



Senegal

Better Markets for All through Competition Policy

July 2018

The World Bank Group

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List of Acronyms

ADIE	Agence de l'Informatique de l'État
ARMP	Autorité de Régulation des Marchés Publics
ARPU	Average Revenue Per User
ARTP	Autorité de Régulation des Télécommunications et des Postes
BoP	Balance of Payments
BTE	Barriers to Entry and Rivalry
BTI	Barriers to Trade and Investment
CAIT	Complexe Agro-Industriel de Touba
CNIA	Comité National Interprofessionnel de l'Arachide
COMESA	Common Market for Eastern and Southern Africa
COPEOL	Compagnie d'Exploitation des Oléagineux
CRSE	Commission de Régulation au Secteur de l'Électricité
DISEM	Division des Semences
DRDR	Directions Régionales de Développement Rural
DTIS	Diagnostic Trade Integration Study
ECOWAS	Economic Community of West African States
EU	European Union
FCC	Federal Communications Commission
FCFA	Franc CFA
FAO	Food and Agriculture Organization of the United Nations
FDI	Foreign Direct Investment
FNOPS/T	Fédération des Opérateurs Privés Stockeurs et Transporteurs
FOREX	Foreign Exchange
GCR	Global Competitiveness Report
GDP	Gross Domestic Product
GoS	Government of Senegal
GVA	Gross Value Added
GVC	Global Value Chain
HA	Hectare
HHI	Herfindahl-Hirschman Index
ICS	Industries Chimiques du Sénégal
ICT	Information and Communications Technology
IDC	Islamic Development Bank
IFPRI	International Food Policy Research Institute
IMF	International Monetary Fund
ISRA	Institut Sénégalais de Recherches Agricoles
IT	Information Technology
ITFC	International Islamic Trade Finance Corporation
LRAIC	Long-Run Average Incremental Cost
MAER	Ministère de l'Agriculture et de l'Équipement Rural
MCC	Millennium Challenge Corporation
MoU	Memorandum of Understanding
MNO	Mobile Network Operator

MPT	Ministry of Post and Telecommunications
MT	Metric Ton
MVNO	Mobile Virtual Network Operator
NCA	National Competition Authority
NCC	National Competition Commission
NGA	Next Generation Access
NIS	Nuts in Shell
OECD	Organisation for Economic Co-operation and Development
OER	Oil Extraction Rate
OPS	Opérateurs Privés Stockeurs
PMR	Product Market Regulation
PSE	Plan Sénégal Emergent
SEDAB	Société Sahélienne d'Entreprises de Distribution et d'Agro-Business
SENELEC	Société National d'Électricité du Sénégal
SERPM	Société d'études et de Réalisation des Phosphates de Matam
SIM	Subscriber Identification Module
SMP	Significant Market Power
SN 2025	Sénégal Numérique 2016-2025
SOE	State-Owned Enterprise
SONACOS	Société Nationale de Commercialisation des Oléagineux du Sénégal
SPV	Service de la Protection des Végétaux
TFP	Total Factor Productivity
UNAOPSE	Union Nationale des Opérateurs Privés Semenciers du Sénégal
UNCAS	Union Nationale des Coopératives Agricoles
US	United States
USD	US Dollars
USDA	United States Department of Agriculture
WAEMU	West African Economic and Monetary Union
WAO	West African Oils
WBG	World Bank Group
WEF	World Economic Forum

Acknowledgements

The report preparation was led by Georgiana Pop (Senior Economist and Competition Policy Specialist, Markets and Competition Policy Team; Task Team Leader) and Laurent Corthay (Senior Private Sector Development Specialist; Task Team Leader). The principal authors are Georgiana Pop, Sara Nyman (Economist, Markets and Competition Policy Team), Gonçalo Coelho (Consultant, Markets and Competition Policy Team) and Julian Koschorke (Consultant, Markets and Competition Policy Team). Olivier Cattaneo (former Senior Trade Economist), Amadou Abdoulaye Fall (Consultant, Markets and Competition Policy Team), Liz Diana Nyamoita Nyachio (Consultant, Markets and Competition Policy Team), Morgane Elise Fouche (Consultant, Markets and Competition Policy Team) and Laurent Benzoni (External Consultant, President of Tera Consultants) provided specific inputs.

Martha Martinez Licetti, Lead Economist and Global Lead of the Markets and Competition Team provided overall strategic advice which follows the World Bank Group's Market and Competition Policy Assessment Tool (MCPAT).

The report has benefited greatly from comments, advice, guidance, and technical discussions with Tania Begazo (Senior Economist and Competition Policy Specialist), Raju Singh (Program Leader), El Hadj Adama Toure (Lead Agricultural Economist), Jerome Bezzina (Senior Regulatory Economist), Arthur Foch (Senior ICT Policy Specialist), Aifa Fatimata Niane Ndoeye (Senior Agriculture Economist) and Julio Loayza (Senior Economist). Adam Winship (Consultant) provided editorial support.

The report was prepared under the guidance of Louise Cord (Country Director, Cabo-Verde, The Gambia, Guinea-Bissau, Mauritania, Senegal), Paolo Zacchia (Program Leader), Lars Moller (Practice Manager), Jose Guilherme Reis (Practice Manager) and Rashmi Shankar (Practice Manager).

The team is grateful for the fruitful discussions with the representatives of the Prime Minister's Office, the Ministry of Agriculture, the Ministry of Economy and Finance, Ministry of Commerce, Ministry of Telecommunications and Post, the Telecommunications Regulatory Agency, the civil society and private sector who participated in a two-day workshop on June 25-26, 2018.

Executive Summary

Economic growth in Senegal has surged over 6 percent since 2015 – and the trend is expected to continue in 2018 and beyond. Growth reached 6.2 percent in 2016 and 7.2 percent in 2017,¹ led by the primary sector with around 13 percent of growth, boosted by fishing and agriculture. The secondary sector also grew rapidly at 4.5 percent supported by food; chemicals and extractives (phosphates and gold). Services grew at 6.6 percent thanks to transport and financial and intermediation services. Ongoing reforms, higher total investment, and adequate climate conditions help explain this performance. Downside risks include rising oil and food import prices.

Addressing Senegal’s challenges at the macroeconomic level, notably sustaining high growth, elicits a deeper understanding of the microeconomic constraints affecting key sectors. Macro-fiscal policies have supported growth, and Senegal benefits from other factors, such as its coastal location and its 1,500 km of optic fiber network. However, structural constraints undermine the efficiency of investment and sustained growth. Despite recent positive trends, growth in agriculture has been volatile, and productivity gains scarce, despite the high potential of the sector and its important share of jobs. Furthermore, the country does not take full advantage of existing infrastructure. This is the case of the information and communications technology (ICT) infrastructure, including the optic fiber network. A key challenge for Senegal is to undertake structural reforms to reduce its vulnerability to exogenous shocks, foster economic diversification, and translate sustained economic growth into job creation and a reduction in extreme poverty.² In a recent growth diagnostic,³ the Millennium Challenge Corporation (MCC) identified microeconomic risks, such as unpredictable and inefficient regulatory environment, among other constraints to growth.⁴ In its article IV review, the IMF warned that “for growth to be sustained, further reforms are needed to improve the business environment and create economic space for private domestic and foreign investment.”⁵

Guided by the World Bank Group’s Markets and Competition Policy Assessment Toolkit (MCPAT) (Box 1), this assessment aims to respond to the country’s microeconomic reform needs and to identify actionable pro-competition solutions to enhance the results of ongoing Government initiatives. In particular, this report reviews the status of competition policies and their effectiveness in promoting functioning markets and a more efficient resource allocation in Senegal. It provides insights into the restrictiveness of Government regulations and policies that affect product markets across the economy and in two selected sectors - groundnut and telecommunications sectors - and into the effectiveness of the competition and antitrust

¹ These numbers refer to the new, rebased GDP series that were published recently, covering 2014-2016, and including 2017 estimates.

² IDA Program Document –Concept Stage for a Proposed Credit to Senegal, Multi-Sector Structural Reforms DPO, July 2016.
<http://documents.worldbank.org/curated/en/813071472550399966/pdf/AB7863-PGID-P159023-Concept-Box396304B-PUBLIC-Disclosed-8-29-2016.pdf>

³ The Growth Diagnostics approach was developed at Harvard University by Ricardo Hausmann, Dani Rodrik, and Andrés Velasco and aims at identifying the binding constraint to private investment and entrepreneurship in an economy. The methodology allows countries to prioritize development activities among many competing needs.

⁴ Millennium Challenge Corporation. 2017. *Senegal Constraints Analysis Report*

⁵ IMF. 2017. *Article IV Review*, Executive Summary.

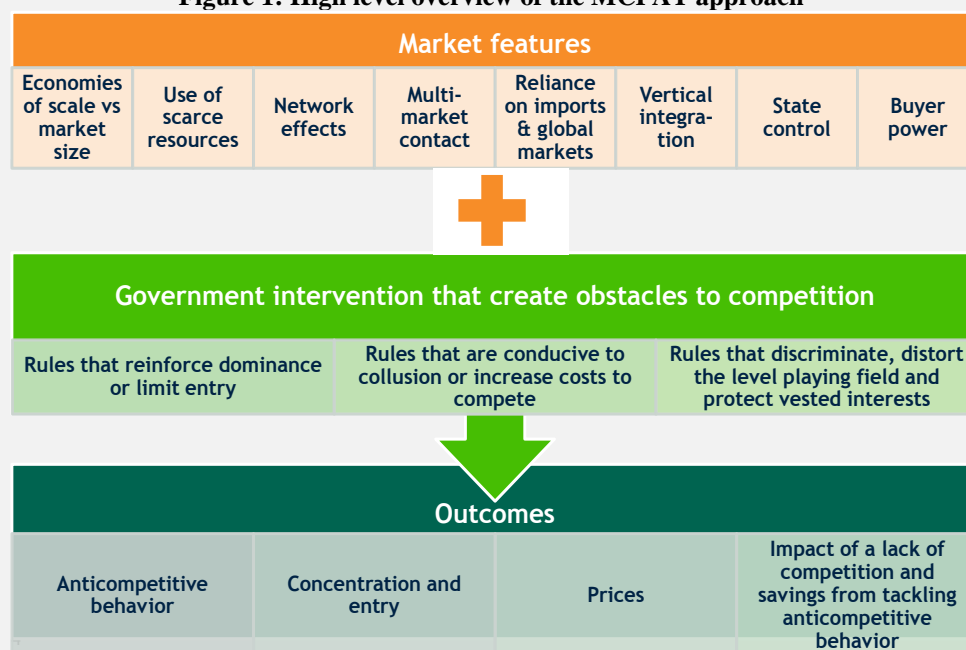
framework. Greater competition can be enabled through a comprehensive competition policy framework that includes a set of policies and laws ensuring that competition in the marketplace is not restricted in such a way as to reduce economic welfare.⁶

Box 1: The World Bank Market and Competition Policy Assessment Tool (MCPAT)

The MCPAT is a methodological instrument of analysis developed by the World Bank Group (WBG) Markets and Competition Policy team to identify specific problems at the market level and prioritize competition tools accordingly—markets to be prioritized as well as the tools vary by country – and in some cases, complement each other. Having a practical nature and a focus on implementation, this methodology has been developed based primarily on the experience of the WBG Markets and Competition Policy team implementing pro-competitive reforms in more than 45 developing countries. Therefore, The MCPAT provides a standardized and comprehensive tool with which to understand i) competition dynamics created by market feature (including supply-side characteristics and buyer characteristics) and ii) identify and assess the potential anticompetitive effects of government intervention in markets. The interaction between these two elements can then be analyzed to determine the risk of anticompetitive behavior, both in terms of collusion and exclusionary abuse of dominance.

This assessment can then inform the development and prioritization of effective strategies to promote competition through changes in policies, regulations, and rules.

Figure 1: High level overview of the MCPAT approach



The MCPAT builds on the identification of those rules and regulations that may have anticompetitive effects on the basis of the following typology:

- (1) Rules that reinforce dominance or limit entry;
- (2) Rules that are conducive to collusive outcomes or increase costs to compete in the market;
- (3) Rules that discriminate and protect vested interests.

This typology feeds into a holistic step-by-step methodology to promote competition reforms.

Source: World Bank Group's Market and Competition Policy Assessment Toolkit

⁶ Motta, M. 2004. *Competition Policy*. Cambridge Books, Cambridge University Press.

Senegal can benefit from tackling regulatory restrictions to competition

Newly collected data on the status of regulatory restrictiveness suggest that significant constraints might be limiting competition in Senegal. Product Market Regulation (PMR) methodology (Box 2) was used to collect data and information on those regulations and policies that can inhibit competition in areas of the product market where competition is viable. PMR reviews such policies in relation to state control, barriers to entry and rivalry, and barriers to trade and investment. On the aggregate PMR indicator, Senegal receives a score of 2.56, which places the country 18th out of 23 non-OECD and selected OECD comparator countries.⁷ State control and barriers to trade and investment are the most important drivers of Senegal's ranking.

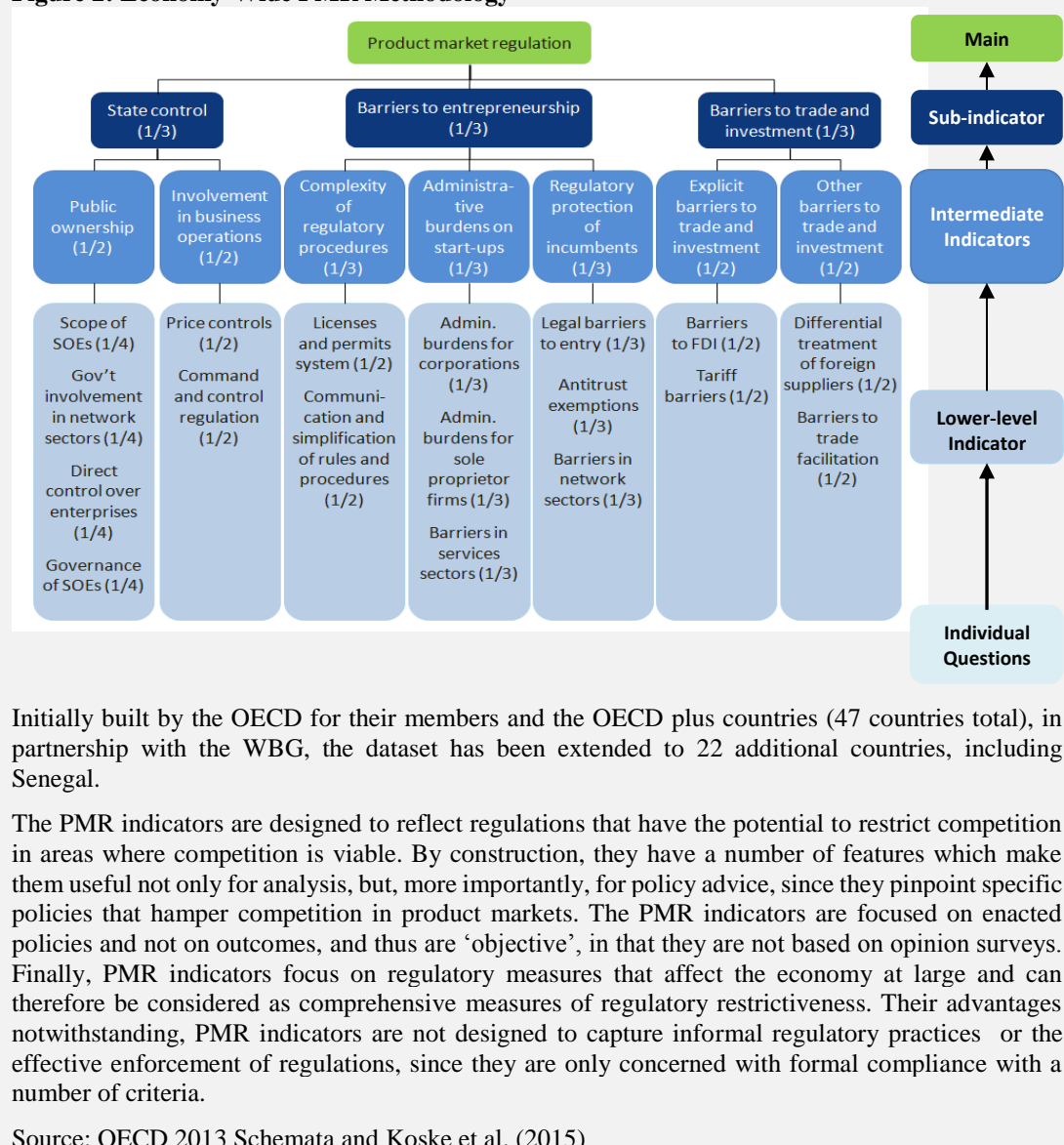
Box 2: PMR Methodology: Economy-Wide Score

Product Market Regulation (PMR) indicators form a comprehensive and internationally-comparable set of indicators that measure the degree to which policies promote or inhibit competition in areas of the product market where competition is viable. PMR indicators are useful to monitor the regulatory achievements of monitored countries and to evaluate the effectiveness of policies introduced throughout the years. Moreover, PMR indicators have been widely used to help policy-makers to draw a clear picture of regulations in different countries, with the objective of identifying gaps in regulations and/or room for improvements.

The PMR indicators rely on information collected through the OECD regulatory indicators questionnaires. Figure 16 below summarizes how the economy-wide score is calculated (numbers in parentheses represent weights). First, the answers of the questionnaire are coded into objective information (scores range from 0 to 6, 6 = worst). Second, scores of individual regulations are aggregated into subsequently broader regulatory areas starting with “Lower-level indicators” (18 areas), then “Intermediate indicators” (7 areas), then the three “sub-indicators”. Finally, the three sub-indicators are averaged to calculate the overall PMR score (Box 26 in Annex 2 provides a description of the low-level indicators).

⁷ Throughout the report, graphs will compare Senegal to non-OECD countries from Latin America and the Caribbean, and – where PMR data is available – Eastern Europe, East Asia and the Pacific, the Middle East and North Africa and Sub-Saharan Africa. The only OECD countries included in the sample are Mexico, Chile and Turkey. To allow for a comparison to OECD countries nonetheless, the average performance of OECD countries and the average of the top 5 performers among all countries, including OECD, will be included as well. The list of comparator countries includes: Argentina, Bolivia, Brazil, Chile, China, Colombia, Costa Rica, Dominican Republic, Egypt, El Salvador, Honduras, India, Jamaica, Kenya, Mexico, Nicaragua, Panama, Peru, the Philippines, South Africa, Tunisia, Turkey, and Ukraine.

Figure 2: Economy-Wide PMR Methodology



Initially built by the OECD for their members and the OECD plus countries (47 countries total), in partnership with the WBG, the dataset has been extended to 22 additional countries, including Senegal.

The PMR indicators are designed to reflect regulations that have the potential to restrict competition in areas where competition is viable. By construction, they have a number of features which make them useful not only for analysis, but, more importantly, for policy advice, since they pinpoint specific policies that hamper competition in product markets. The PMR indicators are focused on enacted policies and not on outcomes, and thus are 'objective', in that they are not based on opinion surveys. Finally, PMR indicators focus on regulatory measures that affect the economy at large and can therefore be considered as comprehensive measures of regulatory restrictiveness. Their advantages notwithstanding, PMR indicators are not designed to capture informal regulatory practices or the effective enforcement of regulations, since they are only concerned with formal compliance with a number of criteria.

Source: OECD 2013 Schemata and Koske et al. (2015)

SOE presence in otherwise contested markets (e.g. fertilizer production, groundnut processing) and network sectors, coupled with restrictive Government regulation appear to inhibit private sector entry to markets. According to the PMR, there are 13 sectors in which at least one SOE is present. Although this is in line with the OECD average, it may be worth reconsidering the direct state involvement through SOEs in several Senegalese markets. Groundnut processing or fertilizer production, for example, feature private sector players and are traditionally economic activities that can be carried out by the private sector more efficiently than by SOEs. Ensuring competitive neutrality in these markets is therefore crucial for these value chains.

Furthermore, the Government intervenes in the economy through regulation of prices to end consumers. While Governments may seek different objectives by controlling prices,⁸ such as protecting consumers from increasing prices or protecting

⁸ In network industries where there are market segments having natural monopoly characteristics, the sectoral regulators typically adopt regulations of tariffs to ensure non-discriminatory access to

the incomes of small producers, price controls can distort markets with more players, by facilitating collusion, for example, or dampening incentives to invest. In Senegal, the state regulates the prices of at least 15 goods and services, including staples such as rice and bread, other food products like soy bean oil, sugar and wheat flour, agricultural products (like fertilizer, seed and machinery), electricity, gas (where the sectors present natural monopoly characteristics) and a variety of other products including cargo, fuels, and pharmaceuticals. The methodology for selecting these products and for setting or assessing the level of prices is not clear. The prices are decided by a committee with representatives from different ministries, producers, private sector associations and consumer bodies. Regional committees of the Ministry of Commerce are responsible for monitoring these prices. For example, in the transport of cargo, the Government provides and monitors rate ranges and sets retail price caps for petrol and fuel oil. In the medium term, extensive price controls may lead to inefficiencies and discourage increases in productivity or quality of supplied products.

Government participation in and the lack of pro-competition regulation of the network industries (such as electricity, gas and telecommunications) may inhibit the efficient functioning of these industries. While the liberalization of network industries has been critical to improve the overall competitive environment across countries, the Government of Senegal maintains a dominant role along the vertical supply chain in network industries. The PMR indicates that there is virtually no vertical separation in the electricity market and still no third-party access regulation to the electricity grid, which may hinder competitive outcomes.

Furthermore, complex regulatory procedures affect the cost of doing business and firms' ability to invest. PMR data indicate that navigating Senegal's regulatory system can be difficult, and this difficulty benefits incumbents. Requirements for existing businesses or start-ups and legislation and regulations are not systematically available online, and start-ups struggle to ensure that they are in possession of all required licenses and permits. This creates uncertainty for businesses and can prevent new entry. The PMR indicates the continued regulatory protection of incumbents, as in the case of the energy utility. In other sectors, such as post (basic letter services, basic parcel services, courier services), air transport, telecom, railway infrastructure, and water collection, treatment and supply, the number of competitors allowed to enter into the market is restricted by regulation.

While trade and investment have been liberalized, Senegal could benefit from a better framework that facilitates trade. Overall, there has been no concerted attempt by the Government to harmonize standards or to actively encourage the recognition of foreign standards through mutual recognition agreements (MRAs). When present, MRAs promote trade between the countries and facilitate market access. However, Senegal does not have a single MRA in any of the 16 sectors/markets assessed by the PMR.⁹ Similarly, regulators are not required to use internationally harmonized standards and certification procedures in any of the same 16 sectors/markets. This lack of harmonized standards is a barrier to trade, especially in the presence of the explicit

infrastructure networks for all operators. As described, this type of economic regulation has a different purpose than the regulation of final prices to consumers.

⁹ These are: manufacturing, construction, energy, distribution, air transport, maritime transport, road transport, fixed telecommunications, mobile telecommunications, insurance, banking, hotels and restaurants, and accounting, legal, engineering, and architecture services.

tariff barriers found in a number of sectors for products, such as rice, sugar, wheat, and vegetable oils.

In a simulated scenario, reducing regulatory restrictiveness in several network industries and other service sectors could result in higher income growth. For example, if Senegal undergoes reforms that decrease regulatory restrictiveness¹⁰ of network inputs (electricity, gas and water), post and telecommunication, transport and other business services, growth in value added in industries intensive in these services and network inputs would translate into additional 0.2 up to 0.5 percent growth of annual GDP, all else being equal.

A more effective competition policy would boost Senegal's ability to address anticompetitive conduct and to promote pro-competition policies

Currently, Senegal's antitrust framework is not functional, and thus it is even more important that the Government promotes the adoption of pro-competition policies. The National Competition Commission (NCC) lost national enforcement powers in favor of the West African Economic and Monetary Union (WAEMU) Commission in 2003, when WAEMU competition law came into force. This means that the NCC may only conduct preliminary investigations and market analyses subject to the WAEMU Commission's instructions. At the same time, the WAEMU Commission has limited resources to finalize investigations and has not issued competition decisions, which limits the effectiveness of competition law enforcement in Senegal. Furthermore, there is little de facto collaboration between NCC and the WAEMU Commission. Developing efforts within WAEMU to approve legislation delegating powers to national competition authorities to investigate and decide on anticompetitive practices that occur on the national territory and do not have cross-border effects and translating these into a more effective national competition policy framework, will be key going forward.

Pursuing solutions to remove competition constraints can have a positive impact not only on economic diversification and growth, but also on poverty reduction

Addressing competition constraints across markets is not only important for private-sector development, but also for households in Senegal. In Senegal, explicit trade barriers, such as tariffs and other import restrictions, are in place for products such as rice, sugar, wheat, and vegetable oils and can raise consumer prices significantly. This is particularly problematic for products that are disproportionately consumed by the poor. Many of the food products consumed by Senegalese households are subject to some form of import restriction that directly impacts the price. For example, import restrictions on vegetable oils are a direct result of Senegal's attempts to bolster its groundnut industry, in particular its crude and refined groundnut oil (which, on the other hand, is partially subsidized¹¹). However, significant poverty reductions could be

¹⁰ This is a decrease equivalent to a two-quartile reduction in PMR score. See Annex 2 for the simulation methodology.

¹¹ The Government of Senegal subsidizes oilseed producers when world prices are below producer prices. Global dynamics of the groundnut industry present relatively low prices in groundnut oil and a downward prices trend in the last year. See "USDA Production, Supply and Distribution database" available at <https://apps.fas.usda.gov/psdonline/app/index.html#/app/home> as included in World Bank, 2016. *Competitiveness and comparative advantage of the groundnut value chain in Senegal*.

achieved by the removal of these restrictions, especially restrictions on wheat bread, vegetable oil and sugar. Overall, the removal of import restrictions would propel almost 50,000 poor people above the national poverty line which represents a 0.35 percentage point decrease in the poverty headcount ratio.¹²

Zooming in on groundnut and telecommunications sectors...

The groundnut and the telecommunications sectors were selected for an in-depth assessment because the stringent regulatory restrictions and the lack of pro-competition regulations in those sectors affect diversification, growth and consumers' welfare. In addition to prior knowledge of restrictions on competition, such as import restrictions driving up consumer prices for vegetable oils, the selection was informed by an assessment of sectors' contributions to GDP and exports, their weight in consumption baskets and their spillover effects, all of which are among the MCPAT's sector selection criteria.¹³

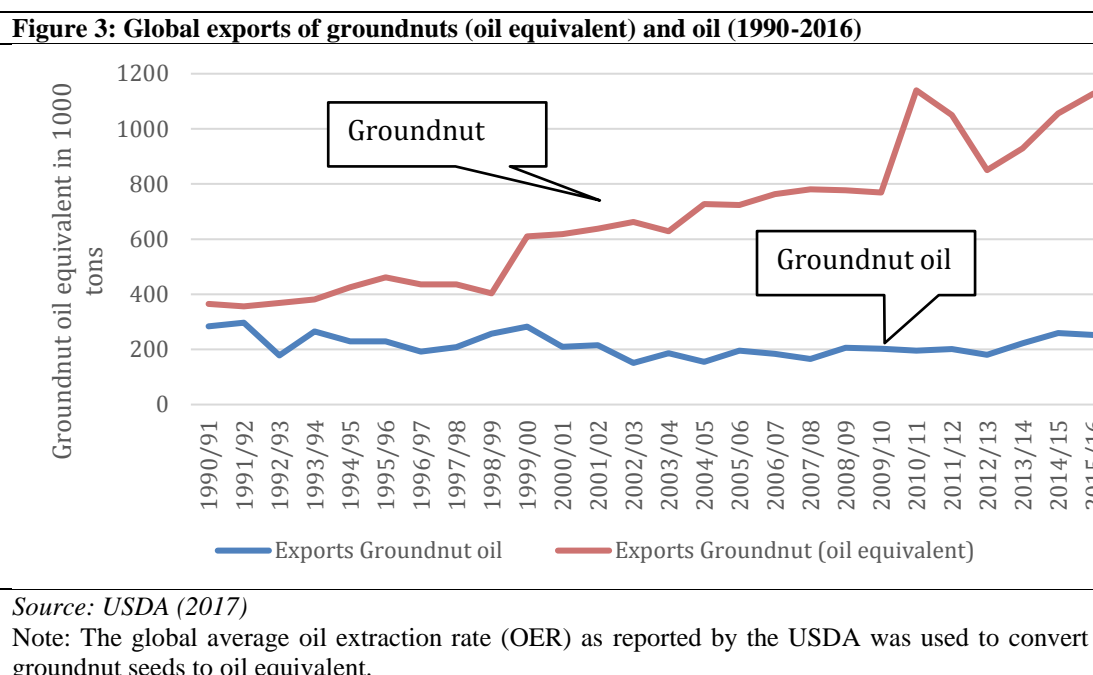
Groundnuts

A series of restrictions in consecutive segments of the groundnut value chain has inhibited the sector from adapting to global trends. While these restrictions are intended to improve market functioning, they in fact lead to an accumulation of market distortions that hinder development of this crucial sector. Covering roughly half of arable land in Senegal and employing 482,000 farmers,¹⁴ the development of the groundnut sector has been a priority for the Government of Senegal. However, the country's importance as a global supplier of groundnuts and groundnut oil has declined steadily in recent years. In some cases, Government interventions appear to have unintended negative impact on both producers and consumers, and to hinder market players from responding to market trends, such as the shift in global exports from groundnut oil to whole groundnuts (see Figure 3).

¹² Based on 2011 data. The result is robust regardless of whether the poverty line calculated by the Senegalese bureau of statistics or the line calculated by the World Bank Group correcting for the settlement type classification is used.

¹³ See Annex 4.

¹⁴ World Bank. 2015. *Etude Diagnostique de la Chaîne de valeurs arachide au Sénégal: Propositions de réformes*, p. 10

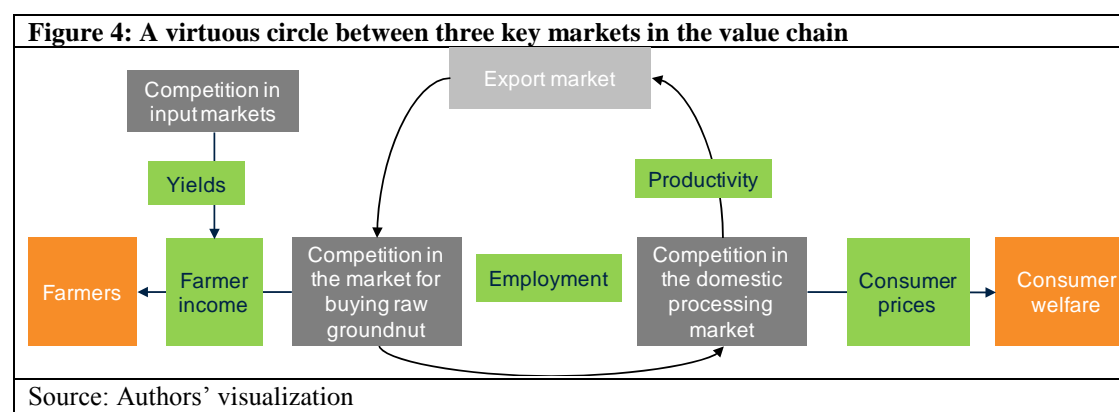


Three markets along the groundnut value chain are key for shaping market outcomes for farmers, consumers and for job creation, namely: the input market, the market for buying raw groundnut and the market for vegetable oils. Market dynamics and competition in these three markets, and the interlinkages between them, form the focus of this assessment. Figure 4 outlines how, if markets function well and allow for competition between players, a virtuous circle between key markets in the value chain can lead to welfare gains for consumers (through lower consumer prices), for farmers (through increased incomes), and can help boost international competitiveness and create better jobs. Market dynamics in input markets affect the price and availability of quality seeds and fertilizer, affecting productivity and thus yields and incomes of farmers. Market dynamics in the market for buying raw groundnuts determine farmer incentives to produce and invest in inputs as well as the ability of the processing industry to access groundnut inputs. Finally, market dynamics in the processing industry drive industry players' incentives to innovate and improve the range of value added products produced, what is particularly relevant for snack groundnuts, where Senegal has a strong competitive advantage. In addition to affecting competitiveness in international markets, market dynamics also affect the capability to reduce prices of outputs in domestic markets. Market dynamics in the processing industry also affect competition in the market for buying raw groundnut from farmers.

Distortions to market functioning along this value chain as a result of Government interventions can hinder the benefits of competition and obstruct the signals and incentives that would otherwise characterize these linkages. The Government of Senegal (GoS) intervenes in the groundnut sector at all stages of the value chain.¹⁵ These interventions in the market are both indirect (through policies and regulation that set the rules for market functioning), such as export taxes on groundnuts or import

¹⁵ The Government is currently undergoing a review of the country's strategy for the groundnut sector, which relies less on Government intervention and more on private sector participation. The present assessment is intended to contribute to this review.

tariffs on vegetable oils, and direct (through Government ownership of market players) as well as through an active participation in the value chain organization through the Comité National Interprofessionnel de l'Arachide (CNIA). They aim particularly at protecting Senegalese oil millers, while at the same time providing support to farmers. In some cases, however, such interventions introduce distortions into the value chain which may restrict market functioning and distort the incentives or ability of various market players – including farmers, traders and processors – to invest, compete and expand.



Tackling priority issues from a markets and competition perspective is key for the value chain development and can complement broader Government interventions on market development, such as the development of adequate product quality and standards, irrigation systems, and contract farming as well as risk mitigating measures for farmers, such as crop insurance and measures of social protection.

The input market

The Government participates heavily in input provision, and this intervention leads to inefficiencies in groundnut production. The Government's research institution ISRA (Institut Sénégalais de Recherches Agricoles) holds a monopoly over the production of pre-base seed, and imports of groundnut seed are restricted. However, ISRA is not able to produce sufficient pre-base seed to satisfy demand. Thus, certified groundnut seeds are in short supply,¹⁶ and many farmers instead plant whole groundnuts, which are of questionable quality, affecting their competitiveness in international markets, such as the exports to the European Union¹⁷). The shortage of high-quality seeds contributes to Senegal's low yields¹⁸: while Senegal has a strong competitive advantage in the production and export of high-quality groundnuts, groundnut oil factories run at 25-50 percent of production capacity (mainly due to the

¹⁶ Only roughly 25% of seed is certified.

¹⁷ 80 percent of Senegal, Ghana and Tanzania's exports of snack-nuts go to the EU, "of which 20 percent is rejected due to aflatoxin (and sold in Eastern Europe (...))". Senegal processing and export of snack-nuts to the EU has an estimated profitability of 36.4 percent (compared to 25 percent in the case of Tanzania and 35 percent for Ghana). See SENSE 2016. *Economic Analyses of Peanut Processing in Africa*.

¹⁸ Dakaractu. 2014. *Le gouvernement veut éliminer graduellement les semences écrémées (ministre)*. Available at: http://www.dakaractu.com/Le-gouvernement-veut-eliminer-graduellement-les-semences-ecremees-ministre_a71043.html

current downward trend of groundnut oil prices¹⁹). A Government-managed allocation mechanism of subsidized seeds furthermore leads to an inefficient allocation of seed. The provision of fertilizer is also highly controlled. The Government of Senegal subsidizes fertilizer and is involved in all stages of the value chain from procurement to distribution. For subsidized fertilizer, the Government engages in a public procurement process based on anticipated demand and then awards contracts to a few large providers. As part of the contract, providers are required to deliver fertilizer to specific locations determined by the Government. As a result, market incentives are not allowed to contribute to an efficient allocation of fertilizers, better quality provision based on soil requirements, timeliness of deliveries and better prices.

The market for buying raw groundnut from farmers

The functioning of the market for buying raw groundnut from farmers is affected not only by market characteristics but also by policy-related distortions. Following the removal of a ban on groundnut exports, farmers largely opted to sell their produce to exporters willing to pay higher prices than domestic processors. The Government put in place an export tax on groundnuts during the 2016/17 season. This tax was intended to be a measure to protect the domestic processing industry, including the state-owned enterprise SONACOS, as well as, kept at a low level, a means of revenue collection for reinvestment into providing public goods to ensure product quality. The tax was albeit suspended in late 2017. The tax had led to a boycott (primarily by Chinese traders) and slow sales of groundnut towards the end of 2017, which in turn lowered farmer incomes. Furthermore, the incidence of the tax fell more heavily on shelled nuts than on unprocessed nuts in shell, discouraging local value addition and better market outcomes. In the past, export restrictions also strengthened the market position of so-called OPS, the licensed buyers for domestic oil producers. This provided them with advantages over potentially competing buyers beyond the fact that they already appear to benefit from a well-established infrastructure of collection points as well as other advantages such as cheaper access to finance.²⁰

The Comité National Interprofessionnel de l'Arachide (CNIA) manages the value chain and is responsible for determining a number of key market parameters. Most importantly, with the approval of the Government, the CNIA sets the season's minimum price for groundnuts, which applies to all purchases made by OPS and other formal collectors. Given its mandate, the representation of market players on the CNIA and their relative bargaining power is a key determinant of market outcomes. According to stakeholder interviews, bargaining power has tended to lie with local processors, and because the membership structure of the CNIA has not been reformed in recent years, it does not necessarily reflect the current realities of the value chain.²¹ In particular, there does not seem to be a formal mechanism to allow representation by new entrants or potential entrants, which may put these players at a disadvantage relative to

¹⁹ See "USDA Production, Supply and Distribution database" available at <https://apps.fas.usda.gov/psdonline/app/index.html#/app/home> as included in WBG presentation "Rentabilité de la chaîne de valeurs de l'arachide au Sénégal: « Compétitivité, avantage comparatif et options politiques », p.9, by Toure, A., Lead Agriculture Economist, April 2017.

²⁰ European Commission. 2016. *Analyse d'économie politique (PEA) des filières de l'arachide et du riz*, p. 19

²¹ World Bank. 2015. *Etude Diagnostique de la Chaîne de valeurs arachide au Sénégal: Propositions de réformes*, p. 62

incumbents since members of CNIA have the ability to influence certain market parameters, such as the minimum price or the length of the season, to the detriment of entrants.

To compensate oil processors for the set producer prices, the Government of Senegal has until recently subsidized groundnut purchases of oil producers. In addition to this subsidy, the SOE SONACOS (Société Nationale de Commercialisation des Oléagineux du Sénégal), Senegal's largest groundnut oil producer may benefit from certain advantages in the market for procuring groundnuts over its private sector rivals. For example, the Government procured a \$75 million loan from the Islamic Trade Finance Corporation to ensure that SONACOS would be able to purchase throughout during the 2016/17 growing season.²² The Government should ensure that both public and private actors have equal opportunity to access finance to guarantee competitively neutral markets. Furthermore, to maximize finance for development, the Government should encourage private investment along the value chain to optimize public resources and invest them in public goods that contribute to increasing productivity, such as research, transport infrastructure.

The market for vegetable oils

Import restrictions on crude and refined vegetable oils further protect oil producers. Import restrictions include high tariffs (e.g. the ECOWAS tariff of 35 percent on specific goods that “contribute to the promotion of the region’s economic development” applied since 2015), occasional taxes on imports (e.g. the “Taxe Conjoncturelle à l’Importation” until 2004, and then safeguards until 2008)²³ and non-tariff measures. In addition to these import restrictions, the Government, through the Ministry of Commerce, has shown support to a recently created platform (comprising traders, producers, processors and consumers) to regulate oil imports in Senegal. The alleged policy objective is to render stability to the groundnut oil market and to ensure that refined groundnut oil is commercialized only through national traders. The effects of this policy protecting the domestic oil industry are yet to materialize. Nevertheless, a detailed analysis of such effects will be important to inform the sectoral policies.²⁴

The policies restricting competition in the groundnut value chain appear to be harmful to the overall development of the sector. These policies threaten the Government’s objective to increase yields and production and negatively affect farmer incomes in the long run. Although producers have been usually taxed, the Government has also subsidized them depending on the year. This, together with inefficiencies in the inputs markets (especially seeds and fertilizer markets, and marketing), can hamper productivity. Furthermore, the processing industry receives the most explicit protections, and domestic processors end up bearing low price risk, that comes at a cost to farmers and consumers. In addition, domestic processors are struggling despite the distortionary protections they receive. This is because of production inefficiencies that

²² ITFC. 2016. *USD 75 million Murabaha financing agreement between ITFC and the Government of Senegal for 2016-2017 groundnut campaign*. Available at <http://www.itfc-idb.org/en/content/usd-75-million-murabaha-financing-agreement-between-itfc-and-government-senegal-2016-2017>

²³ Based on Customs data.

²⁴ See “Sénégal: Commercialisation de l'huile d'arachide raffinée - L'Unacois jappo mobilise 1 milliard 500 millions de F CFA” available at <http://fr.allafrica.com/stories/201805280103.html>

persist due to the lack of competitive pressures. Moreover, these policies limit the employment potential of the value chain.

Estimated benefits of implementing pro-competition reforms

It is estimated that reforming the sector to allow for more competition would generate benefits for all value chain actors in excess of F CFA 150 billion (USD 250 million), create employment for rural poor women and lift 50,000 people out of poverty. If employed correctly, current policy reforms in combination with a set of additional prudent reforms (including phasing out the minimum purchasing price for raw groundnuts, maintaining the suspension of the export tax on kernel, and phasing out tariff and non-tariff barriers on crude vegetable oil imports) would increase farmer incomes, lower consumer prices, create employment and generate higher profits. This is not to say that this subset of reforms is necessarily what should be adopted by the Government of Senegal or that other reforms would not be necessary (notably in the infrastructure sector to lower the cost of transport, private warehousing; or public procurement rules), however, it does indicate the potential magnitude of gains that are available to the GoS if reforms are implemented systematically and credibly. In addition, if taken into consideration, these reforms should be accompanied by mechanisms that address the downside risk of market price fluctuations on farmers, such as targeted cash transfers as well as climate and output risks, such as crop insurance.

Maximizing finance for development in the groundnut value chain

Given the current levels of investment in agricultural value chains at global level, crowding in private investment is necessary to achieve key development goals. Senegal's groundnut value chain is no exception to this. Crowding-in private investment can help optimize the use of the public resources, while contributing to other goals such as good governance and environmental and social sustainability. To ensure and increase private sector access to various sources of finance (own-savings; agricultural investment funds), it is key for the Government of Senegal to provide an enabling environment for all private sector actors in agricultural value chains (farmers, input suppliers, processors, distributors, and marketers). In addition, crowding-in more private investment also requires increasing the space for private sector activity; improving the policy and regulatory environment as well as considering options for using public financing to improve private incentives and reduce transactions costs and risks. Finally, public resources will still be necessary to finance key public goods, such as agricultural research and extension, and public infrastructure. In this sense, public-private collaboration mechanisms can help inform country-level action prioritization.

Telecommunications

The telecommunications sector has been identified as a crucial pillar of future growth by the Senegalese Government and a significant contributor to the overall economy. Improving the regulatory framework to ensure access and more competitive conditions is the key constraint to growth. ICT contributed 6.3 percent to GDP in 2014.²⁵ Furthermore, the sector's spillovers are considerable to the rest of the economy.

²⁵ Republic of Senegal. 2016. *Strategie Sénégal Numérique*, p. 9

Senegal's telecommunications sector has expanded rapidly in the last years, but it has not yet achieved its full potential. Senegal is well-positioned to take advantage of its well-developed backbone infrastructure to increase broadband Internet penetration, deliver services more efficiently and encourage use. Boosting broadband connectivity and access would enable Senegal to further align itself with the world average in terms of ICT services and to reap the benefits stemming from the digital economy. Senegal already ranks above the African average (but below the world average) as regards: active mobile broadband subscriptions (26.1 per 100 inhabitants against 22.9 in Africa, and a world average of 52.2); fixed broadband subscriptions (0.6 per 100 inhabitants against 0.4 in Africa, and a world average of 12.4); and percentage of individuals using the Internet (25.7 percent against 19.9 percent in Africa, and a world average of 45.9 percent). However, internet penetration remains relatively low, with internet usage in Senegal being below Ghana, Cote d'Ivoire and Kenya (see Figure 5), and fixed-broadband being very limited (0.6 subscriptions per 100 inhabitants). Download speeds are also on the low side and international internet bandwidth per Internet user is less than one tenth of the average for Africa,²⁶ affecting the quality of connectivity (Figure 7). The country's levels of ICT access and usage may be partially explained by the still limited affordability of mobile services and fixed broadband. In 2016, Senegal ranked only in 130 out of 138 countries as regards affordability of telecommunications services.²⁷ At the same time, recent price decreases brought Senegal's broadband prices close to the median of the African peers, even if they are still higher than those of countries in the region, such as Gambia and Cote d'Ivoire (Figure 6).

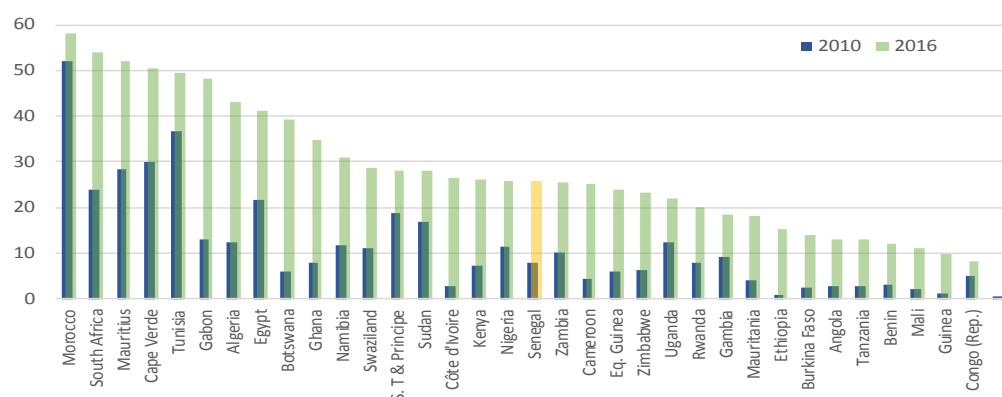
Concentrated markets and the lack of pro-competition regulation can hinder better market outcomes in the telecommunications sector, affecting prices and broadband penetration. All market segments are highly concentrated and dominated by Sonatel, which is co-owned by Orange and the Senegalese state. The Herfindahl-Hirschman Indices (HHI) for the Senegalese mobile market are also high in comparison to peer countries.²⁸ While it is not unusual for certain telecom market segments to be concentrated, some segments in Senegal have actually become more concentrated over time. For example, in the late 1990s, there were more than 15 internet service providers (ISPs), while today there are four ISPs (for a summary of bottlenecks along the telecommunications value chain see Figure 8).

²⁶ 4,977 bit/second in Senegal versus 51,000 bit/second in Africa. Source: ITU (2017).

²⁷ Network Readiness Index figures for 2016.

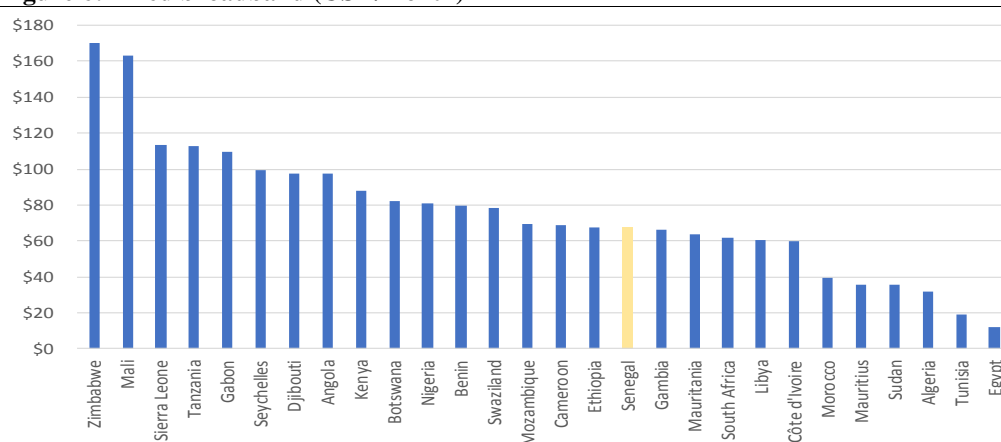
²⁸ Benin, Botswana, Burkina Faso, Cameroon, Egypt, Gambia, Ghana, Jordan, Kenya, Mali, Morocco, Mozambique, Nigeria, Rwanda, South Africa, Tanzania, Tunisia, Uganda, Zambia, Zimbabwe

Figure 5: Internet Penetration in Senegal vs. Peer Countries: % of People Using the Internet (2010-2016)



Source: International Telecommunication Union (2017)

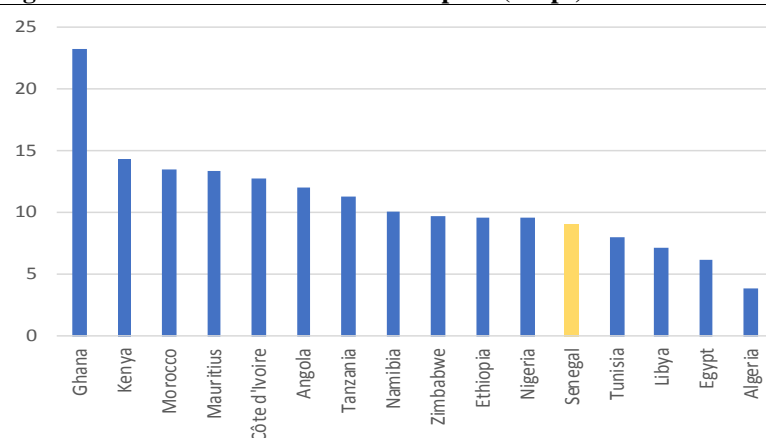
Figure 6: Fixed broadband (USD/month)



Source: Broadband Pricing League, Sonatel

Note: Figures as of Sep/Oct 2017; May 2018 for Senegal

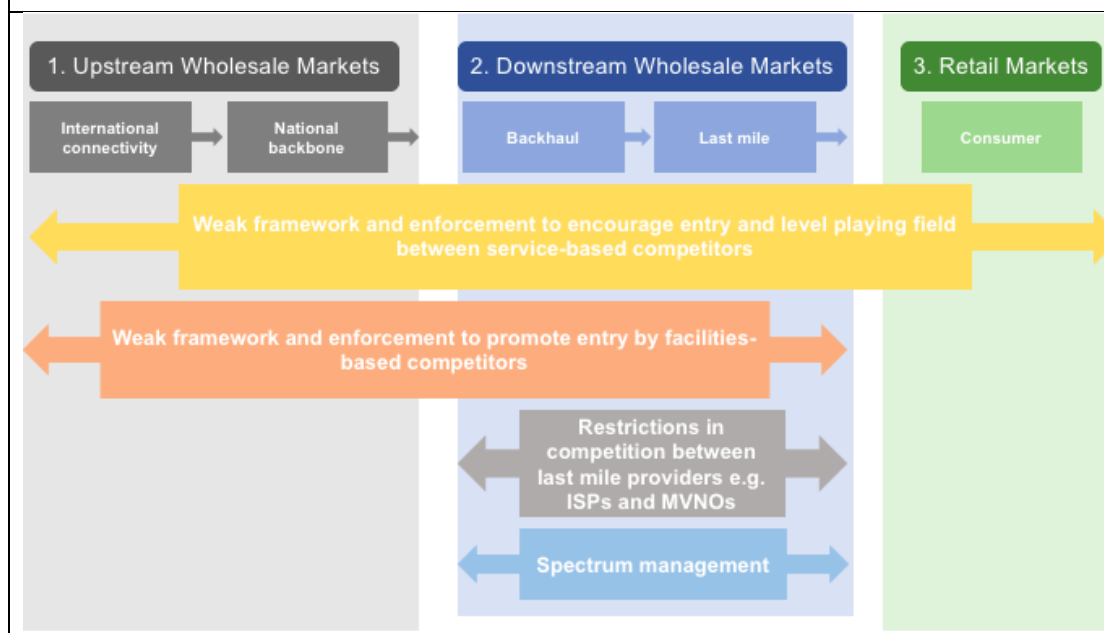
Figure 7: Fixed broadband download speed (Mbps)



Source: Speedtest Global Index

Note: As of June 6, 2018

Figure 8: Bottlenecks along the Senegalese telecommunications value chain



Opening mobile and international calling markets to more competition can have an important impact on access, usage and prices, and help Senegal achieving the *Plan Sénégal Emergent 2014 (PSE)*. According to a sample of 40 African countries, the entry of an additional operator led to a 57 percent increase in mobile subscriptions (Gebreab, 2002), whilst the opening-up of international calling services has been found to lead to an increase in call volumes up to 104 percent, and a reduction of prices up to 90 percent.²⁹

Lack of framework to encourage entry and a level playing field between services-based competitors

The Senegalese telecommunications sector does not yet have a fully-functional framework to encourage entry and a level playing field between services-based competitors. Senegal's telecommunications regulatory framework is still characterized both by an ineffective ex ante regulation which is typically needed to facilitate entry as well as by burdensome regulation of operators without real market power. Sonatel's position as the only operator of a fixed fiber and ADSL networks stems from the 2011 Telecommunications Code licensing regime which capped the number of ISPs until 2017³⁰ and indicates that significant market power (SMP) regulation has not been effective. In effect, the Telecommunications Code would need to provide for a cost-based access pricing and procedures to minimize any access restrictions to Sonatel's essential facilities. Moreover, the lack of an effective SMP regulation^{31 32} have not been

²⁹ Groupe Spéciale Mobile Association (GSMA) 2012.

³⁰ Law 2017-13, from January 20, 2017, and Décret 2017-691, from April 27, 2017.

³¹ Despite having considered that Sonatel has SMP across 12 wholesale markets, ARTP has not yet imposed obligations to grant fair, transparent and non-discriminatory access to the non-replicable infrastructure and assets owned by Sonatel (including civil engineering, such as ducts and poles).

