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The Model of French Development Assistance – Who Gets the Help?[**]

A b s t r a c t. Development cooperation is an important element of international relations because it influences the power balance between major players on the world markets and in the political debate. The aim of the article was to analyze the French development assistance model based upon the amount of help sent to Africa over the period 2001–2012. The motivation of donor country is a crucial factor of development assistance, which influence not only the relations between donors and recipients, but also the effectiveness of aid. We estimated a series of dynamic panel models to assess whether the poverty-related factors play a dominant role in the distribution of help. On the contrary, we found that the most important variables appeared to be the political and economic dependencies, among others: colonial history and oil/gas reserves.

K e y w o r d s: development assistance; bilateral aid; development cooperation; developing country; France, dynamic panel model;

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Introduction

The role and effectiveness of development aid have been repeatedly questioned ever since the system was established. The growing income dis-

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parities between the North and the South, energy crisis in 1970s, debt crisis and structural adjustment in the late 1980s, numerous political and military conflicts in the 1990s, the number of people living below the poverty line, as well as interference in political situation in beneficiary countries are only a few examples of system dysfunction, repeatedly analyzed in the development literature (e.g. Chenery, Carter, 1973; Bonne, 1996; Kosack, 2003; Amprou et al., 2007; Easterly, Pfutze 2007; Doucouliagos, Paldam, 2008; Roodman, 2008). At the same time, the economic and social context, as well as the main character of development cooperation changed over the years. The critics of aid and donors as well as the appearance of new donors on the scene lead to official redefinition of development cooperation in year 2000 (United Nations Millennium Development Goals Declaration). The malfunctioning of the development cooperation system has been officially recognized and the aid has been declared to serve development issues, not the donors' interests. In the meantime, the emergence and spreading of global communication means and channels allowed more open debate on migrations, detriment of environment, health and natural disasters as well as terrorism threats issues. This increased public opinion's role in evaluation of the Northern countries approach towards less developed regions. As a consequence, the role of grass root level of cooperation has been noticed and its importance raised in the development agenda. A philosophy to direct the support towards local communities in need with the omission of state administration often affected by corruption and ineffectiveness (Tanburn, 2008) has been widely recognized

The landscape of development cooperation has undergone major changes in the last decade especially due to the changes in the "donors' club". This means that the donors represent very different (not only political) contradictory interests and approaches, and that they start to "compete" as donors. The appearance of the "generous" Nordic states and multilat-eral organizations, such as European Union, then the so called South countries, compelled the "old donors" to revise their international policy in development cooperation (McEwan, Mawdsley, 2012). The appearance of new actors in the system was a main driving force of its evolution. The architecture of aid relations known in 20th century and based on Organization for Economic Cooperation and Development Assistance Committee (hereafter DAC), World Bank and International Monetary Fund is therefore being replaced by a more complex system of actors and approaches (Gore, 2013). The appearance of emerging economies and private actors and organizations has changed the international scene and requires rethinking of the traditional development assistance schemes (Eyben, 2012). Main aid donors are no

longer only the Triada countries. Old donors, which placed the themes of democracy and the market economy as pivotal for aid policy agenda are now only a group in a more complex donor group (Kim, Lightfoot, 2011). The DAC-ability concept, which embraced the philosophy of aid giving and the very definition of what aid is (Official Development Aid term), is now challenged by the non-DAC donors (NDD). There is an increasing volume of development aid provided by the emerging economies. This aid influences international relations between states and redesigns the cooperation scene, influences and interests. Among the symbolic signs of change, the Fourth High Level Forum on Aid Effectiveness was organized at Busan in South Korea.

The changes in aid system are undeniable, however, apart from the optimistic declarations, it is debatable to say that the system has evolved for the benefit of aid recipients. It is therefore doubtful that the donors stopped focusing on realization of their external policy goals in the scope of development cooperation. Because of this, the dilemmas that undermine the very concept of development cooperation need to be addressed. The critics of aid donors persist. The ineffectiveness problem remains unresolved, as the Paris Declaration agenda of 2005 does not seem to be fulfilled. The relations between development agents tend to rely on one-sided domination, not partnership. Rather than development aid creating growth, Doucouliagos and Paldam (2013), suggest it is possible that economic growth itself may influence donor aid allocation decisions. Since donor dysfunctions burden aid efficiency (Simplice, 2014), in the analysis of aid effects in recipient country, the issue of donors motivation in decision making process is crucial. Development assistance system is given, so the research should concentrate on finding the means to make it more effective and enhance countries' capacities to develop. For these effects to appear, we assumed that they are more probable, once the aid is provided with such an aim.

