

Employing needs-based funding formulae – some unavoidable tradeoffs

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Abstract

Purpose – The method by which the state allocates resources to its schooling system can serve as an important instrument for achieving desired improvements in levels of educational attainment, social equity and other social policy goals. In many school systems, the allocation of school resources is done according to a needs-based funding formula. The purpose of this paper is to provide a deeper understanding of some significant tradeoffs involved in employing needs-based funding formulae.

Design/methodology/approach – The paper is based on theoretical investigations of normative aspects involved in using needs-based funding formulae.

Findings – There are a number of underexplored complications and difficulties that arise from the use of needs-based funding formulae. Dealing with these involves significant tradeoffs that require taking normative decisions. Understanding these tradeoffs is important for improving the use of needs-based funding formulae.

Originality/value – The paper highlights three under-examined issues that emerge from the current use of needs-based funding formulae. These issues are: to what extent funding formulae should be responsive to social and economic needs? To what extent should funding formulae allow for the use of discretion in resource allocation? To what degree needs-based formulae funding should be linked to outcomes? By discussing these issues and the tradeoffs involved in them, the paper provides a deeper understanding of significant aspects stemming from the use of needs-based funding formulae. This, in turn, can serve as a basis for an improved and better informed process for decision making regarding the use of funding formulae.

Keywords Policy, Equity, Resource allocation, Funding formulae, Needs based

Paper type Conceptual paper

1. Introduction

In many school systems, the allocation of school resources is done according to a needs-based funding formula. Traditionally, educational funds have been allocated primarily on the basis of pupil and teacher numbers (Ross and Levacic, 1999). However, since the 1990s, countries and states have increasingly employed needs-based funding formulae to guide their educational resource allocation to schools (Fazekas, 2012). A needs-based funding formula, also known as weighted students funding, is a funding mechanism that allocates greater educational resources to students with greater needs through an impartially applied mechanical set of criteria. In the literature, the shift to needs-based funding formulae is generally regarded as an improvement on more traditional methods of school funding. Most significantly, it marks an important development in the conception of educational justice guiding resource allocation. The use of needs-based funding formulae normally brings about a move from a conception of justice as blind equality, in which all students receive similar resources, to one based on vertical equity in which different students receive different allocations according to their need (Center for Public Education, 2016). Another relative advantage of needs-based formulae is that by setting explicit allocation criteria, they can play an important role in increasing allocative transparency and in depoliticizing the budgeting process (Berne and Stiefel, 1999a). Finally, needs-based formulae are also regarded as effective instruments for reform (Ross and Levacic, 1999).



However, alongside the many advantages of needs-based funding formulae, their use introduces a number of questions, complications and difficulties. In this paper, we highlight three issues that emerge from the current use of needs-based funding formulae and which have not been sufficiently addressed in the literature. These issues are: to what extent educational funding formulae should be responsive to social and economic needs? To what extent should funding formulae allow for the use of discretion in resource allocation? To what degree needs-based formulae funding should be linked to outcomes? Our goal in this paper is not to provide a definitive answer to these questions because doing so demands making a normative decision that takes into consideration the particular context in which the funding formula is to be employed. What we aim to do here is bring these issues to the fore and analyze the different tradeoffs involved in deciding what direction to take about them. We hope that the discussion conducted in this paper will help provide those interested in needs-based funding formulae a deeper understanding of some significant but underexplored issues that stem from using them.

The paper proceeds as follows. Section 2 begins by introducing the notion of needs-based funding formulae and provides a brief account of their current use in educational policy. Section 3 points to some tradeoffs involved in making needs-based funding formulae responsive to social and economic needs. Section 4 explores the use of discretion in educational resource allocation. It is argued that while reliance on discretion has clear disadvantages, it also has some important educational benefits that should not be overlooked. Section 5 focuses on the relationship between needs and outcomes. It is maintained that while a very good case can be made for linking the two, creating such a link has its limitations. The final section offers some concluding remarks that tie the questions discussed in the paper to policymaking.

Before we continue, however, two important clarifications are in order. First, the paper focuses on normative features involved in the use of needs-based funding formulae. For this reason, it mainly examines the underlying rationale guiding this method and does not touch on local implementations of it. Second, the paper does not deal with the financing of higher education since it has some unique features that render the discussion offered in this paper inapplicable to it.