³² ARTP is expected to lower the termination rates in July 2018 to mitigate the club effects which currently favor Sonatel's network and increase the risks of anticompetitive behavior. Going forward, it will be important that these policy changes be disseminated to make them truly effective.

compensated for by an effective ex post competition law enforcement by the National Competition Commission (NCC) or by the regulator ARTP (Autorité de Régulation des Télécommunications et des Postes) at the national level, nor by the West African Economic and Monetary Union (WAEMU) at the regional level.³³

Although Sonatel does not hold a legal monopoly over international data transmission, it controls access to the main international gateway, which is not effectively regulated. This lack of regulatory intervention by ARTP over the international gateway segment of the market has the effect of favoring the incumbent, which may further strengthen its dominant position in the market. The lack of regulation for accessing the international gateway is likely to contribute to the high cost of international calls and data transmission in Senegal, with the country's cost for international connectivity being three times higher than other countries in the region.

ARTP has yet to develop rules to encourage MVNOs entry and contribution to greater access to telecom services. Rules on setting adequate charges for MVNOs and establishing asymmetric obligations of non-discrimination and transparency, together with potential obligations for operators with SMP could be considered. Generally, entry of MVNOs is subject to commercial agreements and proportionate authorization regime. Evidence shows that consumers often benefit from the entrance of MVNOs in the telecommunications market, through lower prices for voice calls and text messages. The recent award of three licenses through tender was subject to approval by incumbents (MVNOs licenses awarded to Groupe Futurs Médias (GfM), which uses the brand You Mobile (Sonatel network), Sirius Télécoms (Tigo network) and Origines SA (Expresso network)). Senegal could also follow the example of countries where MVNOs have developed successfully under less-intrusive regulation. For example, the First National Bank in South Africa launched an MVNO in 2015, which attracted more than 200,000 customers in its first year of operations. A similar move was made by Kenya's Equity Bank, whilst traditional MVNOs, such as Lycamobile have also ventured into mobile wallet and money transfer services.

ARTP's implementation of a procedure for number portability is a step in the right direction, in accordance with international best practices, but the results have been modest so far, indicating further regulatory challenges. This is mainly related to the high cost (10 USD) associated with number portability, which apparently deterred telecommunication operators from encouraging number transfer.³⁴

Lack of framework to promote entry by facilities-based competitors³⁵

The Senegalese telecom regulatory framework will require a well-defined approach for regulating wholesale markets. In particular, the regulatory framework still needs to develop the adequate tools for identifying essential facilities (non-

³³ The NCC has lost national enforcement powers in favor of the WAEMU Commission in 2000. Since then the NCC may only conduct preliminary investigations and market analyses subject to the WAEMU Commissions' instructions.

³⁴ ARTP. 2017.

http://www.artpsenegal.net/index.php?option=com_content&view=article&id=304:communiquer-de-presse-la-portabilite-un-an-apres&catid=9:infos-flash&Itemid=162

³⁵ Facilities-based competition (also called infrastructure-based competition) refers to competition between providers of the same or similar services through different networks.

replicable assets) and for allowing regulated access to those assets by competitors on a fair and non-discriminatory basis. Even though Sonatel has been declared a dominant operator, ARTP has not imposed conditions on infrastructure sharing. Furthermore, the Telecommunications Code is unclear about the applicable procedure (or the cost) for setting-up a cable landing station or accessing a submarine cable. International experience demonstrates that where access to international gateway has been opened to competition, prices dropped, and demand went-up.³⁶ For example, when Chile fully opened international services to competition, the weighted average call charges to major destinations declined by 50 percent between 1991 and 1998, and traffic increased fourfold;³⁷ Singapore's opening of international gateways to competition led to more players entering the market and to a drop greater than 90 percent in international dialing charges since 2000, whilst charges for international private leased circuits dropped by around 95 percent.³⁸ Although Sonatel does not have a legal monopoly over the operation of a submarine cable landing station, the absence of a clear regulatory framework in this regard increases uncertainty, thus limiting entry, and potentially reinforcing the incumbent's position. The use of government backbone infrastructure by private operators would also help operators build a national (virtual) network for data transmission services. However, the current regulatory framework lacks clarity regarding the possibility of regulating access to State-owned infrastructure under the Telecommunications Code, which has led to unused digital spare capacity.³⁹

Restrictions in competition between last-mile providers

Furthermore, the way in which licenses and authorizations are granted will require further clarifications to enhance pro-competition outcomes. According to the 2017 amendments to the Telecommunications Code, the ISPs are now subject to an authorization to enter the market. This represents an important step in the right direction.⁴⁰ Going forward, the regulatory framework governing the issuing of an authorization should be broadened so that it applies to all administrative procedures where no scarce resources, such as frequencies, are involved and can benefit from further clarifications. Further, market entry by MVNOs should only be subject to a general authorization regime, instead of a cumbersome procedure as provided by the current licensing regime.

Spectrum management

Senegal should take full advantage of the existence of available adequate radio spectrum to deploy a full 4G network and assign the respective radio frequencies competitively. Granting access to spectrum to those operators that will use it in the most efficient way is important to reap the benefits from wireless broadband technologies. For this, it is important to ensure a competitive selection process that minimizes potential negative effects on competition either by granting a first-mover advantage to

³⁶ See World Bank Group/African Competition Forum ('ACF'), Breaking Down Barriers - Unlocking Africa's Potential through Vigorous Competition Policy, 27 July 2016, p. 111.

³⁷ World Bank Working Paper No. 42, "Competition in International Voice Communications", 2004, p. 7.

³⁸ <http://www.itu.int/itu-news/manager/display.asp?lang=en&year=2009&issue=01&ipage=26>

³⁹ In this respect, the Government and ADIE have adopted an Arrêté establishing a Committee to handle this topic.

⁴⁰ New Article 32 bis of the Telecommunications Code (introduced by Law 2017-13).

an operator or applying methods that can alter the competitive environment and reinforce dominance. It is also important that spectrum fees are clearly calculated, and that their value is aligned with other countries from the region, in order to foster market entry and limit the risks of MNOs passing-on the costs incurred to consumers. In 2016, Senegal lagged behind 32 African countries that had already developed 4G networks, including neighboring countries such as Ivory Coast, Ghana, Gambia and Benin. So far, only the former telecoms incumbent, Sonatel, has been awarded frequency rights to deploy a 4G network. This assignment resulted from a direct negotiation between the Government and Sonatel concerning the renewal of its global license (fixed and mobile) in 2016 following a failed attempt to assign spectrum competitively. This ad hoc form of assignment may not lead to better value for money, as there is no competition for the spectrum rights. Furthermore, it can strengthen Sonatel's market power and weaken its competitors, by giving the incumbent a time advantage vis-à-vis its competitors in terms of consolidation of a 4G network. In addition, it appears that the Government has chosen to sideline ARTP by directly negotiating with Sonatel, which may affect the technical independence of the telecoms regulator.

Safeguarding against concentration of spectrum in the hands of a few players may also allow for a more efficient use of spectrum. No spectrum licenses have been assigned to newcomers, but given available spectrum, Senegal could benefit from reassessing its spectrum management policy and optimize its use for the delivery of current and future services. In tandem, Senegal could also benefit from the introduction of market-based mechanisms that could encourage a more efficient use of spectrum, namely by opening the possibility for spectrum trading and leasing, subject to ARTP's monitoring, and by increasing the flexibility of ARTP's licenses by not locking them to a specific technology (unless necessary for interference reasons). Furthermore, a framework governing unlicensed spectrum is not yet in place, but this becomes increasingly important in light of recent technological developments, such as the Internet of Things (IoT), which relies on the availability of unlicensed spectrum.

Further, the need for adequate resources of ARTP coupled with an institutional structure and technical capabilities that are shielded from undue public and private influence would ensure a more effective application of the current regulatory framework. For instance, decisions on licenses and authorizations are taken by a non-independent Commission consisting of representatives of the Government and the President of the Republic.⁴¹ In addition, the Board of ARTP is often overshadowed by ARTP's Director General, a body which is directly appointed by the Executive with far-reaching investigative and organizational powers.⁴²

Finally, limited information at the consumer level (households and businesses) can hinder the estimations of potential costs and benefits stemming from Government interventions. In this regard, business and household surveys including relevant questions to allow the Government to conduct quantitative assessments of the effects of their policies could be implemented.

⁴¹ Article 24 of the Telecommunications Code.

⁴² Telecommunications Code, Article 159 and 165.

A proposed agenda of pro-competition reforms

To tackle economy-wide and sector specific competition policy issues, **the following tables provide a series of actionable and prioritized pro-competition solutions** based on their feasibility in the short and medium-term that are aiming to **(i) promote a level playing field in selected sectors (groundnuts and telecommunications sectors); and (ii) enhance the effectiveness of current competition policy and law.**

1. Groundnuts

Table 1: Recommendations on market solutions to address key bottlenecks in the groundnut value chain

Recommendation	Responsibility	Priority
Certified seed availability		
1.1 Review reasons that ISRA does not produce sufficient pre-base seed to fulfil market demand.	Ministry of Agriculture and Rural Equipment (MAER), ISRA	High
1.2 Implement a pricing mechanism for pre-base seed that allows ISRA to satisfy demand for seed and cover costs. As a complementary measure, put in place mechanisms of traceability and transparency, e.g. a seed e-platform.	MAER, ISRA	High
1.3 Consider whether ISRA could provide breeder seed to private players to allow for increased production. As a complementary measure, identify ISRA's public good elements and allocate funds.	MAER, ISRA	High
1.4 Refine and operationalize subsidy schemes that allow for competition between distributors/seed companies, e.g. voucher scheme.	MAER	High
1.5 Allow private sector to choose geographical allocation of seeds based on demand, except in the case of market failures.	MAER	Medium
Fertilizer availability		
1.6 Review the costs and benefits of maintaining restrictive formula specifications in Government tenders.	MAER	High
1.7 Consider allowing bulk blends for tenders.	MAER	High
1.8 Formally delink tender award for subsidized fertilizer distribution from bidder's choice of supplier.	MAER	High
1.9 Operationalize subsidy schemes which allow for competition between distributors and greater choice for consumers, e.g. voucher scheme.	MAER	High
1.10 As a complementary measure, consider state support for inputs (fertilizers and seeds) in the context of contract farming schemes to promote diversification, and the dissemination of climate-smart agricultural technologies, especially to boost production in areas affected by climate shocks.	MAER, ISRA	High

Farmer incomes		
1.11 Consider reforming export restrictions, such as the export tax on groundnuts.	Government	High
1.12 Review the role of the CNIA in the development of the sector. Develop guidelines on its mandate to rationalize its involvement in determining market parameters (e.g. prices and geographic allocation) and on exchange of information in order to minimize the risk of facilitating anticompetitive outcomes.	CNIA, CNIA stakeholders, MAER	High
1.13 Review membership of the CNIA and develop guidance to ensure adequate representation of producers and new/potential entrants.	CNIA, CNIA stakeholders	High
1.14 Remove restrictions that limit the number of buyers in a specific area (e.g., collection point restrictions specified by CNIA), including those affecting exporters.	CNIA, MAER	Medium
1.15 Strengthen the efficiency of input distribution markets and access to finance during sowing seasons.	MAER	Medium
1.16 As a complementary measure, promote contract farming and better risk sharing between producers and buyers by encouraging them to become involved in production financing.	CNIA, CNIA stakeholders	High
Throughput for local processors and building local value addition ⁴³		
<p>Overall drivers of throughput for local processors and building local value addition:</p> <ul style="list-style-type: none"> - Competition in local processing drives efficient allocation of resources and boosts productivity - Competition in market for buying from farmers encourages participation of efficient firms in local processing <p>These drivers can be achieved through implementing recommendations above– plus the following additional reforms...</p>		
1.17 Accelerate incentives to increase the production of quality seeds to ensure adequate volumes for the local industry. Hence, facilitate competition between oil producers and other buyers, including exporters.	MAER	High

⁴³ In addition to the recommendations listed below, consider maintaining the removal of the purchasing subsidy for oil processors (in line with the previous policy).

1.18 Set clear objectives for state support to the industry through transparent criteria to minimize distortions, in the framework of contracts.	MAER, Ministry of Finance	High
1.19. Consider removing set minimum farmgate price, while putting in place mechanisms to protect producers' income (e.g. social protection measures; production and export insurance; warehouse receipts).	CNIA, MAER	Medium
1.20. As a complementary measure, consider investing in improving quality standards and mechanisms for the detection and control of aflatoxin; setting a strategy to respond the growing demand of the confectionery industry; and leveraging on digital economy opportunities to reduce costs and increase productivity.	MAER, Ministry of Finance	High
Consumer prices for oil		
1.21 In addition to previous recommendations... Consider removing import tariffs on crude (and potentially refined) vegetable oil.	Government	Medium

2. Telecommunications

Table 2: Recommendations for the telecommunications sector

Recommendations	Responsibility	Priority
Entry and level playing field between services-based competitors		
2.1 Focus regulation on markets that need it. Markets should meet the 'three criteria test': (1) high and non-transitory barriers to entry; (2) market structure does not tend towards effective competition; (3) inadequacy of competition law to tackle market failures.	Government and Parliament	High

<p>2.2 Refocus ex ante regulation on SMP operators. Alleviate the regulatory burden that falls on operators without SMP.</p> <p>ARTP could consider (i) imposing obligations on Sonatel to grant fair, transparent and non-discriminatory access to the non-replicable infrastructure and assets it owns (including civil engineering, such as ducts and poles); and (ii) setting-up lower termination rates to mitigate the club effects which currently favor Sonatel's network and increase the risks of anticompetitive behavior.</p>	ARTP	High
<p>2.3 Analyze effective competition to declare SMP. Considering eliminating in the Telecommunications Code 25-percent-market-share presumption of dominance or replacing it by a rebuttable presumption of 40%.</p>	Government and Parliament	Medium
<p>2.4 Boost the technical independence of ARTP.</p> <p>Ensure check and balances and implement a transparent and technical selection process to appoint Board members and the Director and involve the President of the Republic in the selection of all Board members.</p> <p>Undertake a functional review of ARTP to identify areas for making its mandate more effective.</p>	Government and Parliament	High
<p>2.5 Adopt the bylaws necessary to ensure the effectiveness of the Telecommunications Code to open markets to competition (e.g. applicable costs to termination rates and charges for access to infrastructure, spectrum assignment rules and fees, integrate asymmetric regulation principle).</p>	Ministry of Post and Telecommunications (MPT)	High
<p>2.6 Strengthen powers to investigate and sanction anticompetitive conduct (e.g. margin squeeze, refusal to deal)</p>	ARTP with support of MTP	Low
<p>2.7 Promote a clarification or a change in regional rules regarding the competences of Senegal's authorities with powers to enforce the national competition rules (notably, the National Competition Commission and the ARTP in the telecom sector) vis-à-vis the WAEMU Commission</p>	Government and Parliament	High
<p>2.8 Develop mechanisms of collaboration both at the regional level (National Competition Commission (NCC)/ ARTP with the WAEMU Commission), and at the national level (NCC, ARTP, other sectoral regulators). This collaboration could involve memoranda of understanding (MoUs) on how these bodies will exercise their</p>	ARTP, NCC, WAEMU Commission	High

functions when dealing with issues involving the enforcement of competition rules, exchange of information, development and exchanging of skills and expertise, etc.		
Entry by facilities-based competitors		
2.9 Identify services where regulation can allow for facilities-based competition or support services-based competition.	MPT	High
2.10 Evaluate developing a framework for broadband support that prevents negative effects on private investment.	ARTP	High
2.11 Prevent cross-subsidization between competitive and non-competitive market segments. Identify public service obligations.	ARTP	High
2.12 Consider implementing principles of the “Ladder of investment” to accompany the entry of new players, notably ISPs, MVNOs.	ARTP	Medium
2.13 Clarify the regulatory regime applicable to State-owned infrastructure to facilitate access (e.g. network of the Agence de l’Informatique de l’État - ADIE).	ARTP	Medium
2.14 Consider regulating Sonatel’s passive infrastructure under open access principles (considering essential facilities).	ARTP	Medium
Competition between last mile providers e.g. ISPs/MVNOs		
2.15 Rationalize administrative control of entry for ISPs and MVNOs.	MPT and ARTP	High
<ul style="list-style-type: none"> • The scope of the authorization regime should be broadened so that it applies to all administrative procedures where no scarce resources, such as frequencies, are involved. Market entry by MVNOs should only be subject to a general authorization regime • Continue the process of streamlining entry by setting a general authorization regime with minimal requirements at any time for the facilities-based or services-based operators without quantitative limitation and without geographical restriction. • Only scarce frequencies, some infrastructure segments and some areas (low density) (which would be identified by ARTP after in-depth specific analysis) should require calls for tenders. 		

- There should be no decision on the number of market players when no scarce resources (spectrum) are involved.
- Ensure a technical and agile assessment for granting licenses by ARTP and the Commission with representatives from the Government and the President of the Republic.

Spectrum management

2.16 Design a spectrum management policy so to facilitate the access to spectrum to those operators that will use spectrum in the most efficient way and considering technology neutrality.	MPT and ARTP	High
2.17 Design and adopt open competitive tenders for spectrum assignment, with provisions to allow for new entry.	ARTP & spectrum management agency (MPT)	High
2.18 Review and reform spectrum pricing principles to incentivize efficient use of spectrum – including separating management fees (based on administrative costs) from usage fees (based on either market-determined or administratively-calculated economic value); allowing for spectrum trading and leasing subject to ARTP's monitoring; and adopt more flexible spectrum licenses that do not lock operators into a particular technology (unless justified by interference reasons).	ARTP & spectrum management agency (MPT)	Medium
2.19 Develop a framework for unlicensed spectrum that can address the challenges posed by new technological developments (e.g. Internet of Things)	ARTP & spectrum management agency (MPT)	Medium
2.20 Design a package of measures and launch a process to allow for entry of a fourth mobile 4G+ operator	ARTP & spectrum management agency (MPT)	Medium

3. Cross-cutting pro-competition regulations, competition policy and law

Table 3: Recommendations to improve pro-competition regulations and the competition policy and legal framework

Recommendation	Responsibility	Priority
Cross-cutting pro-competition regulations		

3.1 Continue assessing barriers to competition and identifying alternative Government interventions to minimize competition distortions and to facilitate competition and entry in network industries (e.g. energy), retail and professional services markets.	Government	High
Competition policy and legal framework: WAEMU level		
3.2 Develop efforts within WAEMU to approve legislation delegating powers to national competition authorities to investigate and decide on anticompetitive practices that occur on the national territory and do not have cross-border effects.	Government	High
3.3 Press for the issuing of rules at the WAEMU level regulating cooperation between the WAEMU Commission and national competition authorities.	Government	High
3.4 Press for the strengthening and adequate resourcing of the WAEMU Commission to enhance competition enforcement.	Government	Medium
Competition policy and legal framework: National level		
3.5 Encourage NCC to carry out market studies and improve communication and collaboration with sector-specific regulators and other Government institutions to address competition issues.	NCC	High
3.6 Depending on the clarification of regional vs. national powers, consider setting up an independent NCC with the adequate financial, human and technical resources to make it fully operational in terms of competition law enforcement.	Government	High
3.7 In a scenario where the Competition Act would become enforceable, review the competition law in order to align with international best practice (e.g. provisions on abuse of dominance, prohibition of cartels, adequate sanctions).	Government and Parliament	High

1. Introduction

1.1 Objectives of the Report

6. This report reviews the status of competition policies and their effectiveness in promoting functioning markets and more efficient resource allocation in Senegal. It provides insights into the restrictiveness of Government regulations and policies that affect product markets across the economy and in two selected sectors (groundnut and telecommunications sectors) and also into the effectiveness of the competition and antitrust framework.

7. The objective of the report is to identify actions to enhance competition conditions and to support pro-competition Government policies so that private sector participation delivers larger benefits to the economy, boosting consumer welfare, productivity, competitiveness, investment, and jobs. Given that trade policies can unlevel the playing field, the assessment will also aim at ensuring that competition and trade policies are designed in a coherent manner.

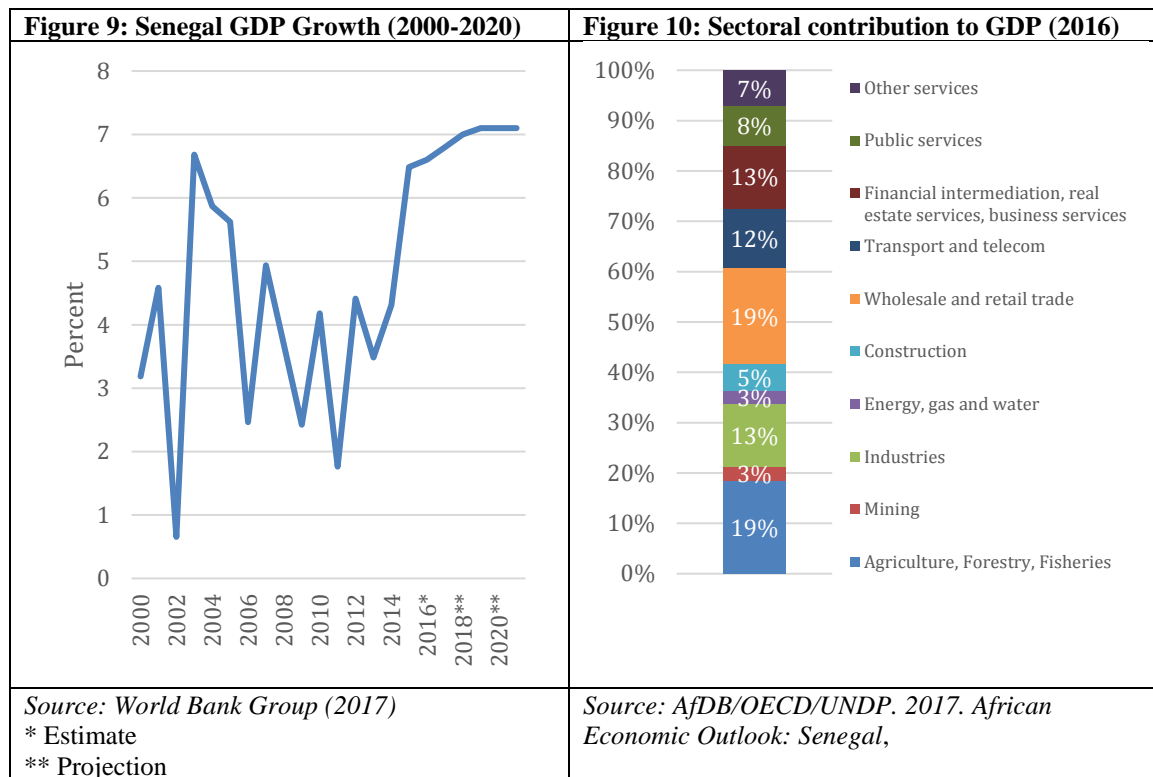
8. The report also aims to support the Government of Senegal’s ongoing actions to eliminate barriers to competition that reduce the welfare gains of private sector participation in the economy and affect consumer welfare. Following the World Bank Group’s Markets and Competition Policy Assessment Toolkit (MCPAT), the report will provide a general assessment of the regulatory framework across the economy and in key input sectors, using Product Market regulations (PMR) indicators as entry points, and will review the effectiveness of the competition policy and legal framework. Given that Senegal’s antitrust framework is not currently functional, there is a need for the Government to ensure that its interventions incentivize competition. Therefore, the report will also provide an analysis of competition and market dynamics in two selected sectors that are high on the Government’s policy agenda: groundnuts and telecommunications. Finally, it will provide a sequence of pro-competition policy solutions that would contribute to the Senegalese economic development agenda as well as a quantification of effects associated with the implementation of selected recommendations.

1.2 Economic Overview

9. Economic growth in Senegal has surged over 6 percent since 2015 – and the trend is expected to continue in 2018 and beyond. GDP growth between 2005 and 2015 had averaged 4 percent (Figure 9). Growth reached 6.2 percent in 2016 and 7.2 percent in 2017,⁴⁴ led by the primary sector with around 13 percent of growth, boosted by fishing and agriculture. The secondary sector also grew rapidly at 4.5 percent supported by food; chemicals and extractives (phosphates and gold). Services grew at 6.6 percent thanks to

⁴⁴ These numbers refer to the new, rebased GDP series that were published recently, covering 2014-2016, and including 2017 estimates.

transport and financial and intermediation services. For the years between 2018 and 2021 the projected growth rates are around 7 percent (IMF, 2017). Demand components are expected to remain robust, led by exports and total investment. Ongoing reforms, higher total investment, and adequate climate conditions help explain this performance. Downside risks include rising oil and food import prices. The services sector is the largest contributor to GDP, within which wholesale and retail trade is the largest sub-sector, contributing roughly as much to GDP as agriculture (Figure 10).



10. Strong growth has led to a substantial decline in poverty. Given a 4 percent average GDP growth rate during 2005-2015 and population growth in the same period of 2.9 percent,⁴⁵ poverty remained at roughly 38 percent of the population during the same period using the international \$1.90 per day poverty line.⁴⁶ However, the picture appears to be changing. Following growth above 6 percent in 2015,⁴⁷ poverty has begun to decline markedly. Since 2011, poverty has fallen from 38 percent to its current rate of around 34.5 percent and is projected to fall further.⁴⁸

11. Past moderate growth weighed heavily on the ability of the economy to create jobs, but policies that foster competition can spur job growth. In 2016, Senegal's employment ratio was estimated at only 51.8 percent, indicating that about one in two

⁴⁵ World Bank. 2017. *World Development Indicators*

⁴⁶ World Bank. 2017. *World Development Indicators*; Data are only available for the years 2005 and 2011

⁴⁷ IMF. 2017. *Article IV Review*.

⁴⁸ World Bank. 2017. *World Development Indicators*

individuals of working-age were working any job.⁴⁹ Product market reforms that boost competition tend to boost employment in the long term. This conclusion is confirmed in both theoretical models (Spector 2004; Blanchard and Giavazzi 2003)⁵⁰ and empirical work (Griffith, Harrison, and Macartney 2007; Fiori et al. 2012; Nicoletti and Scarpetta 2005).⁵¹ The basic intuition is that more intense competition lowers prices toward marginal cost, increasing the output demanded by consumers and, therefore, the labor demanded by producers. Lower prices also raise real wages, which can increase the supply of labor.

12. The mixed results regarding economic growth in Senegal have been related to enduring structural constraints, persistent infrastructure gaps and a lack of economic diversification away from agriculture. Macro-fiscal policies have supported growth and Senegal benefits from other factors such as its coastal location and its 1,500 km of optic fiber network. However, structural constraints seem to have undermined the efficiency of investment and sustained growth. For instance, growth in agriculture has been slow and volatile, and productivity gains scarce, despite the high potential of the sector and its important share of jobs. Furthermore, the country does not take full advantage of existing infrastructure. This is the case, in particular, of the ICT infrastructure, including the important public optic fiber network. For the future, a key challenge for Senegal is to undertake structural reforms to reduce its vulnerability to exogenous shocks, foster economic diversification, translate sustained economic growth into job creation and a reduction in extreme poverty.⁵²

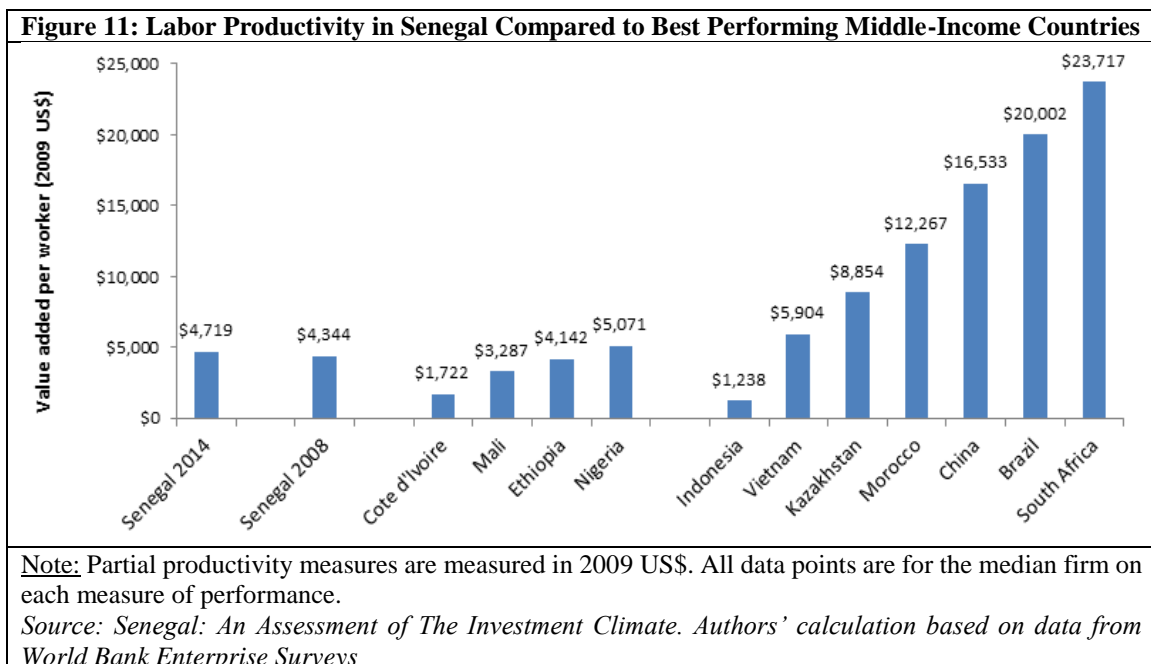
13. Capital accumulation was the main growth driver, with little or negative contribution from Total Factor Productivity (TFP) growth and human capital accumulation. An analysis based on World Bank's Enterprise Surveys from the Investment Climate Assessment for Senegal 2016 suggests limited change in terms of labor productivity between the 2005, 2007 and 2014/15 enterprise surveys. Overall, it seems Senegalese firms are relatively productive compared to West African peers, but fall below in terms of performance compared to firms in non-African emerging markets (Figure 11).

⁴⁹ World Bank. 2017. *World Development Indicators*; Due to the absence of labor data, it is not possible to compute the usual labor market indicators such as unemployment and labor force participation rates. The employment to working-age population ratio is reported as a proxy of labor market activity. In the case of Senegal, such a ratio is at the lower end of the distribution – it is considerably lower than the mean of most countries, both low-income (0.72) and high-income (0.56).

⁵⁰ The long-term positive effect found by Blanchard and Giavazzi (2003) assumes a reduction in entry costs.

⁵¹ The applicability of these results outside the OECD is not clear. One might expect the effects of product market regulation to be more modest in developing countries, for example, due to greater informality and a lower capacity for supervision.

⁵² IDA Program Document –Concept Stage for a Proposed Credit to Senegal, Multi-Sector Structural Reforms DPO, July 2016. <http://documents.worldbank.org/curated/en/813071472550399966/pdf/AB7863-PGID-P159023-Concept-Box396304B-PUBLIC-Disclosed-8-29-2016.pdf>



14. Trade performance has also been mixed. Senegal inherited a system of specialization and protection (e.g. with groundnuts supplying the European market) that was challenged first at the time of independence and then with the progressive reduction of international barriers to trade, including a suppression of quotas. Senegalese industries that were not competitive were hurt, and the country entered a vicious circle of lagging competitiveness that required more protection. While in a world of global segmentation of production and global value chains (GVCs), the paradigm has become “import to export,” Senegal is still basing its trade model on self-sufficiency and import substitution. In 2017, for example, several import bans have already been put in place, including for carrots, onions, and potatoes. This lack of predictability of trade is a barrier to investment and competitiveness.

15. Senegalese exports have represented less than 30 percent of GDP over the past 15 years, which is below the average for Africa, but trade is relatively diversified given Senegal’s level of development. Growth of exports has been driven by both goods and services – with the latter now representing one third of total exports. Refined petroleum oils represent Senegal’s main export (19 percent in 2016), followed by fish (13 percent), gold (12.3 percent), cement (7.9 percent), phosphoric acid (7.3 percent), and agricultural or food products. With regard to the destinations of exports, Senegal primarily exports to the West African region (led by Mali) and to Asia and Europe (see Figure 79 in Annex 1).

16. Barriers to competition and trade can affect Senegal’s capacity to export. This is true not only of barriers directly affecting the product to be exported, but also of barriers affecting products and services upstream and downstream in the value chains. Barriers to competition also affect the country’s capacity to upgrade and move towards the center of

the product space (i.e. towards the production of more sophisticated products).⁵³ For example, Senegal has the capabilities (skills and technologies) to become a globally competitive exporter of palm oil or margarine, but distortions associated with regulations and trade barriers in certain sectors and markets (e.g. groundnuts) affect the development of these industries. From a value chain perspective:

- Upstream barriers to competition affect the competitiveness of downstream sectors (for example, obstacles in telecommunications affect competitiveness in IT-enabled services); and
- Downstream barriers to competition affect the country's capacity to diversify, upgrade and add domestic value (moving towards the center of the product space through for example, the development of local processing capacities, which could allow Senegal to move from the exportation of fresh fish to fillets or processed fish).

Figure 77 in Annex 1 shows the product space of Senegalese exports. It confirms the relative diversity of its exports, but also reveals a confinement of the country to the periphery of the product space, with very few value chains that have been fully developed towards the center of the product space (mainly in agriculture, food products, animal skins, and fisheries).

17. Acknowledging the need to sustain structural reforms, the Government launched the “Plan Sénégal Emergent” (PSE) in 2014. It provides a framework to address the country's development challenges and is articulated around three pillars: (i) higher and sustainable growth and structural transformation, (ii) human development, and (iii) governance, peace and security. According to the PSE, economic activity would be driven by an expansion of globally competitive production allowing increased exports, and by investment in new sectors. With the PSE, Senegal aims to become an emerging country by 2035. For this to happen, growth rates of 7-8 percent are required, in a context of higher productivity and competitiveness. Further, as part of the PSE, the Ministry of Posts initiated the formulation of a national strategy document for development of the digital economy, “Sénégal Numérique 2016-2025” (SN 2025), to increase access to and use of broadband internet services in Senegal. The strategy intends for the digital economy to generate 10 percent of Senegal's GDP by 2025.⁵⁴ With regard to the groundnut sector, the second sectoral focus of this analysis, the Government is currently developing a new strategy encompassing profound reforms to the sector which this analysis will inform.

⁵³ The Product Space maps a country's exports and quantifies the relatedness of products with a measure called proximity. Proximity of products within the Product Space reflects similarities in technologies and inputs used to produce them. For example, fruits and vegetables are highly proximate—the technologies and inputs used to produce melons for export could be readily shifted to the export of other fruits and vegetables but could not be shifted to the production of iron ore. At the periphery of the product space are the least complex products, and at the center the most complex ones. Once a country has moved towards the center of the product space where proximity between products is higher, it also becomes easier to diversify. See also: https://en.wikipedia.org/wiki/The_Product_Space.

⁵⁴ The strategy aims for 75 percent of its cost to be funded by the private sector, 15 percent to come from the public sector, and the remaining 10 percent to be mobilized through public-private partnerships. In connection with the new digital strategy, the Government aims to establish an umbrella governance body for the ICT sector, with the creation of the “Conseil National du Numérique”, gathering both public and private stakeholders to guide and monitor the implementation of the Strategy.

18. In this context, reforms which could remove barriers to well-functioning markets both economy wide and in key sectors are important in enhancing growth and private-sector development.⁵⁵ Both the PSE and the strategy SN 2025 expressly acknowledge the importance of the business environment and SN 2025 specifically emphasizes the need for competition. The PSE is off to a good start, but further reforms will be required to sustain the current momentum. Particularly, space for private domestic and foreign investment needs to be created.⁵⁶ The PSE recognizes the need for improvements to the business environment and for an “active management of competitiveness indicators.”⁵⁷ The plan also calls for “guaranteeing the conditions for healthy competition,”⁵⁸ which is picked up by SN 2025, which calls for “healthy and increased competition.”⁵⁹ Therefore, this Markets and Competition Policy Assessment aims at providing an analysis of economy-wide and sector-specific constraints to competition to help support the Government’s development priorities.

2. Competitive Markets Matter for Economic Development in Senegal

19. Market competition is a key driver for achieving greater innovation, productivity, and economic growth. Greater competition is enabled through a comprehensive competition policy framework that includes a set of policies and laws ensuring that competition in the marketplace is not restricted in such a way as to reduce economic welfare.⁶⁰ In practical terms, competition policy involves: (i) the promotion of measures to enable contestability, firm entry and rivalry; (ii) the enforcement of antitrust laws (typically rules against abuse of dominance and anticompetitive agreements, and merger control), and (iii) competitive neutrality and state aid control (see Figure 12 below).⁶¹ It is worth noting that the ultimate aim of competition policies is not to increase the number of firms in a market or to eliminate market power to achieve a theoretical state of perfect competition. Their final goal is to generate the right incentives for firms to

⁵⁵ With regard to the challenges facing Senegal’s agriculture, the PSE acknowledges the relationships between the agricultural sector and the other branches of the economy, in particular with agro-industries, as well as its spillover and leveraging effects on other sectors of activity (transport, trade, etc.). For that reason, the PSE highlights the role of “agro-poles” as the driving force of industrialization in Senegal through enhancement of agricultural added value; it provides for the creation and development of three integrated and competitive agro-poles focused on high-potential value chains (livestock, fruits and vegetables, fisheries and aquaculture). These agro-poles will serve as enterprise incubators providing facilities and services with the main objective of strengthening and supporting agro-industry value chains, and promoting commercial farming among local and regional producers through integrated training plans, capacity building and the establishment of appropriate PPP financial schemes. To this effect, the strategic choices of PSE in terms of industrialization have been mainly directed towards the development of industrial parks and the promotion and upgrading of high-potential value chains that can attract foreign and domestic investors.

⁵⁶ IMF. 2017. *Article IV Review*.

⁵⁷ Republic of Senegal. 2014. *Plan Sénégal Emergent*, p. 81.

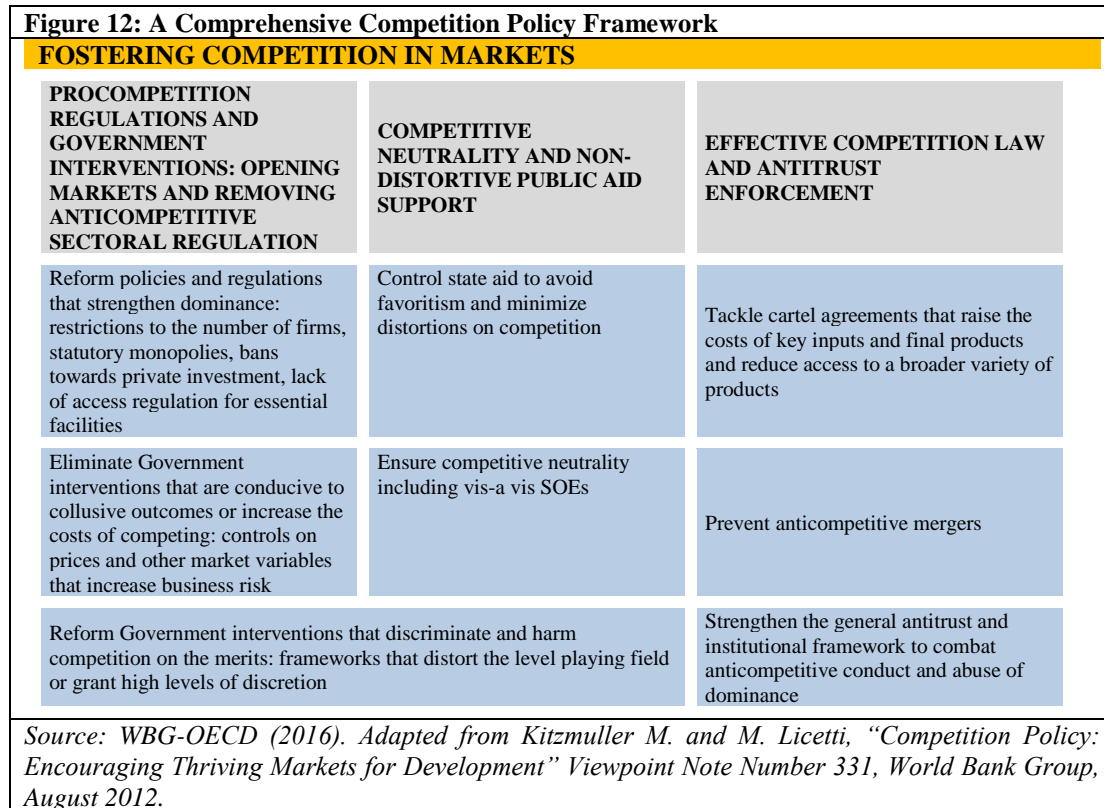
⁵⁸ Republic of Senegal. 2014. *Plan Sénégal Emergent*, p. 80.

⁵⁹ Republic of Senegal. 2016. *Sénégal Numérique 2016-2025*, p. 25.

⁶⁰ Motta, M. 2004. *Competition Policy*. Cambridge Books, Cambridge University Press.

⁶¹ For more details on competition advocacy, see International Competition Network. 2009. *Report on Assessment of ICN Members’ Requirements and Recommendations on Further ICN Work on Competition Advocacy*. Presented at the 8th Annual Conference of the ICN, Zurich (June).

improve their economic performance vis-à-vis their actual and potential rivals and in so doing deliver the best outcomes for consumers and the economy as a whole.



20. Enhanced competition and more effective competition policies can play a key role in achieving a healthy investment climate in Senegal, while significantly contributing to the diversification of trade and production. Since the competitive environment in any country will be affected by Government interventions⁶² (such as policies and regulations), Governments can implement pro-competition market regulation⁶³ to varying degrees in any country. Governments can impact market outcomes either through direct participation (as a buyer or supplier of goods and services), or through indirect participation (for example, through regulation, taxation, subsidy or other influence using various policy and regulatory instruments). Both types of interventions have an effect on competition dynamics.⁶⁴ Regulations that enable firm entry and rivalry combined with

⁶² Consistent with the World Bank Markets and Competition Policy Assessment Toolkit (MCPAT), Government interventions described in this section are considered to include Government policies, regulations, rules, procedures and actions of Government officials that affect decisions made by market players regarding economic matters.

⁶³ Procompetitive regulations are those that are designed to achieve public policy objectives whilst minimizing the extent to which the regulation hinders competition, or those that are set with the explicit objective of increasing entry or the degree of rivalry in a market.

⁶⁴ Government interventions include Government policies, regulations, rules, procedures and actions of Government officials that affect decisions made by market players regarding economic matters. In addition, rules set by the private sector also affect market functioning. The World Bank's Markets and Competition

the enforcement of competition laws that deter anticompetitive behavior, can raise the efficiency of product and input markets. The application of rules that guarantee competitive neutrality in markets with state-owned enterprises can further help firms to enter, expand and diversify based on their merits. By contrast, rules that discriminate against certain firms in favor of vested interests can hinder economic diversification. Lack of political will, institutional capacity constraints and limited regulatory powers can also affect the design and impact of competition policy reforms. The type of competition policy intervention required will depend on the specific market (or policy) failure.

21. Competition policy addresses market or policy failures that facilitate the exercise of significant market power (jointly or unilaterally) by firms. Sometimes firms may resort to actions that increase their profits but reduce overall allocative efficiency, such as explicit cartel behavior (which is per se illegal) or oligopolistic mergers. The exercise of significant market power may increase prices, lead to deadweight losses and reduce allocative efficiency. Overall, competition and the implementation of competition policies generate economic benefits (see **Error! Reference source not found.** below).⁶⁵

Box 3: The Impact of Competition on Growth, Productivity and Job Creation

The economic benefits from competition are well documented. Firms operating in a competitive environment are more likely to innovate (Bassanini and Ernst, 2002, Bloom et al, 2011) and to increase their productivity (Acemoglu et al. 2006 or Aghion and Griffith, 2005). Competition boosts investment (Alesina et al, 2005), generates employment and ultimately speeds up economic growth and improves overall welfare. Empirical evidence strongly supports the positive effects of competition policy enforcement on productivity growth (Voigt, 2009 or Buccirossi et al, 2009). Tough enforcement against the practices of cartels, based on well-designed anti-cartel laws, for example, constitutes an effective tool to reduce the negative impact of anticompetitive behavior (Symeonidis, 2008, Alexander, 1994). Increased international competitiveness - and therefore more favorable terms of trade - is another important and positive effect associated with increased competition in domestic markets. Finally, consumers benefit from lower prices, direct savings and improvements in the variety and quality of goods and services. Consumers also find enhanced job opportunities and additional income as investors.

Anti-competitive practices also result in welfare losses for the economy as a whole. Price-fixing agreements among competitors impose significant costs on society. Connor, 2010, examines studies and judicial decisions on 381 cartelized markets worldwide and estimates a long-run median overcharge of 23.3% of prices above competitive levels. Estimations from the European Commission (2008) suggest that average productivity would fall by 13 percent in the presence of market sharing cartel agreements among member states. A recent study of the international market for coffee beans finds that the cartel's breakdown explains 49 percentage points of the 75 percent drop in the real coffee price between 1988 and 2001 (Igami 2011). Apart from increasing the cost of goods and services to conduct business, cartels are also associated with low labor productivity and reduced incentives to innovate (Broadberry and Crafts (2001); Evenett, Levenstein, Suslow (2001) and Symeonidis, (2003)). In a study of 42 countries, Kee and Hoekman (2007) found that in industries where competition rules were actively enforced, antitrust enforcement increased the number of domestic firms by 7.2 percent. Similarly, a 20 percent increase on an index scale—roughly equivalent to moving from the level of competition rules enforcement in the Czech Republic to that in the United Kingdom—resulted in total factor productivity growth of 1 percent.

Policy Assessment Toolkit (MCPAT) also covers potential effects of self-regulation schemes established by professional and business associations that affect incentives of market players to compete in a particular market.

⁶⁵ World Bank. 2016. *Economic Diversification Guidance Note*.

International experience shows that the introduction of a comprehensive national competition policy framework can bring substantial economic gains. Australia is one of the countries that serve as an example of successful implementation of a national competition policy framework. Estimates suggest that competition policy reforms boosted Australia's GDP by at least 2.5 percent or \$20 billion due to their effect on increased productivity and lower prices during the 1990s. Likewise, conservative estimates for the UK suggest that direct consumer savings resulting from the enforcement of competition law are worth USD 112 million a year. In the case of the Netherlands, the positive impact of the competition agency's actions on Dutch society is estimated at USD 426 million (a 3-year rolling average). Finally, recent studies also provide evidence that budgetary commitments to competition agencies and institutions yield economic benefits in terms of improved economic growth since they are associated with higher levels of per-capita GDP growth.

22. Further, the ability of trade reforms to encourage economic diversification and shared prosperity also relies on the intensity of domestic competition. A lack of domestic competition in intermediate sectors, including transport and distribution services, can hinder the transmission of international price signals to producers. Promoting domestic competition prevents sectoral misallocation between tradeable and non-tradeable sectors. Several studies provide evidence that competition can improve the distributional impact of trade liberalization by directing more benefits toward developing country producers and raising the relative wages of less-skilled workers.⁶⁶

23. At the same time, well-functioning markets are crucial to support integration in regional and global value chains (GVC), and allow for an increase in the share of domestic value-added embedded in exports. The effects of obstacles to competition are magnified in a trade environment that increasingly relies on GVC through different channels:

- Servicification⁶⁷ is the future of manufacturing. When industries go global, they need to source services in the various locations where they operate.
- Global value chains have entered a phase of consolidation. New winners are the countries able to offer a “bundle of tasks” that includes multiple tasks along the value chain, with a blend of manufacturing and services tasks (e.g. logistics and marketing with assembly). Competition issues affecting one task affect all the other tasks that need to be bundled.

Half of services exports globally are now embedded in goods exports. Competitiveness in manufacturing or agriculture is dependent on services competitiveness. Stand-alone services exports also depend on competition in basic services: for example, the digital strategy and competitiveness in IT-enabled services will depend on how well the telecom sector functions.

⁶⁶ For a literature review, see World Bank. 2016. *A Step Ahead: Competition Policy for Shared Prosperity and Inclusive Growth*.

⁶⁷ The servicification of manufacturing refers to the manufacturing sector's increasing reliance on services, “whether as inputs, as activities within firms or as output sold bundled with goods.” (Miroudot 2017) Servicification of manufacturing has revolutionized the way companies produce value, especially within global value chains. See also: http://unctad.org/meetings/en/Presentation/c1mem5_2017_124_S3_Miroudot_2.pdf.

24. Last, but not least, competition policy reforms can deliver benefits for the poorest households and improve income distribution particularly in developing economies. Frameworks that enable competition help empower the poorer segments of society, increase their buying power, and give them greater economic opportunity. Uncompetitive consumer product markets harm families, especially the poorest ones, while more open markets benefit low-income households (Urzua 2013 using data on Mexico; Creedy and Dixon 1998, 2000; Argent and Begazo 2015 using data on Kenya). A lack of competition in food markets hurts the poorest households the most. Consumers pay artificially high prices for goods and services due to cartels (Connor and Lande 2010, 2012; Mncube 2013 based on South African data), and restrictive and burdensome product market regulations hold back job creation (Bertrand and Kramarz 2001; Blanchard and Giavazzi 2003; Nicoletti and Scarpetta 2005; Schiffbauer et al. 2015 for countries of the Middle East and Northern Africa). Empirical literature also shows that competition in input markets and between buyers helps farmers and small businesses (Begazo and Nyman 2016 based on a broad review of the empirical literature).

2.1 Improving the Market Functioning in Senegal

25. To address Senegal’s challenges at the macroeconomic level, notably sustaining high growth, and poverty alleviation, a deeper understanding of the microeconomic constraints affecting key sectors is needed. In a recent growth diagnostic,⁶⁸ the Millennium Challenge Corporation (MCC) identified micro risks, such as an unpredictable and inefficient regulatory environment, among binding constraints to growth in Senegal.⁶⁹ In its Article IV review, the IMF stated that that “for growth to be sustained, further reforms are needed to improve the business environment and create economic space for private domestic and foreign investment.”⁷⁰

26. Markets cannot achieve the best outcomes for producers, enterprises, consumers or the Government if competition is hampered. There are two broad reasons for the lack of competition in markets, each with different policy responses. First, regulations or Government interventions can disincentivize firms from competing and innovating. Following the World Bank’s MCPAT (Box 4 below), the next section provides some evidence for this to be the case in Senegal across the economy, focusing on groundnuts and telecommunications. While in the groundnut sector, certain Government regulations and intervention may advantage certain players at the expense of both producers and consumers, in the telecommunications sector regulations are not yet set in a way that allows for entry and access on equal footing by all players, or for the pro-competition use of scarce resources like spectrum. Second, firms can engage in anticompetitive behavior, for example by colluding with one another or abusing their dominant positions. An effective competition policy and law typically tackle such conduct;

⁶⁸ The Growth Diagnostics approach was developed at Harvard University by Ricardo Hausmann, Dani Rodrik, and Andrés Velasco and aims to identify the binding constraint to private investment and entrepreneurship in an economy. The methodology allows countries to prioritize development activities among many competing needs.

⁶⁹ Millennium Challenge Corporation. 2017. *Senegal Constraints Analysis Report*

⁷⁰ IMF. 2017. *Article IV Review*, Executive Summary

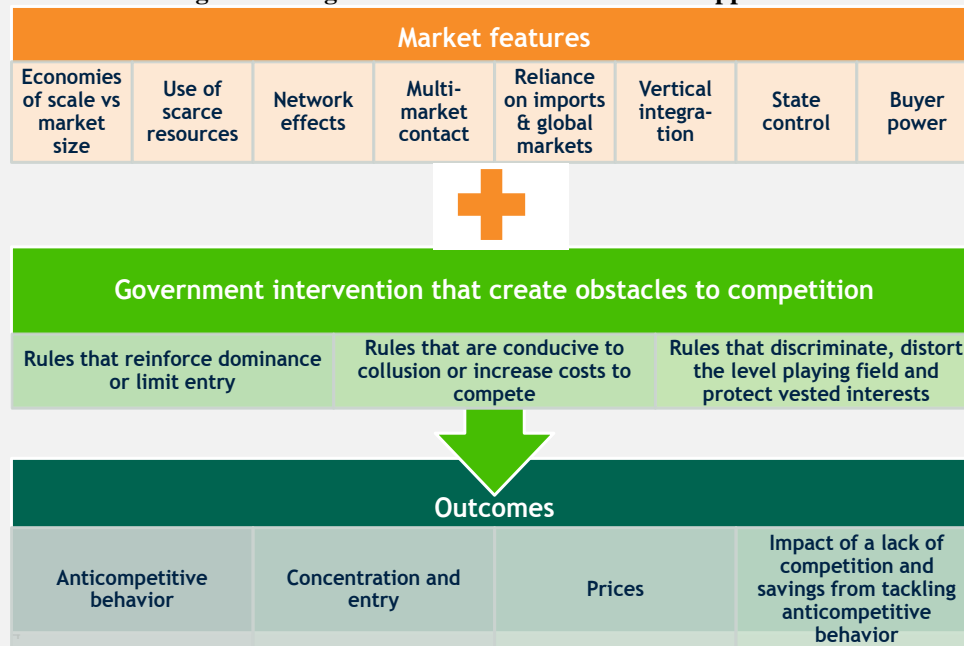
however, there is limited implementation of the Senegalese competition legislation to tackle most harmful anticompetitive behavior, as the last chapter of this report will show.

Box 4: The World Bank Market and Competition Policy Assessment Tool (MCPAT)

The MCPAT is a methodological instrument of analysis developed by the WBG Markets and Competition Policy team to identify specific problems at the market level and prioritize competition tools accordingly—markets to be prioritized as well as the tools vary by country – and in some cases, complement each other. Having a practical nature and a focus on implementation, this methodology has been developed based primarily on the experience of the WBG Markets and Competition Policy Team implementing pro-competitive reforms in more than 45 developing countries. Therefore, The MCPAT provides a standardized and comprehensive tool with which to understand i) competition dynamics created by market feature (including supply-side characteristics and buyer characteristics) and ii) identify and assess the potential anticompetitive effects of Government intervention in markets. The interaction between these two elements can then be analyzed to determine the risk of anticompetitive behavior, both in terms of collusion and exclusionary abuse of dominance.

