

# **Distributive justice in the financing of public foreign aid for development**

**SERGIO TEZANOS VÁZQUEZ**

Cátedra de Cooperación Internacional y con Iberoamérica

Department of Economics, Universidad de Cantabria,

Facultad CC.EE. y Empresariales, Avda. Los Castros, s/n. 39005, Santander, SPAIN

Tel. (+34) 942 20 20 59

[tezanoss@unican.es](mailto:tezanoss@unican.es)

**ABSTRACT.** *How should the aid financial burden be distributed across donor Governments?*

*This article discusses the ‘distributive justice’ of the current aid-financing pattern, and advocates a progressive rationale in which citizens from donor countries with higher living standards contribute proportionally more than citizens from countries with lower living standards. For this purpose, we conceive public foreign aid as a tax mechanism for redistributing income on a worldwide scale. The progressivity analysis for 45 bilateral donors (28 DAC countries and 17 non-DAC donors) using concentration curves and Suits indexes between 2000 and 2012 shows that the current distribution of the aid burden is insufficiently progressive (mainly due to the scarce contributions of the richer donors). Finally, we argue that a progressive exaction scheme will improve the distributive justice of the aid system.*

**Key words.** Distributive justice, foreign aid for development, Official Development Assistance (ODA), progressivity, aid financing

**JEL classification.** F35, O19, I30, C5

**Word count:** 8,379

*Justice is the first virtue of social institutions, as truth is of systems of thought. A theory however elegant and economical must be rejected or revised if it is untrue; likewise laws and institutions no matter how efficient and well-arranged must be reformed or abolished if they are unjust.*

John B. Rawls (1999). *A Theory of Justice*, p. 3.

*Consider any of the great many changes that can be proposed for reforming the institutional structure of the world today to make it less unfair and unjust [...] The question that we have to ask here is: what international reforms do we need to make the world a bit less unjust?*

Amartya K. Sen (2009). *The Idea of Justice*, pp. 24-25

## **1. Introduction**

There is no doubt that a certain amount of international aid is needed to help poor people from developing countries to reach higher levels of human development. In the European Union, despite the severity of the economic recession, the last special Eurobarometer on development aid clearly showed strong public support for this policy, with 85% of Europeans believing that it is important and 61% being in favour of honouring or exceeding the 0.7% aid target by 2015 — the deadline for achieving the Millennium Development Goals— (European Commission, 2012). To some extent, these opinions reveal public support for the ‘internationalization’ of the welfare State policies and an extension of its responsibilities on the global stage.<sup>1</sup>

If citizens from different donor countries support the public financing of *foreign aid for development*, an immediate question arises:<sup>2</sup> how should the aid financial burden be distributed across donor Governments? However immediate, this question has received limited attention in the development studies debate, despite the fact that foreign aid has already been disbursed for

more than 60 years with no clear ‘rationale’ for distributing the aid financial burden. The 0.7% initiative offers a simple —yet dubious— rationale: all donors should contribute the same amount of aid in relation to their Gross National Incomes (GNI), regardless of their abilities to finance public policies. The result of this approach has been fairly disappointing: in 2013, only five country members of the Development Assistance Committee (DAC) (out of 28 donors) fulfilled this commitment.<sup>3</sup> Several limitations of the 0.7% target explain this outcome; among others, it is worth mentioning that a fixed ODA target does not weight the dissimilar levels of development among donor countries, which means that this aid exaction approach is not ‘progressive’. This non-progressivity of aid also has important political implications in the current times of economic recession, which are especially acute in some OECD countries, where the pressing demands for fiscal austerity are also threatening the aid budgets (for the majority of these countries, these are already well below the 0.7%) and citizens are vindicating more progressivity in the financing of public policies. Moreover, as Clemens and Moss (2007) convincingly explain, the 0.7% target was never intended to be a proposal for the appropriate level of aid but a tool to lobby rich Governments to finance aid budgets.<sup>4</sup> Even more —in the opinion of these authors— the 0.7% target ‘is an arbitrary figure based on a series of outdated assumptions going into a dubious model and measured against the wrong metric’ (Clemens & Moss, 2007, p. 23).

From the interdisciplinary point of view of the distributive theory of justice, public foreign aid can be conceived as a tax mechanism for redistributing income on a worldwide scale, raising resources from the best-off (‘developed’ and ‘emerging’) countries and transferring them to the worst-off (‘developing’) countries. The aid policy can be used as a ‘real-world’ tool with the aim of achieving greater international distributive justice. Hence, if we conceive aid as a tax, the ‘fairness’ of this system (in terms of a socially accepted criterion of justice) must be evaluated as part of the overall system of public policies that it helps to create (Murphy & Nagel, 2002).

Therefore, the overall ‘distributive justice’ of aid should be analysed from a double perspective: first, how fairly is the aid financial burden distributed among donor countries? (i.e. the ‘financial side of aid fairness’); and, second, how fair is the eventual allocation of aid resources among recipient countries? (i.e. the ‘allocation side of aid fairness’).

Starting with the last question, the extensive literature on the geographical allocation of aid categorically shows that aid is not allocated purely for altruistic reasons and therefore it is not particularly consistent with the international development commitments claimed by donors<sup>5</sup>. In reality, aid is distributed in a fairly ‘eclectic’ way so that developing countries with greater political, historical and cultural affinities with donors, as well as countries with greater economic and geo-strategic importance to donors, tend to receive more aid than other countries with similar —or greater— levels of need. There is compelling evidence, therefore, that the aid allocation pattern is not contributing to the desired level of fairness in the aid system.<sup>6</sup>

This article shall be constrained to contribute to the first question (the financial side of aid fairness), discussing the distributive justice of the current aid-financing pattern and advocating a clearer and fairer financial rationale in which citizens from donor countries with higher living standards contribute proportionally more than citizens from countries with lower living standards (i.e. a ‘progressive aid-financing scheme’). Within this context, it is legitimate to ask the following question: if most taxes are collected in a reasonably progressive way in OECD countries (especially in the European Union), can we also implement a progressive scheme for financing aid on a worldwide scale? In the following pages we will explain that it is ‘technically’ feasible, although there are some political difficulties that may hinder the needed international agreement.

