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GTAP Annual Conference on Global Economic Analysis
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Fiscal Policy Reforms in Senegal.
Single Country CGE Analysis with highly desegregated SAM

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This is a preliminary draft. Please do not quote
version 15.04.2017

1. Introduction

The Emerging Senegal Plan (*Plan Sénégal Emergent*, PSE) launched a new development model which should allow the acceleration of the economic and social development of Senegal, in the medium and long term (2035). The aim is to accelerate growth. The target set over the period 2014-2018 is between 7 and 8%. This plan mentions public finances as a lever for action, particularly a sustained mobilisation of fiscal resources (République du Sénégal, 2014a). Should be borne in mind that Senegal is a member of the Economic Community of West African States (ECOWAS). Thus Senegal faces fixed exchange rate and no control over its monetary policy (managed by the Central Bank of West African States). Consequently, fiscal policy is the main lever to achieve political goals. In Senegal, the level of taxation as a percentage of GDP (around 20 % in 2014) is consistent with the average of countries of similar development level (see appendix). A recent study assessing the tax potential of Senegal considers that the increase in tax revenues is 2.8 percentage point of the GDP, i.e. presents a potential of 22.8 % (Ba and Diagne, 2016). Building on existing analyses, the authors stress that the agricultural share of the GDP has a negative effect on direct and indirect taxes. However, if agriculture contributes to about 16 % of the GDP of Senegal, the relative decline in the contribution of the agriculture sector to GDP represents an opportunity to enhance mobilisation of public resources because agriculture is a sector which is difficult to impose (AfDB/ADF, 2010).

The programme on acceleration of the pace of Senegalese Agriculture (*Programme d'accélération de la cadence de l'agriculture sénégalaise*, PRACAS) is the agricultural component of PSE to increase food safety. In particular, it aims to reduce the trade balance deficit and set up ambitious goals, including self-sufficiency in rice in 2017, and high production targets in strategic sectors for 2017, i.e. onion, peanut, fruit and vegetables. In addition, the PRACAS mentions as key the upgrade of the seed, water management, equipment, modernisation of the rural world, etc. (République du Sénégal, 2014b). It calls for rethinking the subsidy policy in the context of PRACAS accompanying measures, with a focus on fiscal incentives of investments and VAT exemption on inputs. Focusing on the predictability of public expenditures on food and nutrition security in Senegal, EU (2015) highlights the current weight of subsidies in agriculture (inputs and price). These reduce the possibility of financing alternative measures. In 2014, agricultural input subsidies capture 12 % of food and nutrition security expenditure (49 % in 2012) while the PRACAS draws up a strategy of reducing such subsidies. In this context, the government plans the gradual reduction of input subsidies, with the objective that they decline from 0.5 % to 0.3 % of GDP (three-year average). In fact, a decrease of 0.56 % (2012/14) to 0.24 % (2013/2015) can already be observed.

EU (2015) points out some fiscal expenditures (tax exemptions) corresponding to indirect subsidies to consumers, in particular the exemption of VAT and customs duties on food imports (e.g. rice, wheat, milk and dairies) and agricultural inputs (seeds, fertilisers, agricultural machinery and equipment,

[1] European Commission, Joint Research Centre (JRC), Seville

etc.). Resulting lower input and food prices may represent a high cost for public finances. Therefore regular estimates of tax expenditures and their inclusion in the initial budget law are recommended. IMF (2017) sheds some light on the low taxation of the agricultural sector despite a broad base of possible contributions. Indeed it is not clear if a direct taxation would be optimal. This later would limit the upgrading/expansion of crops of greater added value and would require an assessment on the Senegalese economy and more specifically in the agriculture sector of a potential tax reform. The above-mentioned IMF study stresses the need for indirectly taxing the sector on the basis of its potential to contribute to the State budget, and proposes three lines of action:

- Taxation of land tenure in rural areas (with exemption of agricultural land for productive purposes to foster the modernisation of farm holdings);
- Income tax exemption (with few thresholds, especially for higher income from property and agricultural sectors);
- Consumption taxes (e.g. VAT).

Appropriate taxation requires land reform as well as skilled technicians. It appears that property taxes are underused in Senegal although they are promising as progressive, administratively feasible and increasing along with urban sprawl. Finally, it should be stressed that real estates are is effective and fair form of taxation (Norregaard, 2013).

The aim of this paper is to quantify some fiscal policy reforms in Senegal support agriculture and other sectors essential to the food and nutrition security (FNS). Section 3 presents the methodology. Section 4 and 5 explains the scenarios and results, respectively. Section 6 concludes.

2. Methodology

The model used in this study is a comparative static variant of the STatic Applied General Equilibrium model (STAGE) (McDonald, 2007) specifically extended for the context of the developing countries (STAGE-DEV)(Aragie et al., 2017). The model is thus calibrated to 2014 Senegal SAM that is built for the purpose of this analyse.

2.1 STAGE-DEV: A STatic Applied General Equilibrium model for Developing Countries

To properly model agriculture and food security issues in Sub-Saharan African (SSA) countries, a model should be able to depict the dual roles of semi-subsistent agricultural households, which play the non-separable double role of producers and consumers. Other SSA peculiarities a model should rigorously tackle relate with structural rigidities in economies, especially labour market and factor segmentation; high level of unemployment/under employment, particularly in rural areas; high use of time for non–productive activities (i.e., fetching water); substantial population and labour force migration, etc.

The introduction of a Home Production for Home Consumption (HPHC) module within STAGE is a crucial added value of the STAGE-DEV. Indeed HPHC is explicitly modelled to account for the non-separability of the dual roles of producers and consumers. The consumption is modelled with Constant Elasticity of Substitution-Linear Expenditure System (CES-LES) nested structure that allows substitution between "broad" commodity groups (i.e. in the top nest) which are subject to subsistence consumption constraints, while at the lower level households can substitute between the component commodities (e.g., HPHC and consumption from market) of the "broad" commodity groups.