This assessment can then inform the development and prioritization of effective strategies to promote competition through changes in policies, regulations, and rules.

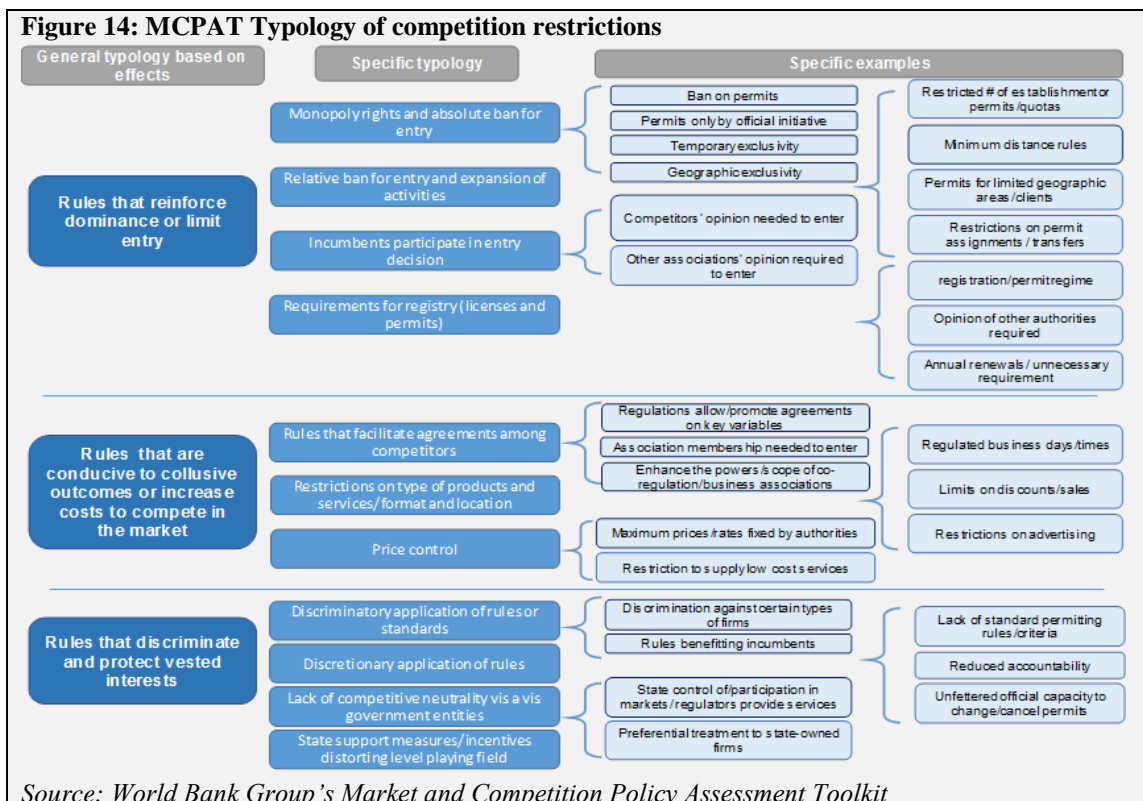
Figure 13: High level overview of the MCPAT approach



As described in Figure 14, the MCPAT builds on the identification of those rules and regulations that may have anticompetitive effects on the basis of the following typology:

- (1) Rules that reinforce dominance or limit entry;
- (2) Rules that are conducive to collusive outcomes or increase costs to compete in the market;
- (3) Rules that discriminate and protect vested interests.

Within each of these categories, specific sub-typologies of rules have been identified and illustrated with specific examples. This typology feeds into a holistic step-by-step methodology to promote competition reforms.



27. Pro-competition regulations and competition policy play a central role in enhancing the business environment and ensuring the effective functioning of markets. However, competition-perception indicators suggest that lack of market competition and inefficient anti-monopoly policy are obstacles to increased competitiveness and well-functioning markets. The World Economic Forum's (WEF) Global Competitiveness Report (GCR) 2017/18, a perception-based survey⁷¹ indicates that the effectiveness of anti-monopoly policy in Senegal is perceived to be low, receiving a score 3.5 out of 7 in the WEF's Global Competitiveness Index (GCI), which puts the country on par with regional neighbors Mali and Ghana, but behind The Gambia, which receives a score of 4.4. Senegal's perceived effectiveness of the anti-monopoly policy enforcement has declined over recent years from rank 70 in 2010/11 to rank 81 last year and now places Senegal on the 77th rank out of 137 economies.⁷² Similarly, in the Bertelsmann Foundation's transformation index, Senegal receives a score of 5.5 out of 10 (with 10 being the best) for "market organization." The measure is an assessment of market-based competition and anti-monopoly policy (among other factors), in which Senegal receives 4 and 6 points respectively, indicating a perceived lack of competition and of effectiveness of the current competition policy and law.⁷³

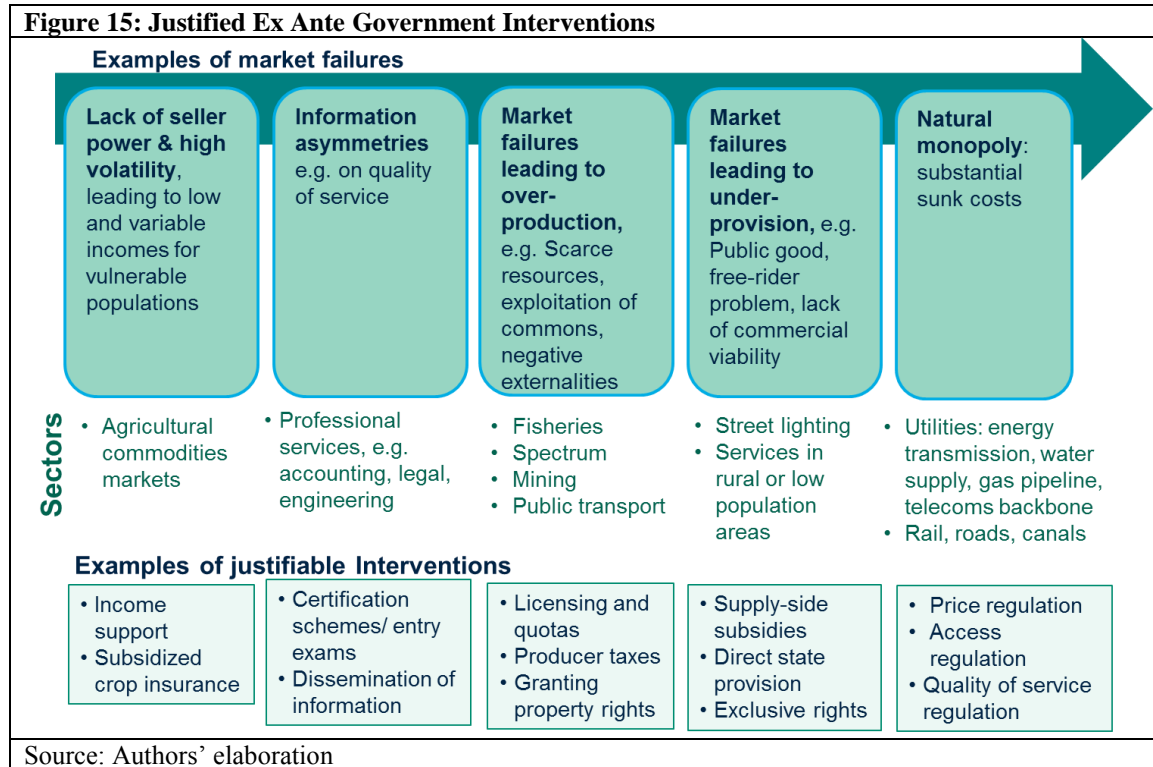
⁷¹ In the WEF's GCI, Senegal has improved slightly to a score of 3.8 out of 7 (with 7 being the best) after having stagnated at a score of 3.7 since 2012. In the World Economic Forum's (WEF) 2017/18 Global, Senegal now ranks 106th out of 137 countries, compared to 112th out of 138 in 2016/17 World Economic Forum. 2017. Global Competitiveness Index

⁷² A higher rank indicates a perceived deterioration of the policy dimension. World Economic Forum. 2017. Global Competitiveness Index

⁷³ Bertelsmann Transformation Index. 2016.

3. Regulatory Obstacles to Competition in the Senegalese Markets

28. Regulations can often be justified on social or economic grounds and are important to achieve relevant policy objectives. Regulations are usually driven by legitimate social and economic objectives, and may be justified by equity goals, such as poverty reduction, or by economic considerations, such as efficiency. Intervention may be justified by efficiency considerations when market forces alone cannot deliver the socially optimal outcome, for example in the case of market failures, such as natural monopolies, information asymmetries or the presence of negative externalities (Figure 15).



29. However, there are circumstances where policy interventions may have the unintended consequence of distorting competition and in turn harm welfare. In some cases, existing regulations (or a lack of regulation) may be the result of historical processes which have not taken into account distortive effects on markets. In other circumstances, the main market participants may exercise their lobbying power to influence rule setters (a phenomenon that the literature calls *regulatory capture*).⁷⁴ One of their goals usually is to obtain rules that reduce the degree of competitive pressure they face. However, reducing the level of competition is a very important cost that affects the private sector, consumers and the whole economy. It is thus fundamental for policy-makers to ensure that the costs of regulatory interventions will not outweigh the benefits, and to seek the alternative,

⁷⁴ The Chicago School pioneered the notion and theory of 'regulatory capture' (see Stigler, 1971), which was further developed by the Toulouse School (see Laffont and Tirole, 1991).

among options that achieve the ultimate policy objective, that minimizes the distortions to market functioning. In this way, policy-makers can maximize the positive impact of regulations on the economy.

30. The risk that regulation may hinder the development of well-functioning markets may be mitigated by considering competition principles when designing regulations and state interventions. One of the most important goals of a successful competition policy is to ensure that Government policies and regulations do not unnecessarily restrict entry, facilitate collusion, increase the cost of competing, or distort the level playing field by providing an undue advantage to specific firms.

31. By embedding competition principles in policy-making, potential distortions from direct state intervention through state-owned enterprises (SOEs), state aid and investment incentives may be minimized. State support can take various forms, including tax exemptions, loan guarantees, provision of resources at below market prices, subsidies, and capital injections. While offering Government support to private or state-owned enterprises (SOEs) may help achieve specific goals, it may have a negative impact on competition. If not properly designed, state aid may provide an undue advantage to specific firms, reinforce a dominant position (thus facilitating anticompetitive behaviors), or reduce a firm's incentive to make investments (thus generating market inefficiencies).

32. Price controls are another type of intervention where the negative effects should be carefully assessed. Governments may seek different objectives by controlling prices. They may want to protect consumers from increasing prices or to protect the incomes of small producers. Price controls may be necessary in the regulation of natural monopolies, yet in markets with more players, they can have distortive effects, for example, by facilitating collusion or dampening incentives to invest. To guard against this, regulations that require consultation with the competition authority before introducing price controls could be implemented. The authority could assess the impact of the competitive restrictions in the concerned market and check whether the pursued objective could be achieved using a less distortive intervention.

33. New data on the status of the product market regulations in Senegal suggest the regulatory restrictions may hamper competition across markets, thus restricting the country's growth potential. Product Market Regulation (PMR) indicators assess the extent to which public policies promote or inhibit market forces in several areas of product markets.⁷⁵ Each of the areas addressed within the PMR methodology sheds light on specific restrictions of the regulatory framework both economy-wide and in key sectors of the

⁷⁵ The methodology and key findings of the PMR for OECD countries are presented in Nicoletti et al. (1999), Conway et al. (2005) and Wolf et al. (2009). The current PMR data base used for this study includes Australia, Austria, Argentina, Belgium, Bolivia, Brazil, Bulgaria, Canada, Chile, China, Czech Republic, Colombia, Costa Rica, Croatia, Cyprus, Denmark, Dominican Republic, Ecuador, Egypt, El Salvador, Estonia, Finland, France, Germany, Greece, Guatemala, Honduras, Hungary, Iceland, India, Ireland, Israel, Italy, Jamaica, Japan, Kenya, Korea, Latvia, Lithuania, Luxembourg, Malta, Mexico, Netherlands, New Zealand, Nicaragua, Norway, Panama, Paraguay, Peru, Philippines, Poland, Portugal, Romania, Russia, Rwanda, Slovak Republic, Slovenia, South Africa, Spain, Sweden, Switzerland, Turkey, Tunisia, Uruguay, and the United Kingdom.

economy on twelve topics: electricity; gas; telecom; post; transport; water; retail distribution; professional services; other sectors; administrative requirements for business start-ups; treatment of foreign parties; and others, such as governance of public-controlled enterprises or antitrust exclusions and exemptions. The information for Senegal was collected in 2017, reflecting the status of the regulations as June 2017, and was used to calculate PMR scores.

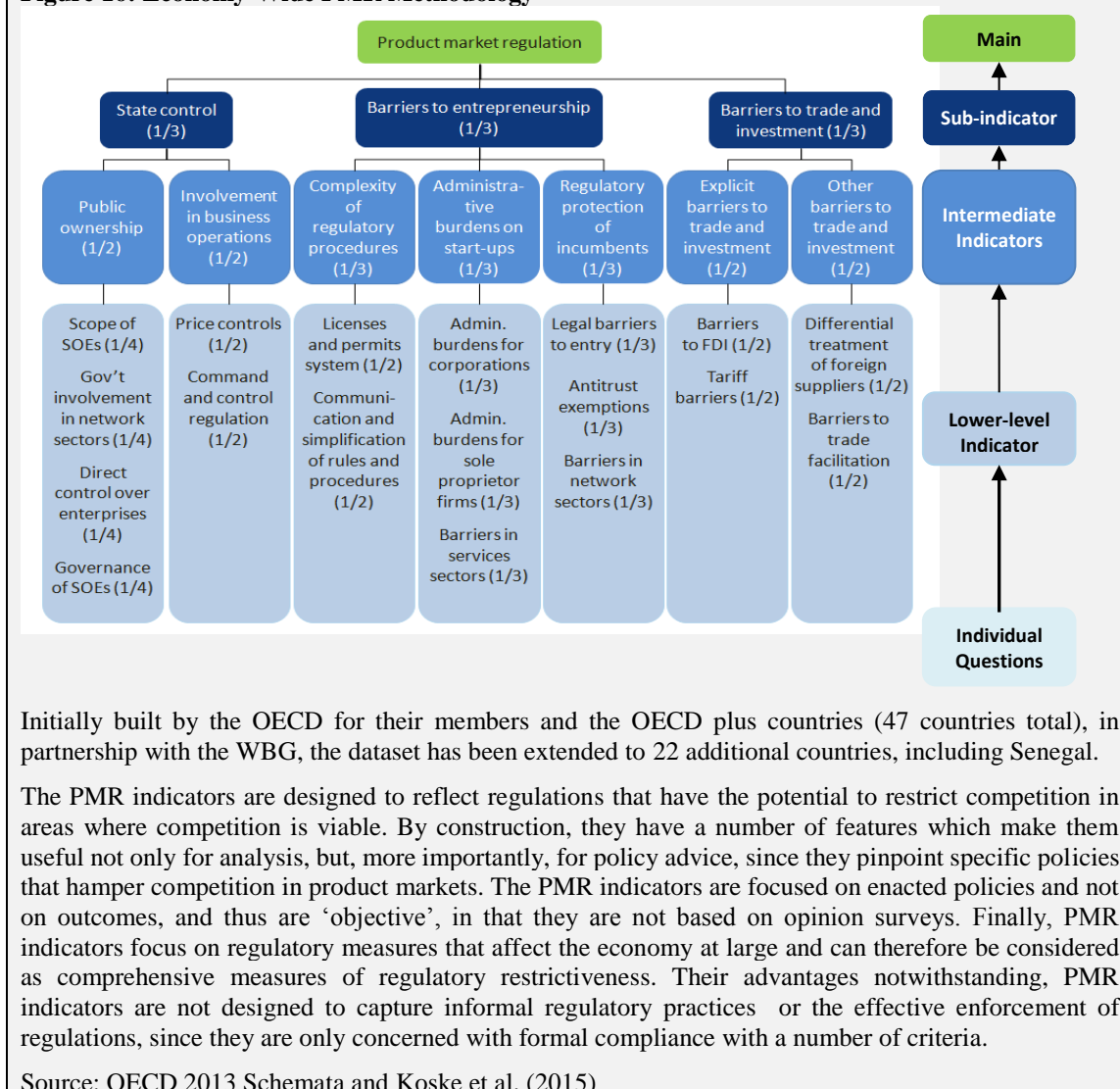
34. The PMR helps identify gaps in regulation and opportunities for an in-depth review of regulatory changes that would facilitate better market functioning (see **Error! Reference source not found.**). In contrast to regulatory or governance indicators that have been developed by other institutions, the PMR indicators are policy focused and reflect restrictive elements that affect the incentive or ability of firms to compete and that are embedded in formal laws and regulations. Unlike opinion surveys, PMR does not reflect subjective assessments of market participants. It should be kept in mind that PMR analysis is not an end in itself: once scores are calculated, these must be used as a screening device to identify the aspects of the regulatory framework that are more likely to have a negative impact on competition.

Box 5: PMR Methodology: Economy-Wide Score

Product Market Regulation (PMR) indicators form a comprehensive and internationally-comparable set of indicators that measure the degree to which policies promote or inhibit competition in areas of the product market where competition is viable. PMR indicators are useful to monitor the regulatory achievements of monitored countries and to evaluate the effectiveness of policies introduced throughout the years. Moreover, PMR indicators have been widely used to help policy-makers to draw a clear picture of regulations in different countries, with the objective of identifying gaps in regulations and/or room for improvements.

The PMR indicators rely on information collected through the OECD regulatory indicators questionnaires. Figure 16 below summarizes how the economy-wide score is calculated (numbers in parentheses represent weights). First, the answers of the questionnaire are coded into objective information (scores range from 0 to 6, 6 = worst). Second, scores of individual regulations are aggregated into subsequently broader regulatory areas starting with “Lower-level indicators” (18 areas), then “Intermediate indicators” (7 areas), then the three “sub-indicators”. Finally, the three sub-indicators are averaged to calculate the overall PMR score (Box 26 in Annex 2 provides a description of the low-level indicators).

Figure 16: Economy-Wide PMR Methodology

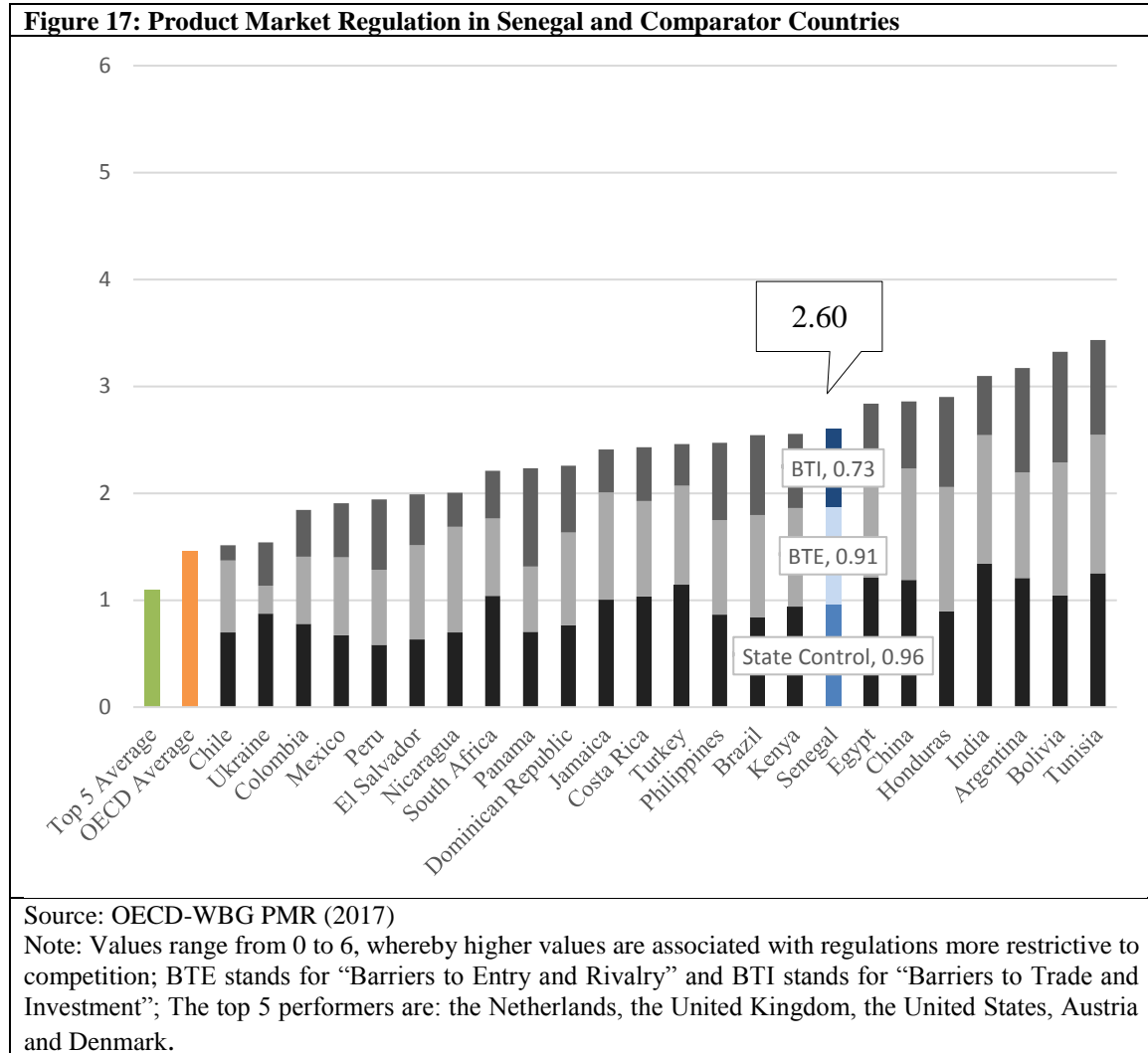


35. Regulatory restrictiveness in Senegal is relatively high, especially when compared with peers, where PMR data is available.⁷⁶ As Figure 17 shows, Senegal has

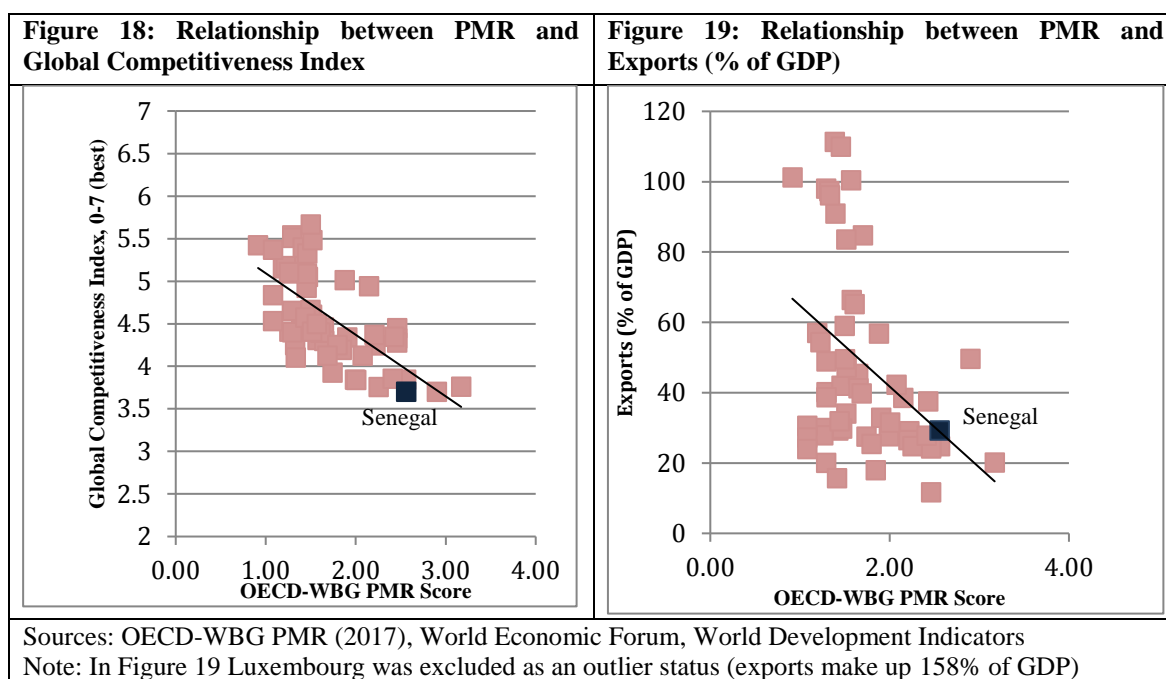
⁷⁶ Throughout the course of this analysis, graphs will compare Senegal to non-OECD countries from Latin America and the Caribbean, and – where available – South Asia, East Asia and the Pacific, the Middle East and North Africa and Sub-Saharan Africa. The analysis includes virtually all non-OECD countries, for which PMR data were available. The only OECD countries included in the sample are Mexico and Chile. To allow for a comparison to OECD countries nonetheless, the average performance of OECD countries and the average of the top 5 performers among all countries, including OECD, will be included as well. The list of comparator countries is as follows: Argentina, Bolivia, Brazil, Chile, China, Colombia, Costa Rica, Dominican Republic, Egypt, El Salvador, Honduras, India, Jamaica, Kenya, Mexico, Nicaragua, Panama, Peru, the Philippines, South Africa, Tunisia, Turkey, and Ukraine.

⁷⁶ In network industries where there are market segments having natural monopoly characteristics, the sectoral regulators typically adopt regulations of tariffs to ensure non-discriminatory access to infrastructure networks for all operators. As described, this type of economic regulation has a different purpose than the regulation of final prices to consumers.

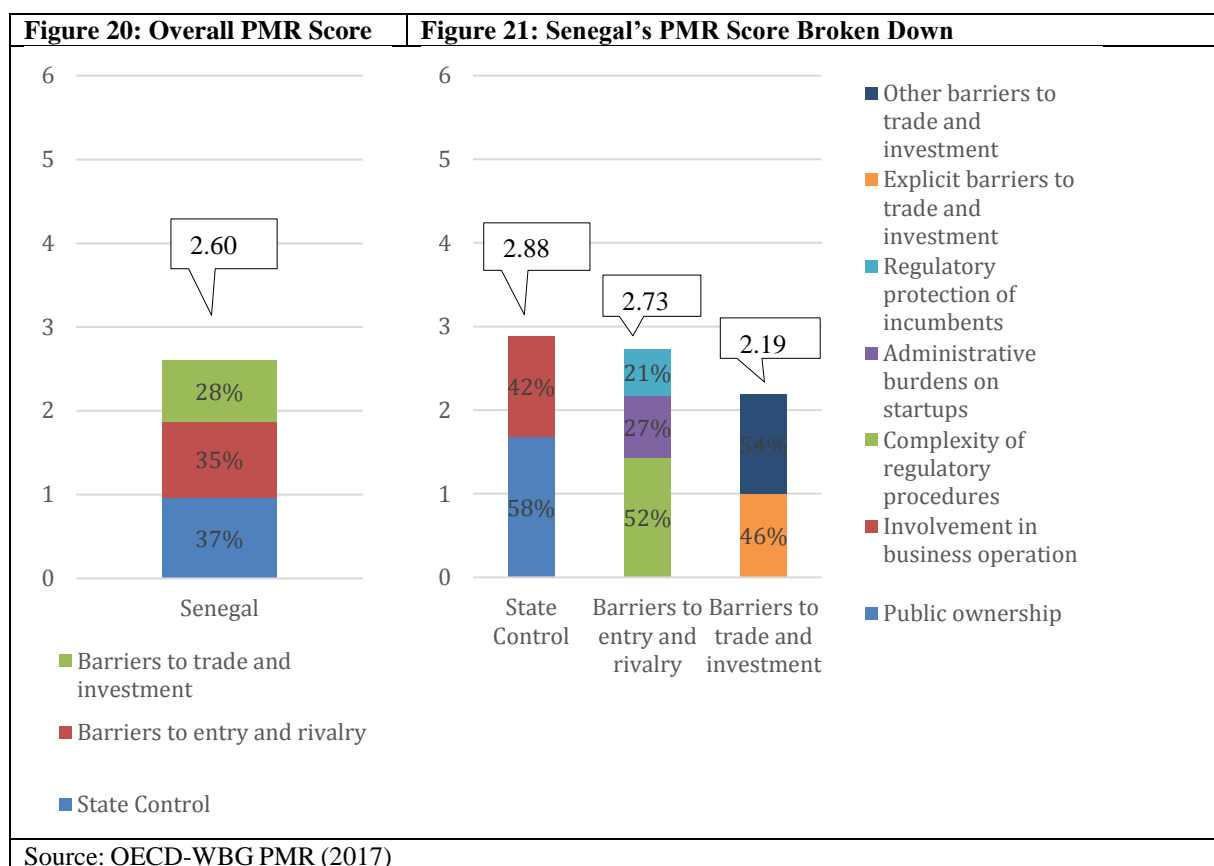
an overall PMR score of 2.56, which captures state control of the economy, barriers to entry and rivalry and barriers to trade and investment.



36. Lower (better) PMR scores are generally associated with better market outcomes. Figure 18 and Figure 19 show the relationship between Senegal’s PMR score and its overall score in the WEF’s GCR. These relationships are negative, indicating that higher (worse) PMR scores are associated with lower competitiveness. Furthermore, countries with a lower (better) PMR score generally tend to have higher exports, which can be a measure of trade openness.



37. State control of the economy is still significant in Senegal, being the main contributor to Senegal's PMR score, of which the extent of public ownership is the primary driver (see Figure 20 and Figure 21). Barriers to entry and rivalry also contribute to the overall regulatory restrictiveness, mainly because of the existing complex regulatory procedures. The restrictiveness associated with the barriers to trade and investment, the third contributor to Senegal's score, is mainly driven by other barriers to investment (including differential treatment of foreign suppliers and barriers to trade facilitation) and high tariffs. Barriers to trade and investment, while not being the largest component of the PMR score, are the main driver of Senegal's ranking among comparator countries. All these aspects and their implications for market functioning and competition will be discussed in the sections below.



3.1 Restrictions that May Affect the Level Playing Field Between Public and Private Operators

38. Typically, Governments can influence markets either through direct participation (as a buyer or supplier of goods and services), or through indirect participation in private markets (through regulation, subsidies or taxation). The degree of state involvement in the markets is the prerogative of each country. At the same time, reviewing the economic outcomes of state intervention is important in order to balance economic and non-economic policy objectives and their effects on market functioning. The most important criteria to filter distortive Government intervention are whether the intervention affects (i) the possibility of market entry or exit (such as exclusive rights to supply, limitations on the number of suppliers or interventions that significantly raise the costs of new firms to enter the market), (ii) the market conditions to compete among firms, either through direct restrictions (such as price or product regulation) or by reducing the incentive for firms to compete strongly; and (iii) the ability of consumers to shop around between firms and exercise consumers' choice.⁷⁷

⁷⁷Office of Fair Trading (2009), Government in markets. Why competition matters – a guide for policy makers.

39. Governments justify their direct participation in the economy through a mixture of social and economic goals. Governments generally invoke the control of strategic resources and the improvement of distribution of wealth and power as justifications to participate in economic activities through SOEs. Employment and industrial policies may also be major drivers for developing a large presence of SOEs in the market.⁷⁸ In times of crisis, state ownership is often used to rescue private businesses affected by systemic economic and financial problems.⁷⁹ Such Government bailouts for private firms in critical conditions are carried out for a variety of reasons, including the protection of employment, industrial policy considerations, and other strategic and political motivations.⁸⁰ However, it is important to ensure that the participation of the Government in the economy remains subsidiary to that of the private sector, i.e. the state provides only those goods and services that the private sector cannot provide itself.

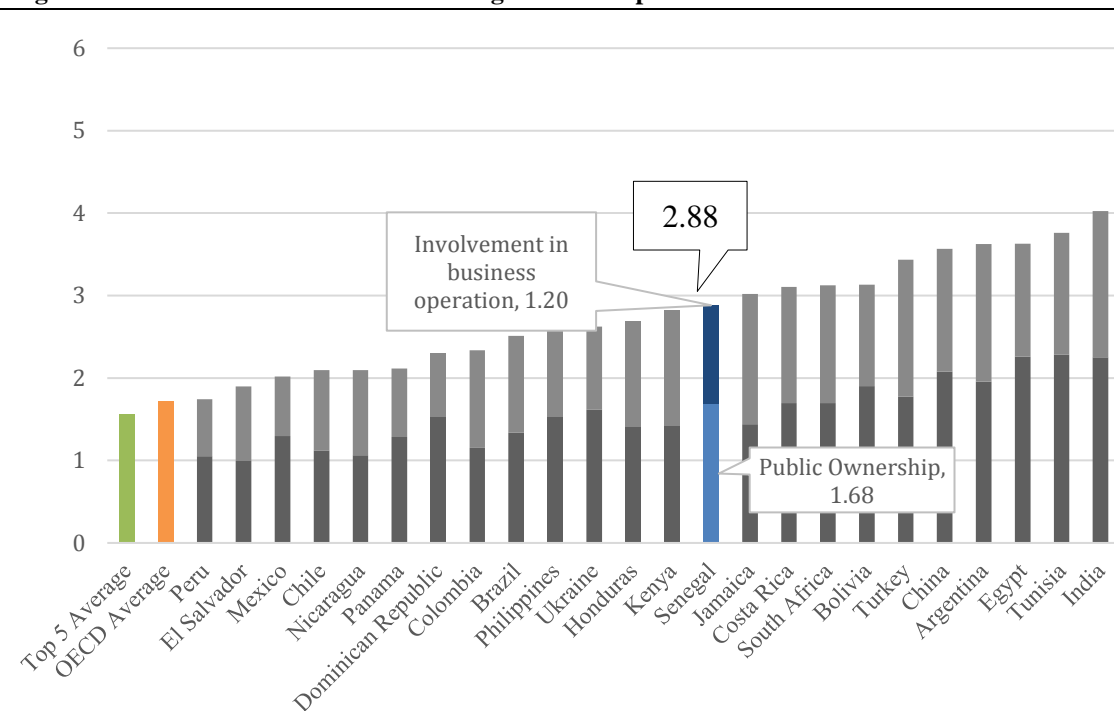
40. The Senegalese Government is involved in the market both directly through State-owned enterprises (SOEs) and indirectly through regulation that can affect competition conditions. The PMR indicator on state control includes aspects, such as the scope of SOE involvement in the economy, direct Government control of enterprises, price controls, and the use of command and control regulations. With its score on state control of 2.88, Senegal ranks in the bottom half of comparator economies, behind Kenya and most Latin American countries (Figure 22). Public ownership of enterprises contributes roughly 58 percent and Government involvement in business operations 42 percent, respectively, to the overall state control indicator (Figure 23). Involvement in business operations is evenly driven by existing price controls that the Government keeps in place and command and control regulation, which captures the extent to which the Government uses coercive (as opposed to incentive-based) regulation.

⁷⁸ See: Giorgio Monti, *EC Competition Law*, CUP 2007, pp. 441-442; Karel van Miert, *Liberalization of the Economy of the European Union: The Game is not (yet) over*, in Damien Geradin (Ed.) *Liberalization of state monopolies*, Kluwer Law International 2000, pp.1-2; OECD (2005), *OECD Guidelines on Corporate Governance of state-owned Enterprises*, pp. 9-10.

⁷⁹ OECD (2009), *Competition and the Financial Crisis*, pp. 14-15; For example, in response to the latest financial crisis the European Commission has adopted a number of Communications loosening the state aid rules applicable to restructuring aid given by Member States to banks. http://ec.europa.eu/competition/state_aid/legislation/temporary.html

⁸⁰ OECD (2009), *State Owned Enterprises and the Principle of Competitive Neutrality*, OECD Policy Roundtables, p. 26.

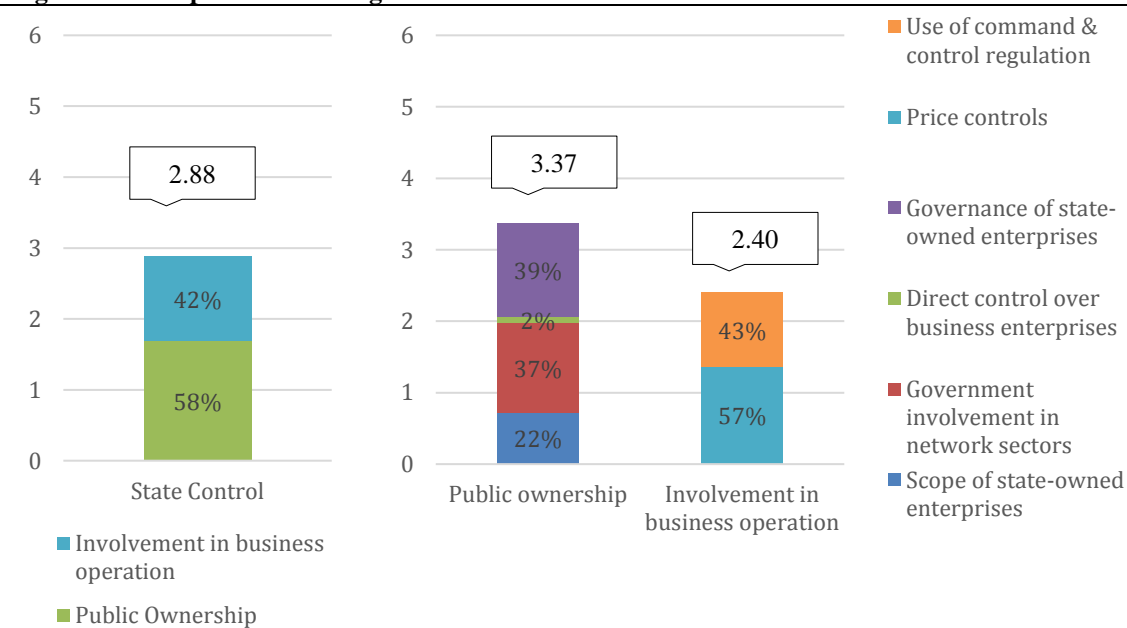
Figure 22: State Control Indicator in Senegal and Comparator Countries



Source: OECD-WBG PMR (2017)

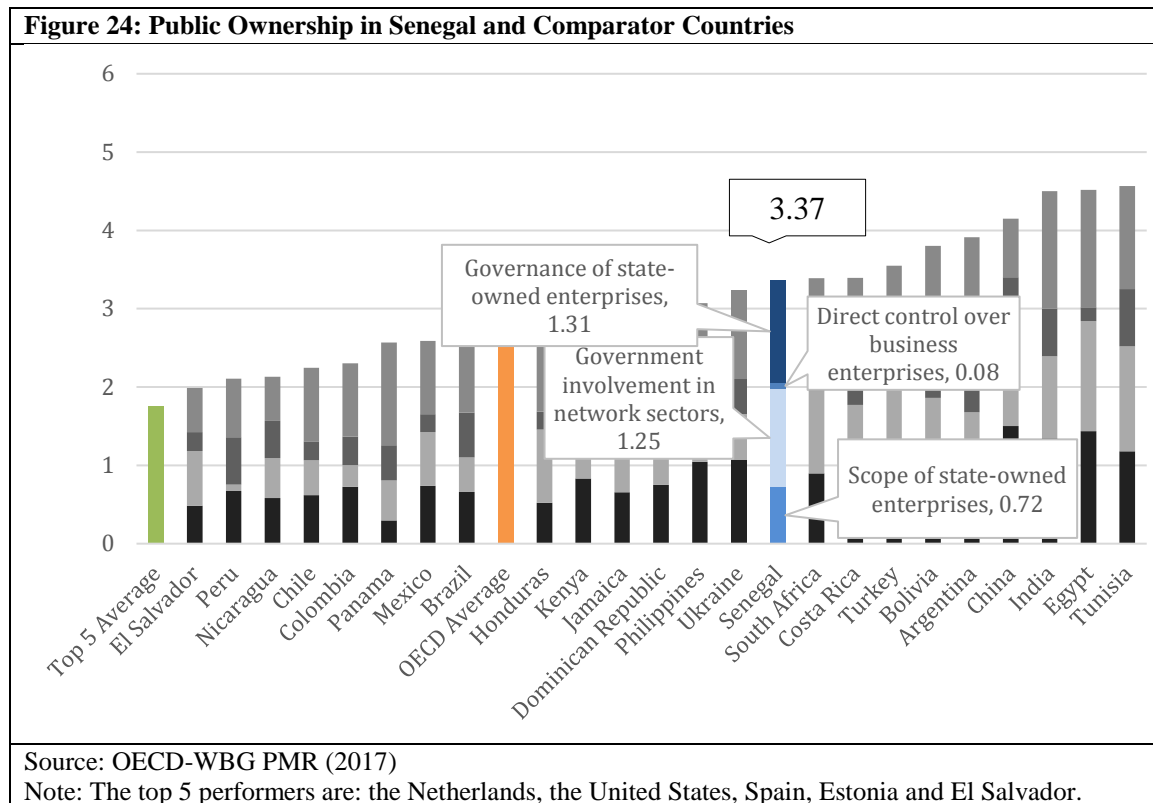
Note: The top 5 performers are: the Netherlands, the United States, the United Kingdom, Estonia and Austria.

Figure 23: Composition of Senegal's State Control Indicator



Source: OECD-WBG PMR (2017)

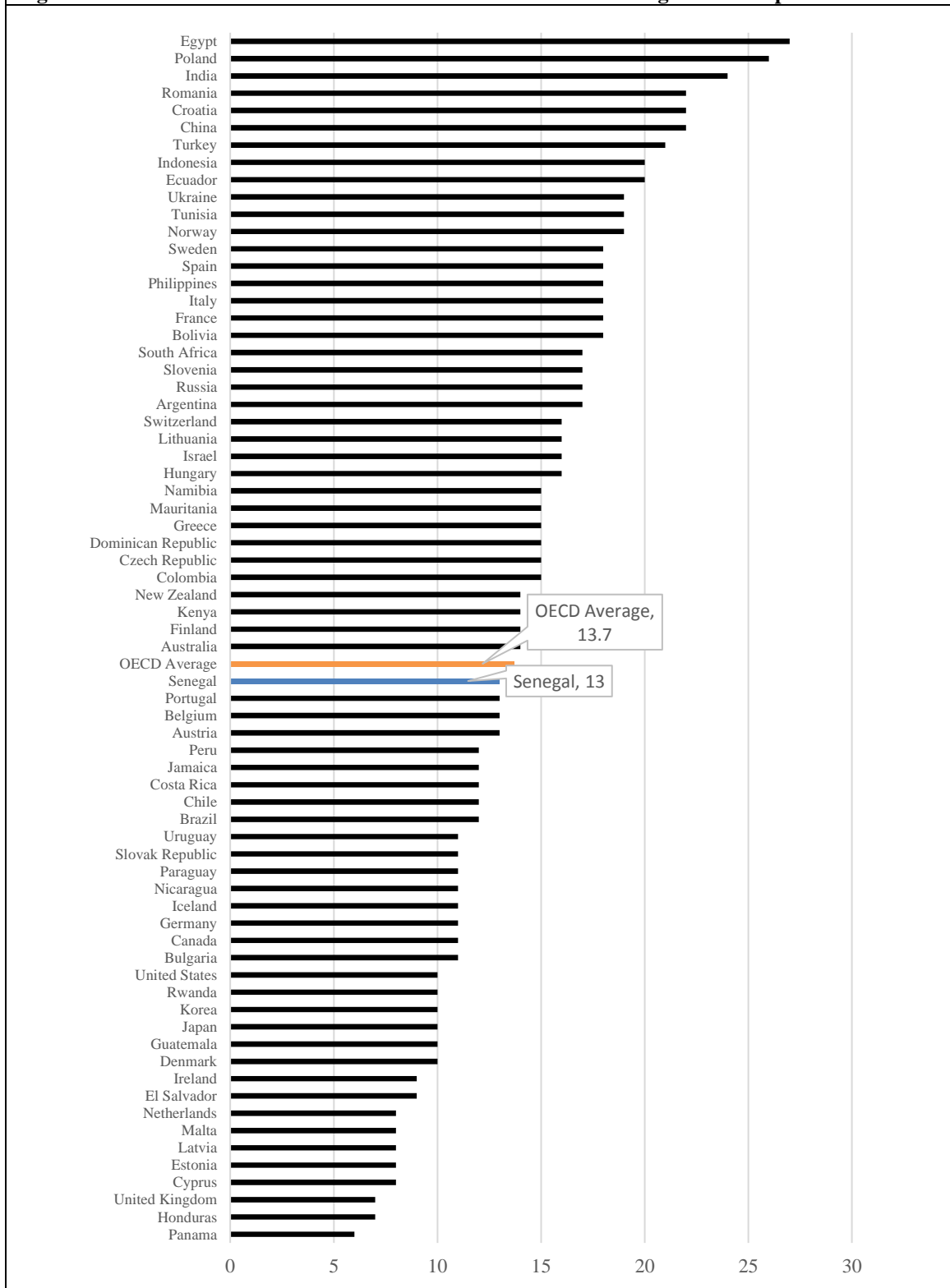
41. The regulatory restrictiveness associated with public ownership is primarily driven by the governance of SOEs and the Government involvement in network sectors and, to a lesser extent, by the scope of SOEs. As Figure 24 shows, most Latin American countries and Kenya, for example, receive better scores on the public ownership sub-indicator than Senegal, which is ranked in the bottom half of comparator countries.



42. Notwithstanding the scope of SOEs, the sectors/markets that SOEs participate in also feature private sector presence suggesting that Government interaction with SOEs needs to ensure equal treatment of all enterprises, be they public or private. Of 27 sectors reviewed by the PMR (see Table 17 in Annex 2), Senegal has 13 sectors in which there is at least one SOE, in line with the OECD average of 13.7 (Figure 25 below). Although the presence of SOEs in infrastructure sectors is not unusual across countries, especially in sectors that require capital intensive investments (such as electricity transmission and road infrastructure), there are other markets where the SOEs compete with private sector players, for example in financial services or groundnut processing (Table 4 below). This raises questions about the rationale of SOE presence in these markets and concerns over whether private-sector participants in these markets face a level playing field. Groundnut processing and fertilizer manufacturing, for example, which feature private sector players are traditionally economic activities that can be carried out by the private sector more efficiently than by SOEs. Acknowledging this, the Government attempted to privatize SONACOS, but privatization was not successful. The below analysis of the groundnut sector will explore the role of the state and of SONACOS in the market in more detail.

43. Overall, competitive neutrality (CN) suggests that all enterprises, public or private, domestic or foreign, should face the same set of rules. Contacts with the Government or Government ownership or involvement in the marketplace, in fact or in law, should not confer an undue competitive advantage on any actual or potential market participant. As part of the broader CN framework, the subsidiarity role of the State in the economy implies that if there are – or could be – private agents interested in performing an economic activity or participating in a given market, the state does not need to participate as an economic agent. Instead, it is typically more efficient and effective for the State to act as a regulator.

Figure 25: Number of Sectors/Markets with at least one SOEs in Senegal and Comparator Countries



Source: OECD-WBG PMR (2017)

Note: The top 5 performers are Panama (6), Honduras (7), the United Kingdom (7), as well as Cyprus, Estonia, Latvia, Malta and the Netherlands (each 8)

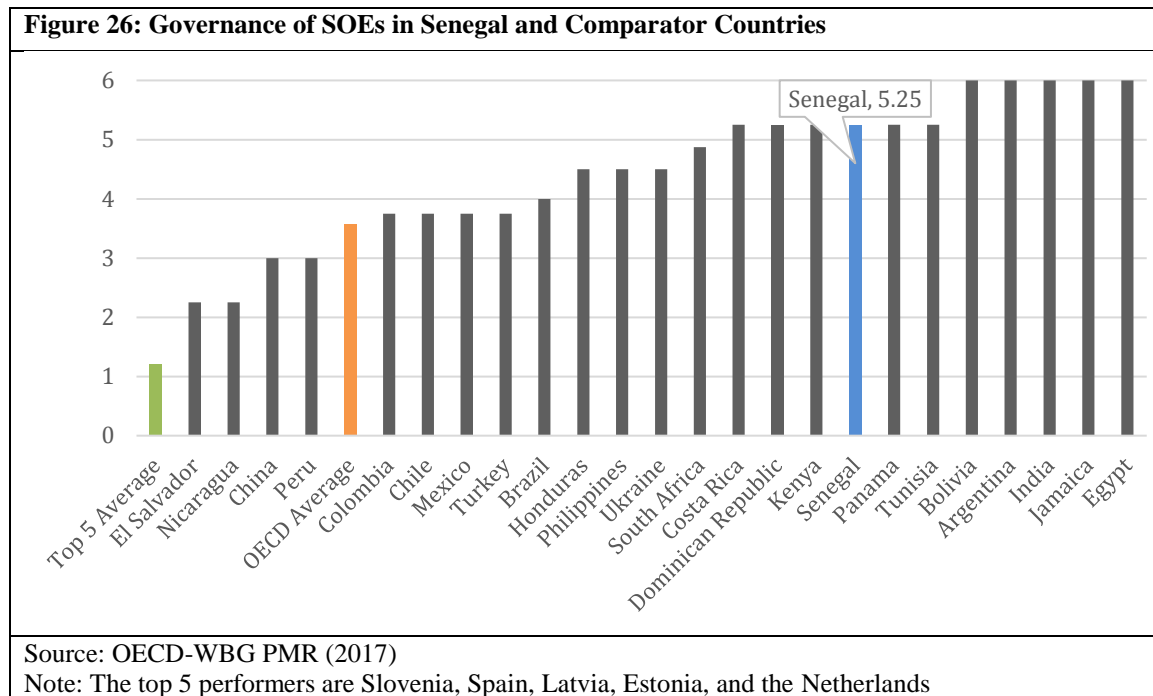
Table 4: Sectors/Markets with SOE Presence

SOE	GoS share	Sector/Market	Market Share
SENELEC	100%	Electricity	Monopoly on transmission and distribution; around 50% in the generation market
PETROSEN	99%	Gas	Less than 10%
SONATEL	17% state-owned; 52% owned by Orange	Telecom	97% of fixed-line network and services
La Poste Senegal	100%	Postal services	~70%
SONACOS	99.78%	Agriculture/ Groundnuts	~75%
Industries Chimiques du Sénégal (ICS)	15%	Mining/Fertilizer	-
Société d'Etudes et de Réalisation des Phosphates de Matam (SERPM)	-	Mining/Fertilizer	-
SODEFITEX	46%	Agriculture/Cotton/ Textiles	Monopoly on cotton ginning
Petit Train de Banlieu and Dakar Bamako Ferroviaire	100%	Rail transport	>90% for freight and passenger transport
SONES	100%	Water	
Société Africaine de Raffinage	Majority-owned by PETROSEN	Petroleum refining	Not known
Dem Dikk	76.7%	Urban Transport	Not known
POSTEFINANCES	87% owned by La Poste Senegal	Financial Services	Not known
Caisse de Retraite (IPRES)	Under Government guardianship	Insurance	Not known

Source: OECD-WBG PMR (2017), Authors' elaboration.

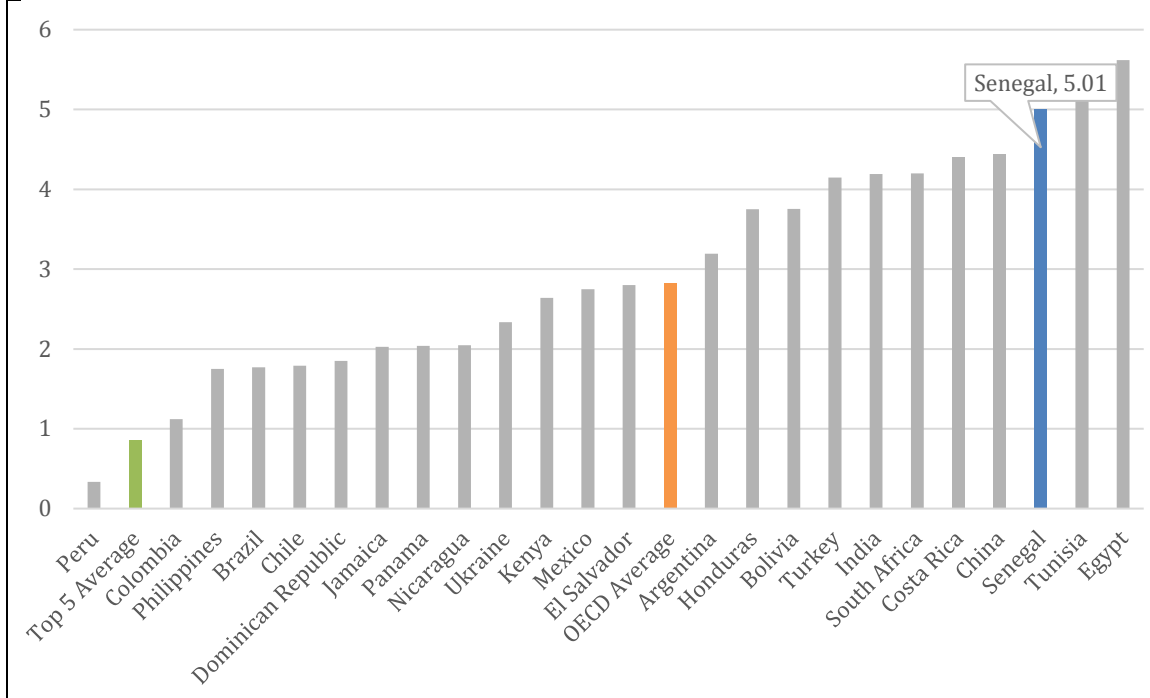
44. The governance of SOEs in Senegal requires attention in order to ensure that SOEs are subject to the same market discipline as the private market players (Figure 26). The governance of SOE sub-indicator measures the degree of insulation of state-owned enterprises (SOEs) from market discipline and the degree of political interference in the management of SOEs. In Senegal, SOEs are generally regulated by private company law, but in many cases, they are also subject to specific Government regulation. Strategic choices often must be cleared by the Ministry of Finance and the respective sector ministry of each SOE, while state equity holdings in publicly controlled firms are managed by the Ministry of Finance. International good practice indicates that direct Government influence

in the management and business decisions of SOEs is not an adequate means of pursuing policy objectives and tends to negatively affect efficiency due to conflict of interest or weak incentives. Entrusting management of state equity holdings to independent bodies typically results in superior market outcomes.



