

Towards an Education-based Meritocracy? Carlo Barone

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ISA eSymposium for Sociology

Towards an Education-based Meritocracy?



Why Modernisation and Social Reproduction theories cannot explain trends in educational inequalities: outline of an alternative explanation

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Abstract

Education is the single most important determinant of life chances. Hence, reducing socioeconomic inequalities in education is a priority in promoting equal opportunities. This article first discusses concerning trends over time in inequalities of educational opportunity in western nations, arguing that evidence indicates that while these inequalities have declined in the post-war decades, they have stagnated for cohorts since the 1980s. Next, I argue that this pattern contradicts the expectations of the two dominant theories in the field: modernisation theory and persistent inequality. Finally, I argue that this empirical pattern is consistent with an institutional explanation which pays more attention than these theories do to the evolution of educational policies, labour market arrangements and welfare protection.

Keywords: educational inequality, inequality of educational opportunity, persistent inequality, social mobility, social origins, modernisation theory

1. Is capitalism conducive to an education-based meritocracy? A dispute between two theories

Education is a key determinant of life chances which is strongly affected by family socioeconomic background. Hence, education promotes the intergenerational reproduction of privilege: this is an uncontested sociological fact. What sociologists debate is whether the Inequality of Educational Opportunity (IEO) decreases, increases or remains unchanged over time. This is more than an empirical debate: it is a dispute over the key drivers of social mobility in contemporary societies and, more fundamentally, the widespread belief that capitalist development promotes the advent of an education-based meritocracy. In turn, the supposed advent of meritocracy plays a major role for the legitimation of the marked inequalities of condition observed in capitalist societies, which would be justified, to the extent that everyone is given the opportunity to reach the top.

The dispute over the advent of education-based meritocracies has been dominated by two main hypotheses: according to modernisation theories, capitalism development results in declining IEO, while social reproduction theories predict the persistence of IEO. The main thesis of this article is that neither of these two families of theories fits the current empirical evidence, and that we therefore need an alternative interpretation of trends in IEO, which I sketch below.

Let me first quickly illustrate the two competitors of the dispute. On one side, modernisation theory assumes the optimistic view that economic development is conducive to a diminished influence of ascriptive factors on educational and occupational success (Treiman, 1970; Bell, 1974; Ganzeboom *et al.*, 1991). Capitalist development brings widespread economic affluence and stimulates growing public investments in education, which reduce economic hurdles to educational participation for the working class. Moreover, modernisation promotes an upgrading of the occupational structure which increases the economic value of educational qualifications in industrial and postindustrial societies, thus enhancing incentives to invest in education. Finally, modernisation is supposed to promote the rise of universalistic and meritocratic values which would inhibit discriminatory practices in education and at the workplace. Capitalist societies would therefore increasingly approach the ideal of an education-based meritocracy, where access to education is unaffected by family background, and where educational qualifications are a major determinant of economic success. Hence, IEO is expected to decline linearly, or at least monotonically.

On the other side, according to social reproduction theories (Shavit, Yossi & Blossfeld, 1993; Collins, 1971; Bourdieu, 1979; Bourdieu & Passeron, 1977; Goldthorpe, 2000), capitalist development does not reduce IEO. While lower educational levels become universally accessible, educational competition shifts to higher educational levels, where the uppper classes would preserve a strong competitive advantage. They can mobilise their persistently higher cultural resources to achieve better academic performance, which is a major predictor of school success. They can also mobilise their higher economic resources to sustain the costs of longer educational durations in better-quality schools and universities. Relative loss-aversion may further promote the persistence of IEO (Breen & Goldthorpe, 1997): according to this view, all social groups share the same fundamental objective, avoiding social demotion for their children, but this objective has different implications for different social groups, because their children start the social competition from different social positions. Hence, investing in university education is a core priority for upper class families in order to minimise the risks of social demotion for their children, while vocational pathways in secondary and tertiary education may be a safer strategy for short-range upward mobility for lower social groups. Overall, social reproduction theories argue that the upper classes have the cultural and economic resources, as well as the motivations, to preserve a competitive edge in education, even in a context of mass education.

