A Sovereign Fund for India

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October 2019

1. THE REDISTRIBUTION DEBATE

Over the past several decades, a rising tide of inequality within nations has provoked a new urgency to find effective redistributive mechanisms. It would be nice to describe this urgency as moral, but "political" is likely more apt. In developed countries, redistribution appears key to stemming the backlash against globalization and immigration that has emerged from the declining fortunes of the working class (Autor et al 2013). In labor-surplus developing countries like India and China, higher GDP growth and a generally favorable movement of wage-rental ratios have helped retain a greater degree of support for the global economic order. Yet, all is not well. In India, our topic of discussion in this paper, there is a real sense that the fruits of new prosperity have gone disproportionately to the elite. The available evidence is sketchy but broadly supportive of this claim (Banerjee and Piketty 2005, Chancel and Piketty 2017)

Politicians are under pressure worldwide to restore some sense of equal opportunity and shared prosperity among their voters. India is no exception. As we write, India has just emerged from a historic General Election, where the question of redistributive transfers — and their mode of deployment — lay at the heart of the main policy platforms. Both incumbent and opposition floated the idea of direct cash transfers. There was — and continues to be — vociferous debate on such transfers: whether or not they should be conditioned on the economic circumstances of the recipient, whether transfers should be in kind instead of in cash, or whether the government should be in the business of actually running the transfer programs, such as the distribution of foodgrain.

Universal basic income (UBI) — a fixed sum to be unconditionally paid by the government to every citizen — has figured prominently in this discussion. That India — a poor country — would even entertain the notion of UBI appears odd at first glance, but not at second. India has built up a bewildering plethora of redistributive schemes and directed subsidies, the latter over long years of pandering to special interests. These range from subsidies on food, fertilizer, transportation, electricity and water, to government "revenues foregone" on account of various exemptions and concessions given to payers of taxes or excise and customs duties. Observers of the Indian political and economic landscape often register an understandable frustration with this spiderweb of subsidies, as well as with the lumbering incompetence and corruption that often hangs over direct Government interventions.

All that has led to a call for simple transfers that are easy to verify and hard to game. UBI is an obvious contender. It has found support from a wide range of the political spectrum from libertarians to socialists. UBI frees the State from complex targeting exercises, or direct forays into the business of production and distribution, which appeals to the Right. Unlike egalitarian interventions in limited domains, such as food distribution or subsidized medical care, UBI can

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be scaled up with relative ease, and also avoids the pernicious air of specific subsidies to special-interest groups, which perhaps enhance its attraction to the Left. Even the Indian government's own *Economic Survey*, which often floats trial balloons for policy reform, got into the act: in the 2017 edition, it devoted a whole chapter to UBI. And quite predictably, this rush to dismantle all targeted subsidies has met with its own set of reactions. The opponents of UBI acknowledge the simplicity of universality and cash, but correctly worry that an entire herd of babies will go out with the bathwater — rights to employment, health care, nutrition, social insurance and a host of other basic services, as well as adequate indexation and protection against inflation.

This is an important debate. The main points in it appear to have been made both forcefully and repeatedly — perhaps repetitively. It sets the context for our somewhat separate focus.

2. THE FLIP SIDE OF UBI

In our brief contribution, we emphasize a different factor that goes hand in hand with the idea of universal basic income, which is common ownership of (part of) the wealth of a country. The historical roots of UBI include the Alaska Dividend, which is a universal annual payout from the Alaska Permanent Fund to every man, woman and child resident in Alaska. The Fund, built on oil revenues, is based on the notion of a shared, universally held wealth, emanating from a philosophy (surely alarming to some) of common ownership of national wealth. As Jay Hammond wrote in his 1994 memoir, "The dividend concept is based on Alaska's Constitution, which holds that Alaska's natural resources are owned, not by the state, but by the Alaskan people themselves." This notion of a common heritage extends to the Norway fund: while a percentage of the fund enters the State budget for social expenditures, the dominant use of the fund is as an investment for common ownership by future generations.