45. While the liberalization of network industries has been critical in improving the overall competitive environment across countries, the Government of Senegal maintains a dominant role in network industries. In several network sectors – electricity, postal services, and railways – the state is the majority shareholder in the largest firm (see Table 4 above). In fact, as Figure 27 shows, only Tunisia, and Egypt score worse than Senegal on the PMR indicator of Government involvement in network industries (see also Figure 28 for regulatory restrictiveness in network sectors). The PMR indicators for network industries reflect: (i) entry regulation, (ii) public ownership, (iii) vertical integration and (iv) market structure. In the electricity sector, for example, the PMR score is 6. SENELEC holds a monopoly on the transmission and distribution of electricity instituted by the law 98-29 of 14 April 1998 and maintains around 50 percent market share in electricity generation. Based on the PMR, there is virtually no vertical separation in the electricity market although separation may facilitate the arrival of new competitors to the market or certain market segments that do not have natural monopoly characteristics. Furthermore, there is not yet regulation that ensures third party access to the electricity grid.

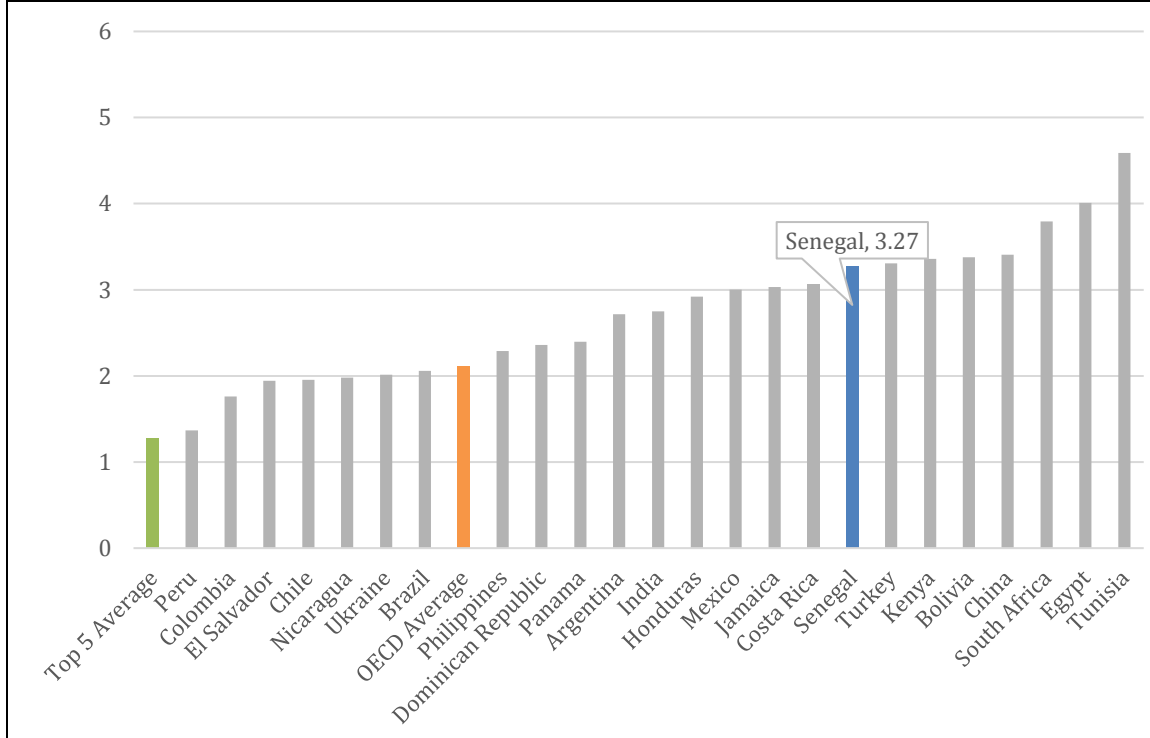
Figure 27: Government Involvement in Network Industries in Senegal and Comparator Countries



Source: OECD-WBG PMR (2017)

Note: The top 5 performers are Peru, the United States, the United Kingdom, Colombia and Germany

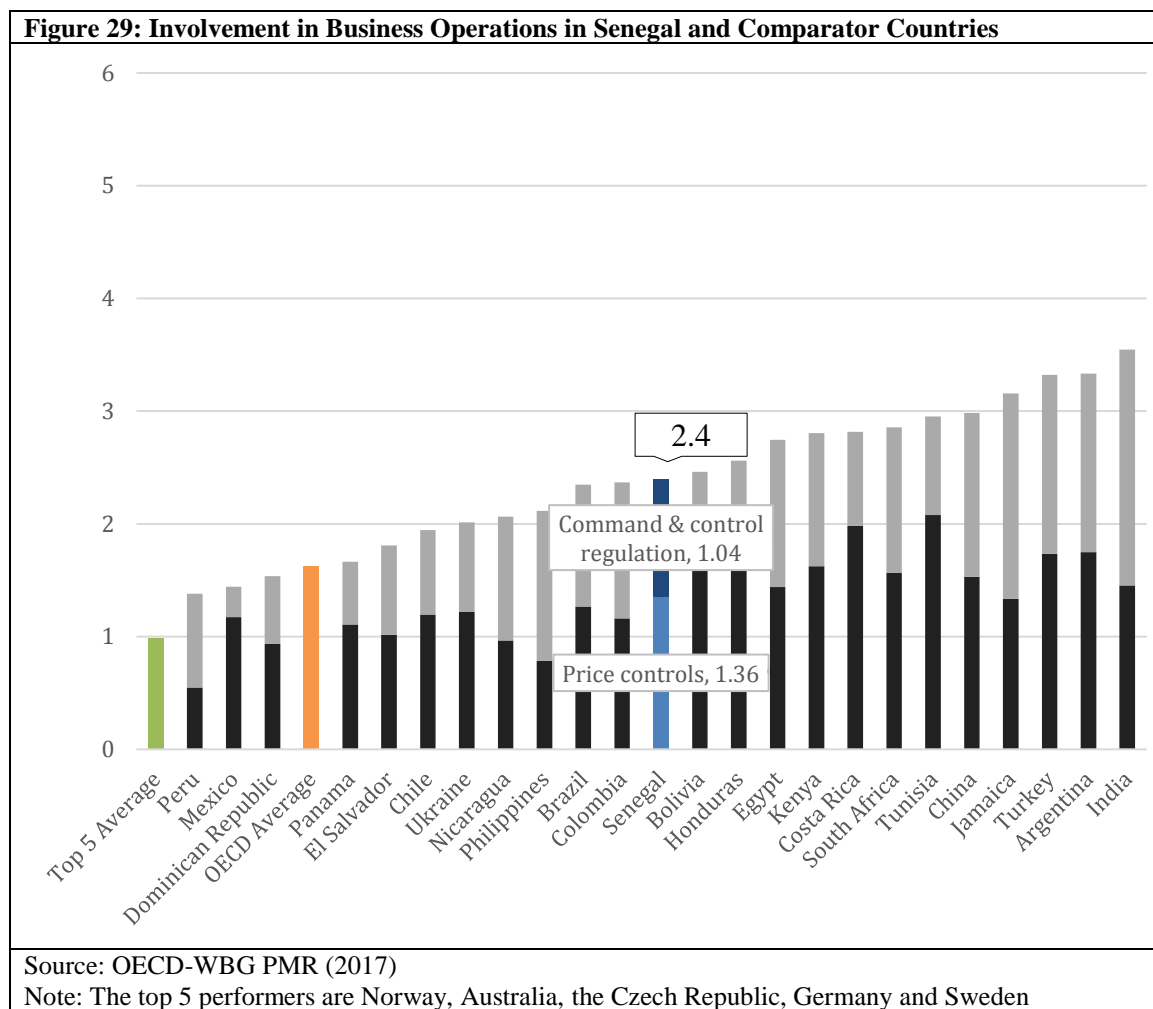
Figure 28: Regulations in Network Sectors in Senegal and Comparator Countries



Source: OECD-WBG PMR (2017)

Note: The top 5 performers in Figure 28 are the United Kingdom, Germany, Peru, the United States, and Australia.

46. In addition to direct Government participation, the Senegalese Government indirectly participates in the market through price controls and coercive rather than incentive-based regulations. Regarding the Government's involvement in business operations, Senegal scores around the median of its comparator countries (Figure 29). For the country's score of 2.4, the indicator for price controls accounts for 57 percent and the remaining 43 percent is accounted for by the indicator for command and control regulations, which measures the extent to which the Government uses coercive (as opposed to incentive-based) regulation. In Senegal, PMR data indicate that regulators are not required to assess alternative policy instruments before adopting new regulations and that no guidance has been issued on using alternatives to traditional regulation.



47. At least 15 products are subject to price regulation for end consumers (see Table 5), which places Senegal in the bottom half of comparator countries (Figure 30). These include staples such as rice and bread, other food products like soy bean oil, sugar and wheat flour, agricultural products like fertilizer, seed and machinery, products in

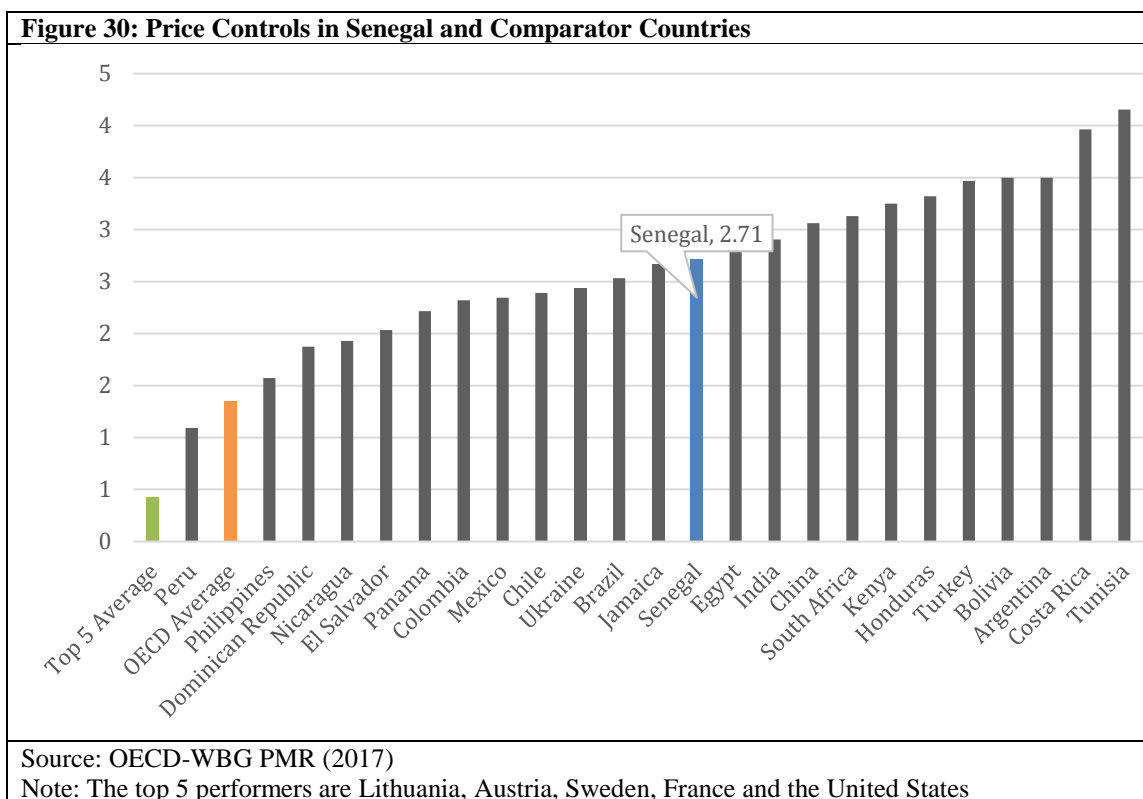
network industries such as water, electricity, gas, fuels (with segments exhibiting natural monopoly characteristics), and others like cargo transport and pharmaceuticals. By contrast, in Morocco, for example, the list of price controls is limited to few agricultural products (e.g., soft wheat flour, sugar, raw tobacco, manufactured tobacco).⁸¹ OECD-WBG PMR data indicates that out of 33 non-OECD countries from Eastern and Central Asia, East Asia and Pacific, Latin America, Middle East and North Africa and Sub-Saharan Africa, slightly more than 50 percent have price controls for food staples, such as milk and bread.⁸² The methodology for selecting these products and for setting or assessing the level of prices is not clear. The prices are decided by a committee with representatives from different ministries, producers, private sector associations and consumer bodies. Regional committees of the Ministry of Commerce are responsible for monitoring these prices. For example, in the transport of cargo, the Government provides and monitors rate ranges, as well as setting retail price caps for petrol and fuel oil. In the medium term, extensive price controls may lead to inefficiencies and discourage increases in productivity or quality of supplied products.

Table 5: List of Controlled Prices

Foodstuffs	Agriculture	Network industries	Other
<ul style="list-style-type: none"> • Rice • Sugar • Wheat flour • Bread • Soy bean oil 	<ul style="list-style-type: none"> • Fertilizer • Seed • Agricultural equipment 	<ul style="list-style-type: none"> • Water • Electricity • Gas • Petrol • Fuel oil 	<ul style="list-style-type: none"> • Transport of cargo • Pharmaceuticals
Source: OECD-WBG PMR (2017) and Markets and Competition Team elaboration			

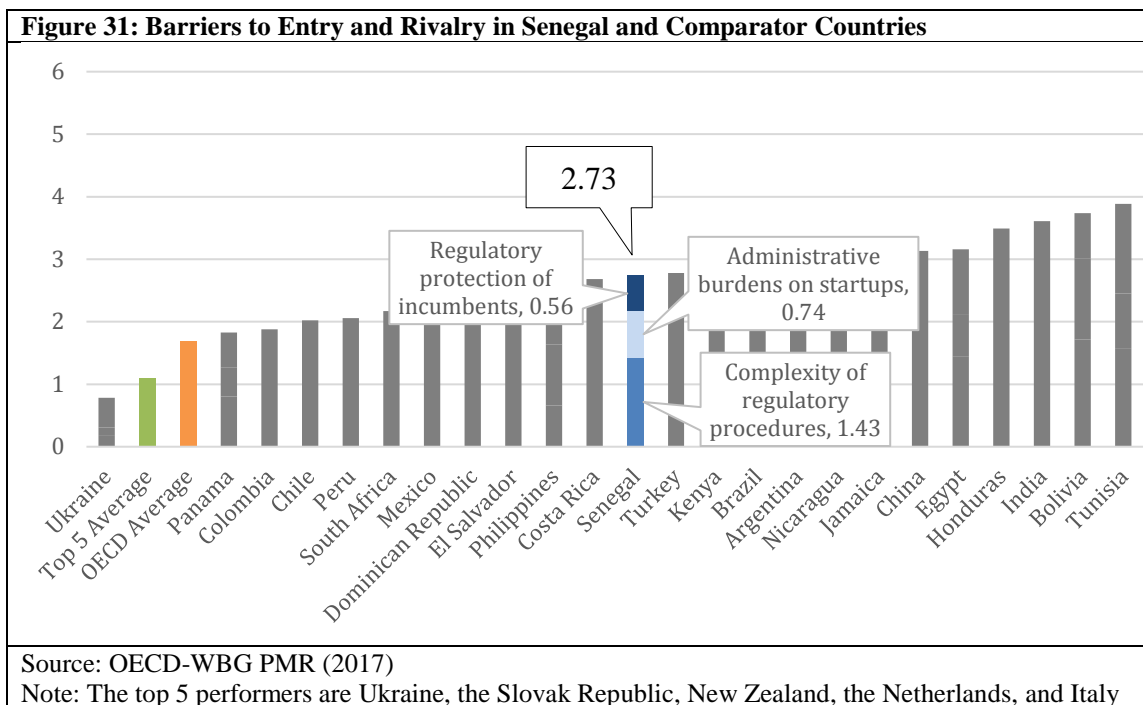
⁸¹ For Morocco: Décret n° 2-00-854 du 28 jourmada II 1422 for the implementation of Law n° 06-99 on competition.

⁸² Argentina, Bolivia, Colombia, Costa Rica, Dominican Republic, Egypt, El Salvador, Honduras, India, Jamaica, Nicaragua, Panama, Philippines, Russia, Senegal, Ukraine, and Uruguay have price controls for food staples in place, while Brazil, Bulgaria, Croatia, Cyprus, Ecuador, Guatemala, Indonesia, Kenya, Latvia, Lithuania, Malta, Paraguay, Peru, Romania, Rwanda, and South Africa do not.

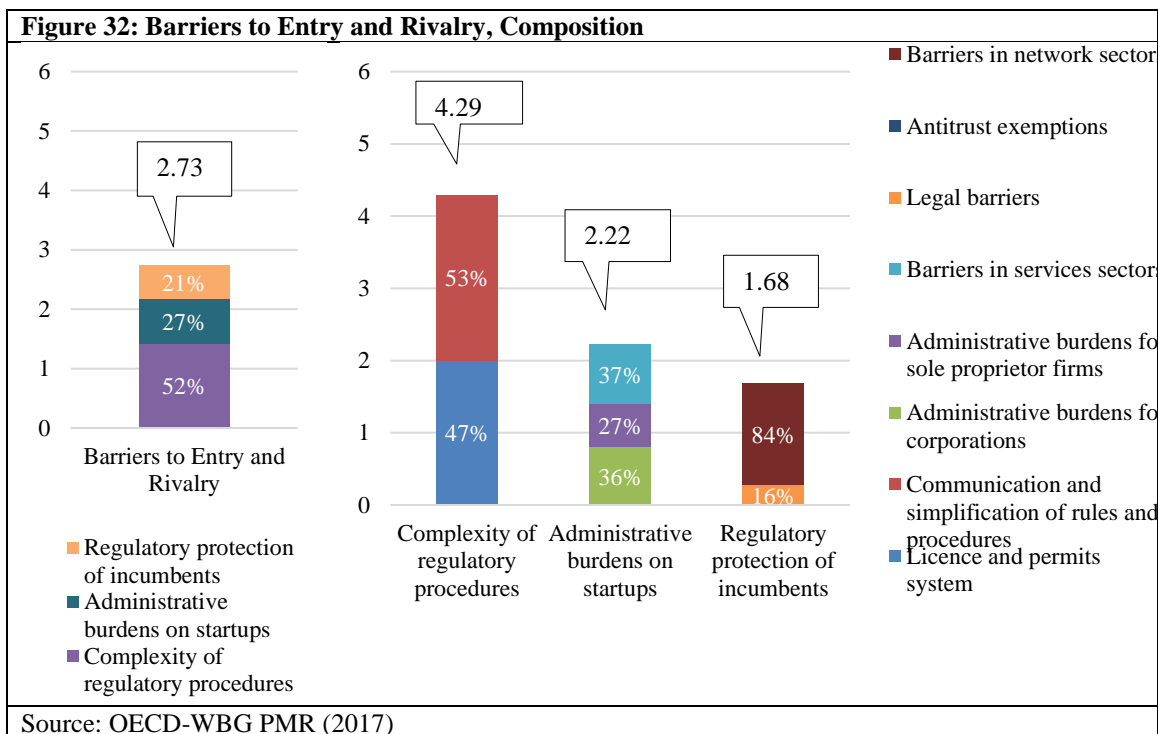


3.2 Entry Restrictions that Inhibit Competition and Private Sector Development in Key Sectors

48. Senegal has room to improve its regulatory framework on entry and rivalry to facilitate private sector investment and growth. Barriers to entry and rivalry include the complexity of regulatory procedures, administrative burdens on startups and the regulatory protection of incumbents. Senegal's PMR score of 2.73 places the country towards the bottom half of comparator countries (Figure 31), indicating more restrictive procedures to entry and rivalry than in most countries from Latin American and Eastern Europe and Central Asia.



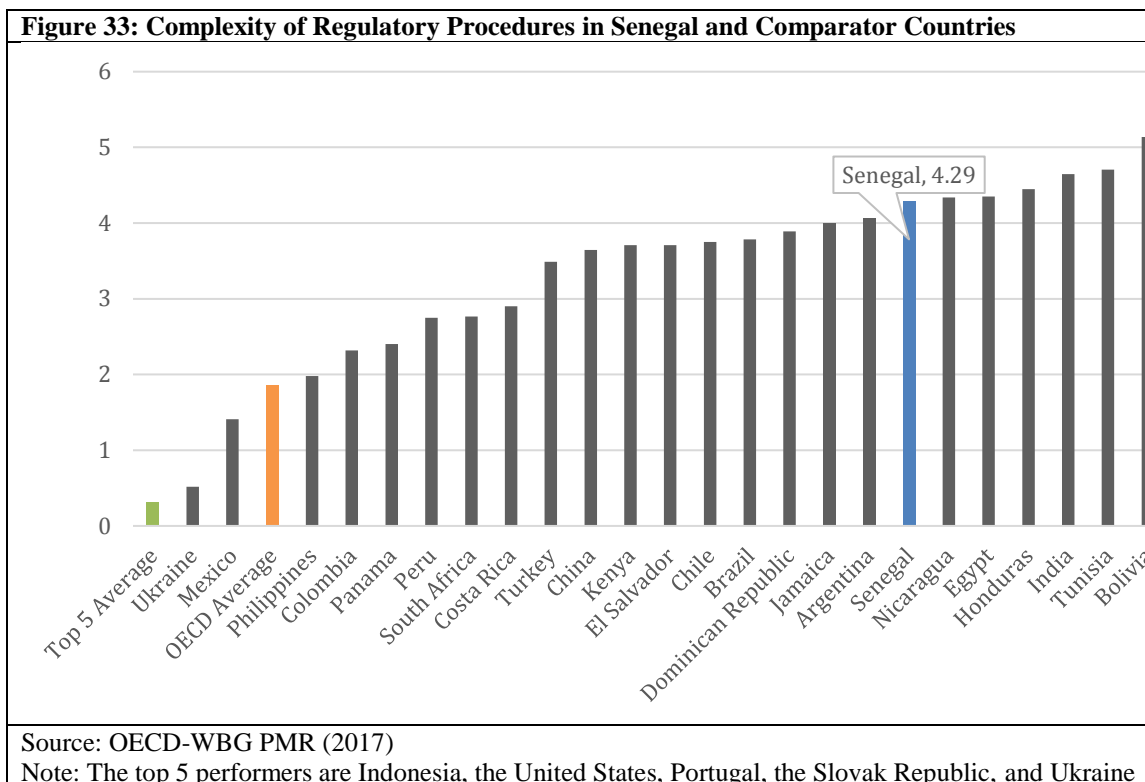
49. Complex regulatory procedures are largely contributing to the existing barriers to entry and rivalry in Senegal. Next, administrative burdens on startups, particularly in the services sectors, and the regulatory protection of incumbents contribute roughly equally to the PMR sub-indicator. The score for the latter is primarily driven by barriers in network sectors, which have already been mentioned above. The score for the former is relatively equally driven by the existing regulatory barriers in the services sectors, administrative burdens for sole proprietor firms and administrative burdens for corporations, all of which may ultimately raise business costs for firms and affect their ability to enter and to invest (Figure 32).



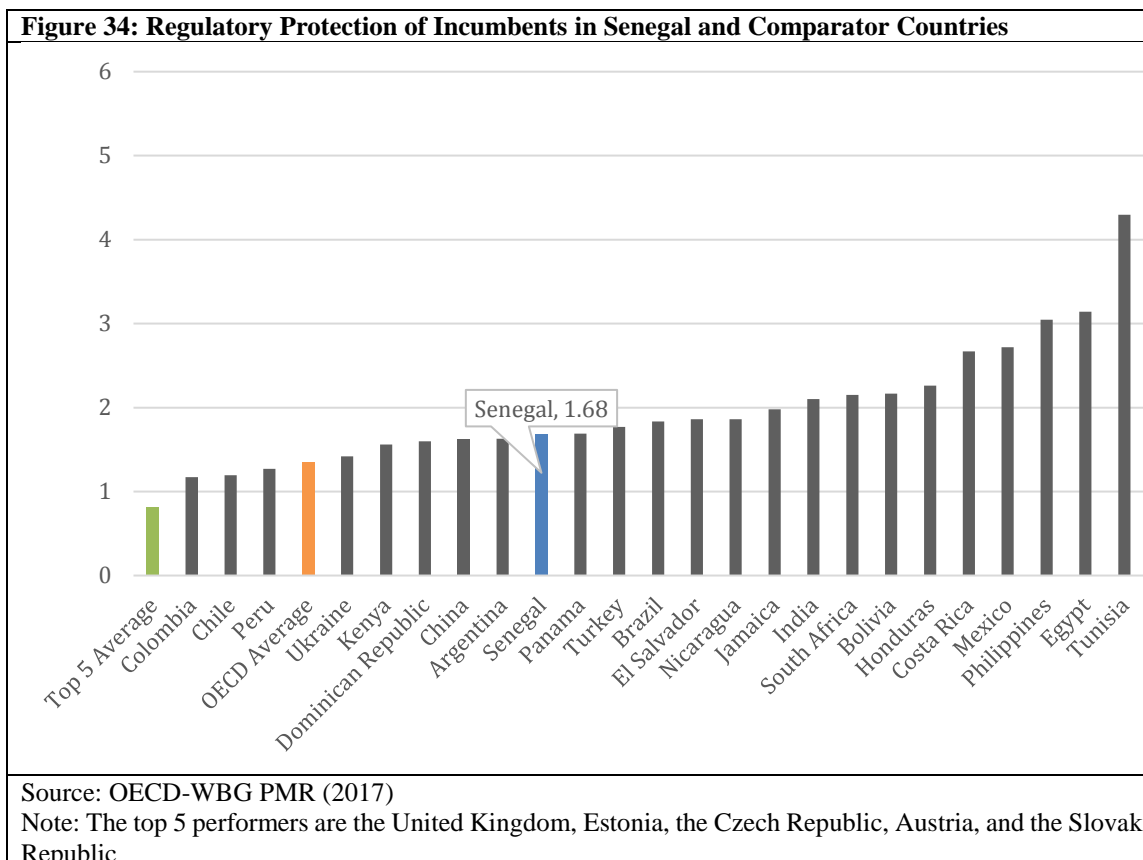
50. Navigating Senegal’s system of regulations can be difficult given that regulations are not easily available, and this difficulty amplifies competition restrictions. PMR data indicate that requirements for existing businesses or start-ups and legislation and regulations are not systematically available online. Anticipated changes or planned regulatory reforms are not published on the internet, complicating strategic planning for companies. Existing legislation can be difficult to interpret and understand for companies without sufficient legal sophistication given that there is no law requiring that regulations are published in plain language. Start-ups would struggle to ensure that they are in possession of all licenses and permits that are required, because there is no complete account of them available online.⁸³ Thus, Senegal compares poorly on measures of entrepreneurship. Figure 33 highlights that few countries exhibit a more burdensome regulatory environment than that of Senegal. According to the latest World Bank’s Doing Business report, filing taxes takes almost double the time in Senegal than in other Sub-Saharan African countries (441 vs. on average 281 hours per year).⁸⁴ In Senegal, as the PMR data points out, there is no program underway to review and reduce the required number of licenses and permits.

⁸³ PMR data indicates that the administrative requirements for setting up a company entail a process that typically lasts 8 days for both individual and public limited companies. Although this is considerably less than the approximately 20 days and 40 days it takes to set up individual and public limited companies, respectively, in Latin America and the Caribbean, it is much more than the 0.7 days and 1.4 days it takes in the top 5 OECD performers. On average, 2 to 3 agencies need to be contacted to complete the pre-registration process and 1 agency needs to be contacted to complete the registration phase.

⁸⁴ <http://www.doingbusiness.org/data/exploreeconomies/senegal#paying-taxes>



51. The regulatory framework in Senegal can help insulate incumbents from competition. While Senegal does not score particularly poorly compared to comparator countries with regard to the regulatory protection of incumbents (Figure 34), room for improvement remains. Senegal's score is largely associated with the continued protection of SENELEC, which has monopoly over transmission and distribution of electricity. Regulation also restricts the number of competitors in other sectors such as post (basic letter services, basic parcel services, courier services), air transport, telecom, railway infrastructure, and water collection, treatment and supply. Protection from new entrants tends to allow incumbents to be less innovative and less efficient than under competitive pressure, where viable, which ultimately harms consumers through higher prices, fewer consumption options and poor quality.

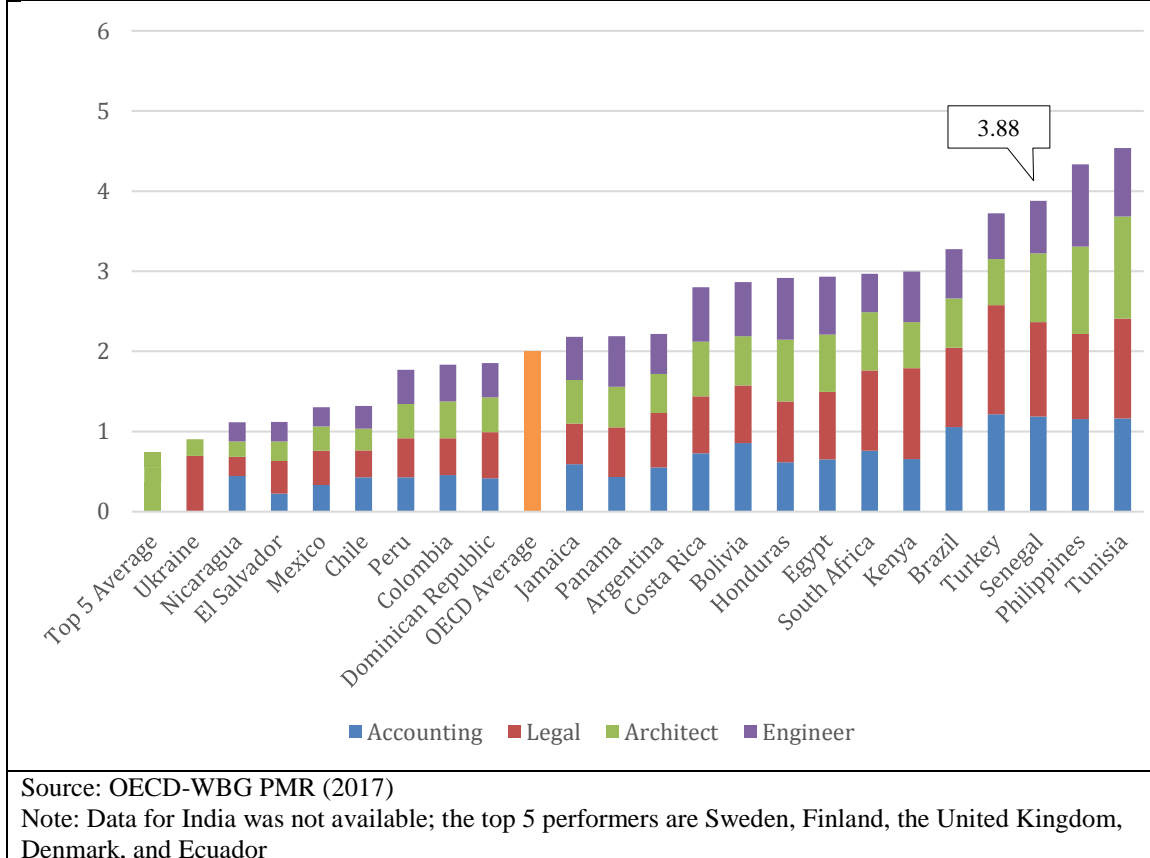


52. High barriers to entry and rivalry in key services that are essential for doing business may further increase costs for all market players. The PMR data on professional services provide information on entry restrictions and conduct regulations affecting accounting, legal, architectural and engineering businesses. Entry restrictions are prevalent in Senegal across the four professions and are higher than in comparator countries, except for the Philippines and Tunisia (Figure 35).⁸⁵ With regard to entry regulations in both legal and accounting services, the country scores are 5.67 and 5.75, respectively, compared to 4.63 for entry regulations governing architecture services and 3 for those governing engineering services. To provide accounting, legal, architectural and

⁸⁵ The accountancy profession has an exclusive right to carry out 5 tasks (statutory audit, non-statutory audit, audit of mergers and contribution in kind, public sector audit, accounting including public-sector accounting and book-keeping) compared to top 5 OECD country average of 5 exclusive or shared exclusive tasks. Legal professionals have the exclusive right to carry out 7 tasks (advice on matters predominantly regulated by domestic law, advice on matters predominantly regulated by international law, advice on matters predominantly regulated by foreign law, transfer of title to real estate, wills and regulation of family matters (conveyancing), representation of clients before courts, representation before administrative agencies, including on tax matters, tax advice) compared to top 5 OECD country average of 6 exclusive or shared exclusive tasks. Engineers, on the other hand, do not have any exclusive rights, while only architects can request construction permits, prepare and monitor the construction/execution of projects, or carry out landscape planning - i.e. architects have exclusive rights on 3 tasks compared to top 5 OECD country average of 2.4 exclusive or shared exclusive tasks. The 5 main OECD countries regarding sector regulations are: Austria, Australia, Germany, Netherlands and the United Kingdom.

engineering service, membership in a professional organization is mandatory. In accounting and architectural services, entry is regulated by public authorities.⁸⁶ For legal services, a professional body decides on entry to the sector, which may also suggest that incumbents could be involved in allowing competitors in the market. Further, binding minimum fees for accounting services may also affect the service providers' incentives to compete based on quality and to innovate. Price controls that are self-imposed may also hinder competition in services since the market effects of these practices are like those of cartel agreements.⁸⁷

Figure 35: Regulation in Professional Services in Senegal and Comparator Countries

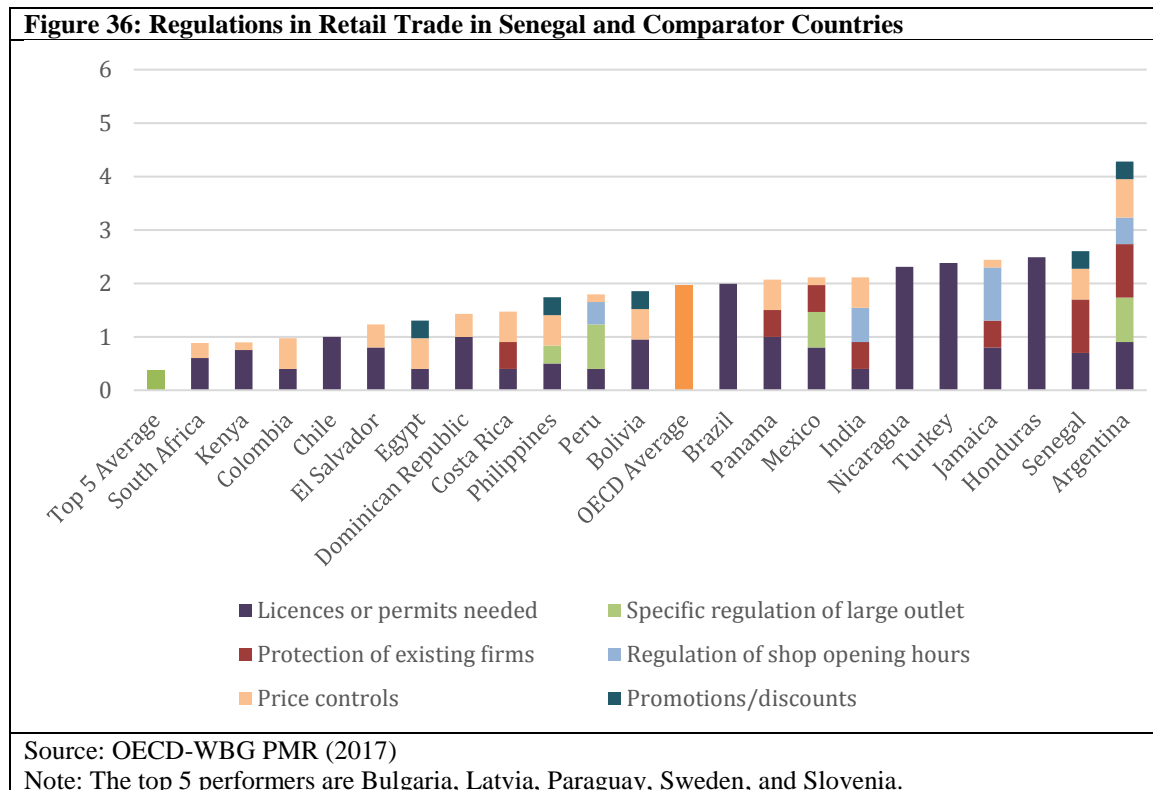


53. Further, Senegal exhibits a relatively restrictive regulatory framework governing retail trade. Figure 36 shows that only Argentina performs worse in the sample. Senegal's score of 2.6 places the country significantly behind the OECD average (1.97) and behind the top 5 average of 0.38. The key contributor to Senegal's score is the country's protection of existing firms, where Senegal receives a score of 6 out of 6. Also, the number of licenses and permits required to engage in commercial activities is cumbersome (the

⁸⁶ Accountants must have four years of post-secondary education and then pass a centralized exam (Examen Préliminaire aux Etudes Comptables et Financières Approfondies (EPECFA)); Règlement n°12/2000/CM/UEMOA.

⁸⁷ See, Harrington, Joseph (2016), "Heterogeneous Firms Can Always Collude on a Minimum Price", Economics Letters (136), pp. 46-49, January.

country receives a score of 4.2). For example, to be able to sell food products, it is necessary to register, notify authorities, and to obtain licenses and permits, which may be product- or activity-specific. Through stakeholder engagement procedures, professional bodies or representatives of trade and commercial interests, existing enterprises can be involved in licensing decisions or decisions about regulation specific to large outlets, which allows them to shape such regulations in their favor and to the disadvantage of existing or potential competitors. There are products, such as pharmaceuticals that can only be sold in outlets operating under a local or national legal monopoly, which provides the existing firms an advantage over potential new entrants.

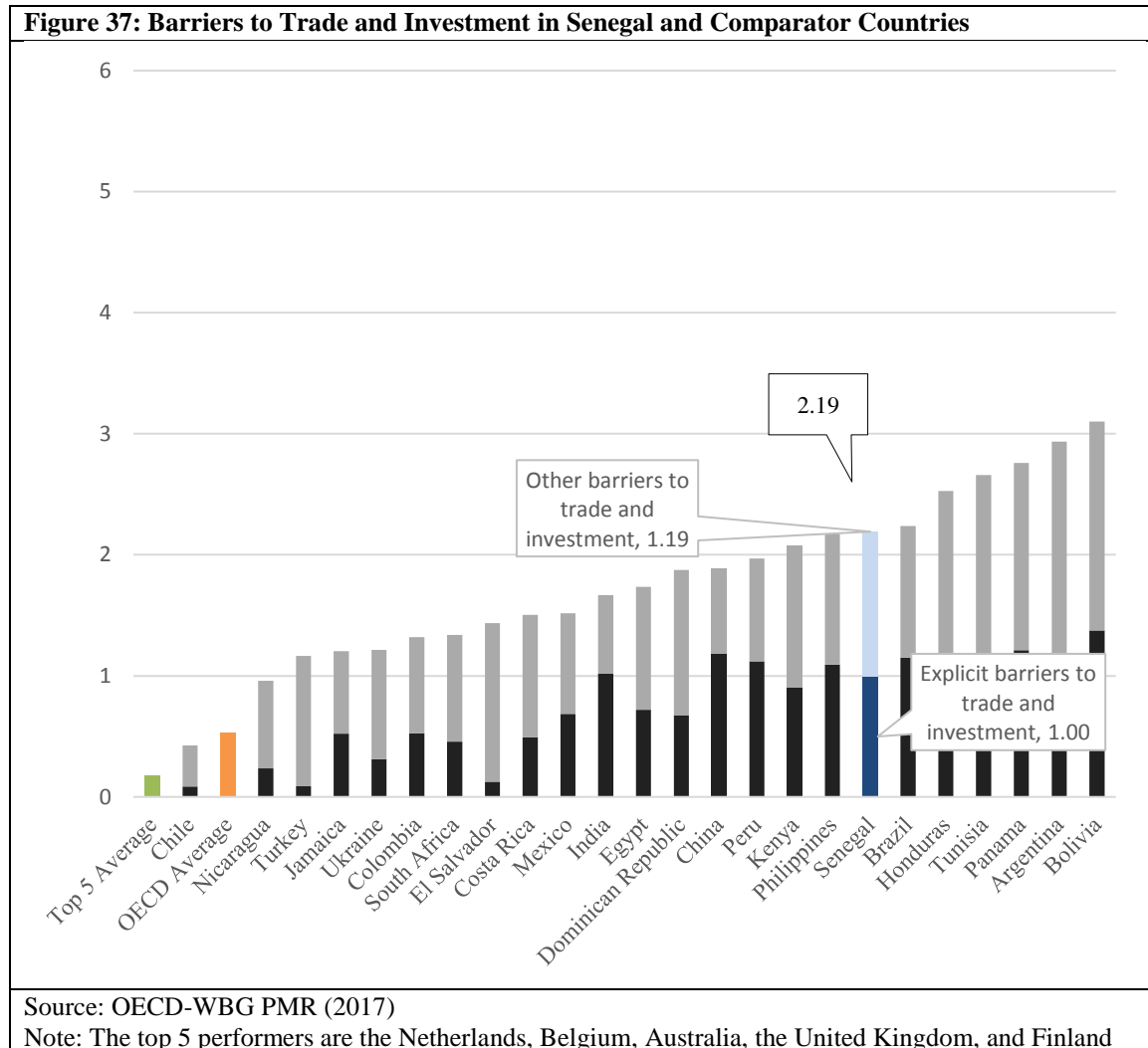


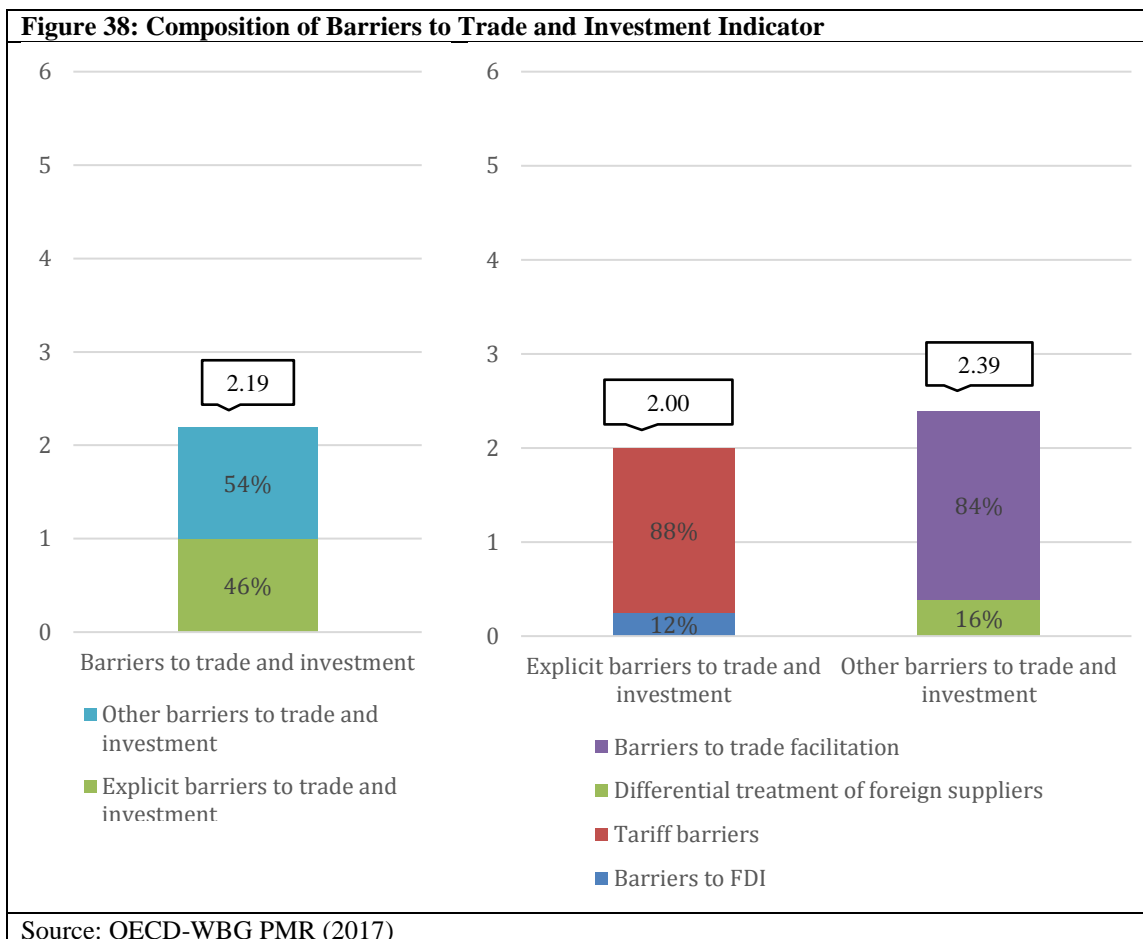
3.3 Restrictions to Trade and Foreign Direct Investment Could Affect International Competitiveness

54. Senegal has a relatively restrictive trade and investment regime compared to the other countries for which PMR data are available (Figure 37 and Figure 38 below). Although they are not the largest part of Senegal’s overall PMR score, barriers to trade and investment appear to be the most important driver of Senegal’s placement in comparison to other countries (see also Figure 17 above).

55. The most important contributors to the restrictiveness of barriers to trade and investment in Senegal are tariff barriers and barriers to trade facilitation. The important weight of tariff barriers results from the relatively high effectively applied tariff

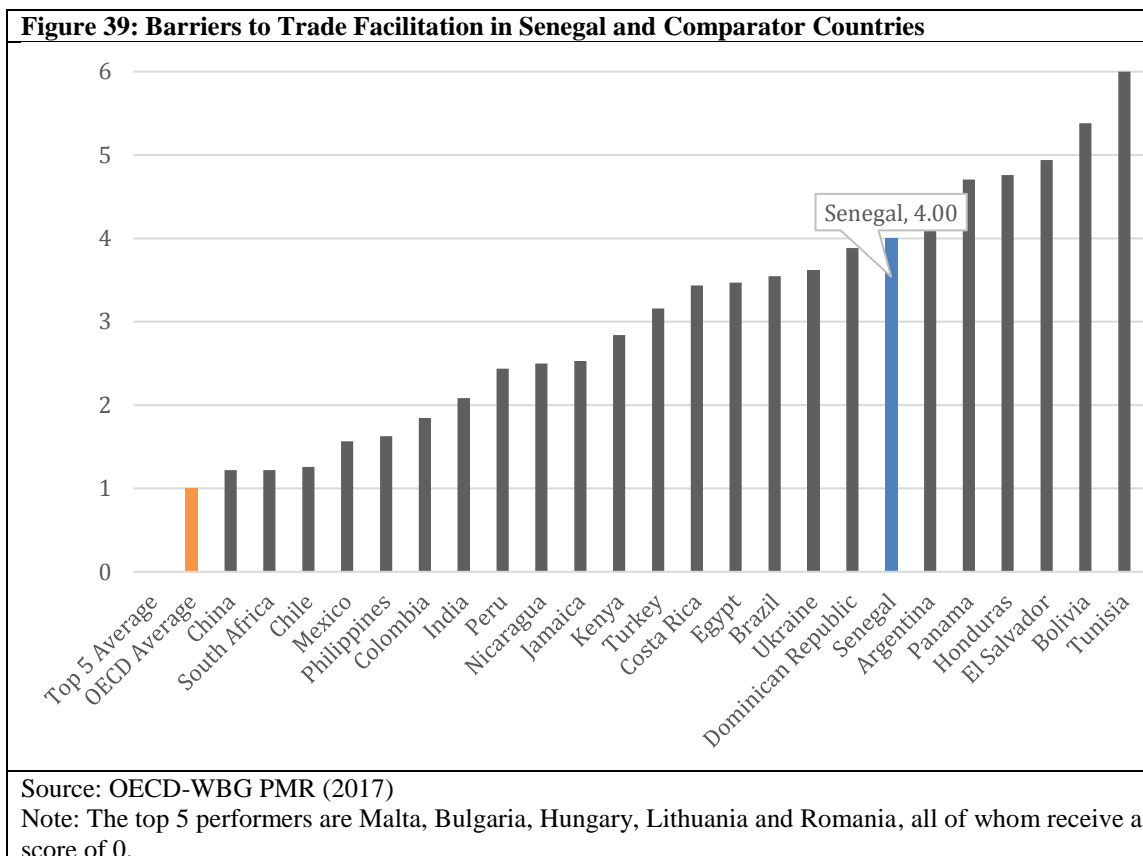
of almost 13 percent (simple average). The other African countries for which PMR data are available have consistently lower tariff rates, with Rwanda at 10.7 percent, South Africa at 7 percent, Kenya at 12 percent, and Egypt at 9.2 percent. Tariff barriers can be found in a number of sectors and for various products such as rice, sugar, wheat, and vegetable oils. Furthermore, there are non-tariff barriers, such as specific import permits required for seed imports. There are no barriers to FDI according to the scope of the PMR indicators, although there is preferential treatment for domestically-owned telecommunications enterprises in participating in tenders for various services (e.g. internet service providers) (see also Section 5).





56. Barriers to trade facilitation are largely due to the lack of concerted attempts by the Government to harmonize standards, actively encourage the recognition of foreign standards and the lack of mutual recognition agreements (MRAs) (see Figure 39). MRAs are bilateral agreements that aim to benefit industry by providing easier access to conformity assessment. When present, they promote trade in goods between the countries and facilitate market access. However, Senegal does not have a single MRA in any of the 16 sectors/markets assessed by the PMR.⁸⁸ Moreover, regulators are not required to use internationally harmonized standards and certification procedures in any of these 16 sectors/markets. In addition to the barriers to entry for foreign firms, there are regulations in place that prevent the participation of foreign firms in tenders for Government transport contracts/public procurement as well as economic needs tests and quotas that restrict the participation of foreign professionals in services, such as accounting, engineering, architecture and law.

⁸⁸ These are: manufacturing, construction, energy, distribution, air transport, maritime transport, road transport, fixed telecommunications, mobile telecommunications, insurance, banking, hotels and restaurants, and accounting, legal, engineering, and architecture services.



3.4 Simulation of A Reduction in Regulatory Restrictiveness on GDP Growth

57. Given the current regulatory restrictions to competition in Senegal, there is room for further opening the markets to facilitate private sector investment and income growth. In a simulated scenario, if Senegal undergoes reforms that decrease regulatory restrictiveness⁸⁹ of network inputs (electricity, gas and water), post and telecommunication, transport and other business services, growth in value added in industries intensive in these services and network inputs would translate into additional 0.2 up to 0.5 percent growth of annual GDP, all else being equal (see Annex 2 for methodological clarifications and Table 18 for estimation results).

4. To What Extent Do Regulatory Restrictions to Competition Affect Senegalese Households and Poverty?

The degree of competition in markets has an important impact on poverty reduction and shared prosperity. When the drivers of poverty reduction are divided into changes in labor income, non-labor income, and demographics, labor income growth clearly emerges

⁸⁹ This decrease is equivalent to a two-quartile reduction in PMR score.

as the most important contributor to poverty reduction. Competition has both a direct and dynamic impact on the variables that form labor income through households' market functions, notably (i) income to producers (as the owners of production factors such as capital and land); (ii) income to employees (as the providers of labor); and (iii) prices faced by consumers. Incomes are impacted through both the number of adults employed in salaried jobs or engaged in other productive activities and the returns to those activities, whereas consumer prices affect the real value of those incomes in terms of consumption possibilities. Next, drawing on the growth-distribution decomposition linked to the dynamic effects of competition, effective market competition is widely acknowledged to spur economic growth by increasing industry- and firm-level productivity, leading to rises in GDP and expansions in jobs and labor productivity⁹⁰ (see also **Error! Reference source not found.**).

Box 6: Competition and Poverty Reduction

Two main types of transmission mechanisms exist, through which competition affects the variables that drive poverty reduction and shared prosperity and how they relate to each other (see

Figure 40 below):

- Mechanisms that can have a more *direct impact on the level and distribution of household welfare* – namely the incomes of producers and employees and the prices, quality, and variety of goods and services available to consumers – by removing inefficiencies in those markets that are particularly relevant to the poor. These mechanisms are more relevant and more frequently observed in markets where poorer citizens produce, work, and purchase. These direct mechanisms are directly affected by the degree of competition in the short term but can also be impacted by dynamic effects in the longer term.
- Mechanisms that primarily *boost growth dynamically in the longer term* – notably increases in firm productivity through the entry, growth, and expansion of more productive firms, as well as by incentivizing firms to reduce costs. The link between competition and innovation also has a bearing on long-term productivity through process innovation, for example.

⁹⁰ World Bank – OECD (2017) *A Step Ahead – Competition Policy for Shared Prosperity and Inclusive Growth*.

