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Supply-side and demand-side approaches to financing early childhood care and education in South Africa

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Abstract

Public financing of early childhood care and education (ECCE) in South Africa follows a supply-subsidisation model where finance flows to the provider of services. This paper considers whether there could be merits to an alternative demand-side approach to public financing of ECCE in South Africa where finance follows those benefitting from these services such as parents or caregivers. We identify key arguments for and against demand-side subsidisation from the existing international literature against the realities of ECCE provisioning in the local context. Specifically, the paper explores the suitability of two demand-side financing approaches, namely conditional cash transfers and demand-side vouchers for early childhood care or education. A key conclusion is that demand-side subsidisation approaches cannot replace existing supply-side approaches to public ECCE financing. A primary concern is that demand-side subsidisation in the absence of supply-side support is ineffective if supply-constraints are binding. Supply-side responses to support widening ECCE access are likely to be further limited as the COVID pandemic exacerbates information asymmetries rife in childcare markets. Concerns also pertain to the ethics, feasibility and efficacy of attaching ECCE attendance conditionalities to the receipt of existing cash transfers. In moving forward, implementing financial and administrative reforms of the existing supply-side model, including raising finance allocations for ECCE and resolving current administrative challenges in the sector, is simply unavoidable.

The Ilifa-Resep ECD Working Paper Series is a collaboration between Ilifa Labantwana and Research on Socio-Economic Policy (Resep) at Stellenbosch University. The working paper series aims to promote research that addresses the major systemic issues facing the ECD sector in South Africa. Key themes of the series include: financing and funding, labour, nutrition, ECD governance, regulation, economics of ECD, the household environment, and developmental outcomes of children. The series will contain research papers that address any of the components of the ECD essential package - early learning, parent and caregiver support, nutrition, maternal and child health, and social protection.

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1. Introduction

Effective finance strategies resulting in higher-performing early childhood care and education (ECCE) systems are characterised by an appropriate balance of three dimensions: sustainability, equity in access and administrative simplicity (Valerio and Garcia, 2013). The current financing system for ECCE in South Africa has been struggling to strike this balance. Despite two decades of expansion in access to ECCE, the quality of provision has been highly compromised (Kotze, 2015; Biersteker *et al.*, 2016). More recently access has suffered, with the sector contracting significantly in 2020 within a few months of lockdown and COVID-19 disruptions. Despite a partial recovery of the sector by the fourth quarter of 2020, of adults living with children aged 0 to 6 in the National Income Dynamics Coronavirus Rapid Mobile survey, just 28% reported a child attending an ECCE programme in November/December 2020 compared to 39% in February 2020 before the pandemic (Wills, Kika-Mistry and Kotze, 2021). Depressed access to ECCE services and the low quality of provision has exposed weaknesses in the current financing, regulatory and administration systems. Significant improvements and reforms are required with respect to ECCE financing, and the administration of this finance, if South Africa is to meet 2030 national targets for universal access to two years of quality ECCE services before children start Grade 1 (National Planning Commission, 2011), let alone seeing a sustained recovery in ECCE access to pre-pandemic levels.

The ECCE system in South Africa can be characterised as a quasi-market comprising a largely informal set of independent ECCE service providers. Providers of services consist of both registered and non-registered ECCE operators. Only registered operators - that are technically not-for-profit organisations - can receive subsidies in the form of means-tested per-child per-day operational subsidies. Although means-testing is linked to the child, subsidies are directed at providers. However, the reach and the level of the state subsidies for ECCE is limited. Bottlenecks and onerous requirements to register with the state as ECCE programmes make it difficult for new entrants or programmes in poorer areas to register to access subsidies (Giese *et al.*, 2011). Where received, the subsidy amount is very small – about R17 (USD 1.14)³ per-child per-day compared to about R96 (USD 6.41) per-child per-day⁴ in the schooling sector (Wills, Kotze and Kika-Mistry, 2020). Thus, despite the existing subsidy system, most ECCE programmes are highly dependent on payments of fees by caregivers (Carter, Streak and Judith, 2008). As we show in this paper, over 80% of children aged 0 to 5 attending ECCE programmes were being charged fees to attend pre-pandemic. By contrast in the South African schooling sector at least three quarters of children do not pay fees to attend school.

This current financing model, with low supply-side subsidies and significant parent co-payments, has over-exposed the ECCE sector to demand-side shocks, compromising the sustainability of programme offerings and exacerbating inequalities in access. Where ECCE fee payments are sporadic and sensitive to downturns in the economy, this presents a particular challenge for the sustainability of a sizeable proportion of unregistered programmes that are solely reliant on parent fees. Furthermore, recent limits to planned annual fiscal allocations for early childhood development also imply future constraints to real increases in subsidies directed at current or new ECCE providers (SmartStart, 2021), deepening ECCE programme dependence on parent fee payments. This in turn has implications for the financial health and sustainability of ECCE programmes and their ability to offer quality services to children.

Beyond the administrative bottlenecks to registration, oversight of the sector has been a major concern. For example, administrative irregularities and inconsistencies in the receipt of subsidies experienced have been reported by registered providers (BRIDGE *et al.*, 2020; Vorster, 2020). The system overall lacks data management systems, oversight structures and quality assurance processes. However, it is a challenging system to oversee, due to the largely informal nature of provision with many small ECCE operators providing a varied range of childcare modalities.

³ Using exchange rate of R14.97 as at 31 March 2021.

⁴ This is based on R19,099 per learner per year current expenditure, discounted using the Basic Education Price Index (BEPI).



In this context and given the proposed migration of the oversight function of early childhood development (ECD) from the Department of Social Development (DSD) (a welfare department) to the Department of Basic Education (DBE) by April 2022, now is an appropriate time to consider financial reforms for the sector. Drawing on international and local literature, this paper aims to contribute to debates on the suitability of alternate modalities of ECCE financing in South Africa. Using a classification framework that distinguishes financing approaches by whether the subsidisation follows the provider of services (a supply-side approach) or those benefitting from these services such as parents or caregivers (a demand-side approach), we highlight that public ECCE financing in South Africa has depended on a supply-subsidisation model. We consider whether there are merits to a demand-side ECCE financing approach which puts resources in hands of those who demand education (Patrinos, 2007). The reason to explore demand-side financing, is that it is believed to promote equitable and more efficient outcomes. By transferring funding to families, it is believed this approach can circumvent bureaucratic administrative systems, political ineffectiveness and may be less expensive than alternate supply-side approaches. However, there may be challenges associated with this approach too. In this paper we give attention to the advantages and disadvantages of two approaches with consideration to the South African ECCE context, namely, conditional cash transfers linked to ECCE attendance and demand-side vouchers.

As a point of clarification, this paper focuses on the direction of finance flows. It does not give detailed attention to sources of public finance, including raising finance for ECCE in the South African context (for a discussion on sources of ECD finance see for example Putcha and van der Gaag (2015)). Then with regards to definition, the paper identifies financing approaches that have been used or discussed internationally to support the expansion of early childhood childcare and education (ECCE), as a subcomponent of early child development (ECD).⁵ While focusing on ECCE, we acknowledge that the aims of early childhood development programming extend beyond childcare or education to promoting childhood nutrition, health, cognitive or socio-emotional development, improved familial care of children and promoting labour force participation (Cavallera *et al.*, 2019). The National Integrated ECD Policy approved by Cabinet in 2015 certainly envisages ECCE as a comprehensive set of services (Desmond *et al.*, 2019). Accordingly, developing a comprehensive financing strategy is complex and multisectoral in nature as it requires tapping into a variety of service delivery mechanisms (Valerio and Garcia, 2013).⁶ The financing mechanisms discussed here typically pertain to ECCE for children aged 0 to 5 and we focus on non-school based provision (i.e., excluding in-school grade R7).⁸ Using this definition, 41% of children aged 0 to 5 were enrolled in ECCE programmes (excluding school or grade R) according to the General Household Survey 2018. Although, enrolment is considerably lower among children aged 0 to 2, than those 3 to 5.

In the next section we provide background on South Africa's current ECCE financing system, highlighting the key shortcomings of the current system. Turning to our classification framework, section 4 then outlines various supply- and demand-side approaches to ECCE financing that exist in developed and developing countries. Section 5 then hones into demand-side approaches such as tax breaks and voucher schemes (or a combination of the two) to improve household access to market-based ECCE services. Section 6 then turns to international literature on the merits and disadvantages of conditional cash transfers for promoting ECCE access due to the prominence of cash transfer programmes in developing countries and South Africa specifically. We discuss the applicability and suitability of these demand-side funding mechanisms in the South African context in sections 7 and 8.

5 In South Africa these terms are generally used interchangeably although they are not the same terms.

6 A myriad of financing approaches has been considered internationally in promoting these outcomes individually or in tandem.

7 Grade R is a reception year before the first year of formal schooling which is typically provided in schools and is significantly subsidised through public finance. South Africa is close to achieving universal coverage in access to grade R.

8 Historically financing strategies for ECCE in South Africa have not been explicitly delineated by age. Expanding this short paper could involve giving more consideration to the need for mixed modalities in provisioning and associated delineation of financing strategies that are sensitive to age-specific childcare requirements. A dedicated research piece would also be necessary to interrogate financing options that pertain to an "integrated" ECD service package.



2. South Africa's current ECCE financing system

South Africa's existing ECCE financing system includes two main components: public funding that subsidises the operations of ECCE providers in direct or indirect ways and private payments of ECCE fees.

Direct public subsidisation to non-state ECCE providers

The bulk of early childhood development related budget allocations from the state for non-school based ECCE are made at provincial level by the Department of Social Development (DSD). There are two main channels for the direct flow of DSD funds to ECCE providers in the form of operational subsidies. The first is that registered ECCE centres (and in some cases conditionally registered centres) receive a per-child per-day subsidy of R17 for children aged 0 to 5 whose caregivers pass an income means-test.⁹ A second channel of DSD funds is programme funding for non-profit organisations (NPOs) in respect of ECCE programmes, most of which are not centre-based (Giese and Budlender, 2011). The amount of funding that is allocated to ECCE through these two channels is subject to how provincial governments choose to allocate funds received from national government across their provincial departments. For example, Gustafsson (2017, pp. 18–19) estimates that in 2016/17 about R5010 annually was allocated per child for ECD in KwaZulu-Natal compared to R3333 per child in the Western Cape.