The remainder of this article is structured as follows. The next section explains the concept of distributive justice and applies it to the analysis of the financing of aid. The paper then turns to analysing the level of progressivity of the distribution of the aid financial burden among 45 bilateral donors (28 DAC countries and 17 non-DAC donors) between 2000 and 2012. In particular, section three explains the methodology for the construction of two useful instruments for measuring the progressivity of the financing of aid (the concentration curve and the Suits index) and section four explains the results of the analysis and exemplifies a progressive approach for distributing the financial burden of aid across donor countries. The paper concludes by summarising the main results and explaining some implications for the system of public foreign aid for development.

## **2. *Distributive justice in financing public foreign aid for development***

Which is the ‘fairest’ way to distribute the financial burden of aid among donor Governments? To answer this question we first briefly review the interdisciplinary debate on ‘distributive justice’, which has been richly nurtured by political philosophers, political scientists, economists and law theorists.

As it was previously stated, from the viewpoint of the distributive theory of justice, public aid can be conceived (and analysed) as a mechanism intended to redistribute income on a worldwide scale. Indeed, aid resources are financed through taxes which are paid by the citizens of relatively rich donor countries and received by the citizens of developing countries. Within this context, two main dimensions of *equity* need to be considered when designing a ‘fair’ aid (tax) system:<sup>7</sup> *horizontal equity* (i.e. people in equal positions should be treated equally) and *vertical equity* (i.e. people in unequal positions should be treated unequally, favouring the worst-off). Whereas the principle of horizontal equity of taxation is commonly agreed, the principle of

vertical equity is more controversial. This is a notable issue, as for vertical equity to be achieved, horizontal equity must also prevail, whereas horizontal equity may coexist with vertical inequities (Musgrave, 1990 and 2002). This is the reason why ‘vertical equity, after all, is a part of the larger problem of distributive justice, an issue that has no simple answer’ (Musgrave, 2002, p. 9). As we will see below, the answer is even less simple for the aid-financing debate.

A common method in welfare States for increasing vertical equity is to design ‘progressive’ tax systems; that is, ‘a taxation scheme in which the amount of tax paid as a proportion of the tax base rises’ (Vickrey & Ok, 2008). Applied to the aid system, a progressive collection of resources across donors’ Governments will contribute to both greater vertical and greater horizontal equity, thus operating as a redistributive mechanism—at least from the aid financial side.

Still, the link between ‘progressivity’ and ‘distributive justice’ is not straightforward. Several schools of thought have argued, from very different perspectives, in favour of ‘ability-to-pay’—progressive—tax systems for a just distribution of the tax burden imposed by raising a given amount of revenue. For example, Adam Smith asserted that:

*The subjects of every state ought to contribute towards the support of the government, as nearly as possible in proportion to their respective abilities, that is in proportion to the revenue which they respectively enjoy under the protection of the state. (Smith, 1776, p. 310)*

Moreover, Marx and Engels’s (1848) *Communist Manifesto* proposed ‘a heavy progressive or graduated income tax’ (p. 26) for a very different purpose: as a powerful mechanism for redistributing the capital from the bourgeois to the proletarian State, and thus eventually building a more equal and fair society.

In the same year but with a contrary approach, John Stuart Mill (1848) offered in his *Principles of Political Economy* a justification for levying ‘proportional’ taxes. He conceived the burden of taxation as a ‘sacrifice’ made when the tax is paid, and assumed that the marginal utilities of income and sacrifice fall as income rises, and that similar marginal utilities of income schedules apply to all individuals. Within this conception, Mill called for the sacrifice to be ‘proportional’ to the taxpayers’ pre-tax level of welfare.

*As a government ought to make no distinction of persons or classes in the strength of their claims on it, whatever sacrifices it requires from them should be made to bear as nearly as possible with the same pressure upon all [...] Equality of taxation, therefore, as a maxim of politics, means equality of sacrifice* (Mill, 1848, p. 804).

However —as Young (1990) pointed out— Mill’s principle of ‘equal sacrifice’ does not necessarily imply progressiveness, but rather that everyone should suffer the same ‘absolute’ loss of utility. Indeed, Mill originally believed that progressive taxation penalizes those who work harder and save more, and labelled it as ‘a mild form of robbery’.

Nevertheless, Mill’s ideas gave rise, in the 20<sup>th</sup> Century, to the development of the utilitarian theory that defended the use of progressive tax systems. From this perspective, distributive justice demands that the welfare of all human beings should be factored in and maximized; hence, in the matter of taxation, they called for equal ‘marginal’ sacrifice. From this perspective, progressive taxes maximize the society’s aggregate welfare by taxing the rich (whose marginal utility of income is supposed to be low) proportionally more than the poor (whose marginal utility of income is supposed to be higher) (for example, Edgeworth, 1910; Pigou, 1928; Hayek, 1960).<sup>8</sup>

The strongest support for progressive taxes came from the post-welfarist conception of distributive justice. This approach argues that the society must choose a ‘social contract’ expressing its judgement of what constitutes social justice. This conception of distributive justice was developed by the North American political philosopher John B. Rawls, who attempted to reconcile ‘freedom’ and ‘equality’ in a principled way, offering a conception of ‘justice as fairness’. In his influential book *A Theory of Justice*, Rawls (1971) defended the premise that inequalities originating from the existence of different ‘natural disadvantages’ and ‘social circumstances’ are unfair, and thus ‘well-ordered societies’ require the implementation of adequate mechanisms to promote equality.

In particular, Rawls thought that individuals may agree upon some basic principles of social justice if they were to choose among alternative states of distribution in an impartial fashion (‘from behind the veil of ignorance’), without knowing their own ultimate position in the chosen distribution (what Rawls called the ‘original position’). Two principles of social justice arose from this thought experiment: social and economic inequalities are to be attached to positions and offices open to all under conditions of fair equality of opportunity (the *principle of equality of opportunity*); and inequalities are to be of the greatest benefit for the least advantaged members of society (the *difference principle*).

In the particular issue of taxation, Rawls conceived the tax system as a ‘means’ of achieving distributive justice, rather than as a requirement of justice itself.<sup>9</sup> Yet, Rawls (1999) stressed that taxes are the mechanism by which Governments raise revenues in order to provide public goods and satisfy the requirements of democracy and equality of opportunities.<sup>10</sup> Therefore —as Surgin (2004) pointed out— Rawls’s principles would preclude a system of taxation that collects insufficient total revenue to support the public institutions that are necessary for fair equality of



opportunity. Specifically, Rawls (1999, p. 119) himself proposed a global tax (what he called the ‘general resource dividend’) to assist the poorest countries of the world —although, as we have explained before, the actual allocation of aid does not resemble Rawls’s proposal—. Within this perspective, aid can be treated as a ‘means’ of achieving distributive justice on a worldwide scale, both directly in the form of transfer payments to the neediest developing countries and indirectly through the provision of international public goods.

Following Musgrave’s (2002) interpretation of this post-welfarist conception of distributive justice, the design of a progressive tax can be understood as a problem of choice under uncertainty that depends on risk aversion: assuming extreme risk aversion, rational economic agents will choose the *maxi-min* distribution of the tax burden, which maximizes the welfare of the worst-off; in this way, a utilitarian view of distribution as a matter of rational choice is retained, but subordinated to an ethical premise of justice.<sup>11</sup>

*The case for progressive taxation follows from acceptance of the ethical premise of equal worth and a setting in which individuals will agree to choose impartially. Against this background, the case for progressive taxation holds up, not based on dubious clinical assumptions, but on what might be called good manners in a democratic society.* (Musgrave, 2002, p.17)

All in all, it is possible to apply this post-welfarist rationale to the distribution issue of raising a given amount of aid: taxpayers (that is, donor countries) have to choose among alternative rate schedules that yield the required aid budget. If they were to choose from behind the ‘veil of ignorance’ (that is, without knowing what their applicable rate bracket will be), the *maxi-min* rule (inequality only if it benefits the worst-off) will predict a progressive aid-financing scheme, with proportionally more aid collected from the best-off countries. Moreover, a progressive

financing scheme of aid would best serve both the requirement of horizontal equity across donor countries and the requisite of vertical equity in the distribution of the aid-burden.<sup>12</sup>

Before finishing this quick review of distributive justice's foundations for applying a progressive scheme for financing aid, three caveats apply when moving the analysis from the national level (taxes) to the international level (aid).<sup>13</sup>

First, it is worth noting that Rawls's (1971) original conception of distributive justice applies only to members of a 'cooperative venture for mutual advantage'; therefore, national assistance transfers satisfy this prerequisite, but international aid does not. This is the reason why Rawls's 'scoop of justice' —the account specifying *from whom* and *to whom* resources should be distributed— is considered 'communitarian' (i.e. within one nation, what Rawls called a 'people'), in contrast with the 'cosmopolitan' conception that claims that there are universal principles of distribution that must be applied globally, to all human beings (such as Pogge, 1994; Barry, 1999; Beitz, 1999; Caney, 2005; and, more recently, Sen, 2009). Beyond this debate, as Conybeare (2008) neatly explained, it is reasonable to think that human beings are less willing to engage in redistribution when the beneficiaries are beyond their borders. What is more, States may be even less willing to do so than individuals within nations (the EU being a notable exception, as it has effected major redistributions across its member States). This reluctance may be due to a number of reasons, such as the heterogeneity of goals and values between donors and recipients, the lack of formal political commitment between the donor's Government and the recipient's citizens, the opportunistic behaviours in some beneficiary countries, the lack of secure norms of reciprocity in the international arena and the lack of direct benefits to the taxpayers.

Second, Milanovic (2008) warned that the fact that aid resources flow from ‘rich’ to ‘poor’ countries is not a sufficient condition for progressivity, because it does not take into account the income distributions between donor and recipient countries. In fact, aid transfers will not be progressive unless we can be sure that the average taxpayer in the donor country is richer than the average beneficiary in the recipient country.<sup>14</sup>

And third –as we previously warned out–, it should be borne in mind that vertical equity in the financing of aid is part of the larger problem of distributive justice. In particular, we are neglecting in this analysis other important concepts of equity, such as the concept of ‘procedural justice’, which in our case involves the idea of fairness in the processes of geographically allocating foreign aid. In this respect, Leventhal (1980) emphasized that procedural justice is enhanced when individuals feel that they have a voice in the process or that the process involves characteristics such as consistency, accuracy, ethicality and lack of bias. In the aid case, these conditions could be met by means of a transparent international agreement on a progressive financing scheme.

### **3. Methodology: measuring aid-financing progressiveness**

The methodology used to evaluate the distribution of aid financial burdens across donor Governments is that of the concentration curve and its statistical counterpart, the Suits index. In accordance with this approach —commonly used in tax analysis— the financing of aid is considered progressive if donor countries with higher living standards contribute proportionally more than donor countries with lower living standards.

On one hand, the concentration curve provides a useful graphical device for showing whether the distribution of a tax burden among economic agents (in this case, donor Governments) is

progressive or regressive (Kakwani, 1977; Suits 1977). In our case of study, the curve plots the cumulative percentage of the aid financial burden (y-axis) against the cumulative percentage of income (x-axis), ranked by living standards beginning with the poorest country and ending with the richest.<sup>15</sup> Therefore, if most aid is financed by the richest donors, then the concentration curve will lie below the diagonal line (and vice versa). For example, reading from left to right on the concentration curve, the graph depicts the donor countries ranked from the relatively poorest to the relatively richest. Each segment of the curve corresponds to one donor, and the longitude of each segment is proportional to each country's contribution to the aggregate aid and income. More precisely, the vertical distance of each segment represents each country's participation in the sample's aggregate aid, and the horizontal distance represents each country's participation in the sample's aggregate income. Therefore, in the case of progressive distribution of the aid financial burden, the concentration curve will initially have a slope under 45 degrees (i.e. below the leading diagonal), and this slope will gradually increase as the curve moves to the right side of the graph (i.e. where the countries with the highest living standards are located).

On the other hand, the so-called Suits index was developed by Daniel Suits for analysing the progressivity of a tax system, and it was first applied to the case of the United States (Suits, 1977).<sup>16</sup> The index —inspired by and related to the Gini ratio— ascribes a numerical value to the concentration curve, varying from +1 at the extreme of progressivity (where the entire aid burden is borne by the citizens of the richest donor country), through 0 for a proportional –neutral– aid burden (as in the 0.7% case),<sup>17</sup> to -1 at the extreme of regressivity (at which the entire aid burden is borne by the citizens of the poorest donor country).<sup>18</sup>

The use of concentration curves for the analysis of aid flows was first proposed by Mosley (1987) and later applied by Clark (1991 and 1992), White and McGillivray (1995), Baulch (2006) and Tezanos (2008a). However, these previous analyses evaluated the distribution of

aggregate aid among developing countries, thus treating aid as a ‘subsidy’. In contrast, the present analysis of the distribution of the aid financial burden treats aid as a ‘tax’. Consequently, the Suits index has opposite signs in these two types of analysis.

The concentration curve and the Suits index are useful tools for synthesizing complex distributional information into a single graph and a summary statistic. However—it should be pointed out—when comparing two or more alternative distributions, the Suits index has the same limitation as the Gini coefficient: it can be an ambiguous measure of the progressivity of the distribution when two concentration curves cross (Baulch, 2006).

Regarding the data used for the analysis (see **Table 1**), we use the aggregate net resources classified by the OECD-DAC as Official Development Assistance (ODA)<sup>19</sup>. The sample of analysis includes 45 bilateral donors: 28 DAC countries and 17 other donors that are not members of this Committee but that do report information.<sup>20</sup> Net disbursements rather than commitments of ODA are used because they are the most accurate measure of how much aid a donor actually finances. We include both bilateral and multilateral donor countries’ ODA contributions.

#### **Table 1 here**

Regarding the period of analysis, the paper shall study the current aid-financing progressivity but within the time perspective of the 21<sup>st</sup> Century. In order to do so, we analyse the aid data of three different years: 2000 (the beginning of the Millennium Development Goals era), 2006 (the year prior to the international financial crisis) and 2012 (the most recent year with complete data).

Finally, we use the Gross National Income (GNI) as a measure of each country's national income and the per capita Gross Domestic Product (GDP), adjusted for purchasing power parity (PPP), of each year in order to rank countries by their average economic welfare at each period of analysis.<sup>21</sup>

#### **4. How progressive is the financing of aid?**

The distribution of the aid burden among the 45 analysed donor countries in 2012 was almost neutral (in terms of progressivity), with a slightly progressive Suits index of 0.049 (**Figure 1**). The first section of the concentration curve passes under the leading diagonal (in fact, the 0.7% line) due to the less than proportional contribution of the 18 donors with the lowest per capita incomes, all of which had ODA shares lower than their respective GNI shares.<sup>22</sup> Turkey, Portugal and New Zealand are the first three countries (in increasing order of per capita income) with greater ODA shares than GNI shares. Of the remaining 24 –richer– countries, only five are not contributing higher quotas of ODA than their respective shares in the aggregate income (the exceptions are Italy, Japan, Iceland, Taiwan, the USA and Kuwait), which makes the concentration curve steeper and therefore it crosses the leading diagonal.

**Figure 1 here**

In fact, this ‘virtual’ neutrality of the distribution of the aid financial burden is driven by the fact that the first part of the curve (located under the leading diagonal) is compensating for the next segment (positioned over the diagonal), thus rendering the Suits index very close to zero. Moreover, the improvement of the overall progressivity is actually due to the participation of the non-DAC donors (most of them, except Taiwan, Saudi Arabia, the United Arab Emirates, Kuwait and Liechtenstein, located in the lowest part of the per capita income rank) and the ‘new’

DAC members (such as Poland, Slovak Republic, Czech Republic, Slovenia and Korea, which have comparatively lower levels of per capita income). Thus, the Suits index for the 22 ‘old’ DAC countries (i.e. the OECD donors previous to the recent expansions in 2010 and 2013) reveals a regressive pattern of aid financing (-0.031), mostly driven by the insufficient progressivity among some of the richest donors (**Figure 2**).<sup>23</sup>

**Figure 2 here**

Within a time perspective, the aid-financing levels of progressiveness have improved since 2000, according to the corresponding Suits indexes. In particular, for the group of all donor countries the Suits indexes have evolved from regressive (negative) values in 2000 and 2006 to slightly progressive (positive) values in 2012 (see the ‘all donors’ line in **Figure 3**). However, this improvement is mainly due to the gradual inclusion of both new DAC donors with lower per capita incomes, and non-DAC countries that have started to report aid data to this Committee. In fact, the analysis restricted to the 22 ‘old’ DAC donors renders negative (regressive) indexes in the whole period and these indexes show a slower pace of improvement.

**Figure 3 here**

Regarding the 0.7 aid target, it has —by definition— a Suits index equal to zero, drawing the leading diagonal of **Figure 1**, and it is thus neutral in terms of progressivity. However, this fixed rate of contributions neglects the notable disparities that exist among donor countries in terms of living standards and abilities to finance aid. In our sample, this means that the PPP per capita incomes range from the 13,736 dollars of Thailand to the more than 86,000 dollars of Luxembourg and Liechtenstein (a 6.5 times difference), which makes the 0.7 approach both unfair (in post-welfarist terms) and —as we will argue later— very unlikely to be fulfilled.

In this context, which countries are causing the insufficient progressiveness of the current distribution of the aid financial burden? A preliminary way to identify them is to calculate the differences between each country's ODA share and its income share (**Table 2**, column 13). The five countries with the largest differences (i.e. those that are the 'least generous' in financing aid in terms of their shares in the aggregate income) are the USA (despite being the biggest ODA contributor), Japan (the fifth contributor), Russia (the 24<sup>th</sup>), Italy (the 12<sup>th</sup>) and Spain (the 16<sup>th</sup>). However, this simple procedure does not take into account the position of each country in the per capita GDP ranking, and thus a more nuanced analysis is needed to identify the causes of the insufficient financial progressiveness of aid.

**Table 2 here**

A possible solution for increasing the progressiveness of the distribution is to apply a progressive exaction scheme for financing aid in such a way that richer donor countries contribute proportionally more than poorer countries. A tentative example is depicted in **Figure 4**, where each country's ODA/GNI ratio (the so-called 'aid effort') is plotted against its corresponding GDP per capita. A hypothetical line of progressiveness is drawn in the graph by means of an exponential linear regression that is typical of progressive taxes.<sup>24</sup> In accordance with this tentative analysis, the regression line suggests that the majority of the donor countries are actually financing aid in a fairly progressive way—that is, they lie either above or fairly close to the regression line.<sup>25</sup>

**Figure 4 here**



For example, a Nordic country like Sweden (with a per capita income of \$41,840 and an aid effort of 0.97% in 2012) contributes proportionally more to the aid budget than its per capita income level predicts, like other neighbouring countries such as Norway, Denmark and the Netherlands (all of them located far above the progressivity line, and also above the 0.7% target in 2012) (for detailed data, see **Table 2**, columns 6 and 12). In contrast, Japan and Russia's ODA efforts are slightly lower than the model predictions (given their \$34,882 and 23,310 per capita incomes, respectively). A remarkable fact is that only a limited number of countries are far from fulfilling this progressive exaction scheme, lying under the progressivity line. In particular, the seven most notable cases of regressivity are the USA, Luxembourg, Liechtenstein, Kuwait, United Arab Emirates, Russia and Taiwan, with per capita income levels proportionally much higher than their 'limited' aid efforts.<sup>26</sup>

Finally, if aid burden quotas were raised according to this hypothetical progressive scheme, there would be a notable increase in the overall progressivity. The third concentration curve in **Figure 1** ('progressive scheme') illustrates this scenario. Substituting the actual GDP per capita levels of each country in the regression line written in **Figure 4**, and working out the corresponding ODA shares for raising exactly the same aggregate aid level as in 2012 (i.e. 133,438 million dollars), we depict the resulting concentration curve. In this case, the Suits index rises to a high progressivity level of 0.21, which is a remarkable improvement –in terms of distributive justice– in comparison with the actual 2012 situation.

## 5. Conclusions and implications

A manifest deficiency of the aid system is the absence of a clear sense of 'distributive justice', both in the way the resources are collected from donors' citizens and in the way these resources are eventually allocated to the citizens of the developing world. This article tries to contribute to

the financing side of this ‘aid fairness dilemma’ by asking the following legitimate question: how should the aid financial burden be distributed across donor Governments?

For this purpose, we conceive public foreign aid as a tax mechanism for redistributing income on a worldwide scale, raising resources from the best-off (developed and emerging) countries and transferring them to the worst-off (developing) countries. From the viewpoint of the distributive theory of justice, a fair aid-financing scheme needs to meet both the *principle of horizontal equity* —people in equal positions should be treated equally— and the *principle of vertical equity* —people in unequal positions should be treated unequally, favouring the worst-off—. Given the fact that achieving vertical equity in the aid system also requires horizontal equity to prevail, and that horizontal equity may coexist with vertical inequities, we argue that the design of a progressive aid-financing scheme would best serve both the requirement of horizontal equity across donor countries and the requisite of vertical equity in the distribution of the aid financial burden, thus rendering the aid system a real redistributive mechanism (at least from the financing side).

The applied analysis of this paper evaluates the level of progressivity of the distribution of the aid financial burden across 45 bilateral donors (28 DAC countries and 17 non-DAC donors). For this purpose we use two common tools for the analysis of tax progressivity: the concentration curve and the Suits index. This procedure shows that the 2012 distribution of the aid burden across donor countries was insufficiently progressive (with a Suits index of 0.049). In fact, this ‘virtual’ neutrality of the distribution is driven by the participation of the new DAC members and the non-DAC donors (the majority of them located in the lowest part of the per capita income rank), which are improving the overall regressivity. In contrast, the distribution of the aid financial burden across the 22 ‘old’ DAC countries is slightly regressive (with a Suits index equal to -0.031), mostly because of the regressivity among some of the richest donors.

Nevertheless, these unsatisfactory levels of progressivity seem to have improved since the beginning of the 21<sup>st</sup> Century, thus pointing to a gradual –yet insufficient– enhancement of the aid-financing distributive justice.

Furthermore, we apply a hypothetical progressive aid exaction scheme (using an exponential linear regression) in such a way that richer donor countries contribute proportionally more than poorer countries. This analysis suggests that the majority of the donor countries are actually financing aid in a fairly progressive way, and only a limited number of countries are far below the hypothetical progressivity line (especially the USA, Luxembourg, Liechtenstein, Kuwait, the United Arab Emirates, Russia and Taiwan). Moreover, if aid burden quotas were raised according to this hypothetical progressive scheme, there would be a notable increase in the overall progressivity (raising the Suits index to 0.21).

Despite the utility of this analysis for evaluating the distributive justice in the financing of aid, an important caveat about the ‘quality’ of aid applies: the analysis does not consider the heterogeneous levels of aid impact across donor countries but it just identifies the main sources of regressivity in the financing of the aggregate aid budget. Nonetheless, the prolific literature on aid effectiveness shows that the macroeconomic impact of aid may depend –among many other determinants– on the donors’ managing procedures, such as the volatility and fragmentation of the resources, and the preponderance of the donors’ foreign interest –not always in accord with development goals– in the geographical allocation of aid.<sup>27</sup> This implies that similar contributions (in monetary terms) from two donors may finally exert different impacts on terms of development outcomes. Weighting the donors’ contributions in terms of the quality of their aid projects and programmes is feasible but complicated, and could be the object of a future research.