The goal of this paper is, therefore, to analyze the bilateral development cooperation in the context of the donor motivation to provide assistance. We chose France as a model country representing traditional donors, since it has the characteristics of traditional donors. However, we are aware that the other traditional countries need to be tested for compliance with the model in further research. We concentrate on the aid for African countries. First, we discuss current literature on development assistance cooperation and next we introduce the traditional model of aid, based on qualitative analysis of cooperation dimensions. Methods of comparative and system analysis were applied in order to elaborate theoretical foundations for the models of cooperation. We used the system-GMM approach for dynamic panel models to veri-

fy the motivation of the donor in the aid distribution over the period 2001––2012. It appeared that the poverty-related factors do not play any significant role in the aid distribution, but rather the political and economic ones. The robustness of the results was confirmed by the non-linear correlation test (Kendall's tau). In the last section we discuss the implication of the results.

1. Traditional Development Aid Donors

Development cooperation system is a post-Second World War phenomenon, which was initiated by the USA as a response to the economic situation and Cold War in Europe (overseas development assistance). It's further evolution was a consequence of the decolonization process and the independence of African states (Williams, 2014). In the OECD terminology, the aid is associated with Official Development Assistance (ODA) public flows to beneficiaries placed on the DAC (Development Assistance Committee) List of ODA Recipients and to multilateral development institutions. These transfers are concessional in character – they convey a grant element of at least 25 per cent (calculated at a rate of discount of 10 percent per annum) and are administered with the promotion of the economic development and the welfare of developing countries as the main objective (OECD, 2014). That leaves out a great deal of development initiatives by private entities (enterprises, NGOs) but also public actors (non-ODA initiatives, local communities cooperation).

Moreover, currently some major donors, such as China, do not report their flows to OECD at all. The character of these flows is often unknown, so there is no possibility to conclude if they meet the requirements of ODA or not. Because of that, the term development cooperation should not be limited purely to ODA transfers recognized by the DAC anymore. Development aid gains a wider meaning, which include ODA and other development purposes transfers, not reported to DAC. In a broad sense, aid is neither limited to the type of transfer nor to the type of agents in the relation. However, it still does not include some "foreign aid" elements, such as military support. In this article we concentrate on development aid, treated as an instrument of a state foreign policy towards less developed countries.

The broadening range of donor countries is a consequence of major changes in World economy. While the group of aid recipients is shrinking, the group of donors grows (the good news about the aid system is just about it). The enlarged donor club is currently an amalgam of different countries. Verifying whether their aid is instrumentally subordinated to the long and short term strategic goals of foreign policy is an important aim. Analysis of

donors motivation requires more than dividing them into DAC and NDD groups, because there are differences between the donors in both of the groups. The division logic may be based on the geography, their public willingness to adhere to DAC standards, level of economic development, political regime, and others. There are OECD countries that are not members of DAC–Mexico, Turkey and several European countries; new EU Members; Middle East and Organization of the Petroleum Exporting Countries, and non-OECD donors from neither of these groups: Brazil, China, India and Russia (Kim, Lightfoot, 2011). In the DAC there are traditional donors, Scandinavian states (generous), new-DAC members, including new EU Members. Such classifications are not exhaustive, but sufficient to understand the complexity of interests, which may be related with development cooperation. All these groups are specific in character and realize different development aid policy.

In this paper we concentrate on the practice of traditional DAC donors, based on French example. We are interested to see, weather the emergence of new donors affected their actions or only the declarations. We suspect, that as Cumming and Chaffer wrote: "European member states are driven more by their desire to enhance their own relative power within the international system than by any overriding need to help African countries" (2011: 212).

Traditional DAC donors based their foreign aid policy mainly on bilateral relations. Major contributors such as USA, France and UK were therefore criticized for supporting dictators in favor of their geopolitical goals in the bipolarized reality of the second half of XXth century (Williams, 2014). Today, their image of Cold War players is still in force, but the war against terrorism and the peace maintenance in strategic regions of the World are of increased importance (Chou, 2012). The altruistic motivation of traditional donors involvement in any international security issue is questioned, as well as their true willingness to decrease poverty.

Traditional donors approach has been first contested by the aid agenda of Scandinavian countries and multilateral organizations. Generally, Sweden and other Nordic states are considered not only most generous donors (Barczak, 2008) but also donors more focused on the idea of effective use of help, on building a civil society in developing countries, and on directing their assistance towards realization of Millennium Development Goals (Thiele et al., 2007). However, even the Nordic states are claimed to enhance their relative power and punch above their weight in international donor circles (Cumming, Chaffer, 2011). Multiparty organizations, on the other hand, are theoretically devoid of egoistic national interests and oriented to-

wards democracy promotion and human rights protection in recipient states (Der-Chin, 2003). Their policy stance was supposed to reflect the coherent interests of developed and developing countries. Because of this, the increased share of multilateral disbursements in the total donors' aid volume was considered as higher aid quality. In reality, multilateral aid is biased for the Western World with the omission of national labels (see: Charbonneau, 2008). Ohler and Nunnenkamp (2014) found that the multilateral institutions do not take regional needs into account while directing aid, instead favoritism plays an important role for location choices. Traditional donors are influential in the international organizations and may profit from their activities indirectly.

