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Conditional cash transfer programs and poverty in Morocco: An ex-ante assessment of the direct social assistance program and its socioeconomic impacts using a recursive dynamic computable general equilibrium model.

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Extended Abstract

Conditional Cash Transfer (CCT) programs have a significant impact on developing countries by combating poverty and inequality among poor and vulnerable households. These welfare programs transfer money only to individuals who meet specific criteria and focus on redistributing funds and investing in families and their children, aiming to break the cycle of poverty (Bastagli et al., 2016 ; Cahyadi et al., 2020 ; Duflo, 2003 ; Fiszbein & Schady, 2009 ; Glassman et al., 2013 ; Onwuchekwa et al., 2021).

In 1997, only three programs worldwide existed that provided CCT programs to impoverished people. These programs were Bolsa Escola in Brazil, Progresa in Mexico, and Food-for-Education in Bangladesh. Currently, many countries around the world -at least 63 countries- have implemented CCT programs, while others are planning or testing CCT schemes to reduce poverty (Bastagli et al., 2016; ILO, 2009).

In literature theory, CCT programs are social welfare initiatives aiming to alleviate poverty by providing cash or in-kind assistance to low-income households. They can improve households' situations at different levels. First, they reduce child labor and increase school attendance (Behrman et al., 2005; Sadoulet et al., 2004; Schultz, 2004). CCT programs can enhance the educational outcomes of poor households by boosting school enrollment and attendance. Moreover, they can affect human capital in the long term by promoting the enrollment of the beneficiaries' children in secondary school, providing them with a significant opportunity to

attend universities. (Molina Millán et al., 2020; Sanchez Chico et al., 2020) Third, these transfers could boost overall household consumption, savings, and investment in productive assets (Attanasio & Mesnard, 2005; Attanasio et al., 2006; Gitter & Caldes, 2010). Further, they may promote short- and long-term poverty reduction and boost human capital, particularly children's (Kisiwa et al., 2023, Molina Millán et al., 2020).

Indeed, the direct cash transfer aims to mitigate immediate needs caused by poverty, such as hunger, health issues, and family unit disintegration. In the long term, CCT programs aim to break the cycle of poverty across generations by advancing children's education and enhancing beneficiaries' health and employability (Kamakura & Mazzon, 2015).

However, poverty encompasses various dimensions such as low incomes, inability to access basic goods and services for dignified survival, limited health and education services, inadequate sanitation and water access, lack of security, voice, and opportunities for improvement (World Bank, 2015). Typically, the CCT programs strive to address all these dimensions of poverty.

In this context, reducing poverty requires the development of human capital, which is deemed a priority for both advanced and emerging economies. Therefore, the Moroccan government has several multi-year plans to strengthen the current health, social protection, and education systems and reduce social, territorial disparities, aiming to promote human capital.

Like other countries, Morocco's economy has implemented various CCT programs (*Tayssir (2008), INDH (2009), and temporary support for families working in the informal sector affected by the Coronavirus (2020)*) aim to support vulnerable households, especially in urban areas, by improving their living standards through access to necessary services (health, education, food, clean, and safe water...) and promote accumulation of human capital. Additionally, these initiatives try to combat poverty and inequality.

However, the social protection and healthcare systems in Morocco face several challenges. One of the primary issues is the limited coverage of health and social protection programs, especially those in the informal sector and those living in rural areas. Another crucial aspect involves enhancing the targeting of health and social protection programs to ensure they reach out to the most vulnerable and impoverished populations. Moreover, financing these programs requires more resources. Indeed, investments in healthcare have remained relatively low, fluctuating between 4% and 6% of the GDP[1]. The public expenditure on social protection and healthcare is also relatively low, equal to 4.5% and 2.5% of GDP, respectively.[2]

Following the COVID-19 crisis, the Moroccan government aimed to build a national model of a social state where the citizens were at the center of all reform and development projects.[3] Thus, in 2021, the government initiated an ambitious project to extend social protection by 2025, unfolding in four progressive stages: the generalization of basic compulsory health insurance, family allowances, job loss indemnity, and the expansion of the pension scheme's membership to include employed individuals who do not receive any pension. Concurrently, the government allocated $2.4 billion to the healthcare sector in 2022.