59. Using a distributive analysis,⁹¹ Table 6 shows the first order income effects and poverty headcount impacts of a hypothetical 10 percent linear decreases in the prices for Senegal's main food products⁹² based on their importance in the consumer basket, all else being equal. Each row represents a food product, whereas the columns show the estimated impact of a decrease in the price of the commodity on the absolute number of the poor, the poverty headcount ratio and the income distribution in the country. Given that adjusted actual tax rates on flour, palm oil and sugar imports have all exceeded 50% at some point in the past,⁹³ the 10 percent linear decrease is in fact a conservative estimate of the price effects that could be achieved with pro-competition policy measures.

60. Reducing the prices of food products that are important for Senegalese households by 10 percent would lift over 230,000 people over the national poverty line. This corresponds to a combined effect of over approximately 1.71 percentage point reduction in poverty. Given that the poverty headcount ratios using the international poverty lines of \$1.90 and \$3.10 per day have decreased by only 0.4 and 0.1 percentage points respectively between the years 2005 and 2011,⁹⁴ a 1.71 percentage point reduction would represent a substantial step towards poverty alleviation in Senegal.

61. The largest effect could be achieved by a decrease in the price of vegetable oil. This would propel almost 50,000 poor people above the national poverty line which represents a 0.35 percentage point decrease in the poverty headcount ratio.⁹⁵ Similar conclusions hold for reductions in the price of sugar, where a ten percent price decrease would lift around 40,000 people out of poverty, representing a decrease in poverty by 0.3 percentage points, and in the prices of millet and rice, which would each lead to a reduction in poverty of 0.2 percentage points or more than 25,000 people. Reductions in the prices of peanut oil, maize, and palm oil by ten percent would lead to decreases in absolute numbers of the poor by 14-15,000, roughly 9,000 and almost 4,000 people respectively. Similarly, price decreases for sorghum and groundnuts are associated with decreases in poverty although not at statistically significant levels.

62. Food products in general and certain foods specifically weigh more heavily in the consumption baskets of the poor than in those of the rich, suggesting that price decreases of certain products can disproportionately benefit the poor. Across all food products except for peanut oil and wheat bread price decreases disproportionality benefit the poor. A decrease in the price of sorghum, for example, would benefit incomes of people

⁹¹ Abdelkrim, A. and Duclos, J-Y. 2007. *DASP: Distributive Analysis Stata Package*. PEP. World Bank, UNDP and Université Laval.

⁹² The food products included are millet, sorghum, maize, rice, palm oil, vegetable oils, peanut oil, groundnuts, granulated sugar, wheat bread, and other types of bread. These were selected based on their importance in an average Senegalese consumer basket, and also because they are consumed more by the bottom 40 percent of the income distribution than by the top 40 (as shown by a ratio of more than unity in the second-to-last column of the below table). The exceptions are peanut oil (due to the detailed analysis in the following section) and wheat breads (due to their large poverty implications).

⁹³ Mbaye, A. A., Golub, S., English, P. 2015. *Policies, Prices and Poverty: The Sugar, Vegetable Oil, and Flour Industries in Senegal*. World Bank Policy Research Working Paper 7286, p. 43ff.

⁹⁴ World Bank. 2017. *World Development Indicators*

⁹⁵ The result is robust regardless of whether the poverty line calculated by the Senegalese bureau of statistics or the line calculated by the World Bank Group correcting for the settlement type classification is used.

in the bottom 40 percent of the income distribution four and a half times more than people in the top 40 percent. The effect increases to a ratio of more than 40 when comparing people in the bottom 10 percent with people in the top 10 percent. Similarly, a decrease in the price of maize would benefit the poorest 10 percent over 13 times more than the richest 10 percent, whereas price decreases in millet would create benefits for the bottom 10 percent outweighing those for the top 10 percent by a factor of almost 12. The respective ratios comparing the poorest and richest 10 percent for groundnuts, rice, bread, palm oil, and sugar are almost 9, 7.2, 6.6 and 5.2. The benefits of a price reduction for vegetable oil would also disproportionately benefit the poor, however only by a ratio of 1.5, suggesting that vegetable oil represents a comparable proportion of the consumption basket for those in the top and bottom 10 percent of the income distribution. Peanut oil, on the other hand, appears to be primarily consumed by richer Senegalese, meaning that a price decrease of 10 percent would primarily benefit those at the top of the income distribution. The same is true for the consumption of wheat bread.

Table 6: Summary of changes in poverty and direction of gains given a 10 percent price decrease

Name of food	Using Senegalese Poverty Line		Using Corrected WBG Poverty Line		Ratio of bottom 40 to top 40	Ratio of bottom 10 to top 10
	Moving out of poverty	Percentage point decrease in poverty	Moving out of poverty	Percentage point decrease in poverty		
Millet	25,902***	0.19	27,266***	0.20	3.71	11.74
Sorghum	5,453	0.04	5,453	0.04	4.54	43.15
Maize	9,134*	0.07	8,589*	0.06	3.23	13.44
Rice	25,902***	0.19	25,902***	0.19	3.93	8.42
Palm oil	3,953*	0.03	3,953*	0.03	2.69	6.62
Vegetable oil	47,715***	0.35	47,715***	0.35	1.63	1.55
Peanut oil	13,633**	0.10	14,996**	0.11	0.97	0.86
Groundnuts	2,318	0.02	4,090	0.03	2.93	8.96
Granulated sugar	39,535***	0.29	40,898***	0.30	2.35	5.20
Wheat bread	55,894***	0.41	57,258***	0.42	0.91	0.63
Other bread	3,272	0.03	3,272	0.03	3.48	7.17
All the above foods	233,120***	1.71	235,016***	1.72	1.93	3.11

Source: Authors' computation from the 2011 Senegalese Household Survey

Note: ***1% level of significance; **5% level of significance; *10% level of significance

The last two columns of this table analyze these effects of price decreases on income inequality. A ratio of more than unity suggest that people towards the bottom end of the distribution benefit disproportionately from the income effects created by price reductions.

5. The Groundnut and Telecommunication Sectors

63. Policy-makers can be tempted to counter market distortions, for example caused by import restrictions, with interventions that introduce further distortions in other part of the value chain. Vegetable oil, sugar, and bread prices, for example, are subject to price ceilings. These, in turn, can facilitate collusion by providing a focal point for agreements, distort price signals to producers, and stifle quality and innovation. It is therefore important to conduct holistic market assessments that consider the underlying sources of undesirable market outcomes and assess all market actors and/or adjacent markets.

64. The groundnut value chain and the telecommunications sector were selected for further assessment. In addition to prior knowledge of restrictions on competition such as import restrictions driving up consumer prices for vegetable oils, the selection was informed by an assessment of sectors' contributions to GDP and exports, their weight in consumption baskets and their spillover effects, all of which are part of the MCPAT's sector selection criteria.

65. In the groundnut sector, a series of restrictions in consecutive segments of the value chain are intended to improve market functioning, but in fact lead to an accumulation of market distortions which hinder the development of this crucial sector. Covering roughly half of arable land in Senegal and employing 482,000 farmers,⁹⁶ the groundnut sector has been a political priority. The “restructuring of the groundnut industry” is one of the flagship projects of the Plan Sénégal Emergent, for example.⁹⁷ As a result, the Government has traditionally played an important role in the sector and continues to do so despite formal liberalization.

66. Telecommunications has been identified as a crucial pillar of future growth by the GoS and contributes significantly to the overall economy – in this respect, the lack of a functioning regulatory framework to ensure access is the key constraint. ICT contributed 6.3 percent to GDP in 2014.⁹⁸ Furthermore, the sector's spillovers are considerable. As a percentage of total GDP, Senegal's iGDP, which measures the internet's contribution to overall GDP, exceeds that of all other African economies and is higher than that of Germany.⁹⁹ More detailed analyses of the selected sectors and de-selected other sectors can be found in Annex 4.

⁹⁶ World Bank. 2015. *Étude Diagnostique de la Chaîne de valeurs arachide au Sénégal: Propositions de réformes*, p. 10

⁹⁷ Republic of Senegal. 2014. *Plan Sénégal Emergent*.

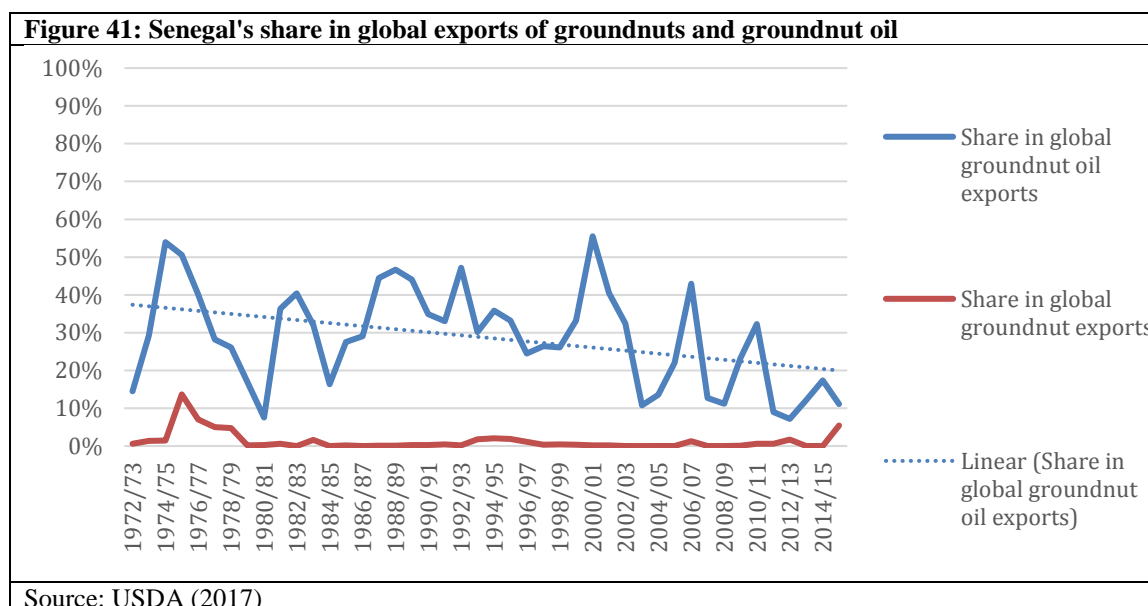
⁹⁸ Republic of Senegal. 2016. *Strategie Sénégal Numérique*, p. 9

⁹⁹ McKinsey Global Institute. 2013. *Lions go digital: The internet's transformative potential in Africa*. Available at <http://www.mckinsey.com/industries/high-tech/our-insights/lions-go-digital-the-internets-transformative-potential-in-africa>

5.1 The Groundnut Sector

5.1.1 Background

67. Groundnuts play a crucial role in Senegal’s agricultural sector. However, the standing of Senegal as a global supplier of groundnuts and groundnut oil has declined steadily in recent decades. Around 482,000 farmers or 63 percent of the farming population grow groundnuts¹⁰⁰ and around one third of arable land is dedicated to the cultivation of the crop.¹⁰¹ Senegal is currently the ninth largest groundnut producer globally and holds the fifteenth place in global groundnut oil production.¹⁰² While Senegal was the world’s largest exporter of groundnut oil on and off up until the early 2000s, it has now been firmly overtaken by Argentina and Brazil¹⁰³ – following a continuous decline of market share in global groundnut oil exports down to 11 percent in 2015/16 (see Figure 41).



68. Senegal’s declining share of global production coincides with a shift away from groundnut oil and towards whole groundnuts in the global trade of groundnuts and derived products. Whereas global groundnut oil exports have declined continuously in

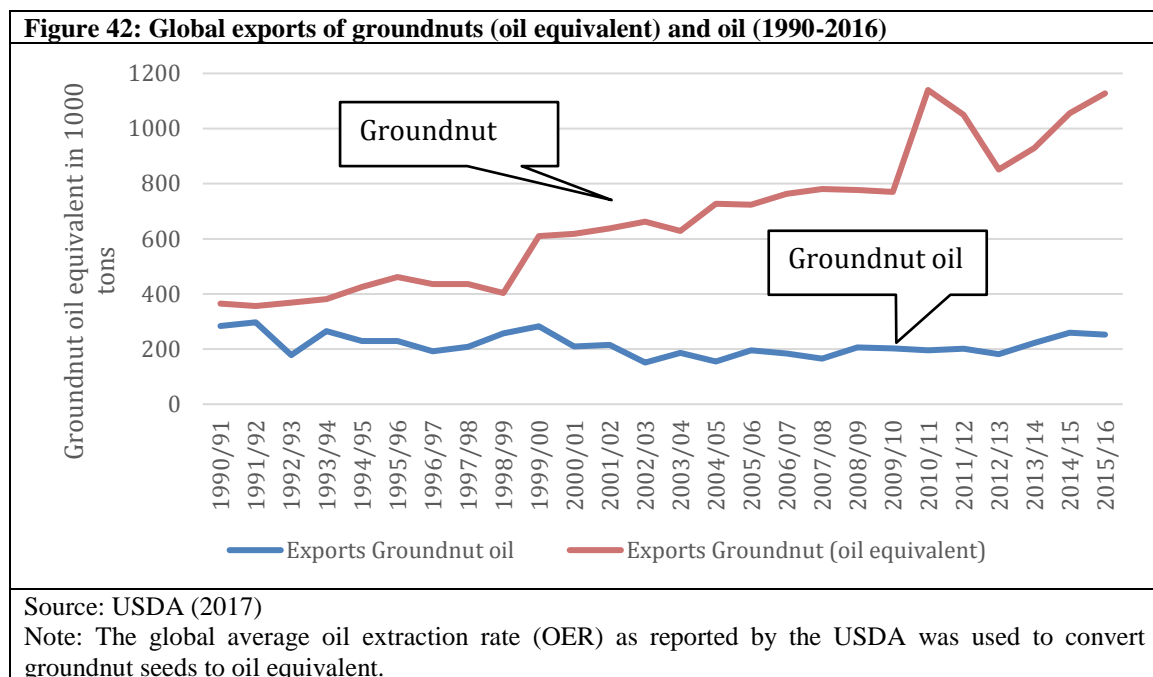
¹⁰⁰ World Bank. 2015. *Étude Diagnostique de la Chaîne de valeurs arachide au Sénégal: Propositions de réformes*, p. 41

¹⁰¹ According to the latest available data, Senegal has 3.2 million hectares of arable land (FAO. 2017. *County Indicators – Senegal*. Available at: <http://www.fao.org/faostat/en/#country/195>), 1.1 million of which are dedicated to groundnuts (USDA. 2017. *Production, Supply and Distribution Database*. Available at: <https://apps.fas.usda.gov/psdonline/app/index.html#/app/home>).

¹⁰² USDA. 2017. *Production, Supply and Distribution Database*. Available at: <https://apps.fas.usda.gov/psdonline/app/index.html#/app/home>

¹⁰³ USDA. 2017. *Production, Supply and Distribution Database*. Available at: <https://apps.fas.usda.gov/psdonline/app/index.html#/app/home>

absolute terms since the mid-1970s, whole nut exports have been increasing steadily over the past 20 years (Figure 42).¹⁰⁴ Senegal has only recently been able to follow this trend after the removal of an export ban on whole nuts in 2013 (which will be discussed in more detail later in this section), even though it has been proven conclusively that Senegalese comparative advantage lies with whole groundnuts as opposed to oil processing.¹⁰⁵ Today, relative to other vegetable oils, groundnut oil makes up a relatively low proportion of the global market. The continued rise of cheaper vegetable oils such as palm and soy bean oils, which today dominate over three quarters of the global market for vegetable oils, means that groundnut oil has become a niche product, occupying only 0.3 percent of the global market.¹⁰⁶



69. With the rise of palm and soy bean oil on the one hand and larger and more efficient groundnut producers such as China on the other hand, Senegal's groundnut oil sector is struggling to compete on the global market. Using budget data from Senegalese groundnut enterprises, a recent World Bank analysis showed that processing groundnuts into groundnut oil appears to currently be an unprofitable and risky activity in Senegal.¹⁰⁷ This is due to limited global demand for imported groundnut oil, but is exacerbated by distortions along the value chain. Also, increasingly at global level groundnut oil processing is carried out in the destination point due to, among other factors,

¹⁰⁴ World Bank. 2016. *Competitiveness and comparative advantage of the groundnut value chain in Senegal*, p. iv

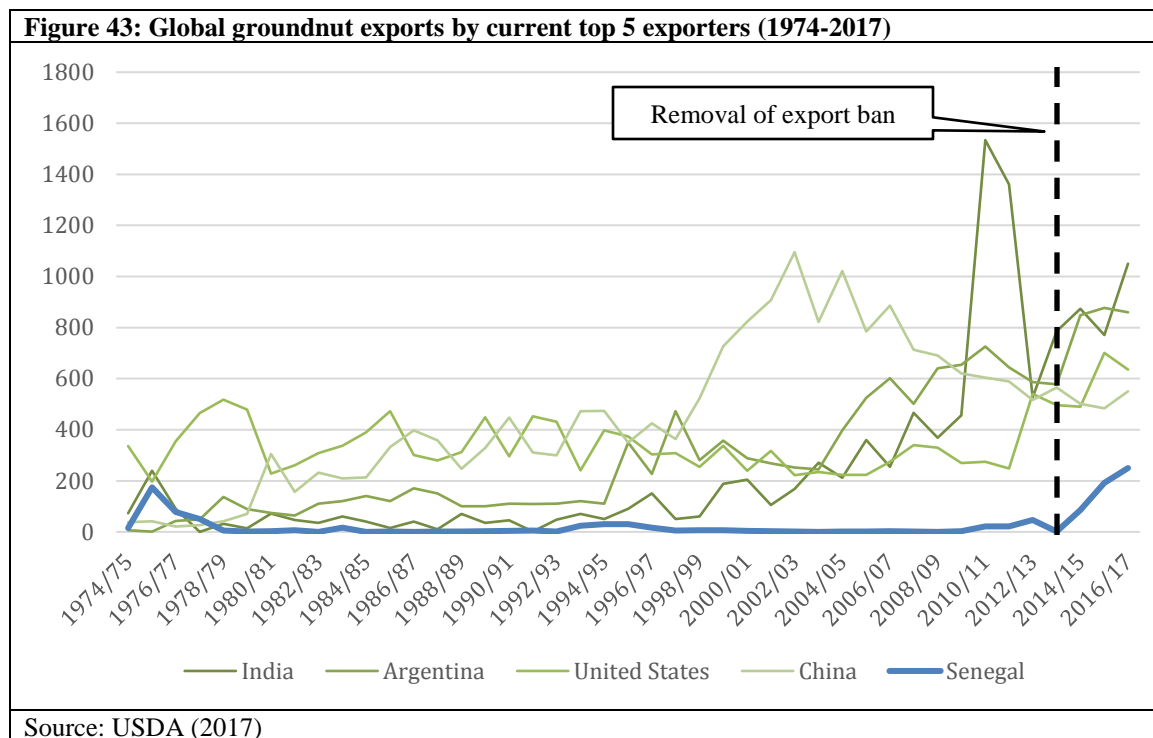
¹⁰⁵ World Bank. 2016. *Competitiveness and comparative advantage of the groundnut value chain in Senegal*, p. iv

¹⁰⁶ European Commission. 2016. *Analyse d'économie politique (PEA) des filières de l'arachide et du riz*, p. 25

¹⁰⁷ World Bank. 2016. *Competitiveness and comparative advantage of the groundnut value chain in Senegal*.

the high cost of transport. This and other distortions may have contributed to a lack of high-quality inputs and low yields, which raise costs for processors by making it more difficult for them to reach an efficient scale of operation. For example, while the United States is currently able to harvest 4.08 tons of groundnuts per hectare, China's and Argentina's yields are 3.59 and 3.36 tons per hectare respectively, and India and Nigeria harvest 1.1 and 1.2 mt/ha each, Senegal struggles to generate yields of 0.91 mt/ha falling behind Tanzania, which harvests 0.95 mt/ha.¹⁰⁸

70. The export of whole groundnuts from Senegal, on the other hand, is a highly profitable activity.¹⁰⁹ When the Senegalese Government liberalized the export of whole groundnuts in 2013, the entry of exporters - primarily exporting to China - created significant upward pressure on groundnut farmgate prices in Senegal.¹¹⁰ While oil processors paid farmers a fixed price of 200 F CFA per kg in the 2015/16 season (agreed among processors), the new exporters were willing to pay anywhere between 250 and 300 F CFA per kg.¹¹¹ Figure 43 shows the increase in Senegalese groundnut exports following the liberalization.



71. Due to the sector's lack of competitiveness, Senegalese groundnut oil millers have continuously operated below capacity over recent years. As Table 7 shows, the

¹⁰⁸ USDA. 2017. *Production, Supply and Distribution Database*. Available at: <https://apps.fas.usda.gov/psdonline/app/index.html#/app/home>

¹⁰⁹ World Bank. 2016. *Competitiveness and comparative advantage of the groundnut value chain in Senegal*.

¹¹⁰ Mbaye, A. A., Golub, S., English, P. 2015. *Policies, Prices and Poverty: The Sugar, Vegetable Oil, and Flour Industries in Senegal*. World Bank Policy Research Working Paper 7286, p. 15

¹¹¹ Authors' interviews

largest oil millers have struggled to reach even 50 percent of capacity. This is despite the fact that in the 2016/17 season an export tax was put in place that allowed millers to better compete with exporters that have been able to pay higher prices for whole groundnuts (See also Box 7). While these policies pursue legitimate objectives, they may cause adverse effects. Since the Government subsidizes and protects the groundnut oil industry, oilseed producers face lower price risk. On the other hand, export taxes reduce local prices, which despite facilitating consumption and processing of groundnut oil locally affects productivity as well. Lower productivity leads to lower exports at world 1 price levels, which has a high opportunity cost not only for exporters but also for the domestic industry, ultimately hurting consumers

Table 7: Capacity utilization rates of largest Senegalese millers (2015-2017)

Oil miller	Capacity (tons)	Utilization 2015/16	Utilization 2016/17
SONACOS	300,000	2.4%	31.1%
COPEOL	100,000	25.3%	49.6%
WAO	80,000	17%	16.5%
CAIT	30-35,000	<1%	<1%

Source: Authors' calculations based on CNIA (2017) and World Bank (2015)

Box 7: Overview of the groundnuts sector trends and profitability

The potential of Senegal's whole groundnut exports (and especially high-quality whole groundnut, such as those for confectionery and snacks) is still to be fully unleashed. Currently, the season's minimum price for groundnuts is set by The Comité National Interprofessionnel de l'Arachide (CNIA). Phasing out the minimum price would lower the price and impact farmers' income. However, removing the minimum price would also encourage competition among producers and exports, what would increase production to meet global demand. To address issues stemming from the exposure of farmers to world price volatility, this policy should be accompanied by mechanisms to address potential vulnerabilities.

Further, high export taxes can have a negative impact in the domestic whole groundnut market: an export tax puts pressure on the local price, what increases local consumption but reduces productivity. Since production decreases, exports decrease. This constitutes an opportunity cost for farmers. However, if the Government invests the collected revenues in public services to increase productivity (i.e. genetics or biotechnology, agronomic conditions and infrastructure) the export tax policy can help accelerate inclusive growth and social protection. Ad valorem export taxes kept at low levels (i.e. 5 percent) allow adapt to different levels of production and according to the variability of world prices, what renders more stability to local prices. In any case, the domestic price increase stemming from market liberalization (and a moderate export tax), leads to revenue gains higher than the cost increase for consumers, even for poorest households.

Finally, exports of processed groundnuts (snacks) present an estimated 39.3 percent profit margin for Senegal. This market albeit requires investment in the sourcing cost, groundnuts, what may increase cost fixes as well, due to investments in aflatoxin detection and control mechanisms. Following a recent study (Arnoldus, M et al. *Economic Analyses of Peanut Processing in Africa*, SENSE, 2016), for an amount of 10,000 tons of kernels, even if the factory is only at 50 percent of production capacity, it will still be profitable at 36.7 percent.

Source: World Bank. 2016. Competitiveness and comparative advantage of the groundnut value chain in Senegal; Arnoldus, M et al. Economic Analyses of Peanut Processing in Africa, SENSE, 2016

72. The groundnut sector constitutes a key priority for the Senegalese Government due to its economic importance. In the Plan Sénégal Emergent (PSE), Senegal’s strategic vision, the restructuring of the groundnut industry constitutes a “flagship project,” with the objective to (i) increase yields by 50 percent between 2016 and 2020; (ii) replace 10-20 percent of groundnut oil production with edible nuts by 2023; and (iii) replace 20-30 percent of imported oil consumption with locally produced groundnut oils.¹¹² The third objective highlights the Government’s desire to develop a viable groundnut oil processing sector, while the second points to a desire to encourage some diversification in groundnut processing away from oils which appears to be more aligned with international demand. To improve the competitiveness of the groundnut value chain, the Government is currently in the process of developing a new strategy for the sector, to which this assessment aims to contribute.

5.1.2 The Groundnut Value Chain in Senegal

73. The exact nature and structure of groundnut value chains depends on the product being produced, but all start with the use of key inputs (notably seed and fertilizer) for the production of raw nuts. Production is dominated by around 482,000 smallholder farmers, although some larger farms are also engaged in groundnut production.¹¹³ Senegal typically produces around 1 million tons of groundnuts a year.¹¹⁴ An estimated quarter of that production is used immediately on the farm for auto consumption, is recycled as seed or is lost in post-harvest handling. The rest is purchased either by official collectors buying for the industrial millers or by exporters, or is used for artisanal processing, often by grower’s cooperatives or other forms of farmers’ associations. During the 2016/17 season, official collectors, generally called Opérateurs Privés Stockeurs (OPS), purchased around 16 percent of the overall production of groundnuts.¹¹⁵ Those groundnuts purchased by OPS are on-sold to millers (sometime under contract between the OPS and the miller), shelled, then processed into crude oil and either exported or refined for local consumption. The remainder of the groundnuts are either exported (roughly 35% in 2015/16)¹¹⁶ or go towards local artisanal products which are sold domestically, primarily as Seggal, a locally produced artisanal oil (25%). Figure 44 provides a summary of the value chain for these products, shows the key stakeholders involved at each segment of the chain and highlights the Government’s strategic objectives

¹¹² Republic of Senegal. 2014. *Plan Sénégal Emergent*, p. 81

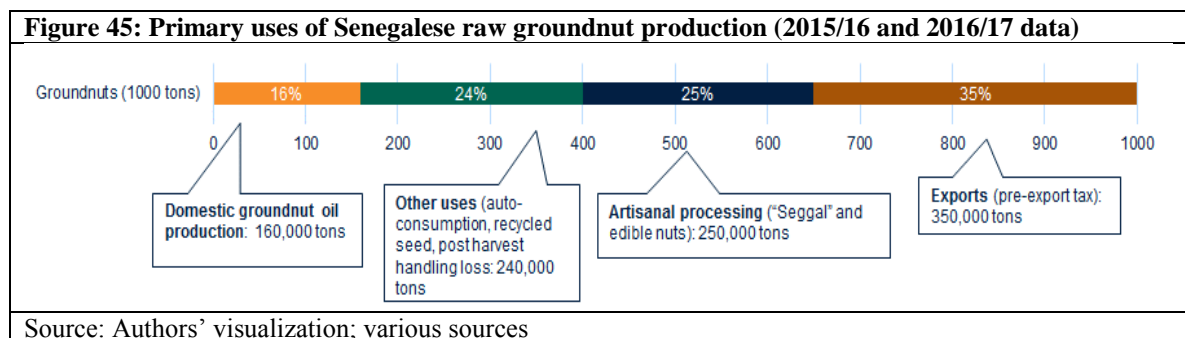
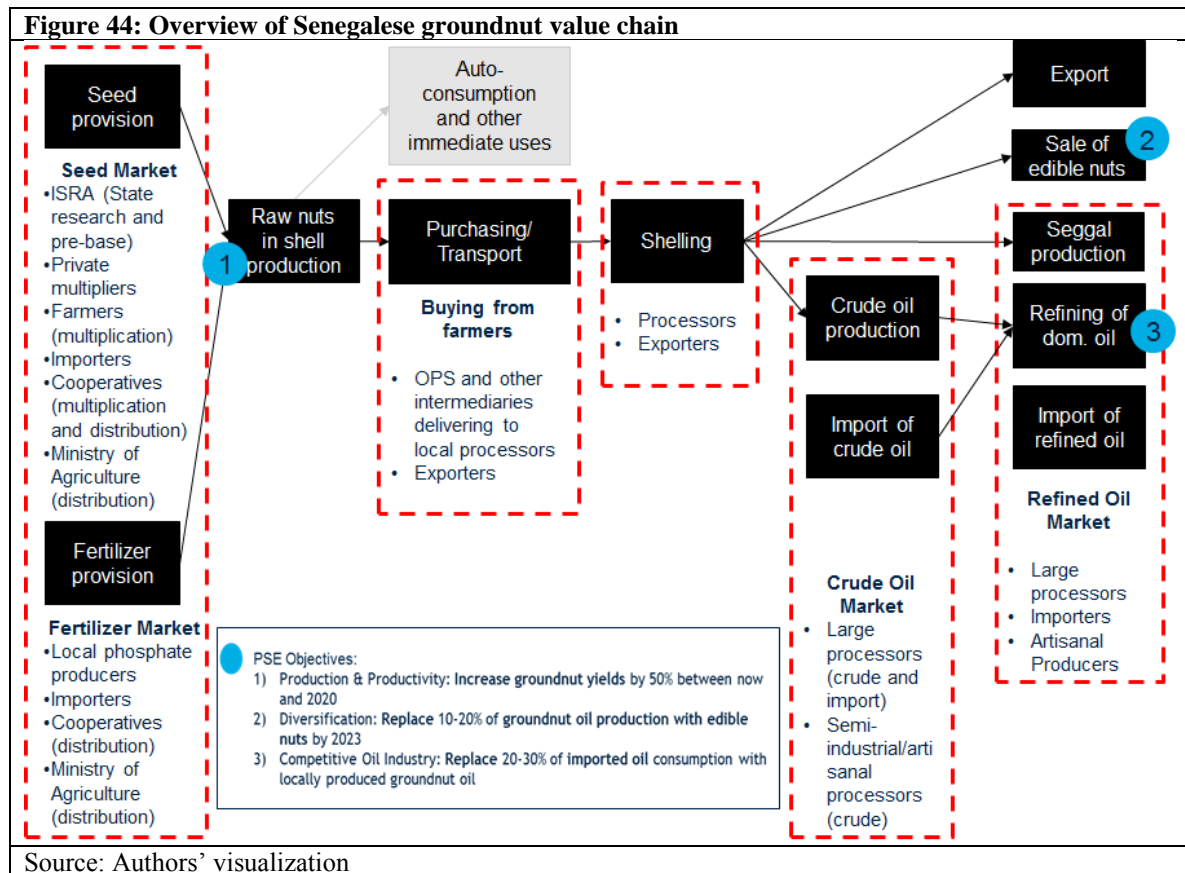
¹¹³ Including those controlled by religious leaders (called “Marabout”).

¹¹⁴ During the 2015/16 season, Senegal produced 1.1 million tons of groundnuts. USDA. 2017. *Production, Supply and Distribution Database*. Available at: <https://apps.fas.usda.gov/psdonline/app/index.html#/app/home>

¹¹⁵ CNIA. 2017. *Situation collecte commercialization des arachides 28eme semaine, du 05 juin 2017 au 10 juin 2017*, p. 5.

¹¹⁶ USDA. 2016. *Senegal – Oilseeds and Products Annual 2016*. Global Agriculture Information Network (GAIN), p. 2.

with regard to the value chain. Figure 45 shows the primary uses of Senegalese groundnut production.



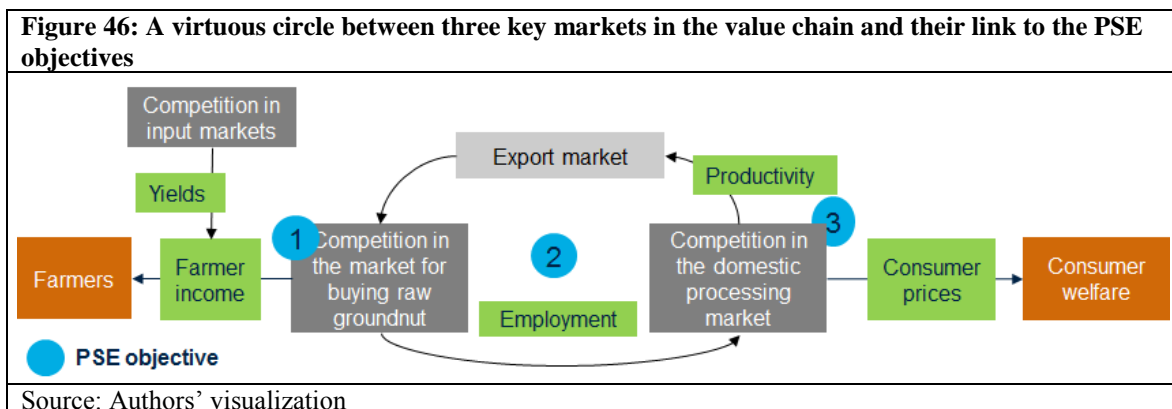
74. Given the overall value chain structure, three groups of markets emerge as central to the understanding of the dynamics of the value chain and will form the focus of this assessment. These are: i) input (seed and fertilizer) markets; ii) the market for buying from farmers; and iii) the vegetable oil production market (crude and refined). These markets are indicated along the value chain in Figure 44 above. The input market is crucial for the overall development of the value chain and is central to the achievement of the Government's objective to increase yields and ensure sufficient throughput for

processors. The market for buying from farmers determines farmgate prices, and thus the incentives for farmers to produce and the ability of processors and exporters to enter, procure inputs, and compete. Finally, the market for the production of vegetable oils determines the ability of local processors to be internationally competitive and to provide affordable products to domestic consumers. Since some millers import crude vegetable oils (primarily soy bean oil) and refine those for the local market as a substitute for groundnut oil, crude vegetable oils are shown to compete in the same relevant market as crude groundnut oil. Likewise, the import of refined vegetable oils (soy bean and palm oil) are shown to lie in the same relevant market as refined groundnut oil.

75. The Government's three PSE objectives for the groundnut sector are interlinked through market dynamics and competition along the value chain, particularly between the three focus markets of this assessment. Figure 46 outlines how, if markets function well and allow for competition between players, a virtuous circle between key markets in the value chain can lead to welfare gains for consumers (through lower consumer prices), for farmers (through increased incomes), and can help boost international competitiveness and create better jobs. In particular:

- 1) Market dynamics in input markets affect the price and availability of quality seeds and fertilizer,** which drives usage of these inputs and therefore productivity and yields in the production of groundnuts, thus indirectly affecting incomes of farmers.
- 2) Market dynamics in the market for buying raw groundnuts determine farmer incentives to produce and invest in inputs as well as the ability of the processing industry to access groundnut inputs.** The functioning of this market therefore supports the Government's objectives regarding yields and productivity in agricultural production. Prices and qualities determined on this market directly affect competition in the processing industry by affecting the ability of potential entrant processors to access inputs and enter, and also drive processors' input costs and their ability to operate at efficient capacity.
- 3) Market dynamics in the processing industry** drive industry player's incentives to i) improve production processes and reduce costs; ii) innovate in response to international demand and improve the range of value added products produced; and iii) reduce prices of groundnut products and vegetable oils (both locally produced and imported) in domestic markets. This would increase welfare of the more than 1.6m households consuming vegetable oils¹¹⁷ while also increasing opportunities for Senegal to export (see).
- 4) Greater entry in the processing market, greater diversity of products, and increased processing productivity should boost competition in the market for buying from farmers,** thus completing the virtuous circle.

¹¹⁷ Government of Senegal. 2015. 2013 Census Data. Available at: <http://senegal.opendataforafrica.org/dvltxuc/ordinary-and-collective-households>



76. However, distortions to market functioning along this value chain can hinder the benefits of competition and obstruct the signals and incentives that would otherwise characterize these linkages. The remainder of this assessment examines how Government interventions in each of the key markets identified may cause such distortions - taking into account market characteristics - interrupting the “virtuous circle” represented in Figure 46.

Box 8: Why domestic market competition matters for export competitiveness

Industries with more intense local competition are more likely to be competitive on export markets according to a 2015 review of the empirical literature on the relationship between domestic market competition and export competitiveness.¹¹⁸ Empirical studies suggest that companies tend to increase their productivity and competitiveness first due to domestic pressures before successfully participating in export markets. While, domestic competition promotes firm-specific productivity, it also generates efficiency-enhancing reallocation that increases industry-wide productivity thus further boosting a country’s export competitiveness in that industry. The literature furthermore shows that more intense competition in upstream markets (e.g. inputs goods and services) positively impacts the productivity of downstream activities (e.g. processing), and therefore their competitiveness on domestic and international markets.

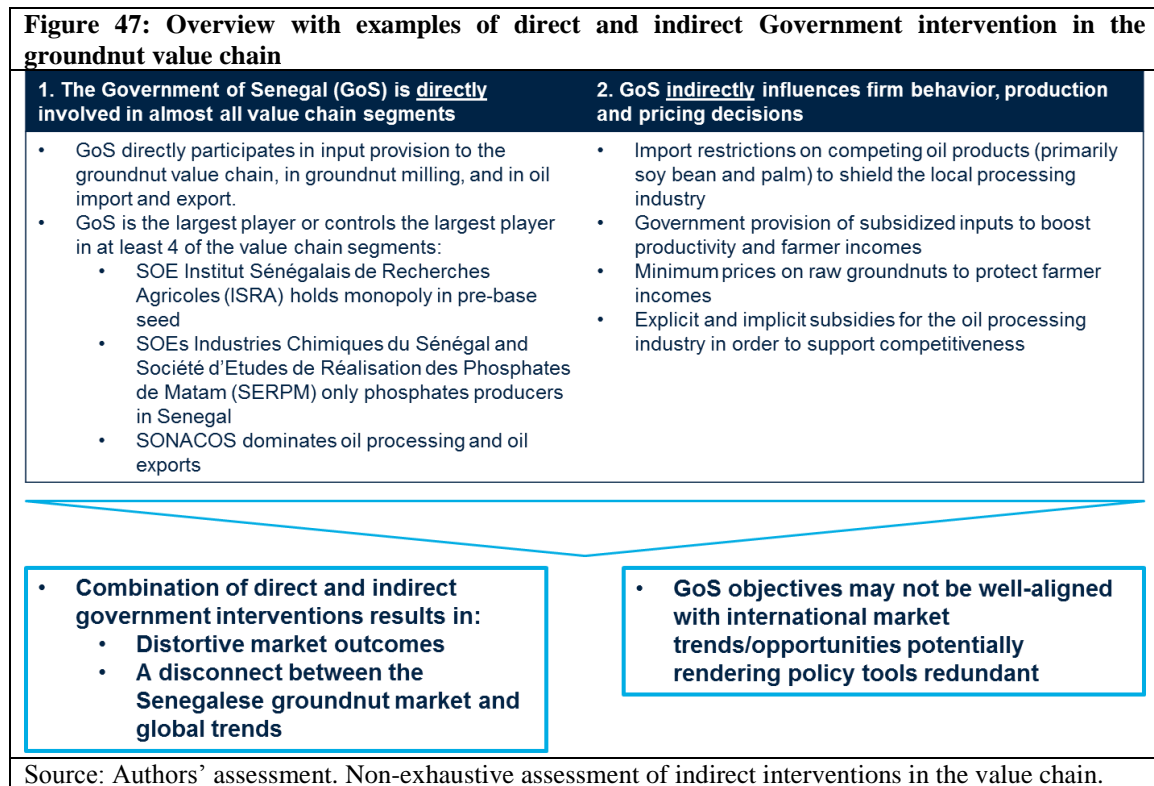
In the case of Senegal this suggests that competition in input markets and on the market for buying from farmers can increase the productivity and efficiency of the oil processing industry. This, in turn, would enhance the industry’s competitiveness on the export market (see Figure 46 above). A processing industry with little competition is unlikely to incentivize innovation and productivity of enterprises to ensure their competitiveness on export markets.

5.1.3 An Assessment of Market Dynamics and Government Interventions that May Restrict Competition

77. The GoS makes use of several tools to shape outcomes in the groundnut sector at all stages of the value chain. These Government interventions in the market are both indirect (through policies, regulation or departmental directives that set the rules for market functioning) and direct (through ownership of market players). They aim particularly at protecting Senegalese oil millers, while at the same time providing support to farmers. In

¹¹⁸ World Bank. 2015. *Export Competitiveness: Why Domestic Market Competition Matters*. Viewpoint no. 348. 97914.

some cases, however, such interventions introduce distortions into the value chain which may restrict market functioning and distort the incentives or ability for various market players (including farmers, traders and processors) to invest, compete and expand. Figure 47 summarizes examples of these interventions:



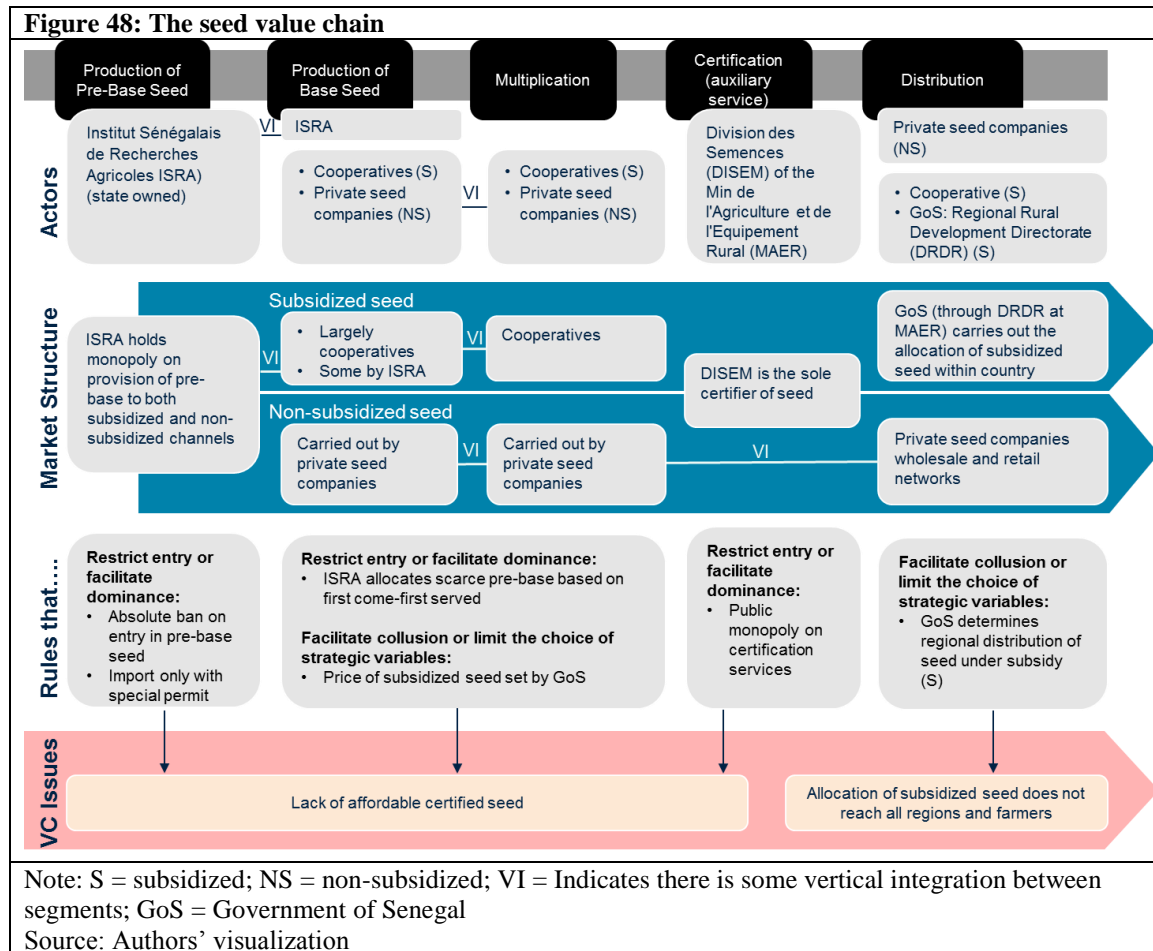
78. Tackling priority issues from a markets and competition perspective is key for the value chain development and can complement broader Government interventions on market development, such as the development of adequate quality and standards, irrigation systems, and contract farming as well as risk mitigating measures for farmers, such as crop insurance and measures for social protection.

79. This section explores these interventions and how they affect various markets along the value chain in more detail. Government interventions are classified according to their effects on the market, namely whether they: i) restrict entry or reinforce dominance; ii) facilitate collusion or limit firms' choice of strategic variables; or iii) protect vested interests or provide an undue advantage to certain players. It is worth noting that such a classification does not preclude the possibility that such interventions may play a legitimate role in achieving valid policy objective – but simply stresses that policy makers should also be aware of their potentially negative effects on the market, providing an opportunity to develop less distortive alternatives and to balance positive and negative effects more carefully.

Groundnut Input Markets in Senegal

Seeds

80. Figure 48 summarizes the segments of the seed value chain in Senegal, the actors present in each segment, the current market structure and the main restrictions to market functioning posed by Government interventions classified by their effect on the market. Since seeds are produced and distributed through a subsidized and a non-subsidized channels, both channels are shown in the figure.



81. The Government's research institution ISRA (Institut Sénégalais de Recherches Agricoles) holds a de facto monopoly on the production of pre-base seed and imports of groundnut seed are restricted. However, ISRA is not able to produce sufficient pre-base seed to satisfy demand. As a result, certified groundnut seeds are in short supply,¹¹⁹ and many farmers instead plant whole groundnuts, so-called "semences écrémées", which are not traceable and are of questionable quality. According to a 1960 decree, the import of groundnut seeds (both pre-base and certified) must be authorized by

¹¹⁹ Only roughly 25% of seed is certified

the Government's Service de la Protection des Végétaux (SPV).¹²⁰ The shortage of high-quality seeds contributes to Senegal's low yields, and the Government aims to replace recycled seeds with certified ones.¹²¹

82. Prices of pre-base seed set by ISRA do not allow it to satisfy market demand while covering its costs. Typically, a research institute would set a price for its pre-base seed that allows it to cover the cost of producing sufficient seed to cover market demand from market players looking to produce base seed from the pre-base seed.¹²² However, this does not appear to be the case in Senegal where demand for pre-base seed out-weighs supply from ISRA. Given scarce supply, ISRA decides on the allocation of pre-base seed between producers of base seed on a first-come-first-served basis, according to seed producers' capacity. This allocation mechanism lacks transparency and could allow for discretion in allocation. Furthermore, it does not allow for scarce pre-base to be allocated to the most efficient seed producers.

83. Licensing requirements for seed producers, although often warranted to achieve public health, safety and environmental objectives, may restrict entry to the market. In Senegal, seed operators are licensed by the Seed Division (Division des Semences, DISEM) of the Ministry of Agriculture (Ministère de l'Agriculture et de l'Équipement Rural, MAER) based on the quality of the producer's land, the adequacy of his equipment and his financial capacity.¹²³ It is important to ensure that licensing requirements are proportional to their objectives of safeguarding against food security, quality, health and environmental concerns. Services for certification of seed are also carried out exclusively by DISEM. Thus, combined with DISEM's role in seed producer licensing, the division determines entry of players to the market of certified seed.

84. Once certified, seed continues through two separate channels – non-subsidized and subsidized – with the regional distribution of the latter being determined by the Government. For the non-subsidized channel, seed multiplied by commercial producers is sold through their distribution channels and can be bought at prices that are not subsidized by the Government. Seed that is distributed with a subsidy is multiplied by ISRA itself or by cooperatives. To acquire subsidized seed, farmers are required to purchase seed through a Government-managed distribution channel, in which the regional rural development directorates (Directions Régionales de Développement Rural, DRDR) allocate seeds to communities and, with the support of cooperatives and village leaders, eventually to farmers. Farmers are restricted to the Government allocation points in their choice of where to purchase subsidized seed. Some sources claim that the lack of transparency in the allocation mechanism for subsidized seeds has tended favor well-

¹²⁰ Décret n°60-121 SG.

¹²¹ Dakaractu. 2014. *Le gouvernement veut éliminer graduellement les semences écrémées (ministre)*. Available at: http://www.dakaractu.com/Le-gouvernement-veut-eliminer-graduellement-les-semences-ecremees-ministre_a71043.html

¹²² Generally, the production of pre-base seed (sometimes called “breeder seed”) is followed by the production of “foundation seed” or “base seed”. This base seed is then multiplied and sold as ready to use seed.

¹²³ DISEM. *Procédure d'agrément et d'admission au contrôle d'un OPS*. Available at: <http://www.seysoo.com/GECSEM/controlecertification/processuscertification>

connected entrepreneurial growers, such as politicians, religious leaders (Marabouts) and other officials.^{124,125,126}

85. Restrictions on the seed market are summarized in Table 8 below. In addition to the restrictions elaborated on above, the involvement of cooperatives and farmer organizations in the multiplication process, while potentially offering efficiencies, could also facilitate information exchange among participating seed producers and thus facilitate collusion.

¹²⁴ Initiative Prospective Agricole et Rurale (IPAR). 2015. *Subventions des intrants agricoles au Sénégal: controverses et réalités*. Rapport annuel sur l'état de l'agriculture et du monde rural au Sénégal, p. 9

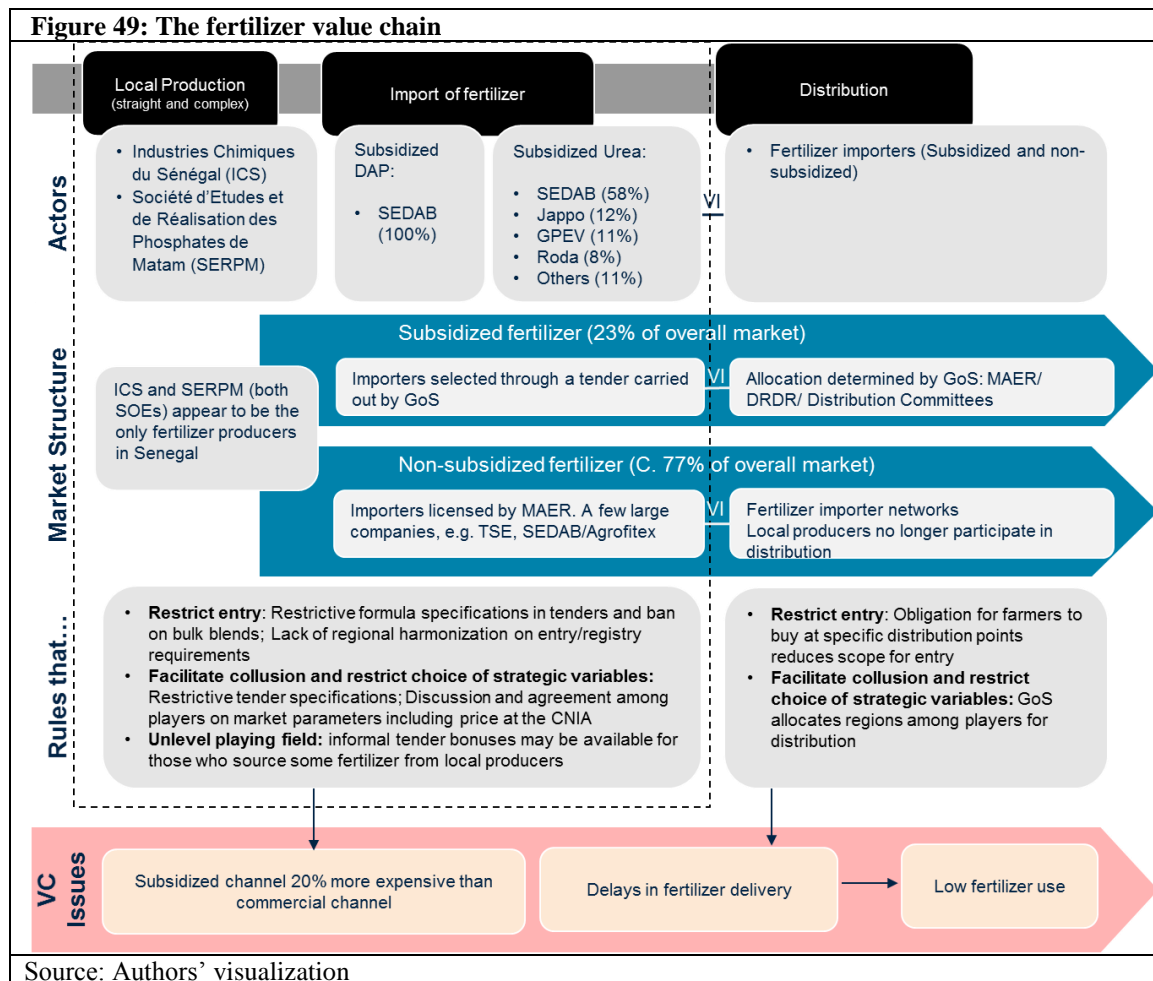
¹²⁵ PressAfrik. 2014. *Entre reconstitution du capitalisme semencier et commercialisation de l'arachide : Le cycle d'une gestion nébuleuse*. Available at: http://www.pressafrik.com/Entre-reconstitution-du-capitalisme-semencier-et-commercialisation-de-l-arachide-Le-cycle-d-une-gestion-nebuleuse_a117408.html

¹²⁶ A reformed subsidy scheme would require an assessment of the proper targeting of subsidies.

