239	606		186	493		182	386	

Notes: This table presents means and standard errors of the observable explanatory variables for each year for kibbutzim which reformed early (1998-1999) versus late (2003-2005). Columns 1-2, 4-5, 7-8, 10-11 present the mean (and SD in parentheses). Columns 3,6,9,12 presents the coefficient of the indicator for early reform (and SE in parentheses) based on a regression of the variable as a dependent variable and the early reform indicator, full set of survey year dummies and clustering by kibbutz.

Table A4: Effect and Interaction Between Treatment and Economic Measures

	Original Effect	Economic Strength Measure				Credit Rating Measure			
		Effect	Interaction Level 1	Interaction Level 2	Interaction Level 3	Effect	Interaction Level 1	Interaction Level 2	Interaction Level 3
A. Labor Market Norms									
Paying for overtime	0.26*	0.51*	-0.46*	-0.25	-0.28	0.64*	-0.62*	-0.36	-0.35
	(0.06)	(0.17)	(0.20)	(0.19)	(0.20)	(0.30)	(0.32)	(0.31)	(0.32)
Reduce pay for underworking	-0.05	-0.14	0.12	0.12	0.17	-0.01	-0.06	0.01	-0.04
	(0.07)	(0.17)	(0.25)	(0.18)	(0.19)	(0.36)	(0.38)	(0.36)	(0.37)
Support for full privatization	0.41*	0.36*	-0.07	0.05	0.26	0.39	0.00	0.00	0.15
	(0.07)	(0.19)	(0.22)	(0.20)	(0.23)	(0.30)	(0.32)	(0.31)	(0.32)
Support for differential wages	0.62*	0.66*	-0.21	0.00	0.01	0.78*	-0.37	-0.09	-0.13
	(0.06)	(0.14)	(0.17)	(0.15)	(0.17)	(0.21)	(0.23)	(0.22)	(0.23)
Labor index	0.32*	0.37*	-0.15	-0.03	0.04	0.41*	-0.18	-0.08	-0.03
	(0.04)	(0.11)	(0.13)	(0.12)	(0.13)	(0.19)	(0.19)	(0.19)	(0.19)
B. Social Norms									
Overall equality	-0.15*	-0.18	0.08	0.06	0.01	-0.22	0.08	0.10	0.06
	(0.06)	(0.14)	(0.19)	(0.15)	(0.16)	(0.18)	(0.22)	(0.19)	(0.20)
Mutual responsibility	0.17*	0.09	0.07	0.10	0.10	0.18*	-0.03	0.02	-0.06
	(0.05)	(0.09)	(0.16)	(0.11)	(0.11)	(0.08)	(0.14)	(0.10)	(0.10)
From each according to his ability, to each according to his needs	-0.03	-0.10	0.06	0.11	0.05	-0.08	-0.02	0.12	0.02
	(0.06)	(0.12)	(0.20)	(0.14)	(0.15)	(0.15)	(0.20)	(0.17)	(0.17)
C. Collectivism									
Joint ownership of the means of production	0.05	0.01	0.22	0.07	-0.02	-0.06	0.17	0.17*	0.07
	(0.04)	(0.08)	(0.15)	(0.08)	(0.10)	(0.09)	(0.16)	(0.09)	(0.10)
Collective ownership of assets	-0.14*	-0.12	-0.23	0.01	-0.04	-0.19*	-0.29	0.12	0.05
	(0.05)	(0.10)	(0.25)	(0.11)	(0.12)	(0.10)	(0.22)	(0.12)	(0.12)

Notes: This table presents the coefficients of the treatment dummy and the interaction between treatment and measures of kibbutz wealth based on a regression of the question answers as a dependent variable and the treatment indicator, interaction variable, survey year dummies, and demographic controls as the explanatory variables with kibbutz fixed effects. Standard errors are presented in parentheses. Standard errors are adjusted for clustering at the kibbutz level.