The hypothesis of 'maximally maintained inequality' introduces some *nuance* within social reproduction theories (Raftery & Hout, 1993): when education expands at a given educational level, IEO may be reduced if the upper classes have already reached saturation at this level, but these classes will react by intensifying their investments at higher levels, so that IEO increases at higher levels. The hypothesis of 'effectively maintained inequality' further suggests that the upper classes have the resources and motivations to exploit horizontal differences within educational levels to their advantage: for instance, they can preserve a competitive edge in the educational arena even in a context of mass higher education by monopolising access to the most prestigious high schools and universities, to the more rewarding fields of study, to postgraduate programs (van de Werfhorst, 2002; Lucas & Byrne, 2017).

Overall, social reproduction theories pose two fundamental critiques to modernisation theories. First, while capitalist societies promote growing affluence, they are still marked by strong inequalities of condition, which foster the persistence of inequalities of opportunity. Hence, the claim that inequalities of condition are legitimate in meritocratic societies would be naif, given that the former actually hinders equal opportunities in education. Second, it seems unrealistic to assume, as modernisation theories do, that the upper classes will passively accept the erosion of their privilege: instead they can be expected to mobilise their superior material and immaterial resources to preserve their competitive advantage, even in contexts of mass educational expansion. Hence, IEO can be expected to remain stable or display only trendless fluctuations.

2. The empirical evidence challenges both theories

The thesis of persistent inequality in education has dominated the debate in the 1980s and 1990s, while over the past 20 years the balance of empirical evidence has shifted in favour of the hypothesis of declining IEO. Evidence in this direction is now well established for Germany (Jonsson *et al.*, 1996; Mayer *et al.*, 2007; Blossfeld *et al.*, 2015), France (Vallet, 2014; Falcon & Bataille, 2018), Italy (Shavit &

Westerbeek, 1998; Ballarino et al., 2009; Barone et al., 2010; Triventi et al., 2015), Spain (Ballarino et al., 2009), Sweden (Esping-Andersen, 2014; Erikson & Jonsson, 1996) and other Scandinavian countries (Kivinen & Rinne, 1996; Esping-Andersen, 2014), the US (Bernardi et al., 2018; Hertel & Pfeffer, 2016). The work by Breen et al. (2009, 2010) marks a turning point in this debate, as they report evidence of declining IEO for six out of eight European countries under examination (Great Britain and Poland being the exceptions). Their results have been recently replicated and extended by Barone and Ruggera (2016), who report declining IEO in 24 out of 26 European countries. According to these comparative studies, the decline of IEO is not negligible in magnitude and involves both males and females to a similar extent.

These results are robust to several methodological specifications (Breen et al., 2010, Barone & Ruggera, 2016). First, measuring social origins with reference to parental social class only, parental education only, or both, does not affect the main results (and the distinction between social class and social status measures is equally unimportant). Bukodi and Goldthorpe (2012; Bukodi et al., 2014) have recently advocated in favour of a more comprehensive measurement of social background, which involves simultaneously fitting measures of parental social class, education and social status, but also recent analyses based on this more comprehensive approach reporting declining IEO for most countries (Barone & Ruggera, 2016). Second, the statistical model used to analyse trends over time (Mare's educational transition model, multinomial or ordered logit) is equally ininfluent. Third, using relative or absolute measures of inequality in educational attainment (such as the odds ratio and the logits vs. probability differences or marginal effects), does not matter either. Fourth, equalisation involves not only primary and lower secondary education, but also upper secondary education, and it is important to bear in mind that in the 1950s and 1960s the attainment of high school diplomas was far from universal: these diplomas were highly valued credentials in the labour market. Finally, equalisation in the postwar decades has been found to also involve higher education for several countries (Breen et al., 2010,

Barone & Ruggera, 2016). Hence, we cannot easily dismiss these changes by claiming that the upper classes preserved stable advantages at higher educational levels, as suggested by social reproduction theories. Overall, these results also reject the hypothesis of effectively maintainted inequality and, more generally, the claim that IEO is persistent when we consider the positional value of education (Shavit & Park, 2016; Shavit *et al.*, 2007).

So why did earlier studies fail to detect the decline in IEO? The single most important reason is that they did not have enough statistical power, that is, their sample sizes were too small to detect the declines of IEO. The unfortunate consequences of this limitation, which involves also more recent studies (such as Pfeffer, 2008, Herz *et al.*, 2009, Bukodi & Goldthorpe, 2012) have been extensively illustrated elsewhere (Breen *et al.*, 2009; Barone & Ruggera, 2016). Therefore, I will not elaborate on this point.

