Public Works Programs: Use and Effectiveness to Stabilize Income and Eradicate Poverty as seen in Argentina and India

Hailey Eichner
Individual Research Project
ECO201A
Professor F. Koohi-Kamali
4/23/13
I. Introduction

Public works are often used in times of financial crisis in order to prevent the spread of poverty and provide a safety net for the poor. Public works programs include construction on roads, irrigation systems, and other public goods used by the general population. These programs will ideally lead to further development and cause “secondary and multiplier employment effects” (Koohi-Kamali 2010: 3). Both developed and developing countries have used public works programs as “counter-cyclical interventions” (Subbarao 2003: 1); the New Deal implemented in the United States during the Great Depression is an example of a public works program in a developed country.

Public works programs began by offering a wage slightly below the market wage in order to prevent program costs from being too high as well as preventing the non-poor from participating in the program, which would “crowd out existing employment” (Koohi-Kamali 2010: 4). This is often referred to as self-selection. This is important because the creation of public works programs can have adverse effects on other areas of the economy if the wage offered by the program is more desirable than wages offered in already existing jobs.

This paper will examine the effectiveness of public work schemes based on geography as well as the use of cash transfers versus food transfers. The paper will discuss (II) Argentina’s Jefes y Jefas program, and (III) India’s National Rural Employment Guarantee (NREG). The paper will also contain (IV) a theory section, and (V) a hypothesis on the effectiveness of public works programs on income.
stabilization and poverty reduction based on these case studies, ending with concluding remarks.

II. Argentina: Jefes y Jefas

The Argentinean financial crisis devastated the economy causing default on foreign debt, devaluation of currency, and a massive increase in unemployment. The response of the government was to replace the existing Trabajar program with one that would “reach a broader segment of the population” (Galasso and Ravallion 2004: 370). The Jefes y Jefas program did not specifically target the poor, but unemployed heads of households who lived with at least one dependent. The program offered a cash transfer of approximately half the mean household per capita per month (Koohi-Kamali 2010: 6). Like Trabajar, Jefes was a conditional transfer program with requirements of at least 20 hours of community work on small construction, agricultural or maintenance projects as well as training activities and school attendance; the program also encouraged participants to acquire work outside of Jefes (Wray 2006: 2294).

One of the main criticisms of Jefes was that it benefited many ineligible participants. For instance, the conditional requirements for the cash transfer were not strictly enforced. Because of this, only 80 percent of participants completed the work requirement (Galasso and Ravallion 2004: 395). A large number of participants were also employed in other jobs or had the means to support themselves without the Jefes transfer. The government was only able to verify employment in the formal sector and therefore could not be sure that all
participants met the unemployment criteria because the informal sector makes up more than half of Argentina’s economy (Koohi-Kamali 2010: 6). There was also the issue of inactive members of the economy benefiting from the program. For example, it was found that many women “who would not otherwise have been in the labor force” were participants of Jefes (Galasso and Ravallion 2004: 396). Because of so many cases of ineligible participants, Jefes seemed to have a very small effect on those who needed its benefits the most. The program slightly reduced poverty as it only benefited about one-fourth of the eligible population (Galasso and Ravallion 2004: 395-6).

It is clear, however, that Jefes had a major impact on the Argentinean economy following the financial crisis. Firstly, it created nearly two million jobs in its initial months (Wray 2006: 2293). Because projects in the program were targeted to benefit larger communities by renovating community centers and holding educational classes, there were multiplier effects that caused GDP to grow by more than the 1 percent of GDP cost of spending to 2.5 percent of GDP (Wray 2006: 2293).

In addition, Jefes also was able to create jobs that were friendly to women, especially mothers. Although many were not technically eligible for participation in the program because they were not the heads of their households, women were able to find jobs through Jefes. This is primarily because many projects took place in local neighborhoods and offered free childcare (Wray 2006: 2295). The ability to expand the workforce to include more women can also account for economic progress and prevention of poverty among households.
Jefes also had a significant impact on cases of extreme poverty. It was found that 10 percent of participants would have fallen into extreme poverty and been unable to afford a sustainable amount of food in the absence of the program (Galasso and Ravallion 2004: 396). The cash transfer also helped cushion the shocking decline in real wage rate following the devaluation of currency due to foreign debt default. Because of this, the program was able to protect some households from falling into poverty, or in most cases, into extreme poverty and arguably made Jefes the most successful aspect of social spending in Argentina at the time (Galasso and Ravallion 2004: 380).