Table A5: Control and Never-Reformed Means, by Years (Grouped)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Part 1: 1993-1998			**Part 2: 1999-2001**			**Part 3: 2002-2004**			**Part 4: 2005-2007**		
	Control Mean	Communal Mean	Difference	Control Mean	Communal Mean	Difference	Control Mean	Communal Mean	Difference	Control Mean	Communal Mean	Difference
Paying for overtime	3.30	2.66	0.65*	3.73	2.66	1.07*	3.97	3.08	0.89*	4.04	3.07	0.97*
	(1.60)	(1.61)	(0.15)	(1.45)	(1.63)	(0.17)	(1.33)	(1.61)	(0.20)	(1.30)	(1.60)	(0.21)
Reduce pay for underworking	3.46	2.88	0.59*	3.82	2.82	1.00*	4.00	3.26	0.73*			
	(1.54)	(1.61)	(0.15)	(1.35)	(1.57)	(0.17)	(1.24)	(1.54)	(0.20)			
Support for full privatization	1.99	1.48	0.51*	2.00	1.51	0.49*	2.21	1.56	0.64*	2.01	1.49	0.50*
	(1.37)	(1.04)	(0.08)	(1.40)	(1.10)	(0.10)	(1.47)	(1.10)	(0.11)	(1.45)	(1.05)	(0.12)
Support for differential wages	2.60	2.11	0.49*	2.92	1.96	0.96*	3.51	2.68	0.84*	3.05	2.23	0.81*
	(1.60)	(1.43)	(0.13)	(1.62)	(1.39)	(0.15)	(1.59)	(1.64)	(0.17)	(1.71)	(1.58)	(0.22)
Overall equality				3.36	3.83	-0.47*	3.20	3.68	-0.48*	3.36	3.76	-0.41*
				(1.08)	(0.94)	(0.14)	(1.14)	(1.03)	(0.10)	(1.05)	(1.03)	(0.10)
Mutual responsibility				4.12	4.33	-0.21*	3.89	4.07	-0.21*	3.56	3.44	0.11
				(0.90)	(0.71)	(0.09)	(1.00)	(0.96)	(0.06)	(1.00)	(1.20)	(0.10)
From each according to his ability, to each according to his needs				2.68	3.12	-0.44*	2.46	3.07	-0.61*	2.60	3.07	-0.47*
				(1.29)	(1.30)	(0.18)	(1.28)	(1.32)	(0.13)	(1.22)	(1.33)	(0.15)
Joint ownership of the means of production				4.01	4.31	-0.29*	3.91	4.17	-0.27*	3.95	4.16	-0.2*
				(0.87)	(0.80)	(0.08)	(0.92)	(0.84)	(0.07)	(0.80)	(0.85)	(0.07)
Collective ownership of assets				2.59	3.41	-0.82*	2.33	2.90	-0.58*	2.32	2.85	-0.52*
				(1.29)	(1.42)	(0.23)	(1.28)	(1.42)	(0.16)	(1.17)	(1.39)	(0.15)
Observations	4081	870		1997	453		1112	441		348	305	

Notes: This table presents means and standard errors of the answers to the survey questions of individuals in control kibbutzim (not yet reformned but reformed at some point upto 2018) and communal kibbutzim that never reformed. The table also presents the difference estimated by a regression of the question answers as a dependet variable and the control/communal indicator, survey year dummies with kibbutz clustering. Columns 1-2, 4-5, 7-8, 10-11 presents the mean for the control or communal kibbutzim and the standard deviations in parentheses. Columns 3,6,9,12 presents the treatment coefficient (and SE in parentheses) from a regression.

Table A6: Impact of Pre-Reform Norms and Social Values on Voting Patterns

Political Category	Year since reform	Overall equality	Mutual assurace	Joint ownership of the means of production
Left	0	2.1381	1.7904	3.7075
		(1.230)	(1.465)	(1.372)
	1	2.3986	1.7028	2.5643
		(1.247)	(1.427)	(1.209)
	2	1.7995	1.0269	3.0612
		(1.266)	(1.335)	(1.299)
Center	0	-1.233	-1.532	-1.886
		(1.030)	(1.358)	(1.443)
	1	-1.506	-1.387	-1.240
		(0.909)	(1.308)	(1.283)
	2	-1.332	-1.778	-1.415
		(0.883)	(0.960)	(1.380)
Right	0	-0.566	-0.044	-0.897
		(0.410)	(0.472)	(0.408)
	1	0.219	-0.048	-0.918
		(0.448)	(0.398)	(0.456)
	2	0.361	0.272	-1.096
		(0.529)	(0.541)	(0.474)
Kibbutzes		58	58	58
Observations		348	348	348

