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## **Productivist Social Assistance and 21st-Century Development Models**

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#### **ABSTRACT**

The paper re-considers the growing literature on income transfers and labour market outcomes in low- and middle-income countries. Following the canonical literature in high-income countries, to date most studies on low- and middle-income countries have focused on testing for potentially adverse labour supply incentive effects from transfers. In the process they have neglected the potential impacts of transfers on structural transformation. The hypothesis at the core of this paper is that productivist social assistance, understood as income transfers capable of improving productive capacity among disadvantage groups, is a key policy helping to manage adverse trade-offs between structural transformation and inclusive growth. The paper re-considers the empirical literature in this light and sketches a research agenda re-assessing the role of social assistance in 21st c. development models.

#### **KEYWORDS**

Social assistance; labour market; structural transformation; productive capacity;

#### About the GPID research network:

The ESRC Global Poverty and Inequality Dynamics (GPID) research network is an international network of academics, civil society organisations, and policymakers. It was launched in 2017 and is funded by the ESRC's Global Challenges Research Fund.

The objective of the ESRC GPID Research Network is to build a new research programme that focuses on the relationship between structural change and inclusive growth.

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#### THE DEVELOPER'S DILEMMA

The ESRC Global Poverty and Inequality Dynamics (GPID) research network is concerned with what we have called 'the developer's dilemma'.

This dilemma is a trade-off between two objectives that developing countries are pursuing. Specifically:

- Economic development via structural transformation and productivity growth based on the intra- and inter-sectoral reallocation of economic activity.
- 2. Inclusive growth which is typically defined as broad-based economic growth benefiting the poorer in society in particular.

Structural transformation, the former has been thought to push up inequality. Whereas the latter, inclusive growth implies a need for steady or even falling inequality to spread the benefits of growth widely. The 'developer's dilemma' is thus a distribution tension at the heart of economic development.



#### 1. Introduction

The paper re-considers the growing literature on income transfers and labour market outcomes in low- and middle-income countries. Following the canonical literature in highincome countries (Moffitt, 2002), to date most studies in low- and middle-income countries have focused on testing for short-term adverse labour supply incentive effects from social assistance transfers. In the process, this literature has neglected the potential effects of transfers on improving the productive capacity of low-income groups. The hypothesis at the core of this paper is that productivist social assistance, understood as income transfers capable of improving productive capacity and labour market outcomes among disadvantaged groups, is a key policy helping to manage the trade-off between structural transformation and inclusive growth. This is especially true given the low coverage of social insurance and labour market policies in developing countries, due the high informality. Social assistance programs, therefore represent the main social protection policies. The number of transfer programs has risen significantly in the last decades, with their total number rising from 89 to 223 from 2000 to 2015 (Barrientos, 2018). It has also been estimated than nearly one billion individuals are reached by transfers (Barrientos, 2013).

Given its relevance, the paper re-considers the empirical literature in this light and sketches a research agenda re-assessing the role of social assistance in 21st c. development models.<sup>2</sup> The majority of studies examining the short-term labour supply effects of transfer programme

 $<sup>^{\</sup>mathrm{1}}$  Social assistance describes public programmes and policies providing budget-financed transfers and services

to disadvantaged groups aimed to facilitate exit from poverty. It includes pure income transfers such as social

pensions or family subsidies; income transfers combined with asset accumulation, such as conditional income

transfers; and integrated antipoverty programmes combining transfers, asset accumulation and

intermediation (Barrientos, 2013).

<sup>&</sup>lt;sup>2</sup> The paper focuses on evidence from existing meta-analyses and systematic reviews.

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participation find no statistically significant effects on the labour supply of adult participants at the intensive and extensive margins (Bastagli et al., 2016). This literature focuses mainly on effects on aggregate individual labour supply effects. A small number of studies find small effects at the extensive margin, positive and negative, but these are often explained by differences in participant socioeconomic conditions, context and programme design. Barrientos and Villa (2015), for example, find increases in the labour supply of single mothers with young children, suggesting the presence of heterogeneous effects. In summary, the bulk of the literature finds, at best, marginal effects or transfer receipt on aggregate adult labour supply. Larger and statistically significant labour supply effects are found for specific age categories, Labour supply effects of transfer receipt are stronger, and negative, for older persons, especially in the context of social pensions (Galiani, Gertler, & Bando, 2016). Labour supply effects associated with programme participation by children are the strongest, especially where programmes incentivise school attendance or explicitly discourage child labour (De Hoop & Rosati, 2014). Few studies consider changes in household labour supply. Going beyond marginal effects on the labour supply, social assistance, and conditional income transfer programmes in particular, have the potential to support improvements in the productive capacity of households in poverty. Studies have shown measurable effects on the accumulation of productive capacity, especially by children (Baird, Ferreira, Özler, & Woolcock, 2013; Duflo, 2003; Glewwe & Kassouf, 2012); and on improvements in productive resource allocation within households (Ardington, Case, & Hosegood, 2009; Barrientos & Villa, 2015; Posel, Fairburn, & Lund, 2006). Augmentation and reallocation of productive capacity following programme participation reflects the developmental effects of social assistance. Economy wide improvements in the productive capacity of low-income households are a condition for poverty eradication, inclusive growth, and equity - the hallmarks of transformative

development models. However, few studies tackle this important issue in the context of labour outcomes.