III. India: Maharashtra Employment Guarantee Scheme and National Rural Employment Guarantee

Maharashtra Employment Guarantee Scheme (MEGS) was created in 1979 in Maharashtra in order to reduce poverty in the region. The program offered a low wage for work on public works including irrigation, road, land development and food projects. MEGS was successful from its creation because it offered the minimum wage rate, encouraging self-selection and attracting mostly the poor and, notably, poor women (Koohi-Kamali 2010: 7). The program’s success also stems from repeated access, which allows participants to participate in the program as often as they like, as opposed to the Argentinean program Trabajar that recruited workers for first projects and did not guarantee placement into second projects.

The program’s ability to accurately target the poor declined, however, when the minimum wage rate was nearly doubled in 1988 by the Indian government.
Because of this, the non-poors began to participate in MEGS, crowding out the poor who needed the benefits of the program. One of the greatest lessons learned from MEGS, which is still operating today as a subprogram of NREG, is that targeting can never be perfect. Employment guarantee programs cannot assume “that all of the poor will participate, and none of the non-poor” (Murgai and Ravallion 2005: 3450). Despite the decreased participation of the poor, the program still continued to succeed because of repeated access for it remained active during off-peak seasons in the agriculturally seasonal region (Koohi-Kamali 2010: 8).

The success of MEGS led to the creation of the NREG, which implemented the policies of MEGS across all of rural India. NREG offers 100 days of work per rural household per year to any adult able to work, not just the poor (Koohi-Kamali 2010: 8). Similar to MEGS, the program sponsors mostly irrigation, road and land development projects. The NREG also provides employment to nearly 31 million households and requires at least one-third of participants to be women (Koohi-Kamali 2010: 8). Because of this, the NREG has been tremendously effective in increasing employment and decreasing poverty across rural India.

One interesting fault of the NREG is that it has failed to be successful in Maharashtra, the area of the program that the NREG was based on. It seems that corruption in the government plays a role in this failure. By law, the government is supposed to match the amount of taxes collected for the benefit of the employment guarantee scheme, but has failed to do so (Datar 2007: 3454). Another issue is the use of private contractors who often favor machinery over human labor (Koohi-
Kamali 2010: 8). In these cases, wages offered to participants are often very low and not paid on time, decreasing the attractiveness of projects in the program (Datar 2007: 3455). This drastically reduces the number of days worked out of the 100 offered days by participants. However, positive effects have still been observed overall throughout rural India as a result of the NREG.

VI. Theory

As government expenditure, public work programs highlight both Keynesian and Neoclassical theory on government intervention. The intended goal of public works is to increase overall levels of employment. In this way, public work programs support the Keynesian argument of government intervention. When the private sector has a low demand for labor, public works and other forms of government expenditure can be used to raise overall levels of output and employment.

As seen in Figure 1 (Koohi-Kamali, Powerpoint, 2013), when private sector investment falls, output and employment also fall. A fall in investment could be caused by changing interest rates, leading to a fall in demand for labor. Under Keynesian theory, investment is the most volatile component of the economy. Because of this, government expenditure can be used to replace the fall in investment and therefore the fall in employment. Figure 2 (Koohi-Kamali, Powerpoint, 2013) illustrates how a rise in expenditure can supplement a fall in investment, raising the level of output and employment. Figure 2 also shows that the
expenditure multiplier allows a small rise in government expenditure to result in a large rise in output and employment.

Neoclassicals argue that government expenditure does not add employment to the economy but rather replaces already existing employment. A rise in government expenditure results in a rise in interest rates, which lowers investment, effectively crowding out private investment. In this case of public works, the wage rate can lead to crowding out. If a program sets its wage rate higher than the market wage offered in the private sector, those employed in the private sector will switch to public work. Figure 3 shows that a higher wage rate will result in a fall in both investment and consumption and create a fall in the supply of labor to the private sector, setting the money market out of equilibrium.

Crowding out of the private sector as a result of a high public work wage also causes the program itself to be less effective. If those employed in the private sector switch over to public work, it weakens the program’s targeting of the poor because of higher participation by the non-poor. When the non-poor participate in place of
the poor, employment falls not only because public jobs are replacing private ones, but because investment itself falls resulting in additional unemployment.

The theoretical dispute between Keynesians and Neoclassicals on government expenditure reveals the importance of design in public work programs. It is crucial to choose a wage rate that does not create crowding out in the private sector and allows the program to create employment, rather than replace it.