In recent years, a third major source of public funding for the ECCE system - in the form of a 'conditional ECD grant' for infrastructure and maintenance - has been introduced to facilitate compliance with the National Integrated ECD Policy. The grant also supports additional funding for ECCE subsidies (South African Government, 2019). Unlike funding which flows to provinces through the equitable share formula,¹⁰ conditional grants must be spent on the purpose for which they are allocated and are thus subject to more accountability as to how they are used. The introduction of this 'ECD conditional grant' was a welcome move from the pre-2019 situation where the approach to public finance of programme infrastructure was less systematic (Financial and Fiscal Commission, 2015).¹¹

Public subsidisation to non-state ECCE providers through indirect channels

South Africa has a long history of large public works programmes, in particular, the Expanded Public Works Programme (EPWP) launched in 2004 which was preceded by the National Public Works Programme in the 90s. The EPWP is also an indirect source of government funding to support ECCE through accelerating the registration of ECCE programmes and thus the flow of government subsidies to programmes. Between 2007 and 2009 specifically, it is believed that the EPWP significantly supported the expansion of registered ECCE programmes (The Department of Public Works, 2010, p. 51). It has also resulted in the training of ECCE practitioners and occasionally infrastructure has been funded through the EPWP. Additionally, the Community Works Programme (CWP), whose budget is recorded through the Department of Cooperative Governance and Traditional Affairs (COGTA), indirectly finances 'labour' support for ECCE through stipends paid to community members for work on projects identified by communities which may include early childhood development (Giese and Budlender, 2011). CWP funds have also been used to pay part of ECCE practitioners salaries.¹² Thus both the EPWP and CWP have indirectly covered some centre costs (Giese *et al.*, 2011, p. 33).

9 The subsidy was only increased to R17 in 2020 and had remained stagnant at R15 for years despite inflation.

10 Provincial budgets are determined through an equitable share formula. The equitable share formula is strongly weighted to education. However, ECCE (that is not school-based grade R) is not counted in the education variable of this formula. ECCE (that is not school-based grade R) would fall under social services and welfare. But the equitable share formula does not include a variable for social development and welfare. Rather a poverty variable is meant to cater to this aspect of service delivery. However, once provincial budget amounts are allocated, provinces are not obliged to follow the formula. This can result in inequalities in how funds are allocated to ECCE across provincial DSDs.

11 ECCE infrastructure financing varied markedly across provinces (Financial and Fiscal Commission, 2015). Most provinces, except for KwaZulu-Natal, did not have an identifiable programme for financing the construction or maintenance of ECCE infrastructure.

12 This is possible because the CWP rules allow for 16 days per month of pay at a higher rate for "supervisors".



The National Development Agency is also known to have been another potential source of government funding for ECCE, with some allocation provided to ECCE practitioners (Giese and Budlender, 2011) or for limited infrastructure financial assistance in the form of mobile ECCE trucks, although little is known about this. Local municipalities may also allocate budget to support ECCE programmes. While they are under no obligation to fund ECCE activities, municipalities are responsible for ensuring ECCE centres comply with municipal health and safety bylaws (Financial and Fiscal Commission, 2015).¹³

Despite the complex stream of financing for ECCE, discussions on what is spent per child are typically restricted to per-child per-day subsidies because it is difficult to track multiple and varied streams of funds that flow via different departments to support ECCE. But clearly, the financing system is considerably more complex than just merely following subsidies (Financial and Fiscal Commission, 2015). Historically tracking funds channelled through the DSD for ECCE have been difficult because they are often “hidden” within the childcare and protection services budget sub-programme (Giese and Budlender, 2011). Since 2014/15 however this has become easier as budgets for ‘ECCE and partial care’ have been separated out from ‘children and families’ (Carter and Barberton, 2014). Reflecting on the state of financial reporting on ECCE expenditure, Gustafsson (2017, p. 19) argues that “the volume of financial information provided is fairly large, and categories, for both financial and non-financial information, are relatively standardised across provinces. What is missing, however, is a clearer sense of how departments are dealing with the central trade-offs between the quantity of services offered, the unit costs of those services, and their quality.”

Private payment of fees by parents

Pre-pandemic, ECCE fee payments were made for nearly 80% of children aged 0 to 5 attending some form of ECCE programme. If one excludes from definitions of ECCE enrolment grade R, school attendance and the care of day-mothers, ‘gogos’ or childminders, then fees are charged for around 90% of children aged 0 to 5 attending ECCE programmes. This is shown in Figure 1 which juxtaposes ECCE enrolment against private fee payments.¹⁴ However, the extent to which fees are charged, and the amounts that are charged, vary by factors such children’s age, and socioeconomic status.

Pre-pandemic, monthly fees charged differed by household wealth indicators. In Figure 2 we distinguish fee payments across poorer and wealthier children attending non-grade R ECCE, while Figure 3 shows corresponding attendance rates by household income quintile. For children aged 0 to 5 from the poorest quintile 1 households attending non-grade R ECCE in 2017/18, about 24% did not pay any monthly fees, 19% pay between R1 and R100 per month, 31% pay R101 to R200 per month, and a remaining 26% pay over R200 per month as seen in Figure 2. As expected, the distribution of monthly ECCE fee payments for children from wealthier households is significantly more skewed toward higher fee brackets. For children aged 0 to 5 that attend non-grade R ECCE and live in the wealthiest quintile of households, almost 77% are charged more than R200 a month for ECCE, while 26% pay over R1000 per month. There are also differences in fees charged by age of child attending (see Figure A 1).

Using wave 3 data from the National Income Dynamics Study – Coronavirus Rapid Mobile Survey (NIDS-CRAM), Wills et al (2021) also show that households’ ability to afford ECCE fees is closely tied to structural inequalities. Compared with respondents who could afford ECCE fees in October 2020, respondents who report that they or someone in their household could not afford ECCE fees were more likely to be black, women, poorer, grant recipients, less likely to be employed and more likely to be unemployed but searching for work. Under the current ECCE financing system, this evidence suggests that where ECCE attendance is linked to fee payment, widening inequalities in ECCE access are expected.

In the same study, Wills et al (2021) also show that ability to pay fees is the strongest determinant

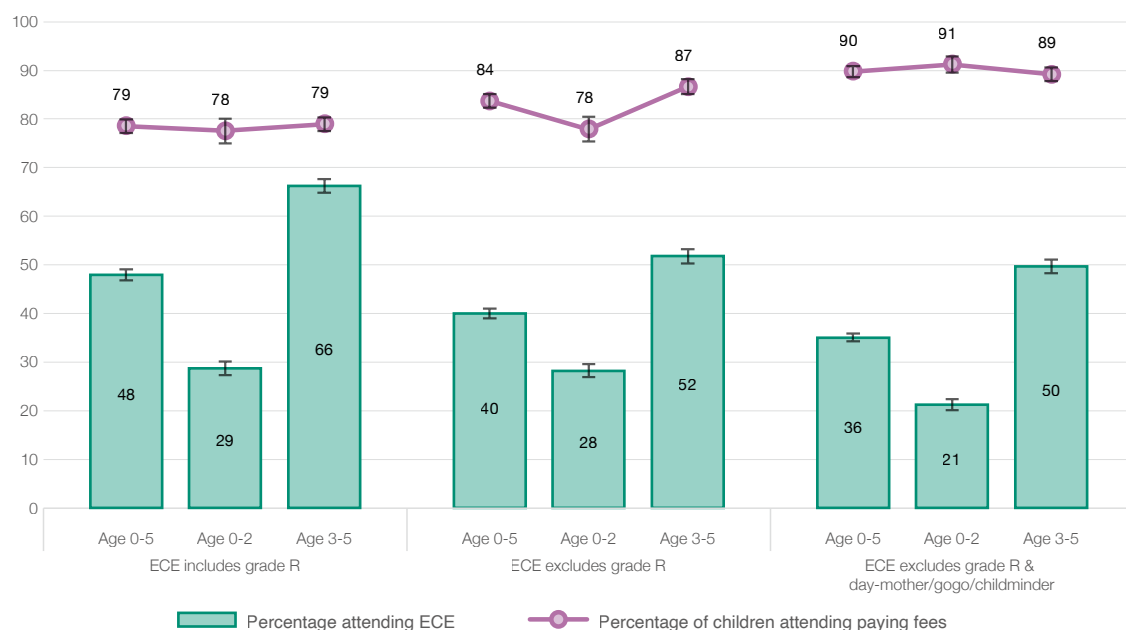
¹³ Also noted is that funding for training for ECCE comes from the DBE budget – both for learnership stipends and through the Department of Higher Education and Training (DHET) for TVET colleges, as well as for in-service training on the national curriculum framework.

¹⁴ Excluding day-mothers from ECCE programmes, makes a particularly large difference to whether fees are paid for children under 1.

of whether children access ECCE services. NIDS-CRAM respondents indicating they or someone in their household could afford the fees for children to attend an ECCE facility in October 2020, were 43 percentage points more likely to report that children attended ECCE programmes in the past 7 days, after accounting for background characteristics and the available supply of ECCE programmes. The shock of lockdown on household income, however, has significantly impacted on household ability to pay ECCE fees. Of the respondents paying fees for children pre-lockdown, almost half (48%) said they couldn't afford ECCE fees in October 2020.

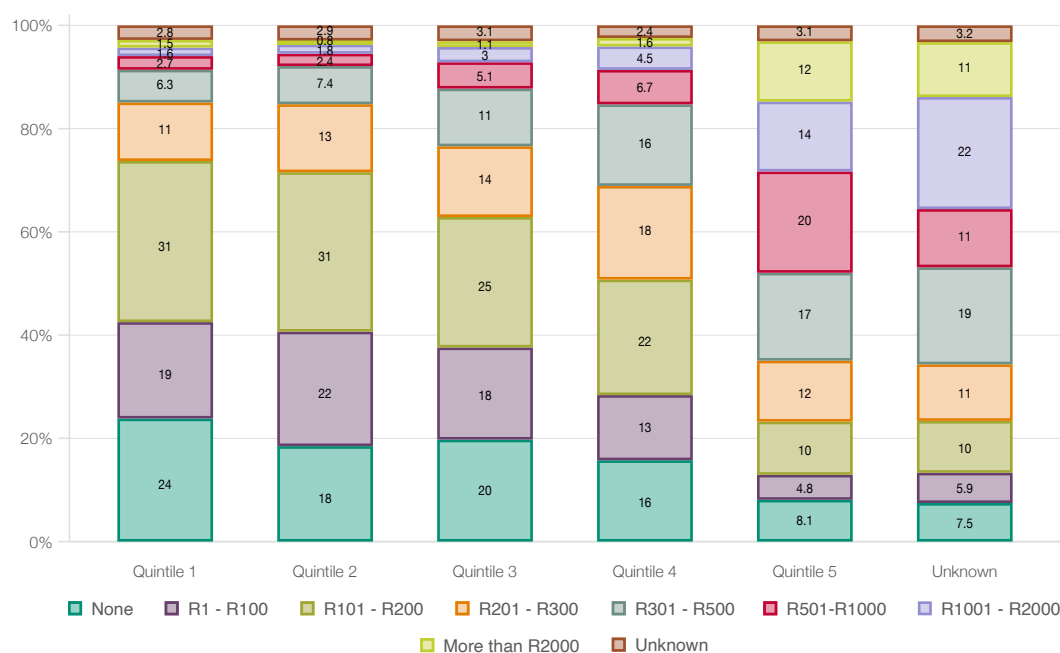
Although not all children attending ECCE pay fees, Wills *et al.*, (2021) find a very strong correlation between reported meal receipt at ECCE programmes in February 2020 and whether fees are paid to attend. This suggests that pre-pandemic it was evident that there was a direct link between caregivers' ability to pay for ECCE services and the quality of ECCE care (reflected in meals) that was being provided.