Modernisation theory thus has a point but it does not encapsulate the full picture. The problem is that the above-reported evidence of declining IEO concerns cohorts born in the 1940s and 1950s, that is, the cohorts schooled in a period of dramatic economic growth, the so-called Trente Glorieuses (1945-1973). On the contrary, for cohorts schooled in the two following decades, we now have increasing evidence of stable IEO (Barone & Ruggera, 2016; Meraviglia & Buis, 2015; Triventi, 2010; Breen et al., 2009; Bernardi et al., 2018; Hout & Janus, 2011; Wiborg, 2019). In sum, at least four large-scale analyses converge in reporting that IEO declined for the birth cohorts schooled during the economic boom of the postwar decades, while it stagnated (or declined very slowly) thereafter. Altogether, these results challenge the prediction that economic modernisation translates into a monotonic, long-term trend of declining IEO. The thesis of persistent inequality is more accurate for more recent cohorts.

The results of these macro-comparative analyses should not be taken at surface value. In some countries, we may observe some mild, continuing decline of IEO in recent cohorts, while a few countries may have experienced little change even in the post-war decades. However, the broad picture is sufficiently clear: equalisation is the dominant trend during the *Trente Glorieuses*, while persistence of IEO is the norm later on. Unsuriprisingly, a forthcoming comparative study on social mobility reports that the relationship between origins and occupational destinations declined in the post-war decades parallel to declining IEO, and largely stagnated thereafter (Breen & Mueller, 2019).

However, these long-term, comparative analyses consider only the *level* of education attained, or they incorporate at best only the distinction between academic and vocational programmes in secondary and tertiary education. Hence, these studies most often fail to consider the vertical differences between bachelor and master degrees, as well as the horizontal differences between fields of study and between university institutions with different prestige (hypothesis of effectively maintained inequality). This is a major limitation, particularly for the more recent decades, while in the post-war decades, these internal differences within higher education did not exist or were much less visible and significant: in a context where undifferentiated, unitary models of higher education prevailed, and where a clear hierarchy between universities existed only in few countries such as the US and the UK, the main division within Higher Education involved fields of study. Even this division was probably less significant than it is nowadays, given that tertiary attainment rates were much lower than the share of upper class positions in western countries (Breen & Mueller, 2019), which means that the chances of graduates from weak fields accessing upper class jobs were more favourable. All in all, the conclusion that IEO has declined in the post-war decades seems unlikely to be undermined by empirical evidence involving finer distinctions on higher education. However, with the massive expansion of higher education in recent decades, these differences have become more important, and the upper classes may be able to effectively exploit them to their advantage (Triventi, 2013; Ichou & Vallet, 2011). This line of argument gives one more reason to suspect that IEO, when assessed comprehensively in its full vertical and horizontal dimensions, has been stagnating, or perhaps even increasing, in recent decades, in contrast

to the predictions of modernisation theory.

In sum, social reproduction theory is undermined by the robust evidence indicating a substantial, generalised decline of IEO in the post-war decades, while modernisation theory is challenged by the generalised stagnation of IEO in recent decades. The current empirical evidence does not match either of these theoretical approaches. However, I will argue in the next section that the pattern of declining and then stagnating IEO is far from surprising or unexpected, in light of the structural and institutional transformations experienced by western societies in recent decades (Bernardi *et al.*, 2018).

3.1 Tertium datur: micro- and macrolevel determinants of educational inequality

In order to outline a theoretical framework for the analysis of trends in IEO, we must proceed in three steps. First, we need a simple *micro-level model* of educational choices. For the purpose of this discussion, I will simply assume that the educational decisions of families are responsive to three parameters: the costs of educational investments, their socio-economic profitability and the student's academic performance. There is indeed a large amount of empirical evidence supporting this assumption, which is consistent with several specific models of bounded rationality (Erikson & Jonsson, 1996; Gambett, 1996; Goldthorpe, 2000).