Therefore, the emergence of South-South development cooperation has influenced the position of traditional donors in a much serious way, than the recommendation to increase the multiparty aid element. Some research values South-originated aid as multidimensional and encompassing the intrinsic and non-economic roles of development and hence very practical for African economies (Babaci-Wilhite et al., 2013). Realization of sustainable development goals investments in joint investment promotion mechanisms, joint programs for absorptive capacity and joint public-private partnership models are said to be more likely to happen in the scope of regional and South-South cooperation (UN WIR, 2014). However, the Chinese development cooperation practice is in many ways similar to French or American model (Chaponniere et al., 2009). The major accusations towards traditional donors are their limited involvement in cooperation and self-oriented approach – despite helping to close savings gap, based on the neo-classical theory, aid serves donors' interests (Page, te Velde, 2004; Cumming, Chaffer, 2011). However, for China and India energy, land and raw materials imports from Africa are equally important (Bearce et al., 2009; Walker, 2008, p. 21). What is especially interesting, is that the appearance of new donors, which negotiate with African countries without the colonial history burden, and their increased presence in the region, influenced the need of a change in the traditional donors' policies.

Both individually and as a member of organizations, France has always played leading role in development cooperation system. In the past France was realizing its neo-colonial *Françafrique* strategy, partly created by Jaques Foccart and supported by the "*cellule Africaine*" in Presidential Palace, whoever was its resident since Charles de Gaulle. Historically France kept close relations with the countries of the so called *champ* and even closer with the group of *pre carré*, especially in Africa. The strategy embraced economic, political and diplomatic goals (Fuchs, 1993). For Africa – or more precisely

– for African leaders these relations have been a source of material, political and diplomatic power, while for France – more literally of resources and comparative advantage in international relations (Lancaster, 1999). France was more direct in their policy goals realization than the United Kingdom, for which African policy was a source of relative power – soft influence. French were less liberal than the British and took a more interventionist stance in African relations (Cumming, Chaffer, 2011). The element shared by France and UK was the establishment of language communities, which were enforcing the relations and creating another dimension for a closer link (Hugon, 2008).

Today, according to the French development policy, main components of development agenda: economy, society and environment are subordinated to fighting with poverty and sustainable development promotion. *Francphone terrirtories* are the main area of development aid focus. French cooperation policy aims to address four mutually-supportive issues, promoting peace, stability, human rights and gender equality (1); Equity, social justice and human development (2); sustainable, job-rich economic development (3); protecting the environment and global public goods (4). Strategic partners of French development cooperation are: Benin, Burkina Faso, Burundi, Djibouti, Comoros, Ghana, Guinea, Madagascar, Mali, Mauretania, Niger, Centralafrican Republic, Democratic Republic of Congo, Chad, Togo, Senegal (MAE, 2015). Among them only two not being a former French colony, both rich in natural resources. Such a selection of partners indicates that the realization of national interests can actually remain a major issue for the development policy. In the next sections, the analysis of French practice will be studied in order to evaluate the motivation of France as a traditional aid donor.

2. Methodology

Panel data modeling is a statistical methodology allowing to use information included both in time and cross-sectional dimension. The regression is therefore run on the two (or more) dimensions. Depending on the assumptions made about the error term, one can talk about fixed- or random-effect models (see e.g. Hsiao, 2014; Greene, 2011). Let us consider a panel model of the following form:

$$y_{i,t} = \mathbf{X}_{i,t}\boldsymbol{\beta} + u_{i,t}, \tag{1}$$

where y_{it} is the dependent variable observed at time t for the i-th cross-sectional unit, while $\mathbf{X}_{i,t}$ – the matrix of explanatory variables. Depending on the error decomposition we receive different model specification. For instance:

$$y_{it} = \boldsymbol{\beta}\mathbf{X}_{it} + \eta_i + u_{it}, \tag{2}$$

is a "fixed-effect" panel model, that can be estimated e.g. through least-square dummy variable (LSDV) estimator. Such specification is justified when we assume that apart from the time-varying explanatory variables there are also time-invariant individual effects that influence the dependent variable.
Another possible specification is the random-effect one:

$$y_{it} = \mathbf{X}_{it}\boldsymbol{\beta} + \eta + \nu_i + u_{it}. \tag{3}$$

In this formulation ν_i is a group-specific random element similar to u_{it}, except that for each group there is but a single draw that enters the regression identically in each period (Greene, 2011). If a lagged dependent variable is included in the model, we talk about the dynamic panel data models.