Table 8: Rules that may hinder competition in the market for seed

	Rules that reinforce dominance or limit entry	Rules that facilitate collusion or restrict firms' choice of strategic variables	Rules that discriminate and provide an undue advantage to certain players
Pre-base	Monopoly rights and absolute ban on entry: <ul style="list-style-type: none"> ISRA holds monopoly on pre-base seed production and sets price 		
Multiplication	Relative ban on entry <ul style="list-style-type: none"> Shortage of pre-base seed, and first come first served allocation of pre-base to multipliers by ISRA, limits access to essential inputs for multipliers 	Rules that facilitate agreements among competitors: <ul style="list-style-type: none"> Government may encourage formation of seed producers into cooperatives or large associations which may provide additional information exchange mechanism that can facilitate collusion 	Potential discretionary application of rules: <ul style="list-style-type: none"> First-come-first-served allocation of pre-base seed from ISRA may leave scope for discretion which may provide for advantage allocation to certain players on the basis of factors other than merit.
Distribution	Relative ban on entry: <ul style="list-style-type: none"> Regional distribution of seed under the subsidy scheme determined by Government, limiting entry by multiplier/distributors in regional markets Farmers cannot choose where to buy subsidized seed reducing opportunities for the private sector to enter and compete Licensing restrictions on imports of groundnut seed. 	Restrictions on type of products and services/format and location <ul style="list-style-type: none"> Government determined regional distribution of subsidized seed may limit multiplier/distributors choice over which regional markets to supply Rules that facilitate agreements among competitors: <ul style="list-style-type: none"> Government may encourage formation of seed producers into cooperatives or large associations which may provide additional information exchange mechanism that can facilitate collusion 	Discretionary application of rules: <ul style="list-style-type: none"> Lack of transparency in targeting of subsidies (said to favor connected individuals)

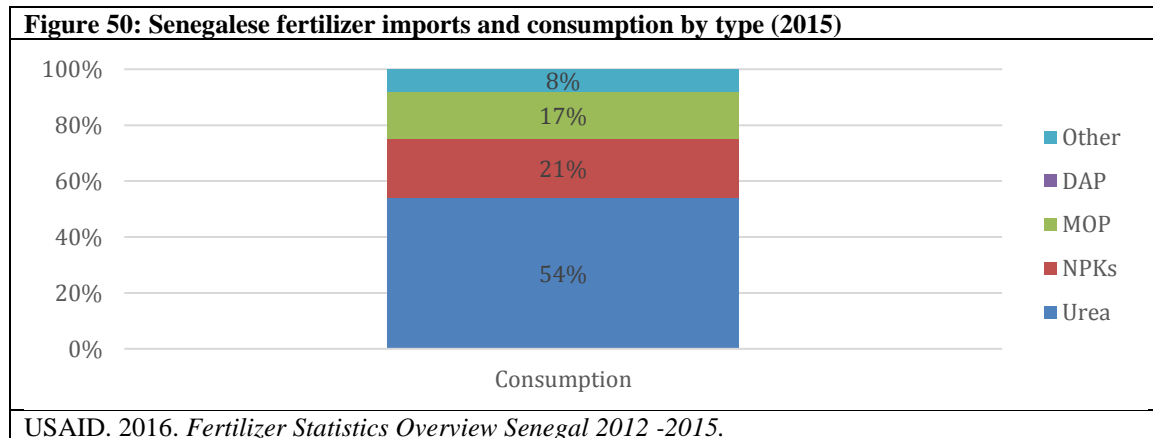
86. Figure 49 summarizes the segments of the fertilizer value chain in Senegal, the actors present in each segment, the current market structure and the main restrictions to market functioning posed by Government interventions classified by their effect on the market. Since fertilizer can be distributed through either a subsidized or a non-subsidized channels both channels are shown in the figure. Table 9 summarizes the rules that may hinder competition in the market for fertilizer in more detail.



87. While there are two producers of phosphatic fertilizer present in Senegal (both of which are characterized by state ownership), Senegal imports most of its straight and complex fertilizer. Industries Chimiques du Sénégal (ICS), of which the Government holds 15 percent,¹²⁷ and Société d'Etudes et de Réalisation des Phosphates de Matam (SERPM), which is owned by the GoS and controlled by the Ministry of Mines and

¹²⁷ DakarActu. 2016. *Industries Chimiques du Sénégal : le problème majeur c'est leur acquisition nébuleuse par Indorama*. Available at http://www.dakaractu.com/Industries-Chimiques-du-Senegal%C2%A0-le-probleme-majeur-c-est-leur-acquisition-nebuleuse-par-Indorama_a121215.html

Geology,¹²⁸ appear to be the only producers of fertilizer in Senegal. Both focus on phosphate fertilizers such as phosphate rock, diammonium phosphate (DAP) and other NPKs.¹²⁹ Domestic production of fertilizers appears to be limited so that the country relies on fertilizer imports.¹³⁰ In 2015, Senegal's fertilizer imports exceeded its use of fertilizer for domestic agriculture.¹³¹ Figure 50 shows consumption by fertilizer type to highlight the structure of the fertilizer market.



88. The Government of Senegal subsidizes fertilizer and is involved in all stages of the value chain from procurement to distribution. Roughly 23 percent of fertilizers are being subsidized by the Government.¹³² For subsidized fertilizer, the Government engages in a public procurement process based on anticipated demand and then awards contracts to a few large providers. As part of the contract, providers are required to deliver fertilizer to specific locations determined by the Government. The regional allocation is carried out by the Agriculture Directorate in the MAER. As with seed, local allocation is undertaken by DRDR in cooperation with cooperatives and village-level distribution committees. The Government determines the final price of the subsidized fertilizer and importers recoup the difference between their cost of delivery and the subsidized price upon presenting sales

¹²⁸ Décret n° 2017-1546 du 08 septembre 2017 portant répartition des services de l'État et du contrôle des établissements publics, des sociétés nationales et des sociétés à participation publique entre la Présidence de la République, la Primature et les Ministères

¹²⁹ USAID. 2016. *Fertilizer Statistics Overview Senegal 2012 -2015*; NPK stands for nitrogen (N), phosphorus (P), and potassium (K).

¹³⁰ In 2015, Senegal exported 27,169 tons of fertilizer. Of those, 66 percent were DAP, 30 percent were other phosphate fertilizers, 3 percent urea, 1 percent NPKs and the remainder were organic fertilizers. Three fourths of fertilizer exports were destined to Mali, about a quarter to Cote d'Ivoire, and some to other countries. Only for DAP and other phosphate fertilizers exports exceed imports, suggesting local production (although some might be reexports of previous seasons' imports). Overall, exports represent about 30 percent of imports, suggesting that Senegal depends on fertilizer imports. (USAID. 2016. *Fertilizer Statistics Overview Senegal 2012 -2015*)

¹³¹ USAID. 2016. *Fertilizer Statistics Overview Senegal 2012 -2015*. Some fertilizer products can be used for both agricultural and industrial purposes

¹³² In 2015, Senegal consumed 75,299 tons of fertilizer (USAID. 2016. *Fertilizer Statistics Overview Senegal 2012 -2015*). In the 2016/17 season, GoS subsidized 17,318 tons of fertilizer (Data from DRDR). Assuming constant consumption, this is equivalent to 22.66%.

receipts to the Government. The average subsidy is 50-60 percent,¹³³ although this varies across regions according to transport costs.

89. In the 2016/17 season, one supplier dominated both the provision of subsidized urea and DAP fertilizers. The Société Sahélienne d'Entreprises de Distribution et d'Agro-Business (SEDAB) was the only supplier of subsidized DAP in Senegal and provided 58 percent of the country's subsidized urea fertilizer. Although high market concentration is not in itself problematic, if a tender has not been awarded to the most competitive supplier, it may raise questions about the competitive nature of the tender process. In fact, there are indications that contracts are awarded also on the basis of factors that are not related to performance, like the identity of winning bidders (e.g., Senegalese suppliers).¹³⁴

90. Tender rules for subsidized fertilizer in Senegal display some features that may restrict competition. For example, a specific formula for groundnut fertilizer is determined in the tender rules, and this may restrict entry of potential substitute specifications and limit firms' choice of strategic variables (i.e. prevent competition in the dimension of the formula specification). It may also facilitate collusion by increasing symmetry between bidders. Furthermore, the Government appears to prohibit the participation of bulk blended products in fertilizer tenders (limiting tenders to complex blends which are produced by ICS for example). This has the effect of excluding potential regional competitors from Mali, Burkina Faso, Côte d'Ivoire, and Guinea, and may raise prices. Finally, it appears tender bonuses may informally be given to bidders who agree to procuring fertilizer partially from ICS.¹³⁵

91. Delayed Government payments to suppliers and inefficiencies in the subsidized channel hinder entry and raise the final costs of subsidized fertilizer relative to fertilizer delivered commercially. Some suppliers to the Government fertilizer schemes stated that difficulties in ensuring timely tender selection and payment through the subsidized channel raised risks for players and hindered entry into the tender processes.¹³⁶ It was reported that such inefficiencies in the Government-managed distribution channels meant that the cost for the private sector of delivering fertilizer under subsidy (and therefore the cost passed on to Government) was around 20 percent higher than the cost of delivery through the commercial distribution channel.¹³⁷ This differential is also likely to reflect the lack of incentives for market players to reduce costs under the subsidized distribution channel and suggests that the Government may be able to lower its costs by developing ways to leverage on commercial networks for fertilizer schemes (e.g. through utilizing demand side vouchers for users rather than supply side subsidies).

92. Given that formula specifications are narrowly set, retail prices are set by the Government, and regional allocations are pre-determined, few competitive

¹³³ Ministère de l'Agriculture et de l'Équipement Rural. 2016. *Circulaire fixant les prix de cession des intrants subventionnés pour la campagne agricole 2016/17*. 29 April 2016.

¹³⁴ Authors' interviews with stakeholders in December 2016.

¹³⁵ Authors' interviews with stakeholders in December 2016.

¹³⁶ International Fertilizer Development Center (IFDC). 2014. *Senegal Fertilizer Assessment*, p. 24

¹³⁷ Authors' interviews with stakeholders in December 2016.

dimensions remain on the subsidized fertilizer market. Farmers are restricted to a single outlet for subsidized fertilizer (market restrictions are summarized in Table 9 below). Moreover, the process of allocating subsidized fertilizers among farmers lacks transparency,¹³⁸ which some sources have claimed has led to an advantage for well-connected producers.¹³⁹

93. A lack of harmonization at the regional level and burdensome licensing and permitting requirements may further limit entry of imports to the Senegalese fertilizer market. A regional legal framework to harmonize national fertilizer quality control regulations was enacted formally in 2014. However, only 4 out of 15 ECOWAS countries were classified as having made some progress toward implementation and WAEMU has not formally signed the convention.

¹³⁸ PressAfrik. 2014. *Entre reconstitution du capitalisme semencier et commercialisation de l'arachide : Le cycle d'une gestion nébuleuse*. Available at: http://www.pressafrik.com/Entre-reconstitution-du-capitalisme-semencier-et-commercialisation-de-l-arachide-Le-cycle-d-une-gestion-nebuleuse_a117408.html

¹³⁹ Initiative Prospective Agricole et Rurale (IPAR). 2015. *Subventions des intrants agricoles au Sénégal: controverses et réalités*. Rapport annuel sur l'état de l'agriculture et du monde rural au Sénégal, p. 9

Table 9: Rules that may hinder competition in the market for fertilizer

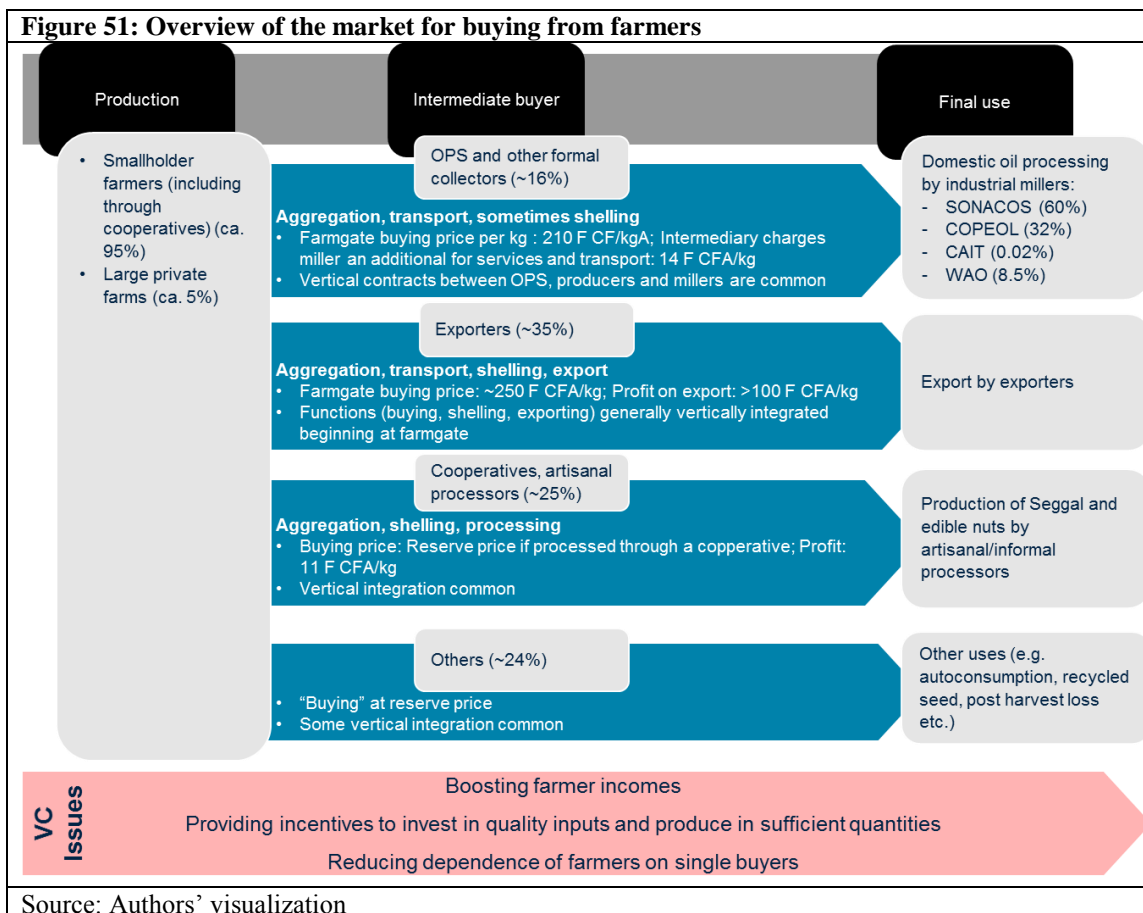
	Rules that reinforce dominance or limit entry	Rules that facilitate collusion or restrict firms' choice of strategic variables	Rules that discriminate and provide an undue advantage to certain players
Fertilizer Import / production	<p>Relative ban on entry and expansion of activities</p> <ul style="list-style-type: none"> • Potentially over-burdensome requirements for registry of new fertilizers (licenses and permits) due to lack of regional harmonization in product registration, labeling, and inspection — even for identical products in similar agro-climatic conditions. • Payment delays caused by the Government in the subsidized channel create additional costs for potential competitors • Overly restrictive formula specifications for Government tenders can limit entry of potential substitute specifications • Tender process for subsidized fertilizer tends to only select 3-7 recurrent firms to import/distribute • Prohibition on bulk blending Government tenders (limiting the market to complex, nominally to protect farmers) 	<p>Rules that facilitate agreements among competitors and restrictions on type of products and services/format and location:</p> <p>Overly restrictive tender specifications and bans on bulk blends in tenders increases symmetry and can facilitate collusion, and reduces firms' ability to choose their strategic variables.</p> <p>Rules that facilitate agreements among competitors: Information exchange through the CNIA can facilitate collusion in both the subsidized and unsubsidized channel</p>	<p>Discretionary application of rules: An informal tender bonus may be provided to distributors who agree to buy from local producers (through a letter of recommendation from suppliers to the Government)</p>
Fertilizer Distribution	<p>Relative ban on entry and expansion of activities</p> <ul style="list-style-type: none"> • Distribution of subsidized fertilizer across regions by various players determined by Government limiting entry by alternative distributors in regional markets • Farmers are obliged to buy subsidized fertilizer from specific distribution points reducing opportunities for the private sector to enter and compete 	<p>Limits on choice of strategic variable</p> <ul style="list-style-type: none"> • GoS allocates regions among players for fertilizer distribution under the subsidy scheme limiting choice of strategic variable for importers/distributors in regional markets <p>Rules that facilitate agreements among competitors: Information exchange through the CNIA.</p>	<p>Discriminatory application of rules and standards: Prohibition on bulk blending Government tenders favors local complex fertilizer producers.</p> <p>Discretionary application of rules: Lack of transparency in targeting of subsidies said to benefit well connected agricultural producers</p>

The Market for Buying Raw Groundnut from Farmers

94. The market for buying raw groundnut from farmers directly determines the income for almost 500,000 groundnut producers, and is characterized by a significant degree of Government intervention. There are four types of buyers in the market for raw groundnuts. First, the Opérateurs Privés Stockeurs (OPS) and other formal collectors generally purchase for one or more of the industrial millers, often under contract. In this sense, ultimately the dynamics of the market for purchasing groundnuts through this channel are determined by the local groundnut processors. Second, exporters, largely from China or Vietnam, purchase groundnuts for export, either in the form of nuts in shell (NIS) or shelled kernels. Third, artisanal or semi-industrial processors purchase groundnuts for the production of Senegal, an artisanal groundnut oil, or for some confectionary uses (See Box 9 on the international experience in developing the confectionary industry). Although there are no reliable estimates, artisanal processing carries significant employment implications, particularly for women.¹⁴⁰ Often organized in farmers' organizations or cooperatives, artisanal processors tend to be partially vertically integrated into farming. According to the World Bank, artisanal processing generates profits of 11 F CFA/kg.¹⁴¹ Finally, the remainder of the groundnut is self-consumed by farmers or recycled as seed (Figure 51).

¹⁴⁰ European Commission. 2016. *Analyse d'économie politique (PEA) des filières de l'arachide et du riz*, p. 17.

¹⁴¹ World Bank. 2016. *Competitiveness and comparative advantage of the groundnut value chain in Senegal*, Annex 1, p. 8.



Box 9: International experience: Development of the groundnut confectionery industry

Exports of confectionery groundnuts represent a profitable opportunity for Senegal, given the growing demand of confectionery in Africa and Asia. At the same time, this opportunity requires investments to respond to consumer trends and quality requirements in importer countries. For instance, in Europe, consumers favor flavored groundnuts and snacks, confectionery or chocolate products over groundnut oil and cake. Countries such as India, Argentina and Brazil offer examples that have diversified away in groundnut processing by investing in the confectionery industry. They have managed to become leading exporters by investing in quality compliance standards or developing new types of groundnuts to take advantage of the growing demand of the confectionery industry and to meet the demanding requirements of markets such as the EU.

- India:** In 2018, India has developed jointly with the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) a type of high-oleic groundnuts that can be grown in Indian farms. This biotechnological development will allow India to benefit from the confectionery groundnut market (i.e. confectionery multinationals such as Mars pledged to use only oleic-rich groundnut from 2017). The coordination of two institutions, India's Agricultural and Processed Food Products Export Development Authority (APEDA) and the Indian Oilseeds and Produce Export Promotion Council (IOPEPC) have put together efforts to increase groundnuts quality standards. APEDA has issued export guidelines for groundnuts and groundnut products, and information on registration of groundnut processing units and/or warehouse; and IOPEPC has issued export certificates, and organized workshops to raise awareness about the benefits of improving quality for exports. For instance, farmers received workshops about technologies for groundnut processing and culinary preparation. India has also set Codex standards for "Ready to Eat Peanuts". These measures have contributed to increased quality and added value groundnut exports and thus to its leading position in exports.

- **Argentina:** Argentina was able to shift from groundnut oil to high quality prepared groundnuts to respond to global market demands, with confectionery groundnut growing in importance worldwide. By establishing alliances and partnerships with research institutions, that monitor quality, the private sector and universities, and investing in technology, the Argentinian groundnut industry has been able to develop new varieties, improve its processes and marketing. For instance, Cordoba, the largest producer province in Argentina (90 percent of national production), has designated a quality seal, “Córdoba Peanuts” as a certificate of origin to ensure quality and compliance with social, environmental and economic standards. Producers have organized themselves in cooperatives that own processing plants and manage exports to bear with high processing costs, what has also allowed them to coordinate supply chains and become more competitive. Investments in production and processing helped Argentina to become the leading groundnut exporter by exporting only added-value groundnuts: shelled, blanched, splits, chopped, sized for confectionery; snacks (prepared and/or flavored); and peanut butter. Argentina is also a producer of the high-oleic groundnut used in the confectionery industry and competes in this segment with the United States.
- **Brazil:** Brazil has developed a groundnut confectionery industry, specializing in it, while groundnut oil and cake have become complementary industries. This has allowed Brazil to become an export-oriented groundnut producer. To take this strategic approach, Brazil introduced technical, organizational and institutional reforms along the production chain such as: new cultivars, processing techniques and harvesting mechanization; artificial drying techniques and control of environmental conditions. Aflatoxin control and prevention was another key aspect to this paradigmatic change. Brazil increased its EU market share from 1 to 6 percent between 2001 and 2005.

Key takeaways that are worth highlighting:

- ✓ **Institutional coordination** is key to achieve improved quality standards;
- ✓ **Alliances and partnerships** with research institutions and the private sector can help develop new varieties and improve processes;
- ✓ **Investments** in enhanced processes and techniques are also important to increase the value-added of groundnuts;
- ✓ **Marketing** and quality labels investments have proved to help increase groundnut exports in competitive and high-quality demanding markets.

Source: International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), 2018. *Indian smallholder farmers could soon benefit from the growing confectionary peanut market, as the first-ever high oleic groundnut varieties adapted to India are ready for release.*

95. Compliance with high-quality standards, especially aflatoxin detection and control is a key question for groundnut competitiveness in global markets.¹⁴² Levels of aflatoxin, a proven carcinogen, have been reported to be high in these products, but

¹⁴² The European Union rejects 20 percent of groundnut snacks from Senegal, Ghana and Tanzania together due to aflatoxin contamination levels. In 2013, the World Bank reported that reducing the levels of aflatoxin could increase Senegal’s export value by an annual average of USD 300 million. Currently, most EU groundnut imports come from Argentina, which exported 330,000 tons in 2015. Thus, increasing compliance with EU requirements could increase Senegal’s groundnut marketing in Europe. These include:

- maximum levels of aflatoxin allowed are B1 max 2 ppb (total aflatoxin: maximum 4 ppb)
- quality management system certification: HACCP, IFS or BRC.
- corporate responsibility and sustainability can provide comparative advantages, i.e. EU organic logo.
- applicable legislation: Commission Regulation (EC) No 1881/2006 on the Maximum levels of aflatoxins (aflatoxins B1, B2, G1, G2 and M1), and the Commission Regulation (EC) No 401/2006 Provisions for methods of sampling and analysis for the official control of mycotoxins including aflatoxins.

See also: Centre for the Promotion of Imports from developing countries (CBI), funded by the Netherlands Ministry of Foreign Affairs. *Exporting groundnuts (peanuts) to Europe* available at <https://www.cbi.eu/market-information/processed-fruit-vegetables-edible-nuts/groundnuts-peanuts-europe/>; SENSE, 2016. *Economic Analyses of Peanut Processing in Africa.*

recent innovations, also supported by the World Bank Group, have been able to reduce health risks¹⁴³ - and this channel may show room for growth in the future. Some countries like India, Argentina or Brazil have improved standards to align their domestic production with international demand and became leading groundnut exporters globally. Similarly, Nigeria and Ghana have introduced measures to improve standards, notably aflatoxin detection and control (Box 10).

Box 10: International Experience: Standards in the groundnut industry

Some developing countries, like India, the global leading groundnut exporter, have successfully encouraged groundnut producers to invest in standards for quality increase, processing and storage technology to adapt to these trends. Argentina, the second larger groundnut exporter worldwide, has invested in technology, marketing and quality standards to integrate their domestic groundnut industry into global markets. Brazil also managed to become a groundnut exporter by investing in these three areas and creating a quality control label or “pro-peanut label”.

- **India:** India is the leading groundnut exporter worldwide and the second largest producer after China. Two institutions, India’s Agricultural and Processed Food Products Export Development Authority (APEDA) and the Indian Oilseeds and Produce Export Promotion Council (IOPEPC) have put together efforts to increase groundnuts quality standards. APEDA has issued export guidelines for groundnuts and groundnut products, and information on registration of groundnut processing units and/or warehouse; and IOPEPC has issued export certificates, and organized workshops to raise awareness about the benefits of improving quality for exports. For instance, farmers received workshops about technologies for groundnut processing and culinary preparation. India has also set Codex standards for “Ready to Eat Peanuts”. These measures have contributed to increased quality and added value groundnut exports and thus to its leading position in exports.
- **Argentina:** Argentina is the seventh groundnut producer worldwide and the largest one in Latin America, as well as second larger exporter after India, exporting 90 percent of national production. By establishing alliances and partnerships with research institutions, that monitor quality, the private sector and universities, and investing in technology, the Argentinian groundnut industry has been able to develop new varieties, improve its processes and marketing. For instance, Cordoba, the largest producer province in Argentina (90 percent of national production), has designated a quality seal, “Córdoba Peanuts” as a certificate of origin to ensure quality and compliance with social, environmental and economic standards. Producers have organized themselves in cooperatives that own processing plants and manage exports to bear with high processing costs, what has also allowed them to coordinate supply chains and become more competitive.
- **Brazil:** Investments in groundnut quality (i.e. aflatoxin tests), storage technology (i.e. big bags) and marketing (i.e. label), together with innovative cultivars, have allowed Brazil to shift from being a groundnut importer country to become an exporter country from 2001. The Brazilian Association of the Chocolate, Cocoa, Peanut, Bullet and Derivatives Industry (ABICAB) designated a quality label, “Pro-Amendoin” (pro-peanut) label, to complain with safety standards, and especially for control of aflatoxin levels, which has been key to it in terms of communication of quality standards to as well. Public and private collaboration has been key to promote measures to prevent and reduce aflatoxin contamination.

In Africa, the following countries have implemented policies in aflatoxin standards:

- **Nigeria:** Nigeria’s Harvestfield Industries Ltd will sign a Technology Transfer and Licensing Agreement (TTLA) with IITA – the developers of Aflasafe, “a biological aflatoxin control technology developed by IITA, US Department of Agriculture, University of Arizona and local partners (e.g. University of Ibadan in Nigeria)”. In addition to it, to promote the adoption of improved varieties of groundnut, projects such as “Increasing groundnut productivity of smallholder farmers in Ghana,

¹⁴³ World Bank. 2015. *Étude Diagnostique de la Chaîne de valeurs arachide au Sénégal: Propositions de réformes*, p. 40

Mali and Nigeria” , have contributed to the use of technologies to control seeds quality and to improve management practices among farmers, for instance through demonstration plots for varietal and aflatoxin management at local level. Four institutions, the Standards Organization of Nigeria (SON), National Agency for Food and Drug Administration and Control (NAFDAC), The Nigeria Agricultural Quarantine Services (NAQS) and The Nigerian Institute of Animal Science (NIAS), are responsible for food safety control systems.

- **Ghana:** It is the only African country with a Code of Practice/SOP for Food Hygiene in Processing. However, it does not have a Code of Practice for other stakeholders such as farmers. A randomized control trial (RCT) led by the University of Georgia, International Food Policy Research Institute (IFPRI), and University for Development Studies in Ghana showed the effectiveness of videos to train farmers on recommended-practices to reduce aflatoxin in crops and described the opportunities derived from aflatoxin-safe groundnuts. After it, a series of videos were distributed among farmers in different regions across the country.

Source:

International Trade Centre, 2015. *Edible Nuts- Groundnuts*. Available at http://www.intracen.org/uploadedFiles/intracen.org/Content/Exporters/Market_Data_and_Information/Market_information/Market_Insider/Edible_Nuts/Groundnut%20Quarterly%20Bulletin%20June%202015.pdf

96. OPS and other formal collectors for local processing perform important functions in the value chain, but are bound by the prices and market parameters determined in the forum of the CNIA. All purchases made by these collectors must be made at collection points determined by the CNIA at a price set in the CNIA forum (see **Error! Reference source not found.** Box 11).^{144,145} In addition to purchasing groundnuts from farmers for millers, OPS and other collectors sometimes provide inputs and financing to farmers, handle transport and shell groundnuts. In addition to purchasing groundnuts from farmers for millers, OPS and other collectors sometimes provide inputs and financing to farmers, handle transport and shell groundnuts. They tend to have contracts with processors and/or farmers. The OPS typically charge millers for delivery of the produce at around 14 F CFA/kg or 7 percent of the purchase price.¹⁴⁶

Box 11: Groundnut value chain management by the CNIA

The Comité National Interprofessionnel de l'Arachide (CNIA) performs a central and highly influential role in the value chain as a forum for the management of the sector. Members of the CNIA are groundnut producer organizations (3), seed producer organizations (2), OPS representatives (4), industrial millers (3), input providers (3) and one service provider. The Government acts as a facilitator and an arbitrator for the CNIA. Three of the four OPS representatives are affiliated with the Fédération des Opérateurs Privés Stockeurs et Transporteurs (FNOPS/T).¹⁴⁷

¹⁴⁴ CNIA. 2017. *Situation collecte commercialization des arachides 28eme semaine, du 05 juin 2017 au 10 juin 2017*, p. 1

¹⁴⁵ Nevertheless, in some cases collectors have been reported to abuse their power to undercut official prices. World Bank. 2015. *Policies, prices and poverty: the sugar, vegetable oil, and flour industries in Senegal*, p. 13

¹⁴⁶ World Bank. 2016. *Competitiveness and comparative advantage of the groundnut value chain in Senegal*, p. 11

¹⁴⁷ World Bank. 2015. *Étude Diagnostique de la Chaîne de valeurs arachide au Sénégal: Propositions de réformes*, p. 62f

The CNIA is responsible for determining a number of key market parameters. Most importantly, with the approval of the Government, the CNIA decides on the season's minimum price for groundnuts, which applies to all purchases made by OPS and other formal collectors (excluding exporters) for on-sale to oil processors. Furthermore, the CNIA decides on the length of the period in which purchases can be made. During the season, the CNIA convenes regularly to collect information on purchases, transports and exports. Although formally independent from the Senegalese Government, the CNIA and the Government consult with each other and the CNIA uses Government communication channels to publicize information.

Given its mandate, the representation of market players on the CNIA and their relative bargaining power is a key determinant of market outcomes. According to stakeholder interviews, bargaining power has tended to lie with local processors. In addition, the membership structure of the CNIA has not been reformed in recent years, meaning that it does not necessarily reflect the current realities of the value chain.¹⁴⁸ Moreover, there does not seem to be a formal mechanism to allow representation by new entrants or potential entrants, which may put these players at a disadvantage versus incumbents since members of CNIA have more ability to influence certain market parameters to the detriment of entrants.

In addition to issues relating to its representativeness, the CNIA risks unintentionally introducing market distortions to the market for raw groundnuts. By providing a forum for information exchange among sometimes competing value chain actors CNIA risks facilitating collusion. Furthermore, the setting of minimum prices and the definition of the purchasing periods restricts the choice of strategic variables for actors thereby limiting the dimensions in which actors compete with one another. The resulting knowledge of other value chain participants' cost structures further enables reaching and sustaining agreements.

97. Exports of groundnuts were legalized in 2013, which led to the entry of exporters (mainly from China), increasing the choice of buyers for farmers and driving up farmgate prices. During the 2015/16 season, exporters were able to pay between 250 F CFA and 300 F CFA per kg to farmers, exceeding the Government-set minimum price by between 25 and 50 percent.¹⁴⁹ Despite paying higher prices, exporters were still able to generate average profit margins of 121 F CFA between the years 2012 and 2015.¹⁵⁰ Exporters tend to carry out various steps of value addition such as shelling, for which they employ “thousands of women” for the season at daily salaries of between \$2.60 and \$3.20.¹⁵¹ During the 2015/16 groundnut season, the fact that farmers were able to achieve higher prices by selling to exporters led to a decline in the ability of OPS to procure groundnuts for delivery to local millers. Figure 52 shows the decline in groundnuts collected for industrial processors (in tons) in recent years, even while Government subsidies to processors were increasing to counteract this trend.

98. Although the collection of groundnuts for milling had been on a declining trend for some time before exports were permitted, in December 2016, the GoS

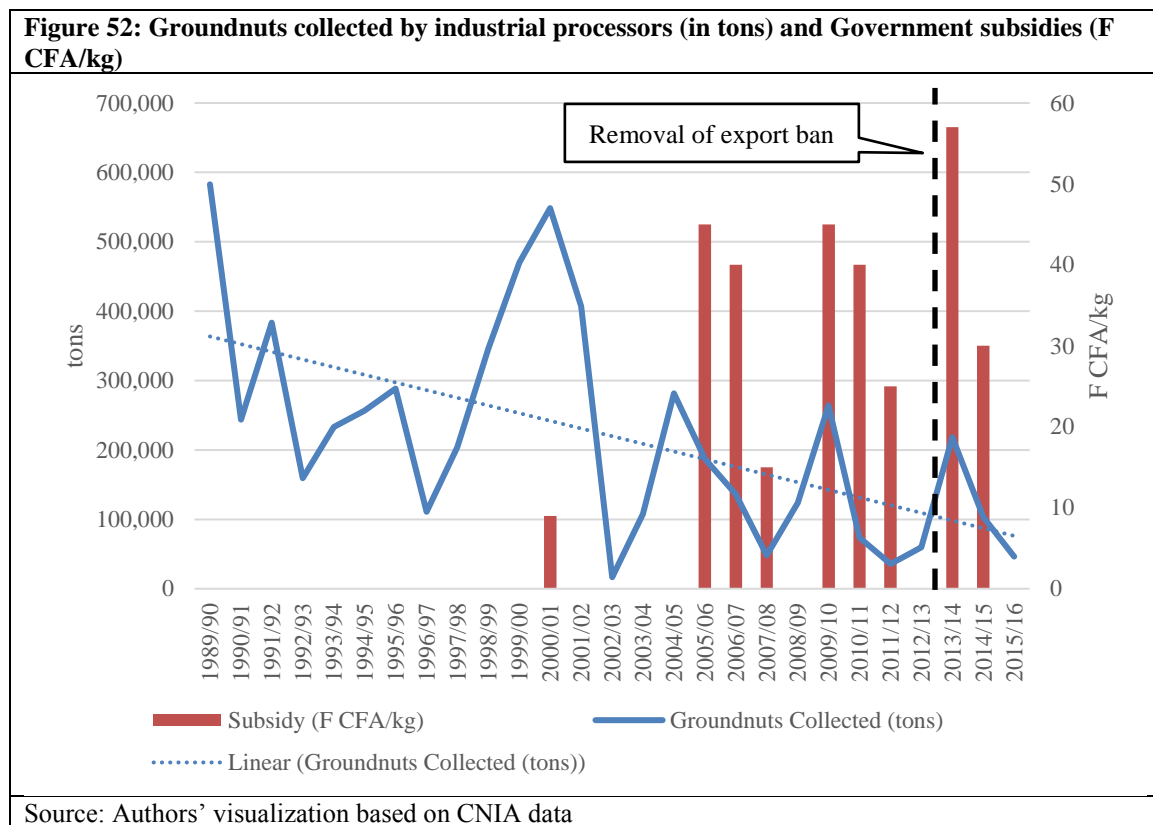
¹⁴⁸ World Bank. 2015. *Étude Diagnostique de la Chaîne de valeurs arachide au Sénégal: Propositions de réformes*, p. 62

¹⁴⁹ Authors' interviews. One potential explanation for why exporters have paid this premium above the minimum price set by the CNIA is that this is the premium needed to encourage farmers to switch to sell to exporters rather than OPS, e.g. because the farmer may be switching away from a long term relationship with an OPS or because there may be additional farmer transport costs to reach an exporter given that their network of collection points may be currently less developed than that of the OPS.

¹⁵⁰ World Bank. 2016. *Competitiveness and comparative advantage of the groundnut value chain in Senegal*, p. 19

¹⁵¹ European Commission. 2016. *Analyse d'économie politique (PEA) des filières de l'arachide et du riz*, p. 25

introduced a high export tax to support local processors in their competition with exporters. Following adverse effects on farmers, the Senegalese President suspended the tax in December 2017. The tax was set at 40 F CFA per kg of shelled groundnuts (equivalent to the difference between the lower bound exporters' price at the farmgate and the OPS price) and 15 F CFA per kg of nuts in shell (NIS).¹⁵² As well as hindering the ability of exporters to compete with OPS, it should be noted that the incidence of the tax on shelled nuts explicitly disincentivizes shelling, a value added activity which, in addition, has been notable for the employment opportunities it has created particularly for low skilled women. Due to these adverse effects and a boycott by primarily Chinese traders, the Government of Senegal suspended the tax in late 2017, only a year after it was introduced.



99. Export restrictions have in the past also included temporary de facto bans on exports, restricting Senegal's entry into international markets and unleveling the playing field between exporters and local processors. For example, in December of 2016 the GoS ordered customs to block all exports of groundnuts,¹⁵³ hindering exporters from entering the global export market. Such episodes, along with the export tax that was put in place around the same time, create a disadvantage for exporters in their ability to compete on the market for buying from farmers. Since then, the groundnut oil processing industry

¹⁵² Article 20 of Law n° 2016-35 "portant loi de finances pour l'année 2017".

¹⁵³ Sud Quotidien. 2016. *Le Copega Menace de Fermer L'ensemble de ses Points de Collecte*. Available at: http://www.sudonline.sn/le-copega-menace-de-fermer-l-ensemble-de-ses-points-de-collecte_a_32847.html

has picked up, having collected 237 percent more by the second-to-last week of the 2016/17 season than in the entire 2015/16 season,¹⁵⁴ despite the fact that in the 2016/17 season purchasing subsidies to processors were not paid.

100. In addition to explicit restrictions placed on exports, dynamics in the market for buying from farmers are shaped by a combination of market characteristics and policy-related distortions. While farmers are in theory able to sell to different intermediaries, the fact that farmers typically sell by bringing their produce to an OPS collection point or an exporter's warehouse means that their choice of buyer is shaped by the prevalence and physical locations of these points. In particular, the OPS appear to benefit from a well-established infrastructure of collection points.¹⁵⁵ The CNIA oversees a process of allocating collection points between OPS contracted to certain processors,¹⁵⁶ and even where these may not be strictly adhered to, the fact that certain collectors have historically controlled certain points may provide them with an advantage over new market entrants, including exporters.

101. This advantage to OPS is amplified by the fact that OPS have also often acted as input and credit providers for farmers and appear to benefit from favorable rates of credit. This is partially a result of the fact that the Government subsidizes interest rates for OPS so that they enjoy lower rates than farmers. Whereas farmers' interest rates for loans from the publicly owned Caisse Nationale de Crédit Agricole (CNCAS), the primary financier, are capped at 7.5 percent, those of OPS are capped at 6 percent.¹⁵⁷ This allows OPS to onlend to farmers at relatively favorable rates compared to those charged by CNCAS. It may be partly a result of the dependence of some farmers on OPS as input and credit providers that OPS have reportedly been able to informally pay farmers below the officially set minimum farmgate price in some cases.¹⁵⁸ Moreover, the risk of collusion between OPS is heightened by their presence on the CNIA, and their obligation to buy at designated collection points, which increase opportunities for information exchange. Given that the CNIA also defines the length of the collection season, farmers are not only limited in their choice of purchaser, but also in the timing of their sale to OPS or other formal collectors, which removes yet another strategic variable over which buyers and sellers could compete. Lastly, although historically set quotas for collection by OPS have now been lifted, they could still serve as an informational anchor that may raise the risk of collusion between OPS in terms of quantity/market allocation.

¹⁵⁴ CNIA. 2017. *Situation collecte commercialization des arachides 28eme semaine, du 05 juin 2017 au 10 juin 2017*, p. 5

¹⁵⁵ European Commission. 2016. *Analyse d'économie politique (PEA) des filières de l'arachide et du riz*, p. 19

¹⁵⁶ CNIA. 2017. *Situation collecte commercialization des arachides 28eme semaine, du 05 juin 2017 au 10 juin 2017*, p. 2

¹⁵⁷ PressAfrik. 2014. *Entre reconstitution du capitalisme semencier et commercialisation de l'arachide : Le cycle d'une gestion nébuleuse*. Available at: http://www.pressafrik.com/Entre-reconstitution-du-capitalisme-semencier-et-commercialisation-de-l-arachide-Le-cycle-d-une-gestion-nebuleuse_a117408.html

¹⁵⁸ World Bank. 2015. *Policies, prices and poverty: the sugar, vegetable oil, and flour industries in Senegal*, p. 13

102. The Government of Senegal also directly shapes competition in the market for buying from farmers through its direct participation in the value chain as the owner of the Société Nationale de Commercialisation des Oléagineux du Sénégal (SONACOS), Senegal's largest groundnut oil producer. In 2005, after years of state ownership, SONACOS was partially privatized through a sale of 85 percent to the French company, Advens.¹⁵⁹ The Senegalese Government retained the remaining market share of 15 percent of the company, which was renamed SUNEOR. However, in October 2015, following financial difficulties, the Government agreed to take over SUNEOR again and currently owns 99.78 percent of the shares of the company, which has reverted to the name SONACOS.^{160, 161} SONACOS may benefit from certain advantages in the market for procuring groundnuts over its private sector rivals, given the Government's explicit exclusive financial support to the company. For example, while purchasing subsidies for processors have been phased out in the latest growing season, the Government procured a \$75 million loan from the Islamic Trade Finance Corporation (ITFC; member of the Islamic Development Bank (IDB)), to ensure that SONACOS would be able to purchase throughput during the 2016/17 growing season.¹⁶² Despite this capital injection, the company has still missed the declared target of 200-300,000 tons of groundnuts,¹⁶³ having collected only 93,314 tons towards the end of the season.¹⁶⁴ Further advantageous subsidies available to SONACOS are discussed in the following section. The Government should ensure that both public and private actors have equal opportunity in access to finance and resources, to guarantee competitive neutrality along the value chain.

103. Some rules may also create an unlevel playing field between farmers in the sale of their produce. For example, a lack of transparency and clear rules in the allocation of inputs among farmers, and the involvement of village heads and representatives of the Ministry of Commerce in determining the allocation of inputs might provide informal advantages to better-connected (typically larger) producers. In addition, CNIA rules state that farmers may only sell to an OPS at a designated collection point unless there is an exporter collection point within a 5km radius of the farmer (in which case the farmer may sell to the OPS at the export collection point). The number of potential OPS buyers available to a particular farmer thus depends on his geographic location and whether there is an export collection point within 5km. Finally, a Government directive provides priority access to OPS collection to seed multipliers;¹⁶⁵ this might limit access to markets for

¹⁵⁹ World Bank. 2015. *Étude Diagnostique de la Chaîne de valeurs arachide au Sénégal: Propositions de réformes*, p. 17

¹⁶⁰ Financial Afrik. 2016. *Sénégal: Suneor redevient Sonacos SA*. Available at <http://www.financialafrik.com/2016/07/27/senegal-suneor-redevient-sonacos-sa/#.WWQJUujyuUI>

¹⁶¹ For the sake of simplicity, the company will be called simply "SONACOS" throughout this document.

¹⁶² ITFC. 2016. *USD 75 million Murabaha financing agreement between ITFC and the Government of Senegal for 2016-2017 groundnut campaign*. Available at <http://www.itfc-idb.org/en/content/usd-75-million-murabaha-financing-agreement-between-itfc-and-government-senegal-2016-2017>

¹⁶³ ITFC. 2016. *USD 75 million Murabaha financing agreement between ITFC and the Government of Senegal for 2016-2017 groundnut campaign*. Available at <http://www.itfc-idb.org/en/content/usd-75-million-murabaha-financing-agreement-between-itfc-and-government-senegal-2016-2017>

¹⁶⁴ CNIA. 2017. *Situation collecte commercialization des arachides 28eme semaine, du 05 juin 2017 au 10 juin 2017*, p. 5

¹⁶⁵ Lettre circulaire no. 22.60 MAER/DA du 26 décembre 2016

agricultural producers (likely smaller farmers) who are not also involved in seed multiplication.

104. Table 10 outlines in detail the restrictions in the following sub-segments which shape directly or indirectly the market for buying from farmers: agricultural production, aggregation/ intermediation for local processing, processing, intermediation for export.

Table 10: Rules that may hinder competition in the market for buying from farmers

	Rules that reinforce dominance or limit entry	Rules that facilitate collusion or restrict firms' choice of strategic variables	Rules that discriminate and provide an undue advantage to certain players
Agricultural Production		<p>Rules that facilitate agreements among competitors</p> <ul style="list-style-type: none"> •Existence of producer organizations (cooperatives) that encourage agreement on price/standards between members •Producer organizations are involved in formal price setting procedures at the CNIA •Existence of minimum price can prevent producers from competing on price and provides a focal point for collusion. <p>Restrictions on choice of buyers for some farmers due to geographic location (see also rules that unlevel the playing field):</p> <p>Farmers limited to sell to an OPS at a designated OPS collection point unless there is an exporter collection point within a 5km radius of the farmer (in which case the farmer may sell to the OPS at the export collection point). The number of potential buyers faced by a particular farmer depends on his geographic location and whether there is an export collection point within 5km.</p>	<p>Discretionary application of rules</p> <ul style="list-style-type: none"> •Involvement of village heads and representatives of the Ministry of Commerce in the allocation of inputs might provide informal advantages to better-connected players •Lack of transparency in targeting of subsidies (said to benefit large connected farmers) <p>Rules that distort the level playing field:</p> <ul style="list-style-type: none"> •Priority access to OPS collection points is given to seed multipliers which might limit access to markets for agricultural producers (likely smaller farmers) who not also involved in seed multiplication.
Aggregation/ Intermediation for local processing	<p>Relative ban on entry and expansion of activities:</p> <p>Allocation of OPS to collection points restricts possibility for other buyers to use collection points</p>	<p>Rules that facilitate agreements among competitors</p> <ul style="list-style-type: none"> •Existence of minimum price set with input from OPS/local processors at the CNIA appears to act as a set price among OPS/local processors. •Obligation to buy at specific points of collection facilitates exchange of information and may increase symmetry of players 	<p>Rules that distort the level playing field:</p> <p>OPS being represented in overall value chain planning have formal and informal capacity to influence decisions/outcomes, unlike exporters and potential entrant types of intermediaries</p>

	<ul style="list-style-type: none"> •OPS/Transporters participate in an information exchange fora (the FNOPS/T and the CNIA) where details on capacity and prices can be shared <p>Limits on choice of strategic variable</p> <ul style="list-style-type: none"> •Limit on purchasing season limits the ability for producers and other sellers to choose their time of sale 	
Processing	<p>Relative ban on entry and expansion of activities</p> <ul style="list-style-type: none"> •Allocation of collection points and collection areas to processors benefits incumbents and increases the (transaction) cost of entrants •Incumbent processors are represented in CNIA which allocates collection points among processors which may lead to conflict of interest in allocating collection points to new entrants. <p>Rules that facilitate agreements among competitors</p> <ul style="list-style-type: none"> •The three processors represented in CNIA have access to and can actively share information on prices and other strategic variables •Historical quotas / allocation of produce among processors provides a potential focal point for collusion. <p>Limits on choice of strategic variable</p> <p>If binding, zone allocation between processors through the CNIA can restrict the area from which they are able to procure produce. If not binding, then allocation of zones can provide a focal point for market allocation.</p>	<p>Discretionary application of rules</p> <p>The three processors represented in CNIA may have preferential access to the policy making process compared to unrepresented processors.</p> <p>Rules that distort the level playing field</p> <ul style="list-style-type: none"> •Preferential access to finance for SONACOS for purchase of groundnut: Islamic Development Bank (IDB) loan to the Government and passed on to SONACOS for purchase of input in 2016/2017 •Operational subsidies appear to be targeted solely at SONACOS creating unlevel playing field •SONACOS appears to be the only miller who was reimbursed forgone revenue from price ceilings on soy bean oil put in place by the Ministry of Commerce.
Intermediation for export	<p>Absolute ban on entry: Temporary ban of exports by customs blocks entry into export markets.</p> <p>Rules that facilitate agreements among competitors: Obligation to buy at specific points of collection facilitates exchange of information and may increase symmetry of players.</p>	<p>Rules that distort level playing field: Currently suspended export tax constrains the ability of exporters to compete with domestic processors in the purchase of groundnuts</p>

105. The state-owned oil processor SONACOS dominates the market for crude groundnut oil, in terms of both processing capacity and actual purchases made in the 2016/17 season (for an overview of the value chain for domestically produced vegetable oils see Figure 53). SONACOS has the capacity to process 300,000 tons of groundnuts or around 58 percent of overall installed capacity in the country, the Compagnie d'Exploitation des Oléagineux (COPEOL) can process 100,000 tons (19 percent), West African Oils (WAO) has a capacity of 80,000 tons (~15 percent), while the capacity of the Complexe Agro-Industriel de Touba (CAIT) is 35,000 tons (~7 percent).¹⁶⁶ However, all Senegalese oil producers have consistently been producing under capacity (see Table 7 above). In the 2015/16 season, SONACOS only purchased 7,000 tons, of which nothing was processed, COPEOL 25,000 and CAIT only 280 tons. West African Oils (WAO) purchased 13,600 tons.¹⁶⁷ In the 2016/17 season volumes increased slightly (likely due to the export tax that was described above), but are still far short of capacity. By the second-to-last week of the season, SONACOS had purchased 93,000 tons, COPEOL 50,000 tons, CAIT 28 tons and WAO 13,000.¹⁶⁸

106. Most of the locally produced crude groundnut oil is exported. SONACOS held roughly 75 percent of the export market share between 2009 and 2012, while COPEOL (formerly NOVASEN) exported the remaining 25 percent.¹⁶⁹ COPEOL focuses on the Chinese market, where Senegalese oil enjoys a good reputation.¹⁷⁰

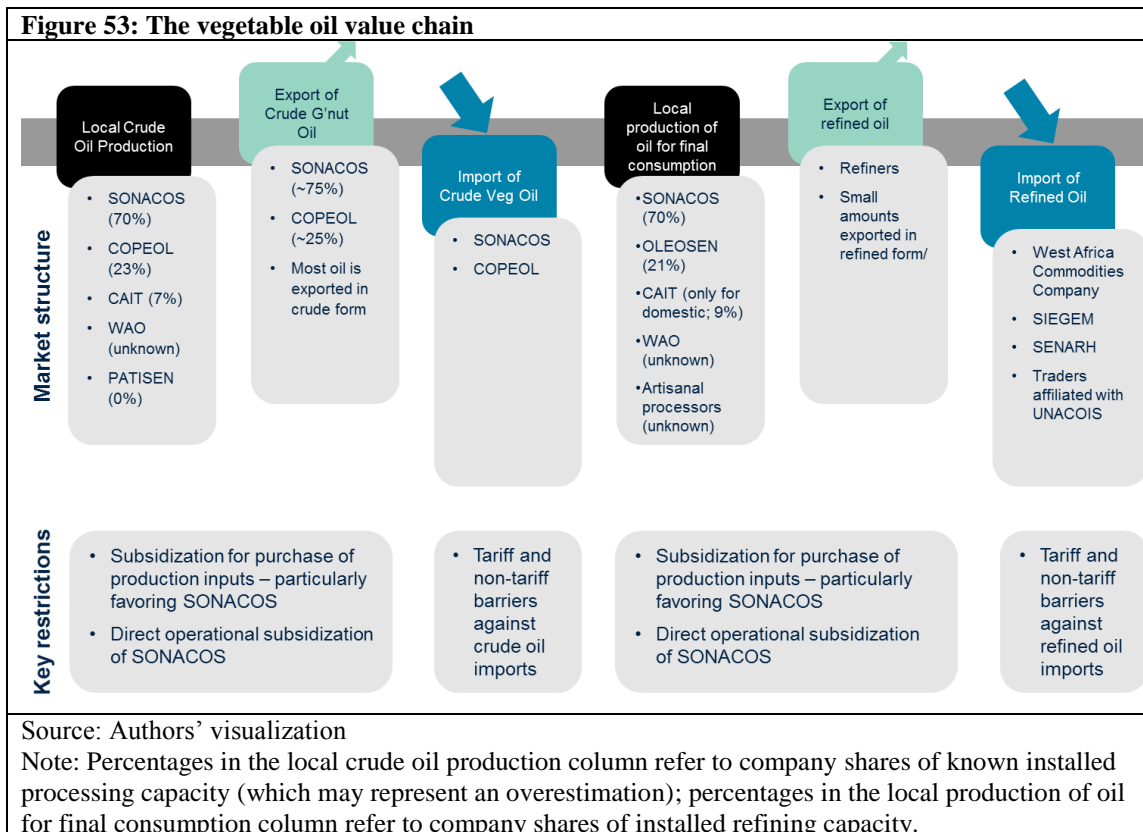
¹⁶⁶ Jeune Afrique. 2016. Sénégal : *Arachide, l'état d'urgence*. Available at: <http://www.jeuneafrique.com/mag/340235/economie/senegal-arachide-letat-d-urgence/>

¹⁶⁷ CNIA. 2017. *Situation collecte commercialization des arachides 28eme semaine, du 05 juin 2017 au 10 juin 2017*, p. 5; Jeune Afrique. 2016. Sénégal : *Arachide, l'état d'urgence*. Available at: <http://www.jeuneafrique.com/mag/340235/economie/senegal-arachide-letat-d-urgence/>

¹⁶⁸ CNIA. 2017. *Situation collecte commercialization des arachides 28eme semaine, du 05 juin 2017 au 10 juin 2017*, p. 5

¹⁶⁹ World Bank. 2015. *Etude Diagnostique de la Chaîne de valeurs arachide au Sénégal: Propositions de réformes*, p. 45

¹⁷⁰ World Bank. 2015. *Etude Diagnostique de la Chaîne de valeurs arachide au Sénégal: Propositions de réformes*, p. 84



107. The refining of crude groundnut oil for domestic sale is dominated by state-owned SONACOS. Most of the crude oil producers are also active in the refining of groundnut oil. The refiner OLEOSEN is part of the same group as COPEOL and functions as COPEOL's domestic-facing producer. CAIT produces refined oil exclusively for the domestic market. Refined groundnut oil competes on the domestic market with other imported refined vegetable oils, refined imported crude vegetable oils and the artisanal groundnut oil Seggal. Small quantities of refined groundnut oil are also exported, although most Senegalese oil exports are in crude form.

108. Some processors complement their production of refined groundnut oil with the refining of imported crude oils. SONACOS, in particular, has in the past imported crude soy bean oil for refining for the Senegalese market. Prior to the entry of COPEOL to the market for imported crude soy bean oil, it was the only importer of unrefined vegetable oils.¹⁷¹ However, due to the influx of cheap Ivorian palm oil, the refinement of soy bean oil in Senegal has lost its viability.¹⁷² This has prompted the Government to put policies in place restricting refined palm oil imports. For example, an import ban on vegetable oils with a content of saturated fats of more than 30 percent (under the guise of preventing

¹⁷¹ World Bank. 2015. *Policies, prices and poverty: the sugar, vegetable oil, and flour industries in Senegal*, p. 14

¹⁷² World Bank. 2015. *Policies, prices and poverty: the sugar, vegetable oil, and flour industries in Senegal*, p. 12

health risks) was imposed until 2010, restricting imports of Ivorian palm oil, when the WAEMU commission forced the Government to retract the measure.¹⁷³

109. Although refined vegetable oil imports have faced tariff and non-tariff barriers, various companies are involved in importing them for sale on the domestic markets. These companies tend not to be involved in the local production of vegetable oils. Import restrictions faced by the market include high tariffs (e.g. ECOWAS tariff of 35 percent on specific goods that “contribute to the promotion of the region’s economic development” applied since 2015), occasional taxes on imports (e.g. “Taxe Conjoncturelle à l’Importation” until 2004, and then safeguards until 2008)¹⁷⁴ and non-tariff measures, such as the above-described import ban related to fat content (retracted in 2010).

110. Sectoral policies explicitly or implicitly aim to protect domestic processors and to ensure their viability. The historical allocation of collection points and zones through the CNIA to individual processors for groundnut procurement, although seemingly not binding, may provide a focal point for the division of the market between processors and may inhibit entry of new firms that may not be able to access established collection points. The legacy of quotas that allocated produce to processors prior to the sector’s liberalization can also act as a focal point for market division. The potential for market division is amplified by the fact that the largest processors are represented on the CNIA, which makes crucial decisions about the collection of produce and its price. As a result, processors are able to influence decisions to the disadvantage of new entrants or players not represented in the CNIA. The CNIA forum also facilitates the development and sustenance of agreements between processors.

111. Of the processors, SONACOS enjoys particularly favorable treatment. In addition to subsidies that were previously available for all processors for the purchase of raw groundnuts, operational subsidies have been available only to SONACOS.¹⁷⁵ The company further benefited from the \$75 million concessional loan obtained by the Government discussed above.¹⁷⁶ Lastly, SONACOS appears to be the only processor that was reimbursed for losses due to a Government-imposed price ceiling for refined soy bean oil.¹⁷⁷

112. Restrictions on the market for buying from farmers spill over into the vegetable oil market. As processors rely almost exclusively on OPS and other formal collectors for their input, their market position is crucial for the processors. As described

¹⁷³ Mbaye, A. A., Golub, S., English, P. 2015. *Policies, Prices and Poverty: The Sugar, Vegetable Oil, and Flour Industries in Senegal*. World Bank Policy Research Working Paper 7286, p. 14

¹⁷⁴ Based on customs data. Here a tariff refers to a duty applied on the import of specific goods and services, while a tax is charged more broadly against a range of potential good/services.

¹⁷⁵ World Bank. 2016. *Competitiveness and comparative advantage of the groundnut value chain in Senegal*, p. 14

¹⁷⁶ ITFC. 2016. *USD 75 million Murabaha financing agreement between ITFC and the Government of Senegal for 2016-2017 groundnut campaign*. Available at <http://www.itfc-idb.org/en/content/usd-75-million-murabaha-financing-agreement-between-itfc-and-government-senegal-2016-2017>

¹⁷⁷ World Bank. 2015. *Etude Diagnostique de la Chaîne de valeurs arachide au Sénégal: Propositions de réformes*, p. 33

in the previous section, the collectors' dominant market position, geographic separation, and their participation in the CNIA information exchange have the potential to facilitate collusion and to unlevel the playing field against new entrants or other competitors. Furthermore, the price-setting process of the CNIA and the restrictions on the length of the purchasing season restrict actors' choices of strategic variables (limiting the dimensions of competition) and provide them insights into their competitors' cost structures.

113. Restrictions targeting the export of whole nuts benefited the local groundnut oil processing industry. Temporary export bans like the one instated in December of 2016 limited entry of Senegalese groundnuts into the international market.¹⁷⁸ The export tax in place from December 2016 and suspended since December 2017 unlevelled the playing field against exporters and in favor of the OPS and collectors that supply domestic processors.

114. Regulations in favor of the local processing industry are apparently intended to ensure domestic value added and protect employment in the processing industry, even though employment in the industry is limited. In 2013, the entire industry was estimated to employ about 2,000 people, plus some 3,000 seasonal workers.¹⁷⁹ SONACOS appears to employ just over 1,000 workers directly,¹⁸⁰ although other estimates put the number of SONACOS full time staff at 387, plus roughly 500 seasonal staff.¹⁸¹ This appears limited compared to the almost 500,000 farmers who stand to benefit from greater competition between processors and exporters, as well as the 1.6 million households that stand to gain from more affordable vegetable oils.

115. Apart from restrictions on the import of crude and refined vegetable oils (noted in Figure 53), competition in the market for vegetable oil production is driven by competition from and between local groundnut oil producers, which in turn is affected by competition in intermediation for local processing and intermediation for export – since these markets affect the ability of groundnut processors to access inputs. These rules have previously been discussed in Table 10, but are also relevant for market dynamics in the market for vegetable oil production and import.

5.1.4 Implications of Rules that Restrict Competition

116. Government interventions that restrict competition in the groundnut value chain threaten to unintentionally undermine the Government's objective to increase yields and production. Table 11 provides a summary of the unintended consequences of

¹⁷⁸ Sud Quotidien. 2016. *Le Copega Menace de Fermer L'ensemble de ses Points de Collecte*. Available at: http://www.sudonline.sn/le-copega-menace-de-fermer-l-ensemble-de-ses-points-de-collecte_a_32847.html

¹⁷⁹ The Japan Times. 2013. *China makes peanuts new 'gold' in Senegal*. Available at: <http://www.japantimes.co.jp/news/2013/03/26/business/china-makes-peanuts-new-gold-in-senegal/#.WWesHOjyuUI>

¹⁸⁰ Authors' interviews, 2016/2017

¹⁸¹ World Bank. 2015. *Etude Diagnostique de la Chaîne de valeurs arachide au Sénégal: Propositions de réformes*, p. 48

the Government interventions. The distortions introduced to the input markets directly contribute to the lack of quality seed and the inefficient allocation of much-needed inputs. As a result, yields remain low. The Government's policies therefore directly contradict its stated policy objective. Furthermore, they carry large fiscal implications. The Government's input subsidies for seed cost 10.5 bn F CFA in 2013/14 (US\$ 21.2 million),¹⁸² while the subsidies for fertilizer totaled 18.1 bn in 2012/13 (US\$ 36.2m).^{183,184} The total cost of roughly 28.6 bn F CFA represented 1.2% of the 2013 budget.¹⁸⁵

117. The Government's measures to protect farmer incomes hamper competition for their produce, negatively affecting farmer incomes in the long run. The lack of and inefficient allocation of inputs reduces farmers' yields and therefore the quantities they can sell. Furthermore, the regulations put in place governing the market for buying from farmers have contributed to restricting farmers' ability to sell their produce most profitably to the highest bidder. Instead they can find themselves dependent on selling to OPS or other collectors at a price that has been pre-agreed among buyers through the minimum price setting process of the CNIA.¹⁸⁶

118. The processing industry receives the most explicit protections, but these come at the expense of farmers and consumers. Purchasing subsidies, direct financial support to SONACOS, export restrictions on raw nuts and import restrictions on competing oil products are intended to ensure the viability of the domestic oil processing industry. However, the support to this industry comes at a cost to farmers and consumers. Generally, export taxes and bans, for example, lower the prices farmers achieve with their produce, lowering their income overall. This was reflected in the nominal rate of protection for groundnuts in Senegal, a measure of the incidence of subsidies calculated by a consortium of international organizations like the FAO, the OECD and the World Bank and facilitated by the International Food Policy Research Institute (IFPRI). The measure compares the actual farmgate price with an undistorted reference price and expresses the difference of the two as a percentage.¹⁸⁷ As Figure 54 shows, the nominal rate of protection for groundnuts has been consistently negative over the past years also below that of all available African comparators, showing that farmgate prices for groundnuts in Senegal are below the undistorted reference price. This suggests that the 482,000 Senegalese groundnut farmers have been subsidizing Senegalese groundnut oil production, which remains uncompetitive regardless.

¹⁸² Using an average 2013/14 exchange rate of 496 F CFA/USD

¹⁸³ Using an average 2012/13 exchange rate of 500 F CFA/USD

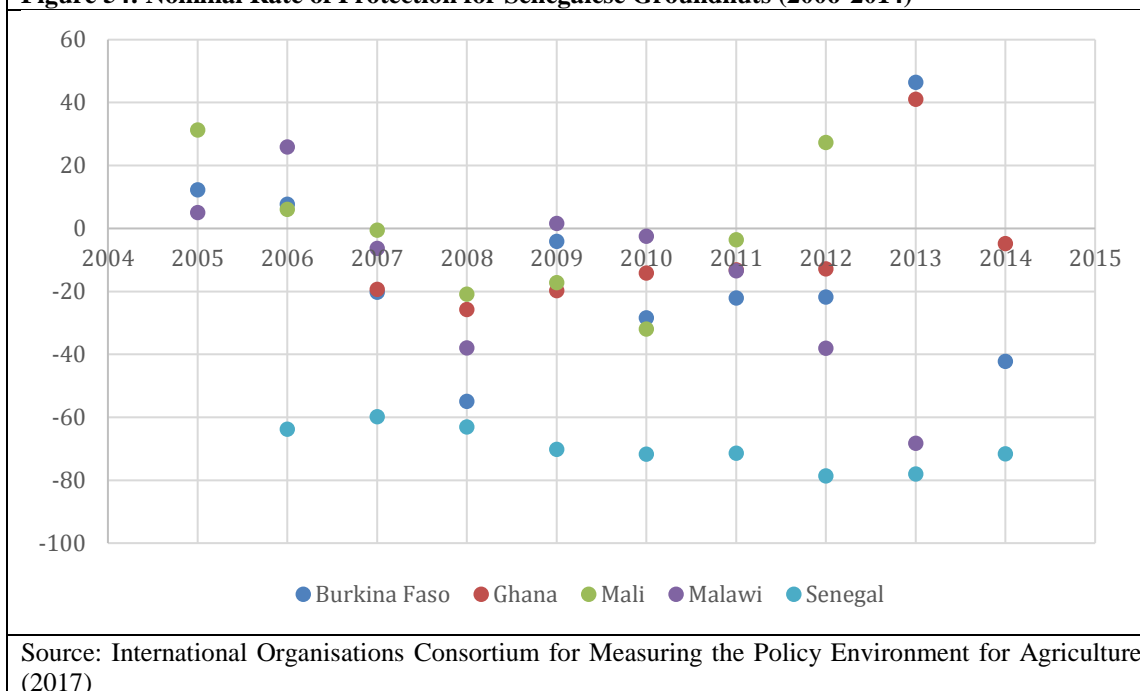
¹⁸⁴ Initiative Prospective Agricole et Rurale (IPAR). 2015. *Subventions des intrants agricoles au Sénégal: controverses et réalités*. Rapport annuel sur l'état de l'agriculture et du monde rural au Sénégal, p. 11

¹⁸⁵ Loi n°2012-18 du 17 décembre 2012: *Loi de finances pour 2013*.

¹⁸⁶ As discussed above, in some cases OPS and other formal collectors have been known to pay farmers below the set minimum rice – potentially due to a lack of other options for farmers or due to a reliance of some farmers on OPS for inputs and credit.

¹⁸⁷ Agincentives. 2017. *Nominal Rate of Protection*. Available at <http://www.agincentives.org/indicator/nominal-rate-protection>

Figure 54: Nominal Rate of Protection for Senegalese Groundnuts (2006-2014)



Source: International Organisations Consortium for Measuring the Policy Environment for Agriculture (2017)

119. Consumers suffer from high prices for vegetable oils. Import restrictions on vegetable oils drive up consumer prices, negatively affecting the welfare of the 14 million consumers in Senegal. Between 2011 and 2013, the price of vegetable oils in Senegal was estimated to be about 60 percent above world prices.¹⁸⁸ In 2015, the World Bank estimated that between 2000 and 2010 the various protections for the processors cost consumers 50 bn F CFA annually or between 5 to 9 times the industry’s wage bill. This cost rose to 60 bn F CFA per year in the period between 2011 and 2013 or 10 times the industry’s wage bill.¹⁸⁹ Overall, the various Government policies protecting the processing industry represent an implicit subsidy to millers paid for by farmers and consumers.

120. Despite the protections they enjoy, domestic processors are struggling, largely because they lack domestic competitive pressures to operate more efficiently. As shown by Box 12, domestic competitive pressures contribute to an industry’s competitiveness and ability to export. Instead, the various policies in place in the Senegalese groundnut sector interrupt the “virtuous circle” summarized in Figure 46 and create an industry that lacks efficiency, productivity and competitiveness. Indeed, international experience provides examples of where, while costly Government protection have achieved stated objective in certain value chain segments in the short term, adverse effects have been created for the value chain overall. Box 12 explores the example of Gabon, where the Government instated protective measures for its wood processing

¹⁸⁸ Mbaye, A. A., Golub, S., English, P. 2015. *Policies, Prices and Poverty: The Sugar, Vegetable Oil, and Flour Industries in Senegal*. World Bank Policy Research Working Paper 7286, p. 22

¹⁸⁹ Mbaye, A. A., Golub, S., English, P. 2015. *Policies, Prices and Poverty: The Sugar, Vegetable Oil, and Flour Industries in Senegal*. World Bank Policy Research Working Paper 7286, p. 22

industry, which increased processing activity in the short term, but led to a decrease of output along the entire value chain.

Box 12: Designing industry support programs: lessons from the Gabon export ban on timber

In Gabon, following a shift in demand for wood from sawn and plywood to unprocessed logs, the local wood transformation industry struggled. As a result, the Government banned all exports of logs and put in place a capacity building program for the wood transformation industry with the assistance of donors. Two recent World Bank reports (2014a and 2016b) have analyzed the impact of these restrictions on trade and competition.^{190,191}

As a result of the industry support programs put in place, the *downstream* wood transformation industry did develop: employment in the industry doubled between 2010 and 2016 and exports grew from USD 128.6 million in 2010 to 143.2 million in 2014. However, partially because international demand had moved away from transformed wood, there was an absence of high immediate returns for investment in forestry, which resulted in a halving of the number of jobs in the *upstream* activity, and export receipts from logs dropped to zero as a result of the ban.

Taking into account both upstream and downstream activities, *total exports* for the whole value chain are half of what they were before the ban. Excess supply of logs on the domestic market resulted in a drop in prices and further dampened activity in the upstream forestry sector. Overall production of logs in Gabon ultimately halved as a result.¹⁹²

In sum, a key lesson from this example is that industry supply programs need to i) take into account the entire value chain and the impact that restrictions will have on the incentives for players to invest, for example to produce sufficient inputs for downstream transformation; and ii) take into account international trends in demand.

121. The various market interventions in Senegal's groundnut sector carry negative effects for employment in the value chain. Most employment in the groundnut value chain is found in production. 482,000 farmers produce the crop. Only a few thousand Senegalese are directly or indirectly employed by the large industrial processors. Yet, the current policies provide a challenge to farmers to the benefit of the employees of SONACOS and other processors. Furthermore, exporters tend to shell groundnuts, for which they employ thousands of vulnerable rural workers, particularly women. However, the currently suspended export tax put in place in December 2016 disproportionately affected shelled groundnuts, creating an incentive for exporters to export nuts in shell and

¹⁹⁰ World Bank. 2014. *Gabon Export Diversification and Competitiveness Report*. World Bank, Washington, D.C.

¹⁹¹ World Bank. 2016. *Impact of the 2010 Log Export Ban on Forests, the Timber Industry and the Gabonese Economy*. World Bank, Washington, D.C.

¹⁹² The studies also found that that presence of natural resources is not enough to establish comparative advantage and that profitability depends on many macro and micro factors. Logging and woodworking are different processes so vertical synergies at the firm level appear limited. Thus, diversification into downstream transformation activities essentially called for bringing in new players. A value chain analysis for wood processing in Gabon also revealed that the high costs of transporting logs to sawmills decreased competitiveness due to poor transport infrastructure. Gabon's finished goods were also not priced competitively due to high labor costs combined with low labor productivity, low level of craftsmanship, and lack of technical know-how. Since Gabon was a rather high-cost location for manufacturing, changing it into an attractive location for timber transformation required a number of policies to be put in place to improve the business environment.

to eliminate the intermediate shelling process, which would create employment and value added. The overall employment effects of the current policies are likely negative.

122. Less distortive policies are available that would enable the Government to achieve its policy objectives. Table 11 summarizes the unintended consequences of Government interventions used to achieve various policy objectives, and suggests less distortive measures available to the Government of Senegal to achieve the same policy objectives. Following these policies would not only relieve the Government of fiscal pressures, unlock employment potentials and increase consumer welfare, but would also create the competitive pressure on the groundnut processors the industry needs if it wants to become profitable in the face of international competition in the long term. In addition to these less distortive policies, the Government can benefit from technological applications to help facilitate transactions and become more competitive in global markets (see Box 13).

Box 13: International experience: Digital economy in Agriculture

Technology for agriculture is developing at a fast pace, and not only at large scale but also for small-scale farmers. While innovative large-scale technologies such as the “blue river technology” are able to bring AI to agriculture and automatize the process of focusing on and eliminating weeds affecting productivity, scale neutral robots are also being developed for smaller plots and, what is more, at relatively affordable prices. Actually, innovative technologies can help reduce budget constraints, for instance, substituting subsidies by robots that can detect macronutrients. Some groundnut producing countries have already incorporated innovative technologies into their processes.

- **India:** The International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) and Microsoft partnered in 2016 to implement a digital technology pilot project in a groundnut producing district. ICRISAT adopted a cloud technology and business intelligence system that has allowed it to disseminate information about sowing and harvesting (i.e. fertilizer recommendations, weather forecasts, etc) to farmers and government officials via SMS. The pilot project has allowed to increase groundnut yield by a reported 30 percent.
- **Nigeria:** A technological solution has allowed Nigerian farmers to address lack of farm machinery and improve productivity. “Hello Tractor”, a type of “uber” tractor technology, has enabled small-scale farmers to request and pay tractor services via SMS and mobile money”, connecting them to a network of tractor owners. Since it takes a small tractor eight hours to prepare the land for planting versus forty days to a farmer, increase in farmers’ yields are estimated at 200 percent.
- **Uganda:** a study carried out using baseline survey data in three districts in Uganda (Bonabana-Wabbi, J et al., 2015) to disseminate technology, such as motorized shelling machines, grinding machines, to farmers showed that, despite some of these technologies were affordable to small-scale farmers, some of the biggest challenges besides unaffordability in some cases, were “lack of technical knowledge regarding use of the technology and unavailability of fertilizers”. In this sense, the World Bank has recently carried out a randomized control trial (RCT) to address the significant technological divide between large and small-scale farmers, rural and urban, old and young, as well as high and low-income households, with similar findings: access (cost), adaptability to location (scale), and appropriability (know-how transfer) are the three key elements that hamper digital inclusion in farmer households. The RCT also proved, among other facts, that kids can act as “bridges” between technology and older people, and that by easing ICT know-how transfer they can actually help to change behaviors in adults, i.e. their parents.

Source: ICABR Conference on Disruptive Innovations, Value Chains, and Rural Development: *Disruptive Innovations in the Agriculture Value Chain*. Presentation by Maximo Torero, Executive Director, World Bank Group, June 2018

Table 11: Unintended consequences of Government policies

Intended policy objectives	Current policy instruments	Unintended effect on market dynamics / competition	Less distortive measures to achieve policy objective
Increase yields	<ul style="list-style-type: none"> • State control over production of pre-base/breeder seed • Inefficiencies in supply side input subsidy system • Government allocation of inputs across geographies and farms • Overly restrictive specifications in input tenders • Import restrictions on seed 	<ul style="list-style-type: none"> • Lack of affordable high-quality seed, along with reduced choice and increased cost of subsidized fertilizers → contributes to lower yields 	<ul style="list-style-type: none"> • Ensure process to obtain special permit for import of certified seed imports are not overly burdensome • Consider delivering subsidies via demand side mechanisms and remove restrictions on which regions distributors can operate in. • Ensure that tender specifications do not unnecessarily restrict the participation of substitute products • Invest in extension services and overall capacity development
Increase farmer incomes	<ul style="list-style-type: none"> • Supply side input subsidies • Minimum farmgate prices • Various rules on buying from farmers set through CNIA (e.g. establishment of OPS collection points and allocation amongst processors, restrictions on purchasing season etc.) 	<ul style="list-style-type: none"> • Lack of affordable high-quality seed, along with reduced choice and increased cost of subsidized fertilizers → contributes to lower yields which can lower incomes • Minimum farmgate prices are set below price that would prevail if an unrestricted export market were permitted → lower farmer incomes and lower production 	<p>As above, plus:</p> <ul style="list-style-type: none"> • Consider allowing market players to compete on farmgate prices • Invest in extension services and overall capacity development • Consider removing restrictions in market for purchasing groundnuts from farmers to provide greater choice in where and when they sell

Create employment and increase domestic value add	<ul style="list-style-type: none"> • Import restrictions on vegetable oils • Periodic export restrictions • Subsidization of millers 	<ul style="list-style-type: none"> • Increased consumer prices for oils and decreased consumer welfare • Disincentive to develop processed whole nut value chain • Protection of downstream employment in millers at the expense of employment in upstream value chain functions, e.g. shelling • Foregone FOREX from restricting export 	<ul style="list-style-type: none"> • Remove import restrictions on vegetable oils and encourage development of whole nut exports with local value addition (e.g. shelling) by <ul style="list-style-type: none"> • Reassessing the need for export taxes; or increasing the tax on Nut in Shell (NIS) while lowering the tax on shelled nuts • Reinvesting income from export tax (if maintained/reinstated) in the value chain, ensuring that funds are dispersed in a way that safeguards a level playing field, e.g. avoid targeting support at specific players. • Actively focusing on development of value add whole nut export value chain in order to respond to international demand
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5.1.5 Recommendations

123. Based on the above analysis of restrictions to competition and potentially less distortive mechanisms to achieve Government objectives, the following table (Table 12) provides key recommendations on market solutions to address bottlenecks to achieve the objectives of: increasing certified seed availability, increasing fertilizer availability, boosting farmer incomes, boosting throughput for local processors and building local value addition, and improving consumer prices for oil.

Table 12: Recommendations on market solutions to address key bottlenecks in the groundnut value chain

Recommendation	Responsibility	Priority
Certified seed availability		
1. Review reasons that ISRA does not produce sufficient pre-base seed to fulfil market demand.	MAER, ISRA	High
2. Implement a pricing mechanism for pre-base seed that allows ISRA to satisfy demand for seed and cover costs. As a complementary measure, put in place mechanisms of traceability and transparency, e.g. a seed e-platform.	MAER, ISRA	High
3. Consider whether ISRA could provide breeder seed to private players to allow for increased production. As a complementary measure, identify ISRA's public good elements and allocate funds.	MAER, ISRA	High
4. Refine and operationalize subsidy schemes which allow for competition between distributors/seed companies e.g. voucher scheme.	MAER	High
5. Allow private sector to choose geographical allocation of seeds based on demand, except in the case of market failures.	MAER	Medium
Fertilizer availability		
6. Review the costs and benefits of maintaining restrictive formula specifications.	MAER	High
7. Consider allowing bulk blends.	MAER	High
8. Formally delink tender award from bidder's choice of supplier.	MAER	High
9. Operationalize subsidy schemes which allow for competition between distributors and greater choice for consumers, e.g. voucher scheme.	MAER	High
10. As a complementary measure, consider State support for inputs (fertilizers and seeds) in the context of contract farming schemes to promote diversification, and the dissemination of climate-smart agriculture technologies, especially to boost production in areas affected by climate shocks.	MAER, ISRA	High
Farmer incomes		

11. Consider reforming export restrictions, such as the export tax on groundnuts.	Government	High
12. Review the role of the CNIA in the development of the sector. Develop guidelines on its mandate to rationalize its involvement in determining market parameters (e.g. prices and geographic allocation) and on exchange of information in order to minimize the risk of facilitating anticompetitive outcomes.	CNIA, CNIA stakeholders, MAER	High
13. Review membership of the CNIA and develop guidance to ensure adequate representation of producers and new/potential entrants.	CNIA, CNIA stakeholders	High
14. Remove restrictions that limit the number of buyers in a specific area (e.g., collection point restrictions specified by CNIA), including those affecting exporters.	CNIA, MAER	Medium
1.15 Strengthen the efficiency of input distribution markets and access to finance during sowing seasons.	MAER	Medium
1.16 As a complementary measure, promote contract farming and better risk sharing between producers and buyers by encouraging them to become involved in production financing.	CNIA, CNIA stakeholders	High
Throughput for local processors and building local value addition ¹⁹³		
<p>Overall drivers of throughput for local processors and building local value addition:</p> <ul style="list-style-type: none"> - Competition in local processing drives efficient allocation of resources and boosts productivity - Competition in market for buying from farmers encourages participation of efficient firms in local processing <p>These drivers can be achieved through implementing recommendations above– plus the following additional reforms...</p>		
17. Accelerate incentives to increase the production of quality seeds to ensure adequate volumes for the local industry. Hence, facilitate competition between oil producers and other buyers, including exporters..	MAER	High
18. Set clear objectives for state support to the industry through transparent criteria to minimize distortions, in the framework of contracts.	MAER, Ministry of Finance	High
19. Consider removing set minimum farmgate price, while putting in place mechanisms to protect producers' income (e.g. social protection measures; production and export insurance; warehouse receipts).	CNIA, MAER	Medium
20. As a complementary measure, consider investing in improving quality standards and mechanisms for the detection and control of aflatoxin; setting a strategy to respond the growing demand of the confectionery	MAER, Ministry of Finance	High

¹⁹³ In addition to the recommendations listed below, consider maintaining the removal of the purchasing subsidy for oil processors (in line with the previous policy).

industry; and leveraging on digital economy opportunities to reduce costs and increase productivity.

Consumer prices for oil

21. In addition to previous recommendations... Consider removing import tariffs on crude (and potentially refined) vegetable oil.	Government	Medium
--	------------	--------

124. In addition, if taken into consideration, these reforms should be accompanied by mechanisms that address the downside risk of market price fluctuations on farmers, such as targeted cash transfers as well as climate and output risks, such as crop insurance (see also Box 14).

Box 14: International experience in agricultural risk management

Agricultural risks associated with negative outcomes stemming from price volatility (in inputs and outputs), together with other types of risks (biological, climatic ones, production, infrastructure, financial or institutional risks), can significantly impact producers. Mechanisms to prevent and/or address potential negative outcomes associated to agricultural risks can be formal and informal: formal mechanisms consist of “market-based activities and publicly provided mechanisms” while informal ones involve arrangements between “individuals or household or such groups as communities or villages”. They can also be classified into ex ante or ex post depending on when the reaction to the risk takes place. Figure 55 describes types of agricultural risk management mechanisms following this classification. Among formal mechanisms, insurance (market based) and cash transfers (publicly provided) are some common ones to address price volatility and other types of risks.

Figure 55: Types of agricultural risk management mechanisms

		Formal Mechanisms	
		Market Based	Publicly Provided
EX ANTE STRATEGIES	On-farm	Contract marketing and futures contracts Insurance	Agricultural extension Pest management systems Infrastructures (roads, dams, irrigation systems)
	Sharing risk with others		
EX POST STRATEGIES	Coping with shocks	Credit	Social assistance Social funds Cash transfer

Source: Anderson 2001; Townsend 2005; World Bank 2001.

Developing countries have adopted different strategies to address agricultural risks and help farmers access to finance. Some examples are:

- **Malawi:** A weather indexed insurance set as a pilot project for groundnut farmers for the 2005-2006 crop season allowed farmers to obtain a loan to finance the planting of certified seeds. In case of draught under the agreed conditions, the insurance settles farmers' loans.
- **Burkina Faso:** The country set a smoothing fund system (index-based insurance) to help producers respond to price volatility of cotton in global markets after the country changed its price-setting

mechanism to follow world price levels. It consists of a system of levies and refunds (including a guaranteed floor price). It is negotiated on an annual basis by all stakeholders. Producers have been paid increasing prices since its set-up in 2008.

- **Ghana:** In 2011 the Government of Ghana launched the Ghana Agricultural Insurance Programme (GAIP), a crop insurance system covering various agricultural products, to protect producers from financial risks stemming from climate change.
- **Mexico:** The Component for the Attention of Natural Disasters (CADENA) Program, through the Catastrophe Agricultural Insurance (SAC) Program, provides “a minimum level of compensation to small farmers after major catastrophic events”. The program has increased from USD 8.4 million since it was launched in 2003 to USD 303.8 million in 2013 and has been effective in protecting the most vulnerable farmers.
- **Brazil:** Brazil set a compulsory credit insurance program, the Brazilian Insurance for Family Agriculture (SEAF), to help small-scale farmers who access seasonal production credit from the National Program for the Strengthening of Family Agriculture (PRONAF). It indemnifies farmers of a preidentified wide range of crops for economically or technically uncontrollable weather-related risks.

Source: World Bank, 2005. Managing Agricultural Production Risk. Innovations in Developing Countries. Report No. 32727-GLB

125. At the same time, to maximize finance for development, the Government could encourage private investment along the value chain to optimize public resources and invest them in public goods that contribute to increasing productivity (i.e. research, transport infrastructure). Given current levels of investment in agricultural value chains at global level, crowding in private investment is necessary to achieve key development goals. Senegal’s groundnut value chain is no exception to this. Crowding in private investment can help optimize the use of the public resources, while contribute to other goals such as good governance and environmental and social sustainability. To ensure and increase private sector access to various sources of finance (a wide range including from own-savings to agricultural investment funds), it is key for the Government of Senegal to provide an enabling environment for all private sector actors in agricultural value chains (farmers who are by far the largest current investors, input suppliers, processors, distributors, and marketers). In addition, crowding-in more private investment also requires increasing the space for private sector activity; improving the policy and regulatory environment, as well as considering options for using public financing, to improve private incentives, and reduce transactions costs and risks. Finally, public resources will still be necessary to finance key public goods such as agricultural research and extension, and public infrastructure. In this sense, public-private collaboration mechanisms can help inform country level actions prioritization.

Potential Impact of Selected Reforms in the Groundnut Value Chain

126. A rough estimate of the potential gains from implementing a subset of the reforms proposed in this assessment can be calculated using basic assumptions. Error! Reference source not found. estimates the impact of the recent removal of purchasing subsidies, the suspension of the export tax in combination with an additional set of prudent reforms that would decrease market distortions and allow the Government to achieve its policy objectives. The criteria for selecting such reforms for this estimate are that they: i) appear feasible in the short term, ii) are key drivers of market dynamics, and

iii) have an immediate impact on Government spending or revenues. Together they represent a “middle way” between the status quo and full liberalization of the sector including: phasing out the setting of a minimum price, maintaining the current removal of a purchasing subsidy for processors, ensuring the continued suspension of the export tax on kernel (shelled nuts), and phasing out import restrictions on crude vegetable oil imports.

127. Implementing this set of reforms is estimated to generate benefits for all value chain actors in excess of F CFA 150 billion(USD 250 million), create employment for rural poor women and lift 50,000 people out of poverty. If employed correctly, the policy reforms would increase farmer incomes, lower consumer prices, create employment and generate higher profits. This is not to say that this subset of reforms is necessarily what should be adopted by the GoS or that other reforms would not be necessary – however, it does indicate the potential magnitude of gains that are available to the GoS if reforms are implemented systematically and credibly.

Box 15: Implementing a subset of these recommendations can lead to significant gains for Senegal

As shown in the preceding analysis, the current policies employed in the groundnut sector hurt millions of consumers and hundreds of thousands of farmers and only benefit a few thousand employees in the oil processing. At the same time, they are ineffective in achieving the Government’s strategic objectives as laid out in the Plan Sénégal Emergent (PSE).

A prudent blend of policy reforms could not only generate profits for farmers and exporters, but would also generate thousands of jobs and lift tens of thousands of Senegalese out of poverty.

As an example, the following estimate the gains from:

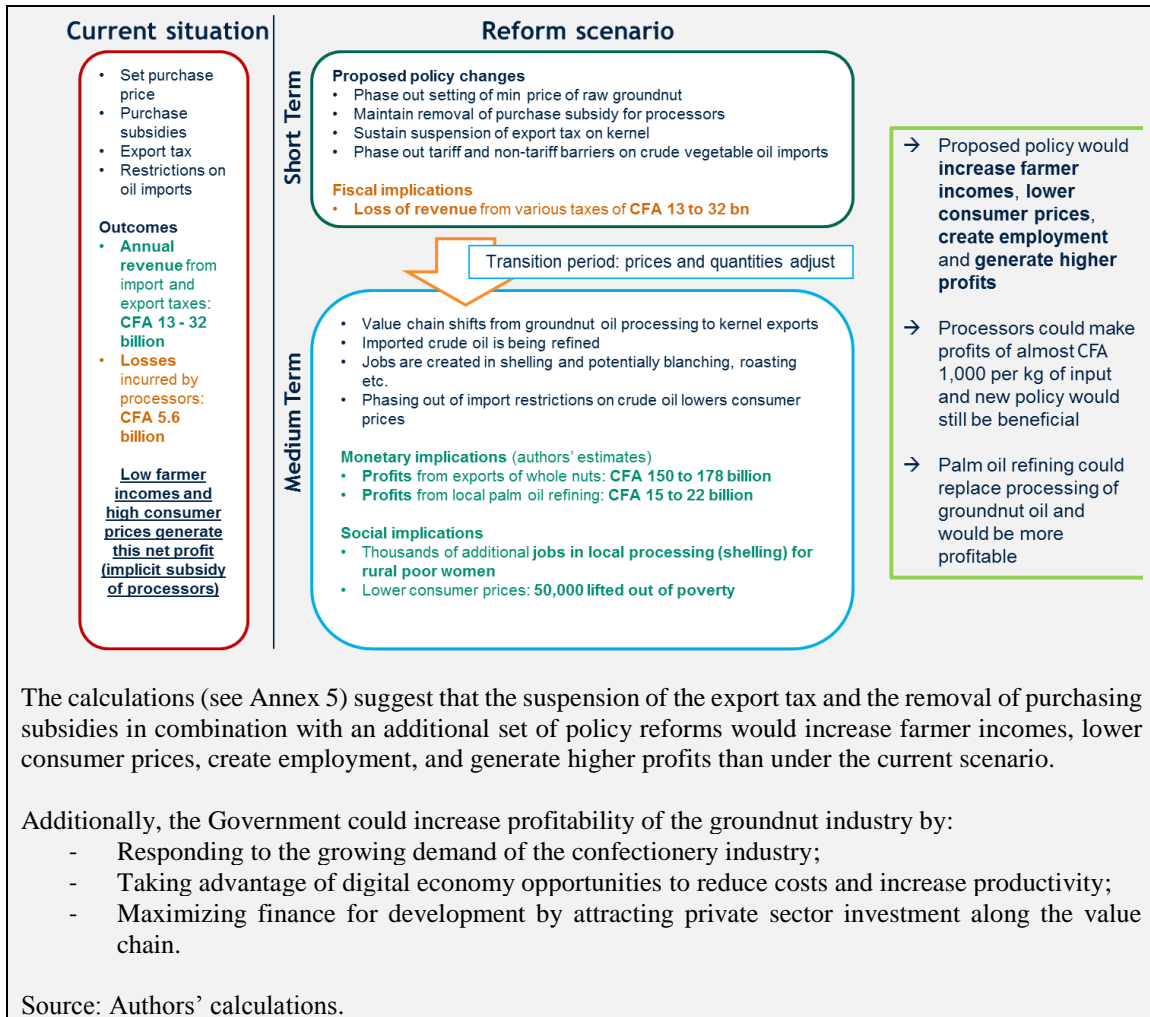
- Phasing out the setting of a minimum purchasing price for raw groundnuts, while addressing farmer vulnerability
- Maintaining the removal of purchasing subsidies for processors
- Sustaining the suspension of the export tax on kernel (shelled nuts)

Phasing out tariff and non-tariff barriers on crude vegetable oil imports. Prices offered to farmers by exporters would reflect the value on international markets (Senegal is assumed to be a price taker here), which is higher than the price currently being offered to farmers by local processors. The value chain would follow international trends and shift towards whole nut exports. Local oil millers could refocus on refining imported crude oils, allowing consumer prices of imported vegetable oil products to decrease. In the longer term, local processors would be encouraged to innovate with new products or new processes.

Although the Government has to incur a loss of short-term revenue from the removal of import and export taxes of between 13 and 32 bn F CFA (USD 22 to 54 million), the reformed value chain would create profits for the Senegalese groundnut value chain in excess of 150 bn F CFA (~USD 250 million) from participating in export of kernel.¹⁹⁴ After an initial investment in their refining capacities, oil processors could generate profits from refining imported crude palm oil between 9 and 14 bn (USD 16 million to 24 million) instead of incurring losses as is currently the case. Furthermore, employment carrying out value addition for the export of groundnut kernels would be created, from which rural women stand to benefit disproportionately. Lastly, as Table 6 (above) shows, decreased consumer prices would have the potential of lifting more than 50,000 people out of poverty. Figure 56 summarizes the fiscal and employment implications of the suggested policy reforms and compares them to the status quo.

Figure 56: The “middle way”

¹⁹⁴ A detailed break-down of calculations and assumptions can be found in Annex 5.



5.2 Telecommunications

5.2.1 Background

The Performance of the Telecoms Sector in Senegal Does Not Yet Reflect its Relatively Well-Developed Telecoms Backbone Infrastructure

128. Senegal's telecommunications sector has registered a rapid expansion in the last years, underpinned by a well-developed backbone telecommunications infrastructure, and by a recent price decrease. Senegal ranks above the African average (but below the world average) regarding the active mobile broadband subscriptions (26.1 per 100 inhabitants against 22.9 in Africa, and a world average of 52.2); fixed broadband subscriptions (0.6 per 100 inhabitants against 0.4 in Africa, and a world average of 12.4); and percentage of individuals using the Internet (25.7 percent against 19.9 percent in Africa, and a world average of 45.9 percent). Notwithstanding, Internet penetration remains

relatively low, with internet usage in Senegal being below that of Ghana, Cote d'Ivoire and Kenya (Figure 57 and Figure 60), and fixed-broadband being very limited (0.6 subscriptions per 100 inhabitants). Download speeds are also on the low side and international internet bandwidth per Internet user is less than one tenth of the average for Africa,¹⁹⁵ affecting connectivity (Figure 59). According to the *Stratégie Sénégal Numérique 2025*,¹⁹⁶ published in October 2016, whilst the telecommunications sector contributed 1.5 percentage points to GDP growth in 2006, it contributed only 0.2 percentage points in 2014. Despite significant improvements registered in the last years, Senegal scores 2.66 out of 10 on the ITU's ICT Development Index 2017, which is below the scores of regional peers (Figure 60) - the country ranks 142nd out of 176 economies.¹⁹⁷ It also ranks 107th out of 139 economies in the Network Readiness Index.¹⁹⁸

129. Senegal's recent price reductions of telecommunication services can contribute to greater penetration of ICT in the country. In 2017, Senegal ranked 130 out of 138 countries on the affordability of telecommunications services.¹⁹⁹ However, Senegal's broadband prices are now close to the median after recent price reductions, even if they are still higher than those in The Gambia and Cote d'Ivoire (Figure 58). According to the International Telecommunications Union (ITU), Senegal's mobile-broadband prices (prepaid handset-based, 500 MB) for 2016 were greater than 8 percent of gross national income (GNI) per capita (compared to an average of 9.3 percent in Africa); the mobile-cellular sub-basket represented 17.3 percent of GNI per capita, higher than the average of 14.2 percent in the rest of Africa; and the fixed-broadband sub-basket represented 20 percent of the GNI per capita, which is below the average 39.4 percent in Africa.²⁰⁰ Despite a drop in prices,²⁰¹ Senegal ranks 32 out of 51 in the price comparison by the OECD mobile basket²⁰² (Table 20 in Annex 6).

¹⁹⁵ 4,977 bit/second in Senegal versus 51,000 bit/second in Africa. Source: ITU (2017).

¹⁹⁶ Ministère des Postes et des Télécommunications. 2016. *Stratégie Sénégal Numérique 2016-2025*

¹⁹⁷ The ITU's ICT Development Index (IDI) is a composite index that combines 11 indicators into one benchmark measure which can be used to monitor and compare developments in ICT between countries and over time. The three sub-indices are "ICT access", "ICT use" and "ICT skills".

¹⁹⁸ Network Readiness Index figures for 2016.

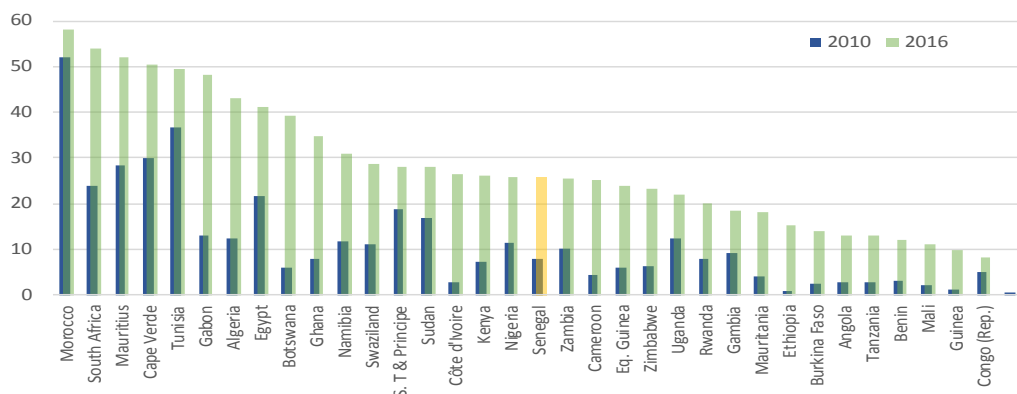
¹⁹⁹ Network Readiness Index figures for 2016.

²⁰⁰ ITU *Measuring the Information Society Report*, 2017.

²⁰¹ <http://www.researchictafrica.net>. Senegal ranks 10 out of 29 in the price for prepaid 1GB in Africa. The comparator countries include: Mozambique, Tanzania, Ghana, Egypt, Nigeria, Guinea, Uganda, Rwanda, Tunisia, Cape Verde, Liberia, Kenya, Niger, Morocco, Burundi, Sudan, Namibia, Gambia, Mauritius, Malawi, Cameroon, South Africa, Lesotho, Madagascar, Ethiopia, Côte d'Ivoire, Senegal, Benin and Burkina Faso.

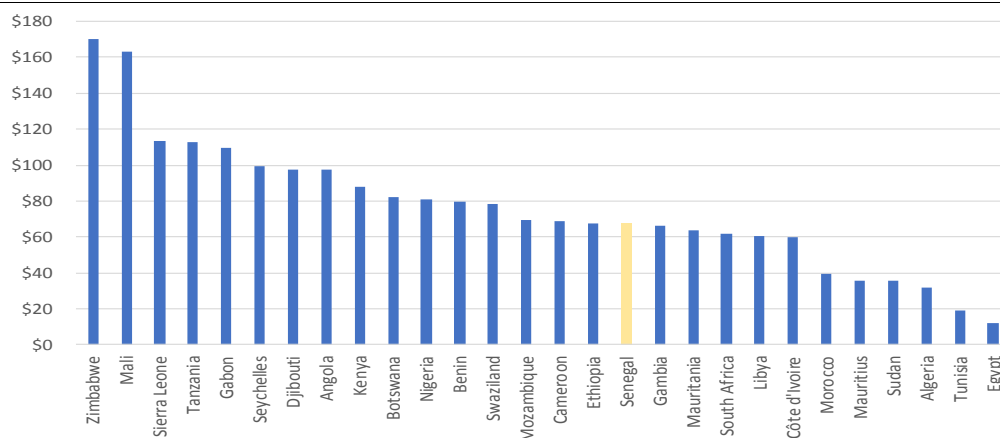
²⁰² The OECD mobile baskets examine the price of making a set basket of calls over the period of one year. The mobile call baskets include a pre-determined number of calls, SMS messages and MMS messages each year. The ratio of on-network and off-network calls is determined through discussions with operators. Operators also provide the OECD with data on SMS and MMS patterns. See also Annex 6 for the list of countries.

Figure 57: Internet Penetration in Senegal vs. Peer Countries: % of People Using the Internet (2010-2016)



Source: International Telecommunication Union (2017)

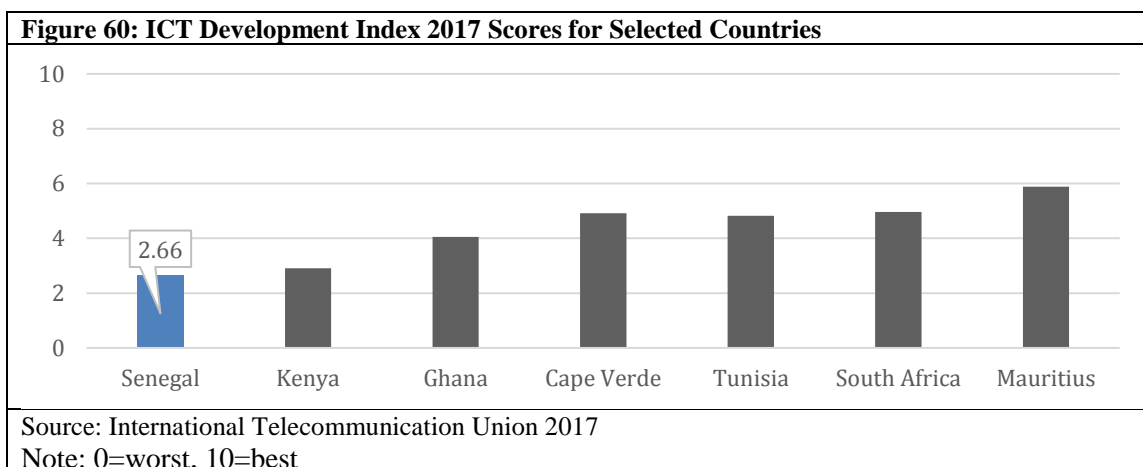
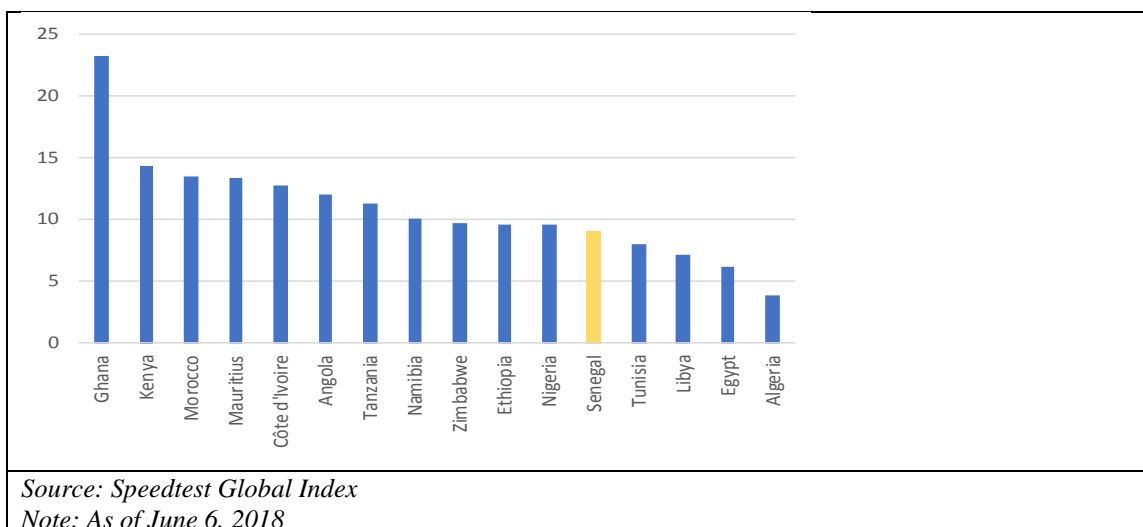
Figure 58: Fixed broadband (USD/month)



Source: Broadband Pricing League, Sonatel

Note: Figures as of Sep/Oct 2017; May 2018 for Senegal

Figure 59: Fixed broadband download speed (Mbps)



Box 16: Stratégie Sénégal Numérique 2025

The *Stratégie Sénégal Numérique* establishes the goal of launching 4G Services and making sure that 70% of the population will be covered within the next 5 years and 90% by 2025.

Private telecommunications operators are expected to play a key role in the development of much needed infrastructure, key to bridge Senegal's accessibility gap. According to the *Stratégie Sénégal Numérique 2025*, private telecommunications operators are expected to contribute over 73 percent of the total financing required over the next eight years. The core of this contribution should consist of investments in deploying 4G networks and telecommunications services.

However, infrastructure development is not a sufficient condition to ensure the broadest possible accessibility to ICT services across Senegal's territory. If retail prices are not competitive, dissemination of ICT services will remain limited. Moreover, if wholesale interconnection between operators are overly costly or insufficient, wide access to ICT services will also be hindered and the digital transition delayed.

To transform the country's digital economy, the *Stratégie Sénégal Numérique 2025* considers that it is key to reform the country's legal and regulatory framework for telecommunications and ICT. The telecommunications sector is key for promoting development, and competition policies are necessary for ensuring that the benefits of the digital economy can be distributed evenly. One of the necessary policy conditions is a regulatory environment that promotes market competition and encourages private operators to innovate, be more productive, and, as a result, promote universal access to telecommunications services

(World Development Report 2016: Digital Dividends). To attain these goals, the *Stratégie Sénégal Numérique 2025 Plan* proposes a series of regulatory measures to boost price competition and attain effective sector specific regulation in tandem with a strong and independently enforced competition law framework.²⁰³

Senegal reformed its telecommunications regulatory framework in 2011, through 2011-01 of 24 February, which adopted a new Telecommunications Code in line with the West African Economic and Monetary Union (WAEMU) and Economic Community of West African States (ECOWAS) frameworks. Despite its ambitions to upgrade the regulatory framework previously set forth in Law 2001-15 of 27 February 2001, with the changes introduced by Law 2006-02, of 4 January 2006, the Telecommunications Code has so far not drastically changed market conditions in Senegal. However, recent reforms to the Telecommunications Code aimed at facilitating the market entry by ISPs are expected to improve competition in the sector (Law 2017-13, from January 20).

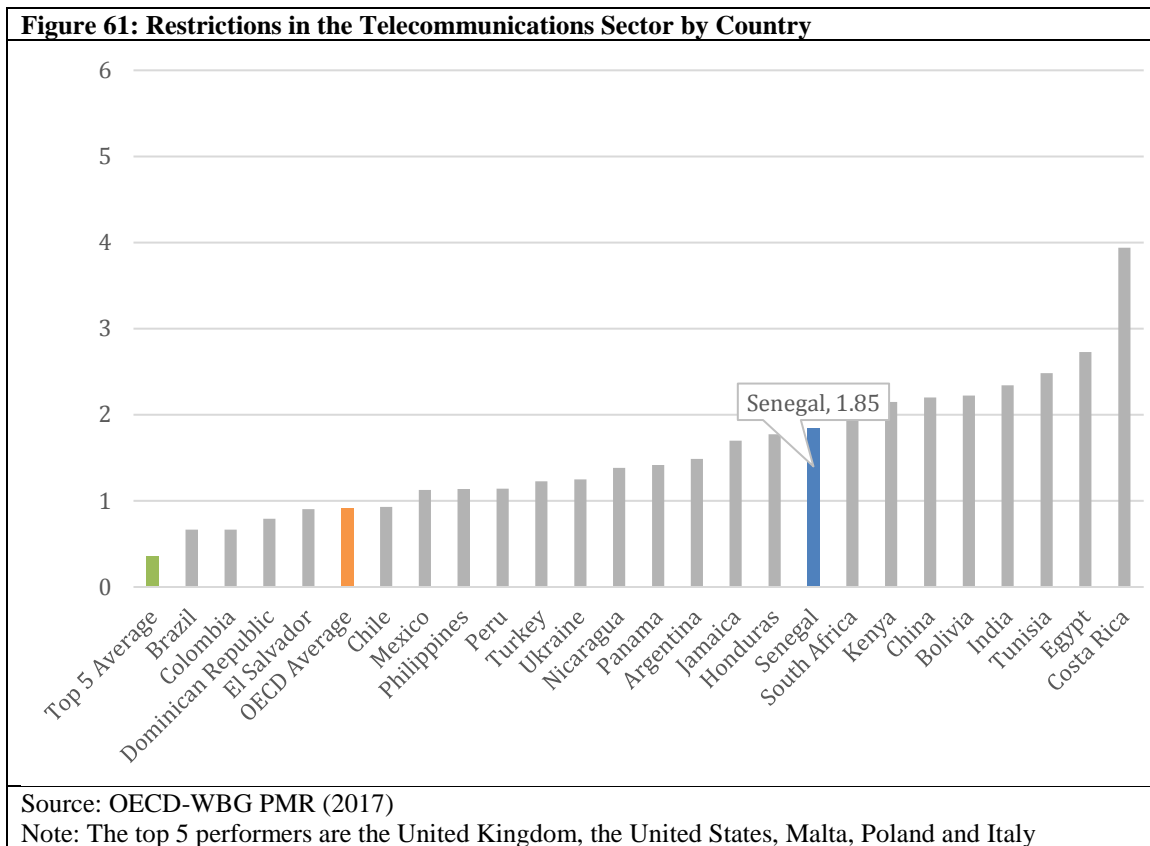
Source: Based on *Stratégie Sénégal Numérique 2025*

The Importance of Competition in the Telecoms Sector

130. Opening mobile, wireless, and international calling markets to more competition can have an important impact on growth and competitiveness. Previous research has found that, in a sample of 40 African countries, the entry of an additional operator led to a 57 percent increase in mobile subscriptions (Gebreab 2002). Meanwhile, opening up international calling services to competition was found to reduce prices by 90 percent and increase call volumes by anywhere from 32 to 104 percent (GSMA 2012).