Figure 1: Percentage of children aged 0 to 5, 0 to 2 and 0 to 3 attending ECCE programmes against percentage of those attending for whom fees are paid, GHS 2017 & 2018



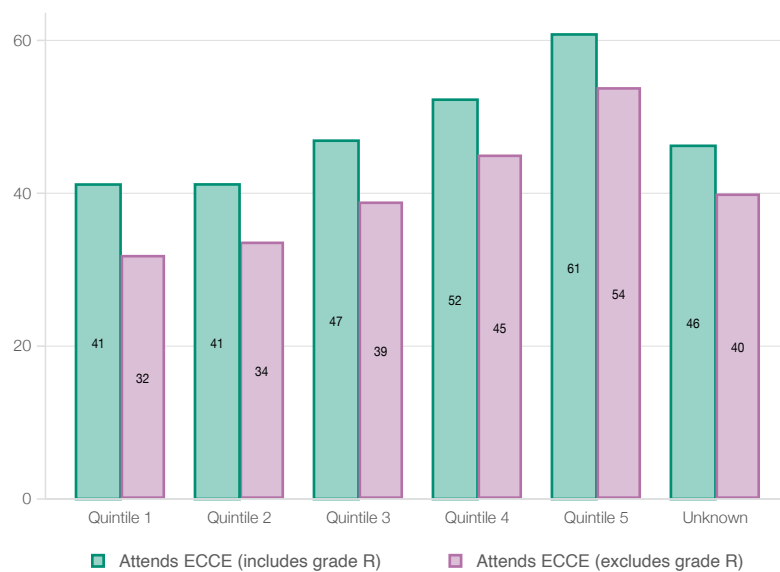
Source: Own calculations using the General Household Survey 2017-2018. Notes: Weighted, clustered, stratified estimates. Error bars are 95% confidence intervals. The fee question in GHS is worded as "Does the household pay any fees for ... to be cared for, or to attend an ECD facility? If yes, how much is paid per month?". Although grade R is included in the first set of estimates, attendance at "school" is excluded.

Figure 2: Amount of fees paid monthly for ECCE (that is not grade R) for children aged 0 to 5 by household income quintiles, GHS 2017 and 2018



Source: Own calculations using the General Household Survey 2017 and 2018. Notes: Weighted estimates. ECCE programme attendance includes attendance at a "Pre-school, nursery school, Grade 00, Grade 000"; "creche or educare centre"; "day mother, gogo, child minder"; or "home, community, play group". The fee question in GHS is worded as "Does the household pay any fees for ___ to be cared for, or to attend an ECD facility? If yes, how much is paid per month?".

Figure 3: Percentage of children aged 0 to 5 attending ECCE by household income quintiles, GHS 2018



Source: Own calculations using the General Household Survey 2018. Notes: Weighted estimates. Although grade R is included in the first set of estimates, attendance at "school" is excluded.



3. Shortcomings of the current ECCE public financing system

Increased political will to prioritise ECCE (South African Government News Agency, 2020), the introduction of the National Integrated ECD policy (Desmond *et al.*, 2019) and the provision of conditional grants for ECD are all notable developments in the sector. These recent developments should not be overlooked. Nevertheless, there remain significant shortcomings to the existing system of ECCE public financing and administration. We highlight three main areas to be addressed.

Limited reach of public ECCE financing

It is challenging identifying credible information on the number of children subsidized at registered programmes or the number of registered programmes.¹⁵ One government platform cites about 800,000 children accessing about 14,000 registered ECCE programmes in 2020, but subsidies of R17 per-child per-day are allocated for only 630 000¹⁶ children at registered ECCE programmes. Another figure is cited at 700,000 children subsidised in 2020. It is suggested that 1.5 million children, that may be eligible to receive subsidies, are estimated as attending ECCE programmes that are not registered, and thus not receiving public subsidies (BRIDGE *et al.*, 2020). While the exact numbers are unclear, what is obvious is that reach of public finance to support ECCE is severely limited and that unregistered programmes are likely to outweigh the number of registered programmes.

A key constraint to increasing the reach of subsidies, is the bottleneck in programme registration. The Department of Social Development's (DSD) registration process requires compliance with a stringent set of norms and standards that require financial investments (for example infrastructural investments) that are often completely out of reach for programmes, particularly those in poorer areas (Kotze, 2015). A large proportion of ECCE programmes thus operate illegally. It is noted though that some efforts are underway to address the bottlenecks to registration. The introduction of the maintenance component of the 'ECD conditional grant' is intended to resolve infrastructural constraints to registration, albeit some provinces have reported notable constraints in rolling out ECCE conditional grants.¹⁷ The DSD also recently partnered with the Nelson Mandela Foundation under the banner of Vangasali-Every Child Counts campaign to find and assist such programmes to comply and register as required by law.

Limited depth of public financing for ECCE

In South Africa, subsidy amounts for ECCE have been determined in relation to budget constraints and spending priorities rather than by viewing ECCE cost structures in terms of their implications for the quality of ECCE programming (Staab and Gerhard, 2010). While ECCE subsidies have spurred periods of expansion in ECCE access, at R17 per-child per-day in 2021 the subsidy value is simply too low to support decent wages or quality programming.

By comparison, the national minimum wage in 2021 is R21.70 per hour or R173 per day. If just 30% of the ECCE subsidy can be allocated for practitioner salaries (BRIDGE *et al.* 2020) a single practitioner in the absence of collecting fees would have to look after 34 children per day to earn a daily national minimum wage. As another point of comparison, it is estimated that the state spends about 6 times more per child attending school compared to an ECCE programme (Wills, Kotze and Kika-Mistry,

¹⁵ Despite the introduction of an "ECCE and partial care" sub-programme in DSD provincial reporting from 2014/15, provincial DSDs do not have standardised reporting of performance indicators in their Annual Reports. This makes it difficult to compare reports of subsidised children across provinces. One simple change to improve tracking of ECCE financing outcomes would be to standardise performance reporting indicators across provinces.

¹⁶ If subsidisation is related to attendance of the child, then identifying a number subsidized over a yearly period would require knowing exactly which children were attending on certain days. Where attendance may be irregular, it is also unclear for how many days the subsidy was allocated per child for the year.

¹⁷ A brief review of annual DSD reports from 2018/9 are indicative of constraints faced in meeting ECD grant spending targets, particularly in relation to infrastructural projects. Often issues with awarding tenders to contractors or contractor related constraints are noted.



2020). Interestingly, at 6 times more, spending on subsidies would be equivalent to the estimated cost to replicate the Perry Preschool Project in South Africa (using South African salary prices) which provides just 2.5 hours a day of early stimulation, excluding any daycare (Desmond *et al.*, 2019, p. 285).

Desmond *et al.* (2019) also estimate that to replicate a less costly middle-income country programme similar to Chilean preschool programmes with early stimulation and subsidised daycare (rather than covering full costs) would also require much higher subsidy values. Applying South African salaries and running costs, the cost would be close to USD 2.8 which equates to R42¹⁸ per-child per-day, or 2.5 times the current subsidy amount.¹⁹ They then extrapolate these costs to providing a coverage level of 80% of the targeted 65% of children between the ages of 3 and 4.5 years. This amounts to R6.7 billion per year (USD 450 million). If fully funded, rather than partially subsidised, R13 billion annually would be required. By comparison, the planned national budget in 2023/24 allocated for subsidies of children of a much wider aged group (0 to 5) is estimated at just R3.3 billion²⁰ (National Treasury, 2021, p. 328). It is noted however, that annual ECCE contributions are larger than just subsidy amounts, but tracking and converting other ECCE budget streams to a per child expenditure figure is challenging with multiple budget streams, and this is further complicated by the lack of an ECCE information management system.

Evidently, the nation needs to be planning for higher subsidies per child, while accounting for yearly growth in the population of children under 5 that are eligible for subsidies. Unfortunately, there are no signs of this improving in the medium term. Given the constrained fiscal environment in South Africa, exacerbated through lockdowns, forecasts on ECCE subsidy spending remain flat till the end of the 2023/24 financial year (SmartStart, 2021). Considered against projected forecasts of children to be subsidised, it is anticipated that less per child will be spent in real terms with each coming year (SmartStart, 2021). This implies that the sector will become increasingly reliant on parent fees²¹ in a context where households are struggling to afford ECCE fee payments (Wills, Kika-Mistry and Kotze, 2021). This has significant implications for access and quality of provision.

Inconsistencies and challenges in the administration of operational subsidies

Beyond the challenges of accessing public subsidies, once programmes are registered, there remain inconsistencies in the allocation of subsidies and administrative challenges in monitoring subsidy allocations. Provinces may also use different income thresholds in the DSD means-test to determine eligibility for the subsidy and in the number of days of the year for which the subsidy is paid (Giese and Budlender, 2011).

Another challenge for the payment of subsidies is the lack of an electronic system for programmes to record daily child attendance, to support the efficient transfer of per-child per-day subsidies. Currently this process is quite manual, where social workers collect attendance registers and submit these to provincial DSDs to process payments. In general, the development of data management systems and more human resources are desperately needed to support improved management of the system.

4. Classifying financing approaches

In the early 2000s investing in the early years became a high strategic focus area in the development community. Support for ECCE was met with an interest in appropriate mechanisms for financing investments in the early years, and for childcare expansion. Belfield (2006) and Valerio and Garcia

¹⁸ USD to ZAR exchange rate assumed to be R14.97 on 28 March 2021.

¹⁹ Covering the full cost of daycare would double costs to R86 per-child per-day (USD 5.6) or R13 billion per year.

²⁰ After accounting for the ECD conditional grant, it is stated that a subsidy value of R17.50 for 717 767 children is anticipated in 2023/24 (National Treasury, 2021, p. 328). Subsidies are typically provided for 264 days in a year.

²¹ Fortunately, the ECD conditional grant which is distinct from funds allocated through the equitable share formula, remains in place, and is annually projected to escalate at or above inflation.