What explains the focus of the empirical literature? Several factors are relevant. The weight of the canonical approach is to test for adverse labour supply effects from unearned income (Moffitt, 2002). This is grounded in standard consumption theory. The availability of evaluation data has greatly facilitated measurement of the impact of social assistance transfers in low-and middle-income countries. This is welcomed, but generates some biases in the selection of problems to study. Evaluation data associated with growing social assistance provision is typically short-term, lending itself more appropriate to the study of short-term impact. Studies relying on experimental data are very effective in rendering causal effects on outcomes, but are much less effective in illuminating the processes linking interventions to outcomes. Dominant theory, quasi experimental data availability, and estimation models- all have a relative advantage in examining short-term labour supply effects. The paper will discuss these in more detail below.

Studies focused on the longer-term effects of participation in social assistance programmes have a better chance to capture the kind of impact that could be described as transformative. But they are scarce and show mixed findings (Baez & Camacho, 2011; Behrman, Parker, & Todd, 2011; Molina-Millan, Barham, Macours, Maluccio, & Stampini, 2016). Araujo, Bosch, and Schady (2017), for example, find only marginal improvements in the longer-term educational attainment of children supported by Ecuador's *Bono de Desarrollo Humano*. They conclude: "any effect of cash transfers on the inter-generational transmission of poverty in Ecuador is likely to be modest" (p.1). Kugler and Rojas (2018) find that, for Mexico's *Progresa*, the average person exposed to *Progresa* for eight years "is 36.6 percent more likely to be employed... and earning 5 more pesos per hour than an individual never exposed to the programme" (p.26).

Studies relying on quasi-experimental data and methods face acute constraints in capturing longer-term effects from programme participation (Molina-Millan et al., 2016).

Perhaps in due time, longitudinal studies will provide reliable findings on the longer-term effects of social assistance programmes on the productive capacity of low-income groups. In the meantime, researchers interested in this issue will have to rely unavoidably on the information provided by short-term impact studies. This requires shifting the weight of researchers' attention away from an exclusive focus on the marginal labour supply effects on individuals and towards an understanding of intrahousehold labour supply reallocation. This will involve paying close attention to issues hitherto secondary to the literature: sectoral occupational shifts, migration, and complementarities existing between transfers, care and work incentives. The paper will re-assess the available information from existing research, focusing on existing review studies.

The remainder of the paper is organised around three main sections. Section 2 will examine critically the focus of the current literature on social assistance transfers and labour outcomes. It will assess the nature of the constraints associated with quasi-experimental data and methods in the context of a productivist approach. Section 3 describes a stylised model of household responses to transfers highlighting intrahousehold resource reallocation. It will be argued this class of models can better support an assessment of the developmental labour market outcomes of transfers. Section 4 reassesses the information emerging from the empirical literature on household resource reallocation in response to income transfers. Section 5 will conclude by sketching a research agenda consistent with a re-focusing of research on the productivist effects of antipoverty transfers and it will extract implications for policy.

# 2. Current research on labour outcomes and productivist social assistance

Social assistance, defined as budget-financed rules-based transfers to disadvantaged groups with the aim of addressing poverty, is the most significant component of social protection systems in developing countries in terms of reach. Disadvantaged groups are seldom covered by social insurance and labour market policies (Castañeda et al., 2018). The number of social assistance programs in developing countries has increased significantly, rising from 89 in 2000 to 223 in 2015 (Barrientos, 2018). These programs range from unconditional cash transfers to transfers requiring investments in human and physical capital and assets and integrated multidimensional programmes. A summary and re-consideration of the effects more strictly linked to structural transformations is the central aim of the paper.<sup>3</sup>

The bulk of studies examining the labour market outcomes associated with participation in antipoverty transfer programmes in low- and middle-income countries focuses on testing for adverse impact on labour supply (Alzúa, Cruces, & Ripani, 2013; de Carvalho Filho, 2008; Eyal & Keswell, 2008; Foguel & Barros, 2010; Freije, Bando, Arce, Medina, & Bernal, 2006). This focus is in line with canonical economics research on the effects of transfers in high-income countries (Blank, 2002; Feldstein, 1987; Moffitt, 2002). Few studies consider the potential contribution of social assistance transfers to structural transformation in LMICs, even where this is the explicit objective of the programmes under examination. This section seeks

<sup>&</sup>lt;sup>3</sup> While the focus of the paper is on the supply effects at the micro-level, a small amount of evidence focuses on the productivist effects of social assistance at the aggregate level. Few previous studies have shown that transfer programs can have local multiplier effects by analysing consumption of non-beneficiaries (Angelucci & De Giorgi, 2009; Barrientos & Sabatés-Wheeler, 2011). Other studies also consider the demand side. Rougier, Combarnous, and Fauré (2018) use aggregated municipal data for the Brazilian state of *Ceará*, showing how the true extent of the local effects of transfer programs depends upon the structure of the local economy. They conclude that local multiplier effects would have been larger in poor municipalities if increased demand was accompanied by structural transformations of their economies.

explanations for the current focus and assesses the limitations of alternative approaches to the study of productivist effects of social assistance.

Aside from any professional/publication bias associated with the dominance of the canonical approach, the focus on labour supply prioritises the minimisation of the antipoverty budget. Poverty research implicitly adopts a non-welfarist perspective on the effects of transfers on poverty. In this context it is important that programme participants achieve a specific level of income or consumption. Where participants reduce their labour supply in response to the transfer, aside from targeted reductions in child labour, the poverty reduction effectiveness of transfer programmes diminishes. In the non-welfarist perspective, disutility associated with labour supply by groups in poverty is assumed to be precisely zero. This is a key part of the legacy from canonical studies in high-income countries.