The flip side of UBI is a sovereign fund, and we would like to start the conversation about how such a fund is to be built for India.

Beyond this fundamental philosophy, there are other reasons to consider a wealth fund. Many developed countries have strong welfare programs, in which social insurance — health care, unemployment insurance, old age pensions — is a large component of what one might superficially think of as "transfers." But these are decidedly *not* transfers. Up to a first approximation, these are essentially payments that persons make to themselves. You can call them transfers if you like, but they are fundamentally payments from one state of a person (employment, say), to be stochastically redeemed in another possible state of that *same* person (in this case, unemployment). Truly redistributive schemes are conceptually separate from and go beyond such social insurance. For instance, universal basic income is a genuine, structural, distributive transfer. Its proper consideration must appear on top of social insurance programs, not as a substitute. Therefore, while India is not equally strong on social insurance, it should certainly be the case that whatever social insurance we *do* have, such as NREGA, should not be cannibalized for the purpose of making structural transfers such as a universal basic income.

¹Small-scale, experimental UBI schemes have been introduced in Canada, Finland and the Netherlands, as well as in Kenya and India, with preliminary studies reporting fairly positive outcomes for work, health and welfare of the recipients.

In any case, to deliver significant benefits to the bottom half of the population, a major breakthrough in the government's revenue generation capacity will surely be necessary. In the United States, a UBI of \$1,000 per month per person will cost the Treasury 10% of GDP. In India, that ratio isn't very different if the goal is to simply pay out the poverty line of around Rs13,000 per year per person. Surely this is a pittance, but multiply by India's population of 1.25 billion and you're at around 12% of India's GDP, which quite coincidentally equals about all of Central Government revenues. Universal basic income doesn't come cheap. Improving the bang-for-the-buck in anti-poverty schemes does not obviate the need for investing more bucks, especially in India where the tax-to-GDP ratio is extremely low by international standards.

In summary: throwing one's hands up at the *current* price tag is missing the point. UBI is, above all, a slow preparation for a possibly not-too-distant future whose first signs we are beginning to see all over the world, even in India. It is a future in which fast economic growth will no longer be accompanied by fast *employment* growth. The fact that this is happening even in labor-abundant developing countries shows how insidious that process is. With the rise of ever-encroaching automation, the one assured endowment we have — human labor — is no longer assured as a necessary input in production. It must be therefore left to society to replace this endowment by another that is durable, one that's firmly based on the acknowledgement of every citizen's right to a share of collective wealth. Universal basic income flows from this right as a corollary, exactly as dividends flow from the ownership of stocks. The formation of this collective wealth is a gradual process that will require patience. Above all, we are acutely aware of incentive effects — this is not a call to heavy-handed expropriation.

The challenge, then, is two-fold: to rise to the task of sustained socio-economic equality while containing the distortions, leakages and targeting errors that most redistributive policies are rife with (this constitutes the bulk of the debate in India so far), *and* to find the fiscal space to adequately fund such programs. Here, we briefly take up the second challenge, inspired by the same spirit that underlies the Alaska Dividend or the Norway Fund: common ownership of the wealth of nations — to a limited degree, we hasten to add! But we do not restrict ourselves to natural resources.

3. The India Fund

We propose that India build up a sovereign fund, to be invested in portfolios of equity, bonds and other financial assets, and managed professionally as any fund would be managed, subject to certain constraints that we describe below. A fraction of the returns from such a fund can be paid out equally as a citizen's dividend. But the payout will be slow, and patience is of the essence. We avoid the debate of whether the payout should be in the form of UBI or something that's meanstested. But even uniform payments will serve to reduce income inequality. More pertinently, by socializing a portion of capital ownership, there will be some diversification of earnings for the poor, liberating them from excessive dependence on labor market outcomes. Moreover, that diversification is also spatial: there is a lower susceptibility to local shocks (Moene and Ray 2016).

