

The impact of fiscal decentralization and budgetary deconcentration on regional disparities in Morocco

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Abstract: *This paper investigates the effects of the fiscal decentralization and the budgetary deconcentration on the regional disparities in Morocco using an econometric approach. Two aspects of finance of the public action on the territories are involved. This approach allows comparing the effects of financing public entities emanating from two separate State organizational processes. The analysis is realized over a period of 10 years spreading out between 2002 and 2011. The result revealed that, the impact of financing territorial action on the regional disparities in Morocco is related rather to budgetary deconcentration when it's combined with the fiscal decentralization.*

Keywords: *fiscal decentralization, budgetary deconcentration, regional disparities*

I. Introduction

The impact of fiscal decentralization on the regional disparities does not make the unanimity in the research's works. If several authors demonstrated its role to reduce the regional disparities, other studies, have in contrast, shown a positive effect of the decentralization on the distribution of income. Overall, empirical studies on this issue are divergent.

This paper focuses on the effects of the fiscal decentralization and also the budgetary deconcentration on the regional disparities. To our knowledge, previous studies which were interested in the regional disparities in Morocco focused rather on fiscal decentralization aspect without giving a particular intention to the budgetary deconcentration. A global approach basing on the financing of local authorities and also the decentralized departments of State is proposed. The study concerns 16 regions composing the national territory.

After a first part dedicated to the concepts used, the paper exposes in the second part the approach followed in the empirical study. Results are presented in the end.

II. Concepts used

In this study we consider that it was interesting to use different decentralization measures for better apprehension of various aspects of this process [1].

The term decentralization is used here to denote the devolution widely used in French literature [2]. On the other side, in addition to the budgets allocated to the local representatives of central government, another form of decentralization appears between central government and Public agencies are considered in this study. It represents grants allocated to government agencies as a delegated budget.

II.1. Fiscal decentralization

The fiscal decentralization is the process through which the central government delegates the resources and expenditures management to territorial authorities. It reflects the importance of local authorities ability to manage resources and expenditures in their territories independently of the central government [3] and [4].

However, in Morocco, local finances are under the supervision of the central government (ministry of the Interior and ministry of Economy and Finance). It would be difficult to adjudicate on the autonomy of territorial authorities [5], [6] and [7].

II.2. Budgetary deconcentration

The deconcentrated budget rate reveals the importance assigned funds devolved to sub-officers in the total appropriations in the budget act. The considered appropriations correspond to the payment appropriations in the general State budget. Commitment appropriations are not taken into account in the calculation because some of them could have a multiyear nature and therefore may be subject to payment incurred over several years in the next budget act.

II.3. Regional disparities

Regional disparities can be measured in several ways. The calculation of some regional macroeconomic aggregates gives the possibility of measuring the regional disparities. The income, the production and even the employment may allow the apprehension of the regional dispersal.

However, among these indicators GDP per capita or total per capita income are the most used to explain regional disparities. To follow the territorial disparities across the total income per capita expresses the effect of the financing of territorial public policies in the disparities in terms of creation of wealth. Whereas the follow-up the disparities through the employment reflects the potential tax territories.

Monitoring of regional disparities is made through statistical indexes which reveal the dispersion in a distribution. Among the most widely used indexes that Gini and Theil. These indexes show no marked difference in the results [8]. The Studies converge on the follow-up of the disparities according to the contribution of the individuals in the wealth of their regions of residence, instead of the analysis of regional disparities within their means income, what means that data on average earnings are balanced by the demographic weight. We opted for the Gini index in this study also found in many works [9], [10], [11] and [12].

III. Literature Review

Many studies have examined the effects of fiscal decentralization on regional disparities particularly in federal States, but few studies, to our knowledge, have investigated the combined effects of fiscal decentralization and deconcentration on the regional disparities. Among these studies, one conducted in the Canadian provinces, showed that fiscal decentralization would have no effect while deconcentration would reduce regional disparities [13].

III.1. Relationship between the fiscal decentralization and the regional disparities

Early researches that examined the link between decentralization and territorial disparities are found in the theory of fiscal federalism [14], [15] and [16].

