UC Berkeley

CEGA Working Papers

Title

An Inclusive Growth Dividend: Reframing the Role of Income Transfers in India's Anti-Poverty Strategy

Permalink

https://escholarship.org/uc/item/3551c3c6

Authors

Ghatak, Maitreesh Muralidharan, Karthik

Publication Date

2019-08-05

Series Name: WPS Paper No.: 090

Issue Date: 5 August 2019

An Inclusive Growth Dividend: Reframing the Role of Income Transfers in India's Anti-Poverty Strategy

Maitreesh Ghatak and Karthik Muralidharan



Working Paper Series

Center for Effective Global Action
University of California



This paper is posted at the eScholarship Repository, University of California. http://escholarship.org/uc/cega_wps Copyright © 2019 by the author(s).

The CEGA Working Paper Series showcases ongoing and completed research by faculty affiliates of the Center. CEGA Working Papers employ rigorous evaluation techniques to measure the impact of large-scale social and eco-nomic development programs, and are intended to encourage discussion and feedback from the global development community.

Recommended Citation:

Ghatak, Maitreesh; Muralidharan, Karthik. 2019. An Inclusive Growth Dividend: Reframing the Role of Income Transfers in India's Anti-Poverty Strategy. Working Paper Series No. WPS-90. Center for Effective Global Action. University of California, Berkeley.

An Inclusive Growth Dividend: Reframing the Role of Income Transfers in India's Anti-Poverty Strategy

Maitreesh Ghatak and Karthik Muralidharan¹

July 5, 2019

Abstract: Theory and evidence point to several advantages of unconditional universal income transfers as a tool not just of anti-poverty policy but also of improving productivity and achieving development goals more broadly. Given recent policy initiatives in India to use income transfers to support farmers (estimated to cost 0.5% of GDP), we propose a modest expansion of this approach to cover *all* citizens, which will be both fiscally feasible and practically implementable. Specifically, we propose that India implement an Inclusive Growth Dividend (IGD) pegged at 1% of GDP per capita, which reaches all citizens and grows equally for all with the country's growth. It would thus be a powerful practical and symbolic commitment to universally shared prosperity. We review global evidence on the impact of income transfer schemes and argue that an IGD would be a highly cost-effective way of directly reducing poverty, with limited administrative costs of targeting and risks of inclusion and exclusion errors, lower leakage of benefits, and *lower* disincentives for work compared to most targeted programs. It would also improve financial inclusion and formal savings, relax borrowing constraints for productive investments, and improve female empowerment. Further, we argue that successfully delivering an IGD would augment state capacity and improve the quality of public expenditure over time, by making income transfers an attainable benchmark against which public expenditure is evaluated. Finally, we make the case that an IGD could be a powerful tool for the 15th Finance Commission to promote the objectives of equity and efficiency given the vast differences in income levels as well as state capacity among Indian states.

Keywords: income transfers, targeting, inclusive growth dividend, anti-poverty strategy

J.E.L. Codes: D63, H24, H53, I38

¹ Ghatak: London School of Economics, BREAD, CEPR, and STICERD; E-mail: m.ghatak@lse.ac.uk Muralidharan: UC San Diego, JPAL, NBER, BREAD, and NCAER; E-mail: kamurali@ucsd.edu. We thank Abhijit Banerjee, Pranab Bardhan, Timothy Besley, Xavier Jaravel, Renana Jhabvala, Vijay Joshi, François Maniquet, Paul Niehaus, Arvind Subramanian, Sandip Sukhtankar, and Jeff Weaver for several conversations over the years that have shaped our thinking on this topic. In some cases, we draw directly on our joint work. We thank Hannah Blackburn for excellent research assistance. Of course, we remain responsible for all errors and omissions.

Introduction

There has been a global surge in academic and policy interest in the idea of a Universal Basic Income (UBI) as a tool for poverty alleviation and inclusive prosperity.² In the Indian context, several scholars and policy commentators have argued over the past decade that it would be better for inefficient and poorly-implemented welfare schemes to be replaced by direct income transfers to the poor.³ Reflecting these discussions, the idea of a UBI in India was given considerable policy salience in the 2016-17 Economic Survey of India. The policy salience of the idea has further increased by the parallel investment in the JAM (Jan-Dhan, Aadhar, Mobile) infrastructure required to implement direct benefit transfers into beneficiary bank accounts.

The move to income transfers as a component of India's anti-poverty strategy has also been reflected in actual policy in the last 18 months – especially in the context of farmer welfare. The pioneering move in this regard was made by the state of Telangana in early 2018 when it announced the Rythu Bandhu Scheme (RBS) that provided farmers with an unconditional payment of Rs. 4,000 per acre. This idea has since been rapidly replicated at both the state-level (as in the KALIA program in Odisha) and at the national level (through the PM-KISAN program). The Pradhan Mantri Kisan Samman Nidhi Yojana (PM-KISAN), was launched in December 2018 and provided Rs 6000/year per family with cultivable landholding up to 2 hectares, subject to some exclusions. In the first Cabinet meeting of the recently re-elected NDA government led by Prime Minister Modi, the scheme has now been extended to *all* farmers, regardless of landholdings. It is likely to be the world's largest income transfer scheme. With the extended coverage, it aims to reach 14.5 crore farming households (or roughly half the country) with an estimated cost to the Central Government of Rs 87217.5 crores for the year 2019-20 which amounts to roughly 0.5% of GDP at current prices.⁴

As a result, the relevant questions regarding the role of income transfers in India's antipoverty strategy have shifted from whether to have them at all to the design, coverage, and scope of such a policy. This paper therefore focuses on the following main questions: Should these income transfers be expanded to be universal and cover all citizens regardless of

² While, the discussion in developed countries has been motivated mainly by concerns of needing to find policy responses to rapid automation and job destruction, the discussion in developing countries has focused more on the benefits of income transfers relative to targeted in-kind transfers because of weak state capacity for implementation (seen for instance by considerable targeting errors and leakage in benefits).

³ A non-exhaustive list of references making this argument include Kapur, Mukhodadhyay, and Subramanian (2008a and b), Banerjee (2016), Bardhan (2016), Ghatak (2016), Joshi (2016), Mundle (2016), and Ray (2016). Davala et al (2015) make the argument for basic income without explicitly calling for substitution of other programs. Critics of income transfers in India primarily worry that it will lead to a substitution of in-kind welfare programs and an abdication of the responsibility of the state to guarantee minimum levels of basic goods and services. Representative references include Shah (2008), Dreze (2016), and Roy (2019). Khosla (2018) provides an excellent summary of the key issues with a focus on the Indian context.

⁴ http://pib.nic.in/newsite/PrintRelease.aspx?relid=190194

whether they are farmers? Should they be supplemental over and above other programs or should they substitute away existing welfare programs? How does such a policy fit in with other anti-poverty and social welfare policies from a broad conceptual point of view of a development strategy but also, from a more practical point of view of the opportunity cost of resources? How can such a policy be both fiscally viable and mitigate the concerns regarding UBI raised by skeptics? How can the needs and preferences of beneficiaries be taken into consideration accounting for heterogeneity in these over time and space?

While much has been written about income transfers in recent years, this paper is motivated by (a) the need for this debate to reflect recent evidence of actually implementing income transfer policies in India as well as data on beneficiary preferences and experiences, (b) the greater political willingness to implement income transfers at scale (seen in the PM KISAN program) – which makes it especially policy-relevant to provide both conceptual clarity and a practical roadmap forward, and (c) the policy window provided by the Fifteenth Finance Commission and the central role of promoting regional equity in its mandate. In addition to providing a concise discussion of the conceptual issues, we offer a specific policy proposal that we believe is implementable at scale and will deliver almost all the benefits of a UBI while mitigating several of the concerns that have been raised by skeptics. We summarize the core argument below.

Theory and evidence point to several advantages of unconditional universal income transfers as a tool not just of anti-poverty policy but of achieving development goals more broadly. These advantages include direct reduction of poverty; limited administrative costs of targeting and risks of inclusion and exclusion errors; lower leakage of benefits by reducing intermediaries between the disbursal and receipt of funds; *lower* disincentives for work compared to most targeted programs⁵; higher sociological acceptability because of the lack of 'rank reversal' in incomes that often happens under targeted programs; improved financial inclusion and formal savings, which in turn provide a lower-cost way to mitigate risk and smooth consumption than credit, which is subject to high costs of financial intermediation; relaxing borrowing constraints for productive investments; and improved female empowerment (especially if transfers to children are sent to their mothers account).

However, we believe that one reason that policy has moved more slowly despite the endorsement by the Economic Survey is that policy discussions of universal income transfers have been conflated with those of a Universal Basic Income (UBI). While conceptually the

⁻

⁵ This point is not well understood by many commentators who continue to believe that unconditional income transfers will reduce work incentives. As we discuss in Section 2, the need to phase-out targeted benefits with income growth usually leads to a high marginal tax rate on income just in the range where people are climbing out of poverty. This is typically a much bigger disincentive to work than the income effect of a universal unconditional transfer that is not phased out.

proposals are similar, in practice there are important differences. Specifically, the term "basic income" connotes an amount that is enough to live on, and most academic and policy discussions of a UBI have focused on amounts that are large enough to nearly eliminate poverty, which in turn have ranged from 3.5 – 4 % of GDP (Joshi, 2016, Economic Survey 2016) who focuses on the poverty gap to 10-11% of GDP (Bardhan, 2016, Ghatak, 2016) who focus on the head-count ratio. As a result, the fiscal math simply does not work out. Given an overall tax to GDP ratio in India of around 18%, it is impossible to implement such a large universal transfer without either cutting other major anti-poverty programs or substantially increasing the tax to GDP ratio. Alternatively, a large transfer automatically necessitates some targeting – which negates several key advantages.

As we discuss in detail, even if we were to believe that income transfers are a more efficient way of achieving the goals of existing welfare programs, it is politically and practically infeasible to cut major categories of government welfare spending. In contrast, it is much more feasible to direct the *incremental* rupee that is earmarked for welfare spending towards income transfers.⁶ This is exactly what is happening with the Rythu Bandhu, KALIA, and PM-KISAN schemes. While no existing scheme has been replaced to finance these programs, they still represent a landmark policy pivot to spend the *marginal rupee* allocated to farmer welfare on direct income transfers as opposed to increases in distortionary subsidies, procurement prices, or loan waivers. Our proposed policy follows exactly this same approach.

Specifically, we recommend that India adopt an "Inclusive Growth Dividend" or IGD for every citizen that is pegged at one percent of GDP per capita to be deposited directly into the bank account of every citizen on a regular monthly basis. This would provide every citizen with a supplemental benefit of around Rs. 110 per month (at current estimates). The amounts for children under 18 will be transferred into the accounts of their mother (or next responsible guardian). We believe that such an approach which is modest in magnitude but ambitious in reach (by being truly universal) can achieve almost all the benefits of income

⁶ A similar point was made by former CEA, Arvind Subramanian in conversation with one of us (see Muralidharan and Subramanian 2015 for more details).

⁷ The idea and terminology was introduced by one of us in a joint op-ed with Paul Niehaus and Sandip Sukhtankar (Muralidharan, Niehaus, and Sukhtankar 2018) and in short internal notes for the Ministry of Finance put together by Muralidharan. The main goal of this paper is to flesh out the full details of such a proposal and place the recommendation in the larger policy context and more fully distinguish it from the related but distinct discussions of a UBI.

⁸ This is obtained by taking the latest estimate of GDP per capita at current prices (2017-18) which is Rs 129901 (see Statement 2, page 10 in the <u>Press Note on Provisional Estimates of Annual National Income</u> 2018-19 and Quarterly Estimates of Gross Domestic Product for the Fourth Quarter (Q4) of 2018-19, National Statistical Office, Ministry of Statistics and Programme Implementation, Government of India). Taking 1% of this gives a monthly figure of Rs 108, which we round off to Rs 110.

transfers discussed above while mitigating almost all the concerns raised to date regarding the potential costs of a UBI, as we discuss further below.