Ownership of a sizable sovereign fund is still rare among the world's governments. The notable exceptions arise from countries and provinces that have invested windfalls from resource revenues (generally oil) into government-run asset portfolios. The Norway Fund amounts to around \$200,000 per Norwegian citizen. It could pay out a UBI from it but as of now, it does not. It does contributes towards funding a good part of Norway's considerable social expenditure. In contrast,

the Alaska Permanent Fund (created in 1976 by channeling a quarter of state income from natural resources into the fund) regularly pays dividends, which vary quite substantially with international resource prices and more recently with legislative action. The fund started with a payout of \$1000, growing to a peak of just over \$2000 in 2015 before falling back in more recent years.

But most sovereigns are not blessed with an abundance of natural resources the way Norway and Alaska are, thereby posing a distinct challenge. In the United States, there have been proposals to tap into the considerable volume of charity from the rich (Stout and Gramico Ricci 2017), a financial transactions tax (Baker 2017), or higher taxes on flow capital incomes like corporate profits, dividends, capital gains, gifts and inheritance (Barnes 2014). Even the sovereign fund is far from a new idea — see Lange (1936) and Meade (1965) for early proposals, and Barnes (2014) and Bruenig (2018), among others, for more recent versions. For instance, Bruenig's proposal involves the creation and growth of a Fund through a mix of voluntary contributions, the transfer and consolidation of existing government-held assets, such as auction proceeds from the electromagnetic spectrum, and various levies on companies. Our specific proposal is a variant of this which emphasizes the deliberate dilution of both existing shares and new share issues, for reasons that we clarify below.

The proposal to access Indian corporate value consists of two parts:

- I. A one-time directive that will require every publicly traded Indian company to issue new shares to the government, equal to some fraction (say 10–20%) of their outstanding shares in the market. These shares are to be transferred free of cost, resulting in dilution of shareholder value and effectively transferring some fraction of private capital into social ownership.
- II. An ongoing obligation to transfer some given fraction (again 10–20%) of every new share issue whether in the form of an initial public offering or an expansion of the existing share base to the India Fund.

It is to be clearly noted that the first part is non-distortionary, while the second part is potentially distortionary. The choice of the levy rate should be carefully considered with this asymmetry in mind. It could well be higher for the one-time directive than for ongoing expansions.

There are several advantages of this proposal. Among them, the most important is:

(a) *The Resource Base*. Figure 1 (reproduced from the Economic Policy Institute website) shows an important trend break in US labor markets around 1970. Up to that point in the post-war era, labor productivity and average hourly compensation grew almost in tandem. There is, however a sharp divergence since the 1970s as productivity continued to grow, but real wages stagnated. This marks the turning point in the modern era of inequality in the West. The subsequent rise in income disparities has brought us to a stage when the issue of distributive justice can no longer be ignored by people of *any* political persuasion.

That said, and while it is true that in the United States (and to a varying extent in other countries), increases in inequality were initially driven by inequality in labor incomes (a rising skill premium) it is increasingly driven by shifts in the capital-to-labor share of GDP (Piketty and Saez 2003, OECD 2015). Figure 2 (reproduced from the OECD 2015 report) shows how the share of labor in GDP has declined over the last several decades for most of the major economies. This empirical trend is in agreement with the predictions of both international trade theory (factor-price equalization and Stolper-Samuelson theorems) as well as work on the dynamic and distributive effects of

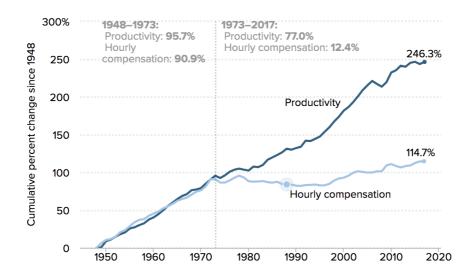


FIGURE 1. Productivity Growth and Hourly Compensation Growth in the United States, 1948–2017. Source: Economic Policy Institute, 2018.

progressive automation (Acemoglu and Restrepo 2018, 2019, Ray (r) Mookherjee 2019). Tax rates on flow capital income are low in most countries — and India is no exception. — but correcting modern inequality requires targeting precisely the capital share of GDP, which has been growing.