The authors report that the State fiscal resources come from the wealth of regions, while expenditures in social services are strongly related to the weight of the population. The effect of the fiscal decentralization on the regional disparities was the object of some empirical studies. For some authors, the transfers of central government to territorial authorities increase the regional disparities [17], [18], and [19]. Unlike these results, other contributions highlight a significant negative impact of fiscal decentralization on regional disparities [20], [21], [22], [23], and [24]. According to other authors, budgetary transfers to less developed decentralized entities allow them to practice their own territorial public policies by raising their territories attractiveness. So, regions can drain investments in their territories which allowing them to catch-up the regional economic growth delay [25].

Empirical studies using a sample of developed and developing country have demonstrated the ambivalence of the effect of the decentralization on the regional disparities. Some findings reveal that the impact of decentralization on regional disparities depends on the State level development: For the developed countries, the fiscal decentralization would reduce regional inequality, while it would accentuate the regional disparities in developing countries [26], and [27].

No consensus has emerged on this issue. Cross-country studies showed a significant negative effect on regional disparities, [28] and [29] contrast these results. A single-country studies present variety of findings for matter. If for developing countries fiscal decentralization stress regional disparities, for China [30], for the case of India [31], for the Philippines [32], research conducted for the US argue that fiscal decentralization has a significant positive on regional disparities [33].

III.2. Relationship between the budgetary deconcentration and the regional disparities

To our knowledge, few studies have approached the issue of deconcentration and its effects on regional disparities. Studies on the federal State of South Korea in the 80s, attempted to find out the effect of infrastructure and public services on regional disparities calculated through the average per capita income using the weighted Gini index [34]. In this study, fiscal decentralization and deconcentration were treated separately. In research works, the process of the decentralization and the deconcentration are not treated together.

If fiscal decentralization has attracted great interest of researchers in its impact on regional disparities, especially in federal systems, the fact remains that, in a unitary form of country as Morocco; the budgetary deconcentration is a process which illustrates the financing of the State intervention through its decentralized departments. It represents a kind of finance public action across territories. If decentralization was able to attract researcher's intention on its effects on the regional disparities, particularly in federal systems, we thought that it might be interesting to see if the budgetary deconcentration would have an impact on the disparities on

infrastructures between regions. Budgetary deconcentration remains a geographical distribution of funding from the central government to local administration in territories. Wouldn't it be interesting to look for the impact of the budgetary deconcentration on regional disparities? All the interest is focused on the confrontation of the effects of both types of public action financing on the shown disparities between territories.

IV. Data

The data used in this study spread out over 10 years, from 2002 till 2011. Fiscal decentralization data are those produced by the General Treasury of the Kingdom (TGR), an organization responsible for the management of local finances on behalf of local authorities. The budgetary deconcentration data derived from databases of the Budget Department. Other data are collected from the publications of the High Commission of the Plan (HCP).

These data concern the GDP and the regional populations which allowed us to have the data illustrating the Regional GDP per capita found in other studies [35]. The rate of deconcentration is collected from General Treasury of Kingdom which controls department's expenditures and resources.

IV.1. Regional disparities measurement

In Morocco, data on regional GDP did not begin long. First data of GDP were published in a report of the HCP on the regional accounts in April 2010 on "the evolution of the GDP in Morocco between 2004 and 2007". HCP has a device for the elaboration of regional macroeconomic data by making regional accounts in reference to the national accounts according to SNA93 standard. We were able to establish a database that back up to 2002 from a report published on January, 2010 by departments of study and financial planification (DEPF from ministry of Economic and Finance) entitled "Regions of Morocco: sectoral contributions in the creation of the national wealth".

The report published in 2007 on contribution of regions in the national wealth revealed significant disparities between regions composing the kingdom. 5 regions out of 16 create more than 60,6 % of wealth: Grand Casablanca (21.3%), Rabat-Salé-Zemmour-Zaer (13.6%), Marrakech-Tensift-Al Haouz (8.9%), Tanger-Tetouan (8.8%) and Souss-Massa-Daraa (8%). In 4 regions, GDP per capita exceeds the national average of 20000 MAD: Grand Casablanca (over 35000 MAD), Rabat-Salé-Zemmour-Zaer (over 33000 MAD), South region (24000 MAD), Tanger-Tetouan (21000 MAD)

The choice of the region as a territory subject of comparison in terms of disparity is based on several reasons. The availability of the data was the first constraint for our choice. Then, this territorialized level reveals a pertinent choice for the implementation of the public policies. The region is from now the State central preoccupation through the launch of the advanced regionalization project. And finally, few authors have exceeded its territorial level to carry their studies at subregional levels.

