The effects of tax coordination on the tax revenue mobilization in West African Economic and Monetary Union (WAEMU)

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Motivation

- Evaluating the impact of the tax harmonisation in terms of revenue mobilization for the Union as a whole and for each member state independently (for the overall tax and for the different types of tax).

Annex to the Decision N°01/98/CM/UEMOA concerning the harmonization of Domestic Indirect Taxation in the WAEMU Zone

*The tax harmonization should lead to:*

- *the coherence between national tax legislations*;
- *the equal treatment of economic agents operating in the WAEMU zone*;
- *an improving of the tax productivity.*
A number of studies have been focused on analysing the tax performance of WAEMU countries:

- Diarra (2012) ⇒ Impact of commodity price shocks on the tax transition process;
- Geourjon et Mansour (2013) ⇒ Effects of tariff reforms on the tax revenue mobilization;
- Yohou et al. (2016) ⇒ Relationship between foreign aid and tax revenue mobilization;
Main Contributions and Findings

- First empirical impact study on the tax harmonization process in WAEMU;

- Measuring the effects of harmonization on the overall tax revenue and by type of tax;

- Estimating the effects on the revenue mobilization in the Union as a whole and for each member state and making recommendations to better coordinate;

- **Results**: the harmonization of the tax legislation affected the revenue mobilization in WAEMU, mainly the domestic indirect tax collection.
Framework of the Tax Coordination in WAEMU

Establishment of the Customs Union and the Tax Transition Process

- **1996** Adoption of a transitional trade regime regulating the intra-community trade.
- **1998** Starting of the domestic indirect tax coordination.
- **2000** Establishment of the Customs Union.
- **2006** Adoption of the tax transition Program.
Framework of the Tax Coordination in WAEMU
The Domestic Indirect Tax coordination

- Six (6) Directives have been elaborated.
- Indirect Tax involves: VAT, Excise and the Special Excise on Petroleum Products.

Value-added tax harmonization framework ⇒ recommends the adoption of VAT; defines: the registration threshold; a range for the standard tax rate (15-20%) and for the reduced tax rate (5-10%); a comprehensive lists of taxable, exempted and non-deductible goods and services; involves: the issue of refunding VAT credits.

Implementation of Community Acts in 2010
All the WAEMU member states had implemented the Directives excepted Guinea-Bissau.
Framework of the Tax Coordination in WAEMU
The Domestic Indirect Tax coordination

- **Excises harmonization framework** ⇒ defines a list and a limited number of taxable goods; a maximum rate and a minimum rate by product.

**Implementation of Community Acts in 2012**

All WAEMU countries had transposed the Community legislation in a large extent excepted Guinea-Bissau.

- **Special Excise on Petroleum Products harmonization framework** ⇒ defines a Community list of taxable products, types of tax applicable to these products; limits subsidies. The levy is linked to the quantity (liter or a kilogram) instead of the price of the product.

**Implementation of the Directive in 2010**

Transposed just by the Benin in 2010. However, in 2012, Burkina Faso, Mali and Niger had implemented the Community legislation.
One (1) Regulation and Three (3) Directives have been elaborated;

Directives: Harmonization of the corporate income and financial activities taxation;

Regulation: aims at avoiding double taxation of profits.
Framework of the Corporate Income Tax Harmonization

- harmonizes the scope of business profits taxation by defining the exemptions, the possibility of deduction of depreciations, provisions, interests, charges on transfers between subsidiaries and parent companies and the other categories of charges; losses treatment and carrying forward; defines the taxable profit, its rate (in the 25-30% range); aims at avoiding double taxation of profits (Multilateral Tax Treaty).

Implementation of Community Acts in 2012

All WAEMU countries had transposed the Community legislation.
Framework of the Coordination of Financial Activities Taxation

defines the corporate tax scope for banks and other financial institutions: deductible provisions/allowances, the duration of losses carrying forward; harmonises the rates of withholding taxes: dividends (10% – 15%; 2% – 7%), interests from bonds (6%/3% – 0%), capital gains (≤ 5% or exempted); exempts closed-end investment companies (from CIT, Withholding taxes and Capital Gains Tax).

Implementation of Community Acts in 2012

Niger and Togo were the only countries having transposed the Directive intended to coordinate withholding and capital gains taxation in WAEMU.
The Synthetic Control Method (SCM) assesses the impact of an event or a policy intervention on an outcome.

