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What to do about the Persistence of Inequality?

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Abstract

The focus of this paper is income inequality and, more pointedly, its persistence throughout generations. In the spirit of Atkinson (2014, 2015) and Roemer (1998), we take a normative stand and make concrete proposals to combat the persistence of inequality. In the view presented here, those inequalities derive, to an important extent, from inequalities in opportunities, themselves arising from "abnormal" differences in human capital endowments. The proposal developed in the paper relies on financial markets to complement extant government transfer programs and open universal access to services required for the formation of human capital.

"To combat inequality, it is important to find ways to offer universal access to services needed to build the human capital of young individuals."

1. Introduction

The focus of this paper is income inequality and, more pointedly, its persistence throughout generations. We do not devote much space to a general discussion of these concepts, having nothing to add to the excellent work of Alacevic and Soci (2018), Goix (2010), and Piketty (2000) among others. Our discussion takes place in the context of a national space and, although much of what is said would apply to all countries, we will have in mind developing countries. As the title of the paper suggests, we take instead a normative stand, in the spirit of Atkinson (2014, 2015) and Roemer (1998). While acknowledging the important contribution of Atkinson, who directed his proposals to combat the inequality of outcomes, we tend to side with Roemer in recognizing the overall importance of the inequality of opportunities. That choice leads us to an examination of the role that "abnormal" differences in human capital endowments have in generating inequality of opportunities and, eventually inequality of outcome and income. In answering the title question we thus come to the realization that, to combat inequality, it is important to find ways to offer universal access to those services needed to build the human capital of young individuals.

Those ideas are presented in greater detail in sections 2 to 4. Section 5 discusses a possible solution to the problem of offering universal access, namely the expansion of existing government programs and the use of transfer policies and explains why that kind of approach would be unfeasible on political and economic grounds. The remaining sections constitute the core of this paper, and they discuss an alternative way to enable universal access to human capital formation services. Put succinctly, the proposal consists of using the financial markets to purchase IOUs issued by young individuals to fund their human capital formation. Section 6 exposes this proposal, which was first put forward in Saavedra-Rivano (2016), and sections 7 and 8 discuss the implications of the proposal for the economy and society more broadly, as well as ways to deal with them.

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2. The Roots of Inequality and its Persistence

Throughout the history of mankind, inequality has been a common trait of all civilizations. Its existence and persistence have attracted the attention of philosophers,* anthropologists, political scientists and, lately, economists. There are also inequalities among countries and, indeed, practically any stratification of a given country or society will let us observe inequalities among the resulting strata: regional, gender, and ethnic inequalities. Although this paper focuses on income inequality, other dimensions of inequality are no less important, such as wealth inequality and political inequality.

It is hard not to recognize that inequalities are, to some extent, unavoidable. Indeed, as pointed out by some authors, some degree of inequality is needed for the working and advancement of a capitalist economy.† At the same time, most people would agree that the currently observed level of inequality in most countries is excessive.‡ In their recent study, Chacel and Piketty (2021), using the WID database, document a steep rise in income inequality during the period from 1980 onwards in many countries, including China, Russia, India, South Africa, the USA, and most Western European countries.

Perhaps more undesirable than (excessive) inequality is its persistence from one generation to the next. The persistence of inequality has been observed by several authors, among them Atkinson (2015), FitzGerald, Heyer and Thorp (2011), and Boix (2010). Several explanations have been offered for this phenomenon. In his review of the subject, Piketty (2000) provided a thorough examination of economic and sociological theories behind these explanations. Atkinson (2014, 2015) went beyond explanations and developed a set of policy proposals designed to reduce income inequality. Another author who adopted a policy-oriented attitude

* An early discussion of the causes for inequality is to be found in Rousseau (1754)
† A representative view can be found in Cowen (2013)
‡ Atkinson (2014)

is Roemer (1998), who has written extensively about the inequality of opportunities.* In Atkinson's interpretation, there should be no confusion between inequality of opportunities and inequality of outcomes and, while he does not deny the importance of the former, his proposals are geared towards the latter.

In this paper we will emphasize the importance that inequalities in opportunities have in the persistence of inequality. Moreover, in our view, an important factor behind the existence of inequalities in opportunities is the disparity in levels of human capital among individuals. Opportunities are not equal for all because of the "abnormal" differences in human capital endowments which, in turn, arise from the lack of universal access to education and other services needed to accumulate it. By "abnormal" we mean differences that could not be explained by the innate differences between individuals.