IV.2. Fiscal decentralization measurement

In this study, the impact of fiscal decentralization on regional disparities is followed through income and expenses. Measuring the disparity through income reveals the autonomy signal of decentralized structures. In Morocco, local authorities benefit from three types of resources for the operating budget; own resources, the resources managed for local authorities (business tax and housing), and the resources transferred by central government (income tax, corporation tax, Value Added Tax (VAT)). For investment, they benefit from internal funding supplied by a specific tax and external financing constituted by the loan, a portion of the VAT and support funds.

Own resources that reveal the autonomy of local authorities are operating revenue, while government transfers are split between revenue for operating budget (income tax, corporation tax, and VAT (general grant), and revenue for investment budget also include the transfer of the remaining portion of the VAT (special investment grant).

IV.3. Budgetary deconcentration measurement

The budgetary deconcentration represents the part of the budget of decentralized services in the finances of the State. Since 2006 the reforms were introduced into the budget management. The new budgeter approach oriented to results prompted the adoption of a new budget nomenclature by introducing the regional imension in the budget presentation. This new orientation is dedicated by the budgetary deconcentration one of the pillars of reforms to overcome the deficiencies relating to the availability of the credits allocated to the decentralized services. However, the apprehension of the budgetary deconcentration through the regionalized budgets is insufficient because of the limited data available only from 2006.

For that purpose, it was decided to opt for the rate of deconcentration of the credits. The delegation of the credits is a process practised by the authorising officer and involving the TGR supervisors services to make benefit subauthorising officer of delegated budgets. This delegation is operated according to an administrative

and financial procedures applied jointly by the concerned administrative departments and the central and regional treasury controllers accredited respectively with departments and their decentralized services.

In Morocco, the delegation of budgetary appropriations is established by the Royal Decree of April 21st, 1967 establishing general regulations for public accounting; the provisions of this decree were strengthened by a circular of the Prime Minister on November 9th, 1979. It is about a power transfer from authorising officer to a subauthorising officer allowing him to undertake expenditure on particular sector annual budgetary appropriations.

In addition, the budgetary deconcentration relating to Public agencies is considered. It is represented by the State transfers as the subsidies of investments granted by the State to such public entities.

V. Analysis

Morocco is a unitary state, is composed of 16 regions in its territorial organization. The data which were collected correspond to a period of 10 years from 2002 to 2011. This suggests that this is a restricted database. For this reason, caution is needed in the analysis. In this work, we began by using the correlation analysis before moving to multiple regression.

V.1. Correlation analysis

At first, we began with the test of variables concerned to the fiscal and financial decentralization. The analysis between the dependant variable and each predictor taken separately using correlation coefficients method gave the Spearman coefficients of correlation and their p-values of the significativity test. The results are shown below:

Table 1: Correlation analysis by the method of correlation coefficients between the explanatory variables related to fiscal decentralization and regional disparities represented by the Gini index

Y	X	r	r ²	t	Pr(> t)
IG	investCL	0,7105	0,5048	2,8559	0,0213
IG	Ressexter	0,6820	0,4651	2,6373	0,0298
IG	dependCL	0,6764	0,4575	2,5973	0,0318
IG	recetCL	0,6683	0,4466	2,5411	0,0347
IG	tauxdecfisc	0,6652	0,4425	2,5198	0,0358
IG	trsfimpotCL	0,6608	0,4366	2,4899	0,0375

N.B: the coefficients of correlation (r), and their significant values p (Pr (> |t |) at a level of 5 % confidence

Acronyms for variables:

investCL: Investment expenditure of local authorities (volumes)

Ressexter: External Resources of local authorities (volumes)

dependCL: Total expenditure of local authorities (volumes)

recetCL: Total receipts of local authorities (volumes)

tauxdecfisc: Fiscal decentralization rate expressing the part of fiscal receipts on the fiscal receipts of the Treasury (in %)

trsfimpotCL: The Treasury transfers of tax to local authorities (volumes)

IG: Gini index

The results show that the coefficients of the endogenous variables related to the fiscal decentralization (investment expenditure, external resources, total expenditures, total receipts, transfers of taxes to local authorities, and fiscal decentralization rate) are positively correlated at Gini index telling the regional disparities.