First, the terminology of an IGD sets a very different set of expectations than a UBI. The term "dividend" makes it clear that this is one component of a *portfolio* of income streams that people would have. The word "inclusive" reflects the progressive aspect of the proposal since the amount is the same for all citizens, the marginal value of the transfer is correspondingly greater for the poor. Finally, the word "growth" captures the idea that the amount will grow along with the growth of the overall economy. Thus, an IGD would be one component of people's income which reaches all citizens and grows equally for all with the country's growth. It would thus be a powerful practical and symbolic commitment to universally shared prosperity. We now discuss the various benefits of such an approach.

The biggest advantage is simply that it is affordable enough to be actually implemented. Indeed, the value envisaged by the IGD is quite similar to that of PM-KISAN (which works out to Rs. 500/month per household or Rs. 110/month per person) and so it can be implemented simply by doubling the budget for PM-KISAN and making the program truly universal. This would allow benefits to also reach landless laborers - who are typically more likely to be destitute and needy than farmers who own land. It would also reduce the likelihood that farmers continue to engage in economically unviable cultivation just to get the PM-KISAN benefit. It would be easier to implement by further reducing eligibility and verification costs. Also by being at the individual level it would limit the scope for gaming the scheme by households splitting to double the value of the transfer. Further, as we discuss in Section 3, an IGD would advance several other social goals as well including female empowerment, financial inclusion, and savings (and be a complement to the Jan-Dhan Scheme). Finally, from a political messaging perspective, an IGD would be a powerful demonstration of the Prime Minister's commitment of "Sabka saath, sabka vikaas". It would also build demonstrable state capacity to credibly deliver a benefit to every citizen – a first in independent India.

In addition to the well-known benefits of income transfers discussed above, we believe that the biggest long-term benefit from an IGD will be to increase the quality of *all* public expenditure by providing an attainable benchmark against which government programs can be assessed. As we document in Section 2.1, evidence suggests that there is a lot of 'value destruction' in public service delivery in India because the government incurs large costs in providing services of such low quality that people opt for market solutions despite the public services being 'free'. Credibly delivering an income transfer every month to every citizen

⁹ As we discuss later, we do not envisage any exclusions from eligibility at this point simply because we believe that it is a powerful symbol of inclusive development and state capacity for the government to demonstrably reach every citizen credibly month after month. One option for excluding the affluent would be to have a "give it up" equivalent option at the time of filing tax returns, whereby citizens who earn above the income tax exemption limit can indicate on their tax returns if they would prefer to forego their IGD.

will over time allow the hypothetical question of "should we do a program or simply give the money directly to intended program beneficiaries" to become a very real one. In many cases beneficiaries themselves can exercise this choice (as suggested by Muralidharan et al. 2018 in the context of the PDS).

In other words, income transfers would become a low-implementation cost "index fund" for development spending and in-kind programs would need to demonstrate that their targeting, administrative and implementation costs deliver more value than their cost. Over time, programs that deliver less value than their cost could be replaced with income transfers while those that deliver more value can be retained. Note that this approach does not make any blanket assumptions regarding the quality (or lack thereof) of government service delivery. Rather, what it does is to raise the accountability of government spending by providing a fiscally-equivalent benchmark. This can have major long-term positive implications for the quality of government expenditure – both by scrapping programs that do not deliver value in excess of their cost, and by forcing programs to become more efficient to deliver value in excess of their cost.

The final important point we make in this paper, is that an IGD could be an especially powerful tool for the 15th Finance Commission to satisfy all three of its goals of inter-state equality, equity, and efficiency. A vexing challenge for the Finance Commission is that economically disadvantaged states are also those with weaker governance. For instance, teacher and doctor absence rates in public schools and clinics are consistently higher in states with lower per-capita income (Chaudhury et al. 2006). Thus, places that are most in need of additional resources to provide basic services like education are also places that are likely to be the least efficient at converting additional spending into improved outcomes. This creates both an efficiency challenge (because funds allocated to poorer states are spent less efficiently) and a political challenge (with better governed states being less willing to finance the inefficiencies of poorer states).

An IGD is uniquely positioned to promote all three goals of inter-state equality, equity, and efficiency and do in a politically acceptable manner. First, by being an equal payment to all citizens, an IGD clearly meets the equality consideration. Second, because the marginal value of an IGD is much higher in poorer areas, it is progressive by construction.¹¹ It is also

⁻

¹⁰ To continue the analogy from investing, the powerful insight of John Bogle was that fund managers all claim to have "alpha" (i.e., they claim to be able to beat the market). But, most actively-managed funds deliver less value over time than low-cost index funds because the fees of the former destroy considerable value. Of course, in the case of public spending, it is possible that many projects have positive "alpha" (which they will if they are true public goods) but is also true that many programs have negative "alpha" where beneficiaries are better off with an income equivalent. Our point is simply that an IGD will make these trade-offs clear.

 $^{^{11}}$ We estimate that it would increase per-capita income by 15% for the poorest 5% of the rural population and by 12% for those between the 6th to 10th percentiles. The corresponding figures for the urban population are

progressive by being directly based on population, which favors the poorer states. Finally, since it will be financed out of the general tax pool (that the rich contribute more to), it is also progressive on the financing side. Thus, an IGD is a powerful tool for promoting equity across the country. Finally, for the reasons discussed above, the efficiency value of an IGD relative to transfers to the general state government budget will be higher in poorer states. This has both the direct benefit of delivering less value destruction (by putting money directly in the hands of the people in states with poorer public service delivery) and the indirect benefit of putting more pressure to improve the quality of public-service delivery in the places where it is weakest. Thus, an IGD may also help promote efficiency of public expenditure in a systematic way.

For all these reasons, we think that an IGD will be an excellent way for the Finance Commission to meet all three principles of equality, equity, and efficiency and believe that such an approach will be broadly politically acceptable for the same reasons. Of course, as we discuss in Section 4, there is nothing that prevents the Central or State governments from adopting an IGD from their own budgets. But we believe that the Finance Commission is best positioned to recommend an implementation of an IGD across the country. Just like the 14th Finance Commission will be remembered primarily for increasing allocations to states, the 15th Finance Commission has an opportunity to be remembered for pushing the next level of decentralization of fiscal authority not just to local bodies (which we support, but is beyond the scope of this paper), but to citizens themselves.

The rest of the paper is organized as follows. In section 2, we review the broad conceptual issues involved in thinking through the trade-offs regarding various aspects of the design of income transfer programs as well as the relevant evidence from India and other developing countries. In section 3 we flesh out the IGD approach in detail and provide specific illustrations of the general aspects of income transfer programs discussed in section 2 in the Indian context. Section 4 provides an implementation roadmap, and section 5 has some concluding observations.

2. Key Conceptual Issues

In this section we review the various arguments and related evidence from India and other developing countries regarding the role of unconditional income transfers as a tool of development policy. Our focus is on the key conceptual arguments and a broad review of the evidence. We discuss the specifics of our Inclusive Growth Dividend (IGD) proposal for India in section 3. In particular, we consider the argument regarding the relative value of spending

a 11% increase for the poorest 5% and a 9% increase for those between the $6^{\rm th}$ and $10^{\rm th}$ percentiles. At the top end of the distribution, the IGD would increase per-capita income by 2% for the top 5% of the rural population and by less than 1% for the top 5% of the urban population. See Table 1 in section 3.3 below for details.

the marginal rupee spent on anti-poverty policies on income transfers as opposed to the direct provision of goods and services aimed at the poor; supplementation versus substitution; the pros and cons of targeted versus universal programs; and the potential impact of an unconditional income transfer scheme like the IGD on wasteful consumption, work incentives, gender empowerment, relaxing borrowing constraints, providing partial mitigation of consumption risk, and facilitating saving for the poor.

2.1. Income transfers versus direct provision of goods and services

A key consideration in assessing the case for income transfers is the question of opportunity costs and whether the same resources could be spent better. In particular, critics of income transfers have argued that it would crowd out resources for spending on other important categories of public expenditure such as education and health, which may have a greater long-term impact on improving citizen welfare (see for instance Aiyar 2019; Roy 2019). As some critics have put it, the move towards income transfers represents giving up on the idea of a "developmental state" and moving towards a "compensatory state" (Roy 2019). Taken to the extreme, such an approach could lead to the abdication of core responsibilities of the state.

How should we assess this criticism? There are two key concepts to keep in mind while assessing the opportunity cost of funds that may be allocated to an income transfer program. The first is that of expenditure on public goods versus redistribution, where we define redistribution to include publicly-provided private goods (like education, health, or food) where the government provides the services to make them available either free or at highly-subsidized costs to make them accessible to the poor. The second is the quality and effectiveness of public expenditure on redistribution and publicly-provided private goods.

Most economists (including us) believe that the returns to spending on public goods and infrastructure significantly exceeds the costs of doing so - especially in countries like India. Examples of such spending include infrastructure for transportation and market integration (such as roads, railways, and ports), communications (internet cables), public health (antivector campaigns, water and sanitation), and basic research. The reason this is likely to be true is that the social benefit of providing these public goods is the sum total of private benefits across millions of individuals. These are all the areas where the market on its own is unlikely to provide the socially optimal amount of the concerned public good and the case for public leadership in ensuring adequate provision is clear.

However, in practice, the patterns of public expenditure in India suggest that there is a substantial allocation of funds to further what may broadly be classified as redistributive goals. These include subsidies to make items cheaper for the poor (such as on fuel, and fertilizer) as well as publicly-provided private goods such as government-run schools and clinics and fair-price shops to distribute subsidized food under the Public Distribution

System (PDS) - where an important rationale for public provision is the ability to offer the service at low or no cost to the poor (which is a redistributive goal).¹²

Indeed, analysis of public expenditure in India suggests that a much larger fraction of social sector spending goes to redistribution rather than public goods. For instance, in agriculture, public expenditure on interest, fertilizer, and electricity subsidies are much greater than spending on public irrigation or agricultural research and extension. Similarly, in health, expenditure on curative services (which are a private good) are greater than those on public goods with substantial positive externalities such as vector control and immunizations. This is also true in education, where the majority of expenditure is on teacher salaries (for *providing* education) rather on public goods such as setting standards and syllabi and running public examination systems.

Thus, the key question we need to answer to assess the relative value of expanding income transfers versus expanding public provision of goods and services is the *quality* of public expenditure in doing so. This is an area where a considerable amount of research has been done in the past fifteen years and several pieces of evidence suggest that the quality of expenditure on public services under the status quo is really poor.

Take the example of schooling where the public spending per student in government schools is over three times higher than the total cost per-student in affordable private schools. Yet, high-quality evidence finds that private schools are at least as effective at improving student learning even though they spend much less per student (Muralidharan and Sundararaman 2015). The main drivers of greater productivity of spending (defined as learning outcomes produced per rupee spent) in private schools are much lower teacher salaries (which allows them to hire more teachers and have smaller pupil-teacher ratios, and less multi-grade

¹² The National Rural Employment Guarantee Scheme (NREGS) has elements of both public good creation (through construction of rural assets) and redistribution (through creating jobs for the rural poor).

¹³ Interest subsidies alone account for Rs. 18,000 crores in the budget for the Ministry of Agriculture and Farmer Welfare in the 2019-2020 Union budget. Further, fertilizer subsidies under the Ministry of Chemicals and Fertilizers are Rs. 74,996 crores. Together, expenditure on just these two subsidies is over eleven times the total budget for the Department of Agriculture Research and Education (Rs. 8,079 crore). In addition, state budgets also spend more on electricity subsidies for groundwater.

¹⁴ The reasons for this pattern of expenditure are beyond the scope of this paper, but one broad explanation is that India adopted universal adult franchise-based democracy at a much lower level of per-capita income than most other OECD countries. Thus, India faced political pressure for redistribution and subsidized or free access to services at a much lower level of development compared to historical norms (see Muralidharan and Subramanian 2015 for a more extended discussion).

¹⁵ Note that a naive comparison of student learning outcomes across public and private schools will yield an incorrect impression that private schools are better because this comparison does not account for the fact that parents of children attending private schools are typically more educated and affluent than those of parents attending government schools. Muralidharan and Sundararaman (2015) address this concern using a large-scale randomized experiment where randomly-selected students (using a lottery) in government schools were provided a voucher to enable them to attend a private school of their choice. Tracking outcomes over time for lottery winners and losers allows for a more accurate comparison of the effects of attending private versus government schools.

teaching) and better accountability (seen in lower teacher absence rates and greater time on task). Another way of seeing this point is that millions of parents are choosing to pay out of pocket for these private schools - even though public schools are available for free or at a *negative* cost (because they provide students with free books and mid-day meals as well).