V. Hypothesis and Conclusion

Based on the case studies, the effectiveness of different public works programs clearly relies on the appropriateness of the program design to the region of the program. One important aspect of program design is the nature of transfer payments. Transfer payments can be either conditional or unconditional, where conditional payments are given once requirements, usually including a set number of hours of work, have been completed by the participant and unconditional payments can be given without the completion of such requirements. Another aspect of transfer payments to consider is the kind of transfer payments the program chooses to offer. Programs generally offer cash transfers or food transfers.
Many public works programs have preferred cash transfers to food transfers because they are more attractive to participants who aren’t in extreme poverty. Food transfers have generally been observed to create little impact on economic recovery and have few multiplier effects on future employment and development. An important consideration with cash transfers is the level of wage offered. Wages are set below market value in order to ensure that only those who are in the most need will seek out employment through these programs. Low wages also encourage participants to seek other employment opportunities, thus reducing the participants’ dependency on the program and, with that, the costs of the program (Ravallion 1999; Murgai and Ravallion 2005: 3451).

Another crucial aspect of the design of public works programs is the targeted population. There are a variety of groups programs can choose to target; which group, or groups, is the most appropriate varies on the region of the program. In some cases, simply targeting the poor over the non-poor is effective, as seen with MEGS. However, in times of financial trouble, targeting the unemployed is more effective. In Jefes, we see that targeting those that are unemployed with dependents was a successful way to provide social protection following a financial crisis. Public works programs can make a huge impact on social issues, if these issues are taken into account. Programs can be very empowering for women by encouraging higher female participation rates (Subbarao 1997: 683). Specific designs that allow women to find employment can be seen in the case of Jefes.

The nature of a program’s targeting is critical. Traditionally, public works programs target participants based on levels of income or unemployment. However,
Income based targeting is often unsuccessful, like in the case of Jefes. Focus on income deprivation can lead to information distortion, where participants give inaccurate information in order to qualify for benefits, and incentive distortion, where participants change their economic behavior in order to qualify (Sen 1992: 12-3). Programs using targeting based on levels of income are likely to attract the non-poor, crowding out the poor who actually qualify for benefits, as in the case of MEGS. Income based targeting can also fail to substantially address important issues, such as education, nutrition and standard of living.

Alternatively, a program based on achievement of capabilities to function can improve targeting. Sen suggests that poverty should be defined by “lacking the opportunity to achieve some minimally acceptable levels of these functions” (1984, 1985; 1992: 15). By defining poverty based on functions relating to health, education and social wellness, public works programs can not only ensure better targeting by avoiding the non-poor, but can also lead to more thorough poverty removal. The Oxford Poverty & Human Development Initiative has developed the Multidimensional Poverty Index, which takes almost entirely non-market phenomenon into consideration when determining an individual’s level of poverty. The MPI looks at education, nutrition and child mortality, and standard of living conditions, including access to clean water, electricity and sanitation (OPHI 2010: 3). By examining these factors, programs are better able to meet the needs of the most vulnerable and target participants more effectively.

Because the capabilities approach assesses multiple dimensions of poverty, it can “identify the most vulnerable people…and help reveal the interconnections
among deprivations” (Alkire and Santos 2010: 1). A comprehensive measurement of impoverished conditions helps program designers better understand the nature of the poverty being experienced and the most appropriate methods to combat that poverty. Although information on capability functions is not as easily available as market data, the capability approach better addresses systemic consequences of poverty that sometimes go unaddressed by these programs. Understanding the complicated, real-life implications of poverty makes it easier for programs and policy makers to focus on creating a better quality of life for the most impoverished individuals, instead of simply raising their levels of income and employment.

The cooperation of the government and program sponsors is also crucial to the success of the public works program. As seen with NREG, private contractors can sometimes influence the effectiveness of a program and the response of the community. If contractors are more willing to use machinery than employ program participants, demand for work will decline, even if similar programs have previously been in the area. Repeated access to programs is also crucial in creating secondary and multiplier effects within the economy. If a program is only accessible for a short period of time, and does not provide repeated access, the program will not be effective in the long-term.

There are many design aspects to consider when creating a public works program. The incorrect type or amount of transfer payment can make a program ineffective as well as an overestimate of participation by the target population and cooperation by the non-target population. Although there are many shortcomings observed in them, if designed appropriately for the region, public works programs
can enormously benefit failing economies and act as social protection by creating a stable form of temporary income for the poor.
References:


