



**(HOW) DOES AID WORK?
A LITERATURE REVIEW OF AID EFFECTIVENESS
& WELFARE STUDIES**

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Introduction

Despite several decades of development aid, economists generally agree that on average, most developing countries have experienced no or only little economic growth: while a limited number of countries particularly in South East Asia have experienced a rather significant growth, most African countries have had very limited or in some cases even negative economic growth. Only two of the 47 Sub-Saharan African countries, Botswana and Equatorial Guinea – both low in population – have reached annual growth rates of 7% over the last 15 years, while only nine countries have managed a growth rate above 2%. Moreover, 21 of the African countries have experienced negative growth, while on a global scale, just five countries have reached an annual growth rate of 7 % or more over a 15 year period (1985-2000) (Clemens *et al.* 2004:9-10).

Does this mean that development aid has failed? Can we conclude, as some economists do, that development aid has had no positive, or even a negative, effect, when economic growth is not recorded for the vast majority of poor countries/recipients of aid? Or are there other ways of measuring development that may reflect more positive results?

By examining a range of studies related to welfare indicators, growth and development aid and their interlinkages, this paper tries to assess to what extent it is possible to argue that although economic growth has either been slow or has stagnated in most (especially African) aid recipient countries and average incomes often have remained the same or even dropped, welfare indicators show that developing countries are catching up with industrialized countries on other important measures. Furthermore, it deals with the role of aid in improving quality of life and points to other possible approaches that might be useful in analysing development, again by reviewing existing literature on the subject.

The term ‘welfare indicators’ here signifies various measurements used to assess a society’s general level of well-being. They include issues related to mortality, health and nutrition, education, access to public services and political rights. Such indicators may give a different perspective on the level of poverty in a country than income alone.

Growth vs. social indicators

For many years, there has been a tendency to measure aid effectiveness primarily in terms of economic growth. Recently, though, there is also a growing awareness of the fact that measuring development and the quality of life solely from a growth perspective is inadequate. Many development researchers have emphasised the shortcomings of such a model and have pointed towards a more nuanced measure of development, and it has become increasingly recognized that people's 'quality of life' is as important as their commodities or income (Anand & Sen 2000; Sen 1999).

However, the conclusion that economic growth is neither an adequate measurement of development, nor the sole factor determining the quality of life of a nation's population is not new, and in 1979 Morris proposed an alternative indicator to GDP, the so-called Physical Quality of Life Index (PQLI), which included measures such as literacy, infant mortality, and life expectancy (but was criticized as the latter two are significantly related); a model which was later developed by the UNDP into what is today known as the Human Development Index.

The most significant criticism of the growth-model is thus targeted at its limited ability to measure actual quality of life: while GDP indexes may offer a partial measure of collective production, they do not necessarily provide adequate measures of welfare. The quality of life of large parts of a population may deteriorate, although collective production simultaneously increases, or vice versa (Dowrick *et al.* 2003: 502). As Dowrick, Dunlop & Quiggin (2003) argue, 'life and health are not objectives of consumption, but provide the capability to engage in productive activity. In order to consume and produce it is necessary to be alive.' (p.506) Also ill-health reduces one's options for participating in production and consumption, a point that even identifies certain elements of welfare as prerequisites for growth. This relates to the question of reversed causality, suggesting that perhaps growth does not necessarily improve people's health, level of education etc., but rather vice versa: a good health, a certain level of education and access to public services are necessary in order to generate growth.

Due to the criticism of the simplistic nature of the growth model and its one-dimensional focus (e.g. Sen 1999; Dasgupta 1988), the common comparative measurement of living standards or development of gross domestic product (GDP) per person has increasingly been supplemented by social welfare indicators. This, then, has led to a greater focus on indicators such as health, education, mortality, life expectancy, etc. This is also related to the fact that economic growth, as

is widely acknowledged, does not necessarily lead to a convergence in wealth within a specific country or to a general increase in average incomes.

Furthermore, the claim that aid is failing if it does not produce economic growth disregards the fact that more than 50 % of development aid is intended for improvements in social service provision such as health and education, finance debt relief, or for emergency relief or food aid, rather than investment as such. And despite the fact that investments in many developing countries rarely bring sustainable high returns, at least not in Africa, and the link between aid and growth is highly disputed, some researchers find that aid does enhance investment, which again contributes to growth (Morrissey 2002).

Nevertheless, many development economists have recently found a substantial relationship between income and welfare indicators (e.g. Dasgupta & Weale 1992; Dasgupta 1993; Klitgaard & Fedderke 1998) as quality of life indicators are generally found to be higher in richer countries. Easterly (1999) agrees that when looking at cross-section samples alone, income and quality of life seem to be strongly correlated, but he also notes that a far more uneven picture emerges when looking at developments in a historical perspective (see below). Thus, both Easterly (1999) and Easterlin (2000) argue for a historical approach rather than just a geographical approach when comparing and assessing improvements in standards of living between nations and regions.

Is there a global convergence of welfare indicators?

If economic growth is not the only indicator of development and welfare indicators are just as important, we are left with the question: is welfare/quality of life improving in poor countries?

In general, there appears to be a very clear connection between income and quality of life indicators. Countries with higher GDPs per capita score higher on welfare indicators over a broad measure, i.e. they have longer life expectancies; lower infant mortality; better access to basic education; better protection of their political rights; better outcomes of school test scores; less child labour; higher nutritional intake; as well as less political, gender and ethnic oppression. There also seems to be a strong relationship between economic growth and most other welfare indicators (Kenny 2005; Easterly 1999; Barro 1996; Pritchett & Summers 1995; Dowrick *et al.* 2003; Dasgupta & Weale 1992).

In a study of 81 welfare indicators, Easterly finds that only 12 of the 81 indicators in the study such as pollution, certain crimes, suicides, and road length per car point towards a decrease in quality of life with higher income. Everything else seems to be positively related to income, including indicators of health, education, mortality, gender equality, political rights and stability, technology, etc. (Easterly 1999:8-9).

The correlation between income and welfare is, however, most significant when economic growth is accompanied by a general improvement of incomes, a narrowing of the national gap between rich and poor rather than the opposite (Kenny 2005).

Furthermore, as Easterly points out, all these seemingly straightforward examples of a causal relationship between income and welfare indicators are almost exclusively found in studies employing a cross-country perspective. The few economic history studies that have been carried out in this context are looking at welfare indicators over time rather than between countries, and finds surprisingly varied changes in quality of life as per capita income increased. Easterly (1999) finds that when taking a historical approach, looking at cross-time rather than cross-country data, there is no clear pattern indicating that welfare indicators are related to income. Central development indicators like democracy, good institutions, human rights, years of schooling, school enrolment ratios, and life expectancy do not really improve with income controlling for country effects, and sometimes the relationship is even a negative one for these indicators. Easterly points out that while per capita income positively and strongly seems to influence quality of life on a significant range of indicators, the changes in quality of life as collective income grows are remarkably uneven (Easterly 1999). Certain fixed factors such as natural resources, climate, access to sea, ethnic disintegration, and social infrastructure, may severely influence a country's income and welfare indicators, and create a seeming (false) positive or negative connection between income and quality of life. Easterly adheres to the explanation that welfare indicators are just as strongly related to global changes, international growth and socioeconomic progress as it is to national growth rate. An example is technical advances such as antibiotics which have drastically influenced global life expectancy (Easterly 1999:24-26; Easterlin 2000:14-15).

Thus, a number of researchers, including Easterly, have questioned the direct causal relationship between growth and quality of life. Studies dealing with welfare indicators as a measure of development generally find a significantly growing convergence when comparing rich and poor countries, an effect which is particularly clear when historical long-term studies are carried out (Easterly 1999; Easterlin 2000; Kenny 2005).

On the global level, both within and between countries, there has been a widening of the gap between rich and poor, in the sense that income divergence between rich and poor countries has been very significant, especially until the post-war period. Since then, certain developing countries (especially South-East Asia) have experienced income convergence in relation to Western countries, whereas African countries on average have experienced strong divergence.

Maddison (2007), who attempts to identify the reasons why certain parts of the world have grown rich while others remain poor, points out that both Western Europe and Africa had a \$450 GDP/capita in 1000 A.D., but by 1998 Western Europe had become 13 times richer than Africa. So as compared to Europe, Africa, the poorest continent, has experienced a significant income divergence over the last 50 years (although income has hardly decreased in absolute terms), as GNP per capita growth rates over the past 25 years have generally, with a few exceptions (e.g. Uganda, Lesotho, Botswana, Equatorial Guinea) been very low or non-existent.

Nevertheless, several researchers (e.g. Clemens *et al.* 2007; Easterlin 2000; Kenny 2005) agree that development progress has been going on at an unparalleled scale over the past more than thirty years.