(2013) for example, mapped available sources of funds for ECCE financing (e.g. public, private or combinations of these) and the modalities – direct or indirect - by which funds could be channeled to ECCE providers or parents. Staab and Gerhard (2010) further classify financing approaches in terms of the aims or objectives they try to achieve or in terms of target beneficiaries, as not all financing approaches aim for the same goal or target beneficiary. This paper frames discussions on financing approaches by whether finance follows the supplier or ECCE provider (a supply-side approach) or whether it follows the parent or child (demand-side approach) (Patrinos, 2007).

Supply-side subsidisation

There are a range of supply-side subsidisation approaches available to stimulate the expansion of ECCE services.

- a. The first approach is **direct government provisioning**. Here ECCE services are funded, managed and implemented by the government, for example as in Chile. Either public services are provided free of charge or may involve a co-payment of fees by parents/caregivers. Co-payments may be capped depending on household incomes. For example, Colombia's home-based childcare programme has been funded through a mix of public financing and parental fees, with fees being capped at less than 25% of the daily minimum wage (Bernal and Fernandez 2012). Direct government provisioning is typically subject to stricter regulations to guarantee minimum quality standards, affordability, and equity in access.

Across the world, however, the direct public provision of ECCE (particularly childcare as distinct from pre-school) is not the norm (Bastos and Cristia, 2012). It is more common for subsidies to be provided to non-state institutions such as private for-profit, non-profit, or faith-based providers as is the case in South Africa. The non-state sector presents an opportunity to crowd-in resources to meet a range of parental and childcare needs through multiple models of provision. Public-private arrangements can be structured with varying degrees of formality and complexity; and a range of subsidisation strategies to support private or non-state provision of services is possible including:

- b. A **once-off investment** to providers to help establish or 'set-up' programmes. Alternatively, a **phased approach to investment grants** may be preferred, where conditionalities for phases of investment can be linked to providers reaching certain target outcomes such as frequency of attendance, registration requirements, meeting stipulated quality criteria or certification of practitioners. Where additional investment grants provided are tied to performance indicators, this is akin to results-based financing (RBF) which has gained traction as a popular approach to improve the efficiency of spending in education systems (Gustafsson-Wright, Gardiner and Smith, 2016).²²
- c. Another approach is to implement ongoing **operational subsidies**. Subsidies paid to providers may be "means-tested" or determined in relation to the incomes of households in which children live. For example, in South Africa the per-child per-day subsidy is linked to a "means-test" of caregivers. Subsidies may also be subject to regulations as to how they are spent. Ongoing payment of subsidies may also be results-based, subject to providers meeting certain key performance indicators or target outcomes (i.e. result-based financing (RBF)). The conditionalities or RBF indicators attached to subsidies will have implications for equity, access, quality and/or sustainability of non-state ECCE operations. In South Africa, the subsidy is based on attendance rather than enrolment.
- d. Government or other private or international agencies may provide once-off or regular allocations to providers to cover **specific input costs** (for example, land, buildings or covering teacher salaries).
- e. A common financing strategy for ECCE in wealthier country contexts is the availability of **tax**

²² It is noted that a pilot RBF arrangement for ECD was launched in 2018 in the Western Cape province. The Western Cape DSD entered a matched funding arrangement with ApexHi Charitable Trust, a private sector outcome funder. Private investors will invest about US\$540,000 up front to fund the Western Cape Foundation for Community Work (FCW) ECD programme over a three-year period. The private investors are repaid with a return on their investment by the government department and private outcome funder if and when improved social outcomes are achieved over the three-year bond term (Graduate School of Business - University of Cape Town, 2018).

breaks to private employers that offer ECCE options for employees..

- f. **Public works programmes (PWP) and related “job-creation” efforts to increase available work opportunities can also be used to promote and support childcare and pre-school expansion.** There are two ways in which this usually occurs. First, temporary or mobile childcare can be directly attached to PWP work sites. For example, in India with the largest public works programme in the world (called the National Rural Employment Guarantee Scheme (NREGS)), the presence of a childcare facility is mandatory at all work sites where more than five children under the age of six are present (Rawlings, Trios and Willenborg, 2020). Second, PWPs can promote training among ECCE workers to improve their future employability and earnings, or PWPs can be utilised to promote certain ECCE objectives such as registration or licensing of centres.²³ In India, the NREGS has also supported the building of creches to support infrastructural improvements of Anganwadi.²⁴ It is noted however that there can be a direct conflict between PWP objectives and those of cash transfer programmes to promote child wellbeing if participation in PWPs reduces household time available for adequate care of children where quality care substitutes are lacking (Chari *et al.*, 2019).²⁵

Of course, countries may choose to use a mix of supply-side subsidisation approaches. The choice of service modality (public versus private) and subsidisation mechanism will be informed by institutional legacies, politics and country frameworks for social policy (Staab and Gerhard, 2010). The mixed-nature of private and public provision of services will also lend itself to both public and private sources (households, corporate or donors) of financing. However, the gap in the levels of funding required for ECCE in developing countries necessitate ECCE finance is mainstreamed²⁶ into national public funding rather than just relying on ‘innovative’ private financing. As Putcha, Upadhyay and Burnett (2016, p. 54) reflect:

The more fundamental drawback of focusing too strongly on innovative financing is that it relegates ECD to a ‘special category’, and detracts attention from securing long-term, sustainable investments from governments. Ultimately, ECD should not solely be associated with innovative financing but should be able to benefit from those traditional sources of finance that support investments in older children and adults.

Demand-side subsidisation

Demand-side subsidisation of childcare or ECCE can take three forms:

- Tax breaks or rebates for parents/caregivers if their children attend ECCE facilities (only covers children with formally employed caregivers).
- Vouchers for childcare to households or specifically poor mothers, with the intention of promoting maternal employment.
- Conditional cash transfers linked to ECCE enrolment.

Table 1 summarises the different supply-side and demand-side approaches used in developed and developing countries. The table also identifies which of these approaches are currently used in South Africa. As is evident, South Africa currently has no demand-side mechanisms in place to support ECCE financing. For this reason, we dedicate the remainder of this paper to outlining demand-side approaches to ECCE financing and their applicability to the South African context. In the next section, we review the benefits and challenges of voucher schemes.

23 PWPs and related “job-creation” efforts are likely to play an influential role in COVID-19 economic recovery plans in South Africa and other developing countries (Gentilini, Almenfi, Orton, *et al.*, 2020).

24 “Anganwadi Centres”. Ministry of Women and Child Development, Government of India. Retrieved 30 March 2016.

25 A recent study on India’s NREGS, found that maternal employment in the programme had negative impacts on newborn infant survival due to the reduced maternal time spent caring for and nurturing young children (Chari *et al.*, 2019).

26 Country examples, particularly evidence of the positive impacts of Columbia’s payroll tax for welfare support, show that with political will, stakeholder engagement and prioritisation, it is possible to improve public financing for ECCE quality and access (Cardenas and Cadena, 2020).

Table 1: Financing approaches to promote increased utilization and expansion of ECCE

South Africa current	
1. Supply-side subsidisation	
a) Public provision of ECCE through government <ul style="list-style-type: none"> i. No-fees (full subsidisation by government) ii. Co-payment of fees by parents 	
b) Investment grants to non-state providers <ul style="list-style-type: none"> i. Once-off grants (e.g. for infrastructure, fixed input costs) ii. Phased-approach to grants <ul style="list-style-type: none"> Results-based (e.g. additional investment grants linked to evidence of outcomes such as attendance, meeting quality standards, or practitioner certification) Non-results based 	Yes - ECD conditional grants
c) Operational subsidies to non-state providers <ul style="list-style-type: none"> i. Means-tested (or sliding-scale based on needs) ii. Results-based iii. Non-results based iv. Conditions on expenditure of subsidies (e.g. subsidies are earmarked to cover specific input costs such as food and staffing salaries) 	Yes Yes (means-tested) Yes (subsidy payments linked to attendance) Yes
d) Allocations or arrangements to cover specific input costs (for example, land, buildings or teacher salaries)	
e) Tax breaks to private employers offering childcare or ECCE services to employees' children	
f) Subsidisation of ECCE through public works programmes <ul style="list-style-type: none"> i. Childcare is provided at public works project sites (could involve private or public-private partnerships) to promote maternal employment ii. Government covers labour costs (salaries) or training of ECCE practitioners or support staff to promote job creation 	Yes
2. Demand-side subsidisation	
a) Tax breaks or rebates for parents/caregivers if their children attend ECCE facilities (only covers children with formally employed caregivers)	
b) Vouchers for childcare to households or poor mothers	
c) Conditional cash transfers linked to ECCE enrolment	

7. Tax breaks, rebates and voucher schemes for childcare

The provision of financial support to households or parents to ECCE services is common in developed country contexts. Childcare vouchers are disbursed to parents through tax allowances (i.e. childcare costs can be treated as a taxable expense) or as transfers to cover some or all of the costs of childcare. A primary aim of these policies is typically to promote labour force participation, particularly of women. As an exception, vouchers can also be used to disincentivise the use of childcare as is the case in Norway (Kornstad and Thoresen, 2007) and rather promote care of children at home which is considered more beneficial for child development although this reduces female labour market supply. But the aims of vouchers also extend to allowing for more flexible responses to childcare needs through market-based approaches, and promoting parental choice²⁷ in how care is combined with employment (Staab and Gerhard, 2010). Political will to implement vouchers typically requires a strong belief in the social economy provision of public goods.

In Australia, Netherlands and especially the United States, childcare voucher schemes to encourage use of market-based childcare services have been implemented for many years (see Table 2). These vouchers are distinct from any subsidisation for pre-school attached to formal schooling. In all three countries the vouchers are offered in relation to an income sliding scale, with the US's voucher system strongly favouring the poorest. Up until recently in the United Kingdom, childcare subsidisation has taken the form of a hybrid between tax rebates and vouchers. Working parents can purchase childcare vouchers at their own cost and this is then treated as a taxable expense on their tax returns (Employers for Childcare, 2020).

There are limited examples of tax-breaks and rebates being used to promote ECCE access in developing countries, largely due to a small proportion of developing country populations being eligible to pay tax due to low earnings or due to the informal nature of work. There are also few examples of demand-side vouchers for ECCE in developing countries. However, we provide some reflections on tax-breaks, rebates and vouchers for ECCE from developed country contexts. We then draw on literature on demand-side vouchers for schooling in developing countries. Given that South Africa's ECCE sector is dominated by low-fee private providers, there is some utility in looking at the literature on school voucher schemes in developing country contexts with many low-fee, private school providers.