The canonical approach has also influenced the existing programme evaluation designs. Reliance on quasi-experimental impact evaluations has ensured a focus on short-term effects (Barrett & Carter, 2010; Deaton, 2010). To date, quasi-experimental impact evaluations of transfer programmes share a short-term outlook, one or two years in the main. A short-term outlook combined with a focus on labour supply effects provides limited information to adequately assess the productivist effects of these programs, for example on higher earnings and labour productivity

A handful of studies look at medium-term effects (Behrman et al., 2011; Gertler, Martinez, & Rubio-Codina, 2012; Rodríguez-Oreggia & Freije, 2012), but studies on the long-run effects of these programmes are scarce (Molina-Millan et al., 2016). The constraints on examining developmental effects from transfers are partly methodological and data driven (Molina-Millan et al., 2016). Mexico's *Progresa* is a typical example. Its evaluation strategy relied on delayed implementation to generate a control group, with the delay as long as two years for

some locations (1998-2000). By end of 2000 the control group had received the treatment. In 2003 a new control groups was created which was later absorbed into the programme. In 2007 a further control group was identified which again was absorbed into the programme. Episodic data collection as in Mexico is problematic in our context because it makes it particularly hard to control for the idiosyncratic effects of economic factors and policy. Attrition is a further constrain on quasi-experimental evaluation of longer-term effects, particularly damaging in high migration contexts like rural Mexico.

Most studies on long-term effects (defined as more than ten years)<sup>4</sup> focus on the oldest programs in Latin America. Barham, Macours, and Maluccio (2017) find the *Red de Protección Social* (RPS) program in Honduras increased schooling and learning outcomes, off-farm work, and income for boys. By contrast, Araujo et al. (2017) find mixed results on education (positive effect on attendance, insignificant on learning outcomes) and no significant impact on labour market outcomes in the context of the Ecuador's *Bono de Desarrollo Humano* (BDH) unconditional transfer. Baez and Camacho (2011) and García, Romero, Attanasio, and Pellerano (2012) find that *Familias en Acción* (FA) improved school attendance, but not test scores. In a related study from Colombia, Barrera-Osorio, Linden, and Saavedra (2017) find that a conditional income transfer in Bogotá increased enrollment in tertiary education. Finally, two recent studies analyse the long-term effects of the Mexico's *Progresa* conditional cash transfer. Parker and Vogl (2018) find young adults who participated in the programme show better educational and labour market outcomes, geographic mobility, and household economic conditions. Kugler and Rojas (2018) find that the effects of delayed implementation

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<sup>&</sup>lt;sup>4</sup> Molina-Millan et al. (2016) define long term effects as "those that both: 1) are related to the accumulation of human capital, and; 2) are observed after beneficiary children have reached a later stage of the life –cycle". They focus on two life –cycle transitions: from early childhood to school; and from school to adulthood.

<sup>&</sup>lt;sup>5</sup> The program "Conditional Subsidies for School Attendance (*Subsidios Condicionados a la Asistencia Escolar*).

might not be significant where effects are cumulative, leaving the length of exposure as the only viable strategy to identify longer-term programme effects. They find that the average person exposed to *Progresa* for 8 years "is 36.6 percent more likely to be employed... and earning 5 more pesos per hour than an individual never exposed to the programme" (p.26). Aside from being scarce, available studies are also inconclusive even in relation to some critical outcomes. Conditional income transfers increase human capital investment in terms of schooling, but it remains uncertain whether programme participation translates into improved productive capacity and labour outcomes.

Long-term evidence of the effects of social assistance programs represents therefore a significant issue, especially due to methodological reasons. Natural experiments might provide an alternative route. Indeed, one of the most informative studies on the longer-term effects of social assistance transfers relies on administrative data. Aizer, Eli, Ferrie, and Lleras-Muney (2016) studied the lifetime effects of participation in the first government sponsored welfare programme in the USA, the Mother's Pension (1911-1935), the precursor for today's TANF. The programme provided transfers equivalent to 12-25 percent of family income to poor families with dependent children typically for a three-year period. The study tracked male child participants through Social Security records. Comparing the lifetime outcomes for children accepted and those rejected for entry into the programme, the study found that participant children lived 1 year longer on average (1.5 years for the poorest families), improved education attainment by 0.4 years and raised income by 14 percent during adulthood.

Discrete choice dynamic programming models provide another approach to extend the findings from quasi-experimental evaluations to assess longer-term effects (Petra E Todd & Wolpin, 2010). These models have several advantages. First, behavioural models replace the black box in quasi-experimental methods and frameworks. This enables a better understanding why particular outcomes are expected/observed. They also have the advantage

that alternative policy designs can be tested. Variants of these models have been applied to the study of the longer terms effects of antipoverty transfers (Attanasio, Meghir, & Santiago, 2012; Peruffo & Ferreira, 2017; Petra E. Todd & Wolpin, 2006).

In sum, the short-term focus on testing for adverse labour supply effects is in part due to the legacy of similar studies in high-income countries and in part due to the methodological and data constraints imposed by the structure of impact evaluation approaches to the effects of transfers on labour market outcomes. Quasi-experimental approaches are not as efficient for the study of longer-term effects as they have been for the study of short-term effects. Alternative approaches are available but are also limited in their ability to capture productivist effects. Natural experiments, where available, can be effective; but they might also need a longer time window to yield information on productivist effects. Dynamic discrete choice models are even rarer, but can provide information on why effects are expected. Finally, longitudinal data are not available to study productivist effects.