In addition, we model small-holder agricultural production by exploiting the multiple-output structure of STAGE. The original STAGE model allows for a simple modelling of multiple product activities through an assumption of fixed proportions of commodity outputs by activities. This represents a by-product assumption, with commodities differentiated or undifferentiated by the activities that produce them, using CES aggregation to define composite variants of differentiated commodities produced

domestically (the same as in Lofgren et al., 2002). STAGE_DEV adds the option that activities can vary their output mixes in response to changes in commodity prices, by introducing CET functions that modify the shares of commodity outputs in response to price changes. The formulation adopted, following Punt (2013), allows the user to define activities for which commodities are differentiated or not and activities that produce fixed or variable output mixes.

Furthermore, an endogenous labour supply decision of households is introduced as "quasi-activities of leisure" that produce "quasi-commodities of leisure" for each household type (not activated in the present simulations). These activities use only labour from the paired households and the leisure quasi-commodity is consumed only by the same households. A satellite account keeps track of factor ownership, such that labour available to households for activities within the production boundary, i.e., labour sold on the labour market, plus labour used to produce leisure. Following the standard logic behind the CGE models, the price of leisure commodity is defined by its costs (which is the cost of labour used to produce it) and hence labour commodity can be assigned an unambiguous price and hence valuation. Thereafter leisure is treated as a standard commodity in the model. Lastly, the labour market closures are extended to include labour used by the leisure quasi-activity.

The model also introduces household migration and factor segmentation. Both use the same method, a generalisation of the method by McDonald and Thierfelder (2009), used in Polaski et al., (2009), further refined by Flaig (2014) and Aragie (2015). Migration and segmentation account for persistent urban-rural and regional wage differentials, farm and off-farm wage disparity and continuous urban-rural and internal migration. In both cases, physical units of labour are allowed to transit across regions and/or skill types according to constant elasticity labour supply functions. The factor ownership matrix is updated after the simulation to accommodate migration and segmentation effects.

2.2 A disaggregated SAM for Senegal in 2014

The use of STAGE-DEV to simulate policy changes requires a Social Accounting Matrix (SAM). the most recent disaggregated and possible. A SAM, a portrait of the economy of Senegal for the year 2014, and the structure of which is presented in Table 1 has been constructed from the sources indicated below.

- Tableau des Ressources et Emplois (TRE), ANSD, 2013
- Enquête de Suivi de la Pauvreté au Sénégal (ESPS_II), ANSD, 2011
- Tableau des Comptes Economiques Intégrés (TCEI), ANSD, 2009
- Principaux indicateurs macroéconomiques, Compte de Biens et Services, ANSD, 2011-2014
- Situation économique et sociale du Sénégal en 2011, ANSD, 2011
- Portail des données de la Direction de l'Analyse, de la Prévision et des Statistiques Agricoles (DAPSA), Ministère de l'Agriculture et de l'Equipement Rural, 2011-2014
- FAOSTAT, FAO, 2011-2014
- Matrice de Comptabilité Sociale de l'économie sénégalaise (SENSAM-2011), AGRODEP, 2011
- Matrice de Comptabilité Sociale de l'économie sénégalaise, UNDESA, 2005
- Analyse Globale de la Vulnérabilité, de la Sécurité Alimentaire et de la Nutrition (AGVSAN) Sénégal, Programme alimentaire mondial des Nations Unies (PAM), 2014

Table 1. Basic structure of flows in the Senegal SAM 2014

	ch	cm	m	ahf	a	flab	fland	flivst	fcap_ag	fcap_na	hh	enter	gov	dirtax	indtax	saltax	facttax	imptax	i_s	row
HPHC commodities (ch)				X							X									
Marketed commodities (cm)			X	X	X						X		X						X	X
Margins (m)		X																		
Households as activities semi-subsistence (ahf)	X	X																		
Activities (a)		X																		
Labour factor (flab)				X	X															X
Land factor (fland)				X	X															
Livestock (flivst)				X	X															
Capital agricultural (fcap_ag)				X	X															
Capital non-agricultural (fcap_na)					X															
Households (hh)						X	X	X	X	X		X	X							X
Enterprises (enter)							X	X	X	X			X							X
Government (gov)										X		X		X	X	X	X	X		X
Direct taxes (dirtax)											X	X								
Indirect taxes (indtax)					X															
Sales taxes (saltax)		X																		
Factor taxes (facttax)						X														
Imports taxes (imptax)		X																		
Save/Investment (i_s)											X	X	X							X
Rest of the World (row)		X				X					X		X							

Source: Own compilation

HPHC concept is introduced in the SAM by assuming that households also have a "production component". Besides the classic Representative Household Groups (RHG) that collect household behaviour as consumers of goods and services and as providers of factors of production (and receptor-contributors of transfers), in Senegal SAM 2014 new accounts are presented showing the behaviour of households as units of production of commodities. These accounts incorporate the economic behaviour of households as producers of food commodities (agricultural, livestock and fish products for food). This requires also separate accounts for commodities produced by these households for own consumption (HPHC as input or as a final product) and other marketed commodities (produced both by households and by conventional productive activities). Rows of these commodity accounts reflect HPHCs use as intermediate inputs in the productive activities of households and their consumption in final demand of households (RHG). Their row sums must be equal to the sums of the columns that summarize the contributions of the activities of households to each of these goods. Similarly, columns of the households activities show how they use inputs (HPHC and marketed), while rows show the destination of their production as inputs, own-consumption goods or marketed commodities. It is necessary to point out that households considered as producers have been broken down regionally (one household category for each region considered), while commodities produced are taken at national level in unique accounts. The breakdown of commodities and activities is summarised in in Table 2.