Tax-breaks, rebates and vouchers for ECCE

Warner and Gradus (2011) review voucher schemes in Australia, Netherlands and the United States, identifying the benefits and challenges of such schemes. Arguments in favour of vouchers are that they can promote increased efficiency, increased competition on the supply-side while stimulating choice and voice on the demand-side. In middle income countries vouchers delivered to households may also have an appeal over subsidies directed at providers, in that they can be directed at the poorest households (Aran, Munoz-Boudet and Aktakke, 2016). By contrast where subsidies to ECCE programmes are not means-tested (in relation to children attending), they may benefit poorer and wealthier children attending the same programmes.

Despite these proposed benefits, voucher schemes are designed on the premise that increased parental demand generates a supply response. Due to distortions or failures in childcare markets, which by nature are highly complex (Warner and Gradus, 2011; Bastos and Cristia, 2012), the success of childcare voucher schemes is not always guaranteed. On both the supply- and demand-side of the childcare market, there exist strong incentives to substitute between formal, informal, and non-market forms of care (such as household care of children). Information asymmetries are rife, where the disaggregated and individualized nature of demand makes it hard for suppliers to recognize the need for a supply response – especially in

²⁷ Public choice theory allows that public goods can be provided through market mechanisms, such as vouchers, if information, effective demand and consumer choice can be clearly expressed.

low income and rural areas. Furthermore, childcare provision is often characterised by low profitability and low effective demand, which may result in insufficient or uneven supply if the level of the voucher is insufficient to guarantee a return (Warner and Gradus, 2011). In the countries in review, voucher schemes did little to support childcare usage in hard to serve markets.

Concerns about supply-constrained responses have been elevated through COVID-19 shocks. Recent experiences during COVID-19 reveal that ECCE systems remain vulnerable to demand-side shocks even in the presence of demand-side vouchers. For example, in the United Kingdom, childcare operators have been vulnerable to demand reductions during COVID-19 as parents have paid less into their voucher accounts linked to tax rebates (Employers for Childcare, 2020). The Great Recession of 2008, also significantly eroded childcare supply in the USA, despite the existence of voucher schemes (Powell, Thomason and Jacobs, 2019). Finally, voucher schemes do not guarantee the quality of supply. In the Netherlands for example, very significant increases in childcare usage were met with declines in the quality of centre care (Warner and Gradus, 2011).

A key conclusion in the review by Warner and Gradus (2011), is that government has to play a coordinating role, as vouchers and tax rebates alone cannot guarantee a sufficient supply response both in terms of the quantity and quality of supply. As they reflect “The invisible hand of the disaggregated market does not coordinate effectively to deliver public good such as access or quality” (Warner and Gradus, 2011, p. 586). In limiting adverse selection effects, poor regulatory controls and quality of supply, they outline three conditions that have to be met for a voucher scheme to work well: i) regulation to encourage quality; ii) provider subsidies that encourage supply in rural and poor areas to correct uneven supply responses to vouchers and iii) engaging government, communities and employers in childcare arrangements. Across countries and regions, the extent to which these conditions can be met will depend on institutional capacities. Others would also argue that these conditions alone do not guarantee success (Bastos and Cristia, 2012). The implications of these conditions for access and quality depend on the economic behaviour of independent providers in childcare markets, which is not well understood including in South Africa. For example, the regulation of childcare markets in efforts to raise quality, could impact negatively on supply (Hotz and Xiao, 2011), particularly in low-income areas as Bastos and Cristia (2012) try to show in the context of Brazil, Sao Paulo.

Where demand-side financing takes the form of tax breaks for ECCE attendance, the feasibility of this reform also requires a large enough tax base to stimulate improved access. In South Africa tax is typically only paid by those earning over R83100²⁸ annually, or R6925 monthly. A taxable deduction for ECCE is unlikely to make significant impacts in improving ECCE access for the poor who experience the most significant ECCE access gap. Although further empirical investigation is required to ascertain the impacts of a tax rebate for ECCE financing among the middle class.

28 This is the 2021 tax threshold for adults under 65 (see <https://www.sars.gov.za/tax-rates/income-tax/rates-of-tax-for-individuals/>).

Table 2: Examples of tax rebates and or voucher systems linked to childcare in developed countries

Country	Description of system
United Kingdom	The Childcare Voucher scheme enables working parents to allocate part of their pre-tax salary to pay for registered childcare. As a result, they make savings on their Tax and National Insurance – up to £933 per parent, per year. Each eligible parent can pay up to £243 per month from their salary into their own Childcare Voucher account and use this to pay for childcare. However, the Government closed the Childcare Voucher scheme to new entrants in October 2018. But even in the presence of this system, it has left childcare operators vulnerable to demand reductions during COVID-19 as parents have paid less into their voucher accounts (Employers for Childcare, 2020).
United States, California	The USA introduced voucher schemes in 1996. On average the subsidy value across states as a percent of childcare costs was 88% for a poor family. But the voucher is limited to poor families only. As a result there was low effective demand. Between 1997 and 2005 there was a mere 4 percentage point increase in the percentage of children in childcare centres or nursery schools. However, a 250 percent increase in government spending on vouchers was recorded from 1996 to 2002 (Warner and Gradus, 2011, p. 575). As a state specific example, California state currently allocates a combination of federal and state funds to different ECCE programming funding streams to subsidise childcare for low-income families. The funding streams straddle supply-side and demand-side subsidisation approaches. The CalWORKs funding stream specifically provides support in the form of vouchers, which families can spend with licensed (i.e. centres are subject to regulation) and license-exempt providers. Despite subsidisation, the Californian childcare system is supply-constrained, partly due to the closure of programmes as a result of the Great Recession (due to low earnings and housing costs). Furthermore subsidies do not sufficiently cover the true cost of high-quality care limiting the appeal of the sector for new market entrants (Powell, Thomason and Jacobs, 2019).
Australia	A childcare voucher scheme was introduced in 1997, using an income sliding scale. It resulted in a large increase in children aged 0 to 4 using formal childcare from 305 500 enrolled in formal childcare in 1996 to 439 900 enrolled in 2005 (Warner and Gradus, 2011, p. 575)
Netherlands	The Netherlands introduced voucher schemes in 2005, with an income sliding scale. The number of Dutch children using childcare grew from 375 000 in 2005 to 802 000 in 2009 (Jongen 2010).

Demand-side vouchers for primary schooling – reflections from developing country examples

In both developed and developing country contexts, as private sector provision of schooling has expanded, vouchers have been offered with the intention of stimulating school choice, improving school quality (public and private) through increased competition and increasing equity as they provide poorer families with access to private education. Private school vouchers are intended to cover some or all of the costs of attending private schools over less expensive or free government schools. In developing countries, rigorous evaluations have been conducted of targeted school voucher programmes in Columbia (Angrist *et al.*, 2002; Angrist, Bettinger and Kremer, 2006), India (Muralidharan and Sundararaman, 2015) and Pakistan. Since the 1980s Chile has also had a universal school voucher system in place²⁹.

Evaluations of private schooling voucher programmes (often also referred to as school choice programmes) have been approached in three ways: 1) evaluating their impacts on student outcomes such as enrolment, test scores and future life outcomes; 2) identifying their cost effectiveness; and 3) calculating their welfare benefits. Typically, evaluations of vouchers programmes focus on the first

²⁹ Evaluation studies of the Chilean programme are not particularly robust in design (Morgan, Petrosino and Fronius, 2015).

two approaches, considering the impact on test scores of attending a private school as facilitated through a voucher relative to attending a government school.³⁰ In the context of non-grade R ECCE in South Africa where there is currently no government provision, the objective of demand-side vouchers for ECCE is not really about stimulating choice across private and government provision, and thus comparing the relative effectiveness of these modalities of provision. What is more relevant from the voucher literature, is identifying whether vouchers are taken-up, how to set the right voucher price, the conditions that promote take-up, whether this stimulates quality improvements in childcare markets and the welfare impacts of vouchers.

Welfare impacts³¹ in particular are an important part of voucher discussions, because private school provision adds value not only through test scores, but through the utility of benefits of shorter commute times as well as other amenities that are directly valued by parents (Carneiro, Das and Reis, 2019). Arguably, evaluations of voucher programmes that have just focused on student outcomes, with often few differences observed across students allocated to private and government schools, potentially downplay the significance of voucher programmes because there may be considerable welfare benefits in credit constrained environments. In this respect, recent work by Arcidiacono *et al.* (2020) in quantifying the welfare impacts of the Andhra Pradesh School Choice Project in India is instructive. Developing on the earlier study by Muralidharan and Sundararaman (2015), they attempt to model the welfare impacts of this primary school voucher project. Even though no differences were found in language (Telugu) and math outcomes across lottery winners and losers, when they account for the fact that large proportions of households were unable to afford private school tuition fees (i.e. were credit constrained) the voucher project generated welfare value exceeding 9,000 Rs. (about five times the average private school's annual tuition) on average to the students who are induced into private schooling by the programme.

A different outcome, however, emerges in Pakistan. Despite 4 million voucher beneficiaries by 2018, Carneiro *et al.* (2019) note no change in the proportion of children enrolled in private schools, and identify welfare losses of the programme. One argument for this result is that this may have been due to the improvements in the quality of private schooling. But a second possibility supported by their estimates is that price was never a fundamental barrier to private schooling in the first place. A key design fault in establishing the Punjab voucher programme in Pakistan was the setting of the voucher price without clearly establishing the price elasticity of private schooling which in the case of Pakistan is actually low (much smaller than one). Vouchers became a “fully fungible and regressive income subsidy” for children already enrolled in the private sector. A key take home of their study is the importance of understanding price elasticities in education markets before designing a large voucher scheme. Relatedly, the nascent literature on the industrial organization of education markets in low-income countries, is key to unpacking pricing and welfare impacts, to improve the design of future voucher impacts.

As another form of demand-side financing we now turn to the literature on conditional cash transfers, and the merits of conditional cash transfers linked to ECCE enrolment.

30 Studies on vouchers for school choice yield quite mixed impacts on test scores, typically finding zero to modest positive effects of receiving a voucher or attending a more selective school on test scores (Rouse and Barrow 2009 review the evidence). Angrist *et al.* (2002), and Angrist, Bettinger, and Kremer (2006) find positive impacts on test scores of the secondary school vouchers offered through the PACES programme, targeted at lower income families, in the middle-income context of Colombia. Muralidharan and Sundararaman (2015) evaluate the impacts of attending private versus government primary schools through the Andhra Pradesh School Choice Project, finding little evidence of higher test scores of attending private schools although private schools are shown to be considerably more cost effective.

31 Evaluating welfare impacts of school choice requires not only estimating impacts, but also quantifying the value of enhancing the schooling choice set which requires identifying aspects of schools that are valued by households such as distance from home, valuing of tuition, and other school characteristics. Effectively identifying welfare benefits also involves clearly separating out households' willingness-to-pay from ability-to-pay, and understanding household credit constraints.