The situation in health is even more striking where over 70% of primary health care visits in rural India are to fee-charging private providers, even when the village has a public health clinic. These private providers are less qualified, but exert more effort and evidence suggests that the quality of care is not lower despite their being less qualified (Das et al 2016). Further, Das et al. (2016) show that private providers with lower qualifications deliver comparable quality of care as in the public sector, but at less than one-fourth the cost per patient seen. Just like in education, an important mechanism for the greater cost-effectiveness of private providers is lower salaries/income and higher effort.

The flight of the poor towards market solutions is at least in part a consequence of the poor accountability of public-sector service providers - illustrated most strikingly by high rates of teacher and doctor absence across India (at 25% and 40% respectively). One striking way of thinking about the quality of public services in India is: "What does it say about the quality of your product, that you can't even give it away for free?" In other words, revealed preferences suggest that there is a lot of 'value destruction' in public service delivery because the government incurs large costs in providing a service that is of such low quality that most people do not want it. This is mainly because government salaries are too high and accountability of front-line workers is low.

Thus, while there is a strong need to improve the quality of government services, the evidence suggests that value for money under the status quo is low and that the returns to simply increasing spending along existing patterns are also likely to be low. Further, evidence from multiple studies suggests that improving governance can be many more times more cost effective at achieving the same level of effective increase in the presence of a program on the ground than spending more on the program itself.¹⁶

One way of doing this is to improve top-down governance, which is what the existing evidence is based on. However, another way of forcing the public sector to improve its efficiency is by not providing them with a captive market of poor households, but to increase the options that the poorest have to avail of services from both public and private providers.

The discussion above highlights that providing some income support should be seen as a *complement to public services and not a substitute*. Over time, once the state shows that it can credibly reach the poorest through income transfers, it opens up a set of policy options whereby the poor can choose between status quo public services and an equivalent cash

¹⁶ See Muralidharan et al (2016) for evidence in the context of NREGS, Muralidharan et al. (2017) for evidence from education, and Muralidharan et al. (2019) for evidence from a cash transfer scheme for farmers.

transfer (an approach outlined in the case of the PDS by Muralidharan, Niehaus and Sukhtankar 2018b).

Overall, this approach makes no assumptions regarding the relative merits of provision of services by the state or the market. We recognize that there is enormous heterogeneity in both provider quality and beneficiary preferences across time and space. Rather, our point is that having income transfers be part of the portfolio of policy options to reach the poor can empower beneficiaries to have a stronger voice in how social sector funds (spent in their name) are actually spent. Over time, the public sector would need to show that it can deliver more value than an equivalent income transfer and compete for the business of the poor who will be empowered with more options after their incomes are augmented.

To summarize this section, we believe that expenditure on pure public goods - especially productivity-enhancing infrastructure - should not be crowded out to make fiscal space for income transfers. However, we believe that at least one component of the budget allocated for poverty alleviation and publicly-provided private goods could fruitfully be used for income transfers instead. Such an approach will empower citizens to choose from a broader menu of service providers (including private and non-government providers) and to increase the accountability of public provision through greater choice and competition.

2.2. Substitution versus supplementation

Most of the existing discourse on the UBI has assumed that the fiscal space for UBI / income transfers will come from replacing existing programs and substituting them with income transfers instead. However, this has almost never been successfully done in practice. There are several reasons for this including the considerable political economy challenges of shutting down existing programs that benefit millions of people and the risk of imperfect implementation of cash transfers.

Recent evidence illustrates how implementation challenges are non-trivial. Starting in 2015, the Government of India attempted a pilot of substitution of subsidized food grains in the Public Distribution System (PDS) in the 3 union territories of Chandigarh, Puducherry, and Dadra Nagar Haveli (DNH). As part of the pilot, the PDS entitlements of beneficiaries were stopped and replaced instead with a direct benefit transfer (DBT) into their bank accounts.

However, a process monitoring study with over 10,000 household surveys (Muralidharan et al 2017) reported that though government records showed that over 99% of transfers had been made successfully, *nearly a third of households reported not having received their transfers*. This likely reflected a combination of funds going to an inactive account, passbooks not being updated, and no outbound notification of fund transfer.

In ongoing work, we have found similar issues in the flagship Prime Minister's Maternity Benefits Scheme or Pradhan Mantri Matritva Vandana Yojana (PMMVY), where we

monitored implementation quality in Jharkhand.¹⁷ Officials at more senior levels (district and above) indicated that no eligible woman was being excluded. However, at more junior-levels, 30% of supervisors and 50% of Anganwadi workers reported cases of beneficiaries not being registered and hence not receiving their payments. This is corroborated by our survey of actual eligible beneficiaries, where less than 40% of eligible women reported receiving their most recent payment. Since payments may come later, this should be interpreted as the fraction of women receiving benefits on time. However, given the goal of providing funds to pregnant and lactating mothers during the key stages of child development, delayed payments are still a significant marker of weaknesses in last-mile delivery.

This field experience highlights how non-trivial it is to ensure that all beneficiaries have bank accounts that are seeded with Aadhar details as well as eligibility details, and that transfers are made reliably. Given the implementation issues that we have documented across sectors and states, we feel that for political and ethical reasons, it is not prudent to embark on income transfers based on mandated substitution of other benefits.

Further, given the political difficulty of scrapping or replacing existing programs with millions of beneficiaries, the many benefits of having predictable income transfers comprise one part of the portfolio of anti-poverty strategies are not getting realized. In part, this is because there is no way to make the fiscal space for the large transfers (envisaged under most UBI proposals) that would be needed to eliminate poverty without also replacing existing programs.

So from a practical policy perspective, we feel that "less is more" in that starting with a modest supplementary income transfer to all citizens can allow us to get started on the pathway towards realizing the many benefits of income transfers while mitigating several concerns that have been raised by critics. We refer to this approach as an "Inclusive Growth Dividend" (which we explain in more detail in the next section).

Our recommended approach is also consistent with how income transfers are playing out in practice in India. The political economy of expenditure reform is that it is much more difficult to change existing spending than it is to improve the quality of new spending (Muralidharan and Subramanian 2015). We see this playing out in the introduction of income transfers as the preferred policy instrument for supporting farmers over the past 15 months starting with the Rythu Bandhu Scheme (RBS) in Telangana, and then followed up by the KALIA program in Odisha, and the PM-KISAN program on a nationwide basis. Note that these are all *supplemental* programs and do not replace any existing program or subsidy. However, they do considerably improve resource allocation on the margin because the marginal rupee that was earmarked for farmer support was spent on these transfers rather

¹⁷ This is based on ongoing work by one of us (Muralidharan) with other co-authors.

than the much more distortionary default options of farm loan waivers and increases in minimum support prices (MSP).

2.3 Targeted versus Universal Income Transfer Programs

The pros and cons of targeted versus universal social welfare programs have been discussed extensively in the public economics and development economics literatures (see, for instance, the discussions in Banerjee, Niehaus & Suri (2019), Currie & Gahvari (2008), Ghatak & Maniquet (2019), and Hanna & Olken (2018). The main goal of this section is to provide a concise summary of the key trade-offs.

Compared to targeted income or benefit transfer schemes that are aimed at the poor and are therefore subject to means-testing, the Inclusive Growth Dividend (IGD) is an unconditional stream of cash income paid by the government to every member of society - it is paid regardless of whether an individual is working, of his or her existing income, and whoever he or she lives with.

There are three aspects in the design of such a program. First, it is an income transfer as opposed to in-kind transfer like food, housing, or fuel. 18 Second, it is universal, i.e., it is not targeted to any specific group based on socioeconomic or demographic criteria (like age, gender, marriage or family status, and family composition) and provided at the level of the individual as opposed to the household. Third, it is unconditional and not contingent on the recipient satisfying any compliance criteria, such as special *needs*, or the beneficiary being deserving. This makes an IGD distinct from conditional transfer schemes that are contingent on parents sending their kids to school etc.

From the economic point of view, the absence of means-testing or targeting is the most controversial aspect of programs like a UBI, which would also apply to an IGD.¹⁹

A key cost of any program that is not universal is the direct and indirect administrative costs of targeting the relevant group.²⁰ It also creates scope for errors of inclusion and exclusion (namely, those who are not eligible getting it, and those who are eligible not getting it, respectively).²¹ Also, other than the standard inefficiencies associated with subsidies of any kind, targeted schemes create the scope for corruption and leakage in the implementation process. Also, the efforts to get into the list of beneficiaries, legitimately or illegitimately,

¹⁸ We use the term income transfer rather than cash transfer to capture the idea that the income will go into a bank account and not be handed out as cash, which may be more susceptible to impulsive spending.

¹⁹ See Hanna and Olken (2018) and Ravallion (2016) for excellent reviews on different forms of targeting.

²⁰ See Hanna and Olken (2018).

²¹ There is a trade-off between inclusion (Type I error) and exclusion errors (Type II error). If the goal is to minimize exclusion errors (for example, in the spirit of "no one left behind"), then it is likely that inclusion errors will go up. Conversely, attempts to reduce leakage and inclusion errors will typically be accompanied by an increase in exclusion errors as shown in ongoing work by Muralidharan, Niehaus, and Sukhtankar (2019). Hanna and Olken (2018) carry out a simulation exercise, using data from Indonesia and Peru, about the tradeoff between these two types of errors.

should count as another set of costs.²² Finally, scholars and practitioners have also argued that "programs meant for the poor" become "poor programs". Specifically, the argument is that universal programs tend to have broader political support and are therefore better funded and implemented.²³ As we show in Section 3, an IGD would augment consumption by 7-8% for the median rural household and 4-5% for the median urban household, which are non-trivial increases even the median recipient.

The cost of not having targeting is that they make universal schemes more expensive for the same level of benefits, and so, for a given budget constraint, it would involve scaling down the benefits. Also, being lump-sum in nature, they cannot respond to specific needs of individuals or groups, which put them in greater need for income due to individual circumstances.

Theoretically, given the weaker state capacity as well as the problem of a lot of people living on the margins of subsistence, the case for a universal income transfer scheme is stronger in a developing country like India than developed countries since the welfare consequences of exclusion errors are higher (see Ghatak and Maniquet 2019 for a more detailed discussion).

To illustrate the argument in the Indian context, suppose we extend the PM-KISAN to all citizens. Assuming an average family size of 4.6 and a population of 133.2 crores, we get 29 crore additional families, which is almost exactly double the current coverage of the scheme. In per capita terms, the transfer of Rs 6000 per family per year translates to approximately Rs 1300 per person per year, or around Rs 110 per person per month. This is roughly the same figure for the IGD we mentioned in the introduction and therefore amounts to 1% of GDP at current prices, and around 8.2% of total central government expenditure. Translated as a fraction of tax revenue, this would be about 5.5%.

A proposal that was floated by the Congress Party in the run-up to the recently concluded Parliamentary elections, called NYAY (Nyuntam Aay Yojana) involved giving Rs 6000 per month (as opposed to per year, as under PM-KISAN) to the poorest 20% families. This works out to be about 2.5 times the amount that would be needed if PM-KISAN was extended to all families, and accordingly, the total expenditure would have amounted to 2.5% of GDP and 20% of total government expenditure. Even though this scheme no longer has immediate policy relevance, it is interesting to contrast this scheme with PM-KISAN, or its extension to a universal scheme like the hypothetical one that we are proposing. Even if the amount of

²³ In the Indian context, this point has been by Jean Dreze who argues for instance that the PDS in Tamil Nadu works better than in other states in part because it is universal and therefore has broader political support (Dreze 2010). In the US context, a similar point has been made to explain why Medicare (which is universal above age 65) is better financed and politically more secure than Medicaid (which caters only to the poor). See Brown & Sparer (2003) for a discussion.

²² See Khosla (2018) for a good review of the various kinds of costs associated with targeting. From an economists' perspective, the deadweight losses associated with these efforts are a substantial cost that is rarely accounted for in discussing the costs and benefits of targeting.

the financial support is scaled down to say, 1%, of GDP, the key feature of NYAY is that it is targeted to the poor, which raises the problems of targeting mentioned above.