The regional breakdown in the Senegal SAM 2014 is based on administrative regional division of the country (allowing subsequent aggregations, if necessary to configure Agro Ecological Zones, AEZ). Thus, the country has been divided into 14 regions. This regional breakdown has been applied to both households, as productive units or activities, and households, as institutional units.
In terms of agricultural production, the SAM accounts for three types of production agents: there are 14 household agricultural activities (ahf), one per each region, that produce 9 *subsistence commodities* not marketed and consumed at home, and 9 *marketed commodities*. The classic activities sectors (representing the market oriented larger holder producers) produce food and cash crops at national level.

In order to form the RHG, households as institutions have been further disaggregated into rural and urban, according to the area of residence. Also, in Dakar region, the urban part has been broken down by income quintiles. As a result, the Senegal SAM 2014 contains 33 RHG (an auxiliary account for rest of the world owners of labour factor is used too), allowing for a good analysis of redistributive aspects and specific impact of different policies.

Three types of labour are considered: skilled, semi-skilled and unskilled labour. Each labour factor is also regionalized, for the fourteen regions of reference plus a Rest of the World account. Hence, the SAM takes into account 45 different types of labour. Regarding capital factor, it has been split in land, livestock, agricultural and no-agricultural capital.

Fiscal issues can be analysed incorporating a split in taxation, so the SAM includes specific accounts for taxes: direct, indirect (production), sales (commodities, including VAT), factor and import taxes.

In summary, Senegal SAM 2014 consists of 209 accounts: 54 activities (14 of them accounts of households as producers) producing 53 marketed and 9 HPHC commodities using 3 types of labour (skilled, unskilled and semi-skilled) in 15 regions (45 labour accounts in total), 4 types of capital (agricultural, non-agricultural, land and livestock), 5 types of taxes (direct, indirect, sales, factors and imports), 33 regionalized RHG and one account each for margins, saving-investment (plus an auxiliary account to allocate investments), enterprises, government and rest of the world.

Table 2. Senegal SAM 2014 activities and commodities

HPHC commodities	***Marketed commodities***			***RHG as activities***	***Activities***		
Millet	Millet	Minning products	Machines	Dakar	Food crops	Chemicals	Adminsitration
Sorghum	Sorghum	Meat - Fish processed	Equipment	Ziguinchor	Cash crops	Rubber	Education
Maize	Maize	Eating fats	Transport material	Diourbel	Livestock	Glass, pottery	Health
Rice	Rice	Grain milling	Other manufactures	Saint-Louis	Forestry	Metas	Other personal services
Fonio	Fonio	Cereal based food	Electricity	Tambacounda	Fish	Machines	
Manioc (Cassava)	Manioc (Cassava)	Sugar	Construction	Kaolack	Minning products	Equipment	
Other food crops	Other food crops	Other manufactured food	Trade	Thiès	Meat - Fish processed	Transport material	
Livestock	Arachide (peanut/ groundnut)	Beverages	Mantenimiento / Reparación	Louga	Grain milling	Other manufactures	
Fish	Cotton	Tobacco (processed)	Hotels	Fatick	Cereal based food	Electricity	
	Niebe (black-eyed pea)	Textile & clothing	Transport	Kolda	Sugar	Construction	
	Pasteque (watermelon)	Leather & footwear	Communication	Matam	Other manufactured food	Trade	
	Sesame	Wood & paper	Finance	Kaffrine	Beverages	Maintenance / Repair service	
	Onion	Printing and publishing	Real estate	Kédougou	Tobacco (processed)	Hotels	
	Other cash crops	Petroleum	Other business services	Sédhiou	Textile & clothing	Transport	
	Livestock	Chemicals	Adminsitration		Leather & footwear	Communication	
	Forestry	Caucho	Education		Wood & paper	Finance	
	Fish	Glass, pottery	Health		Printing and publishing	Real estate	
		Metals	Other personal services		Petroleum	Other business services	

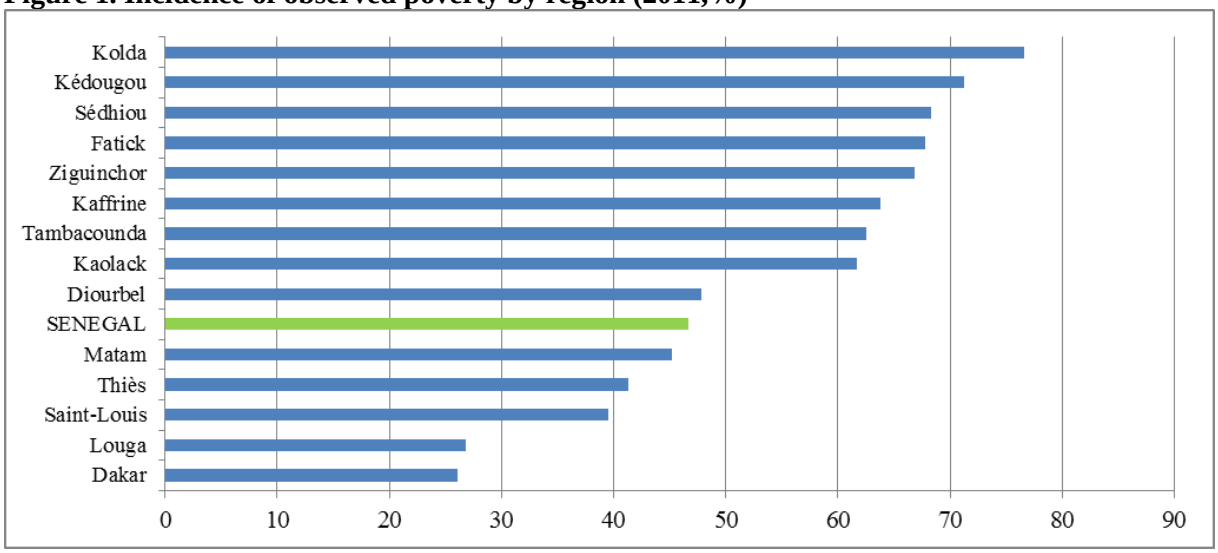
3. Scenarios

In order to analyse the effects of changes in fiscal instruments coherent with critical policy issues, we simulate three scenarios, i.e., changes in VAT, input tax, and income tax.