Furthermore, inequality in capital ownership is orders of magnitude higher than inequality in human capital endowments. According to latest US data, the top 1% of the population earns about 20% of national income but owns nearly 40% of net personal wealth. So the observed shifts in labor and capital shares have enormous consequences for *interpersonal inequality*. Ownership is particularly concentrated for financial assets such as equity, which produce much higher rates of return compared to other asset categories like houses and pension funds. For stocks and mutual funds, the share of the top 1% exceeds 50%. The implications are clear: to tackle inequality head on, one cannot avoid taking it on at its principal source. This is where our proposal of the sovereign wealth fund financed by the dilution of existing and new equity issues comes in.

- (b) *Economic Incentives*. The confiscation of outstanding shares is akin to a textbook redistribution of endowments, just as in the second welfare theorem. It avoids the standard disincentive effect on investment and growth arising from taxing flows, such as corporate profits, dividends and capital gains. If political pressure makes it inevitable that these flows will be taxed highly sooner or later (Alesina and Rodrik 1994), enlightened and forward-looking capitalists should agree to replace them by a suitable equity tax. But we reiterate that part II of our proposal does not have the same advantage, so a large portion of the initial setup plan for the Fund must be based on part I.
- (c) Separation of Ownership and Management. This feature is what distinguishes this plan from classical socialism, where inefficiencies arise primarily from the state trying to organize and manage production. However, if the state owns large chunks of shares in private firms, to what extent de facto influence over corporate decision-making can be avoided is a debatable point. We propose that under any such plan, the state only be issued "Class B" shares which confers no control or voting rights on the government.

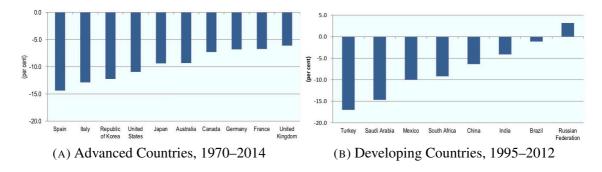


FIGURE 2. Change in Labor Share of GDP in Selected Countries. Source: OECD (2015).

- (d) *Payment via Dilution*. This is conceivably the most compelling point in favor of the plan, especially for India. Stock issues by listed firms are arguably far easier to track down than auditing the portfolio holdings of individuals. There are far fewer incorporated firms than there are individuals, and information about their existing stock as well as increments to such stocks is easily available and verifiable. No payment is required in cash: we seek out a fraction of stock issues so that a sovereign, if it so wants, can hold precisely the national composition of stock wealth at least initially. Thus payments are made via dilution of the share base, or of new issues. But dilution also means that *every* investor in the company automatically pays a tax to the government, without having to be tracked or audited. For a country like India where both the tax base and auditing resources are notoriously low, this can be a very effective form of taxation.
- (e) *Political Incentives*. Socializing a part of capital ownership effectively narrows the dispersion of capital-labor endowments, and so brings the political incentives of citizens into closer alignment. It blunts the political edge behind policies like protectionism and immigration restrictions that achieve distributive ends at the cost of reducing the size of the pie. The reason behind these conflicts is not personal inequality per se but *functional* inequality in the capital-labor ownership ratios. More generally, one would think of different domains on which a universal income may be conditioned. It could come from a tax on labor, a tax on capital, or a tax that's proportional to national income. The choice of corporate valuations as a domain, as a sovereign fund implicitly does, cannot but bring labor into greater harmony with the interests of capital, though of course it is too much to expect that their incentives would be perfectly aligned. Moene and Ray (2016) discuss this point in more detail.

