

The economics of human development: ‘Investing in children’ or ‘children as an investment’? And why it matters

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Abstract

Traditional Human Capital Theory (HCT) views ‘children as an investment’ and is concerned with how children can be turned into productive members of society. The Economics of Human Development (EHD) grew out of the HCT but positions itself closer to the Capability Approach (CA), where ‘investing in children’ means a social commitment to children’s human development. The purpose of this article is to critically analyse the EHD and its actual positioning. It concludes that the EHD’s approach is essentially the same as that of the HCT, paying attention to children insofar as they are the future adult workforce. Although having appropriated the terminology of the CA, the EHD reduces social problems to economic problems, ultimately promoting a social policy that puts economic returns ahead of human development.

Keywords

children, human capital, human capabilities, human development, social policy

Introduction

Even though the field of economics has not completely overlooked the importance of children, until recently, children had not really been given much academic attention, with ‘very few studies explicitly mention[ing] child wellbeing as their object of investigation in the empirical literature in economics’ (Conti and Heckman, 2014: 369). This has changed, particularly as the result of increased

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interest from and evolutions in human capital theory (HCT) (see, e.g., Kilburn and Karoly, 2008; Bandelj and Spiegel, 2023; Griffen, 2024), embodied in research on the importance of investments in early childhood education, developed namely by James Heckman and colleagues (e.g., Heckman, 2000a, 2000b, 2006, 2013; Carneiro and Heckman, 2003; Cunha et al., 2006; Knudsen et al., 2006; Cunha and Heckman, 2007, 2009; Heckman and Masterov, 2007; Doyle et al., 2009; Conti and Heckman, 2014; Heckman and Mosso, 2014; Heckman and Corbin, 2016).

The notion of investing in children is not new to HCT – the works of Theodore Schultz (e.g., Schultz, 1973, 1974) and Gary Becker (e.g., Becker, 1993, 1994) are a testament to that. However, as Kilburn and Karoly (2008) put it, the (re)new(ed) attention devoted by the ‘dismal science’ and ‘Nobel-Prize winning economists’ (Kilburn and Karoly, 2008: 1) to children and investments in early childhood is noteworthy. Heckman’s and colleagues’ research, the product of which is the economics of human development (EHD), with an approach seemingly more complete than HCT, and apparently more in tune with Amartya Sen’s and Martha Nussbaum’s human development or capability approach (CA) (Sen, 1999; Nussbaum, 2000), is now a common reference in related literature (Buzzelli, 2015b; see, e.g., Esping-Andresen, 2002, 2008).

One of Heckman’s most significant early works to highlight the importance of early childhood investments, specifically in disadvantaged children, is ‘Policies to foster human capital’ (Heckman, 2000b), where, based on findings from developmental psychology and other empirical research, the author seeks to explain how skills are formed and developed and to identify which investments are more efficient. While still using the concepts of skills and of human capital, already at this stage Heckman remarks on the differences (further examined below) between his approach and traditional HCT (Heckman, 2000b; Heckman and Rubenstein, 2001). As the framework of analysis developed, Heckman (and colleagues) adopts the concepts of ‘human capabilities’ and ‘human development’ (see, e.g., Knudsen et al., 2006; Heckman, 2007; Cunha and Heckman, 2009). Described as a model of investment in human capabilities formation (Heckman, 2007), the designation of the framework as ‘the economics of human development’ is then claimed by its author(s) (see, e.g., Cunha and Heckman, 2009). Following Heckman and Corbin’s (2016) remarks, besides overcoming HCT’s limitations, the EHD is also said to share common aspects with the CA. The key message conveyed by the EHD is that early childhood investments, particularly those made in children from disadvantaged backgrounds, are ‘both economically efficient and socially fair’ (Heckman and Corbin, 2016: 347). This powerful idea has made Heckman’s and co-authors’ work popular in policymaking in the USA, UK, Europe, as well as in the wider international scene, with its investment narrative being strongly promoted by several supranational organisations such as the European Commission, the OECD and the World Bank (Campbell-Barr and Nygård, 2014; Wastell and White, 2017; Griffen, 2024).

In traditional HCT, investments in human capital, and specifically in children, tend to focus on cognitive skills – as these are viewed as the economically relevant human skills (Heckman, 2000b; Heckman and Rubenstein, 2001) – and are typically assessed through the narrow lens of cost-benefit analysis, emphasising market-related outcomes such as productivity, earnings, income and economic growth (Schultz, 1961; Becker, 1993; Sen, 1997, 1999; Robeyns, 2006; Folbre, 2010; Chiappero-Martinetti and Sabadash, 2014; Buzzelli, 2015a, 2015b; for the influence of the cost-benefit analysis in policymaking see also Berman, 2022). This reflects an investment framework that is strictly preoccupied with economic returns, and this is frequently pointed out as one of the key limitations of HCT’s approach to investments in children and in early childhood (see, e.g., Buzzelli, 2015a, 2015b; see also Bandelj and Spiegel, 2023). It also reveals, it will be argued here, a view of ‘children as an investment’. Furthermore, given its focus, the HCT ends up promoting social policies that are primarily concerned with economic returns and not children’s human development per se (Campbell-Barr and Nygård, 2014).