[1] World Bank, 2023
[2] ILO, 2023
[3] Note of presentation of the Morocco Finance Bill 2023

At the end of 2023, the Moroccan government started launching the second step of this project, the "Direct Social Assistance Program (DSA)," by disbursing $4 billion by 2026.

The direct social assistance program aims to improve the living conditions of families currently not benefiting from any family compensation. It particularly supports families with children under twenty-one or those with disabilities. Additionally, aid extends to poor and vulnerable families. The eligible families will receive monthly social support that varies based on each family's composition and its members' status, at least $50 per month as a minimum. Additionally, they will receive a birth grant for newborns: $200 for the first birth and $100 for the second birth.[4]

To benefit from this assistance, families must register in both the National Population Register (RNP) and the Unified Social Register (RSU), applying through the Direct Assistance Support platform. The RSU assigns a household index, identifying eligible families if they score below the **9.743001**[5] eligibility threshold for this direct social assistance.

In order to assess the impact of the direct social assistance program on economic growth, income distribution, household welfare, and poverty in Morocco, the Partnership for Economic Policy standard (PEP-1-t) model (Decaluwé et al., 2013) was employed. This study has two main objectives: first, to conduct an ex-ante evaluation of the direct social assistance program; second, to compare and assess it against the public services policy (indirect transfers) to identify an effective poverty alleviation policy in Morocco.

Our model has been calibrated using SAM (2019) data on the Moroccan economy. The SAM categorizes labor into three categories: Unskilled work (USK), Skilled work (SK), and Medium-skilled work (MSK), based on individuals' education levels and degrees. Additionally, within our SAM, we have broken down two accounts, the Education, Health, and Social Action (MNO), into three sub-accounts: non-market education (ENM), market education (EM), and health and social action (SN). The second account, Public Administration and Social Security (L75) is divided into two sub-accounts: Public Administration (PA) and Social Security (SS). Finally, the representative household account was disaggregated into four sub-counts using data from the National Survey on Household Consumption and Expenditure 2014 (NSHCE-2014, HCP): Poor urban household (HUP), Poor Rural Household (HRP), Rich Urban Household (HUR), and Rich Rural Household (HRR).

To respond to the objective of this study, we made appropriate modifications to the basic PEP 1-t model. Firstly, to capture the existence of unemployment in the Moroccan labor market, we introduced the wage curve, which assumes a negatively sloped relationship between the unemployment rate and wage rate in each labor market (Blanchflower & Oswald, 1995). Secondly, we incorporate public services provision into this model, in which a government uses factors of production to supply education, health, social security, public administration, and defense. The government buys most of the output of these sectors.[6] Finally, the welfare impact of cash transfers on household utility changes is calculated using formulas introduced by Chen & Ravallion (2004) and Ravallion & Lokshin (2008). In this method, these transfers affect

[4] https://www.asd.ma/fr/
[5] This index seeks to cover 60 percent of households not currently covered by any social security systems.
[6] Incorporate public services provision inspired by two CGE models, HMRC's and DEMTRA CGE.

household welfare through four key factors: price and production effects, labor income, and consumption.

Using a dynamic CGE model and assuming the government implements a cash transfer program targeting low-income families in urban and rural areas, three types of government closure rules describe the financing possibilities of this regime: financing by reducing government expenditures on specific goods and services, financing by raising taxes while maintaining a constant deficit, or increasing the government's deficit. Besides this, we will answer this question: Which policies are most effective in helping families to escape poverty in Morocco? Should the focus be on direct transfer payments or the indirect provision of public services?

The model is constructed, and scenarios are implemented. Preliminary results indicate that the direct social assistance program has a positive impact on low-income families, effectively reducing poverty and fostering income distribution in both urban and rural areas.

Keywords: Conditional Cash Transfer, Human capital, Healthcare, Dynamic Computable General Equilibrium Model, Poverty, Socioeconomic impacts, public policy, Morocco, Inequality, Welfare, Crisis

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