The second step is to identify the *macro-level factors* that have a substantial impact on at least one of these three choice parameters. We do not want to consider all possible determinants of IEO. If we are to account for some broad, large-scale trends, such as the overall decline of IEO in the post-war decades and its more recent stagnation, we must ignore country-specific, idiosyncratic factors and focus instead on those determinants of IEO operating across a wide range of western countries. To understand the broad picture, we must select macro-level determinants of IEO operating with a sufficient level of generalisability. Furthermore, we restrict our discussion to determinants of IEO for which there is a clear theoretical rationale and sufficiently robust empirical evidence that they impact IEO across western countries.

The economic resources available to families to meet the costs of educational participation are expected to affect IEO. Economists most often refer narrowly to family income and wealth, while sociologists take a broader view, stressing the role of employment stability (Godlthorpe, 2000), particularly when long-term educational investments are involved (for instance, taking the academic track in secondary education to attend university in the future). Family size, and particularly the number of children in the schooling age range, also affects educational decisions, because of the dilution of economic resources available for educational investments (De Haan, 2012). We must consider direct costs, which involve the fees at each level of education, the indirect costs of transportation and study materials, as well as opportunity costs, particularly relevant at lower educational transitions in older cohorts, where child labour was widespread (Erikson & Jonsson, 1996; Huebner, 2012).

Regarding student performance, the main consideration is that the earlier, more intensive and more prolonged exposure of children to a shared learning environment reduces the role of the cultural resources of the family (Erikson & Jonsson, 1996; Esping-Andersen, 2015; Heckman, 2011). Cultural resources reflect the concentration of high or low levels of education within households, as well as the active mobilisation of these resources via parental investments in formal and informal learning activities. These unequal resources play a larger role if students spend more time with the parents, or with children having access to similar socio-economic resources, while exposing all children more intensively and for a longer period to a shared learning environment has the opposite effect. This explains why early child care provision, the length of compulsory schooling, as well as formal and informal tracking, have been found to impact inequalities in student performance and participation (Braga et al., 2013; Blossfeld et al., 2016, 2017; Lowe et al., 2010; Pfeffer, 2008).

Finally, the magnitude of *returns to education in terms of employment prospects and earnings* is a third major important determinant of educational investments. The uncertainty surrounding these returns is no less important (De Groot & Osterbeek, 1992). As argued above on the basis of loss-aversion models (Breen & Goldthorpe, 1997), the upper classes have a strong motivation to reach the highest levels of the educational system to preserve their social positions, while the propensity of the lower classes to undertake ambitious educational investments is likely to be more affected by their degree of confidence in the actual profitability of these investments. In particular, in a context where the share of tertiary qualifications is low relative to the share of upper class jobs, and where these credentials ensure high occupational prospects regardless of the specific field of study or university institution attended, the motivation of lower socioeconomic groups to invest in education is higher than in contexts of high uncertainty and variability in the returns to education.

We are now ready to move to the third step of our analysis where we consider how these macro-level factors affecting IEO have evolved from the pre-war to the post-war decades, and then in more recent decades, in order to analyse how these changes may have impacted on trends in IEO.

3.2 Tertium datur: explaining trends in educational inequality

A major consequence of the growing interest amongst sociologists and economists into long-term trends in social inequalities is that we are increasingly recognising the exceptionality of the postwar decades vis-à-vis the first four and the last three decades of the 20th century. Not only has the concentration of income and wealth decreased substantially in the Trente Glorieuses (Piketty, 2014; Atkinson, 2016), but the living conditions of the population, particularly of the most disadvantaged social groups, displayed unprecedented improvements with regard to health, nutrition and child labour (Chaudry et al., 2016 ; Rosés & Wolf, 2018; Hicks & Allen, 1999; Erikson & Jonsson, 1996; Deaton, 2013). The risk of growing up in family contexts characterised by extreme material deprivation diminished substantially. Moreover, in a macroeconomic context approaching full employment and where permanent labour contracts became the standard (Crouch, 1999), the increased economic stability of working class families made more ambitious educational investments increasingly feasible. The opportunity costs of sending children to school, rather than employing them in agricultural or industrial work, decreased dramatically, both as a result of the decline of farming and of reforms raising compulsory education age.

Moreover, in several countries the rapid economic growth and growing tax revenue sustained substantial increase in public investment in education and in the welfare state, which arguably contributed to further weaken economic hurdles to educational participation (Braga et al., 2013; Garrouste, 2010; Breen et al., 2009). The distribution of schools and universities in the territory became much more capillar, thus substantially reducing transportation costs. Educational reforms in this period raised compulsory schooling age and promoted comprehensive reforms in primary and secondary education in virtually all western countries. Altoghether, when comparing the post- and pre-war decades, we observe a marked convergence of macro-level factors promoting a reduction of the economic barriers fuelling IEO.