Although recognising the EHD grew out of early literature on human capital (Heckman and Corbin, 2016), the EHD is posited by its authors as a framework that overcomes the shortcomings of HCT. Among other claimed advances, the EHD is said to go beyond HCT by, in addition to cognitive skills, considering and highlighting the relevance of non-cognitive or social skills (Heckman, 2000b), which ‘The early literature on human capital ... ignor[ed] ... entirely’ (Heckman and Rubenstein, 2001: 145). Also, and again in contrast to early HCT that ‘focused primarily on the labor market returns to schooling and job training’ (Heckman and Corbin, 2016: 343), the EHD is said to ‘recognize both the market returns and the non-monetary benefits of multiple skills’ (Heckman and Corbin, 2016: 343). The EHD is also said to depart from HCT because of how it highlights early childhood investments, particularly in disadvantaged children, instead of investments in later ages (Heckman, 2000b). Moreover, the authors present the EHD as a ‘framework ... to analyze ... human capabilities’ or as an ‘analysis of human development’ (Heckman, 2007: 13250), and argue ‘The capability literature and the economics of human development have much in common’ (Heckman and Corbin, 2016: 344). The CA, contrary to HCT, is not focused on economic benefits but on the enlargement of people’s life opportunities, freedoms or capabilities (Sen, 1999), and, as will be argued here, in this approach ‘investing in children’ translates as a social commitment to children’s human development. If the claims of proximity to the CA are accepted, it follows from here that the EHD should approach investments in children in a similar fashion.

Given how the EHD is described and how influential it has become in policymaking (Wastell and White, 2017; Griffen, 2024), it is important to gauge whether its perspective is indeed different from that of HCT and in tune with the framework of analysis offered by the CA. This being true, that would mean that the type of social policy promoted by the EHD would primarily enhance children’s human development, and not mainly economic outcomes.

The main purpose of this paper is, thus, to critically review the arguments of the EHD and to assess to what extent this framework has moved from the traditional HCT’s focus on the economic returns of investments in children’s human capital – meaning, from seeing ‘children as an investment’ – towards an actual interest in improving the circumstances and life chances, opportunities or capabilities of children – meaning, seeing investments in children as a social commitment – as proposed by the CA. To accomplish this assessment, key articles and books produced by the EHD’s authors, selected on the basis on their relevance to the discussion at hand, and the main author’s (i.e., Heckman) public website (<https://heckmanequation.org/>) were examined. Likewise, the comparisons to traditional HCT and to the CA involved reviewing literature related to both. The conclusion from this scrutiny is also relevant for the appraisal of what kind of social policy the EHD framework ends up promoting, which constitutes an additional goal of this paper.

Given the above objectives, the remainder of this paper is structured as follows. The first section clarifies the key concepts of investment, human capital, commitment and capabilities, and explains and critically compares the HCT to the CA. The second section describes the EHD, highlighting in which ways it is different from HCT and similar to the CA, and the third section assesses the EHD in terms of the limitations found in HCT and other relevant aspects. The fourth section extends the discussion of the third section by examining why it matters what approach the EHD takes to investments in children, namely in terms of its implications for social policy. The conclusion briefly summarises the main ideas discussed throughout the paper.

Investment and human capital, commitment and human capability

Investment, human capital and its shortcomings

Investment decisions are driven by the expected benefits or returns they render and are tied to the calculation of the value of a future flow of services (Folbre, 2010). These calculations are

commonly based on a cost–benefit analysis, ‘the measure of an investment’s benefits relative to its costs ... [used] to prioritize investments based on their expected payoffs’ (Heckman et al., 2006: 10). The cost–benefit analysis is considered an important instrument for public sector decision-making processes (see, e.g., Berman, 2022). Its importance for the assessment of the ‘payoffs of education and human service programs’ (Heckman et al., 2006: 10) has grown and it constitutes the main tool used in HCT to analyse investments in human capital, namely in early childhood (Kilburn and Karoly, 2008; Buzzelli, 2015a).

In traditional HCT, *human capital* tends to be treated as a one-dimensional concept and is usually equated with cognitive ability (Heckman and Corbin, 2016). The standard definition does, however, include several types of skills, knowledge, health and other qualities embodied in people and considered relevant for economic activity (Schultz, 1961; Becker, 1994; Buzzelli, 2015a). These qualities cannot be separated from people or ‘cannot be given away’ (Buzzelli, 2015a: 217) and the approach is that of ‘looking upon human beings as capital’ (Schultz, 1961: 2). Children are also viewed as forms or units of human capital (Schultz, 1974; Folbre, 2010). Investments in human capital comprise expenditures, such as with education, which tends to be the focus of economists (Folbre, 2010) and of HCT in particular. This partially explains why most HCT research has concentrated on cognitive skills, because these tend to be considered the essential skills for success in school as well as for economic success in later life (Heckman, 2000b; Heckman and Rubenstein, 2001). To decide whether investments in human capital are worthwhile or not, the costs of investments are measured against their benefits, the latter mostly viewed in terms of future market or economic returns, such as employment, earnings, enhanced productivity and economic growth (Schultz, 1961; Becker, 1993; Sen, 1997, 1999; Robeyns, 2006; Folbre, 2010; Chiappero-Martinetti and Sabadash, 2014; Buzzelli, 2015a, 2015b; see also Berman, 2022). In HCT, the appraisal of investments in human beings is, thus, based on the cost–benefit rationale, with economic outcomes or benefits as guiding measure. As Robeyns (2006: 73) contends, this constitutes one of the problems with the HCT approach, making it ‘overly economic’: ‘In human capital theory, as in other parts of mainstream economics, human beings act for economic reasons *only*’ (Robeyns, 2006: 72, original emphasis) and action based on other types of goals, namely moral or social, is not accounted for.