Evidence shows that for most of the 20th century, most welfare indicators have converged on a global scale, simultaneously with the long-term, and ongoing, pattern of income divergence: so it does in fact seem as if a broad range of quality of life variables covering health (including child mortality & life expectancy), education (e.g. gross primary enrolment), rights and infrastructure are converging and that they have continued to do so over a long period of time. In this regard, the rates of change in developing countries in the last half century have considerably exceeded those in the historical experience of Western Europe (Easterlin 2000; Maddison 2001). More than 85% of the variables are converging regardless of measurement method (Kenny 2005:5). While average life expectancy in developing countries was 46 years and 67% of the level of rich countries in 1960, the numbers had increased to 65 years and 85% by 1998, a tendency which is also clear for infant mortality (Morrissey 2002). Crafts (2000:6) finds that the Human Development Index reflects a decrease in the discrepancy between developing countries as a whole, including Africa, and the 'advanced countries' in Western Europe and North America since 1950, while Ingram argues that there is strong evidence of convergence in life expectancy, caloric intake, and primary enrolment ratios, somewhat strong evidence regarding social expenditures as a percentage of GNP, and less so for a number of other social indicators. Only two of his chosen indicators did not seem to be converging – employment rates and defence expenditures (1992:20). A study by Kenny (2005) finds that a broad range of social indicators all, with the exception of war deaths, paint a positive picture. Measures of gender equality (e.g.

female literacy), child labour, and the provision of infrastructure have all been converging since the post-World War II period. Even when looking at political and civil rights, average scores for key values have risen, although this is generally harder to measure than other indicators (Kenny 2005).

Clemens *et al.* provide another example supporting the claim that economic growth is not necessarily the main determinant of quality of life, by pointing out that life expectancy for countries at \$300 GDP/capita in 1999 slightly exceeds life expectancy for countries with a GDP/capita of \$3,000 in 1870 (in constant dollars) (Clemens *et al.* 2004). Furthermore, it seems as if an ongoing, centuries-long divergence in life expectancies between rich and poor countries has finally and radically been reversed in the second half of the twentieth century. A similar picture can be painted for other indicators such as infant survival, literacy, and female to male literacy ratio (*ibid.*). Also on the long-term basis, rates of primary enrolment and completion have steadily increased in most countries including many of the poorest.

Furthermore, during the 1990s, 58 developing countries improved their malnutrition rates with an average of 25 %. At the same time, malnutrition rates in other countries like Iraq developed in the wrong direction, and some of the largest countries such as India (from 25 to 24 %), China (16 to 9 %) and Brazil (from 13 to 10 %) only experienced limited improvements (*ibid.*:27).

One can argue that there are limits to growth in the standard of living, e.g. literacy rates, but while literacy obviously cannot exceed 100 % of the population, the quality and length of education may be expanded indefinitely, and the life expectancy at birth indicator could be replaced by an indicator of years of healthy life expectancy. Still, during the last 50 years, the developing countries have experienced rates of change in welfare indicators comfortably exceeding anything experienced in the history of Western Europe (Easterlin 2000:23).

It is also important to recognize the correlation between various welfare indicators, as they may have a very significant mutual effect. Dasgupta & Weale (1992) find that life expectancy, though strongly correlated with income, is also closely connected to adult literacy and, not surprisingly, infant mortality, and Sen (1998) points out that public provision of health care and basic education raises life expectancy. Bidani & Ravallion (1997) also find that both collective spending on health and an increased poverty reduction focus are effective means of positively influencing average life expectancy.

Similarly, in a study from 2002 El-Ghannam finds that other welfare indicators are more likely to improve in developing countries with fewer people per physician and people per hospital bed,

and higher energy consumption per capita. Other important factors are, according to El-Ghannam, small populations, low population growth rates and higher urban populations.

A significant factor influencing infant mortality and life expectancy in poor countries is calorie intake towards the required level, although other factors may be even more important (Kenny 2005). In countries with high economic growth rates, it is characteristic that fast growth has been preceded by a substantial increase in formal schooling, whereas improvements in life expectancy and other health indicators have not necessarily followed. It also does not seem as if democracy and good governance necessarily follow strong economic growth; generally the fast-growing East Asian countries exemplify the lack of direct causality between growth and welfare indicators (Easterly 1999; Easterlin 2000).

As mentioned above it seems that only 10% of the income is needed today in order to reach the same life expectancy as in 1870 (Kenny 2005). Several studies (e.g. Flegg 1982) even conclude that income on its own does not seem to have a noteworthy impact on mortality indicators, once other welfare indicators, such as doctors and nurses per capita, illiteracy among adult women and inequality have been accounted for. Rather, a more even allocation of resources as well as access to improved resources (e.g. vaccines) are more significant factors behind increased welfare (Easterly 1999; Easterlin 2000). And, according to Kenny (2005:10), there are several other interlinkages between various health indicators and a number of social and political indicators that are more significant than their relationship with income.

What has aid got to do with it?

How does this improvement in welfare relate to development aid? It seems fair to argue that there is significant evidence that welfare indicators are actually converging between rich and poor countries, and although it appears logical to conclude that there is a connection between this and the development industry's emphasis on social issues over the recent years, the role of aid in this process is not clear. Whereas many researchers have dealt with the relationship between development aid and economic growth, rather few have done the same for the relationship between welfare indicators and development aid. Comparative cross-country data on poverty over time are also scarce, and, again, existing data are based mainly on income measures of poverty.