The economic crisis of 1973-1974 can be taken as reference point for the start of a new period where most of the structural and institutional conditions promoting educational equalisation faded out, while some new conditions may actually cause an increase in IEO (Bernardi et al., 2018). First, the alternating between periods of slow economic growth and recessions was accompanied by rising unemployment rates and rising employment precarity (Standing, 2009), which was reinforced by the deregulation of labour markets taking place in several western countries since the 1980s or 1990s (Crouch, 1999; Esping-Andersen & Regini, 2000). In a context of welfare retrenchement, where the coverage and the generosity of unemployment benefits and of minimum income guarantees were reduced (Cantillon et al., 2015; Ferragina et al., 2013), these economic trends undermined the economic security of the less well-off.

At the same time, some factors that probably played a role for educational equalisation in the earlier period, such as the construction of a capillar network of schools within the national territory and improvements in transportation are likely to have exhausted, or at least significantly reduced, their equalising potential in recent decades, to the extent that the accessibility of schools is no longer a significant barrier to educational participation since several decades ago. Finally, it is well-documented that income and wealth inequalities have displayed significant increases in most western countries since the 1980s or 1990s (Atkinson, 2016; Piketty, 2014). Altogether, these trends suggest that the decline of economic hurdles to educational participation that characterised the *Trente Glorieuses* has come to an halt in more recent years.

At the same time, the pace of structural change in the employment structure has been slower than educational expansion in recent decades. Tertiary attainment rates have increased much more rapidly than the share of upper class positions in the labour market in western countries (Breen & Mueller, 2019; Bernardi & Ballarino, 2016; Hirsch, 1972). Even if relative returns to education are stable or decline only marginally (Breen, 2004; Breen & Mueller, 2018), the motivation to undertake ambitious educational investments has been undermined by the growing uncertainty surrounding their returns (Chauvel, 2015). As argued above, this factor is likely to have a negative impact on the educational strategies of working class families, in a context where opportunities for upward social mobility are compressed by the stagnation of occupational upgrading.

As for the educational system, selectivity in primary and secondary education has continued to decline in recent decades, to the extent that the attainment of some upper secondary educational qualification is today almost regarded as a citizenship right that is quasi-universalistic (Eurydice, 2012; Downes, 2014; OECD, 2017). Grade repetition and selective exams in primary and middle schools have continued to decline and success rates at upper secondary examinations have increased in several countries (*ibidem*). In some countries, the barriers between academic and vocational tracks have been reduced in recent decades by postponing tracking age, creating

intermediate tracks or reducing the curricular differences among them (Blossfeld et al., 2016). At the same time, recent tendencies towards growing decentralisation and accountability of the school system are promoting the emergence of new forms of sociallybiased informal differentiation between schools, relating to their student composition by social background and academic performance, as well as to the quality of their educational resources and their position in national rankings: the evidence indicates that upper class families are more responsive to these 'quality' factors (Owen, 2016). The increased residential segregation by socio-economic status observed in Europe and the US (Tammaru et al., 2016; Owen, 2016) is yet another force promoting an increasing informal differentiation of learning environments. Finally, the declining selectivity in primary and secondary education has been countervailed by the growing barriers for access to higher education (Ruegg, 2011; Dowes, 2014): access restrictions (numerus clausus, entry examinations, grade requirements) are increasingly common in western higher education systems and negatively impact the IEO (Braga et al., 2013).

The only generalised, countervailing trend which could have promoted a reduction of IEO in recent decades is the growing accessibility of public child care and pre-school education (Blossfeld et al., 2017). The expansion of the regulation and professionalisation of child care provision suggests also that the quality of preschool education may have positively evolved over time from a predominant focus on promoting female labour market participation to stronger concerns for the quality of the educational activities. However, at the same time, parental time investments in early childhood have grown unequal. There is evidence that the overall time spent by parents with their children has increased since the 1970s, but to a higher rate for highly-educated parents (Dotti Sani & Treas, 2016). This conclusion refers also to time specifically spent in informal educational activities at home (ibid.), such as shared book reading, which play an important role in fostering a child's cognitive development in the preschool years. Moreover, over the last three decades of the 20th century, women have closed the gender gap in education. In a context where the distribution of education is similar for men and women and relative educational homogamy does not substantially decrease (Smits *et al.*, 2000; Katmak *et al.*, 2006; Bouchet-Valat, 2011), the structural opportunities for absolute educational homogamy increase (Di Prete & Buchmann, 2013). This means that the concentration of high (low) levels of education, and thus of high (low) levels of educational resources, within the same household have increased over time.