In order to utilize all available information: both changes of variables in time, as well as across countries, we composed a panel of the data, including 12 time periods (2001–2012) and 53 cross-section units (53 countries). Since the number of time periods in our model was relatively small (T=12) compared to the number of cross-sectional units (N=53), we used the system-GMM approach for dynamic panel models. Let us consider a dynamic panel model of the form:

$$y_{i,t} = \boldsymbol{\alpha}y_{i,t-1} + \boldsymbol{\beta}\mathbf{X}_{i,t} + \eta_i + u_{i,t}, \tag{4}$$

where $y_{i,t}$ denotes amount of financial help sent from donor (France) to the i- th African country at time t. In our case t = 1,…,12, while i= 1,…,53. $\boldsymbol{\beta}$ is a $1\times k$ vector of the coefficients, $\boldsymbol{\alpha}$ is the vector of autoregressive coefficients, $\mathbf{X}_{i,t}$ is a $k\times 1$ vector of explanatory variables observed for country i at time t, η_i are so called individual effects (time-invariant), while u_{it} – the disturbance specific for country i at time t. The model can be estimated using the so called "difference estimator". The main idea of the approach is to first difference the data. Then, one obtains:

$$\Delta\mathbf{y}_{i,t} = \boldsymbol{\alpha}\Delta\mathbf{y}_{i,t-1} + \boldsymbol{\beta}\Delta\mathbf{X}_{i,t} + \Delta\mathbf{u}_{i,t} = \boldsymbol{\gamma}\mathbf{W}_{i,t} + \Delta\mathbf{u}_{i,t}. \tag{5}$$

The error term of the equation (2) is by definition autocorrelated and also correlated with the lagged dependent variable. All values of $y_{i,t-k}$ with $k>1$ can be used as instruments for $\Delta y_{i,t-1}$. One-step estimator of equation (5) amounts to computing (Cottrel, Lucchetti, 2014):

$$\hat{\gamma} = \left[\left(\sum_{i=1}^{N} \mathbf{W}_i' \mathbf{Z}_i \right) \mathbf{A}_N \left(\sum_{i=1}^{N} \mathbf{Z}_i' \mathbf{W}_i \right) \right]^{-1} \left[\left(\sum_{i=1}^{N} \mathbf{W}_i' \mathbf{Z}_i \right) \mathbf{A}_N \left(\sum_{i=1}^{N} \mathbf{Z}_i' \Delta \mathbf{y}_i \right) \right], \quad (6)$$

where:

$$\Delta y_i = \lfloor \Delta y_{i,3}, ..., \Delta y_{i,T} \rfloor,$$

$$\mathbf{W}_i = \begin{bmatrix} \Delta y_{i,2} & ... & \Delta y_{i,T-1} \\ \Delta x_{i,3} & ... & \Delta x_{i,T} \end{bmatrix},$$

$$\mathbf{Z}_i = \begin{bmatrix} y_{i,1} & 0 & 0 & ... & 0 & \Delta x_{i,3} \\ 0 & y_{i,1} & y_{i,2} & ... & 0 & \Delta x_{i,4} \\ ... & ... & ... & ... & ... & ... \\ 0 & 0 & 0 & ... & 0 & \Delta x_{i,T} \end{bmatrix},$$

$$\mathbf{A}_N = \left(\sum_{i=1}^{N} \mathbf{Z}_i' \mathbf{H} \mathbf{Z}_i \right)^{-1}.$$

Once the 1-step estimator is computed, the 2-step estimated are obtained through replacing the matrix $\mathbf{H}$ with the sample covariance matrix of the estimated residuals. The 2-step estimator is consistent and asymptotically efficient.

In our paper we used the so-called "system" estimator that complements the differenced data with data in levels, so the lagged differences are used as instruments (see: Blundell and Bond, 1998). The key equation of the system estimator is as follows (Cottrel, Lucchetti, 2014):

$$\tilde{\gamma} = \left[\left(\sum_{i=1}^{N} \tilde{\mathbf{W}}_i' \tilde{\mathbf{Z}}_i \right) \mathbf{A}_N \left(\sum_{i=1}^{N} \tilde{\mathbf{Z}}_i' \tilde{\mathbf{W}}_i \right) \right]^{-1} \left[\left(\sum_{i=1}^{N} \tilde{\mathbf{W}}_i' \tilde{\mathbf{Z}}_i \right) \mathbf{A}_N \left(\sum_{i=1}^{N} \tilde{\mathbf{Z}}_i' \Delta \tilde{\mathbf{y}}_i \right) \right], \quad (7)$$

where:

$$\Delta\tilde{\mathbf{y}}_i = \begin{bmatrix} \Delta y_{i,3} & \dots & \Delta y_{i,t} & y_{i,3} & \dots & y_{i,T} \end{bmatrix},$$

$$\tilde{\mathbf{W}}_i = \begin{bmatrix} \Delta y_{i,2} & \dots & y_{i,T-1} & y_{i,2} & \dots & y_{i,T-1} \\ x_{i,3} & \dots & \Delta x_{i,T} & x_{i,3} & \dots & x_{i,T} \end{bmatrix},$$