2. An overview of needs-based funding formulae

Formula funding is a means of allocating public funds. It allocates funds to devolved entities according to a mechanistic formula (Smith, 2003). In the educational sphere, funding formulae normally consists of a set of agreed-upon objective principles which are fairly applied for allocating resources to educational entities, most commonly individual schools. In practice, a funding formula commonly takes the form of “a mathematical formula which contains some variables to which a cash amount is attached in order to determine” an educational budget (Fazekas, 2012, p. 6).

Needs-based formula funding is a specific approach to designing funding formulae. In this approach, the amount allocated to each entity is based on an analysis of needs followed by resource allocation according to a formula that is supposed to reflect these needs. In education, needs-based allocations normally have three main characteristics. First, money is allocated per student and follows them to the school they attend. Second, the per-student funding amount differs according to the needs of the student. The greater the need, the more funding the student is supposed to receive. In many cases, depth of need is assessed or weighted in comparison with other types of needs, while each type of need receives extra funding according to its relative weight. For these reasons, needs-based funding formulae are often referred to, especially in the USA, as weighted student funds. Finally, schools have a high degree of flexibility in the way they use the funds provided to them.

In terms of practical use, a report on school finance published by the OECD in 2012 found that the use of needs-based funding formulae is a key strategy employed by many of its member states to allocate educational resources (Fazekas, 2012). Surveying the school funding systems in the USA, Verstegen and Jordan (2009) found that 23 states use some form of a needs-based funding. More recently, Roza (2015, p. 837) argued that in the USA the use of funding formulae in general, and needs-based formulae in particular, "is now gaining traction." Ladd and Fiske (2011) help explain this by pointing to the fact that funding formulae appeals to both conservative and liberals. Conservatives see it as a way to promote parental choice and school autonomy because funds are transferred directly to schools, while liberals are attracted by the possibility of providing more funds to students at low starting points.

In the UK, like in the USA, the use of needs-based funding formulae in education has a decades-long history. The allocation formula used in England, which is a statutory requirement of the School Finance Regulations, assigns high weights to student background factors such as whether or not a pupil is entitled to a free meal at school (Adnett *et al.*, 2002). In the rest of Europe, with the exception of the Netherlands, students' socio-economic background tends to receive a lesser significance than in the USA (European Commission, 2014). Nevertheless, in more than half of European countries, the amount of resources allocated by the central government to schools takes into account students' needs in terms of their low starting points. In other parts of the world, the use of needs-based funding formulae is relatively uncommon, and in most countries, accounting for students' minority or migrant status is probably the closest that any of the formulae come to actually taking into account student welfare levels (Alonso and Sánchez, 2011).

3. Social and economic needs

Although the definition of students' needs varies from country to country, needs-based funding formulae almost always heavily rely on students' social and economic characteristics (European Commission, 2014; Ladd and Fiske, 2011). Factors, such as poverty, parents' education, immigration and others, play an important role in determining who should get extra funding. These social and economic indicators can serve as proxies for estimating educational needs but can also be viewed as having their own inherent significance. In the latter case, they are supposed to reflect either social or economic disadvantages that have to be reduced, amended or compensated for through the help of education. Now, the rationale for linking educational needs-based funding formulae to social and economic realities is a simple and powerful one. To begin with, education has a decisive influence on the distribution of many significant social goods, such as wealth, power, and even health. Moreover, education also has a positional value, namely, the benefits in other areas of life that an individual can derive from one's education hinge on how well one fares in education as compared to others (Unterhalter and Brighouse, 2007). This means that the ability of people to answer their social and economic needs depends not only on their own education but also on those competing with them. In addition, education can also actively contribute to answering social and economic needs by advancing a variety of social and individual goals, such as economic growth, active citizenship or professional development. Education, it follows, can play an indispensable role in answering social and economic needs and there is, therefore, a very good reason for allocating resource based on social and economic indicators. When this is taken into consideration, needs-based funding formulae can make an important contribution to achieving a better and more just social and economic order.