Yet it is technically feasible (and simple) to establish a clear and transparent pattern of progressive aid exaction, for example resembling the labour income taxes levied in the European welfare States. Thus, the aid system will not only increase its progressivity (and its distributive justice), but it will also enhance the credibility and legitimacy of its financial commitments, which may boost the amount of aid eventually collected. In turn, given the limited ‘capacity of enforcement’ of the international system, it is preferable to improve the ‘positive incentives’ for honouring the commitments in order to build an effective ‘peer pressure’ dynamic among the donor countries. In 2013, with only five countries out of the 28 DAC donors fulfilling the 0.7% target, it is obvious that the peer pressure mechanism is ineffective. Given the actual distribution of aid financial quotas, a principle of progressive exaction can increase the number of countries honouring the aid financial target (whatever is agreed) and thus it can also strengthen the peer pressure on flagrant violators. Obviously, the most difficult part of this reform is reaching the necessary agreement among the donor countries (ideally DAC and south-south donors). And the key to success resides precisely in convincing those donors that are currently financing aid in a regressive way (and, among them, the most influential one is the USA, which is the largest ODA contributor and has a long record of not supporting international reforms that put the pressure on him). However, we are now facing a good opportunity to build this agreement, coinciding with the debate about the definition of the new international development agenda that will replace the Millennium Development Goals after 2015.

In the end, without some clear distributional rules, the general scepticism regarding the advisability of foreign public aid for development is bound to deteriorate. Citizens from developed countries may be willing to pay higher taxes the higher their income; however, they may be less willing to accept being taxed if there is no assurance that this progressivity criterion holds across all donors’ citizens. If we want foreign aid to contribute to a more just world, the aid system itself ought to be just. Improving the aid-financing progressivity can contribute to

strengthening the distributive justice of the aid system by building a more credible and fairer ‘social contract’ between donor States and their citizens, and introduce positive incentives among donors eventually to fulfil their aid commitments.

## 6. References

- Barry, B. (1999). Statism and Nationalism: a Cosmopolitan Critique. In I. Shapiro & L. Brilmayer (Eds.), *Global Justice* (12-66). New York: New York University Press.
- Baulch, B. (2006). Aid distribution and the MDGs. *World Development*, 34(6): 933-950.
- Beitz, C. (1999). International liberalism and distributive justice. *World Politics*, 51(2), 269-96.
- Caney, S. (2001). International Distributive Justice. *Political Studies*, 49(5), 974-97.
- Caney, S. (2005). *Justice Beyond Borders*. New York: Oxford University Press.
- Clark, D. (1991). Trade versus aid: distributions of third world development assistance. *Economic Development and Cultural Change*, 38, 829-837.
- Clark, D. (1992). Distributions of official development assistance among developing country aid recipients. *The Developing Economies*, 30(3), 189-197.
- Clemens, M.A., & Moss, T.J. (2007). The Ghost of 0.7%. Origins and Relevance of the International Aid Target. *International Journal of Development Issues*, 6(1), 3-25.
- Cogneau, D., & Naudet, J.D. (2007). Who Deserves Aid? Equality of Opportunity, International Aid, and Poverty Reduction. *World Development*, 35(1), 104-120.
- Collier, P., & Dollar, D. (2001). Can the world cut poverty in half? How policy reform and effective aid can meet international development goals. *World Development*, 29(11), 1787-1802.
- Collier, P., & Dollar, D. (2002). Aid allocation and poverty reduction. *European Economic Review*, 46(8), 1475-1500.

- Conybeare, J.A.C. (2007). Efficiency, entitlements and deservingness: perspectives on international distributive justice. *Review of International Political Economy*, 14(3), 389-411.
- Development Assistance Committee (DAC) (2014). *International Development Statistics (IDS) online databases*, OECD, Paris. Retrieved September 29, 2014, from <http://www.oecd.org/dac/stats/idsonline.htm>
- European Commission (2012). *Special Eurobarometer 392: Solidarity that spans the globe: Europeans and development aid*, Brussels. Retrieved from [http://ec.europa.eu/public\\_opinion/archives/ebs/ebs\\_392\\_en.pdf](http://ec.europa.eu/public_opinion/archives/ebs/ebs_392_en.pdf)
- Guillaumont, P., & Chauvet, L. (2001). Aid and Performance: A Reassessment. *Journal of Development Studies*, 37(6), 66-92.
- Hayek, F.A. (1960). *The Constitution of Liberty*. Chicago: The University of Chicago Press.
- Jones, H. (2009). Equity in development: why it is important and how to achieve it. Overseas Development Institute, Working Paper 311, available at <http://www.odi.org.uk/resources/details.asp?id=3480&title=equity-development-working-paper>
- Kakwani, N. C. (1977). Measurement of tax progressivity: an international comparison. *Economic Journal*, 87(345), 71-80.
- Leventhal, G. S. (1980). What should be done with equity theory? New approaches to the study of fairness in social relationship. In K. Gergen, M. Greenberg, & R. Willis (Eds.). *Social exchange: Advances in theory and research* (27–55). New York: Plenum Press.
- Llavorador, H.G., & Roemer, J.E. (2001). An equal opportunity approach to the allocation of international aid. *Journal of Development Economics*, 64(1), 147-171.
- Lumsdaine, D.H. (1993). *Moral vision in international politics: the foreign aid regime, 1949-1989*. Princeton: Princeton University Press.

- Marx, K., & Engels, F. (1848). *Manifesto of the Communist Party* [Marxists Internet Archive]. Retrieved from <http://www.marxists.org/archive/marx/works/1848/communist-manifesto/>
- McGillivray, M. (2004). Descriptive and prescriptive analysis of aid allocations. Approaches, issues and consequences. *International Review of Economics & Finance*, 13(3), 275-292.
- McGillivray, M., Feeny, S., Hermes, N., & Lensik, R. (2006). Controversies over the impact of development aid: it works; it doesn't; it can, but that depends... *Journal of International Development*, 18(7), 1031-1050.
- Milanovic, B. (2008). Rules of redistribution and foreign aid: a proposal for a change in the rules governing eligibility for foreign aid. *Intervention. European Journal of Economics and Economic Policies*, 5(1), 189-205.
- Mill, J.S. (1848). *Principles of Political Economy*. New York: Cosimo Books.
- Mosley, P. (1987). *Overseas aid: its defence and reform*. Brighton: Wheatsheaf Books.
- Murphy, L., & Nagel, T. (2002). *The Myth of Ownership: Taxes and Justice*. Oxford: Oxford University Press.
- Musgrave, R.A. (1990). Horizontal equity, once more. *National Tax Journal*, 43, 113-132.
- Musgrave, R.A. (2002). Equity and the case for progressive taxation. In J.J. Thorndike & D.J. Ventry (Eds.). *Tax justice: the ongoing debate* (9-24). Washington DC: The Urban Institute Press.
- Noel, A., & Therien, J.P. (1995). From domestic to international justice: the welfare state and foreign aid. *International Organization*, 49(3), 523-553.
- Pigou, A.C. (1928). *A Study in Public Finance*. London: Macmillan.
- Pogge, T. (1994). Cosmopolitanism and Sovereignty. In C. Brown (Ed.). *Political Restructuring in Europe: Ethical Perspectives* (89-122). London: Routledge.
- Rawls, J. (1971). *A Theory of Justice*. Revised edition. Boston MA: Harvard University Press.
- Rawls, J. (1993). *Political Liberalism*. New York: Columbia University Press.
- Rawls, J. (1999). *The Law of Peoples*. Cambridge, MA: Harvard University Press.

- Round, J.I., & Odedokun, M. (2004). Aid effort and its determinants. *International Review of Economics and Finance*, 13(3), 293-330.
- Sachs, J. (2005). *The End of Poverty: Economic Possibilities for Our Time*. Nueva York: The Penguin Press.
- Sen, A.K. (2009). *The Idea of Justice*. Boston MA: Harvard University Press.
- Smith, A. (1776). *The Wealth of Nations*. London: Penguin Books.
- Sugin, L. (2004). Theories of distributive justice and limitations on taxation: what Rawls demands from tax systems. *Fordham Law Review*, 72(5), 1991-2014.
- Suits, D.B. (1977). Measurement of Tax Progressivity. *American Economic Review*, 67(4), 747-752.
- Tezanos, S. (2008a). *Cooperación para el desarrollo. Asignación geográfica de la ayuda española [Co-operation for development. The geographical allocation of Spanish aid]*. Madrid: Biblioteca Nueva.
- Tezanos, S. (2008b). Modelos teóricos y empíricos de asignación geográfica de la ayuda al desarrollo [Theoretical and empirical models of aid geographical allocation]. *Principios, Estudios de Economía Política*, 10, 5-41.
- Tezanos, S. (2009). Geopolítica de la ayuda. ¿Cómo optimizar el impacto de la ayuda sobre el crecimiento? [Aid geopolitics. How do we optimize the aid impact on growth?]. *Estudios Económicos de Desarrollo Internacional*, 9(2), 55-88.
- Tezanos, S. (2010b). Ayuda y crecimiento: una relación en disputa [Aid and growth: a debatable connexion]. *Revista de Economía Mundial*, 26, 237-259.
- Therien, J. (2002). Debating foreign aid: right versus left. *Third World Quarterly*, 23(3), 449-466.
- Vickrey, W., & Ok, E.F. (2008). Progressive and regressive taxation. In S.N. Durlauf & L.E. Blume (Eds.). *The New Palgrave Dictionary of Economics*. Second Edition. Basingstoke



Hampshire: Palgrave Macmillan. Retrieved from

[http://www.dictionaryofeconomics.com/article?id=pde2008\\_P000218](http://www.dictionaryofeconomics.com/article?id=pde2008_P000218)

White, H., & McGillivray, M. (1995). How well is aid allocated? Descriptive measures of aid allocation. *Development and Change*, 26(1), 163-183.

World Bank (2014). *World Development Indicators*, Washington DC. Retrieved September 29, 2014, from <http://databank.worldbank.org/data/home.aspx>

Young, H.P. (1990). Progressive taxation and equal sacrifice. *The American Economic Review*, 80(1), 253-266.

### **Annexe. Calculation of the Suits index**

The Suits index is calculated in the same way as the Gini coefficient, but in a space formed by the accumulated percentage of total income and the accumulated percentage of total tax burden (Suits, 1977).

We compute the Suits index using the trapezoidal approximation proposed by Baulch (2006) for discrete distributions (of which the distribution of aid-financial quotas among donor countries is an example):

$$S_{i,t} = 1 - \sum_{i=1}^n Y_i (CA_i + CA_{i-1}) \quad [1]$$

where  $S_i$  is the Suits index for donor country  $i$  in year  $t$ ,  $CA_i$  is the cumulative distribution of aid-quotas of country  $i$  and all countries poorer than  $i$  (ranked by donors' per capita incomes), and  $Y_i$  is the income share of donor country  $i$ .

---

<sup>1</sup> As claimed, among others, by Lumsdaine (1993), Noel and Therien (1995), Therien (2002) and Tezanos (2008a).

---

<sup>2</sup> In the remainder of this article ‘aid’ means ‘public foreign aid for development’.

<sup>3</sup> These are Norway, Denmark, Sweden, Luxembourg and the United Kingdom. However, until 2012 the Netherlands also exceeded the 0.7% aid ratio, and since 2013 the United Kingdom started to fulfill this commitment.

<sup>4</sup> Indeed, the 0.7% target has constituted an effective tool to raise the public awareness of the need for international aid.

<sup>5</sup> The aid geographical allocation has been researched since the late 1960s in an attempt to identify the variables that govern the allocation decisions of bilateral and multilateral donors. See the literature reviews of McGillivray (2004) and Tezanos (2008b).