$$\tilde{\mathbf{Z}}_i = \begin{bmatrix} y_{i,1} & 0 & 0 & \dots & 0 & 0 & \dots & 0 & \Delta x_{i,3} \\ 0 & y_{i,1} & y_{i,2} & \dots & 0 & 0 & 0 & 0 & \Delta x_{i,4} \\ \dots & \dots & \dots & \dots & \dots & \dots & \dots & \dots & \dots \\ 0 & 0 & 0 & \dots & y_{i,T-2} & 0 & \dots & 0 & \Delta x_{i,T} \\ \dots & \dots & \dots & \dots & \dots & \dots & \dots & \dots & \dots \\ 0 & 0 & 0 & 0 & 0 & \Delta y_{i,2} & \dots & 0 & x_{i,3} \\ \dots & \dots & \dots & \dots & \dots & \dots & \dots & \dots & \dots \\ 0 & 0 & 0 & \dots & 0 & 0 & \dots & \Delta y_{i,T-1} & x_{i,T} \end{bmatrix},$$

$$\mathbf{A}_N = \left(\sum_{i=1}^{N} \tilde{\mathbf{Z}}_i' \mathbf{H}^* \tilde{\mathbf{Z}}_i \right)^{-1}.$$

The choice of matrix $\mathbf{H}^*$ is not trivial. The details are presented for instance in Roodman (2009) or Hsiao (2014). See also: Dańska-Borsiak (2009). For more detailed description of panel data concept and modelling we refer the Readers to e.g. Hsiao (2014), Longhi and Nandi (2014) or Gruszczyński et al. (2012).

3. French ODA – the Data

The amount of French ODA sent to Africa is very heterogeneous and it seems to depend both on the period and on the receiver country. We observe an enormous growth over the period 2004–2006 of the amount of help received by Nigeria, as well as high transfers to the Democratic Republic of Congo in 2003, to Congo in 2005 and 2010 and periodical higher transfers to Ivory Coast.

In order to select a relatively homogeneous group, we excluded from the analysis those countries, where the high jumps in data were present (more precisely: we deleted from the sample those countries, where the standard deviation value was higher than the mean value). We filtered out: Congo, the Democratic Republic of Congo, Cote d'Ivore, Liberia, Mozambique, Nigeria, Seychelles, Sierra Leone, the United Republic of Tanzania and Zambia.

In Table 1 We present the descriptive statistics of ODA sent from France to Africa over the period 2001–2012 in the filtered group of countries. The mean value of the help in US 2012 mln dollars amounted to 54.168, but the median only to 20.159. We divided the full sample into two subsamples: COLONY and NON-COLONY countries as well as OIL/GAS vs. NON-OIL/GAS ones. The differences in the amount of help received in each group is striking. In the case of the previous colonies the mean value of help amounted to 104.380 mln USD, while in the case of the non-colonies – only to 9.868. In the case of the countries possessing oil/gas reserves the amount of ODA received equaled 73.246, while in the case of the remaining ones – 36.247. The Cochran-Cox test for equality of mean values rejected the null hypothesis in the case of both pairs. Therefore, we can say that the amount of financial help sent to African countries is larger in the case of the ones that possess natural resources. The analysis of the "within" and "between" standard deviations reveals that the non-colony as well as the NON-OIL/GAS group are more homogeneous than the remaining ones. In all sub-samples the data is right-skewed.

Table 1. Descriptive statistics of financial help from France to the African countries

	FULL SAMPLE	COLONY	NON-COLONY	OIL/GAS	NON-OIL/GAS
Mean	54.168	104.380	9.868	73.246	36.247
Median	20.159	74.089	5.779	44.145	13.754
Minimum	0.025	1.350	0.025	0.580	0.025
Maximum	811.650	811.650	121.390	811.650	310.700
std.dev.	84.443	101.430	13.032	101.650	59.037
vol.factor	1.559	0.972	1.321	1.388	1.629
skewness	3.780	3.167	4.451	3.566	2.624
Kurtosis	22.150	15.013	29.524	18.033	7.094
5% percentile	0.670	14.011	0.469	2.195	0.445
95% percentile	210.170	268.570	27.311	232.060	189.310
Q3–Q1	66.111	88.910	12.570	93.550	38.716
missing obs.	4	0	4	4	0
obs. No.	512	240	272	248	264
within s.d.	49.744	71.795	10.320	68.146	20.964
between s.d.	70.302	76.229	8.596	79.419	56.705

3.1. Explanatory Variables

In order to model the amount of financial help received from France, we chose the following set of explanatory variables:

- MIGRATION – number of immigrants in a given year;
- FDI – Foreign Direct Investment of the donor country in the receiver country;