1. Sample = Member states of WAEMU (8) + some other sub-Saharan African countries (21).
2. Dependent variable = tax revenue; Matching variables = predictors of tax revenue (GDP, Openness, Resource tax...).

Synthetic controls (SCs) = Weighted averages of the units in the donor pool. 
Selected SC = SC which better replicates the pre-reform trajectory of the CI. 
Effect = discrepancy between the post-reform outcome's paths of the CI & the Selected SC.

Figure: Illustrative example (Source: Abadie et al., 2014)
Empirical analysis
Inference, Cavallo et al. (2013), Galiani and Quistorff (2016)

Determination of the significance of the effect:

- **Placebo studies:**
  - "In time placebo test" : applying the method to dates when the intervention did not occur.
  - "In-space placebo test" : applying the method to countries which have not experienced the reform.

- Cavallo et al. (2013), Galiani and Quistorff (2016): Possibility to test the existence of positive effects.

- **Robustness check** : WAEMU countries vs countries having implemented Semi-Autonomous Revenue Authorities (SARA).
Results
Fiscal Impact of the Tax Coordination in WAEMU

- Impact on the overall tax revenue mobilization

**Figure: Impact of Tax Reforms in WAEMU***

- **Effect of the Overall tax reform**
  - Year

- **WAEMU versus WAEMU Synthetic**
  - Year

- **Statistical significance (for positive effects)**
  - Year

Source: Authors’ Calculations
Results
Fiscal Impact of the Tax Coordination in WAEMU

- Impact on the Domestic Indirect taxes mobilization

Figure: Impact of Domestic Indirect Tax Reforms in WAEMU*

Source: Authors’ Calculations
Results
Fiscal Impact of the Tax Coordination in WAEMU

- Impact on the Direct taxes mobilization

**Figure:** Impact of Direct Tax Reforms in WAEMU*

Source: Authors’ Calculations
Results
Fiscal Impact of the Tax Coordination in WAEMU

- Impact on the Trade taxes mobilization

Figure: Impact of Trade Tax Reforms in WAEMU*

Source: Authors’ Calculations
## Results

### Individual Impacts of Tax Coordination in WAEMU

<table>
<thead>
<tr>
<th>Country</th>
<th>Overall Tax Revenue</th>
<th>Indirect Tax</th>
<th>Direct Tax</th>
<th>Trade Tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benin</td>
<td>−</td>
<td>Yes, positive</td>
<td>−</td>
<td>Yes</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>−</td>
<td>Yes, slightly positive</td>
<td>−</td>
<td>−</td>
</tr>
<tr>
<td>Côte d’Ivoire</td>
<td>−</td>
<td>Yes</td>
<td>−</td>
<td>Yes, positive</td>
</tr>
<tr>
<td>Guinea–Bissau</td>
<td>−</td>
<td>No reform</td>
<td>−</td>
<td>−</td>
</tr>
<tr>
<td>Mali</td>
<td>−</td>
<td>Yes, positive</td>
<td>−</td>
<td>−</td>
</tr>
<tr>
<td>Niger</td>
<td>−</td>
<td>−</td>
<td>−</td>
<td>−</td>
</tr>
<tr>
<td>Senegal</td>
<td>−</td>
<td>Yes, strongly positive</td>
<td>−</td>
<td>−</td>
</tr>
<tr>
<td>Togo</td>
<td>−</td>
<td>Yes</td>
<td>−</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Source: Authors’ calculations.
Robustness check

- WAEMU countries vs countries having implemented Semi-Autonomous Revenue Authorities (SARA);
- Controls: Ethiopia, Kenya, Rwanda, South Africa, Tanzania, Uganda and Zambia;
- Limits spillover effects;
- These additional estimations attest the positive effects on Domestic Indirect Tax revenue mobilization.

**Figure:** Impact of the Indirect Tax Reforms
The harmonization of tax legislation affected the revenue mobilization in WAEMU mainly the domestic indirect tax revenue collection.

Strengths of the tax coordination: tax transition process, modernization of excise, choice of territoriality principle...

Weaknesses of the tax coordination: Awarding of extended tax exemptions, Absence of thin capitalization rules and transfer pricing evaluation methodologies...

We recommend an updating of the Community acts and the enforcement of the regional tax legislation at the country level. The continuous monitoring must to be mandatory, this requires a regional institution having a strong bargaining position.
Thank You For Your Attention !!!