So, the coefficients of the explanatory variables of the fiscal decentralization are significantly correlated at Gini index at a level of 5 % confidence.

In the second step, and as for the fiscal decentralization, we preceded by correlation analysis for budgetary deconcentration variables. The obtained results are as follow:

Table 2: Correlation analysis by the method of correlation coefficients between independent variables linked to budgetary deconcentration and regional disparities represented by Gini index

Y	X	r	r ²	t	Pr(> t)
IG	SBIEEP	0,5354	0,2866	1,7929	0,1108
IG	TTEEP	0,5297	0,2805	1,7662	0,1154
IG	TD	0,3354	0,1125	1,0071	0,3434
IG	TIEPIT	0,1630	0,0266	0,4673	0,6528

Acronyms for variables:

SBIEEP: Subsidies in the Capital budget granted by the State to Public agency (volumes)

TTEEP: Total of the Transfers of the State in Public agency (volumes)

TD: Delegation rate (in %)

TIEPT: Share Subsidies investment granted to Public agency in total Treasury investment (in %)

IG: Gini index

For the budgetary deconcentration, although variables present positive coefficients of correlation, they are never significant for a level of 5 % confidence. Variables showing the budgetary deconcentration would not explain the variability of Gini index.

Although the analysis through the correlation coefficients method was able to reveal certain results, nevertheless, to use a multiple regression seems unavoidable to see the combined effect of both processes of the public intervention financing in territories.

V.2. Multiple regression analysis

The purpose of using the multiple regression analysis is to build a model which allows choosing among predictors those who would explain at best the variability of the dependent variable. All the explanatory variables used previously in the correlation analysis are tested. The model used in the multiple regression analysis is a model of panel data. Its equation is of the form:

$$G_i = \alpha_0 + \alpha_1 A_{1i} + \alpha_2 B_{2i} + \varepsilon_i \quad (1)$$

Where α_1 is the estimation coefficients of the fiscal decentralization effect A_{1i} on the Gini index. We'll find measures relating to the fiscal decentralization as own resources, resources managed for local authorities, transferred resources, fiscal decentralization of receipts, fiscal decentralization rate, receipts, spending and investment of local authorities besides the external resources and the internal financing. α_2 represents the estimation coefficients of the impact of the budgetary deconcentration variables B_{2i} on G_i , as well as the measures of the budget appropriations attributed to the decentralize services represented by the delegation rate and those concerning transfers of the State to Public agency like the total transfer of the State, the subsidies of investments, and the investment rate of Public agency. Variables used in this model were centered and reduced.

VI. Results

By using the technique of sequential multiple regression "stepwise multiple regression", the independent variables are reduced to three variables. They are related to the investments subsidies granted to Public agency, the investment rate of Public agency representing the share of the investments subsidies allocated to government agencies in the treasury investments, and finally the delegation rate, as the following results show below:

Table 3: Results of multiple regression analysis using stepwise multiple regression

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Coefficients:
      Estimate Std. Error t value Pr(>|t|)
(Intercept)  4.536e-16  1.839e-01  0.000  1.00000
SBIEEP       1.417e+00  3.385e-01  4.185  0.00578 **
TIEPIT      -1.156e+00  3.559e-01 -3.247  0.01753 *
TD           6.093e-01  2.160e-01  2.821  0.03030 *
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.5817 on 6 degrees of freedom
Multiple R-squared:  0.7745,    Adjusted R-squared:  0.6617
F-statistic: 6.867 on 3 and 6 DF,  p-value: 0.02287

[1] "model coefficients"
Analysis of Variance Table

Response: IG
      Df Sum Sq Mean Sq F value Pr(>F)
SBIEEP  1  2.5797  2.57966   7.6249 0.03280 *
TIEPIT  1  1.6973  1.69727   5.0168 0.06636 .
TD      1  2.6932  2.69316   7.9604 0.03030 *
Residuals 6  2.0299  0.33832
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
    