PM-KISAN is also a targeted income transfer scheme – it is aimed at all landholding farmers (subject to some exclusion criteria such as having a family member who pays income tax or is a professional) and so excludes all those who are involved with agriculture but do not own land (such as, agricultural laborers and tenants), and of course, those who are not engaged with agriculture. PM-KISAN is a substantial improvement over input subsidies and loan waivers, and targeting based on landholding is easier than doing so based on income. Yet, it will still have non-trivial costs of targeting including costs of verifying land-holdings and costs of gaming (by households who choose to split landholdings to take advantage of the non-linear features of the benefits schedule). Making the scheme universal would not have this problem. However, politically it may resonate less than a scheme like the PM-KISAN that is aimed at a specific group that is subject to economic distress, although it does not cover the landless who are dependent on agriculture and are also subject to economic distress.

2.4 Will people spend cash transfers badly?

A frequent concern that is raised about a UBI is founded on paternalistic grounds – whether having a fixed guaranteed income makes people want to work less and squander the cash on inessential consumption. In general, income transfers are preferred as they allow individuals freedom of choice as to how to spend the money based on their specific needs and priorities. However, if there are grounds for paternalistic intervention, because the preferences of the individual are different from that of the policymaker (which can be due to behavioral biases or insufficient intergenerational altruism or gender bias), unconditional income transfers may not be the most efficient form of intervention and there may be a case for other policy instruments (e.g., conditional cash transfers).

While there is some evidence that people spend more when they receive windfalls (like lottery winnings, as suggested by Imbens, Rubin, and Sacerdote, 2001), there is no such evidence on small steady streams of income. Indeed, evidence from developing countries suggest that, on average, cash transfers to the poor do not cause them to work less or spend their money on inessential consumption. Evans and Popova (2017) review evidence from 19 studies with quantitative evidence on the impact of cash transfers on temptation good expenditure (mainly, alcohol and tobacco), as well as 11 studies that surveyed whether respondents reported they used transfers to purchase temptation goods supported by data from Latin America, Africa, and Asia. They find either no significant impact or a significant negative impact of transfers on expenditures on alcohol and tobacco. Restricting attention to randomized trials only, the find a negative but statistically insignificant effect.

Bastagli et al. (2016) review evidence on the effects of cash transfers on individuals and households through a rigorous literature review from 2000 to 2015, covering 201 studies

and report increases in household food expenditure, school attendance, use of health services, dietary diversity, savings, livestock ownership, and purchase of agricultural inputs. A pilot study of UBI in eight Indian villages reports similar findings.

Other than giving beneficiaries freedom of choice, not making the transfers contingent on any behavioral norms of recipients, universal income transfer schemes would enable us to avoid setting up an entire administrative machinery aimed at monitoring compliance. This not only avoids the direct and indirect costs of running such a bureaucracy, it also removes the patron-client relationship that is inherent in any system of monitoring and rewards between the state and its citizens that is undesirable in a democracy.

2.5. Effect on work incentives

A major concern about any income transfer program is the potentially negative effect on work-incentives. Using a standard labor-supply framework where individuals choose between income and leisure, an increase in non-wage income would increase the demand for leisure, being a normal good. This is the basis of the standard view that lump-sum cash transfers will reduce labor supply.

There are two problems with this argument.

First, this argument neglects an important aspect of targeted schemes – namely, the benefits decrease with means. This may create strong negative incentive effects via a substitution effect due to a potentially high marginal tax rate in the range of income where the benefits are phased out.

Second, this theoretical argument is not robust to allowing for subsistence considerations or market frictions, and moreover there is a body of empirical evidence from developing countries that suggests unconditional cash transfers do not in fact reduce labour supply.

There is a large literature in developed countries on the possible disincentive effects of targeted schemes that look at the effect of changes in the effective marginal tax rate that is induced by the phase out of transfers, or the changes in the income tax formula that is needed to generate the revenue for the transfer program. Hanna and Olken (2018) provide a brief and useful review of this literature. As they note, the earned income tax credit as well as the welfare reform of 1996 were designed with these concerns in mind. One interesting point they make is that in developing countries that use proxy-means tests for eligibility for benefits programs, the greater is the noise in these formulas, the less will be the implied labour supply distortions due to the phasing out, for the same reason that incentive schemes are less effective when performance is noisily measured. As Banerjee et al (2019) note, there isn't a lot of evidence on the incentive effects of targeting in developing countries. As they point out, the effects certainly exist, as implied by studies such as Imbert and Papp (2018) who find that the regional targeting of the MGNREGA program has led to a decrease in rural-to-urban migration. They also cite evidence from Stecklov et al. (2018) who use a field

experiment to show that households try to appear poorer when participation in surveys are incentivized.

Turning to the argument that income transfers will affect work incentives negatively given that leisure is a normal good, even within the framework of the textbook labour supply model, once we introduce subsistence considerations, this conclusion needs to be modified (Ghatak and Maniquet, 2019). In situations where income levels are so low that subsistence considerations are important – which will be the case with low wages and low levels of non-labour income - a good proportion of the population will be working very hard (i.e., using up all their available time endowment on work) to earn a minimum income level to meet their subsistence needs. For them an income transfer that is not large, will not have any effect on the labour supply and yet can push them above the subsistence level of consumption, resulting in potentially large welfare gains.

Therefore, even with the classical model of the labour supply there are some theoretical reasons to think that the potential disincentive effect of a UBI on labour supply is more likely to be an issue in developed countries in contrast to developing countries.

Once we allow for frictions in the labour, credit or insurance markets, the likelihood of a potentially negative effect of income transfers on labour supply will be further reduced (Baird et al, 2018). To the extent greater income allows better nutrition, which in turn leads to greater productivity, there could be an increase in labour supply due to a higher effective wage rate. Also, to the extent income transfers relax liquidity constraints or enable individuals to take greater risk given the access to a steady stream of income, there could be an increase in labour supply in self-employment, an issue we discuss in detail in Section 2.

While we do not have much direct evidence regarding the effect of unconditional income transfer scheme on labour supply yet, Banerjee et al (2016) re-analyse the results of seven randomised controlled trials of government-run cash transfer programs from six countries worldwide to examine their impacts on labour supply. Across the seven programs, they find no systematic evidence of impact on either the propensity to work or the overall number of hours worked, for either men or women.

Baird et al (2017) also review the evidence on adult labour market outcomes in response to cash transfers and the general picture that emerges is these generally had little or no effect on overall labour supply, and to the extent there was an effect, it was positive with some substitution away from wage labour to work in self-employment.

One of the very few long-standing nationwide cash transfer programs that most closely resembles a UBI was introduced in Iran in 2011. It faced political criticism for its alleged disincentive for work, especially for the poor. However, careful analysis shows that there was no evidence of reduced labour supply and if anything, the labour supply of women and self-employed men actually went up (Salehi-Isfahani and Mostafavi-Dehzooei, 2018).

This suggests that for developing countries there is no systematic evidence of various cash transfer programs having a negative effect on labour supply. Evidence on the labour supply effect of cash transfer programs in developed countries too does not appear to suggest a potentially large negative effect. For example, Marinescu (2018) reviews empirical results from the U.S. and Canadian negative income tax experiments, the Alaska Permanent Fund Dividend, and the Eastern Band of Cherokees casino dividend program, as well as a few other assorted studies, and finds that overall, the programs analysed suggest either no effect on labour market supply or a slight reduction in work and earnings.

To take a concrete example of the problem of targeted schemes in the Indian context, let us consider the NYAY proposal. This involved targeting families in the bottom quintile of the population. The initial version of the proposal was to pay the target group an amount equal to the gap between their actual income and a threshold minimum income of Rs 12,000 a month. Based on the assumption that even the poorest families earn Rs 6,000 a month, an additional Rs 6,000 per month to the poorest 20 percent families would have been sufficient under this scheme to ensure that all of them will have the minimum income. As the proposal evolved, the modified version involved paying the poorest 20% families a flat amount of Rs 6000 per month. Whichever version one takes, the main problem is that measuring the income of the poor is not easy as they work in the unorganised sector and so we do not have a direct way of verifying their incomes such as through payroll or income tax. As a result, under both versions of the scheme there will be strong incentives to underreport income since the marginal tax rate as someone crosses the threshold of qualifying for this scheme is 100% (every one rupee hidden is one rupee gained in benefits) or more (if one crosses from below the threshold to above the threshold, one loses the entire benefit).

This is a good illustration to show that while income effects of unconditional cash transfers may deter effort in theory, targeting can exacerbate poverty due to the disincentives created for trying to climb out of poverty level (high effective marginal tax rate).

2.6 Female Empowerment and Improved intra-household targeting

There is a large literature that shows the positive effects of cash transfer schemes on empowerment of women (see, for example, Duflo 2012, and Bastagli et al. 2016 for reviews). Direct recent evidence on this point is presented by Field et al (2016) who randomize whether NREGS payments for women's work in Madhya Pradesh are paid into the account of the head of household (typically male) or the female worker herself and find that sending money into female accounts significantly raises the labor supply of women on both NREGS and the open market. The authors interpret this result as direct evidence of increased female empowerment from depositing money into their accounts.²⁴

²⁴ Additional recent evidence on increased female empowerment from being the recipient of income transfers is provided by Almås et al (2018) using a randomized experiment from Macedonia that varied the gender of the parent who received a conditional cash transfer for secondary school attendance.

This is also an important channel for how unconditional universal income transfers may improve targeting of the anti-poverty goal of the transfer. Most targeted schemes attempt to reach poor individuals through targeting poor households, but as Brown et al (2019) show, intrahousehold inequality may mean many poor individuals live within non-poor households. Using data from Bangladesh they apply a new approach to calculating individual-level poverty rates that takes intra-household inequality into consideration. They find that women, children, and the elderly are at a risk of living in poverty even within households with per-capita expenditure levels that exceed the poverty threshold. Thus, universal untargeted income transfers (with the allowance for children going to mothers) may actually *improve* targeting to the most vulnerable members of society relative to a system that targeted transfers based on mean household income.

2.7 Relaxing Borrowing Constraints

Critics of income transfers often caricature it as a band-aid to the problem of poverty that diverts resources away from policies and programs that would have enhanced productivity and provided a more long-term sustained pathway out of poverty (e.g., Aiyar, 2019, Roy, 2019). There are two problems with this argument. First, everyone needs band-aids. For those living on the margins of subsistence, dismissing a small income supplement as "pocketmoney" seems misguided, unless someone says we should replace the development and welfare budget by giving people income transfers. Second, and more importantly, in contrast to the standard trope of income transfers reducing incentives for work, there are several theoretically sound reasons to believe that they may increase the productivity of the poor by providing an important source of working capital. Also, having source of consumption insurance will enable the poor from taking risky investments. In this section we discuss these two channels where having a regular income flow can relax borrowing constraints as well as provide a threshold level of insurance in detail, outlining the theoretical arguments as well as providing supporting empirical evidence.

There is an extensive literature in development economics that looks at returns to capital (see Banerjee and Duflo, 2005 for a review) suggesting very high rates of return which often exceed prevailing interest rates. For example, in a well-known study de Mel et al (2008) consider the effect of one-time randomized capital grants worth at most 10-20% of the capital stock of microenterprises in Sri Lanka and estimate the returns to capital to be 60% per year, which is substantially higher than market interest rates and conclude from this that these enterprises are indeed credit-constrained. Experiments with similar-sized grants were carried out in other countries such as Mexico, Ghana, and India and yielded similar rates of return (see Banerjee et al, 2019 and Baird et al, 2018 for a review of the literature). ²⁵

²⁵ There are also experimental studies that look at the effect of large capital grants, such as, Bandiera et al (2017) and Blattman et al (2016). In the former study, the average capital transfer was 90% of the per capita

Despite these high rates of return to capital, only a small fraction of individuals in developing countries have access to bank loans – Banerjee et al (2019) report a figure of 12% for India from the most recent financial inclusion surveys. For the poor in India, Banerjee and Duflo's (2008) well-known survey of the economic lives of the poor suggest that of the percentage of those who have at least one loan (about 66% in rural and 70% in urban areas), a very small fraction comes from bank loans (6% in rural and 7% in urban areas).