In her discussion on the importance of education, Robeyns (2006) also argues that the way HCT conceptualises it as an economic investment induces comparisons with alternative types of investments. Thus, in the same vein, investments in children will only move forward if they have the highest economic payoffs when compared to alternatives such as family consumption or “‘brick and mortar” economic development initiatives’ (Heckman et al., 2006: 10). Other non-material, intangible or non-market effects or benefits, such as the effects those investments have on health, self-esteem or citizenship, are essentially disregarded in decision-making processes that follow the economic return-on-investment rationale (Robeyns, 2006; Folbre, 2010; Buzzelli, 2015a; Chiappero-Martinetti and Sabadash, 2014).

An additional criticism made to HCT is that it is ‘*entirely* instrumental: it values education, skills and knowledge *only* in so far as they contribute (directly or indirectly) to expected economic productivity’ (Robeyns, 2006: 73, original emphasis; see also Buzzelli, 2015b). HCT is therefore strictly concerned with ‘human beings as an economic production factor’ (Robeyns, 2006: 72; see also Sen, 1997, 1999). Investments in people are valued exclusively on the basis of their contribution to economic productivity and the qualities of human beings that are ‘not economically instrumental ... [have] no investment value from the perspective of human capital theory’ (Robeyns, 2006: 73), an argument also made by Folbre (2010) and Bandelj and Spiegel (2023) in respect to how the HCT views children: they are valued based on the future economic benefits they bring or their future market value.

Another shortcoming of HCT is its lack of attention to *context* (Buzzelli, 2015a, 2015b; Chiappero-Martinetti and Sabadash, 2014). The focus of HCT is on the abilities embodied in humans and on how they contribute to positive economic outcomes, with little regard of how economic, social or political contexts might affect them. According to Chiappero-Martinetti and Sabadash (2014: 123), ‘investments in human capital do not directly and automatically translate into more opportunities on the labour market or higher salaries for everybody everywhere’. Context plays a relevant role in people’s actual opportunities to achieve positive outcomes (Buzzelli, 2015a, 2015b), namely in terms of employment and earnings, but also in other dimensions deemed important for human flourishing. Standard HCT largely neglects these contextual factors.

The HCT is acknowledged as an approach that bears relevance for the understanding of the central role human beings play in the promotion of economic growth (Sen, 1997, 1999; Robeyns, 2006). As important as that role is, however, the approach must be broadened, since, as put by Sen (1997: 1960, original emphasis), ‘human beings are not merely *means* of production (even though they excel in that capacity), but also the *end* of the exercise’, and this is also the case for children (Folbre, 2010). Accordingly, decisions to invest in human beings, adults and children should be guided by more than just the economic gains or returns of those investments.

Commitment, human capabilities and comparisons to HCT

Commitment is a distinct concept that also serves as basis for decision-making, both at the individual and societal level. Although commitment and investment may, to some extent, resemble one another, the motivations behind them are not the same (Folbre, 2010). Commitment, as defined by Sen (1977, 1999), means choosing to act in a specific way even if that action yields no personal benefits. It is action based on morals or values, such as a sense of duty or obligation or the pursuit of social justice (Sen, 1977, 1999). Therefore, commitment, contrary to investment, does not imply a ‘rational calculation of the value of a flow of services’ (Folbre, 2010: 32) and it is a decision that remains binding irrespective of the economic returns it may or may not generate. Traditional HCT ‘deemphasizes commitment’ and is thus ‘inconsistent with the obligation that both parents and societies feel towards children, regardless of future payback’ (Folbre, 2010: 39). A broader and more appropriate view to frame decisions about investments in human beings, including children, that falls in line with the idea of commitment is the one proposed by Amartya Sen (1999), and developed by Martha Nussbaum (2000), that is, the human development approach or the capability approach (CA).

In the CA, *human development* is viewed as the expansion of *human capabilities*, with *capability* being defined as ‘the substantive freedom to achieve alternative *functioning* combinations’ (Sen, 1999: 75, emphasis added). Capability is the freedom or opportunity to achieve something, whereas functioning is the achievement itself or the outcome (Sen, 1999; Robeyns, 2003; Comim et al., 2011). Capabilities include ‘not just the abilities residing inside a person but also the freedoms or opportunities created by a combination of personal abilities and the political, social, and economic environment’ (Nussbaum, 2013: 20). So, for a functioning to actually be chosen, *combined capabilities*, which include both *internal capabilities* – such as personality traits, intellectual and emotional capacities, internalised learning, among other personal abilities – and *political, social, and economic conditions*, must exist (Nussbaum, 2000, 2013). As Nussbaum (2013: 21) explains, ‘A society might do quite well at producing internal capabilities but might cut off the avenues through which people actually have the opportunity to function in accordance to those capabilities.’ Comim and colleagues (2011) make a similar point about children’s capabilities. These can be restricted because of personal or internal characteristics, because of factors related to their families’

characteristics, such as the caregivers' education, but also because of external circumstances, namely public policies, institutions, social norms or discriminating practices (Commin et al., 2011). The CA, then, contrary to the HCT, pays attention to how contextual factors affect the opportunities human beings have to flourish (Buzzelli, 2015b).