Overall, the trend of declining IEO detected for the postwar decades has probably diminished in recent decades, due to the concomitant action of five factors: a) the increased social gradients in parental resources and investments in children's early skill development; b) growing economic and occupational inequalities; c) the emergence of new mechanisms of informal differentiation of the educational supply; d) the increased uncertainy surrounding investments in higher education as an avenue to social mobility; e) the growing horizontal differentiation of higher education.

4. Concluding remarks

The educational equalisation in the postwar decades is an important finding because it shows that IEO can be reduced, and that this is true not only under the exceptional circumstances characterising a few, small, egalitarian Scandinavian countries. Indeed, if a largescale reduction of IEO was not observed in this period of extraordinary improvements of the material conditions of the working classes and of progressive educational and welfare state reforms, we should probably conclude that trying to equalise education and social mobility opportunities is a hopeless effort in capitalist societies. This conclusion has some ideological appeal for those scholars who persistently discard the evidence contradicting the persistent inequality thesis, but this pessimistic message would be also the best justification that research could provide to policymakers for disregarding IEO.

At the same time, I have argued that the forces promoting educational equalisation have largely diminshed in recent decades. The main direction of several recent socio-economic trends and of educational, labour market and welfare policies is rather to promote a stagnation or an *increase* of educational inequalities in younger cohorts. This increase is indeed visible in the US (Bernardi et al., 2018), a country where many of these trends have started earlier and have proceeded at a more rapid pace, and it may become soon apparent in European countries. At the same time, I have argued in the previous section that not all factors promoting a reduction of IEO have entirely disappeared in recent decades, and it is difficult to predict the 'net effect' of countervailing influences. For cohorts born between 1965 and 1980 and schooled between the 1970s and the 2000s, the empirical evidence discussed in section 2 points to stable IEO for most European countries. However, if the structural and institutional developments outlined in the previous section continue in the near future, we must expect a growth of IEO for the cohorts born in the 1980s and 1990s (where it will be particularly important to measure IEO by fully taking into account the internal differentiation of higher education).

This pattern of declining and then stagnating IEO fits the predictions of neither of the two dominant theoretical paradigms in social mobility research. The trendless fluctuations hypothesis is clearly problematic, because in virtually all western countries the current levels of IEO are lower than those observed in the pre-war decades. The modernisation hypothesis, on the other hand, fails to explain three decades of stagnating IEO: the thesis that economic development is conducive to an education-based meritocracy today appears little more than wishful thinking. Indeed these two families of theories are more similar than they may appear at first glance, as they share the same linear view of the evolution of IEO, conceived either as a downward or as an horizontal line, thus downplaying the possibility of more discontinuous evolutions.

In turn, these limitations have important substantive and policy implications. If the persistent inequality thesis is wrong in suggesting that IEO cannot be reduced, modernisation theory is too simplistic in suggesting that economic growth and socio-economic modernisation are sufficient to reduce IEO. It is worth keeping in mind that the pace of modernisation processes has been rather high in several western countries in the past four decades, and that in this period some of these countries have experienced a sustained economic growth, while failing to reduce IEO.

Hence, the interpretation that I have proposed suggests that the relationship between economic growth and IEO is less mechanic than assumed by modernisation theory because it is strongly mediated by institutional variables. In the post-war decades, economic development led to a reduction of IEO because it was accompanied by a changing balance of power between social classes that favoured progressive reforms in educational, labour market and welfare institutions. However, when the same modernisation processes have been associated with a weakening of the political representation and influence of the working classes, the resulting economic and occupational inequalities, coupled with the recent neo-liberal reforms of educational and welfare institutions, have halted the trend of declining IEO. In addition to policies, politics also matter in the reduction and enhancement of social inequality.

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