However, it is true that there is considerable heterogeneity among borrowers in terms of rates of returns and one should not expect income transfers or capital grants or loans to yield uniformly high returns. This in fact is the general conclusion that emerges from experimental evidence from microfinance from six countries (Banerjee, Karlan, Zinman, 2015). In the study that was based in India (Banerjee et al, 2015), there was no significant effect on business earnings on average, but a strongly positive and persistent impact on those who had a pre-existing business. Even in the studies on capital grants to microenterprises mentioned above, there is variation in the returns once one looks beyond the high average rates of return.

An additional point to keep in mind in the findings regarding microcredit is that the interest rates are not low. The India study mentioned above had an annual interest rate (APR) of 24%, which is higher than the market interest rate, which largely reflects costs of intermediation to poor borrowers with small loan amounts. It is not surprising then that several microfinance studies have take-up rates of less than 20%. Further, there seems to be limited impact of micro-finance on consumption in most studies.

Rather than take a pessimistic view on microcredit, one more optimistic implication is that people have either investment or consumption smoothing opportunities that generate an Internal Rate of Return (IRR) of around 25%, but that these returns are mainly absorbed by interest costs (which in turn reflect intermediation costs). In this view, an IGD offers the potential of delivering similar returns to capital since there is no intermediation cost or interest. More generally, it may help poor households move from a "credit cycle" where they borrow first for a consumption event and then repay in installments (at high interest cost) to a "savings cycle" where they first pay themselves (through automatic savings of their IGD) and then use their savings to finance consumption or investments. Repeated over several cycles, moving out of a "credit cycle" to a "savings cycle" can generate very rates of return.

Finally, an IGD may also make it easier for the poor to access formal credit. Recent evidence from developed country contexts suggests that lenders care more about borrowers' cash flow and a steady income stream in assessing their credit-worthiness (since this determines their ability to service the loan) than about collateral as is assumed in many models of credit constraints (because these are typically illiquid) (Drechsel 2019). In such a setting, the

annual consumption expenditure of the group that was targeted for the intervention. Because of our focus on IGD which involves much smaller amounts, we do not discuss these.

presence of an IGD may considerably increase the assessed credit-worthiness of the poor, which may crowd in formal credit.

The final point worth noting regarding an IGD and credit is that most lenders require repayment on a rigid schedule, which may prevent borrowers from undertaking investments with a delayed pay-off (Field et al 2013). An IGD can help alleviate this problem by providing a stream of income that can service a larger loan while the loan is deployed to undertake productive investments that may have a delayed payoff schedule.

2.8 Mitigating Risk

Collins et al (2009) highlight in their book *Portfolios of the Poor* that the poor (defined as those who live on \$1.90 a day), face considerable risk and seasonality in their income streams and do not actually receive that amount with much certainty. Rather, they may live on \$3 one day, \$1 the next day, and nothing the day after. Yet, the poor in developing countries have very little access to any formal insurance system, beyond informal mechanisms of risk-sharing. In Banerjee and Duflo (2008) only 10-11% of household in rural and urban areas had access to any kind of insurance, whether it was health or life.

From this point of view, financial inclusion and a fixed periodic transfer to their bank accounts, however small, can still go a long way in mitigating the risk they face. This risk not only imposes significant welfare costs but also constrains their ability to undertake incomegenerating activities because of the extreme risk aversion that comes from living on the margins of subsistence. Banerjee et al (2019) review the experimental evidence on the degree to which small enterprises or farms may be constrained by lack of insurance (as entrepreneurs or farmers do not want to expose themselves to the risk that comes with additional investment, whether it is their own money or borrowed money). The evidence, mostly in the context of agriculture, suggests that with insurance farmers choose crops that are riskier but have higher average returns, and there is higher investment.

A particularly striking example of how small the relevant investments might be for returns that are quite significant is provided by the experimental study of Bryan et al (2014). Working with a sample of poor households in rural Bangladesh, who suffer considerable hardship in the lean season, they offer a randomly-selected subsample a payment of 600 Takas in 2008 (which is around \$8.50) conditional on migrating to nearby urban areas, and an additional bonus of 200 Taka (approximately \$3) if the migrant reported to the survey team at the destination. This effectively is the cost of a bus-ride. They find that 22% of the selected households send out a seasonal migrant and there is a significant increase in the food and non-food expenditures of the family members of migrant families to the tune of 30-35%, which in turn improves their caloric intake by 550-700 calories per person per day. They also find that the treated households have a higher likelihood to re-migrate after the incentives are removed in subsequent years. This raises the question of what was stopping

these households from taking advantage of migration opportunities given that the costs are relatively small. Their favored answer is risk-aversion. Since there is uncertainty about the returns to migration, and there is the potential of a downside (as the authors find in the data), households at the margin of subsistence (as these were), may not be willing to pay the "search" cost to take advantage of the opportunity.

The lesson from this study that is particularly relevant from our point of view is that relatively small sums of income transfers can have potentially large effects on income generation, other than contributing towards providing some subsistence support.

2.9 Alleviating Savings constraints

Irrespective of their access to credit and insurance, savings can serve both the role of consumption smoothing as well as accumulating resources for productive investments. Yet, in the absence of access to formal banking, saving is difficult for reasons of risk of theft, demands by friends and extended family, and temptations for spending on inessential consumption.

There is indeed demand for institutional opportunities for savings from the poor. Dupas and Robinson (2013) in an experimental study on expanding access to bank accounts to small enterprise owners in rural Kenya find a very high take-up rate (nearly 87%), which is in sharp contrast to microfinance. Not only that, they found women (as opposed to men) use the bank accounts more actively, increased their total savings, and investment in their business.

With the significant progress in financial inclusion through the Jan Dhan Yojana in recent years, many more among the poorer sections now have access to saving opportunities than what earlier studies suggested. Further, recent evidence suggests that payments into bank accounts in India boosted savings. Specifically, Somville & Vandewalle (2018) show using a randomized controlled trial in Chhatisgarh that savings increased significantly when earnings were directly deposited in beneficiary bank accounts, as opposed to being given out in cash. Thus, an income transfer program combined with bank accounts is likely to meaningfully boost formal savings of the poor.

3. An Inclusive Growth Dividend for India

Based on the discussions above, we now introduce the main policy idea of this paper and our specific recommended way forward for income transfers to become a part of the portfolio of anti-poverty strategies for India. Specifically, we recommend that India adopt an "Inclusive Growth Dividend" or IGD for every citizen that is pegged at one percent of GDP per capita to

²⁶ In a review published a decade ago, Banerjee and Duflo (2008) reported only 6.4% of households in rural areas and 24% in urban areas of India in their sample had a savings account.

be deposited directly into the bank account of every citizen on a regular monthly basis.²⁷ At current estimates, this translates to a benefit of around Rs. 110 per person per month. The amounts for children under 18 will be transferred into the accounts of their mother (or next responsible guardian). We believe that such an approach which is modest in magnitude but ambitious in reach (by being nearly universal) can achieve almost all the benefits of income transfers alluded to in the previous section while mitigating almost all the concerns raised to date regarding the potential costs of a UBI, as we discuss further below.

3.1 Terminology

As we mention above, many of the advantages of income transfers as an anti-poverty strategy have been discussed extensively in the context of a UBI. Yet, there are several important ways in which an IGD is different, which is captured in the terminology.

Perhaps most important is the fact that the term "basic income" connotes an amount that is adequate to live on. This sets the expectation that the amount of the transfer will be large enough to eliminate poverty. This in turn means that the amounts involved are large enough that they would be infeasible to implement without either eliminating other schemes or substantially increasing tax collections - both of which are practically and politically daunting tasks. Thus, setting the expectation of the value of the income transfer too high may have had the negative consequence of delaying progress on using income transfers as one component of an anti-poverty strategy.

In contrast, an IGD sets a very different set of expectations. The most important word here is "dividend" which makes it clear that this is one component of a *portfolio* of income streams that people would have. The word "inclusive" captures the built-in progressivity of the idea. The amount being the same for all citizens, the marginal value of the transfer is correspondingly greater for the poor. Finally, the word "growth" captures the idea that the amount will grow along with the growth of the overall economy. Thus, an IGD would be one component of people's income which reaches all citizens and grows equally for all with the country's growth. It would thus be a powerful practical and symbolic commitment to universally shared prosperity. We now discuss the various benefits of such an approach.

3.2 Affordable enough to be feasible

As discussed above, most of the existing discussions of a UBI in India - including those by Pranab Bardhan, Vijay Joshi, Arvind Subramanian (in the Economic Survey) and one of us (Ghatak) have had a benchmark value of the transfer that ranges from 3.5 -10% of GDP per

_

²⁷ This idea and terminology has been introduced in previous writing by one of us in a joint op-ed with Paul Niehaus and Sandip Sukhtankar (Muralidharan, Niehaus, and Sukhtankar 2018) and in short internal notes for the Ministry of Finance put together by Muralidharan. One of the main goals of this paper is to flesh out the full details of such a proposal and place the recommendation in the larger policy context and more fully distinguish it from the related but distinct discussions of a UBI.

capita. In practice, it will be impossible to find the fiscal space to reach this value of transfer without also eliminating other programs, which as discussed above is both politically and practically difficult. This may be one important reason for why there has been limited policy traction for a UBI in India.

In contrast, at 1% of GDP per capita, the total cost of an IGD (with no exclusions whatsoever) would be in the range of Rs. 190,000 crores. While this is a non-trivial amount, it is entirely feasible to fund such an allocation. As we mentioned earlier, this is a little over double that of the budget allocated for PM-KISAN, whose estimated cost to the Central Government of Rs 87217 crores for the year 2019-20. Also, recall that the per-capita allocation of PM-KISAN is quite similar to that of the IGD with an annual transfer of Rs. 6,000 per household, which is similar to the value of the IGD for a household with the average size of 4.6 members. Thus, the amounts envisaged here are more likely to be in the realm of fiscal feasibility for a *supplemental* transfer.

Further, while PM-KISAN is a substantial improvement over NYAY in terms of design (as discussed in Section 2), using the fiscal allocation for PM-KISAN for an IGD would be even better. First, and perhaps most important, it would also reach landless laborers and those without formal title to land - who are typically more destitute and needy than farmers who own land. Second by being independent of occupation, it would reduce the likelihood that farmers continue to engage in economically unviable cultivation just to get the PM-KISAN benefit. Third, from a practical perspective, by being at the individual level and not the household level it would limit the scope for gaming the scheme by households splitting to double the value of the transfer. Further, as we discuss further below, an IGD would advance several other social goals as well including female empowerment, financial inclusion, and savings.

Finally, if there is limited fiscal capacity for a universal IGD making some targeting necessary, it would make sense to target on the basis of region (say district or block) and make the transfer universal within that region. This way, most of the practical benefits of being a universal program will be achieved (especially low targeting cost) with benefits availing to the most economically disadvantaged regions of the country. Thus, it would be feasible and sensible to start with an IGD in the 20% of the lowest-income districts at a cost of 0.2% of GDP. Such an approach is similar to how programs such as NREGS or Aspirational Districts have been initially rolled out in the most disadvantaged parts of the country.

3.3 Progressive, Inclusive, and Sustained Poverty Reduction

By construction an IGD is a highly progressive program. Rs. 110 per month per person may seem like a pittance to someone living in Delhi or Mumbai. But the same amount can augment the consumption of the very poor by a non-trivial amount. Based on our calculations, we

estimate the following distribution of incomes at various percentiles of the income distribution for rural and urban India:²⁸

Table 1: Rural and urban MPCE at percentile distributions of household consumption

	Rural		Urban	
Fractiles	MPCE (monthly Rs. at current prices)	IGD as a Percentage of MPCE	MPCE (monthly Rs. at current prices)	IGD as a Percentage of MPCE
0-5%	734	15%	986	11%
5-10%	937	12%	1,279	9%
10-20%	1,102	10%	1,573	7%
20-30%	1,273	9%	1,917	6%
30-40%	1,432	8%	2,286	5%
40-50%	1,598	7%	2,656	4%
50-60%	1,782	6%	3,068	4%
60-70%	2,008	5%	3,585	3%
70-80%	2,315	5%	4,310	3%
80-90%	2,825	4%	5,477	2%
90-95%	3,597	3%	7,528	1%
95-100%	6,305	2%	14,468	1%
Average	2,012	5%	3,700	3%

As the table above makes clear the 5th percentile rural household has a monthly per-capita expenditure (MPCE) of Rs. 734. Thus, while a sum of Rs. 110/month per head is not large enough to eliminate poverty, it is large enough to allow the poorest households to augment their basic consumption by a highly meaningful 15% in rural areas and 11% in urban areas. In fact, at current prices, Rs 867 defines the upper limit of the bottom 5th percentile in rural areas and so with the proposed IGD, the average MPCE will increase (Rs 734 plus Rs 110) to the point of almost reaching this upper limit (Rs 844 being 97% of Rs 867). In other words, if we were to define the ultra-poor to be the bottom 5-th percentile of rural households, then the IGD will come close to moving everyone out of that (extremely low) threshold.