Another important feature of the CA is that human capabilities have, first and foremost, a direct relevance – *intrinsic value* – to the well-being and freedom of people: they directly enrich people's lives and are 'the preeminent objective of development' (Sen, 1999: 37). They also bear indirect relevance – *instrumental value* – through how they contribute to economic production, but they equally indirectly contribute to social development (Sen, 1997, 1999). This applies both to adults and children. Investments in health but also in early childhood development contribute to children enjoying a fuller life and directly matter for the quality of childhood (Sen, 2003). They also directly contribute to the capacity of future adults to lead good lives, and indirectly contribute to adults' earnings and economic outcomes, and to their ability to engage in social and political activities. So, in the CA investments in children matter because they enhance the quality of life, first and foremost *in childhood*, but also in adulthood. In HCT, on the other hand, the focus is on how those investments make children more productive human beings *in the future*.

In conclusion, the CA, contrary to HCT, goes beyond the idea of 'human beings as investments'. The focus is on the full value of human capabilities, that is, the value attached to people being able to lead a freer life, regardless of future economic returns. Hence, within the CA investments in children can be viewed as a commitment to the enlargement of children's capabilities, that is, to children's human development.

The 'new' human capital theory: The argument for investing in early childhood

James Heckman's research on human capital started at the other 'end of the age spectrum' (Heckman, 2000a) but soon, motivated by concerns about the sources of skill formation and the most appropriate policies to foster human capital, his interest turned to early childhood. Informed by evidence produced in developmental psychology and other empirical research, Heckman (2000b) claims that skill formation and learning start as early as in infancy and 'Success or failure at this stage feeds into success or failure in school which in turn leads to success or failure in post-school learning' (Heckman, 2000b: 5). Contrary to the standard assumption of HCT, Heckman argues that abilities are not static and human capital has 'dynamic complementarity features' (Heckman, 2000b: 8), that is, abilities can be altered in the early years and foster learning, making people more able, and more able people acquire more skills, and so on. Thus, 'Learning is a dynamic process and is most effective when it begins at a young age and continues through to adulthood' (Heckman, 2000b: 50).

Although cognitive skills are seen as undeniably relevant, Heckman also points out that an approach that concentrates on these skills only is an incomplete one, as it ignores the economic and social value of *non-cognitive skills* or social skills, namely motivation, self-discipline or perseverance, among others – a fault Heckman points to in previous HCT literature (Heckman, 2000b; Heckman and Rubenstein, 2001). According to Heckman, these skills are equally, if not more, crucial determinants of success in life, as they influence performance in school and in the workplace (Heckman, 2000b).

Supporting himself on evidence from leading early childhood interventions in the United States, such as the Perry Preschool Project and the Abecedarian Project, and on a cost-benefit analysis of these programmes, Heckman (2000a, 2000b; see also, e.g., Heckman et al., 2006; Heckman et al., 2010) concludes that such interventions bring short- and long-term benefits, both to individuals and

to society. Children gain in terms of their cognitive and non-cognitive skills, which enable greater success in school, and, later, lead to ‘large pay-offs in the labor market’ (Heckman, 2000b: 32), as children become more productive, employable and better-paid adults. Society also benefits, because such early interventions result in less criminal activity and welfare dependence, leading to a reduction in costs for the government and for society (Heckman, 2000a, 2000b), but also, because improvements in ‘the quality of the ... workforce’ are ‘a major source of productivity growth’ (Carneiro and Heckman, 2003: 32). Besides these gains, in later research, Heckman and colleagues add other ‘non-monetary benefits of multiple skills’ (Heckman and Corbin, 2016: 343), such as improvements in terms of physical and mental health, trust, self-control, happiness, among others.

The above constitutes the basis for Heckman’s assertion that the returns (or rates of return) of investments in young children are high, but also higher when compared to other investments in human capital, such as in older and ‘less able’ people – an argument summarised in what is known as the ‘Heckman curve’ (see, e.g., Carneiro and Heckman, 2003; Cunha et al., 2006). Accordingly, Heckman (2000b: 8) argues that ‘efficiency would be enhanced if human capital investment were relocated to the young’ (Heckman, 2000b: 8). To this efficiency argument Heckman also adds a social justice one (see, e.g., Heckman, 2006, 2007), declaring these investments also ‘give kids a fair chance’ (Heckman, 2013).

Learning and skill formation, Heckman also contends, are fundamentally influenced by families. Therefore, once again, interventions should be made as early as possible, before school age and primarily next to children from disadvantaged families, as ‘Failed families produce low-ability, poorly motivated students who do not succeed in school’ (Heckman, 2000b: 5). Accordingly, the most effective – and least costly – way of improving children’s performance in school, and in later life, is through policies directed toward families, focusing on the promotion of good parenting and of a quality early environment for disadvantaged children (Heckman, 2000b; Heckman, 2013). This is also a characteristic of Heckman’s analysis that sets it apart from standard HCT policy recommendations (Heckman, 2000b).