The first scenario considers the current exemption of VAT on food in Senegal. This later benefits the most to urban consumers to the detriment of producers which constitute the major part of poverty (AfDB/ADF, 2010). In view of the objective to strengthen the means of livelihood, educational and productive capacities, and food and nutrition security, it is worth making a link with the reinforcement of the family safety grants (*bourse de sécurité familiale*). The Senegalese government decided to support in 2017 about 300,000 vulnerable households with 100,000 XOF/year, for a total amount of 30 billion XOF.[2] In 2014 approximately 11.8 billion XOF have been spent for family safety grants (EU, 2015). As a result, set of scenario 1 is defined as below.

- **Scenario (1a):** taxation of 18 % VAT on all goods.
- **Scenario (1b):** taxation of 18 % VAT on all agricultural products and enhancement of family safety grants (i.e. increase in social transfers to the poorest households of 30 billion XOF using the allocation key of the poverty monitoring survey in Senegal presented in Figure 1). Note that in Dakar (distribution according to poverty quintile) it is assumed that only the three poorest quintile receive social transfers.
- **Scenario (1c):** taxation of 18 % VAT on all agricultural products.
- **Scenario (1d):** taxation of 18 % VAT on all agricultural products and enhancement of security grants family as in scenario 1.b.

Figure 1. Incidence of observed poverty by region (2011,%)



Source: Enquête de Suivi de la Pauvreté au Sénégal (ESPS_II), ANSD, 2011

The second scenario focuses on the need for developing the fertiliser sector, especially to improve the trade balance, to generate a spill-over effect on the rest of the economy (industry, infrastructure, fiscal resources) and also to increase agricultural yields and contribute to the economic and social development, see PSE and PRACAS (République du Sénégal, 2014a, 2014b).

In 2014, the input subsidies represent approximately 21 billion XOF (0.24 % of GDP), while in 2015 they decline to 8 billion XOF (0.10 % of GDP). Input subsidies include (i) subsidies to inputs (seeds, fertilisers, and plant protection products), (ii) subsidies for farmers (Dakar), and (iii) fuel subsidies to fishermen (EU, 2015). Note that the overall amount of the grant for seeds is 10.5 billion XOF during the 2013-2014 marketing year coinciding with the implementation of PRACAS (IPAR, 2015). In the 2013-2014 marketing year, the total amount of subsidy to fertilisers is 13.9 billion XOF. As a result, set of scenario 2 is defined as below.

[2] http://www.dakaractu.com/20-milliards-alloues-aux-bourses-de-securite-familiale-en-2015-PM_a91063.html

- **Scenario (2a):** Taxation of 18 % on all inputs (intermediate input). It should be noted that the chemicals is viewed as a factor of production (parameter).
- **Scenario (2b):** Taxation of 18 % on all inputs (intermediate input) with higher social transfers (see scenario 1b).
- **Scenario (2b):** Taxation of 18 % on all inputs (intermediate input) with the exception of fertilisers.
- **Scenario (2d):** Taxation of 18 % on all inputs (intermediate input) with the exception of fertilisers with higher social transfers (see scenario 1b).

The third scenario explores the development of income taxes. The agricultural sector contributes little to the tax revenue of Senegal. Therefore this sector appears as a target for the mobilisation of revenue. Agricultural productivity and income being generally low, it is not obvious that direct taxing this sector would be appropriate (in particular if measures discourage the modernisation and expansion of crops with higher added value). It seems preferable to tax indirectly the sector, according to the ability to pay of taxpayer. In practice, it would require to focus on income taxes paid by all with few exemptions and with thresholds that would properly affect land owners and wealthy farmers (IMF, 2017). As a result, set of scenario 3 is defined as below.

- **Scenario (3a):** Uniform taxation (increase of 50 % for all economic actors, including households).
- **Scenario (3b):** Progressive taxation (increase of 50 % for all economic actors, including households) with the exception of the poorest.
- **Scenario (3c):** Progressive taxation with higher social transfers (see scenario 1b).
- **Scenario (3d):** Redistribution of half of total social transfers in favour of the poorest.

4. Results

FURTHER MODELING SIMULATIONS and TEXT ONGOING

Figure 2. Macroeconomic indicators by scenarios (2015, 2035, % change)