```

Grants in the investment budget of Public agency as well as delegation rate present positive coefficients of correlation in opposite of to the variable representing the rate of investments of Public agency in treasury investments.

With a p-value of 0.022, the model coefficients are significant at 5% confidence. The coefficient of determination reveals a robust model explaining 77% of the variability of regional disparities represented by the Gini index. The analysis of variance (ANOVA) shows that we can retain the linear character of the two explanatory variables relating to Public agency investment subsidies and delegation rate at the level of 5% of confidence. So, (1) is written:

$$IG = 4.5 \cdot 10^{-16} + 1.417 \cdot SBIEEP - 1.156 \cdot TIEPIT + 0.6093 \cdot TD + \varepsilon_i \quad (2)$$

Seen the order of magnitude, the model can be written:

$$IG = 1.417 \cdot SBIEEP - 1.156 \cdot TIEPIT + 0.6093 \cdot TD + \varepsilon_i \quad (3)$$

VI.1 Model hypothesis tests

The hypotheses which a multiple linear regression model has to satisfy are tested. Results obtained are presented bellow.

VI.1.1. Test for residuals normality

The errors of the model follow a normal law which average equal to zero and standard deviation is 0.01. Among using tests, the test of Shapiro-wilk, which is very successful for the small samples (observations less than 50), gives evidence of the normality of the residuals model at 5% level of confidence.

Table 4: Results of normality tests for residuals

Attribute	Mu ; Sigma	Shapiro-Wilk (p-value)	Lilliefors D = max[D-, D+] (p-value)	Anderson-Darling (p-value)	d'Agostino (p-value)
Err_Pred_lmreg_1	0.0000 ; 0.0116	0.884654 (0.1475)	0.2337 = max[0.1055, 0.2337] (0.10 ≤ p < 0.15)	0.478977 (p ≥ 0.10)	1.9817 ^ 2 + 1.8552 ^ 2 = 7.3688 (0.0251)

Acronyms for variables:

Err_Pred_lmreg_1: Predictions errors from the multiple linear regression model

VI.1.2. Testing for Homoscedasticity

To verify if the error variance is constant, we used Breush-Pagan test. This test assumes in its null hypothesis that all explanatory variables except for the constant have no significant effect on the square of residuals. Fisher's test confirms the residuals homoscedasticity of our model at a level of 5% confidence, as the following results show:

Table 5: Residual homoscedasticity using Breush-Pagan test

Global results						
Endogenous attribute	Formula_1					
Examples	10					
R ²	0,316745					
Adjusted-R ²	-0,024882					
Sigma error	0,000229					
F-Test (3,6)	0,9272 (0,482997)					
Analysis of variance						
Source	xSS	d.f.	xMS	F	p-value	
Regression	0,0000	3	0,0000	0,9272	0,4830	
Residual	0,0000	6	0,0000			
Total	0,0000	9				
Coefficients						
Attribute	Coef.	std	t(6)	p-value		
Intercept	0,000618	0,000449	1,378080	0,217365		
SBIEEP	0,000000	0,000000	-0,527420	0,616826		
TIEPIT	-0,000007	0,000033	-0,214543	0,837229		
TD	-0,001866	0,002237	-0,834467	0,435976		

Acronyms for variables:

Formula_1: Square of residuals

SBIEEP: Subsidies of investment granted to Public agency (volumes)

TIEPIT: Share of investment of Public agency in Treasury investments (in %)

TD: delegate rate (in %)

VI.1.3. Residual autocorrelation testing

To verify if residuals are not autocorrelated, we had to look for independence of residuals over time. The graph below plots the temporal evolution of model's residuals:

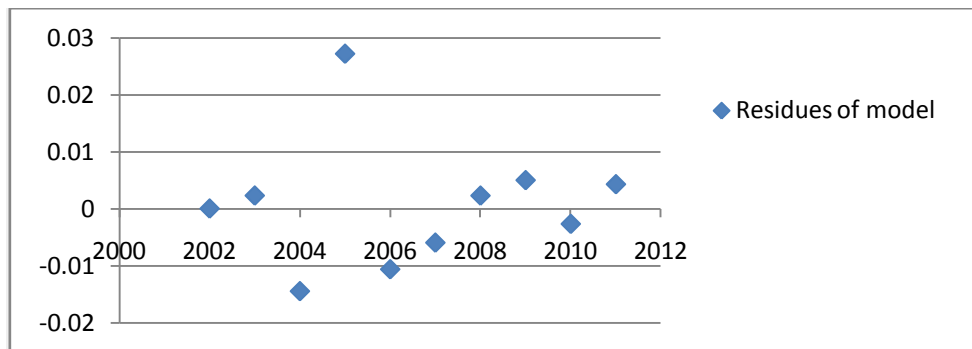


Fig. 1: Plot of the model residuals model over time