These arguments culminated in the development and estimation of the ‘technology of skill formation’ (see, e.g., Cunha et al., 2006; Cunha and Heckman, 2007; Cunha et al., 2010), a mathematical model of skill formation ‘attractive to policy makers’ for its ‘rigorous scientific basis to guide public investment’ (Wastell and White, 2017: 133; for a discussion on economists’ influence on policymaking, see also Hirschman and Berman, 2014). The arguments are also summarised in what has been named ‘the Heckman equation’, which postulates that investing in educational and developmental resources for disadvantaged families, plus nurturing early development of cognitive and social skills in children, plus sustaining early development with effective education through to adulthood, equals gains in terms of a more capable, productive and valuable workforce that pays dividends to future generations (see <https://heckmanequation.org/>).

An interesting aspect to note about Heckman’s (and colleagues’) EHD concerns evolutions in its terminology. Having grown out of early human capital literature (Heckman and Corbin, 2016), Heckman’s and co-authors’ first writings on the importance of investing in early childhood revolved around the concepts of ‘human skills’ and ‘human capital’ (see, e.g., Heckman, 2000b; Carneiro and Heckman, 2003; Heckman, 2006). Throughout the course of research, however, the lexicon suffered changes, and the terms ‘human capabilities’ and ‘human development’ started being adopted, so much so that the framework’s designation as ‘the economics of human development’ was claimed by Heckman and colleagues – and more recently relabelled as ‘the economics of human potential’ (see <https://heckmanequation.org/>). One of the first references to the term capabilities is made in Knudsen and co-authors (2006), a joint article by experts from neurobiology, psychiatry and social policy, with Heckman representing the field of economics, and where investments in early childhood are proposed as the most efficient strategy to strengthen the future

workforce. Here the term capability seems to be used as a simple alternate word for skills or capacities. In following works, namely in Heckman's (2007) article 'The economics, technology, and neuroscience of human capability formation', the term capabilities is used deliberately, taking centre stage in the analysis that Heckman (2007) now describes as a 'model of investment in human capabilities'. In subsequent joint works synthesising the arguments in favour of investments in early childhood (see, e.g., Cunha and Heckman, 2009; Doyle et al., 2009; Heckman and Mosso, 2014), while still discussing human capabilities formation, the use of the term human development becomes more frequent, and this is when the framework starts being referred to as 'the economics of human development'.

These evolutions seem to show a gradual approximation of the EHD to the CA. In fact, in a 2016 article (Heckman and Corbin, 2016) where the EHD is compared to the CA, Heckman and co-author do state that, although different in some aspects, the EHD has much in common with the CA, namely because both literatures 'analyze inequality, equality of opportunity, and social mobility ... [and] examine the core sets of skills that explain the capacities of person to function' (Heckman and Corbin, 2016: 344). The EHD is also contended to contribute to the CA 'by showing how internal capabilities – skills – are formed and how they can be measured' (Heckman and Corbin, 2016: 343), something that, according to Heckman and Corbin (2016), the CA does not explain, limiting its potential to inform policymaking. Following the authors' own account, the EHD also considers external capabilities since it studies how institutions, mainly families, but also schools and social policy, either inhibit or positively contribute to the development of skills (Heckman and Corbin, 2016).

Given Heckman's and colleagues' arguments, overall it looks as if the EHD has in fact moved away from standard HCT in terms of focus of attention and dimensions of human flourishing considered, as it also seems more aligned with the CA. This approximation is acknowledged and commended by authors such as Nussbaum in her comment to 'James Heckman's marvellous address at the Washington, D.C. meeting in 2015, contrasting the Human Capital approach with the Capabilities Approach ... [that] had the nature of a friendly rapprochement between previously divergent perspectives' (Nussbaum, 2019: 125).

But the question still remains: is the EHD truly that different from previous HCT literature and more in tune with the CA?

The economics of human development: 'Investing in children' or 'children as an investment'?

Heckman and co-authors claim that the EHD does pay attention to market-related outcomes, for instance productivity and income, but also goes well beyond that by considering other benefits too, such as reductions in criminal activity and in welfare dependence, and health gains, among others. Therefore, the authors argue, the common criticism of HCT's focus on earnings and income 'is misguided if applied to the economics of human development ... [since it] explicitly considers multiple dimensions of human flourishing' (Heckman and Corbin, 2016: 344–345). This claim is, however, disputable.

First, although it cannot be denied that Heckman and colleagues do make reference to multiple types of benefits that can arise from early investments in disadvantaged children, the EHD's analysis and arguments that follow are still openly grounded on the cost–benefit framework, and as discussed, this bears several problems. Heckman and co-authors (2006) recognise the limitations of the cost–benefit analysis. They also argue that 'Showing the "dollars and cents of early education" gives decision makers the quantitative evidence they need to invest in infants, toddlers, and young children' (Heckman et al., 2006: 17) – which is something that is also acknowledged by

critics of the cost–benefit rationale and HCT (e.g., Folbre, 2010; Buzzelli, 2015a, 2015b). Nevertheless, what the conclusions of such an analysis stress, and reasons for action it highlights, are the *economic* returns of early investments in disadvantaged children – as revealed in the gains emphasised by the Heckman equation.