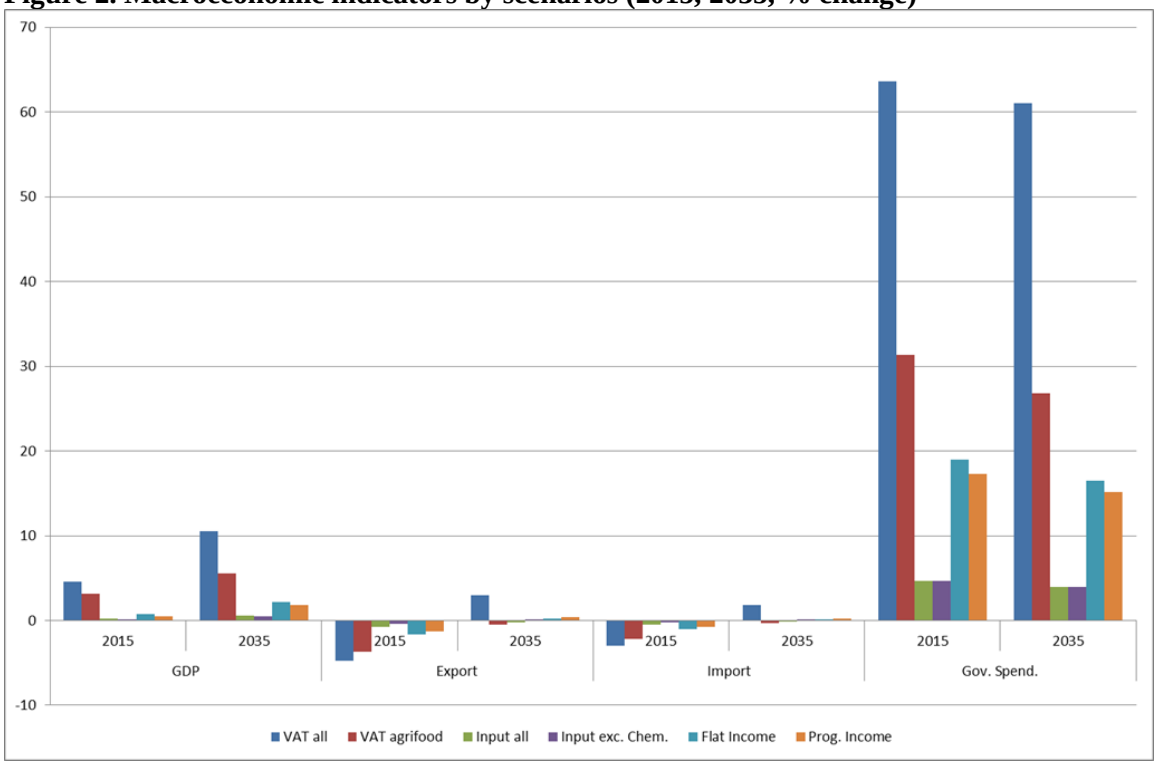


Figure 3. Fiscal revenue by scenarios (2015, 2035, XOF billion change)

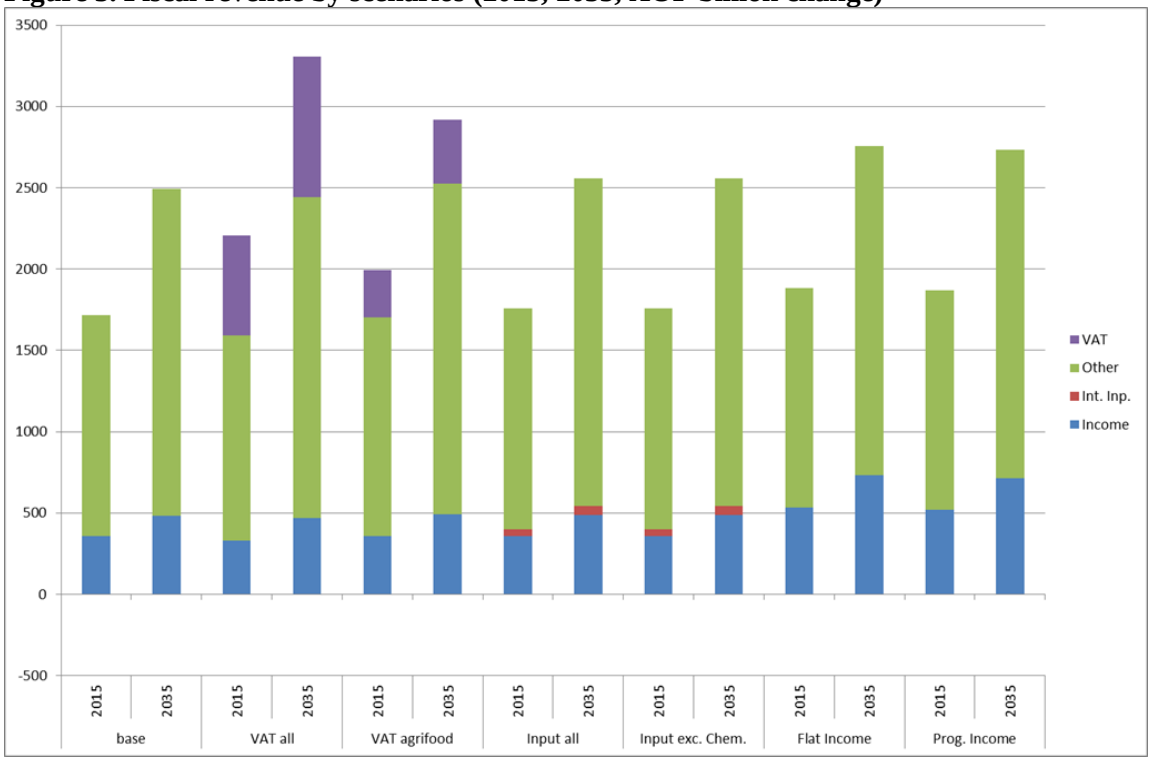


Figure 4. Input support (scenario 2): macroeconomic indicators (2015, 2035, % change)