- IMPORT_FUEL – value of import of fuels, lubricates and related products (import from Africa);
- EXPORT_FUEL – value of export of fuels, lubricates and related products (export from France/Great Britain);
- IMPORT_CRUDE – value of import of crude materials, inedible except fuel;
- EXPORT_CRUDE – value of export of crude materials, inedible except fuel;
- IMPORT – total import from the receiver country;
- EXPORT – value of the total export to the receiver country;
- POLITICAL_STABILITY – index of political stability in the receiver country;
- EXTERNAL_DEBT – value of the external debt of the receiver country (as % of GDP);
- CORUPT_CONTROL – value of the index of corruption control;
- GIRLS_OUT_OF_PS – number of girls out of primary school;
- MORTALITY_RATE – infant mortality rate (deaths per 1000 live births);
- LIFE_EXPECTANCY – expected length of life in the receiver country;
- GDP_PER_CAPITA – value of the GDP per capita in the receiver country;
- OIL – binary variable, taking one for the 12 African countries that have documented oil reserves: Algeria, Angola, Chad, Egypt, Equatorial Guinea, Gabon, Libya, ,Sudan[1];
- OIL_GAS – binary variable taking value 1 for the African countries that have documented gas and/or oil reserves, the gas-producers are: Angola, Benin, Cameroon, Chad, Equatorial Guinea, Ethiopia, Gabon, Ghana, Kenya, Liberia, Madagascar, Malawi, Mauritania, Namibia, Niger, Senegal, Sudan, Uganda.

The source of the data were the following databases: OECD, and AFMI (African Financial Markets Initiative). The descriptive statistics of the explanatory variables are given in Table 8 in the Appendix. The values of import, export and GDP are given in 2012 US dollars. The dependent variable was ODA – the amount of help received from the donor. All the data were collected for the time period from 2001 to 2012. The computations were performed using GRETL (Cottrel, Lucchetti, 2014, Kufel, 2011).

[1] We excluded South Sudan from the whole analysis due to the lack of data for most of the indicators.

4. Results

In Table 2 we present the results of the estimation of the model for the full sample. We observe that the amount of help sent from France to Africa depends on political factors and trade links. First of all, the higher the migration rate from a given country, the higher the amount of help. The amount of help sent seems to depend positively on the amount of export sent to the given country. This suggests that the trade partners receive higher support. Eventually, the historical colonies receive significantly more than the other countries.

Table 2. Results of the dynamic panel model estimation for France – the full sample

Variable	Coefficient	Std.error	*t* statistics	*p*-value
ODA(–1)	0.318	0.070	4.572	0.000
constant	−62.219	24.406	−2.549	0.011
migration (–1)	2.972	0.920	3.231	0.001
colony	38.331	9.309	4.118	0.000
log(eksport)(–1)	3.970	1.448	2.742	0.006

Note: Sargant test statistics of overidentification amounted to 28.4 (p-value: 1), z-statistics for AR(1) test: –1.77 (p-value=0.07), for AR(2): –0.17 (p-value:0.87). Joint Wald test statistics: 168 (p-value:0). Standard error of residuals: 69.5.

Table 3. Results of the dynamic panel model for France – the oil&gas countries

Variable name	Estimate	std.error	*t*-statistics	*p*-value
ODA(–1)	0.294	0.064	4.575	0.000
Const	−93.3005	47.477	−1.965	0.049
Log(IMPORT)	5.424	2.583	2.100	0.036
COLONY	78.742	18.543	4.247	0.000

Note: Sargant test statistics of overidentification amounted to 16.24 (p-value: 1.00), z-statistics for AR(1) test: –1.73 (p-value=0.08), for AR(2): –0.28 (p-value:0.77). Joint Wald test statistics: 84.27 (p-value:0). Standard error of residuals: 79.19.

In Table 3 we present the results obtained for the group of countries that have proven oil and gas reserves. The group is not homogeneous, as the descriptive statistics in Table 1 show. The heterogeneity of the group can be explained by the political instability and internal conflicts, large debt forgiveness events, and the delayed wealth effect. Moreover, the countries that exploit natural resources since many years are more wealthy than the countries in which the oil/gas reserves have been found only recently. Thus, the explanatory power of the model is very weak. However, it shows the main drivers for the help distribution. It seems that the factors that influence generosity is again the amount of import from France. Supporting outlets for French products is an important goal, which at the same time serves internal

policy, by the promotion of French industry and companies. Moreover, the countries that used to be French colonies receive on average 70 mln USD more than the other countries. Being a former colony increases the benefit of possession of natural resources.

In Table 4 we present the results obtained for the more homogenous group – the countries that do not possess natural resources. From Table 1 we know that the amount of help received by them is significantly lower than those of the countries that have oil and/or gas. We observe again that political factors do play a role in generosity of the donor – the amount of ODA received grows together with the migration rate. The residuals from the model have the smallest standard deviation from all estimated ones – 29.51. Providing help to the countries of origin of diasporas living in France allows to realize domestic policy goals at the same time indeed.

Table 4. Results of the dynamic panel model for France – the non-oil&gas countries

Variable name	Estimate	std.error	*t*-statistics	*p*-value
ODA(–1)	0.228	0.103	2.207	0.027
Const	18.660	5.422	3.441	0.001
Migration^2	0.333	0.047	7.125	0.000

Note: Sargant test statistics of overidentification amounted to 21.41 (p-value: 1.00), z-statistics for AR(1) test: –1.82 (p-value=0.07), for AR(2): 1.34 (p-value:0.18). Joint Wald test statistics: 1749.29 (p-value:<0.001). Standard error of residuals: 29.51.