Yet allocating educational resources according to social and economic needs has an important side effect that is rarely acknowledged by policymakers; it helps to sideline

educational considerations by subordinating educational resource allocation to a rationale that is not designed to deal with the unique features of education. It does so in two main ways. First, allocating according to social and economic needs, can conflict with allocating according to educational needs. Let us explain why. Although students' educational needs often coincide with their social and economic ones, there are instances in which they do not. There can be cases in which students have high educational needs and relatively low social and economic needs, and vice versa. This can be shown clearly by examining the case of the gifted and talented. In the case of the gifted and talented, if we focus on educational needs, then we have very good cause to provide them more funds because they have more extensive educational needs due to their more highly developed abilities (Merry, 2008). Yet, if we perceive educational allocation as having to respond to social and economic conditions, it becomes unclear that more funds should be allocated to the gifted and talented. This is because, given their superior capabilities, they are presumably better positioned to answer social and economic needs, such as securing sufficient income by obtaining good jobs. This is not an isolated case but only one among many. Similar considerations, for example, apply to students with learning disabilities from affluent families. Providing for social and economic needs, then, can come at the expense providing for educational needs and vice versa.

Second, the emphasis on answering social and economic needs is bound to lead to education's distinctive features and unique aims being cast aside in favor of non-educational considerations (Martin, 2015). Education, it is important to remember, has an instrumental and positional value but also has a non-instrumental and non-positional value. Much has been written on the potential contribution of education to promoting autonomy, critical thinking, artistic sensitivity and other values that have their own internal reward (White, 2011). Education, it follows, can therefore be seen as producing its own internal goods (Hogan, 2010). When, however, education focuses on answering social and economic needs, these take priority over educational good as resources are invested in order to achieve them. The more we focus on the social and economic functions of education, the more we risk marginalizing other significant educational goals such as enhancing personal autonomy or developing artistic sensitivity. This, Walzer and others warn, can have a detrimental effect on social and educational development (Blacker, 1999; Walzer, 1983). It is maintained that since education has its own characteristics and produces its own unique goods, conducting it according to a rationale that is not designed to deal with these goods can easily lead it astray or result in educational stagnation (Puolimatka, 2004). Walzer (1983), for example, famously argued that education constitutes a distinct sphere in which allocation should be guided, at least in the higher levels, more by merit than needs. Protecting education's independence and preventing it from being subjected to external considerations then has a value that is often disregarded.

Ideally, educational funding should be allocated according to social and economic needs as well as educational ones. It should also look to produce and develop educational goods. We live, however, in an imperfect world in which resources are scarce. The more we invest in answering social and economic needs, the less we will have left for answering purely educational ones or for advancing educational goods. What we must be aware of then, is that the current reliance of needs-based funding formulae on social and economic indicators advances an instrumental view of education as a tool for dealing with social and economic realities. This instrumental aspect of education is undoubtedly important and has a real appeal to policymakers who see education as a tool for furthering their goals. We should not disregard, however, the fact that education also has a non-instrumental value when deciding what goods education should promote and what needs funding formulae should aim to answer.

4. Discretion

Increasing allocative justice is not the only consideration propelling the use of needs-based funding formulae. Another related one, which is in itself very significant, is a desire to limit reliance on discretion in educational resource allocation (Fazekas, 2012). Reducing the use of discretion, namely, narrowing the area in which agents are allowed or empowered to decide and act according to their own autonomous judgment has become a key objective of school finance policy because discretion has significant shortcomings (Molander *et al.*, 2012).

One key weakness of relying on discretion in educational resource allocation is that it is riddled with uncertainty and unpredictability (Barro, 1986). Since ultimately decisions are made based on an agent's judgment at a given moment, it is often hard to foresee their results. This uncertainty can easily impede the formulation of plans for the future and destabilize the system. Another key shortcoming of discretion is that it creates a space that is relatively open to abuse. As experience shows, discretion opens the door to corruption, discrimination, manipulation, extrinsic considerations and so on (Stokey, 2002). Moreover, even when discretion is not abused, reliance on it can lead to inconsistency and injustices humans have a limited ability to make impartial decisions and remain consistent (Santos, 2011). Discretion, then, naturally tends to lead to unequal treatment of equals or equal treatment of unequals. There is, therefore, a powerful case supporting the narrowing of its use in educational resource allocation.