In brief, wealth and income inequality among families preclude their offspring from acquiring skills in such a way that a "playing field" would exist in the succeeding generation. It follows that one way to address the persistence of inequality is to create conditions that would ensure universal access to human capital accumulation.

3. An Aside on Human Capital

It has been some sixty years since the notion of human capital was rediscovered through the seminal writings of Theodore Schultz and the empirical and theoretical work of Gary Becker.† Researchers dealing with the Economics of Education, Labor Economics, and the emerging economic theories of the family and the household swiftly adopted the concept. In the late 1970s, the concept of a heterogeneous and malleable human capital became central to the development of endogenous growth theory. The need for empirical validation of these theories provided, in turn, added impetus to statistical research on the measurement of human capital stocks, their international comparability, and the rates of return to investment on human capital.

Human capital is by now a well-established and respectable concept in Economics, but there is a multiplicity of meanings associated with it. Most precise definitions are consistent with the view that human capital is a form of capital and that, as such, it is used for the sake of production, and it can be accumulated. Differences exist, though, in the breadth of the concept. Business Economics adopts perhaps the narrowest definition, emphasizing on-the-job training and those skills that are useful in the context of the firm. In Labor Economics human capital is often defined as the accumulated stock of education of the individual or society and, indeed, most measures of human capital stocks and rates of return on investment on human capital correspond to this view. The broadest approach comes from Development Economics. It encompasses the knowledge and skills helping the generation of utility from the perspectives of the individual and social collectives, including the enterprise. A good example of such a definition is that adopted by the Organization for Economic Co-operation and Development (OECD), namely that "human capital is defined as the knowledge, skills, competencies and attributes embodied in individuals that facilitate the creation of personal,

* See also the review of this subject by Roemer and Trannoy (2016)

† See, for instance, Schultz (1961) and Becker (1964)

social and economic well-being".* In what follows we will follow this definition as being the best adapted to our purpose.

Ever since the 1961 AEA Presidential Address by Theodore Schultz,† investment in human capital has been acknowledged as one of the most important factors behind economic development. As he pointed out, many spending items that are commonly considered to be consumption expenditures are indeed investment (in human capital) expenditures. National accounts have not yet caught up to this insight and, undoubtedly, this has to do with the ambiguity surrounding the concept of human capital. To be consistent with the broad definition of human capital that we have adopted, investment in human capital for a given individual will be deemed to comprise the entire sum of expenditures needed to nurture him or her from birth to working age. This is indeed the cost needed to incorporate a human being into society and, more specifically, into the labor market. If we consider human capital as the output of this process of formation, the most important inputs to be considered are education, health, and nutrition.

4. Redressing Inequalities of Opportunities

It follows from the preceding discussion that an effective approach towards the correction of the persistence of inequalities and, eventually, moderate inequalities themselves, is to address the inequalities in human capital formation. We will focus our discussion on investment in the human capital of the young and, for the sake of the exposition, consider investment from birth up to adulthood. As noted, and thoroughly developed by James Heckman and his collaborators,‡ investment in human capital at earlier ages is significantly more cost-effective than at later periods of life.

An obvious way of dealing with inequalities in human capital formation is to offer universal access to the services needed to build human capital. Education takes the first place, but also auxiliary services such as health and nutrition. Without addressing, for the time being, the highly nontrivial question of financing, we need to point out that the offer of universal access to these services is not sufficient by itself. Two other conditions are required: homogeneity of services, and compensation for family environment and background.

The first condition means that the quality of services provided must be independent of the place where they are offered. The second condition is also crucial, because family environment and background have a powerful impact on children and, in the worst case, may offset the effect of education at school. Complementary programs, addressed towards adult family members, must be designed to prevent negative effects of family background and environment. Of course, these effects will only be fully mitigated in future generations as family heads will have themselves benefitted from HC formation programs. Fulfillment of these conditions goes towards ensuring that only innate differences between individuals would cause differences in human capital formation.

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* Organization for Economic Co-operation and Development (2007)

† Schultz (1961)

‡ Representative works include Heckman (2006), and Cunha and Heckman (2007)

5. The Redistributive Approach and its Shortcomings

Offering universal access to human capital services is a daunting financial proposition in any country. Rather perversely, the poorer and more unequal the country the harder to finance that sort of program. This happens for two main reasons. First, poorer families do not have the means to pay for the proper formation of their children and many of them barely maintain a subsistence level. Second, the government also lacks the necessary resources to provide reasonable education and health services to everybody and the quality of those services lags that of similar services offered by the private sector.