The IGD would augment monthly consumption by 10% or more for the bottom 30% of the rural population, and by at least 7% or more for the bottom half of the rural population. These are non-trivial amounts.

In terms of proposed amount at the current level of GDP per capita, the IGD works out to be

²⁸ This calculation is based on the percentile distributions of household per capita expenditure based on the NSS 2011-12 figures (NSS, 2014), adjusted for inflation.

very similar to if we extended the PM-KISAN to *all citizens* as we mentioned earlier – in particular, given the latest available estimate of GDP per capita, namely, Rs 129901 (at current prices), the IGD works out to a per person per month figure of Rs 110 for 2017-18.²⁹ This is about 9.1% of the income that defines the rural poverty line for India as a whole, and 6.1% of the corresponding figure that defines the urban poverty line, based on calculations we presented earlier. This may not seem significant at first glance, but one should take two facts into account. First, while about 22% of the population is below the poverty line (according to 2011-12 estimates), there is a great deal of heterogeneity among the poor and so a monthly sum of Rs 110 will not be as trivial as it might seem. Second, these figures are India as a whole and once one takes into account the great heterogeneity among states, for poorer states the sum will not be trivial.

We should also keep in mind the huge amount of inter-state variation in levels of income. For example, in Table 2 below, we present the MPCE in rural areas by state (at current prices) according to NSS (Table T4). Even though for India as a whole the IGD as a fraction of the MPCE is 5%, for the three poorest states, the figure is 8%, while for five more (out of the seventeen major states), the corresponding figure is 6% to 7%.

²⁹ Source: Provisional Estimates of Annual National Income, 2018-19 and Quarterly Estimates of GDP for the Fourth Quarter of 2018-19, National Statistical Office, May 2019.

Table 2: Rural average MPCE by State³⁰

	Ru	Rural	
	MPCE (monthly	IGD as a	
	Rs. at	Percentage	
	current	of MPCE	
States	prices)		
Odissa	1411.32	8%	
Jharkhand	1415.54	8%	
Chhattisgarh	1445.09	8%	
Bihar	1585.80	7%	
Madhya Pradesh	1620.98	7%	
Uttar Pradesh	1626.61	7%	
Assam	1715.26	6%	
West Bengal	1816.57	6%	
Gujarat	2161.31	5%	
Karnataka	2196.48	5%	
Rajasthan	2248.55	5%	
Maharashtra	2278.10	5%	
Tamil Nadu	2382.22	5%	
Andhra Pradesh	2468.05	4%	
Haryana	3061.85	4%	
Punjab	3299.65	3%	
Kerala	3755.55	3%	
All India	2012.15	5%	

Further, by being universal, the risk of exclusion errors is minimized - which is an important way in which existing programs do not deliver on their goals of alleviating poverty. In addition, if benefits are linked to *Aadhaar*, the benefits would be portable, which is something that very few programs are able to do at present (though this has recently been announced for the PDS). The importance of portability of benefits will only grow as migration and urbanization grow in the coming years. The universal coverage would also make an IGD a powerful symbolic program of national unity as perhaps the only program to date that equally reaches every citizen of the country in a reliable predictable manner.

Finally, by pegging the value of the transfer to a fraction of GDP per capita, the structure of the IGD has built-in indexation and will grow over time at the rate of *nominal* GDP growth which will account for both inflation as well as for real economic growth. Critics of income transfers with respect to income-based anti-poverty programs as opposed to in-kind benefits point out that the real value of the former is often allowed to be eroded by inflation for fiscal reasons in a way that the latter are less susceptible to. For instance, the value of

³⁰ The states are arranged in ascending order in terms of rural MPCE in the table.

the National Old Age Pension Scheme had a nominal value of Rs. 200/month in 2006, but was not adjusted upwards for over a decade, prompting concerned economists (including one of us - Ghatak) to write to the Finance Minister to request an increase of this amount in 2018. In contrast, by being linked to a fraction of GDP, the IGD makes these increases automatic and will ensure a sustained impact on poverty reduction over time.³¹

3.4 Rank Preservation and Psychological well-being

There is an important sociological problem with targeted programs - which is that they can often cause "rank reversals" on the ground. This was a major shortcoming of NYAY for instance. By providing transfers to people who were in the poorest 20% of the population but not those who are right above, such a design would reverse the prosperity ordering between households below and above the threshold. Given the well-established evidence that people care about relative income and status as well as absolute income and poverty (Veblen 1899), such ranking reversals can be quite unpopular and may also be a cause for the targeting errors that happen in targeted programs. Further, there is also evidence of negative psychological effects on non-recipients of transfers when some of their neighbors do receive transfers (Haushofer et al. 2015).

An IGD elegantly avoids all such sociological and psychological challenges by being both universal and not excluding anyone, and also by preserving relative ranking of economic status within communities. Of course, the net distributional impact of an IGD will depend on the structure of the tax system that finances it. But since people do not directly map sources of tax revenue to specific expenditure categories, the salience of these issues are mainly a function of the nature of the expenditure.

3.5 Female Empowerment and Improved intra-household targeting

Since the IGD for children will be transferred into their mother's accounts, it would result in a meaningful increase in the resources that women control within the household. Thus, consistent with the evidence reviewed in Section 2, it is reasonable to expect that an IGD where the allowance for children under 18 is transferred into the bank accounts of their mothers will over time increase female empowerment – both in terms of the control of resources and also in terms of increased mobility to visit banks and ATM's to access the money (which they will likely have to do in person to authenticate themselves using Aadhar).

This aspect considerably strengthens the appeal of income transfer schemes like the IGD as they can be aimed at individuals and not families, and mothers can be in addition given the transfers intended for children. Further, as discussed in Section 2, intra-household

_

³¹ In this sense, the IGD is a variant of the idea of a "Universal Basic Share" put forward in Ray (2016) albeit at a much lower share than the 9% discussed there as the share needed to eliminate poverty. The approach is also similar to how Social Security benefits in the US are indexed to the rate of wage growth in the economy capturing not only inflation, but growth in real worker earnings over time.

inequality is a non-trivial concern in India (highlighted for instance by Jayachandran and Pande 2017) and thus, an untargeted universal income transfer with the IGD for children going into mother's accounts may do a better job of targeting *individual* poverty.

3.6 Work incentives

Another advantage of the IGD approach is that the value of the transfer is too small to have any adverse impacts on incentives to work. The income effect on leisure from such a modest transfer are likely to be miniscule. As mentioned earlier, adjusting for inflation, the poverty line figures of Rs. 32 per person per day in rural areas and Rs. 47 per person per day in urban areas translate to per month figures of around Rs. 1,200 and Rs. 1,800 respectively. The sum of Rs 110 per person per month is 6% and 9% of these figures. While non-trivial, they are unlikely to have serious effects on work incentives.

Further, as discussed in Section 2, an important attraction of an IGD is that there is no phase out of the benefits, which means that there is no disincentive to work during that period. Even if there is a phase out at a high-level of income (say high enough to be above the threshold for income tax payments of Rs. 5 lakhs/year) at that point the marginal tax rate from losing the IGD is under 0.2%.

More importantly, an IGD could actually increase worker productivity. Estimates of migration in India suggest that rural to urban migration is sub-optimally low given the disparities in earnings in rural and urban areas (Munshi and Rosenzweig 2016). However, there is also credible evidence from Bangladesh that people often do not invest in profitable opportunities like migration because they are so poor that they cannot afford to invest in "searching" for a better job in an urban area - including transportation and sustenance costs to conduct such a search (Bryan et al 2013). In such a setting, even very modest income transfers to people that are predictable and reliable can significantly improve productivity by increasing their ability to search for better opportunities and take on the small risks needed to "invest" in such search.

3.7 Financial Inclusion, Savings, Credit, Risk, and Insurance

An IGD would also directly promote financial inclusion in the country and help the poor build savings in a secure bank account. Some sense of how important a development goal this would be is provided by Badarinza et al (2017) who show that using the all-India Debt and Investment Survey of 2012 that households at the 25th percentile and below of the Indian wealth distribution had *zero* financial assets/savings. Even at the median, the financial savings were only Rs. 2,200 per household.

This figure has likely improved in recent years with the large-scale expansion of Jan-Dhan bank accounts. Yet, a large number of accounts remain dormant with a zero balance. As of December 2018, the Finance Minister responded to a Lok Sabha Parliamentary question saying that out of 33.6 crore Jan-Dhan accounts created, 23% were dormant.

In the World Bank's 2017 Global Findex, 80% of Indians surveyed reported having accounts at formal financial institutions; 77% of rural Indians reported having accounts (Demirgüç-Kunt et al. 2018). However, among those with accounts, 48% did not make any deposits or withdrawals in the previous 12 months. Such inactivity in turn leads to banks automatically deeming the accounts dormant, which makes them unusable without reactivation. Thus, a large fraction of the enormous efforts undertaken by banks and governments to boost financial inclusion is wasted because the accounts that are opened under these

There is almost no doubt that having a regular inflow of funds into these accounts will lead to greater usage of these accounts, and by definition, these accounts will be active due to the monthly deposits they will receive.

3.8 Augmenting State Capacity

Implementing an IGD would involve identifying every citizen, matching him or her to a bank account (or a parent/guardian with a bank account), and being able to reliably send monthly transfers to over 1.3 billion people. Simply doing this would be a tremendous achievement. It would have the indirect benefit of developing demonstrable state capacity to credibly reach every citizen and reliably deliver a benefit for the first time in independent India.

Building such capacity in turn opens up an entire range of tools for better policy going forward. In the longer-term, the IGD infrastructure may enable a strengthening of tax collection capacity by connecting every citizen to the state and vice versa. Also, there are several critical policy areas for citizen welfare that require scarce resources to be priced, including water and air (the lack of pollution in the later instance). Most economists believe that a policy that increased say carbon taxation or water pricing and rebated the proceeds to all citizens would be welfare enhancing. Yet, such policy instruments are outside the feasible set of what can be implemented right now. Successfully implementing an IGD will make such instruments feasible and thereby augment state capacity to better price scarce resources to reflect their social cost while using income transfers to mitigate the effect of such price increases on the poor.

Remarkably, building such state capacity is no longer a pipe dream and would be a logical culmination of the investments in the past decade in the *Aadhar* platform combined *with Jan-Dhan* accounts and mobile seeding. The final key step in making this capacity universal is to strengthen the "plumbing" of financial inclusion by making the pipes transport funds every month to keep them from becoming rusty. In this sense, the IGD would be fitting next step for the broader vision of augmenting state capacity to better identify citizens and deliver benefits to them.

3.9. IGD as a benchmark for development spending and enabler of choice

Finally, and perhaps most importantly, building the infrastructure to deliver an IGD can improve the accountability of *other* government programs by making cash transfers an

attainable benchmark against which they can be evaluated. There has been an increasing push from policy makers to consider replacing poorly performing programs with income transfers instead. This was the spirit of the pilot of replacing PDS with DBT in 3 union territories. In a similar vein, the NITI Aayog and the Ministry of Women and Child Development have been preparing for pilot studies of substituting Take-Home Rations (THR) in the ICDS (which are believed to be poorly implemented) with DBT.

However, as the discussion in Section 2.2 highlights, data from the field from our experience in monitoring the implementation of these schemes suggests that there are non-trivial challenges with the quality of last-mile implementation of income transfers. These are meaningful enough that we do not feel comfortable endorsing any attempt to mandatorily replace existing in-kind benefits with an income equivalent – whether this be for the PDS or THR or any other such program.