8. Conditional cash transfers linked to ECCE enrolment

Conditional cash transfers have been used for decades to promote household investment in human capital or educational outcomes. A large body of literature assesses the impacts of conditional and unconditional social cash transfers (UCTs) on developmental and educational outcomes of children. Conditional cash transfers (CCTs) are given to beneficiaries subject to meeting certain positive actions or 'co-responsibilities'³², while unconditional transfers are given without any specific requirements beyond eligibility (UNICEF, 2016). A good deal of evidence across numerous developing countries and Africa indicate that CCTs can have significant impacts on school enrolment, school attendance and successful grade progression of children in recipient households (Filmer and Schady, 2011; UNICEF-ESARO Transfer Project, 2015).³³

In developing countries there has been little experimentation with how demand-side cash transfers to households could be linked specifically to pre-school or ECCE participation. However, there are several studies of country efforts, particularly in Latin American, to link cash transfers to ECCE-related components other than education. For example, Rawlings, Trios and Willenborg (2020) review cash transfer projects that augment cash payments with broader ECCE programming initiatives. These measures accompanying cash transfer programmes are categorised into three areas: i) incentives for women, parents and caregivers to use supply-side services that promote child development (e.g. use of health and nutrition services with requirements such as growth monitoring); ii) the direct provision of child-focused goods and services which form part of the cash transfer programme; and iii) behavioural interventions for parents and caregivers to build knowledge and make informed choices. When combined with cash transfers, accompanying measures have the potential to lead to improved outcomes for children (Arriagada *et al.*, 2018; Rawlings, Trios and Willenborg, 2020).

Informal conversations with ECCE lead researchers from a large international agency, revealed that there are few existing examples of countries using cash transfers linked to pre-school participation or details on how they are operationalized. However, we draw attention to one exception relevant for discussions on ECCE financing in South Africa. Gilligan and Roy (2016) study the impacts of a randomized control trial in Uganda where either cash transfers or multiple-micronutrient-fortified food hampers to households were linked to pre-school enrolment. We outline this study and results in Box 2. The main finding is that both the quantity and quality of exposure to stimulation increased through the cash transfer to households, but not through the food hampers to households.

Of course, there are many examples of cash transfer programmes linked to schooling outcomes (for a comprehensive list see Baird *et al.* (Baird *et al.*, 2013, 2014)). Some examples include Malawi's Social Cash Transfer Scheme (SCTS), which while a UCT, provided a 'schooling attendance' bonus to families with school age children; Morocco's Tayssir pilot program; Mexico's PROGRESA and Brazil's Bolsa Escola. When reviewed together, these programmes have been found to increase the odds of being enrolled in and attending school, but any improvements in test scores are modest at best (Baird *et al.*, 2013, 2014). Some programmes have also had much better results on attendance and enrolment than others with particularly significant positive impacts on primary enrolment of Mexico's PROGRESA and Comunidades Solidarias Rurales in El Salvador.

³² This is a term commonly used in Latin American contexts.

³³ The positive impacts of CCTs on school enrolment are evident from Mexico (Schultz, 2004), Ecuador (Schady and Araujo, 2008), Brazil (de Janvry *et al.*, 2008), Colombia (Attanasio *et al.*, 2005), Nicaragua (Maluccio and Flores, 2005), Pakistan (Chaudhury and Parajuli, 2008), and Cambodia (Filmer and Schady, 2008).

Box 1: Cash transfers linked to preschool enrolment in Uganda

Gilligan and Roy (2016) explore the impacts of two treatment arms – cash transfers or multiple-micronutrient-fortified food hampers directed at households – on children's cognitive and non-cognitive development. They also explore the nutritional and stimulation pathways by which these transfers may or may not lead to cognitive improvements.

Details of the interventions:

The first treatment arm involved the provision of a multiple-micronutrient food basket of about 1,200 calories per day delivered to households by truck through well-established food distribution systems. The cash transfer per child was around \$US10.25, equivalent in value to the food basket cost. The cash was distributed to children's parents/caregivers through electronic fund transfers to cards (redeemable at mobile money agents). In both cases, the transfers were provided in 6 to 8 week cycles. Eligible "households" were those with children aged 3 to 5 years enrolled in the ECCE centres and assigned to the treatment group at baseline. The ECCE centres were UNICEF-supported but informally structured. ECCE practitioners were not allowed to charge fees but received training on ECCE and in-kind donations from the community.

Results of the interventions:

Food transfers had no significant cognitive impact, while cash transfers resulted in significant increases of about 9 percentage points (and about 0.33 standard deviations) in cognitive measures relative to the control group. One of the "stimulation" pathways by which the cash transfer had more favourable outcomes is that cash led to increased frequency in ECCE centres being open, increased attendance at ECCE centres and increased cash contribution by parents to centres. With parents contributing a share of the cash transfer to ECCE centres, there was evidence that ECCE providers in the cash treatment arm improved their ECCE infrastructure (including improved ablution facilities). Both the quantity and quality of exposure to stimulation increased through the cash transfer to households, but not through the food hampers to households.

It is noted that the results of the impact evaluation only reflect impacts pertaining to households with children already enrolled in ECCE programmes. While it improved the frequency and regularity of attendance at centres among those already enrolled, it is not clear if other children in the same household were more likely to have enrolled. The success of the cash transfer in improving cognitive and intermediate outcomes may also have been due to both food and cash transfers being conditional on regular attendance at the ECCE centre. Eventually it became difficult to monitor attendance at centres, so that this condition was dropped but the removal of this condition was unlikely to have been communicated to parents. In other words, one cannot rule out that the "condition" of preschool attendance to receive the cash transfer is likely to have contributed to the success of the cash transfer programme.

Both UCTs and CCTs increase household incomes and are theoretically expected to produce an income effect on schooling demand. But only CCTs produce a substitution effect through reducing the price of schooling. One thus expects CCTs to yield stronger positive impacts on human capital accumulation than UCTs (Saavedra and Garcia, 2012, p. 925). But empirical evidence is less conclusive as to whether attaching conditionality to transfers results in improved welfare outcomes over and above the benefits of UCTs (Baird *et al.*, 2014; Baird, McIntosh and Özler, 2019).

With respect to schooling, Baird *et al.* (2014) in their review of cash transfer programmes find that both CCTs and UCTs raise the odds of enrolment in school but find no significant difference in effect sizes. However, they show that not all CCTs are equal in their conditions, transfer-effectiveness or cost-effectiveness - a discussion that is given more attention in Garcia and Saavedra (2012). CCTs with very explicit conditions that are both monitored and enforced increase the odds of enrolment by 60% compared to programmes with no conditions where differences



in effect sizes are statistically significantly different. However, they note that the effectiveness of even the most regulated of CCT programmes in improving test score outcomes is small at best. In other words, CCTs linked to pre-school enrolment would likely only be effective if conditions such as enrolment and attendance were closely monitored, taking punitive action (such as suspending grants) where conditions are not met.

On the one hand, CCTs can direct spending to promote better child outcomes or may align with constitutional rights for better education, nutrition or health care (UNICEF, 2016). On the other hand, human rights debates, practical implementation constraints and costs associated with monitoring present a case against conditional grants. In the next section, we further discuss issues related to the ethics, feasibility and effectiveness of CCTs linked to ECCE, in relation to South Africa.

9. Implementing a conditional cash transfer programme linked to ECCE programme attendance in the South African context: Key considerations

In designing a financing mechanism for ECCE, a clear mapping of available “institutional levers” to support the channelling of financial flows is deemed vital to any ECCE programming success (Valerio and Garcia, 2013; Cavallera *et al.*, 2019). Globally, COVID-19 also highlighted the need to leverage existing institutional platforms to distribute social relief to households (Gentilini, Almenfi, Orton, *et al.*, 2020). South Africa’s cash transfer programme of social grants proved to be a reliable platform to leverage in times of crisis. It has wide reach, connected to multiple payment distribution nodes to channel immediate relief to households. At the beginning of March 2020, 18.2 million grants were paid to 11.3 million beneficiaries where the child support grant has had particularly wide reach of 12.7 million (SASSA, 2020). The “topping-up” of grants was also a clear indication that the grant system is agile, rapidly able to alter grant levels in times of crisis and enrolling large numbers of new applicants onto the system³⁴. For this reason, leveraging the existing cash transfer system to improve access to childcare has been suggested in policy circles. This may require reshaping an unconditional system of grants to include “conditionalities” or “co-responsibilities”. Four major questions emerge in response to such an endeavour:

1. Would this undermine human dignity and equity?
2. Are there likely to be unintended consequences of replacing an unconditional system of child support grants with conditionalities?
3. Would this be a feasible system to implement?
 - a. Is there an institutional system to effectively manage a system of conditional cash transfers?
 - b. Do there exist systems to monitor conditionalities?
4. Is this likely to be effective in raising ECCE attendance?
 - a. Will demand be met with a supply response?

Would this undermine human dignity, choice, equity?

From a human rights perspective, some argue that conditionality undermines principles of human dignity, equity and non-discrimination. Given human rights concerns about conditionalities and implementation challenges, UNICEF (2016) for example prefer conditional cash transfer designs with

³⁴ As reflected in the roll-out of the COVID-19 social relief of distress grant (albeit some glitches and capacity constraints).

“soft conditions” that emphasise messaging about the objective of the transfer programme and avoid punitive action or removal of benefits where beneficiaries do not comply with the conditions.

A further concern is that imposing conditionalities also assumes that poor households are unable to choose the most appropriate use (or ‘investment’) of the cash transfer (UNICEF, 2016). This is a problematic assumption. In South Africa, the positive effects of UCTs on various outcomes are evidence that appropriate investments are often made by poor households. The Child Support Grant (CSG), for example, has been linked to positive human capital investment decisions. For example small positive effects on child-for-height scores and improved progression through school are reported (Aguero, Carter and Woolard, 2007; Coetzee, 2013; Waidler and Devereux, 2019). In a UNICEF sponsored study on the impact of the CSG, propensity score matching is used to assess impact on child outcomes by comparing two groups: children who received the CSG in the first two years of life; and children who only received the CSG when they were two years of age or older (Heinrich *et al.*, 2012). Children, particularly girls, enrolled in the CSG at birth were found to have completed significantly more grades of schooling than children who were enrolled at age six, and achieved higher scores in a maths test. Compared with earlier studies, Bell (2020) more recently finds even larger positive impacts of CSG receipt on school enrolment among adolescents and educational attainment into adulthood. Her estimates are very similar in size to the effects of Mexico’s conditional transfer program, PROGRESA, estimated by Behrman, Parker, and Todd (2011). She identifies no perverse impacts such as reduced parental employment.

Are there likely to be unintended consequences of conditionalities?