Next, we estimated the models for the groups: historical colonies and others. In Table 5 we present the results of the model for colonies. We again observe that the amount of help depends on political dependencies (migration) and trade (the more France imports from the donor, the more help is sent in return there). As the reason for the colonies was to ensure the access to certain resources, the same logic explains the development agenda.

Table 5. Results of the dynamic panel model for France – the historical colony group

Variable name	Estimate	std.error	*t*-statistics	*p*-value
ODA(–1)	0.311	0.063	4.969	0.000
Const	−113.774	60.898	−1.868	0.062
Migration(–1)	2.326	1.386	1.679	0.093
Log(IMPORT)(–1)	9.452	3.772	2.506	0.012

Note: Sargant test statistics of overidentification amounted to 14.7 (p-value: 1.00), z-statistics for AR(1) test: –1.91(p-value=0.05), for AR(2): –0.12 (p-value:0.90). Joint Wald test statistics: 67.7 (p-value:0). Standard error of residuals: 82.36

Eventually, in the case of the group of non-colonies we estimated the static fixed-effect model, since the data did not exhibit any autocorrelation. This

can suggest that French policy is not consequent in this group of countries. The LSDV R^2 amounted to 0.47 (the "within" one – to 0.07). In Table 6 we present the fixed-effect model with time-effect. The time effect for the period 2009–2012 was insignificant, so we conclude that the average value of ODA received by the group was the same as in 2001 (in real value). Moreover – the amount of help received by the countries from the group depended on the recipient and the year (this model was the best one from all other estimated models, including those with additional explanatory variables). Each recipient received different and specific amount of help which varied in different years but did not depend on any other factors – neither political nor poverty-related ones. We observe that in 2004 and 2006 the average amount of ODA was higher, while the lowest – in 2002. All the values presented in the table should be interpreted as the surplus in comparison with 2001.

Table 6. Results of the static fixed-effect panel model with time effect for France – the non-colony group.

Variable name	Estimate	std.error	*t*-statistics	*p*-value
const	6.457	1.179	5.476	0.000
dt_ 2002	1.444	0.462	3.124	0.002
dt_2003	2.286	0.845	2.706	0.007
dt_2004	7.234	2.845	2.543	0.012
dt_2005	6.921	4.040	1.713	0.088
dt_2006	5.308	2.769	1.917	0.057
dt_2007	5.673	1.733	3.273	0.001
dt_2008	4.311	1.423	3.029	0.003
dt_2009	6.400	4.787	1.337	0.183
dt_2010	0.672	0.947	0.710	0.478
dt_2011	0.884	0.919	0.962	0.337
dt_2012	−0.320	0.909	−0.352	0.725

Note: LSDV R^2 amounted to 0.47, while the within R^2 to 0.08. LSDV F(33,238)=6.43(*p*-value= 0), *F*-test statistics for named regressors: F(11,238) =1.8 (p-value=0.05).Durbin-Watson statistics to 1.77. The null hypothesis for common constant in groups was rejected at p-value $4.22e^{-20}$. The p-value of the Wald test for common significancy of dummy time effects was equal to $1.75e^{-13}$. Standard error of residuals amounted to 10.14.

4.1 Robustness Check – Kendall tau

In Table 7 we present the Kendall τ computed for the value of financial help from France and the remaining variables in the set. The τ is the rank-based correlation, indicating the non-linear dependencies in the data. The data in table is sorted according to the decreasing value of τ. According to this simple analysis, the political factors influence the amount of help sent the most. France seems to support mainly its own historical colonies and trade partners or – more precisely – the countries of the highest value of

import from France. A very important factor seems to be also the migration number, as well as the fact of being a historical colony of France. The fact of possessing oil reserves is also significant, but of lesser importance. France is using the nuclear power to quite a large extend, so this may be one of the explanations. From the poverty-related factors only the illiteracy is significantly related to the amount of ODA received. Political stability factor is also significantly related to the amount of ODA, but the relationship is inverse (the less stable the country, the higher amount of help should it receive). This is neither coherent with the Burnside and Dolar paradigm of aid effectiveness in sound policy environment nor with the general conditionality of help based on democracy promoted by the DAC. The conclusions from the panel models seem to be robust.

Table 7. Kendall-tau for financial help and other considered variables

Correlation between ODA and:	Tau	p-value
colony	0.576	<0.001
Migration	0.551	0
export_crude	0.531	0
export	0.529	0
export_fuel	0.362	0
import_crude	0.361	0
import	0.323	0
FDI	0.328	0
oil/gas	0.238	0
girls out of primary school	0.272	0
life expectancy	0.073	0.006
GDP_per_capita	0.046	0.086
mortality rate	0.017	0.517
corruption control	–0.036	0.172
import_fuel	–0.05	0.246
external debt	–0.03	0.206
political stability	–0.116	0

Note: Insignificant variables (p-value higher than 0.05) are put in italics.