Of course, given that governments already offer public education and health services, an obvious route would be to expand those services in such a way as to reach universal access of homogeneous quality, and to complement those services with programs offsetting negative effects of family background and environment. There exist already some programs acting in that direction in several countries, usually taking the form of conditional cash transfer (CCT) programs.[*]

These government policies are undoubtedly important and necessary, but it is unrealistic to expect that all countries, especially more unequal ones, would be able to expand them to the extent that is needed. That would require massive transfers of income from the wealthier groups to the poorer ones of a magnitude that is economically and politically unfeasible. To give context to this statement, let us give some numbers. In 2018, according to the OECD Education Statistics,[†] each Chilean student enrolled in primary school cost 22% of per capita GDP, considering public and private expenditures. The figure was 14% in Mexico, while the OECD average was 21%. A related set of figures comes from a USDA study on the cost of raising children in the United States. The estimated cost, in 2015, of raising a child from birth to age 17, was about US$ 230 thousand, for a middle-income family with two children. Relatively to their before-tax income, households in the lowest income group spent 27 percent per child, those in the middle-income group 16 percent, and those in the highest group 11 percent. These costs include not only education, health, and nutrition, but other costs as well. Education accounts for some 16% of total cost.

Clearly the size of transfers needed to pay for universal access would strain political systems beyond their limits. In addition, in purely economic terms, the resulting increase in taxation would deter private investment essential for the working of a capitalist economy. We can thus conclude that there are both economic and political arguments rendering transfers of the required magnitude unfeasible.

6. A Market-Centered Approach

The preceding discussion shows that, in the case of developing countries at least, there are two factors preventing (uniform) universal access: the inability of most households to afford it, and the financial/political unfeasibility of the government to provide it. There is, however, another way in which the current generation could provide this kind of access to the next

* See World Bank (2009)
† See Organization for Economic Cooperation and Development (2021) and OECD Stat (2021)

generation, and this is lending. The financial markets, which handle large volumes of resources and are guided by the criteria of profitability of their investments, are certain to play a large role in this option. Investment in human capital undeniably stands to become one of the most profitable ventures and this raises the question of how to attract investment flows towards the financing of human capital. The key to successfully face this challenge is a combination of non-reimbursable programs (transfers) and reimbursable programs. The latter would be directed to finance the formation of those elements of human capital that directly increase the potential of their holders to generate wealth, such as education and the acquisition of other productive capacities. The simplest method to finance this investment involves the issuance of impersonal (anonymous) securities by the beneficiaries. These titles would be centralized by a public body responsible for the administration and supervision of the system created for this purpose. They would be traded in financial markets and redeemed by the beneficiaries themselves once the investment begins to pay off.[*] This option offers several advantages. First, the anonymous nature of the securities, in addition to the dissemination of risk among a broad universe of beneficiaries, allows any individual, regardless of their family status, to have access to this type of financing. Thus, access to the services needed to form human capital is enabled for all children, regardless of the income and wealth of their families. In this sense, the scheme allows for progress in bringing about equality of opportunities for all newly-born individuals. Milton Friedman had already noted this effect as a consequence of his proposal to have the central government take equity stakes in individuals through the financing of their vocational education.[†] Second, investment in human capital through these human capital (HC) securities meets the interests both of investors and beneficiaries, thereby eliminating resistance from the most privileged sectors of society to programs promoting the development of human capital. Third, the development of human capital of the population has a powerful effect on economic and social growth: in the short term, the expansion in demand for goods and services; in the medium and long term, full realization of the potential of the country.

Some immediate remarks are in order regarding the acceptance and feasibility of this scheme. The securities in question, in addition to their overall supervision by a government body, would need to be guaranteed by the government, at least in the initial stages, to ensure their acceptance by investors. In addition, some countries are too poor or lack an adequately developed financial system to finance these HC securities. One possibility, in this situation, is for international financial institutions, including international development banks, to become investors (or providers of guarantees) in the development of the human capital of a country.

In an extreme application of the proposed scheme, all the costs of raising children would be financed through the issuance of these HC securities. That would correspond to substituting the current dynastic system of human capital formation with a generational system and replacing donations to children (the current system) with loans to be repaid during their adult lives. In other words, the current generation would invest in the next generation.