Moreover, given its basis for analysis, the EHD almost inevitably, but also intentionally, takes a comparative perspective of early investments in disadvantaged children, as when it is argued that the returns on investments in young children are higher when *compared to* investments in older people (see, e.g., Carneiro and Heckman, 2003; Cunha et al., 2006) – also the idea behind the above-mentioned Heckman curve. In this case, the arguments favour investments in disadvantaged children. However, the conclusions would be different if the returns-on-investment were found to be higher for other ages, meaning that investments would be diverted away from children if they were considered less ‘profitable’. The social justice argument would play no role in this decision. Fairness is invoked in the EHD insofar it reinforces the efficiency argument, but it is the latter that matters for the investment decision. So, the EHD, as the HCT, is still overly economic, meaning it continues to promote the economic rationale in detriment of other rationales, such as fairness or social justice.

Additionally, although expanding the benefits of investments in disadvantaged children beyond earnings, income and productivity, the EHD’s main preoccupation continues to be how those children can be transformed into more productive members of society. The interest has always been the quality of the workforce and its contribution to economic growth, a concern repeatedly present in Heckman’s and co-authors’ research. This is evident in the authors’ statement about their main motivation for research being related with the fact that ‘the source of a nation’s wealth is the skill of its people ... [and] the quality of the workforce has been a major source of productivity growth’ (Carneiro and Heckman, 2003: 77); or related with concerns about ‘The future success of the U.S. economy [which] will depend in part on well-educated and highly resourceful workers’ (Knudsen et al., 2006: 10155); or when highlighting that ‘Growth in both the quantity and the quality of the labor force traditionally has been a major source of U.S. output growth. Given current trends, U.S. growth prospects are poor’ (Heckman and Masterov, 2007: 448).

The EHD’s interest in gains in terms of non-cognitive skills, it must be added, is also guided by the economic value they carry. The focus is ‘on the importance of noncognitive skills *for economic success*’ (Carneiro and Heckman, 2003: 135–137, emphasis added), which can be more easily achieved because ‘manipulating noncognitive skills is more feasible (*less costly*) than manipulating IQ’ (Carneiro and Heckman, 2003: 137, emphasis added).

So, even if throughout their research Heckman and co-authors make reference to issues of inequality and social fairness (see, e.g., Heckman, 2000b; Carneiro and Heckman, 2003; Cunha and Heckman, 2006; Cunha et al., 2010; Heckman and Mosso, 2014; Heckman and Corbin, 2016), what remains central to the argument is how disadvantaged children can be turned into skilled/more productive production factors, at the lowest cost possible. The stance of the EHD is clearly instrumental: investing in disadvantaged children matters *because* they are the future workforce that will contribute to economic productivity and growth. Markedly, this also means that the EHD, just as traditional HCT, fails to account for the intrinsic value associated with investing in children’s capabilities, meaning children are not valued for themselves, as Folbre (2010) argues should be the case.

As discussed above, HCT is also criticised for its focus on internal capabilities and neglect of context. Heckman and colleagues claim the EHD considers both (Heckman and Corbin, 2016). A close inspection of the EHD, however, allows for a different conclusion. As Nussbaum (2013, appendix: 193–194) points out:

[Heckman's] approach is rooted in the 'human capital' approach within economics, and, definitionally, his notion of capabilities is closer to Nussbaum's notion of 'internal capability' than to her notion of 'combined capability'. In other words, the external social circumstances that either permit the choice of functioning or inhibit it are not, as such, elements of a given capability, as Heckman uses the term.

What the EHD tries to explain is skills, and skill formation and development, in the sense of internal capabilities formation and fostering. In this context, families or parental environments are seen as crucial for the production of skills, for the shaping of skills or for explaining ability gaps (see, e.g., Heckman, 2000b; Cunha et al., 2006; Heckman and Masterov, 2007; Heckman, 2008; Cunha et al., 2010; Heckman, 2013; Heckman and Corbin, 2016). The role of schools and other social institutions is also acknowledged but insofar as they are relevant in correcting or promoting the effectiveness of families in producing more capable children. As such, the EHD's concern with institutions is strictly related with how they impact the *formation of children's* internal capabilities. This is, in several accounts, a limited view of how context affects children. First, as discussed before, other important factors besides family environments might constrain children's capabilities (see Comim et al., 2011). Additionally, and more importantly, as also mentioned earlier, even if society excels at producing internal capabilities, that does not necessarily mean that people will actually have the opportunity to function and flourish (Nussbaum, 2013; see also Chiappero-Martinetti and Sabadash, 2014; Buzzelli, 2015a, 2015b). Just like the HCT, the EHD 'lack[s] the ability to explain how capital is activated and converted into positive returns' (Buzzelli, 2015b: 206); it does not look beyond the context's immediate effects on the development of skills/internal capabilities.

Finally, a comment must be made on the EHD's reorientation in terms of lexicon. Even though the terminology evolved towards the use of the terms human capabilities and human development, the essence of the argument has not changed and the key messages are the same. Heckman and colleagues fundamentally equate human skills with internal human capabilities and use the terms interchangeably. What the adjustment in vocabulary could suggest is not that the EHD evolved towards an approach more in line with the CA, but that the EHD has, instead, 'colonised' the terminology used by the CA. This raises the question of whether this is merely an attempt to speak the same language as the CA, or something more, such as an intentional step towards subsuming or replacing the CA as leading economic framework explaining human development.