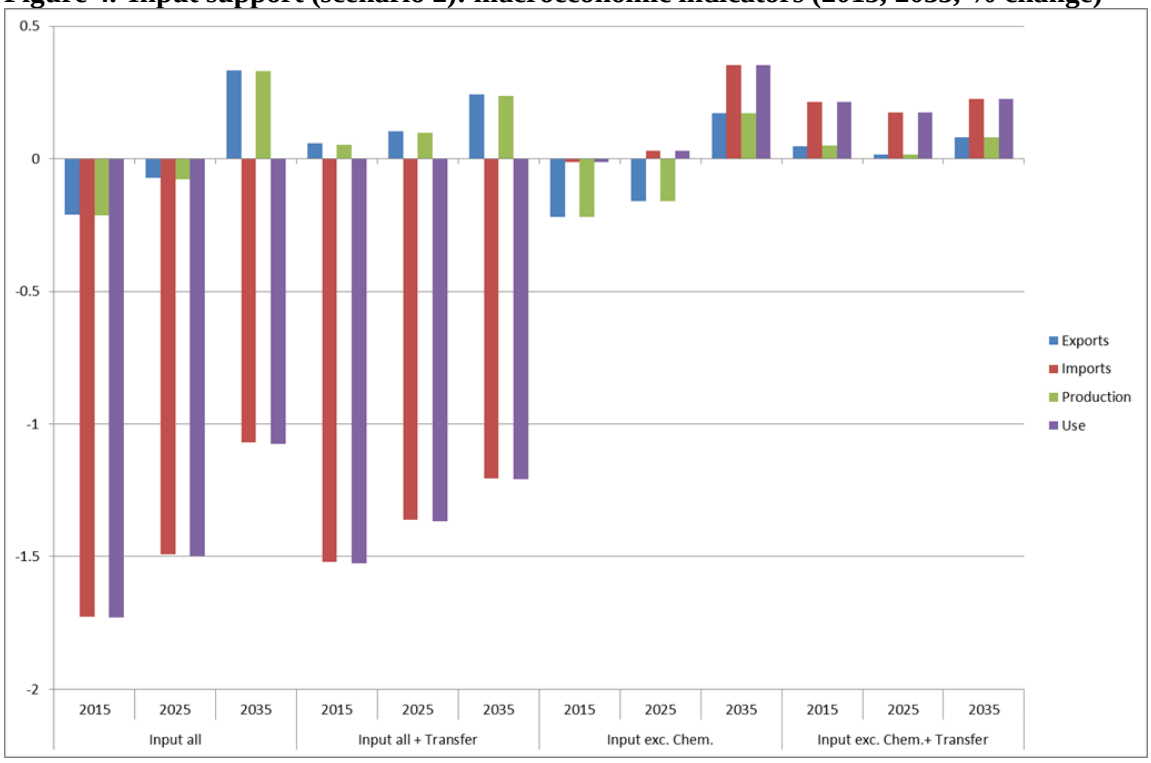
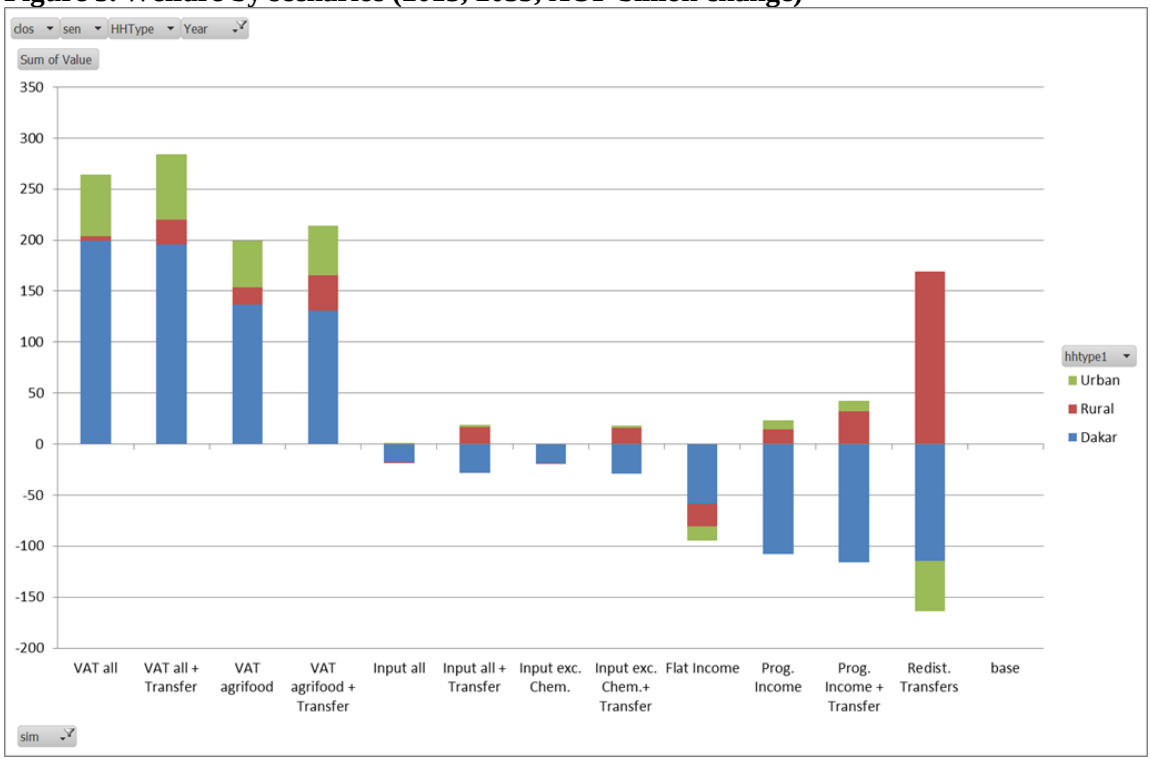


Figure 5. Welfare by scenarios (2015, 2035, XOF billion change)



5. Conclusion

This paper provides a quantitative assessment of three set of changes in fiscal policy in Senegal. These scenarios are not realistic and should be refined in order to provide any policy recommendation. To evaluate such fiscal policy options, we propose two methodological enhancements. First, we use a CGE model that fits key developing country specificities for example the own supply of food by semi-subsistence households and their multiple commodity production activities (through the Home Production for Home Consumption module and the multiple-output structure of STAGE-DEV model, respectively).

Second, we calibrate the CGE model to an original disaggregated 2014 SAM for Senegal. This later 2014 consists of 209 accounts: 54 activities (14 of them accounts of households as producers) producing 53 marketed and 9 HPHC commodities using 3 types of labour (skilled, unskilled and semi-skilled) in 15 regions (45 labour accounts in total), 4 types of capital (agricultural, non-agricultural, land and livestock), 5 types of taxes (direct, indirect, sales, factors and imports), 33 regionalized RHG and one account each for margins, saving-investment (plus an auxiliary account to allocate investments), enterprises, government and rest of the world.

Scenarios on VAT, input tax, and income tax, are performed autonomously and their features are rather different. In order to better understand the drivers of results, additional researches are needed. Furthermore, future investigation shall entail additional tax instruments, such as land taxation. Also future modelling improvement shall better tackle the issue of nutrition, particularly through the development of a module for STAGE-DEV model able to analyse changes in calorie and micronutrient intake. Linking the CGE model with micro analysis techniques such as microsimulations has in the nutrition area a promising field of development as it might help in analysing policy impacts at both representative and single household level.