One cannot rule out that there could also be unintended consequences of conditionality. Sector-specific conditionalities could undermine the broader ‘multi-sectoral’ benefits of cash transfers to children and households (UNICEF, 2016). It is well appreciated that the grants may be pooled with other incomes sources and shared within the household (Sekhampu and Grobler, 2011) supporting other positive outcomes such as labour force participation (Eyal and Woolard, 2011). Attaching conditions to ECCE enrolment may redistribute resources away from other shared household investments. Given the benefits of the CSG for improved child BMI, and spending of grants on food for child development, one would not want to redirect expenditure away from important nutritional investments. Nutritional spending is already limited (with persistent malnutrition reported) due to the small value of monthly CSG amounts relative to the cost of a nutritious basket of food (Devereux and Waidler, 2017). The COVID-19 pandemic has also exacerbated food insecurity (Bridgman, Van der Berg and Patel, 2020). In this respect, an ECCE voucher rather than cash may be a better approach to demand-side subsidisation, limiting the need for households to make trade-offs across vital expenditures.

Would this be a feasible system to implement?

Despite the many aspects in which the social grant systems has been successful in distributing cash to South Africans, in even the hardest to reach areas, the administrative challenges and financial costs of incorporating conditionalities into transfers – such as attendance at an ECCE programme – are not insignificant. Monitoring can be a complex task requiring data, administrative and human capacity, and considerable coordination (UNICEF, 2016). The existing supply-side operational subsidy to ECCE providers in South Africa is meant to be linked to daily child attendance but has been poorly implemented. A successful CCT linked to ECCE attendance would certainly require improved monitoring of “attendance”. In the context of the CSG, linking this to school attendance has never gained traction. A 2009 amendment to the relevant South African legislation incorporates a regulation stating that “the primary care giver must, every six months, submit to the [South African Social Security] Agency the child’s proof of school or educational institution attendance” (Government

of South Africa, 2009). In practice this does not occur.³⁵ Even the schooling system, which is more resourced than the ECCE sector with respect to its information management systems, teacher and support staff resources, struggles to capture reliable child attendance records.³⁶ Such efforts are likely to be even less effective where cash transfers are meant to be linked to ECCE attendance.

Even if information and ICT systems to support monitoring can be established, monitoring is expensive so that the benefit-cost ratios of CCTs may be lower for the same level of impact as a UCT (Schubert and Slater, 2006). In a review of Latin American programmes, Handa and Davis (2006) estimate conditionality attached to cash transfers to be about 20 per cent of administrative costs (net of transfers). The costs of administering the system would have to be considered against any identifiable gains in ECCE access and improved developmental outcomes, if any.

Is this likely to be effective in raising ECCE attendance?

The success of a CCT linked to ECCE attendance assumes a clear pathway between receipt of cash and the uptake of ECCE services. From existing evidence, it is instructive to ask whether a link already exists between receipt of UCTs and ECCE attendance in South Africa? From the same UNICEF funded study mentioned earlier that used propensity score matching to identify the impacts of the roll-out of the CSG, what is less well known is that receipt of the CSG was reported to have no impacts on the likelihood of attendance at a pre-school or creche facility or age of first attendance (Heinrich *et al.*, 2012, p. 49). This is an interesting result, implying that UCTs may not lead to higher investment in ECCE in South Africa. However, this result (which is arguably based on a more rigorous analytical strategy) contradicts findings from correlational studies that find a significant association between CSG receipt and ECCE enrolment (Moses, 2021). Eyal and Woolard (2011) showed that mothers in their 20s who receive the CSG have significantly higher labour force participation and employment probabilities. They attributed this outcome to grants covering fixed costs of working such as day care and the costs of sending a child to school.³⁷ In general, more attention needs to be given to exploring the impacts of the existing CSG on ECCE enrolment, and attendance beyond correlational studies. Impacts may be heterogenous, with higher ECCE attendance impacts among children with more educated mothers or employed mothers. It would be important to unpack this relationship, before considering attaching conditionalities to ECCE attendance.

Another concern is that it cannot be assumed that formal daycare or childhood education services are always used or even preferred by mothers, especially taking into consideration different needs at different stages of child development. There is a growing international body of evidence that low quality ECCE may be harmful for child development (Rosero and Oosterbeek, 2012; Bouguen, Filmer and Macours, Karen; Naudeau, 2013).³⁸ This is a major concern in the South African ECCE context characterised by many low quality programmes. Large proportions of existing programmes fail to meet minimum safety or quality standards (Kotze, 2015). If conditionalities were attached to grants, it would be incumbent upon government to establish and oversee a quality assurance system, which while costly to establish may have positive implications for raising the quality of programmes.

A further and most pressing concern pertains to ensuring a sufficient supply of ECCE programmes to support CCTs linked to pre-schooling. As with demand-side vouchers, limited and uneven supply responses may accompany CCTs linked to ECCE attendance. In a review of CCTs in developing countries, educational programme impacts (in relation to schooling) are found to be larger where baseline enrolment levels are low and there is excess school capacity – i.e. supply constraints are

³⁵ This is unlikely to have altered school enrolment given near universal school enrolment to age 15.

³⁶ This has become apparent in discussions with officials from well-performing provincial education departments in South Africa.

³⁷ However new evidence by Abel (2019) suggests that grants, particularly the South African old age pension, may have negative effects on labour supply.

³⁸ Bouguen *et al.* (2013) review the impact of three early childhood interventions implemented in rural Cambodia: formal preschool, informal community preschool, and informal home-based early childhood programs. The aim of this evaluation was to get systematic evidence on which of the three models which had already been subject to a small pilot achieved the best results when implemented on a larger scale. They found no suggestion of positive effects on indicators of cognitive skills for the full sample, and negative impacts on the cognitive- and social-skills of children aged 66 to 78 months.

not binding (Saavedra and Garcia, 2012, p. 923). As discussed in Saavedra and Garcia (2012), primary enrolment and attendance impacts are larger when CCT programmes are augmented with supply-side interventions such as school grants or cash transfers to teachers or parent-teacher associations. Although their findings relate to primary school attendance, supply constraints are likely to be a major concern in the ECCE sector, and even more so in a COVID-era which has significantly impacted on the supply of ECCE in South Africa.

In a simulation exercise to model the enrolment impacts of supply-side subsidisation or demand-side subsidisation approaches to ECCE financing in Turkey, Aran et al (2016, 2018) neatly show that demand-side subsidisation in the presence of a supply constrained ECCE environment will result in only marginal increases in enrolment. They consider to what extent different childcare subsidy mechanisms expand ECCE enrolments in the context of Turkey, which is a supply constrained ECCE environment with inequalities in access to ECCE. They simulate changes in ECCE programme enrolment through providing i) investment grants to providers, ii) operational monthly grants to child-care providers, iii) combinations of investment grants to providers and operational grants and iv) demand-side vouchers to households (which are equivalent in value to the monthly grants to child-care providers). Contrary to expectations, enrolment increases are simulated to be highest if a combination of monthly grants and once-off investments are provided to child-care providers compared to where demand-side vouchers are provided to households. Supply-side subsidisation both benefits the service provider and user, as the supplier reduces user fees given that the grants cover some of their costs. They find that providing only demand-side vouchers to families has a minimal impact on enrolments, with particularly low increases among the bottom 40% of the population. While addressing affordability of childcare, the demand-side vouchers do not address the main constraint in the market, namely the lack of providers.

Despite the success of CCTs in stimulating ECCE programme attendance and the quality of those programmes in a Ugandan context (Gilligan and Roy, 2016), the above discussion highlights that there are strong ethical, feasibility and efficacy concerns related to CCTs linked to ECCE attendance. As with demand-side voucher schemes, supply responses are not guaranteed where cash subsidies for ECCE attendance are placed in the hands of grant recipients rather than flowing directly to ECCE providers. These concerns are significant enough to call into question the possibility of even experimenting with CCTs linked to ECCE attendance in the South African context. However, alternate models of demand-side subsidies less attached to conditionalities, could form part of larger initiatives to experiment with new financing models. In Box 2, we suggest a possible alternate avenue to explore - a hybrid between a voucher scheme and CCT. This hybrid approach leverages an existing institutional system to support implementation success (Cavallera *et al.*, 2019), while overcoming some ethical issues, human dignity concerns and unintended consequences of replacing a UCT with a CCT. However, the feasibility and effectiveness of this approach in raising access to ECCE would be dependent on state support, administrative capacity - including fast-tracking ECCE programme registration - and efficient oversight.

Box 2: Concept for a demand-side voucher scheme linked to the social grant system in South Africa

The South African Social Security Agency (SASSA) database, and the systems that have been set up to distribute grants to beneficiaries, are potential tools in the hands of policymakers to effectively target finance for ECCE to children of specific ages from poor households. The grant system could be used to provide top-up transfers directly to CSG grant recipients to support ECCE attendance. Preferably this subsidy should be a non-cash-based voucher targeted at CSG grant beneficiaries under 5 that can be redeemed at registered ECCE programmes.

One way that this could work is that an SMS³⁹ with a voucher code is sent to a CSG recipient entitling them to a specific quantity of childcare/education for CSG beneficiaries in their care, redeemable at registered ECCE programmes. The CSG recipient delivers over the voucher code to the registered ECCE provider in exchange for ECCE services. The provider then electronically submits the code (which can only be used once) as indication of a redeemed voucher, which then signals that a monthly subsidy payment should be made to the provider. The subsidy payment could also be capped in line with the registered maximum capacity of the ECCE programme.

Many variants on this idea could be developed, altering the frequency of voucher code SMS's to be sent (e.g. monthly in line with cash pay-outs or on a weekly basis to promote weekly attendance at programmes and weekly primary caregiver engagement with ECCE practitioners). Since the SASSA payment system includes registered details on children and their ages, voucher values could be sensitive to the differential costs of childcare by age. The value of the voucher could also vary depending on the remoteness of the area in which beneficiaries live and the extent (or length) of services rendered by the ECCE provider.⁴⁰

The feasibility and efficacy of this approach depends on a number of factors including a well-managed quality assurance system, a reliable ICT system to support voucher disbursements and a supply response. For ECCE programmes benefiting from subsidies linked to voucher receipt, they should be subject to quality assurance assessments. However quality assurance would have to be enforced across providers, regardless of voucher-subsidy disbursements, as costs of meeting quality assessments may lead to perverse incentives for ECCE programmes to not enrol children with vouchers, to avoid monitoring (Powell, Thomason and Jacobs, 2019).⁴¹ Significant work would have to be done to fast track ECCE programme registration – a problem which would also have to be addressed with existing supply-side models in place.