But there are potential pitfalls and disadvantages:

(a) *Portfolio Management*. It will be necessary to design a credible method to manage these massive portfolios without letting corruption and ineptitude getting in the way. A principal worry is that the government will be coopted by business interests into either buying the shares of a favored company, or selling the shares of a disfavored company. Likewise, if the Treasury controls portfolio decisions, other government goals like anti-trust policy or environmental protection may interact with management decisions. It will therefore be absolutely necessary to create an autonomous fund management authority, exactly along the lines of an independent central bank. The India Fund Management Board would be composed of responsible and respectable individuals, who would in no way be accountable to the Government. At first sight, this may be a tall order, but India can deliver, as it has with the Supreme Court, the Electoral Commission, and (with a bit

more trepidation) the Reserve Bank. The experiences of countries like Norway, China and Saudi Arabia may be instructive in this regard.

(b) Constraints on Transactions. It is to be noted that such a Fund would be very different from sovereign funds held by other nations, which can hold a stock portfolio diversified worldwide. There is a good reason why that cannot happen — or cannot happen immediately — in the case of the India Fund, because the entire fund is based on contributions in the form of stock by companies. Each contribution is large, 10% of the base or some close-by number to be decided. An immediate sale of that stock by the government will have large and untoward effects on the stock market. Even a planned divestment, if commonly known in advance, will be tantamount to a large sale upfront.

One might take this constraint to its logical limit. If the India Fund is to really rise and fall on the national fortunes of India, one might even mandate that the Fund hold — to the extent possible — precisely the current composition of Indian corporate wealth. All payouts would be made by selling the Fund but keeping the composition unchanged, and all company dividends paid to the Fund would be plowed back into stock ownership at the current composition of corporate wealth. Such a rule might seem unnecessarily rigid, and perhaps it is, but it would (i) avoid the need for active management, (ii) avoid the corruption and gaming described in item (a) above, and (iii) literally mean that the Fund will be held as a proportion of *Indian* wealth, or at least Indian incorporated wealth. We do not necessarily recommend this strategy, but it is worth investigation.

- (c) Commitment Problem. What guarantees that the initial share dilution of the existing base will be one-time, and not repeated in the future? If it generates such expectations, the incentive advantages are lost. To some extent, there is a built-in disincentive for further dilution because as capital-labor ownership ratios in the population get compressed, the political incentive to use this instrument gets weaker. The exact details of this property require more rigorous theoretical analysis. But in addition, other avenues of commitment can help. For instance the India Fund could be set up via a Constitutional Amendment, which specifies the terms for the intervention; specifically, that share dilution of an existing base can only occur *once*. Might that generate the commitment power that the government will need?
- (c) Evasion Incentives. If only publicly traded shares are diluted, and to the extent this is known in advance, it generates an incentive for changing the corporate capital structure, e.g., swapping equity for debt or converting publicly traded companies into proprietorships. To extend the policy and target such proprietorships is difficult. Once a firm leaves the confines of the stock market, it may be hard to track. There is also an incentive to list companies in stock exchanges abroad, though this concern is more easily overcome.
- (d) *Domain-Specific Ethics*. Most modern capitalist societies have developed an ethics that legitimizes taxing of income flows but in contrast, renders property rights somehow sacrosanct, though from a purely economic perspective, there should be a one-to-one correspondence between taxing flows and taxing stocks at some corresponding rate. Breaking this psychological barrier is a challenge. But it is an odd barrier, as a one-time taxation of stocks has better incentive properties than the ongoing taxation of flows. Moreover, It is well understood that in a dynamic setting and for incentive purposes, taxation/punishments are best structured if front-loaded rather than stationary (Chamley 1986, Ray 2002) and that is the principle at work here, though as mentioned earlier, it will require commitment at the highest level.