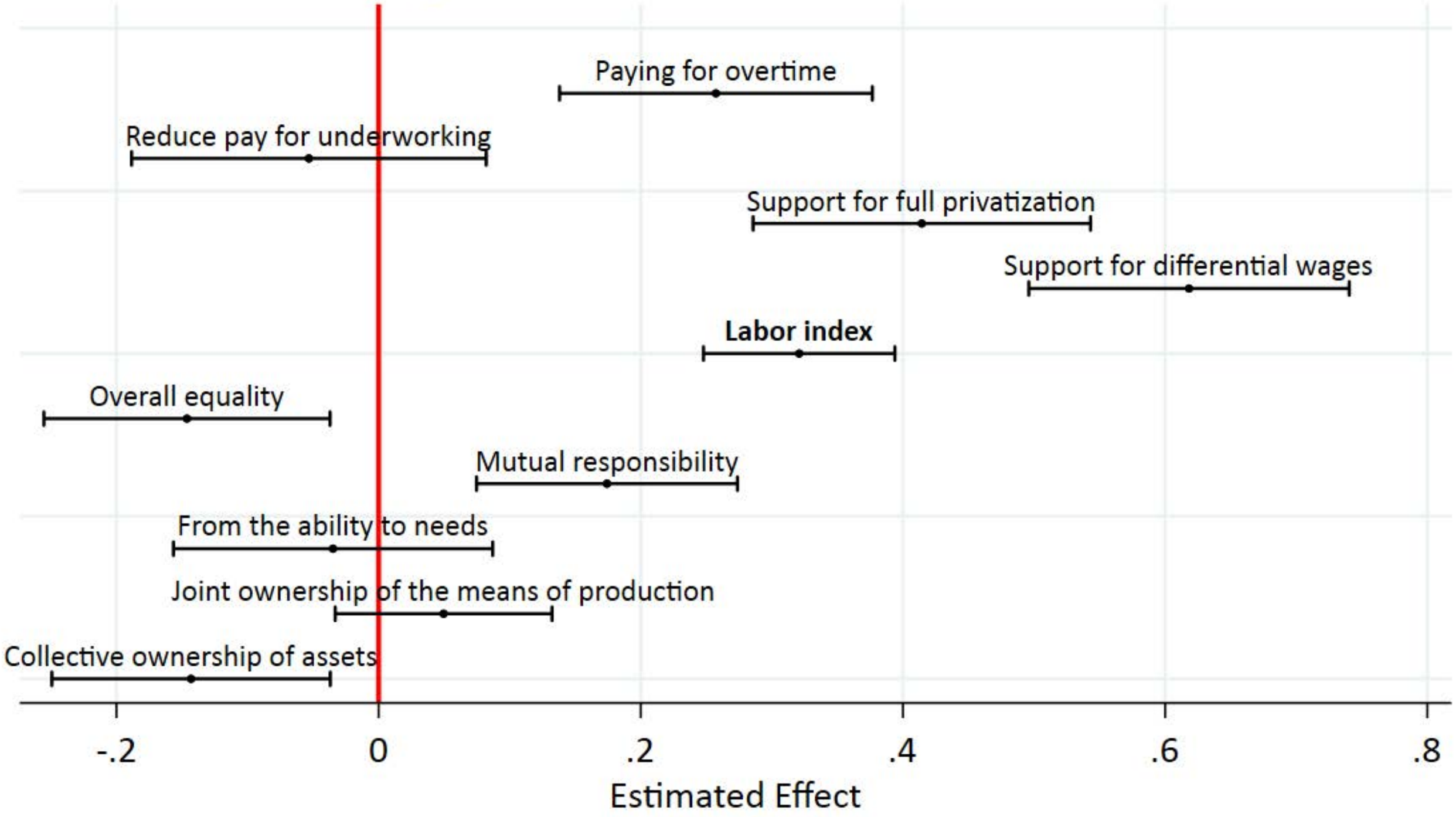
Note: We regress voting for each one of the three political categories one an interaction variable between average answers given to each of the three listed questions and treatment. We allow for timing of treatment to vary between t=0 and t=2. Average responses are measured from t=-5 until t=-1, that is from 5 years before reform until one year before.

Table A7: Effect of Economic Crisis on Post-Reform Voting

Variable		**Treatment**		**Interaction**	
Political Category	Year since reform	All Kubbutzim	Ever Reformed Kibbutzim	All Kubbutzim	Ever Reformed Kibbutzim
Left	0	-1.990	-1.378	0.435	0.457
		(0.865)	(0.871)	(0.957)	(0.959)
	1	-2.617	-2.049	0.947	0.958
		(0.807)	(0.820)	(0.902)	(0.906)
	2	-2.887	-2.216	1.749	1.750
		(0.785)	(0.779)	(0.910)	(0.914)
Center	0	1.961	1.672	-1.711	-1.728
		(0.735)	(0.757)	(0.793)	(0.795)
	1	2.492	2.265	-2.010	-2.016
		(0.711)	(0.729)	(0.781)	(0.783)
	2	2.969	2.735	-2.557	-2.544
		(0.705)	(0.699)	(0.818)	(0.821)
Right	0	-0.298	-0.438	1.117	1.110
		(0.435)	(0.428)	(0.483)	(0.484)
	1	-0.269	-0.448	0.825	0.812
		(0.358)	(0.343)	(0.428)	(0.429)
	2	-0.280	-0.523	0.409	0.397
		(0.383)	(0.370)	(0.460)	(0.461)
Kibbutzes		197	168	197	168
Observations		1182	1008	1182	1008