Further, data collected from ongoing work reveal that there is considerable heterogeneity in beneficiary preferences regarding income versus in-kind benefits.³² For instance, we asked beneficiaries in Jharkhand to state the value of income transfer at which they would be willing to forego their THR entitlements and found substantial variation with some beneficiaries willing to accept an amount that was much below the fiscal cost of the program (suggesting that the in-kind program was destroying value relative to the cost) whereas others stated an amount that was considerably above (suggesting that in-kind provision was providing more value than the cost). Similar heterogeneity is observed in both stated and revealed preference in the PDS.

The combination of implementation challenges with income transfers and demonstrated heterogeneity of beneficiary preferences over income versus in-kind transfers has convinced us that the only politically, and ethically prudent way of proceeding with any kind of substitution is by offering beneficiaries a choice between in-kind benefits (which is the default in most cases) and a fiscally-equivalent income transfer. This is an approach that we have recommended in the PDS (see Muralidharan, Niehaus, and Sukhtankar 2018 and Ghatak 2019) and is one that may be applicable in other cases of publicly-provided private goods as well.

However, embarking on a choice-based framework itself requires the state to have demonstrated the capacity to credibly deliver income transfers. This is why we think that an IGD can be a foundation for improving the quality of expenditure in several other areas of social sector spending. Once income transfers are credibly established as a feasible option

³² This ongoing work is being conducted by Muralidharan jointly with Paul Niehaus, Sandip Sukhtankar, and Jeff Weaver.

that the poor can depend upon, it opens the possibility of offering program-level choices to beneficiaries between income and in-kind assistance.

It is possible that in-kind provision may deliver more value than market options (because the government does not have a profit motive, does not have marketing costs, and can procure in bulk). But it also possible that market options may do better (because costs are higher under government provision and accountability of front-line personnel is low). Again, though on average the data in India suggest that the market is more efficient, we do not pre-judge the outcome (both because of heterogeneity and because it is possible for the government to get more efficient).

The point rather is that allowing the choice allows much more accountability in government programs and will empower beneficiaries by providing them one more option. For instance, in ongoing work in Maharashtra where we are studying the impact of providing choice between PDS grains and income transfers via DBT, we see that the take up rate for DBT is around 25%.³³ Yet, nearly all beneficiaries *value having the option*.

These data also highlight why the default discussion of a UBI that simply assumes that existing welfare programs can be folded into an income transfer is both naïve and unrealistic. People do value their in-kind benefits and often prefer them to income transfers. Conversely, in cases where the performance of the in-kind benefit is poor, they highly value having the option of an income transfer.

In the long-term both public and market provision of goods and services are important – especially for each to keep a check on the other through choice and competition. The problem in the status quo is that the poor constitute a captive market for government provision where they have limited options for both voice and exit (Hirschman 1972). Empowering them with choice improves both their outside options, and thereby their ability to drive improvements in public delivery.

Thus, income transfers would become a low-implementation cost "index fund" for development spending and in-kind programs and subsidies would need to demonstrate that their targeting, administrative and implementation costs deliver more value than their cost. Over time, programs that deliver less value than their cost could be replaced with income transfers while those that deliver more value can be retained.

³³ This is based on ongoing work by Muralidharan with Paul Niehaus, Sandip Sukhtankar, and Jeff Weaver

4 Making it Happen

In practice, making an IGD happen requires two main things: the money for the transfers, and ensuring implementation capacity to actually deliver the transfers in a credible and reliable way. For the purpose of this piece, we assume that the main constraint is the former and assume that the investments in *Aadhaar*, *Jan-Dhan* bank accounts and mobile seeding provide enough of a foundation for implementation to happen if there is political will behind the program. Since the political will for large-scale income transfers to nearly half the Indian population has already been demonstrated in the context of PM-KISAN, this seems like a reasonable assumption. This section will therefore focus on financing and consider three main channels of funding the transfers: the 15th Finance Commission, the Central government, and state governments.

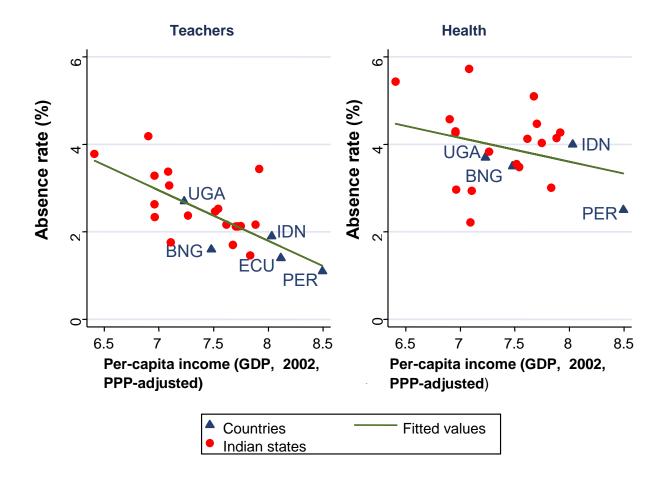
4.1 Fifteenth Finance Commission

We believe that the 15th Finance Commission is overall in the best position to implement the IGD vision outlined in this paper. This is in large part because the IGD satisfies several key principles that are in the terms of reference of the Commission, in particular, those of interstate equality, equity, *and* efficiency.

It should be clear by now that the IGD would satisfy the first two principles. The equality principle is built into the IGD by construction, by virtue of being the same amount for all citizens. The IGD also satisfies the equity principle as shown in Section 3.3. It is highly progressive, with a higher marginal impact on consumption for the poorest.

The subtle point is the one about efficiency and in particular the tension between equity and efficiency. Since a key principle for the Commission is equity across regions, past Commissions have regularly provided additional funding for economically and socially disadvantaged states to help reduce regional inequalities – especially in key areas of human development such as health and education.

The problem however, is that we have fairly robust evidence that the quality of governance is weaker in the poorer states. This point is clearly illustrated by the graph below from Chaudhury et al (2006), who show that states with lower per-capita income have significantly higher rates of teacher and doctor absence in the public sector.



Given that teacher and doctor salaries are the largest component of public expenditure on education and health, this is a direct measure of leakage of public expenditure. Calculations from follow up research on teacher absence in India indicate that the fiscal cost of teacher absence alone is over Rs. 10,000 crores/year (Muralidharan et al. 2017). These figures are based on salaries in 2010 and are likely to be much higher when we use salary figures after the implementation of the 7th Pay Commission.

Another way of seeing the problem of weak public service delivery is to look at the private market share of health and education. Using all-India data on the presence of a private school in villages, Muralidharan and Kremer (2008) show that private schools are more likely to exist in villages with higher teacher absence in the public schools and also show that the correlation between state GDP per capita and private school presence is *negative*. The relationship is also negative within states – with a greater share of private schools in districts with lower consumption per capita (estimated with state fixed effects). In other words, the flight to private options is not simply a function of growing income, but rather likely to be a direct consequence of poor public provision.

Turning to health, Das et al. (2019) show using all-India data on the quality and availability of healthcare providers in rural India, that state like UP and Bihar deliver lower quality healthcare at a higher per-unit cost than better performing states like Tamilnadu. The high unit-cost is in part a reflection of low usage – which in turn is driven by low quality and reliability.

These results highlight the vexing challenge that the Finance Commission faces in terms of satisfying its equity mandate. On the one hand, the poor states need more assistance to help meet horizontal equity goals across the country. On the other hand, the quality of public expenditure is systematically lower in these states. This creates a "Samaritan's dilemma" where the marginal quality of public expenditure is lower in places that need it the most.

An IGD is especially attractive in such a setting by allowing the Finance Commission to meet its equity mandate while circumventing (at least for one component of funding) the weaknesses in governance in the poorer states. In other words, since the "wedge" between cost of provision and on-the-ground delivery of services is higher in poorer states, sending one component of funds earmarked for equity directly to citizens will improve the efficiency of those funds relative to a counterfactual of sending all the additional "equity" funds through the state governments.

It is important to clarify that an IGD does not in any way suggest giving up on improving the quality of governance in poorer states. Rather, it is consistent with our *portfolio* approach whereby one component of funding for India's anti-poverty and development strategy is allocated to direct income transfers. Recommending an IGD does not in any preclude the Finance Commission from introducing other performance-based metrics for transfers.

However, we strongly believe that an IGD provides a more broadly acceptable way for the Finance Commission to redistribute resources to poorer states (which will happen because it is based on population which is greater in poorer states). In particular, because it so transparently satisfies the principles of equality and equity, and directly contributes to poverty alleviation, we believe that citizens in high-income states will be more supportive of this form of redistribution relative to those that go exclusively through governments.

4.2 Central Government

While we believe for the reasons above that the Finance Commission is best placed to implement this vision, there is nothing that prevents the Central government from doing so of its own accord. While fiscal space is tight and there are several competing demands for funds (including say for implementing the New Education Policy or health initiatives like *Ayushman Bharat*), there is clearly political demand for direct alleviation of poverty as seen by the major commitment to the PM-KISAN program.

Implementing an IGD is a natural extension of this approach at a similar cost per beneficiary. It is true that it would double the budget but it would also offer substantial benefits as outlined in Section 3. Recognizing the importance of political messaging and that good economics needs to also be good politics, implementing an IGD would also be directly consistent with the Prime Minister's promise of "Sabka Saath, Sabka Vikas" and provide a demonstrable feat that can be taken back to the voters.

If short-term fiscal constraints are binding, it would also make sense to start an IGD in the most disadvantaged districts (or even blocks) in the coming year and assess and evaluate its performance before scaling up over the next four years to achieve universal coverage before the next elections. Given potential fuzziness in targeting at the district level, it may even be possible to randomize the roll-out within a universe of districts or blocks identified as eligible over a three-year period and use a lottery to phase the program in. This would allow the generation of credible estimates of impact – including general equilibrium effects and multipliers – prior to scaling up.

4.3 State Governments

Finally, even if the Finance Commission or the Central Government choose not to make a fiscal commitment to an IGD for the entire country in one shot, there is nothing that prevents a state government from implementing an IGD on its own volition – potentially targeting the poorest districts or blocks within the state with a similar approach as identified above. The simplicity of the idea means that any state can implement it on its own without needing to explicitly coordinate with the Center.

It is worth recalling that the leadership of the state of Telangana in designing and implementing the *Rythu Bandhu* Scheme, and its demonstrated practical and political success, is what led to the rapid replication of the idea across the country. The idea of an IGD is similarly ripe for state-level leadership if the Centre decides to wait.

5. Conclusion

We have made the case for an Inclusive Growth Dividend or IGD pegged at 1% of GDP per capita to be paid unconditionally to every Indian citizen as a modest (in amount) but ambitious (in reach) way of making income transfers a part of the portfolio of anti-poverty strategies in India. The amount of the transfer is very similar to the amount being offered under PM-KISAN, and the fiscal impact is therefore within the realm of practical feasibility. We highlight the premise that such a scheme is only one part of a large *portfolio* of policies aimed at alleviating poverty. We have argued how it avoids some of the criticisms that can be applied to a more generous Universal Basic Income scheme and argue that there is a strong case for such a scheme in India and it is consistent with key principles that guide our inclusive growth strategy, namely, equity (including, inter-regional equality) and efficiency.