Given the limitations of existing approaches, it might be helpful to reassess the existing empirical literature to establish whether it provides information on short-term labour outcomes capable of throwing light on productivist effects. The next section describes a stylised model to assess what we are looking for.

#### 3. Modelling short-term labour outcomes and productivism

Studies relying on quasi-experimental data typically measure the effect of programme participation in a difference-in-difference setting by estimating the following equation with OLS (Alzúa et al., 2013):

$$Y_{ist} = \gamma_s + \theta_t + \alpha X_{ist} + \beta I_{st} + \varepsilon_{ist} \tag{1}$$

Where  $Y_{ist}$  is a measure of labour supply for the i-ith person, of group s at time t.  $X_{ist}$  captures individual characteristics and  $\varepsilon_{ist}$  is an error term.  $I_{st}$  is an indicator of treatment membership and time. The parameters  $\gamma_s$  and  $\theta_t$  capture group and time effects, while  $\beta$  captures the impact of programme participation. This approach provides a robust estimate of labour supply effects. It can also provide some information on sectoral shifts in employment and potentially migration, if information on migrants is available in the evaluation data. These effects can be interpreted as reflecting individual labour resource reallocation, for example. However, this approach fails to capture any reallocation, or augmentation, of productive capacity.

Rubio-Codina (2010) provides an enhanced model of household labour supply better able to offer insights into the intrahousehold resource allocation in the short run. The household maximises a utility function of the type

$$U = U(C, L_i, \dots, L_I; X, \varepsilon), \tag{2}$$

where C is household aggregate consumption and  $L_i$  is individual 's i non-labour time. X represents observable household heterogeneity and  $\varepsilon$  denotes unobservable household heterogeneity. The household has members i, 1 ... I, where adults are separated out as  $a=1,\ldots,A$ , children as  $q=1,\ldots,Q$ , and children receiving a transfer as  $k=1,\ldots,K\leq Q$ . Each household member has total time available T consisting of hours t which can be allocated to non-labour and labour activities t, say including paid and unpaid work. Activities have a marginal return t0. Children can allocate time to schooling with t1 with representing the direct cost of schooling, such as fees, uniforms, and transport. t2 is non-labour income and t3 is the price of a composite commodity. The household budget constraint is

$$\sum_{i} \sum_{j \neq s} w_i^j h_i^j + Y \ge pC + \sum_{i=q} w_i^s h_i^s$$
(3)

In line with conditional income transfer programmes, the transfer is divided into two parts, a household nutrition transfer dY > 0, and a transfer for each child of school age conditional on school attendance  $dw_k^S t^S > 0$ , where d denotes variation.

This implies that the household nutrition part of the transfer works as pure income effect, whereas the schooling part of the transfer has in addition substitution effects (it reduces the costs of schooling  $w_i^s$  and therefore the relative price of education, while at the same time placing restrictions on the time allocation of children). The substitution effect can be divided into two: (a) the effect of a variation in a members' labour supply in response to a change in its shadow wage, the own substitution effect; and (b) a cross substitution reflecting the effect of a change in the shadow wage of one family member on all other family members' labour supply, the cross-substitution effect. Rubio-Codina (2010) writes the total effect of the antipoverty transfer on the hours of work for individual in a participant household as:

$$dh_{i}^{j} = \frac{\partial \hat{h}_{i}^{j}}{\partial w_{i}^{s}} dw_{i}^{s} + \sum_{k \neq i} \frac{\partial \hat{h}_{i}^{j}}{\partial w_{k}^{s}} dw_{k}^{s} + \left[ -\sum_{k} h_{k}^{j} dw_{k}^{s} + dY \right] \frac{\partial h_{i}^{j}}{\partial Y} \quad \forall i, j$$

$$(4)$$

Where  $\widehat{h_t^J}=\widehat{h_t^J}(w,p,u;X,\varepsilon)$  is the Hicksian (utility compensated) labour supply. The first term describes own-substitution effects of the transfer; the second term describes the cross-substitution effects; and the third term describes the income effects. The first term reflects the increased school time among children of school age, given the conditional part of the transfer. The second term sums up the cross-substitution effects arising from other children living in the household and benefiting from the transfer. This effect nets out mixed incentives. A reduction in the direct cost of schooling can be expected to increase participation by adults in the labour market. To the extent that mothers provide most of the care for children, schooling reduces the shadow wage of unpaid work, although this effect will depend on the ages of all children, particularly whether they are of school age. If all children are of school age,

the reduction in the shadow wage of unpaid work raises. On the other hand, if children help with household chores, the reduction in the shadow wage of mothers might be attenuated. The crucial assumption here relates to whether children and adult paid and unpaid work are substitutes. The third term, the income effect, affects all members of the household and suggests a reduction in adult work.

This basic model provides a framework with which to examine the process of labour reallocation brought about by participation in the programme as well as the social/human investment component. The effects of the transfer on labour supply will be greatest for households facing constraints in their resource allocation prior to the programme, especially single mothers with children. The model will be generalized/extended to take account of other productive resource optimatization within the household, from above, such as child labour supply, informality and sectoral shifts, and migration.