This graph shows the random scattering of residuals over time (no residuals special functions). In other words, there is no trend in residuals. This means that residuals would be independent. This is only a graphic illustration on the residuals independence compared with the variable time (here the variable time illustrates years). Two tests are used to test the absence of autocorrelation between residuals:

When we make the Student test To test the hypothesis $H_0: R^2=0$ (no linear relation between residuals and years, this means there is absence of autocorrelation between residuals, we test residuals vs. years). The result shows that the behavior of expected errors in the model as a function of time let us accept the null hypothesis at a confidence level of 5%.

Table 6: Results for residual autocorrelation

Y	X	r	r ²	t	Pr(> t)
Err_Pred_lmreg_1	Annee	-0.0753	0.0057	-0.2136	0.8362

This result shows that the error expected by the model does not depend on time. This means that there is no signal trend. In other words, we cannot predict the error of the year $n + 1$ from the error of the year n . Or, the errors are independent in time, thus the absence of autocorrelation between them.

VI.1.4. Dealing with collinearity:

The « stepwise regression » method was used in this case, in order to retain in the model explanatory variables which are the most correlated with the dependent variable, and the least correlated between them. This method consists in keeping in the model equation those who are most significantly associated with the variable to be explained. Other explanatory variables are then eliminated from the regression. We use the stepwise, one of the techniques to overcome the problem of collinearity.

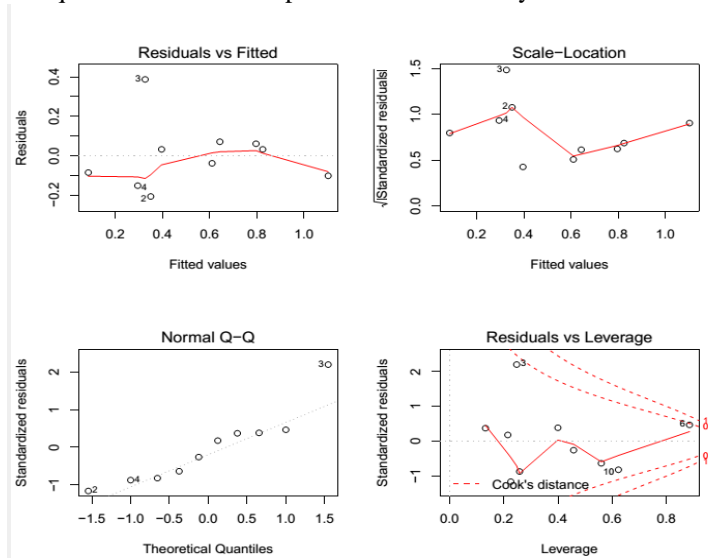


Fig. 2: Graphic illustration of the tests on the residuals of the multiple regression model

VI.2. Model validation

In the constructed model we used observations spread over 10 years (10 observations are available). Given the restricted spectrum of measures on which we worked, the judgment on the accuracy of the elaborate model risks to be penalized although the analysis has shown its robustness.

To dig more about the quality of this model, it was necessary to proceed to its validation. To do so, we opted for the cross validation method in order to apprehend its behavior.

VI.2.1. The principle

From the available measures, we build two files; a testing set containing one year corresponding to a single observation and the training set which contains the rest of the measures (over 9 years).

In this method we proceed by a sliding by step of one year in the Testing set. Like that, we shall have 10 sliding operations on the testing set.



Fig. 3: Diagram of the cross validation

VI.2.2. The method

From the training set, we predict the value of the Gini index (IG) with the model obtained in the multiple regression on the testing set. We make slide of testing file corresponding to one year. We obtain a testing set which contains the following year, and so on until the end of the series. This allows us to compare the components of the vector constituted by the observed values and the values predicted by the model. Finally we have:

Table 7: Results for cross validation test

i	OBS	PREV	R2	RMSE	CTE	SBIEEP	TIEPIT	TD
1	0.17	0.1670996	0.7726711	0.01155815	0.2002432	9.582961e-06	-0.006695561	0.3919469
2	0.15	0.1687188	0.7911357	0.01020658	0.2115469	9.127359e-06	-0.006865119	0.3695178
3	0.19	0.1539157	0.9560193	0.005040938	0.1804888	1.027069e-05	-0.006532233	0.4632115
4	0.15	0.1643535	0.7647424	0.01083228	0.2096057	9.150668e-06	-0.006746226	0.3609372
5	0.14	0.1535733	0.6997158	0.01119392	0.1886819	8.227217e-06	-0.005411246	0.3638258
6	0.2	0.180306	0.7585761	0.01137346	0.2150705	9.597263e-06	-0.00657853	0.2340865