5. Conclusions

Most of development aid research concentrate on the aid effectiveness in the context of recipient performance. However, the motives of donors are also important. The non-profit and development-driven character of foreign aid flows are questionable. From the early stages of development cooperation former colonial powers enjoyed the access to the commodities from newly created states. The economic ties established during colonialism were not sealed off. Despite the reluctance towards former powers, the reconstruction of the economy towards independence was a more complicated process,

than assumed. Moreover, the increasing political instability in many countries and numerous military conflicts, made many African states fragile and explained traditional aid donors presence in the politics.

Establishment of aid structures in African states, allowed donors' governments to insert national business (especially of the key branches such as telecommunication, energy, minig etc.) on the key local markets. Companies without government support or local experience wouldn't easily decide to invest due to high risks. The countries which were politically involved with African leaders, either for the past reasons (France) or the new ones (USA), were automatically predestinated to gain access to the resources of the region. The traditional development cooperation model, represented here by France, is characterized by longtime relationship at relatively high intensity. The evolution of development assistance is the evolution of traditional model policy declaration – from neocolonial relations to development agenda and sustainable development. This policy means both: keep using aid as an instrument of their foreign policy (votes in UN, peacekeeping, access to natural resources), and engage in the initiatives of Millennium Development Goals and the democracy building. They claim to be driven by moral obligation for the past wrongdoing, but at the same time are perceived to use their superior position in negotiations.

Our study suggest, that the traditional approach to development cooperation is based on donors' interests in 21st century, just as it was in the precedent one. The analysis of recipient structure shows that the aid volume is correlated positively with oil reserves, both export and import and with migration. To a lesser extent literacy rate and mortality rate were depicted as important. The motivation of traditional donor is therefore self-oriented. Development cooperation remains instrumental to realization of foreign and internal policy goals of donors. Governments of donor countries, responding to their voters, tend to subordinate development cooperation to increase realization of national and regional interests. Securing the access to markets and low cost imports supports both donor country's entrepreneurs going abroad as the consumers inside the country. The orientation towards "migration countries" may imply the will to keep stable relations, possibly i.a. for the security reasons. Also, the importance of cultural relations for the development cooperation, especially because of the use of common language is recognized. We conclude, that despite the official redefinition of the development cooperation goals, the system tends to serve the traditional donor's agenda in the first place, and next the recipient's needs are considered. Practically, for the African states, it means that a stronger negotiation approach with the donors is needed. At the same time the improvement of internal

transparency to ensure local politicians accountability for the development cooperation agreements could positively influence the system functioning in the future.

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Appendix

Table 8. Descriptive statistics of the explanatory variables

	Mean	Median	Min	Max	Std.dev.	Within s.d.	Between s.d.
Migration	1.726	0.207	0	31.113	4.584	0.719	4.571
FDI	91.711	6.276	–7532.6	12918	789.420	827.64	144.22
Import	5.12e+08	3.55e+07	1841.5	7.36e+09	1.17e+09	5.15e+08	1.06e+09
Import fuel	7.01e+08	9.60e+07	19	7.05e+09	1.33e+09	7.70e+08	9.90e+08
Import crude	2.06e+07	4.03e+06	3	2.68e+08	3.75e+07	1.59e+07	3.31e+07
Export	5.51e+08	1.18e+08	37316	8.42e+09	1.21e+09	3.78e+08	1.16e+09
Export fuel	3.29e+07	1.75e+06	185	8.61E+08	9.72E+07	7.4e+07	6.43e+07
Export crude	6.16e+06	8.40e+05	1157.9	2.54E+08	2.15E+07	1.05e+07	1.83e+07
Political stability	–0.539	–0.36	–3.3	1.190	0.93	0.355	0.873
Corruption control	–0.607	–0.67	–1.92	1.260	0.58	0.193	0.555
Girls out of PS	3.47e+05	1.57e+05	52	5.07e+06	7.32e+05	1.34e+05	7.63e+05
Life expectancy	56.282	55.708	12.3	114.4	13.203	11.612	7.170
Mortality rate	64.701	63.95	12.2	138.5	27.265	9	26.092
GDP per capita	2024.2	729.88	110.5	24355	3153.8	1434.8	2863.8
External debt	65.195	46.575	0.65	881.95	85.792	58.625	65.423

Model francuskiej pomocy rozwojowej – kto dostaje pieniądze?

Z a r y s t r e ś c i. Artykuł przedstawia analizę dystrybucji francuskiej pomocy rozwojowej wśród krajów afrykańskich, w latach 2001–2012. Na podstawie wyników uzyskanych przy pomocy dynamicznych modeli panelowych autorki stwierdzają, że pomoc nie była kierowana do krajów najbardziej potrzebujących, ale do tych, z którymi łączą Francję więzi polityczne i gospodarcze (m.in. byłe kolonie oraz kraje zasobne w ropę i gaz).

S ł o w a k l u c z o w e: pomoc rozwojowa, Deklaracja Milenijna, ubóstwo, Francja, dynamiczny model panelowy