We have emphasized share dilution because it is the relatively novel part of this proposal, and immensely relevant in the Indian context, given that the tax base is so nebulous. That said, it is to be noted that the Indian stock market is still relatively small (though possibly among the top ten stock markets in the world in terms of market capitalization). It weighs in somewhere north of \$ 2 trillion. Currently, the market capitalization for Indian stocks stands at close to 80% of GDP, but this percentage fluctuates quite a bit. A transfer of 15% of its value to the central government will create a fund worth 12% of GDP (which, coincidentally, matches the annual tax revenues of the government, so it is equivalent to a windfall gain of one year's worth of revenues to be treated as an endowment). If the money is invested in a diversified and well managed portfolio of assets, and the returns (capital gains plus dividends) are used for payouts without touching the endowment itself, how much flow income will be available to the government every year to spend on UBI or other welfare programs? The inflation adjusted annual rate of return on large and mid cap funds over the last 15 years has been around 10% (Nathan 2018), with dividends adding another 2% or so. The annual disposable income from the fund will come to around 1.5% of GDP.

This is not a bounty at the national scale but neither is it anything to sniff at. Per-capita GDP in India currently stands at around \$2,000 at market exchange rates, so a truly universal payout funded this way will only amount to \$150 or Rs. 1,000 per year for a household of five members. That is not a huge relief, to put it very mildly. If the cash transfer is targeted at the poorest 20% of households (roughly those under the official poverty line), which is what the Indian National Congress proposed to do in its 2019 election campaign, the amount jumps to Rs 5,000 for each household, which begins to look respectable. In the runup to the general elections, the ruling BJP government announced a scheme that pays farmers owning less than 2 acres of land an annual sum of Rs. 6,000, only slightly more than the amount generated by a modest share dilution of 15%. More pertinently, some of the big-ticket welfare schemes carry costs which are in the same ball park. For example, the central government's share in public health and public education expenditures are about 0.3% and 1% of GDP respectively The massive employment guarantee scheme MNREGA costs about 0.4% of GDP and the food subsidy bill just about crosses 1% of GDP. Some of these schemes could be entirely funded by a modest version of our proposal.

More pertinently, this is just a start with considerable room for growth for a number of reasons. The corporate sector in India accounts for a small fraction of GDP (certainly under 15%) compared to the United States, where it produces 70% or more of GDP.² That implies there is immense room for the corporate sector to grow, and there is much to be gained for the India Fund to piggyback on that growth. Equity and bonds currently account for less than 20% of funds for even large enlisted firms (Allen et al 2006), the major share coming from internal funds and alternative funding sources like family and venture capital. As financial deepening continues, the importance of the stock market is likely to grow many-fold.

In any case, a mechanistic rule of spending fund returns and holding its real value constant (by reinvesting an amount equal to the rate of inflation) is perhaps a very unimaginative strategy. As Piketty (2013) famously points out, the rate of return on financial assets typically exceeds that of real GDP growth (r > g). Therefore any owner of a portfolio who has a high reinvestment strategy will outpace income growth in the rest of the economy, and will become disproportionately

²Oddly enough, the Indian stock market capitalization is still 70% of Indian GDP, despite the incorporated sector accounting for so little of GDP. The United States stock market is currently overheated with corporate valuations at around 150% of GDP, but incorporated firms also account for a much larger share of the economy.

richer over time. Once the government has some ground to stand on by building a start-up fund, a moratorium on payouts for a period of time will cause the fund grow in size relative to the rest of the economy. Eventually it can be much bigger than the initial 12% of GDP we envisaged here. Given a 3 percentage point gap in the real rate of return on stocks and real GDP growth (10% vs 7%), a ten-year moratorium on payouts can make the fund grow from 12% to 16% of GDP in a decade. If the government is able to raise initial capital worth 30% of GDP using sources in addition to share dilution, and postpones payouts by 10 years, the fund will grow to 40% of GDP. The Norwegian sovereign wealth funds own 76% of the country's non-home wealth (Bruenig 2018) which, the oil windfall notwithstanding, is a testimony to good asset management and the economic potential of a portfolio based approach to public finance. To sum up, if governments are willing to leverage the same forces that shaped the rising inequality in the first place, they could go a long way towards neutralizing those very forces. Fight fire with fire.