* This proposal is developed in more detail in Saavedra-Rivano (2016)

† Friedman (1955), p. 143. Of course, constraining this kind of scheme to vocational education limits the scope of its application to those individuals who were able to reach that level of education

7. A Disruptive Scheme: Benefits and Difficulties

The scheme proposed has two important benefits. First, making possible universal access to services of homogeneous quality needed for human capital formation of new generations. And second, beyond the impact on individuals, realizing the potential wealth of a country as embedded in its people.

On the other hand, it must be recognized that, if implemented fully, this method of providing universal access will have a massive and profound impact on many spheres of social life. By "full implementation" we mean that all expenses needed to raise all children from birth to adulthood would be financed through the issuance of HC securities. We can distinguish systemic, economic, political, and social impacts. Systemic impacts are probably the easiest to deal with and have to do with the management of a system that would contemplate millions of daily transactions by millions of individuals generating IOUs and their anonymization and conversion into marketable financial securities. This looks daunting at first but is not very different from what credit card companies and payment processors do routinely. The economic impact is more serious and indicates clearly that any implementation of the scheme must be progressive. On the microeconomic level, the empowerment of previously destitute children will generate an immediate huge increase in demand for goods and services associated with proper human capital formation. The corresponding adjustment in supply will be far from immediate and, in some cases, such as the supply of good teachers and physicians, will take years. On the macroeconomic level, one important effect will be on the financial markets as they accommodate and possibly expand to handle the increasing supply of HC securities.

The impacts presented so far are rather technical and easier to deal with than the political and social impacts. Among the latter, it is undeniable that the implementation of such a system deepens the bond between the individual and society to an extent that might be considered extreme by some. Whereas in the current dynastic system of HC formation individuals have at most a moral debt towards their parents for having provided for their needs during early age, in the proposed system individuals would instead have an actual debt and the associated legal obligation to service and repay it. A second related issue is the ethical objection that some might have towards the perceived constraints on individual freedom implied by the scheme. Clearly it would become more difficult for anybody to break away from the social system. Finally, intra-family relations stand to be impacted by this scheme. At least in Western societies, the decay of the family as an institution is a well-recognized and often lamented fact. The transfer of the economic cost of the upbringing of an individual from the parents to the individual proper has a clear potential to further weaken parental authority. These are all difficult issues for which it would be presumptuous to claim proper answers at this moment. We could perhaps say that society has been evolving through the ages and that, whenever faced with choices that combine higher welfare with deeper forms of social organization and control, it has generally adopted them.

8. Issues of Implementation: A Softer Strategy

The discussion in the previous section makes abundantly clear that a full implementation of the proposal is unfeasible. It seems clear as well that a progressive and flexible approach towards its implementation is needed. Regarding the systemic issues, an adequate management system needs to be designed, tested, and eventually put in place. The economic issues mentioned before suggest that implementation needs to be done in a progressive and modular fashion. For instance, the system might cover, initially, only a given percentage of certain components of expenditure (say, education and health). Alternatively, initial coverage could be limited to disadvantaged sectors of society. The point is that implementation of the scheme should be done in such a way that the many parameters on which it depends (categories covered and percentage of coverage, segments of society, final age of coverage, just to mention the most obvious) are adjusted to take account of the inertia of the economic system. Those parameters could be increased progressively, and eventually, full implementation would be attained.

Another important consideration for implementation is that existing transfer programs should not be ignored. Issuance of HC securities should complement those programs and, as pointed out before, must be directed to finance the formation of those elements of human capital that directly increase the potential of their holders to generate wealth, such as education and the acquisition of other productive capacities.

9. Concluding Remarks

Research on inequality has surged in the past few decades together with the perception of worsening inequality within countries. This worrying trend has been empirically demonstrated in the work of Piketty and his collaborators (Chacel and Piketty, 2021, and World Inequality Lab, 2017) for developing as well as developed countries. High levels of income inequality combined with low growth rates in developing countries lead to an increase in poverty and a deterioration of the living conditions of the middle classes. Neither of these outcomes bodes well for political stability in those countries.

It is hard for a socially aware researcher to remain impassive when confronted with this situation and we are naturally tempted to use the tools of research for the design of solutions. The title question of this paper is of course very difficult to answer, and we cannot pretend to have offered here a fully satisfactory solution. Inasmuch as the ambitious proposal outlined seems to be technically feasible, the social and political obstacles to its implementation are formidable. This does not mean, in any way, that the idea should be discarded but instead that it must be advanced with utmost care. As in most if not all crises, and apparently the income inequality situation is not yet critical in most countries, solutions to an unfolding crisis are implemented only after it has reached a point of no return. In that sense, this proposal is presented here as a possible answer to a looming crisis.

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