Designing the details of this hybrid approach would also require multi-stakeholder participation with umbrella NGOs or bodies supporting ECCE programmes, with DSD, DBE and SASSA officials and third-party agents responsible for SASSA payment systems. It would also have to be trialled. The voucher system would need to be subject to efficacy trials, accompanied by testing and trialling affordable ICT solutions (to deliver and record vouchers or biometric systems to record attendance) that support monitoring at ECCE providers. Efficacy trials would involve identifying the feasibility of ICT-related infrastructure used by under-resourced ECCE providers.

9. Discussion

South African public financing for ECCE has largely depended on a supply-side approach, providing low per-child per-day operational subsidies to registered providers with parents or caregivers contributing considerably higher private fee payments. Despite historical growth in ECCE access which was likely supported by the expansion of subsidies, the existing financing model suffers from three major shortcomings. First, subsidy funding to ECCE programmes is limited and uneven in reach, largely as a consequence of the constraints imposed by the regulatory framework of programme registration. Second, the depth of ECCE financing has been very limited, with subsidy amounts which do not even come close to the costs of financing quality ECCE programmes in a middle-income country context (Desmond *et al.*, 2019). Consequently, the sustainability of the system has been dependent on parent fee payments. This results in limited access to quality ECCE as fee payments

³⁹ Where recipients do not have mobile phones, a paper receipt could be obtained via cash payment points.

⁴⁰ Bougen *et al* (2013) in the context of Cambodia, identified that a contributing reason for the ineffectiveness of a scale-up of the programme is that even where ECCE programming was supplied free of charge, there were hidden costs of attending such as buying learning support materials and distance from ECCE facilities.

⁴¹ In California for example, providers may prefer not to enrol subsidized children to avoid being subjected to quality standards imposed by the state (Powell, Thomason and Jacobs, 2019).



are unlikely to make up the gap between the costs of providing quality ECCE and low state subsidy amounts. A system increasingly dependent on parent fee payments also leaves ECCE access, which is in many aspects a public good, highly vulnerable to demand-side shocks. Third, inconsistencies and lack of data management systems to effectively administrate and provide oversight of the existing operational subsidies do not support the current financing model.

It is tempting to assume that shifting from a supply- to demand-side approach to ECCE financing may allow one to short-circuit the reforms needed to overcome the shortcomings of the current ECCE model. However, having considered the advantages and disadvantages of two demand-side approaches to financing ECCE – namely vouchers or conditional cash transfers – demand-side financing presents no silver bullet. The success of a voucher scheme would, amongst other things, require notable administrative reforms, such as ICT and data management systems, quality assurance systems and human resources to support this. From the perspective of human dignity and ethics, and considering the additional transactional costs of administration, shifting from an unconditional system of cash transfers to cash transfers conditional on ECCE attendance is highly problematic.

Regardless of what form of demand-side subsidisation is used, accelerating the registration of ECCE service providers would be required. Quality assurance systems to monitor provider service quality would be necessary. If one is to reasonably expect providers to meet quality standards or to expect new quality entrants to the market, this arguably necessitates raising voucher/subsidy amounts. Plainly put, a demand-side approach requires remedying the registration crisis⁴², implementing administrative systems for improved oversight and raising⁴³ financing allocations for ECCE. Quite simply, the factors critical to the success of a demand-side financing approach to ECCE are the very reforms that are required with the current supply-side model. Relatedly, where new innovative private financing sources are considered to augment mainstream government finance for ECCE, in the form of new taxes, corporate social responsibility, consumer donations or impact investors, monitoring systems become critical when innovative financing is linked to delivery mechanisms such as results-based aid, results-based financing or impact investing (Putcha, Upadhyay and Burnett, 2016, p. 54; World Bank Group, 2020).

In some respects, the ECCE sector may also be left more vulnerable under a demand-side approach as supply-side responses are not guaranteed where low-value cash subsidies for ECCE attendance or vouchers are placed in the hands of users rather than flowing directly to ECCE providers. Where household's choices between formal and informal forms of childcare are unobserved by suppliers, a problem exacerbated by COVID-19 uncertainties, it can be very hard for suppliers to ascertain the profitability of establishing new programmes. This suppresses desired supply responses. In simulating how operational subsidies and investment grants to providers versus cash transfer/vouchers to households impact on ECCE access a middle-income context, Aran et al resolve that “before resolving supply-side capacity issues, targeting the unaffordability problem through a demand-side transfer to households turns out to be an ineffective policy for expanding access to services” (Aran, Munoz-Boudet and Aktakke, 2016, p. 18).

It is important that policy makers and advocacy groups are not distracted from addressing existing shortcomings in the public financing and administration of the ECCE sector. The reforms required under the current financing system are likely to be the foundations for success of any future financing approaches adopted. This said, there remains room for simulation and experimentation to review the current levels of ECCE subsidisation and the forms that this takes in the South African context. For example, how could variation in the nature of subsidies impact on three key ECCE outcomes: access, equity and quality? Demand-side vouchers may also be useful to *augment, rather than replace, the current supply-side approach*.

42 This is a key concern for the Real Reforms campaign in ECCE. (see <https://domore.org.za/wp-content/uploads/2020/10/Welcome-Letter-RealReformECD.pdf>)

43 In raising budget allocations for ECCE, consideration must be given to both allowing for more registered programmes that access subsidies and raising the subsidy amount.

Simulating how different models lead to varied ECCE outcomes will require improved supply-side data, that interrogates the cost structures of ECCE (Putcha and van der Gaag, 2015). This is not easy however where cost-structures reside outside of the state with private providers. But getting clarity on cost structures is also imperative for planning. A well-developed ECCE strategy must be aligned with the costs of provision and acknowledge that various modalities result in varied cost structures (Staab and Gerhard, 2010). Getting clearer on costs will require collecting more comprehensive and reliable data on provider costs of provision where analysis could be supported by the increasing availability of international frameworks and tools to support ECD costing exercises (Putcha and van der Gaag, 2015). Costing exercises will also require clearer public expenditure tracking on ECCE spending.

Furthermore, planning and policy design could benefit from smaller studies with clear impact evaluations to explore how varied subsidisation mechanisms lead to differential outcomes with respect to the speed of ECCE expansion, the extent to which expansion is equitable and promotes quality outcomes (measured for example by cognitive and non-cognitive developmental outcomes). Understanding the behaviour of ECCE providers (i.e. the supply-side) is also critical to the design of experiments, such as voucher studies. For example, we need to understand what private ECCE providers are maximizing. In the context of Pakistan where private schools are pricing in the inelastic portion of the demand curve, Carneiro et al (2019, p. 41) reflect that while “clearly they [private providers] are subject to some market discipline in that they have to shut down if they cannot cover costs, their pricing decisions may reflect multiple objectives in addition to maximizing profits.” Pricing decisions, such as charging mark-ups below those that would be considered profit maximizing – a feature that is likely to characterise much of the South African ECCE market - could reflect many factors ranging from social concerns to dynamic pricing. Equally, on the demand-side effort needs to be given to understanding the price elasticity of ECCE markets in South Africa to effectively establish the value of supply- or demand-side subsidies.

Furthermore, experimentation and testing of any new design is vital because similar financing strategies can yield vastly different results across contexts. Valerio and Garcia (2013, p. 476) note that “the effectiveness of an ECD finance strategy might have less to do with what specific finance mechanisms are in place and more to do with how these mechanisms interact with local conditions.” If piloting and experimentation with various transfer modalities is not done, or scale-up is achieved too quickly, a system is set in motion that can be hard to reverse or improve (Cavallera *et al.*, 2019). The problem of inertia and lack of agility in the system is worsened when untested financing strategies are accompanied by premature policy directives, and related legislative changes to advance these policies.

10. Conclusion

As the South African early childhood development landscape evolves over the next few years, with a proposed function shift from the DSD to the DBE, new financing strategies will be proposed. In contributing to these discussions, this paper suggests that replacing a supply-side approach to financing ECCE with a demand-side approach is not yet recommended. Demand-side financing could at best be used to augment supply-side subsidisation, subject to experimentation and simulation studies. As a policy priority, attention should be given to establishing the substance of a successful financing system rather than merely playing with variations in its form.

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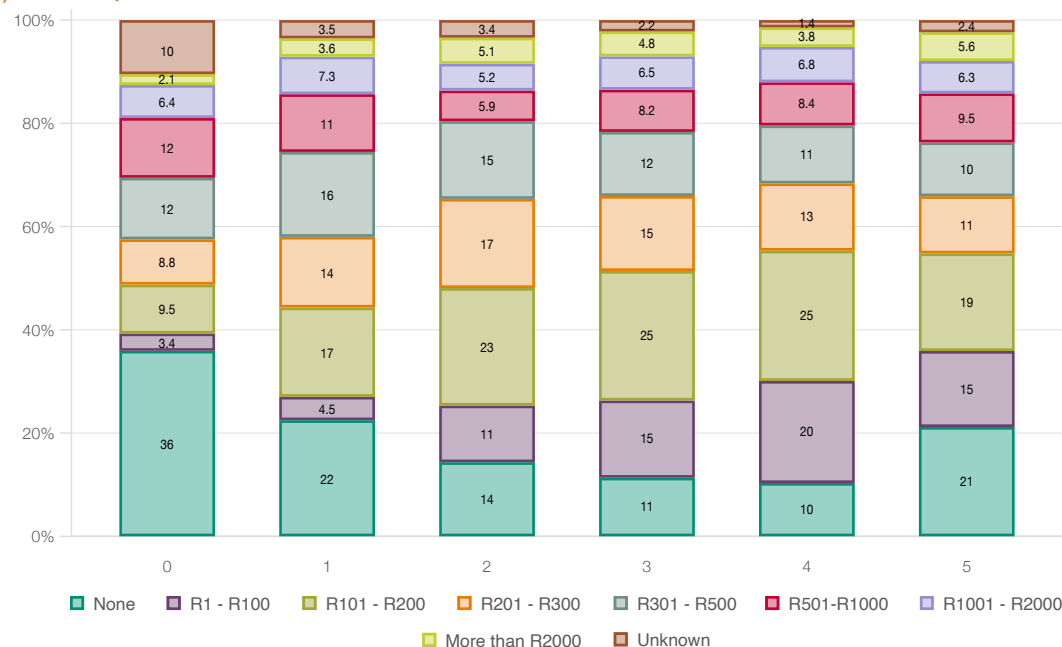


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APPENDIX

Figure A1: Amount of fees paid monthly for ECCE (that is not grade R) for children attending ECCE by child's age, GHS 2017/2018



Source: Own calculations using the General Household Survey 2017 and 2018. Notes: Weighted, clustered, stratified estimates. ECCE programme attendance includes attendance at a "Pre-school, nursery school, Grade 00, Grade 000"; "creche or educare centre"; "day mother, gogo, child minder"; or "home, community, play group". The fee question in GHS is worded as "Does the household pay any fees for ___ to be cared for, or to attend an ECD facility? If yes, how much is paid per month?".