A key feature of needs-based funding formulae is that they define rules for allocation, that is, they introduce specific and binding clauses that explicitly state how resources should be allocated (Schneider, 1995). This setting of rules to guide educational resource allocation has clear advantages in terms of dealing with the shortcomings of discretion. To begin with, while setting rules itself requires some discretion, rules can considerably reduce the reliance on discretion because their subsequent implementation often does not require discretion (Molander *et al.*, 2012). In addition, rules enable one to deal with the negative sides of discretion while at the same time acknowledging differences (Schneider, 1995). As we have seen, the use of needs-based funding formulae allows for a mechanical distinction between different categories of students and differential allocation of resources according to their specific needs. The introduction of rules also tends to enhance certainty and stability and can thereby provide a more solid platform for planning and coordinating decisions (Schlag, 1985). Furthermore, rules tend to augment uniformity and thus are particularly suited to guaranteeing that equals will be treated similarly (Schneider, 1995). Finally, the use of rules is conducive to increasing transparency since it demands an explicit formulation of the allocation rationale. When discretion and its attendant problems enter the equation, it becomes even clearer why the use of needs-based funding formulae, which always involve rules, is so attractive to policymakers and those concerned with educational justice.

Nevertheless, the limiting of discretion achieved by employing needs-based funding formulae involves some tradeoffs. First, simply setting guidelines and rules for allocation is unlikely in and of itself to reduce discretion effectively, as ways must be found of ensuring such resources reach their destination. If, as normally occurs in practice, schools are merely allocated a given sum of money that is supposed to reflect the aggregated needs of their students, then nothing guarantees that these additional resources will indeed be spent on the students for whom they were designated. Discretion here is not reduced but merely transferred from the level of policymakers to that of principals and teachers. To illustrate, while the unit of funding is a single student, funding itself is allocated to schools as an aggregated sum, and the school principal, therefore, enjoys the freedom to decide how to allocate the funds *de facto*. Hence, unless field data on the actual expenditure of schools are collected, there remains much room for discretion in the way the school staff actually allocates funds to students.

The most prevalent way to alleviate the aforementioned problem is to introduce a system of accountability that verifies how resources are actually spent (Molander *et al.*, 2012). However, many scholars have pointed to the difficulties involved in introducing accountability measures into education. While most of these criticisms are irrelevant to the question at hand, as they focus on what teachers are held accountable for, some nevertheless still apply. As argued by Ellison (2012), constant scrutiny and supervision of how resources are used can have a negative impact on the educational process by adding to administrative pressure, fostering an atmosphere of distrust, and curtailing freedoms. Moreover, following Biesta (2004), one could also maintain that introducing measures of accountability that are grounded in formal and economic considerations tends to hinder the development of a true sense of responsibility and distort educational relationships between teachers and students with needs. In addition, erecting a system of accountability normally has an economic price tag. This list of difficulties is, of course, not exhaustive, but it is sufficient to show that relying on accountability has disadvantages, which should be taken into account.

Another difficulty inherent to the use of needs-based funding formulae is that it engenders inflexibility. Rules are by nature rigid, and the aforementioned benefits of using them depend on their being used consistently and with minimum exceptions. Rules thereby are not always conducive to responsiveness, and in many cases they are ill-suited to dealing with the particularities of situations (Hall, 1994). By reducing discretion, then, we also simultaneously restrict our ability to address individuals' needs and deal with exceptions (Schneider, 1995). Yet, many educationalists have long emphasized the fact that education is "dynamic rather than mechanistic in character [...] [and] the amount, type, and quality of learning that occurs in a classroom, especially when there is interaction among students, are only in small part predictable" (Eisner, 1983, p. 554). Moreover, it is increasingly claimed today that the education system itself is complex, that is, it is a system impacted by multiple interacting variables of mutable influences, making it unpredictable and not easily understood in terms of its constituent parts (Radford, 2008). If education is in fact dynamic and unpredictable, at least in part, then trying to eliminate discretion by predetermining educational needs, may not be the best way to respond to actual educational needs considering they are local and ever-changing.

In conclusion, the reduction in discretion achieved through the employment of needs-based funding formulae involves meaningful tradeoffs. The current tendency has been to try to limit discretion. However, notwithstanding the problems associated with it, discretion may still have an important part to play in educational resource allocation. It is necessary, therefore, that policymakers aiming to reduce discretion be aware of the different aspects of the matter and how they relate to controversial educational issues such as the introduction of accountability measures, the nature of student-teacher relationships, the limits of educational responsiveness, and the debate regarding the mechanistic vs open-ended view of education.