Bibliography

- "60 Economists Send Wake-Up Call to Arun Jaitley on Maternal Benefits". 2018. *The Wire*. Retrieved from https://thewire.in/rights/make-pensions-maternity-benefits-priority-in-budget-2019-economists-to-arun-jaitley
- Aiyar, S. A. 2019, February 27, 2019. "Why universal basic income is a bad idea". *The Economic Times*. Almås, I., Armand, A., Attanasio, O., & Carneiro, P. 2018. "Measuring and Changing Control: Women's Empowerment and Targeted Transfers". *The Economic Journal*, 128(612).
- Badarinza, C., Balasubramaniam, V., & Ramadorai, T. 2016. "The Indian Household Finance Landscape". *Working Paper*.
- Baird, S., McKenzie, D., & Özler, B. 2018. "The Effects of Cash Transfers on Adult Labor Market Outcomes". World Bank Group Policy Research Working Paper (8404).
- Bandiera, O., Burgess, R., Das, N., Gulesci, S., Rasul, I., & Sulaiman, M. 2017. "Labor Markets and Poverty in Village Economies". *Quarterly Journal of Economics*.
- Banerjee, A. 2002. "Contracting Constraints, Credit Markets, and Economic Development". *Advances in Economics and Econometrics, 3*.
- Banerjee, A. 2016, June 18, 2016. "The best way to welfare". The Indian Express.
- Banerjee, A., & Duflo, E. 2005. "Growth Theory through the Lens of Development Economics". In P. Aghion & S. Durlauf (Eds.), *Handbook of Economic Growth* (Vol. 1, pp. 473-552): Elsevier.
- Banerjee, A., & Duflo, E. 2008. "Economic Lives of the Poor". *Journal of Economic Perspectives, 21*(1), 141-167.
- Banerjee, A., Duflo, E., Glennerster, R., & Kinnan, C. 2015. "The Miracle of Microfinance: Evidence from a Randomized Evaluation". *American Economic Journal: Applied Economics*, 7(1), 22-53.
- Banerjee, A., Hanna, R., Kreindler, G., & Olken, B. A. 2017. "Debunking the Stereotype of the Lazy Welfare Recipient: Evidence from Cash Transfer Programs". *The World Bank Research Observer*, 32(2), 155-184.
- Banerjee, A., Niehaus, P., & Suri, T. 2019. "Universal basic income in a developing world". *NBER Working Paper 25598*.
- Banerjee, A. V., Karlan, D., & Zinman, J. 2015. "Six Randomized Evaluations of Microcredit: Introduction and Further Steps". *American Economic Journal: Applied Economics*, 7(1), 1-21.
- Bardhan, P. 2016. "Basic income in a poor country". Ideas for India.
- Brown, C., Calvi, R., & Penglase, J. 2019. "Sharing the Pie: Undernutrition, Intra-Household Allocation, and Poverty". *Working Paper*.
- Brown, L. D., & Sparer, M. S. 2003. "Poor Program's Progress: The Unanticipated Politics Of Medicaid Policy". *Health Affairs*, 22(1).
- Bryan, G., Chowdhury, S., & Mobarak, M. A. 2014. "Under-Investment in a Profitable Technology: The Case of Seasonal Migration in Bangladesh". *Econometrica*, 82(5), 1671-1748.
- Christopher Blattman, Eric P. Green, Julian Jamison, M. Christian Lehmann, & Annan, J. 2016. "The Returns to Microenterprise Support among the
- Ultrapoor: A Field Experiment in Postwar Uganda". *American Economic Journal: Applied Economics*, 8(2), 35-64.
- Collins, D., Morduch, J., Rutherford, S., & Ruthven, O. 2009. *Portfolios of the Poor: How the World's Poor Live on \$2 a Day*: Princeton University Press.
- Currie, J., & Gahvari, F. 2008. "Transfers in Cash and In-Kind: Theory Meets the Data". *Journal of Economic Literature*, 46(2), 333-383. doi:10.1257/jel.46.2.333
- Das, J., Holla, A., Mohpal, A., & Muralidharan, K. 2016. "Quality and Accountability in Health Care Delivery: Audit-Study Evidence from Primary Care in India". *American Economic Review,* 106(12), 3765-3799. doi:10.1257/aer.20151138

- Davala, S., Jhabvala, R., Standing, G., & Mehta, S. K. 2015. *Basic Income: A Transformative Policy for India*. London / New York: Bloomsbury.
- de Mel, S., McKenzie, D., & Woodruff, C. 2008. "Returns to Capital in Microenterprises: Evidence from a Field Experiment*". *The Quarterly Journal of Economics, 123*(4), 1329-1372. doi:10.1162/qjec.2008.123.4.1329
- Demirguc-Kunt, A., Klapper, L., Singer, D., Ansar, S., & Hess, J. R. 2018. *The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution* (126033). The World Bank.
- Drechsel, T. 2019. "Earnings-Based Borrowing Constraints and Macroeconomic Fluctuations". *Working Paper, LSE.*
- Dreze, J. 2010, July 8, 2010. "The task of making the PDS work". Retrieved from https://www.thehindu.com/opinion/lead/The-task-of-making-the-PDS-work/article16115247.ece
- Dreze, J. 2018. "Decoding Universal Basic Income". *Indian Journal of Human Development, 11*(2), 163-166.
- Duflo, E. 2012. "Women Empowerment and Economic Development". *Journal of Economic Literature,* 50(4), 1051-1079. doi:10.1257/jel.50.4.1051
- Dupas, P., & Robinson, J. 2011. Savings Constraints and Microenterprise Development: Evidence from a Field Experiment in Kenya. UCLA.
- *Economic Survey 2016-17*. 2017. Government of India, Ministry of Finance, Department of Economic Affairs.
- Evans, D. K., & Popova, A. 2017. "Cash Transfers and Temptation Goods". *Economic Development and Cultural Change, University of Chicago Press, 65*(2), 189-221.
- Field, E., Pande, R., Rigol, N., Schaner, S., & Moore, C. T. 2016. "On Her Account: Can Strengthening Women's Financial Control Boost Female Labor Supply?". *Working Paper*.
- Field, E., Rohini Pande, John Papp, and Natalia Rigol 2013. "Does the Classic Microfinance Model Discourage Entrepreneurship among the Poor? Experimental Evidence from India". *American Economic Review*, 103(6), 2196-2226.
- Ghatak, M. 2015. "Theories of Poverty Traps and Anti-Poverty Policies". *The World Bank Economic Review*, *29*(1), S77-S105.
- Ghatak, M. 2019. "Social Protection". In A. Banerjee, R. G. Rajan, G. Gopinath, & M. S. Sharma (Eds.), What the Economy Needs Now: Juggernaut Books.
- Ghatak, M., & Maniquet, F. 2019. "Some Theoretical Aspects of a Universal Basic Income Proposal". Annual Review of Economics (Forthcoming), 11
- Hanna, R., & Olken, B. 2018. "Universal Basic Income versus Targeted Transfers: Anti-Poverty Programs in Developing Countries". *Journal of Economic Perspectives*, *32*(4), 201-226.
- Haushofer, J., Reisinger, J. H., & Shapiro, J. J. 2015. "Your Gain Is My Pain: Negative Psychological Externalities of Cash Transfers". *Working Paper*.
- Imbens, G. W., Rubin, D. B., & Sacerdote, B. I. 2001. "Estimating the Effect of Unearned Income on Labor Earnings, Savings, and Consumption: Evidence from a Survey of Lottery Players". *American Economic Review*, 91(4), 778-794. doi:10.1257/aer.91.4.778
- Imbert, C., & Papp, J. 2018. "Costs and Benefits of Seasonal Migration: Evidence from India". *The Warwick Economics Research Paper Series* (1161).
- Jayachandran, S., & Pande, R. 2017. "Why Are Indian Children So Short? The Role of Birth Order and Son Preference". *American Economic Review*, 107(9), 2600-2629. doi:10.1257/aer.20151282
- Joshi, V. 2016. "Universal basic income for India". Retrieved from https://www.ideasforindia.in/topics/poverty-inequality/universal-basic-income-for-india.html
- Kapur, D., Mukhopadhyay, P., & Subramanian, A. 2008a. "The Case for Direct Cash Transfers to the Poor". *Economic and Political Weekly*, *43*(15), 37-41, 43.

- Kapur, D., Mukhopadhyay, P., & Subramanian, A. 2008b. "More on Direct Cash Transfers". *Economic and Political Weekly*, 43(47), 85-87.
- Khosla, S. 2018. India's Universal Basic Income: Bedeviled by the Details
- Marinescu, I. 2018. "No Strings Attached: The Behavioral Effects of U.S. Unconditional Cash Transfer Programs". *National Bureau of Economic Research Working Paper Series, 24337*.
- Mohanty, S. K., Govil, D., Chauhan, R. K., Kim, R., & Subramanian, S. V. 2016. "Estimates of Poverty and Inequality in the Districts of India, 2011–2012". *Journal of Development Policy and Practice*, 1(2), 1-61.
- Mundle, S. 2016. "Universal basic income: an idea whose time has come?". Retrieved from https://www.livemint.com/Opinion/6KbaEPNHIpfdpoloXwb690/Universal-basic-income-an-idea-whose-time-has-come.html
- Munshi, K., & Rosenzweig, M. 2016. "Networks and Misallocation: Insurance, Migration, and the Rural-Urban Wage Gap". *American Economic Review,* 106(1), 46-98. doi:10.1257/aer.20131365
- Muralidharan, K., Das, J., Holla, A., & Mohpal, A. 2017. "The fiscal cost of weak governance: Evidence from teacher absence in India". *Journal of Public Economics*, 145, 116-135. doi:https://doi.org/10.1016/j.jpubeco.2016.11.005
- Muralidharan, K., Niehaus, P., & Sukhtankar, S. 2016. "Building State Capacity: Evidence from Biometric Smartcards in India". *American Economic Review, 106*(10), 2895-2929. doi:10.1257/aer.20141346
- Muralidharan, K., Niehaus, P., & Sukhtankar, S. 2017. *Direct Benefits Transfer in Food: Results from One Year of Process Monitoring in Union Territories*. UC San Diego.
- Muralidharan, K., Niehaus, P., & Sukhtankar, S. 2018a, November 6, 2018. "Go for an 'inclusive growth dividend' in India". Retrieved from https://www.hindustantimes.com/columns/an-inclusive-growth-dividend-for-india/story-UiP98IQzxVprnZXBToGrj].html
- Muralidharan, K., Niehaus, P., & Sukhtankar, S. 2018b. "We need a choice-based approach in the Public Distribution System". Retrieved from https://www.hindustantimes.com/columns/we-need-a-choice-based-approach-to-the-public-distribution-system/story-RY7jEYDmXfsxOMEsZguxmJ.html
- Muralidharan, K., Niehaus, P., & Sukhtankar, S. 2019. "Authentication and targeted transfers". *Work in progress*.
- Muralidharan, K., Niehaus, P., Sukhtankar, S., & Weaver, J. 2019. "Improving Last-Mile Service Delivery using Phone-Based Monitoring". *National Bureau of Economic Research Working Paper Series, No. 25298.* doi:10.3386/w25298
- Muralidharan, K., & Subramanian, A. 2015. "Charting a course for the Indian economy". Retrieved from https://www.ideasforindia.in/topics/governance/charting-a-course-for-the-indian-economy.html
- Muralidharan, K., & Sundararaman, V. 2015. "The Aggregate Effect of School Choice: Evidence from a Two-Stage Experiment in India". *The Quarterly Journal of Economics, 130*(3), 1011-1066. doi:10.1093/qje/qjv013
- PM KISAN Scheme extension to include all eligible farmer families irrespective of the size of land holdings. 2019. Government of India, Ministry of Agriculture & Farmers Welfare, Press Information Bureau. [Press release].
- Ravallion, M. 2016. *The Economics of Poverty: History, Measurement and Policy*: Oxford University Press.
- Ray, D. 2016. "The Universal Basic Share". Retrieved from https://www.ideasforindia.in/topics/poverty-inequality/the-universal-basic-share.html
- Roy, R. 2019, March 5, 2019. "A tale of two disenchantments". Retrieved from https://www.business-standard.com/article/opinion/a-tale-of-two-disenchantments-119030500024 1.html

- Salehi-Isfahani, D., & Mostafavi-Dehzooei, M. H. 2018. "Cash transfers and labor supply: Evidence from a large-scale program in Iran". *Journal of Development Economics*, *135*(C), 349-367.
- Shah, M. 2008. "Direct Cash Transfers: No Magic Bullet". Economic and Political Weekly, 43(34).
- Somville, V., & Vandewalle, L. 2018. "Saving by Default: Evidence from a Field Experiment in Rural India". *American Economic Journal: Applied Economics*, 10(3), 39-66.
- Stecklov, G., Weinreb, A., & Carletto, C. 2018. "Can incentives improve survey data quality in developing countries?: results from a field experiment in India". *Journal of the Royal Statistical Society*, 181(4), 1033-1056.
- *Union Budget 2019-2020.* 2019. Retrieved from https://www.indiabudget.gov.in/
- Veblen, T. 1899. *The Theory of the Leisure Class: An Economic Study in the Evolution of Institutions*: Macmillan.