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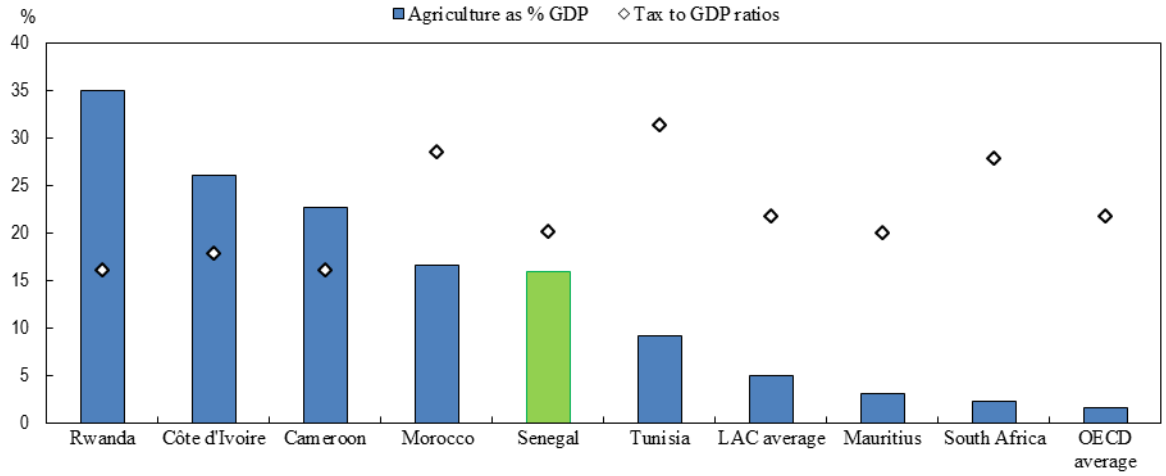
7. Annexes

Table A1. Details of tax revenue in Senegal (1997-2014, million XOF)