5. Needs and outcomes

When needs-based funding formulae are employed, the predicted or actual outcomes of the educational process designed to meet these needs only rarely influence the way resources are allocated. In needs-based formula funding, resources are distributed, almost exclusively, according to student' needs at the starting point. It has been increasingly argued, however, that budgeting education based solely on students' needs at the starting point is unsatisfactory because it tends to be inefficient and to misrepresent students' actual situations. It is inefficient because it does not offer incentives to improve the quality of educational provision, since schools receive the same funds regardless of how well they actually meet students' needs (Ben David-Hadar and Ziderman, 2011). It misrepresents

students' situations because it relies on students' needs at the starting point when the skills and abilities gained by the educational process, which are the focal point of education, are disregarded. One key way to overcome these shortcomings, which is currently gaining currency, is to create a link between outcomes and funding (Mesecar and Soifer, 2013). It aims are to make funding somewhat connected to how well needs are actually being met and to increase awareness of the educational process involved in it.

One way to connect needs and outcomes is to allocate funds according to predicted or estimated outcomes or to improvement gained in outcomes. There are today a number of allocation mechanisms that operate on this principle. A link is drawn here between the end product and funding as the process also comes under scrutiny. This, however, does not solve everything. Basing funding on predicted outcome does not offer incentives to improve performance because funds are distributed in advance. In this respect, then, there is little difference between funding based on predicted outcomes and based on starting points.

In addition, basing funding on predicted outcomes gives rise to some new difficulties. First, there can be a significant gap between estimations of future outcomes and outcomes actually achieved (Berne and Stiefel, 1999b). As discussed in the previous section, education is in many ways a dynamic process with often unpredictable outcomes. Presuming we can know the end results of such a complex process involving so many variables can be misleading and lead to biases in allocation. Second, allocating funds based on expected outcomes demands a predetermination of what constitutes desired outcomes and how needs should be met. Yet, there is a long educational tradition, represented most famously by Dewey, that questions the desirability of attempting to determine educational outcomes in advance, and holds that they should be drawn from the actual educational process. According to Eisner (1983), for example, there are many cases in which the specification, determination and prediction of education's end results are undesirable, because in many domains, such as art, education is meant to yield behavior and products that are original, novel, creative and unpredictable. Tying funding to expected outcomes is, then, not as straightforward as it seems, and actually entails some serious drawbacks that policymakers should be aware of.

An alternative way to link needs and outcomes, which deal with many of the shortcomings of the method just presented, is to make funding dependent upon actual results and how well they have contributed to meeting students' needs. For example, the additional funding a school receives for students with low starting points can be conditioned on the extent to which such funding was able to improve their performance in this school in the past. The advantages of allocating resources based on actual results are significant. First, it creates an incentive to improve performance and better answer students' needs, because funding is rewarded only after results have been obtained. Second, allocating funds according to actual results adds a meritocratic dimension to educational allocation, which is not present when funds are allocated based exclusively on starting-point needs. Due to these advantages, there is currently a growing interest in developing outcomes-based allocation that ties funding to how well needs have been met in practice during the educational process (Mesecar and Soifer, 2013).

There are, however, serious limitations and shortcomings to linking resource allocation to how needs are met in practice. Most notably, in education, funds often have to be allocated before outcomes can be ascertained. There are many cases in which provision of full funds in advance is a necessary precondition for enabling an educational program to run. For example, it is not hard to imagine a school that would like to introduce an ADHD program but could not do so unless full funding is provided beforehand as it demands a measure of investment in equipment at the start. There are, then, situations, extremely common in education, in which waiting to observe outcomes are simply not an option. In addition, it has been often argued that there are highly significant educational outcomes,

such as enhancing creativity, that cannot be satisfactorily measured (Davis, 1995; White, 1999). Basing funding on actual outcomes, it follows, can create a bias toward funding mainly what is measurable, thereby marginalizing important aspects of education that can play a significant role in answering students' needs.

Furthermore, even when outcomes can be ascertained, relying on actual outcomes still raises some difficulties. To begin with, linking funding to actual outcomes can infuse uncertainty into the system. Not knowing exactly how much funding one will receive, as outcomes are never entirely predictable, can hinder the provision and development of measures aimed at answering needs. Moreover, in order to best reflect the existing state of affairs, outcomes must be known. The more accurate a picture we wish to get of a given state of affairs, the more information we have to gather, and the more we end up relying on measuring and testing. Yet, there is a vast literature, which cannot be reviewed here, that deals with the negative side effects of employing extensive testing and measuring in education (e.g. Davis, 1995). Testing can, of course, also be expensive and require a significant investment. Finally, tying funding to actual outcomes can encourage the manipulation or misrepresentation of outcomes. If, for instance, it is known that financial rewards will be given to schools that demonstrate the greatest improvement in pupils' achievements, then schools can be motivated to misrepresent outcomes or refuse to enroll students that evidence a low potential for improvement (Nichols and Berliner, 2007). Similarly, schools will have a particularly strong incentive to "teach to the test," thereby, neglecting other important educational aspects.