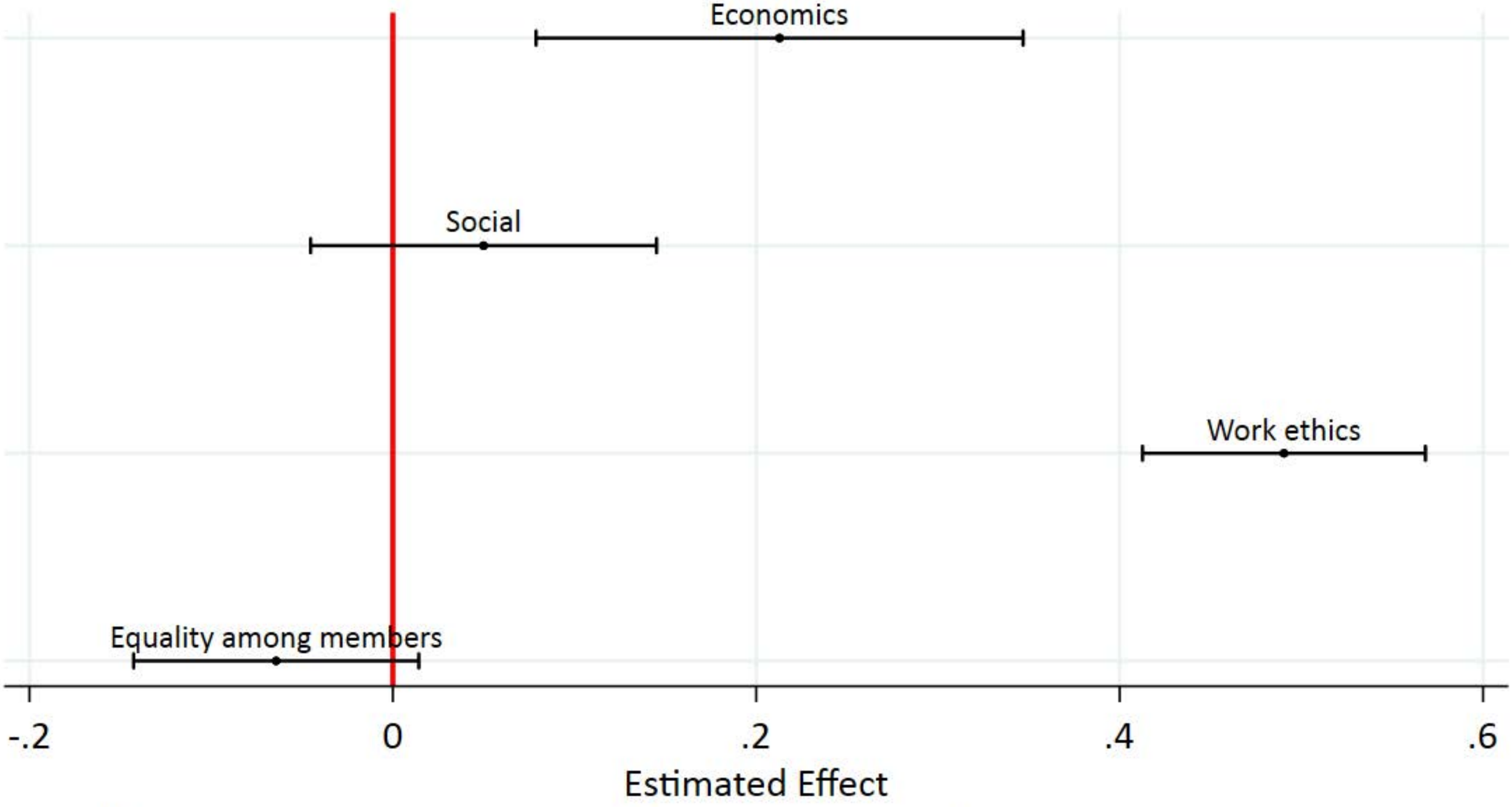
Notes: This table presents results for specification that includes an interaction variable between treatment and the kibbutzim's economic status before privatiztion. Each kibbutz received from the govenment a grade 1-4 reflecting its economic status at 1994. We divide the kibbutzim to groups 1-2, the poorer kibbutzim, and groups 3-4, the richer kibbutzim. Here were present coefficient estimates and robust standard errors of the treatment effect and treatement effect interacted with being one of the poorer kibutzim.

Figure 1: Estimates and Confidence Intervals of the Effect of 'Market Wage' Reform On Labor Market and Social Norms



Notes: This figure presents point estimates from a regression where the dependent variable is the survey response of individuals to questions related to labor market and social norms.
The regressions include demographic controls, year effect and kibbutz fixed-effects.

Figure 2: Estimates and Confidence Intervals of the Effect of the 'Market Wage' Reform On the Economic and Social Conditions of the Kibbutz



Notes: This figure presents point estimates from a regression where the dependent variable is the survey response of individuals to questions related to the condition of the kibbutz.
The regressions include demographic controls, year effect and kibbutz fixed-effects.