Summing-up, what the discussion in this section aims at observing is that in the EHD, just as in HCT, investing in children means children as an investment. The arguments the EHD puts forth for investing in disadvantaged children are based on the economic returns those investments bring to society and, thus, a social commitment to children's well-being and human development is not the underlying reason for the EHD's proposals.

Does it matter?

Even if the perspective of the EHD is the same as of the HCT, since the EHD seems to have been effective in promoting desirable investments, that bring future (e.g., earnings), but also present (e.g., development of cognitive and non-cognitive skills), positive outcomes for young disadvantaged children, one can ask: does it matter that the EHD regards children as an investment?

The EHD's argument is very compelling and 'given the focus on children, ... [it] appeal[s] to both left and right' (Wastell and White, 2017: 132), which explains its popularity, and why it has become very influential and has been widely promoted. Public spending in disadvantaged children is broadly seen as a good decision – as it should be. However, and this is the point being made here, the excessive focus on the 'investment narrative' (Moss, 2013) does matter. The

considerations made in previous sections speak for why it matters and, given the already extensive discussion made there, it is found unnecessary to fully repeat the arguments here. However, three fundamental ideas must be underlined.

First, as suggested earlier, the return-on-investment rationale for investing in young children ‘reflects a focus on children as future members of society instead of questions relating to their “here-and-now” wellbeing’ (Campbell-Barr and Nygård, 2014: 349; see also Bandelj and Spiegel, 2023). As shown before, even if recognising short-run positive effects, the main argument of the EHD is that investing in children will promote future gains for society in the form of a more capable and productive workforce. While the economic instrumental value of such investments must be recognised, it should not be forgotten that, not only children’s capabilities have an intrinsic value, but what is also important is to guarantee that children ‘enjoy a fuller life’ (Sen, 2003: 79) in the present. So, despite the relevance of the connections between childhood and adulthood, recognised and valued also in the CA (Sen, 2003), ‘more attention should be dedicated to the understanding of children’s well-being ..., rather than projecting them to the future’ (Ballet et al., 2011: 22). The EHD does just the opposite. It supports early childhood investments with a focus on children’s future human capital, promoting what Campbell-Barr and Nygård (2014: 355) describe as a construction of childhood ‘where children are becoming rather than being’.

A second concern is that the reasoning of the EHD is reductionistic, in at least two accounts. As discussed, when the EHD highlights the benefits associated with investing in disadvantaged children, the relevance of those benefits is considered insofar as they involve higher productivity and cost-reducing gains for society. This is the investment rationale that has guided a diverse range of policy interventions to which standard HCT has strongly contributed, but also the EHD (see, e.g., Campbell-Barr and Nygård, 2014; Berman, 2022; Laruffa, 2022; Bandelj and Spiegel, 2023; Griffen, 2024).

As Laruffa (2022: 476), for example, points out, social investment strategies in the context of Europe have ‘reframe[d] social problems as economic problems’, the argument being ‘that social problems involve economic costs, which in turn put “pressure on public budgets” so that “not just individuals but society as whole bears the social and economic costs of unemployment, poverty and social exclusion”’. Under this ‘investment narrative ... everything collapses into the economic and everything is reconceptualized along economic lines’ (Moss, 2013: 371). The EHD exhibits the same type of rationale: it reduces social problems to economic problems and promotes social policy interventions compatible with this type of reasoning.

The EHD can also be seen as reductionist for a different reason, namely because of the clear preference it gives to a specific type of social policy, to the detriment of other policy interventions. According to Heckman (2013: 38, original emphasis), ‘*predistribution* – improving the early lives of disadvantaged children – is far more effective than simple redistribution in promoting social inclusion, and at the same time, at promoting economic efficiency and workforce productivity’. Giving money to families, Heckman claims, will not enhance children’s early environments (Heckman, 2013). Social policy, directed toward the malleable early years and ‘guided by the goal of promoting the quality of parenting and the early life environments of disadvantaged children’ (Heckman, 2013: 41), is the appropriate response. Hence, what Heckman and co-authors suggest is that social policy in the form of early investments targeting disadvantaged children is the *one* needed solution that will work as a panacea for all problems, from low productivity and growth, to poverty, inequality, lack of social mobility, social exclusion and so on. As Folbre (2010: 181) explains, however, ‘Gains in one arena can be neutralized by lack of progress in others.’ Thus, although early childhood investments do play an important ‘part in enhancing well-being ... [they must be seen as just] one part of a strong welfare state’ (Moss, 2013: 371). Other authors who stand behind the investment narrative, such as Esping-Andersen (2002, 2008), also recognise that ‘combined strategies’ are what is needed to address the problem of low life

chances or opportunities. Contrary to Heckman and co-authors, Esping-Andersen argues that, ‘Without a doubt, adequate income guarantees for families with children are *sine qua non*’ (Esping-Andersen, 2002: 66; see also Esping-Andersen, 2008).