<sup>6</sup> There are a limited number of studies that have proposed ‘normative’ procedures for allocating aid. According to the literature review done by Tezanos (2009), two main distributive approaches have been applied: the ‘marginalist approach’, which allocates aid in order to maximize poverty reduction (such as Collier & Dollar, 2001 and 2002; and Guillaumont & Chauvet, 2001); and the ‘equal opportunity approach’, which proposes a distributive criteria based on post-welfarist principles (such as Llavador & Roemer, 2001, and Cogneau & Naudet, 2007).

<sup>7</sup> The detailed review by Jones (2009) on ‘equity in development’ offers a clear definition of the concept of equity: *Equity is based on the idea of moral equality, the principle that people should be treated as equals. This is the idea that, despite many differences, all people share a common humanity or human dignity and, as a result of this, we must consider how each of them should be treated. This is not the same as treating people equally [...] rather, it is the idea that all count in the moral calculus.* (p. 3).

<sup>8</sup> This utilitarian approach has been strongly criticized. For example, Conybeare (2008) stated that even if the marginal utility of income was higher for the poor than for the rich, it is not sufficient to justify an aid transfer: it needs to be shown that the poor would use the dollar more productively and add more to the aggregate wealth.

<sup>9</sup> In fact, Rawls (1993, pp. 227–28) specified that ‘the features of a tax system are not constitutional essentials’.

<sup>10</sup> Nevertheless, Rawls did not clearly advocate a progressive tax system. See Surgin (2004) for a clear explanation.

<sup>11</sup> However, Conybeare (2008, p. 406) explain that the post-welfarist theories are also easily criticized for their assumptions (e.g. risk preference), their invocation of self evident values (e.g. helping the worst off) and their internal consistency (e.g. with respect to free choice within contract theory). In particular, Conybeare stated that without risk aversion the prudential reason to favour the least well-off disappears, and, furthermore, that the risk attitudes are likely to be greater internationally than within nations.

<sup>12</sup> More precisely, for this assumption to hold, public aid must be collected in ‘similar’ progressive ways in each donor country. This assumption is reasonable within the European Union, but is less likely to be met outside this region.

<sup>13</sup> Two clarifying and complementary review articles on the complex debate on ‘international distributive justice’ can be found in Caney (2001) and Conybeare (2008).

<sup>14</sup> Milanovic (2008) proposed a practical rule in order to minimize the likelihood of a globally regressive aid transfer. This implies taking into account countries’ national income distributions and penalizing countries with highly unequal distributions since a non-trivial probability exists that the transfers may be received by people richer than rich countries’ taxpayers.

<sup>15</sup> In contrast to a conventional Lorenz curve, the aid concentration curve uses three variables to depict a two-dimensional graph. The additional variable is the ranking variable (a measure of living standards), which allows the concentration curve to cross the leading diagonal (45 degree line).

<sup>16</sup> The annex explains how to calculate the Suits index.

<sup>17</sup> A zero value of the Suit index can also occur when a first progressive (regressive) section of the curve is offset by a second more regressive (progressive) section.

<sup>18</sup> In contrast, the Gini coefficient varies between 0 and +1.

<sup>19</sup> In accordance with DAC’s criteria, ODA consists of grants and loans that meet the following four conditions: *i*) are disbursed to developing countries, *ii*) are granted by the official sector, *iii*) their main objective is the promotion of economic growth and welfare, and *iv*) in the case of loans, they are granted on concessional financial terms, with a grant element of at least 25%.

<sup>20</sup> Other south-south donors are not included in the analysis due to the lack of yearly information.

<sup>21</sup> It would have been preferable to use the GNI and the GNI per capita PPP in order to make a more direct comparison with the aid effort ratio (ODA/GNI). However, the World Development Indicators’ database does not offer complete data on GNI per capita PPP for three DAC donors (Hungary, Slovak Republic and Slovenia). In order to avoid the exclusion of these three countries we took the practical decision of using GDP per capita PPP (instead of GNI per capita PPP), which is available for all countries in the sample. However, a close evaluation of these two indicators for the available countries in the period 2000-2013 shows very limited variations, and no changes in the ranking of per capita incomes (which is the most important aspect in our analysis) so the consequences of not using GNI data for all indicators are negligible.

<sup>22</sup> See **Table 2** for detailed values. The only exceptions are Turkey and Portugal, which actually had aid shares higher than their respective world income shares, despite being the fourth and the 11<sup>th</sup> donors with lower per capita incomes.

---

<sup>23</sup> This result disagrees with the analysis of Round and Odedokun (2004). They ran a panel data regression in order to explain DAC donors' aid efforts. They found that there was progressivity in aid efforts in the sense that the higher the real income of the donor, the greater the fraction of real income given as aid. However, there are important differences between these two types of analysis: Round and Odedokun's regression analysis estimates one donor's 'average' elasticity of income per capita in relation to its aid effort. On the other hand, the concentration curve and the Suits index compute different slopes for each donor country, and use the ranking of per capita incomes to measure the overall progressivity.

<sup>24</sup> Specifically, we estimate the linear regression by the ordinary least squares method, specifying an exponential function that is characteristic of a progressive exaction principle. As this regression method draws the closet line to the observations, it is actually the 'easiest' feasible progressive scheme.

<sup>25</sup> In fact, there are three 'outliers' (Kuwait, Luxembourg and Liechtenstein) that explain the high dispersion across observations (and hence the low  $R^2$ ). Without these outliers, the  $R^2$  statistics raise from 0.36 to 0.46.

<sup>26</sup> It is worth mentioning that this tentative regression is strongly influenced by the existence of the three outliers: Kuwait, Luxembourg and Liechtenstein. Running the regression without these outliers –obviously– renders higher aid efforts to the remaining countries, but especially to the wealthiest ones (such as the Nordic countries, for whom the regression in **Figure 4** predicts lower aid efforts than their actual contributions).

<sup>27</sup> See, among others, the recent literature reviews on aid effectiveness conducted by McGillivray, Feeny, Hermes & Lensik (2006) and Tezanos (2010b).