7	0.19	0.1842621	0.7730098	0.01145207	0.2023006	9.46412e-06	-0.00674802	0.3878303
8	0.18	0.1849615	0.7767617	0.01152565	0.1998969	9.617176e-06	-0.006562337	0.3772662
9	0.2	0.1928966	0.7555886	0.01144361	0.2025346	9.186665e-06	-0.006741233	0.3991363
10	0.21	0.2289199	0.7456742	0.01092307	0.2218443	1.158737e-05	-0.008662483	0.4457876

Multiple linear regression method- Test by cross validation:

Number of observations: 10

OBS= 0.1670996 0.1687188 0.1539157 0.1643535 0.1535733 0.1803060 0.1842621 0.1849615 0.1928966 0.2289199

PREV= 0.17 0.15 0.19 0.15 0.14 0.20 0.19 0.18 0.20 0.21

Correlation between OBS and PREV = 0.7075237

i = Corresponds to the number assigned to the year in chronological order (2002 takes 1, ..., 2011 takes 10)

OBS = Gini index

PREV = Prediction on the training file

R² = Square of the correlation between observation and the expected value on the training file

CTE = Coefficient Model

SBIEEP = subsidies of investment granted to Public agency

TIEPIT = share of investment of Public agency in Treasury investments

TD = Delegation rate

When using the cross-validation method over 10 years of measures, the model showed its stability (R² and RMSE remained close). Except 2004 which could correspond to an outlier, we could say that the model has

a certain satisfactory accuracy. The calculation of correlation coefficients between the observed values and the measures provided by the model confirms this result since their correlation shows a value of 0.71

VII. Conclusion

At the end of this study, we note that, in the case of Morocco:

1- The model stemming from the multiple regression allowed highlighting the variables which would explain at best the variability of the Gini index. Once combined, variables relating to the budgetary deconcentration explain the Gini index variability unlike the financial decentralization variables. And hence, we conclude that regional disparities are affected by the budgetary deconcentration.

2- The subsidies of investments granted to Public agency as well as part of the appropriations delegated to the decentralized department of central government in the total of the budgets could stress the regional disparities, whereas an increase on behalf of Public agency investments in the Treasury investments could limit them.

If for the authors who studied the effect of the fiscal decentralization and the deconcentration on the regional disparities in the federal political system, remained divergent about effect of the fiscal decentralization and the deconcentration on the disparities, in a unitary State, like Morocco, results of this study show that the impact on the regional disparities is mainly linked to the deconcentration.

These results have drawn our attention especially that Morocco is launching a project for an advanced regionalization. It would be interesting, to strengthen the organizational process of the State, in particular on the financial aspect, offering most advantages for a desired regional balance

In the history of Morocco, and during the evolution of the organization of the State, the partisans of an effective fiscal decentralization always pleaded for its strengthening often acclaiming the virtues and benefits of decentralized governments. The results obtained in this study let think that the decentralization would have had contributed less in the mitigation of the regional disparities. However, it would be necessary to remain vigilant on the advanced results especially when we have only a short period of measures, in particular, that the tests of significance are very severe when the data is restricted.

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