# supply effects, they also document secondary effects on other labour outcomes throwing light on the productivist effects of transfers (Kabeer & Waddington, 2015). These secondary effects make sense in the context of intrahousehold labour resource reallocation and augmentation. This section collects and arrays these findings on three main labour outcomes: children's labour supply; sectorial reallocation of labour; and migration. Our approach is to focus primarily on results summarised, harmonised and processed in existing published meta-

analysis and systematic reviews on the effect of social assistance on the outcomes of interest,

such as child labour. Results are selected to illustrate the weight of the evidence as emerging

from these studies. Secondly, when review studies for the outcomes of interest are not

4. Household resource reallocation in response to income transfers

While programme evaluation studies have focused primarily on (short-term) adult labour

<sup>&</sup>lt;sup>6</sup> For example, the systematic review used here is from De Hoop & Rosati (2014)

available, we consider the findings from all the existing studies on the particular topic.<sup>7</sup> The aim is to consider all the available evidence in the broadest way.

#### 4.1 Child labour supply

Evaluations of antipoverty transfers find, with exceptions, to reduce child labour, at both the intensive and extensive margins (De Hoop & Rosati, 2014). The largest reductions in child labour are found in evaluations of conditional income transfers in Latin America where conditions imply a substitution effect (increased schooling) going in the same direction of the income effect, as modelled by Rubio-Codina (2010).8 Table 1 shows that *Bolsa Escola* in Brazil decreased work participation of children by 3%. Pure income transfers focused on children in Latin America also resulted in the reduction of child labour (Edmonds & Schady, 2012). Smaller, but still statistically significant, reductions in child labour have been estimated for social pensions and other pure income transfers in Africa. The effects are stronger where these programs are targeted to children or include implicit conditions (Abdoulayi, Angeles, & Barrington, 2015; Pellerano, Moratti, Jakobsen, Bajgar, & Barca, 2014; Seidenfeld, Handa, & Tembo, 2013).

#### [Table 1 about here]

Conversely, transfer programmes linked to investment in physical assets in sub-Saharan Africa and Asia fail to induce a reduction in child labour. A plausible explanation, grounded on theory, is that in this context the returns to child labour increase given household investment in physical assets (Covarrubias, Davis, & Winters, 2012; Miller & Tsoka, 2012). In the context of

<sup>&</sup>lt;sup>7</sup> The data was collected as part of an ongoing metastudy, but here the objective is simply to re-assess the

findings from key studies with a productivist component.

<sup>&</sup>lt;sup>8</sup> The shift in time allocation is complex, as demonstrated by the fact that the elasticity of substitution between

time at work and time at school is less than unitary (De Hoop & Rosati, 2014).

pure income transfers a negative substitution effect associated with increased returns to child labour is not ameliorated by conditions. Income and the negative substitution effects cancel each other out, with no effects on child labour.

A gender dimension is also relevant as the reduction in labour supply appears to be more pronounced for boys. Lower baseline labour force participation by girls in rural areas suggests girls reduce time spent in household chores to compensate the increased time spent at school (Skoufias, Parker, Behrman, and Pessino (2001), among many others).

Findings on labour supply effects of CCTs on siblings not receiving, or not eligible for, the transfer are also relevant (see Table 2). While the income effect should increase schooling and decrease child labour, the sign and size of the cross-substitution effect depends on whether schooling and work of eligible and non-eligibles are substitutes or complements. On this issue, studies have focused on comparing treatment and control villages or households. Lincove and Parker (2016) find positive effects labour supply effects among non-eligibles. On the other hand Barrera-Osorio, Bertrand, Linden, and Perez-Calle (2011) show that, within the same household, a child targeted by transfers is more likely to attend school, and work less, than a sibling who is not targeted. Interestingly, non-beneficiary siblings are less likely to attend school than are children in non-beneficiary households. Studying a programme in Cambodia, Filmer and Schady (2011) find no impact on the school enrolment of a beneficiary's ineligible sibling for a program, with older girls actually increasing their labour supply. These findings are consistent with negative cross-substitution effects as non-eligible children increase their time in work to substitute their siblings increased time at school.

<sup>&</sup>lt;sup>9</sup> Miller and Tsoka (2012) also found an increase of child labour (girls in household chores) for a program in Malawi.

<sup>&</sup>lt;sup>10</sup> As in this case we are considering CCTs, the negative substitution effect previously seen is not relevant.

#### [Table 2 about here]

#### 4.2 Sectoral employment

Findings on the sectoral labour reallocation is highly relevant when re-assessing the role of social assistance from within productivist perspective. A large number of studies shows that, in response to cash transfers, adults invest in on- and off-farm business, engaging in more productive activities (Bandiera et al., 2015, 2017; Blattman, Fiala, & Martinez, 2014; de Brauw, Gilligan, Hoddinott, & Roy, 2015; Hidrobo, Hoddinott, Kumar, & Olivier, 2018; Skoufias, Unar, & Gonzalez de Cossio, 2013). Moreover, some studies find a shift in labour supply and investments from on-farm to non-farm work (Asfaw, Davis, Dewbre, Handa, & Winters, 2014; Gertler et al., 2012; Maluccio, 2010; Tirivayi, Knowles, & Davis, 2016). Assessing household business investments, Bianchi and Bobba (2013) find that the positive effects of income transfers are driven to an important extent by insurance motives than by the lifting of credit constraints.

Sectoral labour reallocation was shown above to be relevant to the labour supply of children, especially as a consequence of labour demands associated with an expansion of microenterprises. This generates a cross-substitution effect moving in the opposite direction than the case of adults increasing their work time in work as a response to children increasing their time at school. Macours and Del Carpio (2009) show that girls increase labour supply to non-farm sectors, same as Alatas et al. (2011).

A related issue is whether social assistance transfers are associated with a shift in labour supply between the formal and informal employment (see Table 3). The formal-informal labour allocation has implications for future earnings and productivity. A preference for informal

poor rural transportation (Maluccio, 2010).