Finally, the India Fund can also be built up in more conventional ways, such as taxation of dividends or capital gains. In addition, there are other sources; e.g., the selling-off of inefficient public sector units (Air India, BSNL, banks, government lands) and pouring the proceeds into the Fund. These assets do not generate income flows due to poor corporate management. They even put pressure on the Exchequer when run at substantial losses, as they often are. Disinvestment generally allows the government to camouflage fiscal mismanagement by sending the proceeds into the revenue account and artificially lowering the budget deficit. Linking disinvestment explicitly to the India fund solves this problem, and should be use to complement this proposal.

According to the Department of Investment and Public Asset Management of the Government of India, the market capitalization of all public sector enterprises (in which government is the majority stakeholder) is Rs 13.5 lakh crores, a shade under 10% of total corporate wealth in India (which, if you recall, is about 80% of GDP). The value of some of these companies will probably be much higher if their assets and operations are handed over to professional management. There may be a strategic or social mission underpinning some of these ownerships, but there are many that seem like a relic of the past. Air India and BSNL are leading examples — they operate in booming telecom and airline industries which are crowded with private players, and no longer need a helping hand from the state. Judicious disinvestment could add several percentage points of GDP to the India Fund.

There is a general point to be made. Historically, governments have appeared to be excessively wedded to a fiscal strategy primarily consisting of taxing flows rather than building up stocks and endowments. The expropriatory powers of the state and the grand scale of its revenue budget perhaps mask the fact that this is literally a hand-to-mouth existence which, among individuals, is only practiced by the poor. The rich build nest eggs and own things. To play that game, one has to entertain the use of their strategies. The portfolio approach advocated here can be applied regardless of what the source of the start-up capital is — oil revenues, share dilution, disinvestment in PSUs or unexploited resources within the revenue budget itself, such as the scrapping of non-merit subsidies and the closing of various tax loopholes (Bardhan 2016, Ghatak 2016). Indeed, these alternative sources for a potential India Fund should be viewed as complements rather than substitutes.

4. THE SOVEREIGN FUND AND THE UNIVERSAL BASIC SHARE

We end by tying the notion of a sovereign fund to the *universal basic share*, a simple modification of UBI discussed in Ray (2016) and Moene and Ray (2016). One valid concern with universal basic income is that it converts commitments in kind — the right to food, to employment, to health care — to cash. To be sure, as discussed earlier, some of these rights come under the rubric of social insurance and should not be converted to UBI anyway. But the concern remains: that UBI can be inflated away. And even with indexation, the UBI is a *fixed* real commitment at best. As Ray (2016) writes: "What happens as national income or profits continue to rise in an automated world? Is no share to be passed on to the population? Must we be reduced to annual debates about how to adjust the UBI? One can imagine that such debates would constitute a continuing sequence of nightmares."

The universal basic share commits not to an income but to a *share* of GDP. Ray (2016) lists several merits of such a proposal, among which are:

A. It is country-neutral, and every country, rich or poor, can commit to it. The actual commitment scales up or down with income. A share can be declared as a common goal that could apply to all countries.

- B. One can start small. In the Indian case, the commitment does not have to be high to begin with, but over time, we will get there.
- C. The universal basic share allows everyone to share in the prosperity of a country. It is our protection against unbounded inequality as we move into an increasingly automated universe.

A sovereign fund would link the ultimate dividend payout to aggregate company valuations. As the capital share in national income continues to climb (Ray © Mookherjee 2019), the dividend to GDP ratio would possibly rise over time, so the (ratio-based) commitment implied by a sovereign fund would, if anything, dominate that of the universal basic share. But the *asymptotic* commitment indeed resembles that of a universal basic share. To generate and maintain a sustained lock-step with GDP in the longer-run, a tie-in to capital income is what is required, especially if there is truth to the prediction of ever-increasing automation.

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