In conclusion, tying needs-based funding formulae to improvements in outcomes involves meaningful tradeoffs and raises significant normative questions such as whether educational outcomes should be predetermined in the first place, whether we can and should predict educational outcomes, and to what extent we should rely on measuring and testing. It is important that policymakers consider these questions before deciding whether to use outcome-based funding mechanisms and what sort.

6. Final remarks

In their most prevalent existing form, needs-based funding formulae tend to rely on student starting points, to take into account mainly students' social and economic needs, and allocate funds to schools in accordance with the aggregated needs of its students. In doing so, they transform the world of education in intended and unintended ways. For example, they contribute to increased equity in educational resource allocation. They also strengthen the view of education as a means of dealing with social and economic concerns. In addition, they reduce the discretion and consequently lower the risk of corruption and indeterminacy. At the same time, however, needs-based funding formulae often sidestep educational considerations because economic and social ones take precedence. In addition, since they disregard outcomes, they have a limited ability to reward schools according to actual merit. Finally, they often transfer discretion down the ladder into the hands of principals and teachers rather than eliminating it, because they are rarely accompanied by surveillance systems that oversee how money is actually spent.

A possible alternative is to introduce needs-based funding formulae that take outcomes into account, namely that allocate funds according to how well students' needs have actually been met. This is bound to have an impact not only on this specific dimension but also on the two others discussed in the paper. Linking needs-based formulae to outcomes will enable to better deal with questions of efficiency and to assign a more central place to merit. It is also bound to shift the emphasis from the social economic domains to the educational one, because examining educational outcomes themselves becomes the most direct, and probably simplest, indicator for how well needs have been answered. Furthermore, if allocation is based on actual outcomes it will significantly curtail the discretion of funding

recipients receiving the money because they will have to show how the defined objectives for student with needs have been achieved. On the other hand, however, linking needs-based formulae to outcomes is bound to result in a more limited conception of educational aims because it requires their measurability and predictability. It can also limit the flexibility of those engaged in education in their attempt to respond to actual needs. For example, it can prevent a principal from providing extra assistance to a child who needs it but is not defined as having special needs, while obliging him or her to allocate funds to a child that does not genuinely require additional aid but is defined as having special needs. Finally, linking needs-based funding to outcomes is likely to shift the emphasis away from principles of justice and toward utilitarian calculations as results become the ultimate criterion for allocation.

There is, of course, also the possibility of creating a composite system that combines a priori distribution according to starting points with outcome-based allocations. Such a system might have significant potential as it theoretically incorporates the advantages of the two systems. Yet, at the same time, it is equally liable to reproduce the disadvantages of both. Moreover, there are many cases in which the two methods collide and a normative decision must be made regarding what receives priority. Another possibility is to try to amend and improve one of the options suggested above. One could, for example, maintain the existing structure of needs-based formulae while attempting to erect a system of accountability to deal with discretion. As discussed earlier in this paper, however, each of these options involves tradeoffs.

In sum, the use of needs-based formulae brings to the fore a number of normative questions. It requires those formulating them to decide on a number of issues. First, whether the educational domain should be seen as distinct from the economic and social one and to what degree. Second, to what extent educational responsiveness is worth protecting. Third, how essential it is to avoid the negative side effects of discretion. Finally, whether a priori principles of justice should determine allocation or whether questions of efficiency also have an important role to play. These are normative questions and answering each of them involves a tradeoff. It is important that policymakers be conscious of the various aspects involved in employing needs-based funding formulae and that they make informed normative decisions regarding what type of needs-based funding formulae to employ, as such decisions will undoubtedly have a profound impact on the shaping of our future society. It is important, then, that policy actors are able to go beyond the existing paradigms and look at the discussed issues from a different angle.

Before we conclude it is important to clarify that our aim in this paper was not to challenge the use of needs-based funding formulae, which have made a tremendous contribution to making educational allocation more equitable, but to make some of the issues involved in employing them more salient. This we hope would contribute to their future perfection.

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