<sup>&</sup>lt;sup>11</sup> However, the evidence is not definitive. A CCT in Nicaragua reduced such investments. This is attributed to

employment can be driven by the aim of maintaining eligibility for programme transfers (Firpo, Pieri, Pedroso, & Portela Fernandes, 2013), especially as income from informal employment is less traceable. But the evidence on this point is inconclusive. Several papers document a negative effect on formal employment in Latin America (de Brauw et al., 2015; Garganta & Gasparini, 2015; Gasparini, Haimovich, & Olivieri, 2009; Ribas & Soares, 2011). On the other hand, receipt of transfers might facilitate formal employment where it can support longer job search. Pure income transfers in South Africa confirm a shift to formal employment (Tondini, 2017; Tondini, Ardington, & Woolard, 2017).

#### [Table 3 about here]

#### 4.3 Migration

Another labour outcome to consider is whether income transfers affect migration, both labour and non-labour induced. The relevance of migration in the context of productivist social assistance is that migrants seek work in better and more productive jobs than the ones available locally (Sabates-Wheeler & MacAuslan, 2007). Theoretically, income transfers can reduce migration if transfers from social assistance and the potential remittances are considered as substitutes. If, on the other hand, the two income flows are considered as complementary, migration should increase. This applies where regular income transfer can be used to finance migration.

A positive effect of transfers receipt on migration has been documented for pure income transfers in South Africa (Ardington, Bärnighausen, Case, & Menendez, 2016; Ardington et al., 2009), but also for CCTS in the context of international migration (Angelucci, 2015). The effects are relatively small. *Progresa* in Mexico reduces migration to the United States, while no effect

was documented on internal migration (Stecklov, Winters, Stampini, & Davis, 2005).<sup>12</sup> Blattman et al. (2014), in the context of Uganda, find that transfers lead to increased short term migration; but that migration decreases in the long term.

Studies focusing on migration effects among younger groups find that *Progresa* reduced boys' migration by 2%, while no effects were found for girls (Behrman et al., 2011). This suggests that boys continue schooling at home instead of migrating to look for a job.

#### [Table 4 about here]

#### 4.4 Interactions with other policies

The review of the literature shows that the effects of income transfers on the labour outcomes of interest depend to an important extent on the programme design and contextual factors. The former includes the level of transfers, conditions and their enforcement, the direct recipient of the transfer, beneficiary selection, and the interaction of transfers with other policies. It is important to pay attention especially to the interaction between income transfers with other interventions. When complemented by supply measure, transfers have been found to strengthen their impact on child work (Dammert, De Hoop, Mvukiyehe, & Rosati, 2017). Combining social protection with agricultural interventions has been shown to generate additional impact (Tirivayi et al., 2016), especially as most income transfers are implemented in rural areas (Veras Soares, Knowles, Daidone, & Tirivayi, 2017).

The context in which programs are implemented is as important. It has been documented that the effects of transfer schemes on labour outcomes differ between urban and rural areas (Lichand, 2010); regions; baseline poverty levels (Galiani & McEwan, 2013); and demographic

<sup>&</sup>lt;sup>12</sup> Angelucci (2015) finds the opposite effect using an alternative, and less robust, methodology.

and other socio-economic characteristics of households (Barrientos, Debowicz, & Woolard, 2016; Ferro, Lúcia Kassouf, & Levison, 2010; Ribas & Soares, 2011).

The fact that income transfers have larger effects in more disadvantaged contexts is important because of potential feedback effects. To the extent that antipoverty transfers have measurable income multipliers on local economies, they will minimise adverse trade-offs between structural transformation and inclusive growth whilst enhancing positive trade-offs. Studies on the effects of Mexico's *Progresa* on non-beneficiaries support the view that these effects might be sufficiently important to factor in (Angelucci & De Giorgi, 2009; Barrientos & Sabates-Wheeler, 2006).

In summary, this section collected, organised and re-assessed secondary findings from studies evaluating the impact of antipoverty transfer programme participation on labour outcomes. It focused on child labour, sectoral employment, migration and the interaction of income transfers and other interventions. Overall, these findings are consistent with productivist social assistance. They provide a strong indication that the most significant labour outcomes associated with income transfers are not to do with adult labour supply, but with the reallocation and augmentation of the productive capacity of disadvantaged households. They point to the role of social assistance in mitigating adverse trade-offs between structural change and inclusive growth.

# 5. Conclusions: A research agenda for productivist social assistance?

A productivist perspective on the impact of antipoverty transfers on labour outcomes points to an alternative research agenda, with implications for theory, empirics, and policy.

On theory, a key implication is the need to reconsider the weight of canonical models of the labour supply effects of transfers on current research in the context of low- and middle-income countries. There are of course contexts in which generous transfers might lead to measurable

reductions in the labour supply of beneficiary households and where existing social assistance transfer programmes need to be optimised to limit adverse effects on labour supply. But the findings from the literature suggest these conditions are the exception, as opposed to the rule. Adopting an alternative productivist perspective implies that theorising the effects on intrahousehold resource allocation and human capital investment should be the priority for current research.<sup>13</sup>

Section 1 provided a detailed review of alternative approaches to estimating the longer term effects of antipoverty transfers. It might be argued that empirical work on productivist social assistance currently lies in between two stools. On the one hand, reliance on quasi-experimental data restricts research to the investigation of short-term outcomes, themselves of limited value in assessing the productivist role of social assistance. On the other hand, longitudinal data capable of supporting reliable analysis of longer term effects of income transfers will not be available for some time.