	1997	2000	2007	2008	2009	2010	2011	2012	2013	2014
Recettes fiscales totales	**417 544**	**559 295**	**1 085 663**	**1 139 131**	**1 138 498**	**1 267 799**	**1 346 487**	**1 419 281**	**1 414 720**	**1 558 565**
1000 Impôts sur revenu, bénéfices et gains en capital	**87 500**	**123 771**	**221 880**	**262 980**	**275 078**	**328 200**	**333 200**	**384 040**	**373 800**	**398 500**
1100 Des personnes physiques	53 600	64 021	122 840	152 880	175 378	192 900	213 700	240 640	217 300	238 200
1110 Sur le revenu et les bénéfices	53 000	63 370	120 640	151 300	173 578	191 000	211 400	238 140	214 400	234 700
1120 Sur les gains en capital	600	651	2 200	1 580	1 800	1 900	2 300	2 500	2 900	3 500
1200 Des sociétés	29 000	49 418	78 740	86 700	78 000	106 100	98 000	113 900	135 700	133 800
1210 Sur les bénéfices	29 000	49 418	78 740	86 700	78 000	106 100	98 000	113 900	135 700	133 800
1220 Sur les gains en capitals	..	..	..	..	..	..	..	..	..	..
1300 Non-ventilables entre 1100 et 1200	4 900	10 332	20 300	23 400	21 700	29 200	21 500	29 500	20 800	26 500
2000 Cotisations de sécurité sociale	**16 474**	**22 215**	**44 233**	**51 943**	**53 889**	**72 999**	**59 627**	**67 611**	**72 000**	**76 065**
2100 A la charge des salariés	..	..	..	..	..	..	..	..	..	..
2110 Sur la base du salaire	..	..	..	..	..	..	..	..	..	..
2120 Sur la base de l'impôt sur les revenus	..	..	..	..	..	..	..	..	..	..
2200 A la charge des employeurs	..	..	..	..	..	..	..	..	..	..
2210 Sur la base du salaire	..	..	..	..	..	..	..	..	..	..
2220 Sur la base de l'impôt sur le revenu	..	..	..	..	..	..	..	..	..	..
2300 A charge des travailleurs indép. ou sans emploi	..	..	..	..	..	..	..	..	..	..
2310 Sur la base du salaire	..	..	..	..	..	..	..	..	..	..
2320 Sur la base de l'impôt sur le revenu	..	..	..	..	..	..	..	..	..	..
2400 Non-ventilables entre 2100, 2200 et 2300	..	..	..	..	..	..	..	..	..	..
2410 Sur la base du salaire	..	..	..	..	..	..	..	..	..	..
2420 Sur la base de l'impôt sur le revenu	..	..	..	..	..	..	..	..	..	..
3000 Sur salaires ou main d'oeuvre	**5 650**	**6 668**	**9 700**	**9 600**	**10 000**	**10 800**	**12 400**	**15 100**	**16 100**	**16 900**
4000 Impôts sur le patrimoine	**9 900**	**11 200**	**27 800**	**32 200**	**33 200**	**39 100**	**38 200**	**37 200**	**36 600**	**39 600**
4100 Impôts périodiques sur la propriété immobilière	0	0	0	0	0	0	0	0	0	0
4110 Ménages	..	..	..	..	..	..	..	..	..	..
4120 Autres agents	..	..	..	..	..	..	..	..	..	..
4200 Impôts périodiques sur l'actif net	0	0	0	0	0	0	0	0	0	0
4210 Personnes physiques	..	..	..	..	..	..	..	..	..	..
4220 Sociétés	..	..	..	..	..	..	..	..	..	..
4300 Impôts sur mut. par décès, succ. et donations	2 178	2 464	6 116	6 620	5 481	12 445	9 669	7 651	7 809	8 086
4310 Impôts sur mut. par décès et successions	..	..	..	..	..	..	..	..	..	..
4320 Impôts sur les donations	..	..	..	..	..	..	..	..	..	..
4400 Impôts sur transact. mobilières et immob.	7 722	8 736	21 684	25 580	27 719	26 655	28 531	29 549	28 791	31 514
Droits de mutation sur vente ou échanges d'immeubles	..	..	..	13 939	16 388	15 418	15 710	19 398	15 713	18 352
Droits d'enregistrement autre que patrimoine	..	..	..	11 640	11 331	11 237	12 821	10 151	13 078	13 162
4500 Impôts non-périodiques	0	0	0	0	0	0	0	0	0	0
4510 Sur l'actif net	..	..	..	..	..	..	..	..	..	..
4520 Autres non-périodiques	..	..	..	..	..	..	..	..	..	..
4600 Autres impôts périodiques sur patrimoine	0	0	0	0	0	0	0	0	0	0
5000 Impôts sur les biens et services	**291 820**	**386 940**	**769 050**	**769 408**	**754 431**	**804 400**	**890 060**	**902 830**	**900 820**	**1 010 700**
5100 Impôts sur production, vente, transfert, etc.	289 920	384 590	765 050	764 508	749 731	799 400	884 060	896 830	894 420	1 002 700
5110 Impôts généraux	146 240	221 410	436 700	435 001	432 821	478 000	518 930	522 090	512 200	561 400
5111 Taxes sur la valeur ajoutée	146 240	221 410	436 700	435 001	432 821	478 000	518 930	522 090	512 200	561 400
5112 Impôts sur les ventes	0	0	0	0	0	0	0	0	0	0
5113 Autres impôts	0	0	0	0	0	0	0	0	0	0
5120 Impôts sur biens et services déterminés	143 680	163 180	328 350	329 507	316 910	321 400	365 130	374 740	382 220	441 300
5121 Accises	6 140	61 100	87 300	78 940	83 600	82 600	77 800	79 800	76 095	84 100
Taxe spécifique sur les prod. pétroliers	..	..	71 900	64 040	59 300	63 900	55 600	53 800	53 740	59 600
Taxes sur les tabacs	..	..	8 212	7 661	9 016	9 647	9 931	13 116	13 205	13 289
Taxes sur les corps gras	..	..	1 093	962	1 745	978	993	1 375	2 648	1 447
Taxes sur les alcools	..	..	3 985	4 224	5 987	5 297	5 278	4 975	5 498	5 382
Taxe sur la cola	..	..	429	247	439	273	203	183	48	26
Taxe sur les thés	..	..	140	162	334	154	95	102	125	124
Taxe sur le café	..	..	160	160	502	175	216	153	285	367
Taxe sur les produits comestiques	..	..	0	0	0	0	0	0	500	1 400
Autres accises non classées ailleurs	..	..	1 381	1 485	6 277	2 176	5 484	6 096	45	2 466
5122 Bénéfices des monopoles fiscaux	0	0	0	0	0	0	0	0	0	0
5123 Droits de douane et droits à l'importation	129 500	90 340	185 300	190 067	163 810	181 600	203 800	195 200	218 000	221 100
5124 Taxes à l'exportation	0	0	0	0	0	0	0	0	0	0
5125 Impôts sur biens d'équipement	0	0	0	0	0	0	0	0	0	0
5126 Impôts sur services déterminés	8 040	11 740	30 000	27 100	37 600	45 000	55 900	62 500	63 825	69 500
Taxe sur les activités financières (TAF)	6 400	9 340	25 200	23 100	28 500	30 600	34 300	39 100	40 340	45 800
Redevance d'utilisation des télécommunications	0	0	0	0	5 100	10 000	16 700	18 600	18 645	18 700
Taxe sur les contrats d'assurances	1 640	2 400	4 800	4 000	4 000	4 400	4 900	4 800	4 840	5 000
5127 Autres impôts sur commerce et transact. internat.	0	0	0	0	0	0	0	0	0	0
5128 Autres impôts	0	0	25 750	33 400	31 900	12 200	27 630	37 240	24 300	66 600
Fonds de sécurisation des importations de produits pétroliers	..	..	25 750	33 400	31 900	12 200	27 630	32 240	19 400	62 600
Contribution spéciale des produits des mines et carrières	..	..	0	0	0	0	0	5 000	4 900	4 000
5130 Non-ventilables entre 5110 et 5120	0	0	0	0	0	0	0	0	0	0
5200 Impôts sur utilisation des biens et exerc. activites	1 900	2 350	4 000	4 900	4 700	5 000	6 000	6 000	6 400	8 000
5210 Impôts périodiques	1 900	2 350	4 000	4 900	4 700	5 000	6 000	6 000	6 400	8 000
5211 A la charge des ménages: véhicules à moteur	..	..	..	..	..	..	..	..	..	..
5212 A la charge autres agents: véhicules à moteur	..	..	..	..	..	..	..	..	..	..
5213 Autres impôts périodiques	..	..	..	..	..	..	..	..	..	..
5220 Impôts non-périodiques	0	0	0	0	0	0	0	0	0	0
5300 Non-ventilables entre 5100 et 5200	0	0	0	0	0	0	0	0	0	0
6000 Autres impôts	**6 200**	**8 500**	**13 000**	**13 000**	**11 900**	**12 300**	**13 000**	**12 500**	**15 400**	**16 800**
6100 A la charge exclusive des entreprises	..	..	..	..	..	..	..	..	..	..
6200 A la charge d'autres agents	..	..	..	..	..	..	..	..	..	..

Source: Ministry of the Economy, Finance and Planning (OECD/ATAF/AUC, 2016).

Figure A1. Agriculture as a percentage of GDP and level of taxation as a percentage of GDP (2014,%)



Note: This indicator agriculture as % of GDP includes forestry, hunting, and fishing, as well as cultivation of crops and livestock production. The LAC average includes developing Latin American and Caribbean countries only.

Source: African Economic Outlook 2015; World Bank data (OECD/ATAF/AUC, 2016).