The above comment may raise the question: what if the EHD starts seconding policies that promote direct income support to families? Would that make the EHD a more appropriate framework for decisions regarding investments in disadvantaged children? From the point of view of the diversity of instruments suggested to support children in disadvantage and their families, that could be interpreted as an improvement. It would, however, still not represent a change in the EHD’s fundamental economic rationale, and thus would not mean an advancement from the point of view of, for instance, bringing the EHD closer to the CA’s rationale. In fact, and for example, according to Griffen (2024), Heckman’s research has actually inspired the expansion of family support spending initiatives in the US. But while this might represent a ‘break with the harsh fiscal austerity thinking’, the reality is, these programs continue to follow an ‘economic style of reasoning’ (Griffen, 2024: 194) and thus endorse the efficiency argument promoted by the EHD. So, when informed by arguments such as these, greater social policy spending on children does not mean a split from the economic approach to investments in early childhood. This connects to the next and final point of this section.

According to Laruffa (2022), social investment is often seen as an alternative to neoliberalism, the latter usually interpreted as the retrenchment of social policy. However, as Laruffa (2022) argues, neoliberalism does not necessarily translate into welfare retrenchment, at least not for policies promoting human capital (see also Griffen, 2024). Namely when understood as the ‘economisation of the social’ (Laruffa, 2022: 474), neoliberalism can go hand in hand with the promotion of social policy, but a social policy that is ‘reframed following the economic rationale and the cost–benefit logic’ (Laruffa, 2022: 474), with ‘a privileging of instrumental rationality and technical practices that reflects a “what works” approach to policy making’ (Campbell-Barr and Nygård, 2014: 348; see also, Hirschman and Berman, 2014; Berman, 2022). Thus, social policy becomes the ‘motor of economic growth and competitiveness’ (Laruffa, 2022: 482) and ‘social investment is largely in continuity with ... neoliberalism’ (Laruffa, 2022: 483; see also Moss, 2013; Buzzelli, 2015b; Griffen, 2024). A continuity that, in the case of early childhood investments, has been promoted by supranational organisations ‘looking to influence the global view of ECEC [early childhood education and care] within a model that privileges human capital theory’ (Campbell-Barr and Nygård, 2014: 355), and that is also encouraged by the EHD framework. Thus, to conclude, and borrowing Laruffa’s (2022: 485) words, it appears that the EHD speaks ‘to the “markets” rather than to “the people”’ and ‘it represents less an argument in the democratic debate on the good society than the attempt to convince financial investors on the economic importance of social policy’.

Concluding remarks

This paper discussed the EHD’s approach to investments in children and sought to show that, although departing from standard HCT in some respects, it is a framework that still accentuates the economic reasons for investing in human beings, in particular in young children who live in disadvantaged family environments. The framework essentially treats children as an economic investment. The sounder approach would be to base decision-making on a social commitment to children, as the CA suggests. The EHD, as the HCT, deemphasises commitment (Folbre, 2010) and highlights economic returns instead. The EHD is essentially HCT with a different labelling and, as its predecessor, it has a reductionist approach to human beings and development.

Economists have for some time been regarded as professional authorities with influence in policymaking, namely because of their style of reasoning and decision-making tools (Hirschman and Berman, 2014). The EHD’s economic argument favouring investments in disadvantaged children is

therefore strong precisely because of its ‘scientific’ and technical characteristics (Wastell and White, 2017), which are appealing to policymakers. While highlighting efficiency matters, the EHD also appeals to social justice concerns and that is why it is popular across the whole political spectrum (Wastell and White, 2017). Nevertheless, and drawing freely on Sen’s (1998) comment to the utilitarian tradition, even if it is true that the investments promoted by the EHD do not only produce economic returns but also enhance people’s freedoms, these expansions of freedoms are more ‘incidental’ than intended results, since what is mostly valued in the EHD is how children, as future adults, contribute to productivity and growth.

Additionally, although greater social spending in disadvantaged children is beneficial for them, and for society, the fact that the EHD promotes such type of spending does not redeem the framework. As argued, the EHD does not pay enough attention to children as children and the attention it gives to children’s (internal) capabilities is purely instrumental. The EHD is mostly concerned with ‘perfecting people’ (Wastell and White, 2017), with creating ‘an economically useful-to-be child’ (Bandelj and Spiegel, 2023: 824), and with what Moss (2013: 371) has described as an ‘ever stronger governing of children (and also adults) to ensure the promised results’. It promotes the reshaping of individuals ‘in a way that accommodates the needs of the global markets’ (Laruffa, 2022) and, ultimately, it encourages a social policy dominated by economic goals. Finally, one last observation, since the EHD privileges preparing children to be competitive workers instead of promoting the development of ‘a sense of collective responsibility as citizens in a democratic society’ (Bandelj and Spiegel, 2023: 823), this means that the EHD’s rationale could be at odds with democracy itself (Brown, 2015; Bandelj and Spiegel, 2023).

Hence, even if one does not wish to reject the EHD because of the economic case it makes in favour of early investments in disadvantaged children, care is advised when supporting its arguments, not least because children’s human development is as much about the future as it is about the present, as it is also about much more than ensuring economic benefits. Children should not be regarded as mere investments but as human beings. This requires a broad view about human development and a social policy independent of market interests.

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