In this paper we have argued that secondary findings from evaluations of short-term impact of transfers can provide valuable information on the productivist role of social assistance, providing that appropriate models are used to interpret these effects. A more provocative question is whether dominant experimental approaches are, or can be made, productivist friendly? Deaton raises this question in the context of development research (Deaton, 2010). We also made reference to two types of studies seeking to lengthen the time window to measure these effects. Studies relying on quasi-experimental data have sought to extend the time window through connecting evaluation and cross-section data. These studies are focused

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<sup>&</sup>lt;sup>13</sup> Research in high income countries has moved in this direction, especially as regards women's labour supply (Blundell & Macurdy, 1999), and on the configuration of welfare state institutions (Hemerijck, 2013).

on a handful of pioneer programmes like *Progresa/Prospera*. They are seriously affected by data attrition and are constrained by the range of variables captured in programme evaluation surveys. An alternative approach is to combine evaluation data with dynamic discrete choice models as advocated by Petra E Todd and Wolpin (2010) and implemented in a handful of studies. To our knowledge, no one is engaged in collecting longitudinal data to support research on the long-term effects of antipoverty transfers. Administrative data from Single Registries is the next best option, but it will be some time before the data accumulated in them can be employed for this purpose.

What about policy? The rapid expansion of social assistance in LMICs might make this question redundant. It is unlikely that this expansion will grind to a halt in the short and medium term. But it remains essential to the nature of the welfare institutions that are emerging in LMICs. A productivist social assistance pays close attention to improving the productive capacity of disadvantaged groups. Therein lies its significance for managing the trade-offs existing between structural change and inclusive growth, the key to 21c development models. This raises some interesting policy dilemmas. The expansion of social assistance has not been productivist everywhere. Remarkably, it has not been productivist in Asia, the bedrock of productivist social policy in the 1970s and 1980s. How best to strengthen productivism in practice? Emphasising productivism in policy naturally raises questions about the balance between the protective and the productivist roles of social assistance. These are the kind of policy questions a new research agenda might help to answer.

<sup>&</sup>lt;sup>14</sup> Following Rougier et al. (2018), the productivist effects of social assistance at the micro-level need to be enhanced and accompanied by economic policies at the macro-level.

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Table 1: Effects of income transfers on child labour supply

	Program			Treatment
Study	(country)	Outcome	Group	effect
	Bolsa Escola			
Ferro et al. (2010)	(Brazil)	Work enrolment	All children	-0.028***
		No. of hours worked last week	Girls	-0.378**
Barrera-Osorio et al.				
(2011)	SCAE (Colombia)	No. of hours worked last week	Boys	-0.619**
		Children 10 and older do		
		market work	Girls	-0.191**
		Children 10 and older do unpaid		
		market work	Girls	-0.159*
		Children 10 and older do		
		market work	Boys	-0.0941**
Edmonds and Schady		Children 10 and older do unpaid		
(2012)	BDH (Ecuador)	market work	Boys	0.0778
		Children doing household		
		chores	All children	0.077**
		Hours spent family		
		farm/nonfarm business	All children	0.161**
		Domestic work outside the	A 11 1 11 1	0.074***
		household	All children	-0.074***
		Paid domestic work outside the	All children	
	Social Cash	household	All children	-0.077***
	Transfer	liouserioid		-0.077
Covarrubias et al.	Programme	Hours spent on domestic work		
(2012)	(SCTP) (Malawi)	outside the household	All children	-0.261***
Del Carpio, Loayza,		Total labour hours	All children	-2.119***
and Wada (2016)	(Nicaragua)	Total labour hours	All children	-1.144**
and wada (2010)	(Micaragua)		All children	-1.144
		Doing any income-generating activity	Girls	-0.1***
		Doing any income-generating	GILIS	-0.1
		activity	Boys	-0.12***
Millon and Tools		· ·		
Miller and Tsoka		Doing any work on chores	Girls	0.11***
(2012)	SCTP (Malawi)	Doing any work on chores	Boys	0.08*
		Whether working	Girls 12-17	-0.023*
Clfi	PROGRESA	Whether working	Boys 12-17	-0.047**
Skoufias et al. (2001)	(Mexico)	Participating in domestic chores	Girls	-0.43***

<sup>\*</sup>Significant at 10%; \*\* Significant at 5%; \*\* Significant at

1%.

Source: Author's elaboration.

Table 2: Effects of income transfers on sibling's' labour supply

Study	Program (country)	Outcome	Group	Treatment effect
Barrera-Osorio et al	Conditional Subsidies for School Attendance	Attendance	Siblings	-0.03*
(2011)	(Colombia)	Enrolment	Siblings	-0.073***
		School participation	Boys	-0.085*
Rubio-Codina (2010)	PROGRESA (Mexico)	School hours	Boys	-0.558**
			Boys 12-13 years old (sometimes eligible)	-0.198***
Lincove and Parke			Girls 12-13 years old	
(2016)	RPS (Nicaragua)	Work participation	(sometimes eligible)	-0.046

<sup>\*</sup>Significant at 10%; \*\* Significant at 5%; \*\* Significant at

1%. Source: Author's elaboration.