According to a study dealing with the relationship between aid and welfare indicators carried out by Gomanee, Girma & Morrissey (2003)¹, aid does seem to be associated with improvements in welfare (the Human Development Index and infant mortality) and the effect is most significant in countries with lower values of welfare, probably due to the fact that those countries have the most room for improvement. They also suggest that the effect of aid on welfare indicators is very often indirect, as it tends to enhance welfare through increased pro-public expenditure (PPE). This implies spending on sectors such as health, education and sanitation, which are the sectors with the strongest effect on welfare indicators (Verschoor 2002); but also expenditure on rural infrastructure, micro-credit and agricultural extension and technology may be beneficial to the poor, as well as benefitting the public in general (Morrissey, 2004). They also find evidence that pro-poor spending and aid each, separately, contribute to increasing welfare (Gomanee, Girma & Morrissey 2003). At the same time, although it seems likely that certain economic policies enhance growth, there is no evidence that specific economic policies are necessary to ensure aid effectiveness in contributing to welfare. Their findings are generally in line with those of Mosley, Hudson & Verschoor (2004).

However, the impact of aid allocated to improvement in welfare and living conditions for the poor and to the support of good governance is generally difficult to evaluate, as many things first of all are not easily measured, and secondly, often take a long time to materialize. Thus, the relationship between aid, PPE and welfare indicators is not clear. Some studies find that across countries there is no evidence of a noteworthy connection between public health spending per capita (World Bank 2004b) or aid (Boone 1996) and under-five mortality once income is controlled for. Nevertheless, other evidence suggests that aid allocated to public health interventions has a positive influence on health indicators: Although other factors such as income per capita, education and gender inequality are significant determinants of infant and child mortality across countries at a specific point in time, some types of health spending (vaccinations etc.) are similarly influential (Hanmer *et al.* 2003).

In another study Gomanee, Morrissey, Mosley & Verschoor (2005) agree with Gomanee, Girma & Morrissey (2003) that aid is effective in positively and significantly influencing welfare indicators and that the effectiveness of aid is stronger in low-income countries. However, they find that the positive effects of aid do not come from increased pro-poor public spending. Rather, aid increases welfare directly e.g. through improved access to social services and the creation of income, but also through economic growth. They explain the discrepancy between

¹ Results were based on a study of 38 countries in four four-year and one three-year period over 1980-98.

their findings and the findings in other studies² with a number of factors: 'In particular, we have a larger sample, distinguish low-income and middle-income countries and account for unobserved country characteristics in estimation.' (p.364) They conclude that aid has a substantial direct, rather than an indirect (i.e. through increased public expenditure) effect on welfare, e.g. by providing access to social services or generating income for the poor. Their findings thus suggest that direct donor projects within the social sectors are in fact quite efficient in improving welfare, and they suggest that new techniques should be developed in order to make PPE more efficient in improving welfare.

Morrissey (2002) also finds that aid significantly contributes to improvement in welfare indicators. According to him, the rather large percentage of aid spent on welfare improvements is one of the explanations for the significant improvement in welfare indicators in most developing countries since the 1960s. And while progress has sometimes been moderate in the poorest countries, things have still got better.

On the other hand, Clemens *et al.* (2007) argue that additional aid may not be the most important factor in improving quality of life and that the sectoral allocation of aid to maximize progress on any particular welfare indicator is unclear. This conclusion is based on evidence which indicates that changes in welfare has in the past been less related to specific country policies or inputs, and more connected to global changes and other lasting changes in the economy and society as well as fixed conditions such as geography (e.g. Easterly 1999). Specifically, the data suggest that while aid plays an important role in general, for instance by providing access to social services and to some extent by generating income for the poor, its historical impact on achievements in some of the selected welfare indicators has been somewhat limited, a conclusion which is in line with Easterly's (1999) finding that progress on several welfare indicators have most likely been more affected by global structural changes than by aid.

Conclusion

It has been argued that development aid does not work, as there is generally little or no economic growth in most poor countries that have received aid over a long period of time. But despite the fact that there has been no or little convergence of income between rich and poor on a global scale, and many developing countries, especially in Africa, have experienced no or little economic

² Gomanee, Girma & Morrissey (2003) and Mosley, Hudson & Verschoor (2004).

growth, living conditions seem to be improving. A broad range of welfare, or quality of life, indicators significantly converge on a global scale, regardless of economic growth or the lack thereof.

Thus, it seems fair to conclude that income, although still important, has a declining impact on quality of life, and the historically unprecedented improvement in a majority of welfare indicators must be considered a serious success, even if income is still diverging to a large extent (Pritchett 1997), and even if aid is not the only important factor in this. Other factors, such as geographical conditions, global developments etc. may be as or more important. This point, however, is less clear, and the issue may benefit from further studies.

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