Table 3: Effects of income transfers on formality of labour

Canada	Dua augus (a ayuntuu)	Out - and -	C	Treatment
Study	Program (country)	Outcome	Group	effect
		Hours worked in		
		formal sector	total ,18–69	-7.98***
	Bolsa Familia	Hours worked in		
de Brauw et al. (2015)	(Brazil)	formal sector	rural ,18–69	-0.369
	Universal Child Allowance for		unemployed and	
Garganta and	Social Protection	Probability of	informal workers,	
Gasparini (2015)	(AUH) (Argentina)	becoming formal	aged 18–70	-0.0695***
<u>Gaspariii (2015)</u>	(AOT) (Algeriana)	becoming format	ugcu 10 70	0.0033
	Programa Jefes de	Share of individuals		
	Hogar (PJH)	with a formal job in		
Gasparini et al. (2009)	(Argentina)	year 2	Adults	-0.034***
		Maintains formal		
	The Youth	records		0.114***
	Opportunities	Enterprise is formally		
Blattman et al. (2014)	• •	registered	2 years impact	0.051***
, ,	,		<u> </u>	
	Child Support grant	Informal if employed,	Mothers, non-	
Tondini (2017)	(CSG) (South Africa)	2011	White only	-0.0223**

<sup>\*</sup>Significant at 10%; \*\* Significant at 5%; \*\* Significant at

1%. Source: Author's elaboration.

Table 4: Effects of income transfers on migration

	Program			Treatment
Study	(country)	Outcome	Group	effect
			Female members (17-	
	SA-OAP	Migrating internally	51)	0.051**
	(South		Male members	
Ardington et al. (2009)	Africa)	Migrating internally	(17- 51)	0.034**
			individuals 14-	
		Y=1 if U.S. migrant	40	0.0037**
		Y=1 if U.S. migrant in	All eligible	0.0067**
Angelucci (2015)		household	households	
		Work related migration, all	All individuals	8.11***
		Work related migration,		
		male	All individuals	9.02***
		Work related migration,		
		female	All individuals	6.28***
		Work related migration,		
		different country	All individuals	0.69***
		Work related migration,		
		different state	All individuals	1.94***
Rubalcava and Teruel		Work related migration,		
(2006)		United states	All individuals	0.86***
		Migration 2000, short run	Villages	-0.14916***
Azuara (2009)		Migration 2005, long run	Villages	-0.29889***
			Treated	
		Migrating internally	households	-0.003
	PROGRESA		Treated	
Stecklov et al. (2005)	(Mexico)	Migrating to US	households	-0.002**
		Has changed parish since		
		baseline		-0.077***
	The Youth	Lives in large town or city	4 years impact	0.01
	Opportunities	Has changed parish since		
	Program	baseline		0.045*
Blattman et al. (2014)	(UGANDA)	Lives in large town or city	2 years impact	0.011

<sup>\*</sup>Significant at 10%; \*\* Significant at 5%; \*\* Significant at

1%. Source: Author's elaboration.

## Appendix

Table A1: Effects of income transfers on adult's labour supply

Study	program (country)	outcome	Treatment group	treatment effect
•		Whether working	Female	-0.01
	PRAF	=		
	(Honduras)	Whether working Whether working	Male Female	-0.005 -0.02
	RPS	_		
	(Nicaragua)	Whether working	Male 	-0.009
	PROGRESA	Whether working	Female	-0.02
	(Mexico)	Whether working	Male	0.003
		No. of hours worked (among those working)	Female	1.84
	PRAF	No. of hours worked (among		
	(Honduras)	those working)	Male	0.493
		No. of hours worked (among those working)	Female	-5.668
	RPS (Nicaragua)	No. of hours worked (among those working)	Male	-1.475
	DD 0 0555	No. of hours worked (among those working)	Female	0.184*
	PROGRESA (Mexico)	No. of hours worked (among those working)	Male	-0.015
	·	Working in agricultural occupation	Female	-0.036
	PRAF (Honduras)	Working in agricultural occupation	Male	-0.03
		Working in agricultural occupation	Female	-0.037
	RPS (Nicaragua)	Working in agricultural occupation	Male	-0.002
		Working in agricultural occupation	Female	-0.031
	PROGRESA	Working in agricultural		
Alzúa et al. (2013)	(Mexico)	occupation	Male	0.016
		Worked in labour market in last week (if worked at all, paid or unpaid) (Oct 98) Worked in labour market in	Males	-0.03
		last week – Salaried work (Nov 99) Worked in labour market in	Male 18-55+	0.025
		last week – self-employed / family business (Nov 99) Worked in labour market in	Male 18-55+	-0.007
Skaufing and D: *	Aaro DDOC DESA	last week – Salaried work (Nov 99) Worked in labour market in	Male 18-55+	0.001
Skoufias and Di M (2008)	/laroPROGRESA (Mexico)	last week – self-employed / family business (Nov 99)	Male 18-55+	0
. ,	PRAF	Worked last week		-0.0295*
	Tayssir	Worked last week		-0.0097

		PPPP	Worked last week	0.0096
		PAL	Worked last week	0.0135
		PKH	Worked last week	-0.0043
		RPS	Worked last week	-0.0202
		Progresa	Worked last week	-0.0089
		PRAF	Hours worked per week	-0.51
		Tayssir	Hours worked per week	-0.48
		PPPP	Hours worked per week	0.37
		PAL	Hours worked per week	1.15
		PKH	Hours worked per week	n.a.
Banerjee,		Hanna, RPS	Hours worked per week	-1.17
Kreindler, (2017)	and	Olken Progresa	Hours worked per week	-0.34

<sup>\*</sup> Significant at 10%; \*\* Significant at 5%; \*\* Significant

at 1%. Source: Author's elaboration.