131. Improving competition in Senegal's telecoms markets might contribute to better market outcomes. According to PMR indicators, Senegal's telecommunications regulations are relatively restrictive compared to comparator countries (Figure 61). Senegal's score of 1.85 places the country in the bottom half of comparators. Restrictions on entry and the partial public ownership of Sonatel are the main contributors to the PMR score. The ICT sector in Senegal is characterized by a strong Governmental presence: the State maintains a 27 percent shareholding in Sonatel, the former incumbent. Furthermore, Senegalese ICT markets are characterized by high barriers to entry and high concentration levels. In addition, the regulatory framework has not contributed to boosting service and infrastructure-based competition (e.g. no pro-competitive radio spectrum assignments and weak access regulation framework).

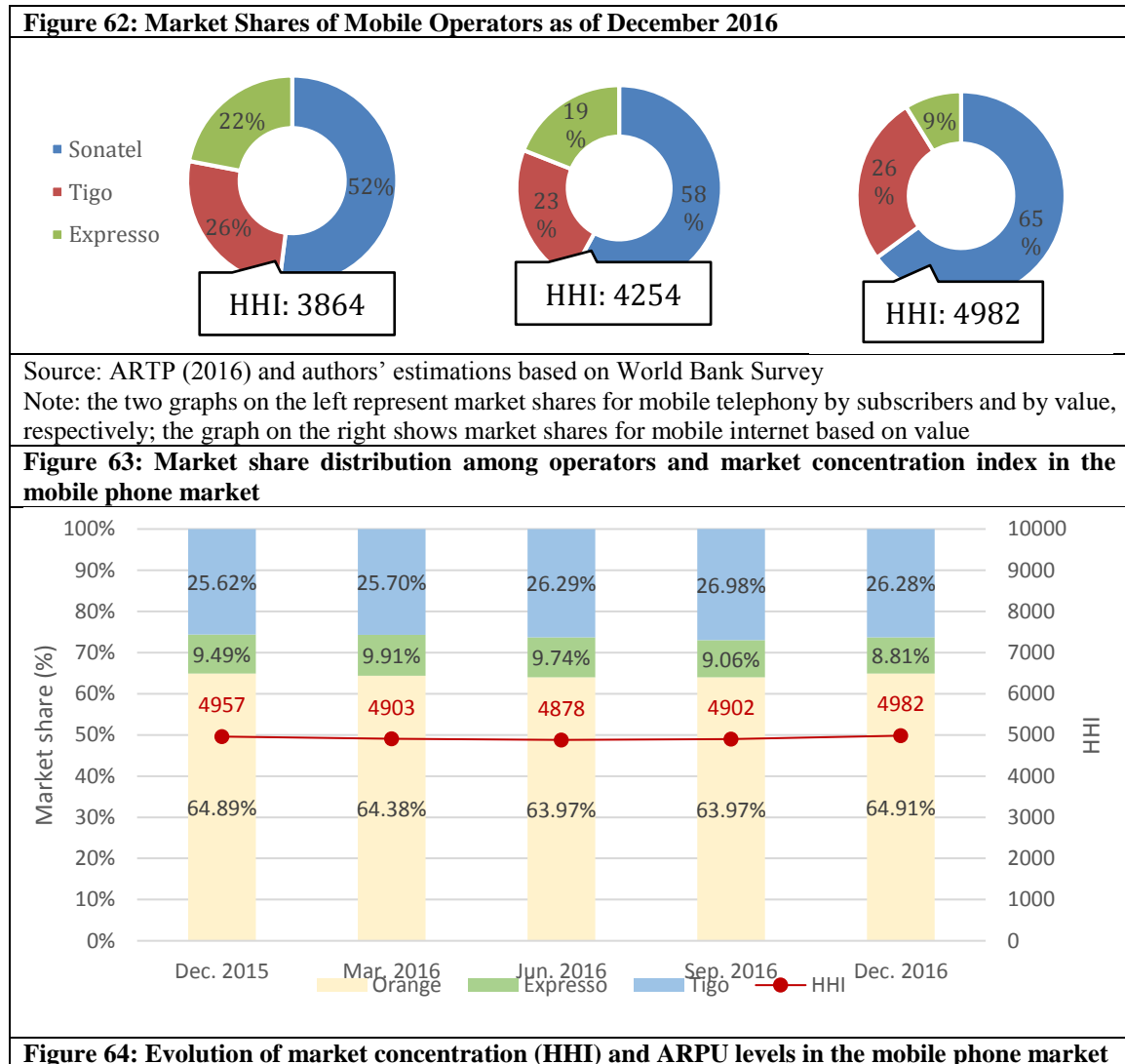
²⁰³ Based on the HHI, the concentration levels are classified as follows: 1) Unconcentrated Markets: HHI below 1,500, 2) Moderately Concentrated Markets: HHI between 1,500 and 2,500, 3) Highly Concentrated Markets: HHI above 2,500 (Horizontal Merger Guidelines 2010; U.S. Department of Justice and Federal Trade Commission).



132. High market concentration is currently the main contributor to Senegal’s high score regarding the regulation of the telecoms sector. More than half of the PMR indicator derives itself from the highly-concentrated market structure Senegal faces. All market segments are highly concentrated and dominated by Sonatel, which is co-owned by Orange and the Senegalese state. The Herfindahl-Hirschman Indices (HHI) for the Senegalese mobile markets are comparatively high. For mobile telephony, they are at 3,864 and 4,254 measured by subscribers or by value, respectively, while the HHI for mobile internet reaches 4,982 (Figure 62). Market share distribution among operators and HHI figures have remained stable, despite the general decrease in ARPU observed during the last decade (Figure 63 and Figure 64). These HHI numbers are high also in comparison to peer countries (Figure 65). While it is not unusual for certain telecom market segments to be concentrated, some segments in Senegal have actually become more concentrated over time. For example, whilst in the late 1990s, there were more than 15 internet service providers (ISPs), four ISPs are in the market today, primarily because ISPs were not authorized to deploy their own infrastructure, thus having to rent Sonatel’s infrastructure for excessive prices that inevitably led to market foreclosure.

133. Furthermore, markets that are not yet fully-functioning may hinder the incentives and ability for the market players to roll out improved technologies. For instance, while 32 African countries had already developed next generation 4G networks in 2016, including neighboring countries such as Cote D’Ivoire, Ghana, Gambia, Benin

(see Figure 66), Senegal is still awaiting the full development of its own 4G network. By 2016, 74 4G networks were available in 32 African countries, compared to only 1 country in 2011, a trend largely missed by Senegal (Figure 80 in Annex 6). Spectrum for 4G is still available in Senegal - and a plan to assign this spectrum under a process that can promote competition will be key for the effectiveness of 4G network deployment. Section 5.2.3 covers this issue in more detail.



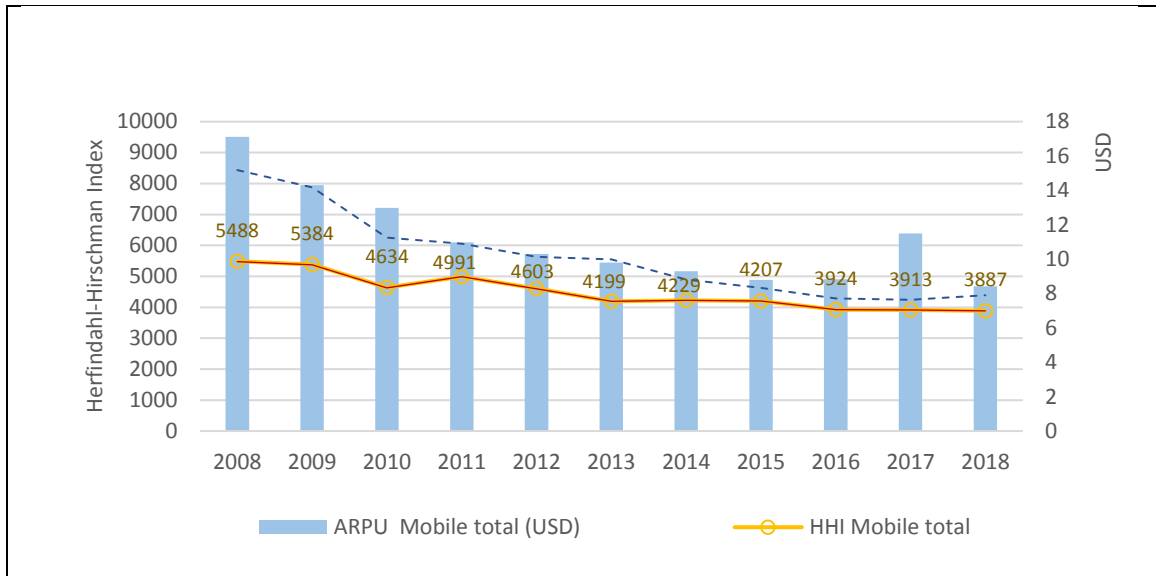
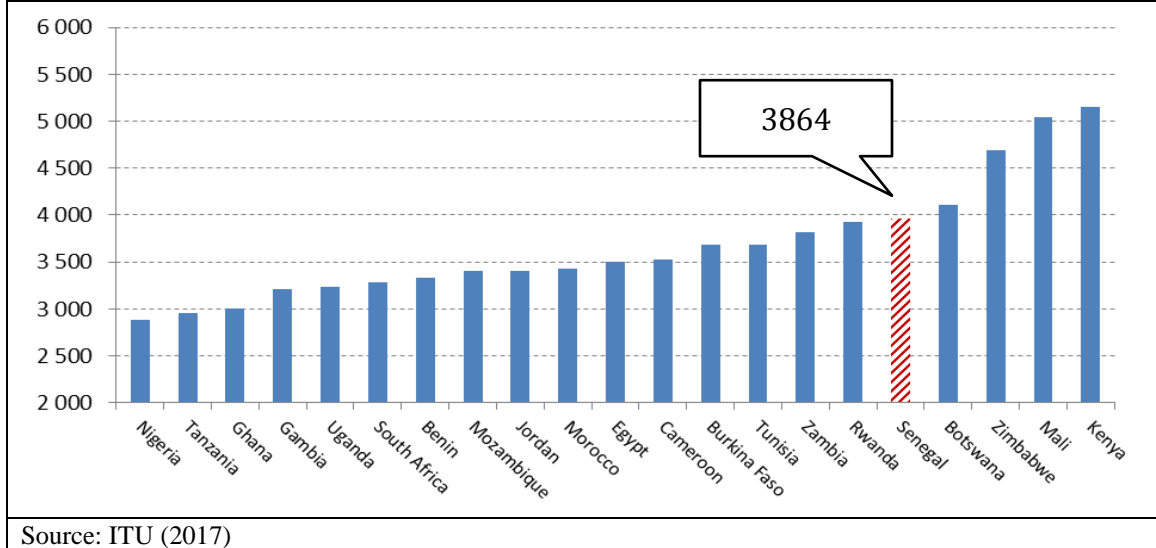
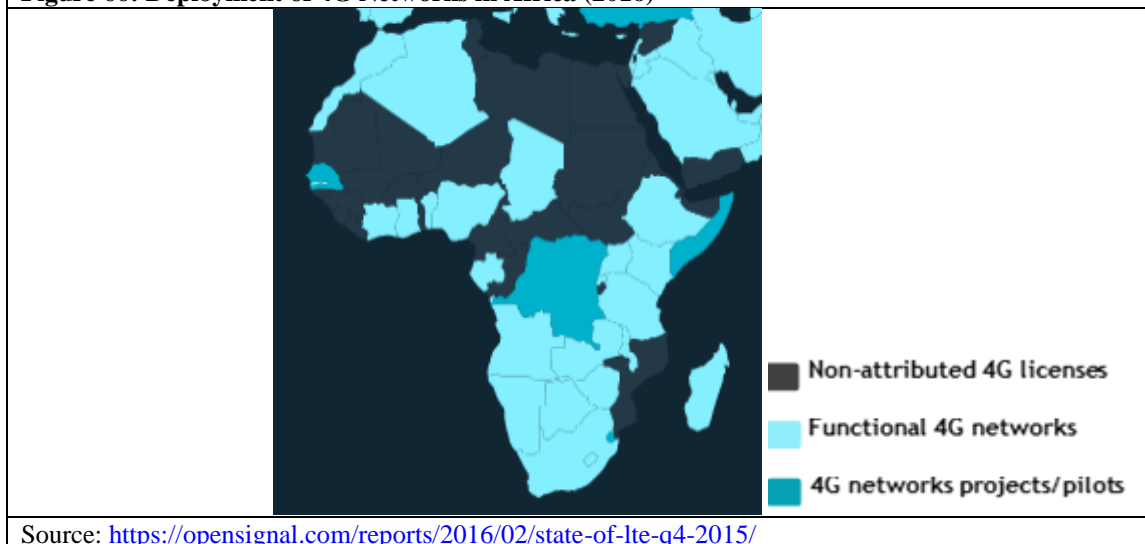


Figure 65: Mobile market concentration in selected countries (HHI based on subscribers)



Source: ITU (2017)

Figure 66: Deployment of 4G Networks in Africa (2016)



134. Pro-competition policies in the telecom sector can help deploy ICT technologies and benefit consumers through lower tariffs and improved quality of service. *Stratégie Sénégal Numérique 2025*, the Government’s ICT strategy published in 2016, reacts to these challenges and calls for a more vibrant and innovative private sector. This, however, requires a strong regulatory and institutional framework that fosters competition. Indeed, the *Stratégie Sénégal Numérique* analyses several factors which constrain competition, which have not been adequately tackled due to the lack of effective regulatory and competition law. The remainder of this section describes these key competition bottlenecks along the Senegalese telecom value chain and provides recommendations for alleviating these bottlenecks to create better functioning markets.

Main Features and Competition Issues of the Telecoms Sector

135. A functioning telecom value chain would require dynamic market conditions and pro-competition regulation at the all levels (see Figure 67).

Figure 67: Competition along the Telecom Value Chain

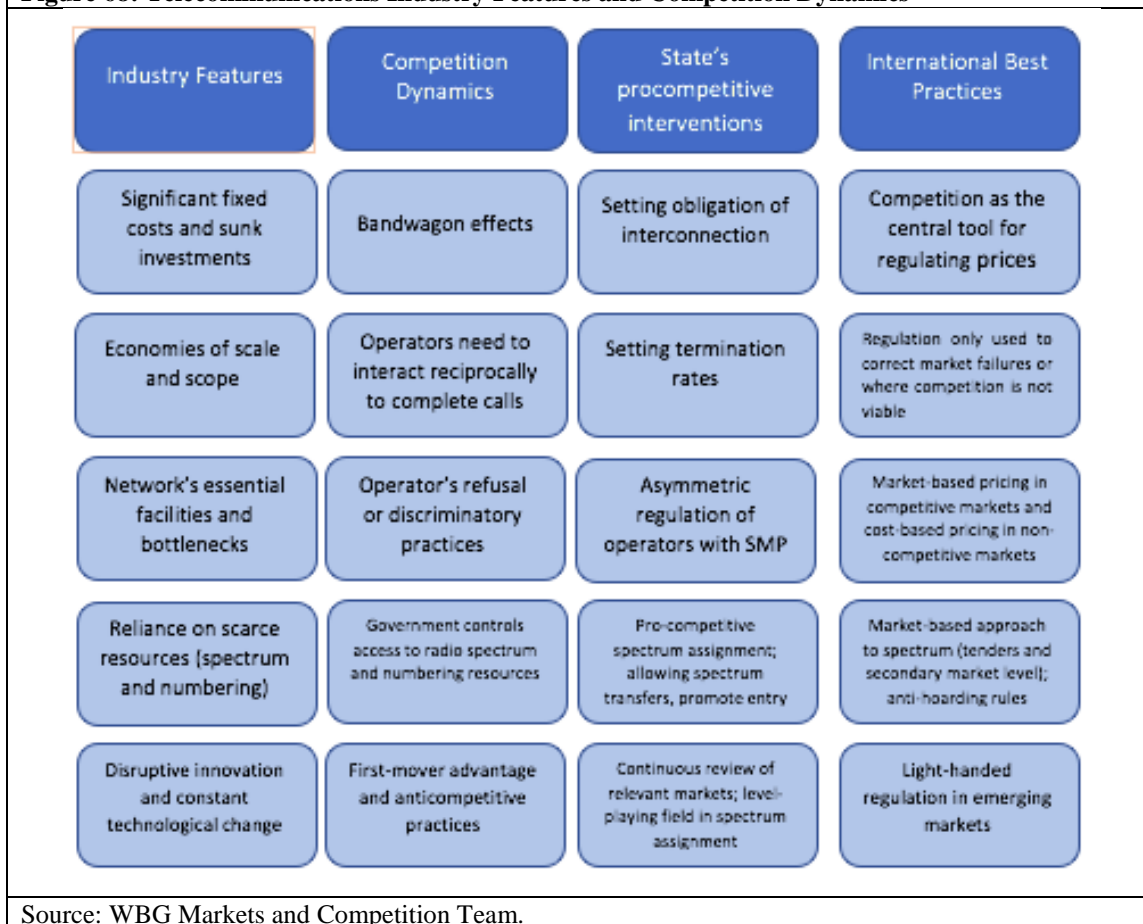
	International connectivity	Core network National backbone	Middle mile Backhaul	Access network Last mile	Final services to consumers
Definition	Network that provides connection of a national network to global networks	Transmission path that carries data gathered from the landing point of international communications infrastructure or a node in the national network to nodes for smaller local/regional networks within the country, and vice versa. i.e. Local or regional networks connect with the backbone for national long-distance interconnection/ transmission and to connect with each other. The connection points are known as network <i>nodes</i> .	Segment of a telecommunications network carrying data from the last mile (i.e. from a local network base station/cell tower to the core/ backbone network Backhaul capacity can be leased from a incumbent network operator by last mile service providers that lack their own infrastructure.	Portion of the telecommunications network chain that physically reaches the end-user's premises. Carries data from the customer to a local network base station. Two main technologies for broadband access: <ul style="list-style-type: none">Fixed services associated with a physical location (Fixed wireline, fixed wireless (e.g. WiFi), satellite connection)Mobile services, which can be used from any location with coverage (2G, 3G, 4G (e.g. LTE), xG)	Services used directly by consumers in daily activities.
Options for expansion and competition	Sharing of international gateway facilities: including undersea cables, cable landing stations and satellite assets E.g Collocation at the landing stations: Allow rivals to install their own equipment in the cable landing station Connection services: services by the incumbent to operators who collocate their equipment in the landing station to connect national networks to the submarine cable system Access to non-owned cables: ability for operators to access capacity that is owned (or leased long term) by a third party on any submarine cable at a landing station	Active infrastructure sharing: Leasing of the capacity from backbone infrastructure provider Among potential providers are incumbent operator and utility companies Passive infrastructure sharing E.g leasing of ducts (where operator could deploy its own fiber cables) or leasing of dark fiber (which could be lit by own active equipment of the operator) Deployment of own infrastructure. Performance of civil works and laying down of own infrastructure (likely fiber) – requires right of way for fiber, highly capital intensive	Fixed network <ul style="list-style-type: none">Active sharing:<ul style="list-style-type: none">Local loop unbundling (LLU): allowing multiple telecommunications operators to use connections from the local exchange to the customer's premises.Bitstream access: incumbent makes a high-speed access link to a customer's premises available to a third party)Passive sharing: Ducts, poles, cablesDeployment of own infrastructure: requires right of way for fiber capital intensive but less so than for core and middle mile Mobile network <ul style="list-style-type: none">Active sharing:<ul style="list-style-type: none">Full Mobile Virtual Network Operator (MVNO): sharing of incumbent MNO's Radio Access Network (RAN)Light MVNO: Shares RAN, network routing, interconnectionRoaming: Allows an operator to make use of another's network in a place where it has no coverage or infrastructure of its own.Passive sharing: Buildings, tower sites and mastDeployment of own infrastructure.	Fixed network <ul style="list-style-type: none">VoiceDataTriple/multiple play – bundling broadband and other traditional services Mobile network <ul style="list-style-type: none">VoiceText/SMSUSSDDataOTT services: which allows for voice, text, data, payment services	

Source: World Bank Group's Market and Competition Policy Assessment Toolkit (forthcoming).

136. The telecommunications sector is characterized by disruptive technology and continues to evolve at a fast pace. Technology changes lead to constant innovation and evolution of services and markets, which create new rivals and shifts the economic strength of existing rivals.

137. Telecommunications markets also feature well-known industry characteristics that make the sector more prone to market concentration and potential anticompetitive practices (Figure 68). These characteristics include significant fixed costs and sunk investments, economies of scale and scope, essential facilities and bottlenecks of network industries, and a reliance on scarce resources, including spectrum. Entrants in some segments face high fixed costs due to upfront investments in infrastructure, as well as commercial investments in sales and distribution channels. These high initial fixed costs, particularly in upstream segments, give incumbents a strategic advantage over new entrants, because the latter have fewer clients to spread their fixed costs.

Figure 68: Telecommunications Industry Features and Competition Dynamics



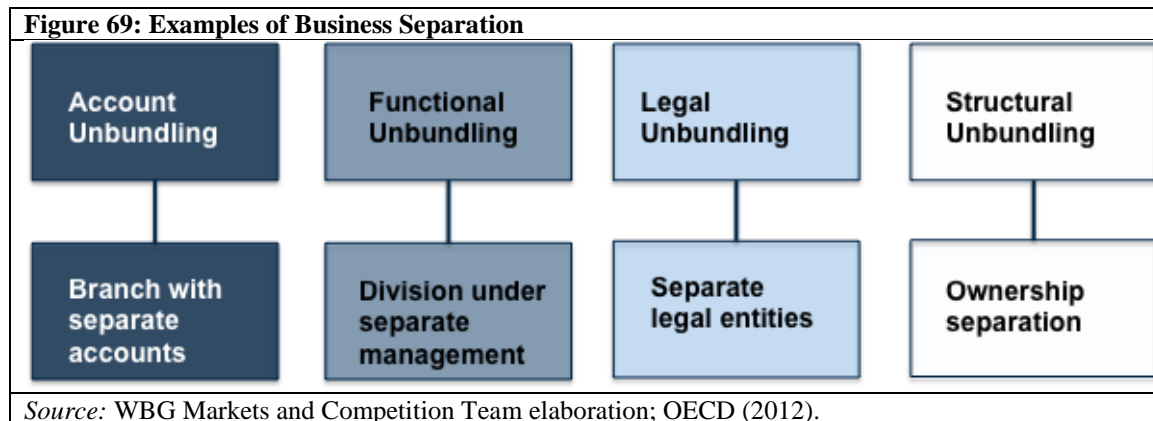
138. High infrastructure costs limit the economic viability of replicating some facilities and thus limits the number of entrants. This can lead to the emergence of a dominant wholesale infrastructure supplier or a small number of retail suppliers with their own duplicated infrastructure.

139. As a network industry, telecommunications networks present essential facilities and bottlenecks that lead to market concentration. Market entry in the retail supply of telecom services requires either access to infrastructure or the ability to resell services (e.g. pure service MVNO).

140. The inherent features of telecommunications networks result in competition dynamics that create strategic barriers to entry and that require both *ex ante* and *ex post* regulatory intervention to assure market efficiency and protect consumers and competitors from abuses of market power (see Box 17 below). The telecommunications sector requires a strong regulatory framework that enables the management of scarce resources (e.g. radio spectrum), ensures access to bottlenecks and overcomes the lack of private initiative in some areas of the country where commercial participation may otherwise be unviable. An ineffective regulatory framework will allow players with

substantial market power to distort competition and prolong the market power historically gained prior to the liberalization of the sector.

141. Moreover, because the incumbent has the incentive and the ability to discriminate in favor of its vertically integrated subsidiaries through control of non-replicable assets, further regulatory intervention may be necessary to require a transparent separation between the parts of the incumbent controlling the bottleneck assets and the other divisions (Figure 69).



142. In addition to a strong regulatory framework it is also crucial to have a strong and independent competition authority that effectively enforces competition rules *ex post*. Competition authorities across Africa have been active in pursuing investigations in the telecom sector. Tunisia launched a number of investigations in the past three years, of which eight resulted in sanctions. Egypt is currently investigating a price-fixing case against three large operators, which is in the prosecution phase. In South Africa, the dominant upstream fixed-line operator was found to have abused its dominance upstream to exclude competitors to its downstream retail division in the Internet segment. Investigations have also been carried out in Kenya, Malawi, and Mauritius.²⁰⁴

143. There are several possible ways to harmonize the enforcement of competition law with the enforcement of sector-specific regulation. There can be concurrent jurisdiction between the competition agency and the sector-specific regulator. This is the case in the UK, where sector-specific regulators, in addition to their own specific regulatory powers, are competent to deal with anti-competitive agreements or abuses of a dominant position which relate to activities in their respective sectors concurrently with the Competition and Markets Authority (CMA). In light of this overlap, sector-specific regulators are required to consider whether the use of Competition law is more appropriate before using their enforcement powers. In order to avoid institutional conflicts, the CMA and Regulators must put in place arrangements for sharing with each other certain

²⁰⁴ World Bank Group and African Competition Forum, *Breaking Down Barriers: Unlocking Africa's Potential through Vigorous Competition Policy*, June 2016, p. xiv.

minimum kinds of information. In this context, the CMA assumes a leadership role as the entity: (i) competent to issue guidance on commitments and to make procedural rules; (ii) competent to solve disputes with regulators; (iii) entrusted with the power to transfer a case from one authority to another or to take over a case; and (iv) given the duty to report annually on the use of concurrent powers in the regulated sectors. Another solution has been to incorporate competition rules directly into the sector-specific legislation and then give the regulators explicit powers to enforce such rules (e.g. telecommunications and energy regulators in Germany). Several countries have seen competition and sector regulators developing memoranda of understanding (MoUs) on how they will exercise their functions when dealing with issues involving overlaps. Such protocols are common in Europe (Albania, Bulgaria, Croatia, Czech Republic, Hungary, Portugal, etc.), as well as in the U.S. (The Federal Trade Commission and the Department of Justice often advise sector specific regulators on non-merger matters with a competition impact) and in some African countries, including Kenya and Zambia.

Box 17: Setting the right combination of *ex ante* regulation and *ex post* competition enforcement

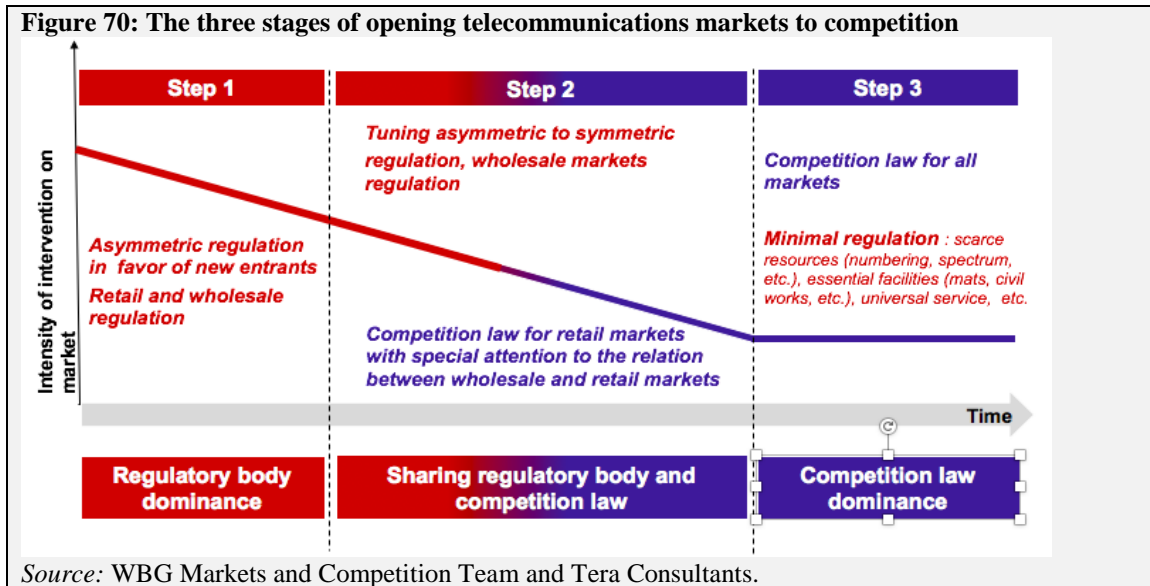
Managing the balance between *ex ante* asymmetric regulation and *ex post* competition enforcement should follow the evolution of the opening of markets to competition (Figure 70).

During the first phase of opening markets to competition, regulation is pro-active and asymmetric, as it must put into place conditions for viable entry of new operators that are capable of competing with the historical incumbent in the long run. This first phase is characterized by a focus on tariff regulation at the wholesale level (i.e. for access to network infrastructure and termination rates) and, if necessary, at the retail level (phone subscriptions). Tariffs should be oriented towards the costs of an efficient operator, although this requires overcoming the asymmetry of information that exists between the former incumbent and the regulator in terms of the incumbent's costs. The control of the costs of the operator by an independent auditor designated by the regulator and the design of ad hoc cost models by the regulator or by independent trustees designated by the regulator can enable the regulator to reduce information asymmetries and to establish regulated tariffs on the basis of objective and verifiable benchmarks.

Once wholesale markets are adequately regulated, the freedom for players to choose their own tariffs and compete in this dimension can be introduced at the retail level in the second phase. Here it is important that an effective competition authority is in place to detect and deter potential abuses of dominance by the dominant operator in the non-regulated retail markets.

Eventually, in the third phase the progressive establishment of viable operators can enable the creation of competitive wholesale markets in some segments (regulated primarily on an *ex post* basis through competition enforcement), as well as the identification of market segments where competition is highly difficult or impossible to foster, where asymmetric regulation remains applicable. This latter phenomenon may especially concern geographical areas with low density or certain capital assets (radio frequencies, passive infrastructure, capacity links) which cannot easily be replicated and which therefore may constitute essential facilities. The identification of these essential facilities allows the regulator to determine the parameters of long term regulation.

It should also be highlighted that, as regards scarce resources, such as spectrum, a competitive, transparent and objective process for the assignment of rights to such resources should be established. Competition in the market must remain active and service-based competition can complement infrastructure competition whenever the latter is not viable in the short to medium run.



144. Despite the existence of an independent telecommunications regulator and of a regulatory framework updated in 2011, competition in the telecommunications sector remains weak (see Boxes 18 and 19 below). In 2001, Senegal established a sector-specific regulator, ARTP with powers over the telecommunications and postal services sectors through Law 2001-15, which approved the Telecommunications Code.²⁰⁵ This Law was replaced in 2011 by Law n° 2011-01, of 24 February 2011, which harmonized Senegal's national law with the WAEMU and ECOWAS frameworks and introduced a series of substantive and institutional changes to the country's telecommunications regulatory framework. The 2011 Telecommunications Code implements the concepts of relevant markets and of operators with significant market power (SMP), the existence of which triggers the application of asymmetric regulation. However, the Telecommunications Code also includes unfair competition law provisions which aim to ensure fairness in the relation between businesses regardless of the existence of market power. In this regard, the Code establishes a general prohibition of abuse of economic dependency vis-à-vis a client or supplier without an equivalent alternative (e.g. breach of existing commercial relations or refusal to supply). Stemming from this prohibition, the Code then sets forth the duty to supply third parties under transparent and non-discriminatory conditions identically to a subsidiary.²⁰⁶ By imposing this obligation upon all operators independently from the existence of SMP, the Telecommunications Code is blurring the distinction between symmetric and asymmetric regulation and ends up unduly burdening the smaller operators even though they lack market power.

145. Further, the need for adequate resources of ARTP coupled with an institutional structure that is shielded from undue public and private influence would ensure a more effective application of the current regulatory framework (see also Box 19).

²⁰⁵ Replaced Law 96-03 from 1996 which determined that the exploitation of networks and services should be attributed to independent operators, namely through concessions and authorizations.

²⁰⁶ Telecommunications Code, Article 44.

Box 18: Telecommunications Code Rules on Competition

In the specific case of the telecommunications sector, the Telecommunications Code includes specific rules on competition. First, in terms of the Code's objectives, Article 4 states that its goals include attaining an effective competition in the telecommunications sector and ensuring a level playing field in the market without discrimination between players. Secondly, the Code prohibits practices having as their object or effect the prevention, restriction or distortion of competition in the telecommunications market, including:

- Limiting access to the market or the freedom of competition by other companies;
- Creation of obstacles to the market, namely through dumping and anticompetitive cross-subsidization;
- Limiting or controlling production, investment or technical development;
- Sharing markets or sources of supply;
- Refusing to make available to other operators in a timely manner technical information on essential facilities and relevant commercial information required for the development of their activity;
- Using information obtained from competitors for anticompetitive purposes; and
- Abusing a dominant position (Telecommunications Code, Article 43).

Although the Telecommunications Code bestows ARTP with the powers to enforce the competition provisions of the Telecommunications Code and to issue decisions, there has been no enforcement so far (Telecommunications Code, Article 46). This enforcement gap can be explained by the delay in enacting the required bylaws to apply the relevant provisions: e.g. the Code leaves it for a subsequent Decree to determine the relevant regulatory costs (Article 45). Moreover, even if ARTP actually applied the relevant competition rules, it is unclear whether it would be able to sanction the practices given that the Telecommunications Code does not lay out specific sanctions in case of breach of the competition rules.

Source: WBG Markets and Competition Team elaboration

Box 19: The Governance of ARTP

Based on the existing legal framework in the Telecommunications Code, ARTP's technical independence may be compromised by the existence of two bodies with conflicting philosophies: the Board and Director-General. The ARTP's solution conflicts with international best practice since it does not prevent the exercise of undue influence over ARTP's decisions by the Government (*see* OECD, "The Governance of Regulators", Chapter 2). Examples of international best practice in this domain can be found in the U.S., South Africa and in most EU Member States (e.g. Germany, Portugal), with the European Commission challenging Member States who fail to guarantee the independence of telecommunications regulators vis-à-vis the Government (e.g., Belgium, Latvia and The Netherlands in 2014). On the other hand, in Africa there are several examples of countries where the Government has direct presence in the regulator or appoints some of its members (e.g. Egypt, Morocco, Rwanda, Kenya). To appropriately determine how effective a regulatory authority is in practice, it would be necessary to carry-out a functional review.

ARTP's Board is composed of seven members, five with a five-year non-renewable mandate and two with a three-year non-renewable mandate (Telecommunications Code, Article 154). Board members are selected following an open tender launched by the Government and candidates are selected on the basis of their integrity, qualifications and expertise (Telecommunications Code, Article 155). Although Members of the Board are chosen by Decree, their President is appointed by the President of the Republic out of the seven members indicated (Telecommunications Code, Article 154). Furthermore, Board members are subject to an incompatibilities regime with any other activity in regulated sectors and any Governmental role and cannot be dismissed except in the case of gross fault (Telecommunications Code, Article 156).

In addition to the Board, the Telecommunications Code creates the position of the Director General. Although the Board is the decision-making body of ARTP, its decisions are based upon the files prepared by the Director General (Telecommunications Code, Article 159). The Director General has investigative powers in regulatory decisions and holds all the powers necessary to ensure the internal organization of

ARTP (Telecommunications Code, Article 165). Furthermore, the Director General also has the power to prepare ARTP's budget subject to the Board's approval. The Telecommunications Code's division of roles between Board and Director General is likely to create situations of conflict or inaction between the two bodies. Moreover, even though both bodies are appointed by Government decree and lack full independence vis-à-vis the executive, it appears that the incompatibilities regime of Board members and the fact that their President is chosen by the President of the Republic offer it an extra layer of independence that can shield it from political interference. On the contrary, even though it is chosen on the basis of criteria of integrity, qualifications and expertise, the Director General is directly linked to the executive and lacks guarantees of technical independence (Telecommunications Code, Article 164).

Source: WBG Markets and Competition Team elaboration

5.2.2 Characteristics of the Telecoms Market in Senegal

146. Although Senegal's market dynamics indicate a strong potential for better functioning markets, all market segments are highly concentrated and dominated by Sonatel (see value chain above). In 1997, Sonatel was partially privatized, with France Telecom (now, Orange) initially acquiring 33 percent of its share capital and increasing its share to 42 percent in 1999, and finally, to 52 percent in 2009, whilst the State still has 17 percent of Sonatel's share capital.²⁰⁷ Sonatel has presence in all the value chain segments identified in Figure 67. Sonatel currently holds a global license to operate both fixed and mobile communications networks in Senegal. Following the end of Sonatel's legal monopoly over fixed-services in 2004, the State issued an international call for tender for the assignment of a second global license (fixed and mobile) that would lead to the creation of a second player in the fixed segment. The license was awarded to Sudatel, which started its operations in 2009 under the brand Expresso. Hence, only Sonatel and Sudatel have fixed networks that allow them to operate in wholesale markets. Furthermore, local loop access has not been yet unbundled and is controlled by Sonatel.²⁰⁸ According to ARTP, Sonatel holds significant market power in: (1) relevant markets in the fixed telephony segment, (i) call termination over fixed-lines network, (ii) traffic collection over fixed-network, (iii) national traffic and (iv) international traffic; (2) relevant markets in the mobile telephony segment, (i) call termination over mobile network and (ii) SMS call termination over mobile network; (3) relevant markets in the data transmission network, (i) broadband access and (ii) access to the local loop; and (4) relevant markets in the capacity services sector, (i) lease of capacity and (ii) access to international capacity.²⁰⁹

147. Despite Expresso's market entry, Sonatel holds a market share larger than 97 percent in the fixed voice telecommunication retail market (Figure 71).²¹⁰ While highly concentrated markets do not necessarily imply the existence of market power (which

²⁰⁷ Mobile World Live. 2009. *France Telecom takes charge of Senegal's Sonatel*. Available at <https://www.mobileworldlive.com/france-telecom-takes-charge-of-senegal-s-sonatel/>

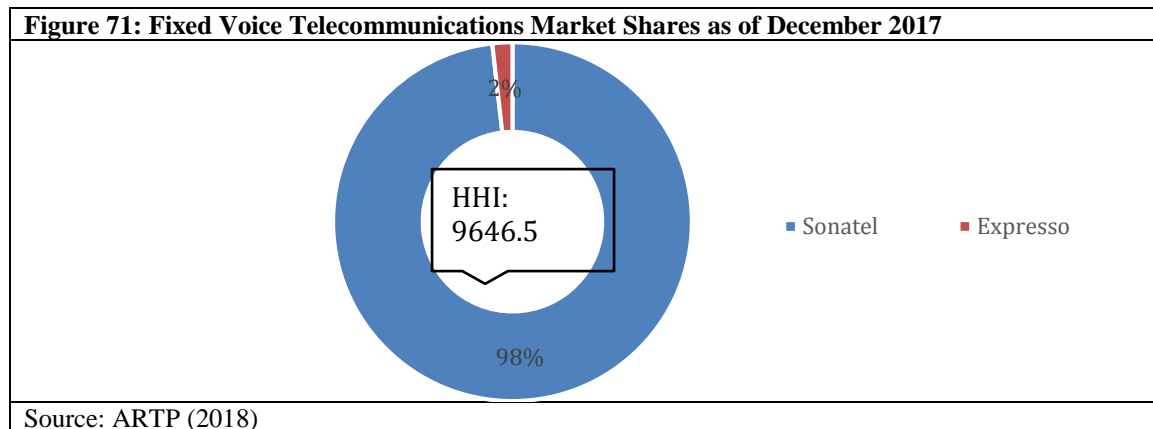
²⁰⁸ ARTP, Consultation publique ouverte du 01 au 15 mars 2016, Projet de Mise en Oeuvre du Dégroupage Total au Sénégal:

https://www.artpsenegal.net/sites/default/files/docs_consultations/document_de_consultation_publique_de_groupe_03022016.pdf

²⁰⁹ ARTP, décision 2016-002.

²¹⁰ https://www.artpsenegal.net/sites/default/files/docs_actualites/rapport_observatoire_t1_2017_vf.pdf

also depends on a number of different factors including the extent of barriers to entry, capacity constraints, vertical integration, demand elasticity, switching costs, and product differentiation that establish whether firms can or cannot exercise market power in a specific market), a market share of over 90 percent may provide a fairly strong initial signal of market power held by Sonatel.²¹¹



148. In terms of fixed broadband, Sonatel has been the only operator of a fixed fiber and ADSL networks. Whilst in the late 1990s, there were more than 15 internet service providers (ISPs), Sonatel's high wholesale prices and poor interconnection quality caused the market exit of multiple ISPs.²¹² Nevertheless, according to the ARTP's Internet Observatory, most users access the Internet through mobile networks (98.5 percent against 1.5 percent via fixed networks), which confirms the near absence of fixed-Internet in Senegal.

149. There are currently three national and one sub-national mobile network operators in Senegal. The 3G market consists of the following actors: Tigo²¹³ (the second licensed mobile operator given a 3G license in 2012), Sudatel licensed in 2009 and Sonatel which was given a 3G license in 2015. In 2013, a group of Senegalese businesses – Consortium du Service Universel (CSU) set up Hayo Telecom to offer fixed, mobile and internet services in the Matam region (Figure 81 in Annex 6 shows the geographic coverage of Senegalese telecommunications networks).

²¹¹ As such, the market concentration analysis provides a first screening to detect the existence of market power. For example, if the market is not concentrated, the existence of market power is less likely. However, highly concentrated markets do not necessarily imply the existence of market power. This is true especially in the case of small economies, although there may be several challenges that need to be taken into account. Therefore, the market concentration analysis should be complemented with an analysis of market characteristics and market dynamics (such as barriers to entry, capacity constraints, vertical structure, demand elasticity, switching costs, and product differentiation) that establish whether firms can or cannot exercise market power in a specific market.

²¹² Métissacana, Africanet, Arc Informatique, Cyber Business Center, PointNet, Sud Informatique, Enda-Tiers-monde, ATI, STE, inf247

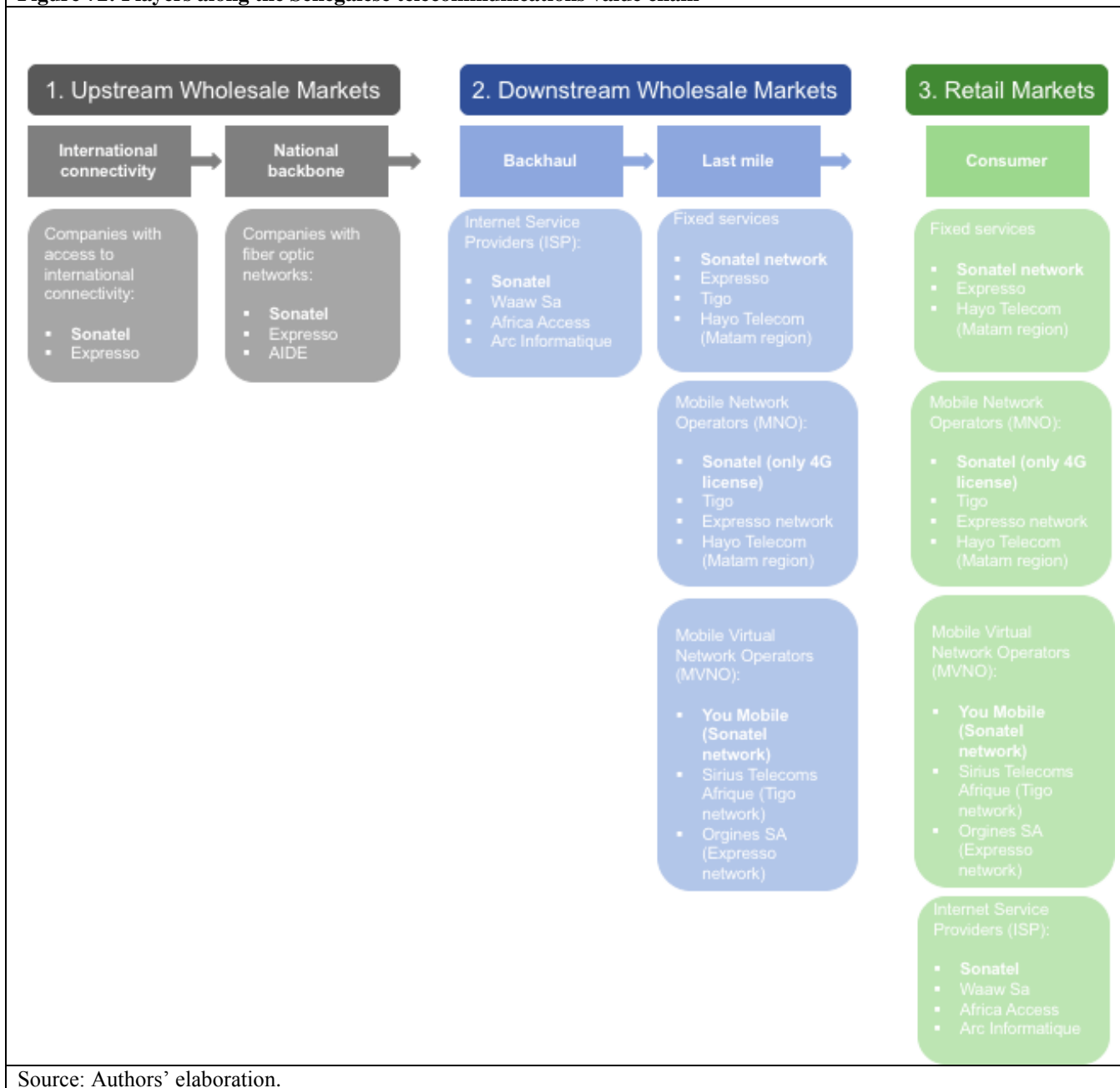
²¹³ In 1998, a second mobile license was awarded to Sentel GSM, a subsidiary of what is now known as Tigo, following an international tender procedure.

150. As of December 2016, Sonatel had 52 percent market share based on the number of subscribers, whilst Tigo had 26 percent and Expresso 22 percent.²¹⁴ The Hirshmann-Herfindahl Index (HHI) that measures market concentration is 3,864, indicating a highly concentrated market (see Figure 62 and Figure 65 above).

151. In terms of mobile data, Sonatel has nearly two thirds of the subscribers (see Figure 62). This market position is likely to further consolidate since Sonatel was granted a 4G license prior to any other player (for an overview of players along the Senegalese telecommunications value chain see Figure 72).

²¹⁴ According to ARTP.

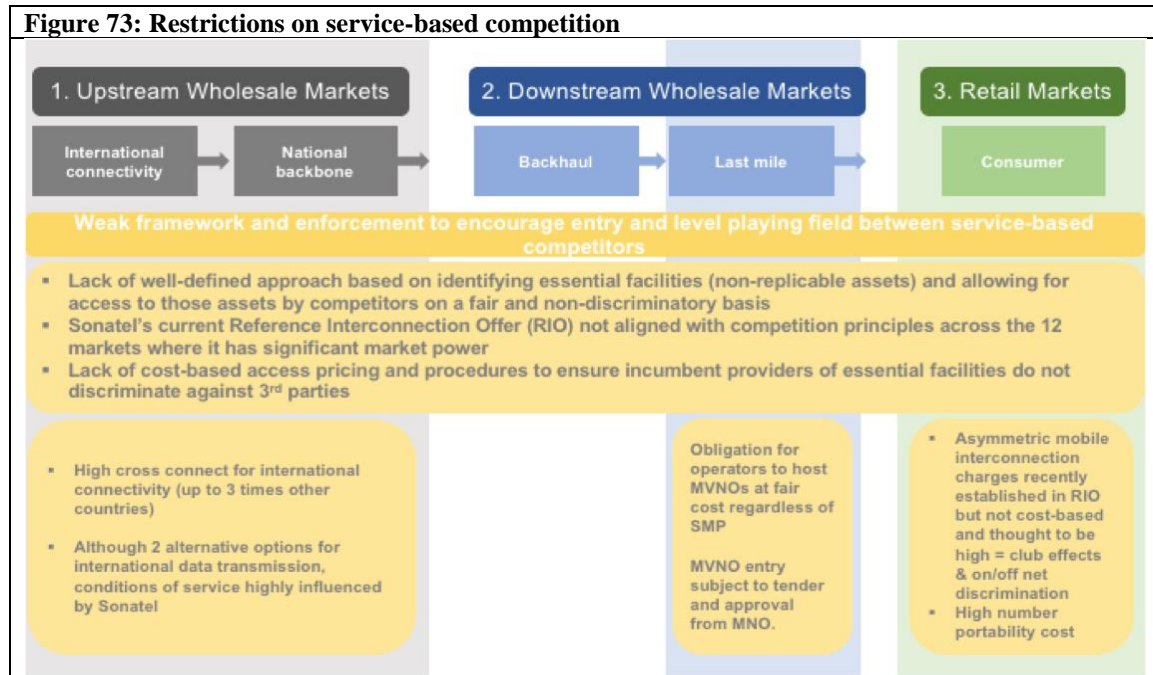
Figure 72: Players along the Senegalese telecommunications value chain



5.2.3 Key Bottlenecks in the Senegalese Telecom Value Chain that Hinder Service- and Facilities-Based Competition

152. A variety of constraints seem to affect outcomes along the telecommunication value chain and Senegal's ICT connectivity at wholesale (international connectivity, national backbone, backhaul, last mile) and retail levels.

Lack of framework to encourage entry and a level playing field between services-based competitors



Source: Authors' elaboration.

Lack of well-defined approach based on identifying essential facilities and allowing for access to those assets by competitors on a fair and non-discriminatory basis

153. Senegal's telecommunications regulatory framework is still characterized both by an ineffective ex ante regulation which is typically needed to facilitate entry as well as by burdensome regulation of operators without real market power. Although Sonatel remains dominant in mobile and fixed markets, in its latest assessment of telecommunications markets in Senegal, ARTP considered not only that Sonatel has market power in all wholesale markets analyzed (see Table 13), but also that Sentel GSM (Tigo) and Espresso Senegal were dominant in the markets for capacity lease, access to special services and SMS and international capacity (Espresso; see Table 13). As a result of ARTP's findings, Tigo and Espresso are subject to interconnection and access asymmetric regulation in accordance with Article 14 of the Telecommunications Code and to asymmetric pricing obligations pursuant to Article 15 of the Telecommunications Code. However, ARTP's decision does not clearly specify which of the asymmetric regulatory obligations will be actually imposed to each operator. This decision stems from the Telecommunications Code's presumption that operators with a 25 percent market share are presumed to be dominant and therefore subject to ex ante asymmetric regulation (Article 3 of the Telecommunications Code). This decision is not in line with sound economic analysis or even with the Telecommunications Code's definition of "operator with significant market power," which requires a position of economic strength that allows an undertaking to behave to an appreciable extent independently of its competitors, its customers and ultimately of consumers. This definition is largely identical to the one

adopted in the EU where it is generally understood that operators with a market share lower than 40% lack market power.²¹⁵ Imposing asymmetric regulation on Sonatel's smaller competitors may hinder competition by burdening operators without effective market power with cumbersome regulatory remedies.

Table 13: Outcome of ARTP's Market Analysis (2016)

Sector	Relevant markets	Operators with market power
Fixed telephony	Call termination over fixed-lines network	Sonatel Expresso Sénégal
	Traffic collection over fixed-network	Sonatel
	National traffic	Sonatel
	International traffic	Sonatel Expresso Sénégal
	Access to telephony service	Sonatel
Mobile telephony	Call termination over mobile network	Sonatel Expresso Sénégal Sentel GSM (Tigo)
	SMS call termination over mobile network	Sonatel Expresso Sénégal Sentel GSM (Tigo)
Data transmission	Broadband access	Sonatel
	Access to the local loop	Sonatel
Capacity services	Lease of capacity	Sonatel Expresso Sénégal Sentel GSM (Tigo)
	Access to international capacity	Sonatel Expresso Sénégal (Tigo)
Complementary and advanced services and functionalities	Access to voice special services and SMS	Sonatel Expresso Sénégal Sentel GSM (Tigo)

Source: ARTP, Decision 2016-002.

154. The existence of an operator with SMP in a relevant market may then justify the imposition of specific remedies by ARTP (asymmetric regulation). Pursuant to the Telecommunications Code, the ARTP annually publishes a catalog with the operators with SMP at the wholesale level.²¹⁶ However, these decisions are not published every year; for instance, ARTP's latest catalogue is based-upon a non-transparent and outdated relevant market analysis carried-out in 2014, while the ARTP issued a decision on markets with SMP operators in 2016. Despite having considered that Sonatel had SMP across 12 wholesale markets, ARTP has not yet imposed obligations to grant fair, transparent and non-discriminatory access to the non-replicable infrastructure and assets owned by Sonatel (including civil engineering, such as ducts and poles). In a sector such as ICT, relying on outdated data can lead to incorrect classifications of operators with SMP and, consequently, to over or under regulation of operators (some new relevant markets might have emerged

²¹⁵ European Commission, Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings, para. 14.

²¹⁶ Telecommunications Code, Article 13.

whilst some old markets may no longer be relevant).²¹⁷ Pursuant to the Telecommunications Code, operators with SMP are subject to the following obligations: (i) publishing of a detailed interconnection offer; (ii) supplying access and interconnection information under non-discriminatory conditions; (iii) granting third-party access under reasonable conditions; (iv) imposing tariffs in accordance with the relevant costs; and (v) providing accounting evidence of meeting the aforementioned obligations.²¹⁸ The Telecommunications Code also establishes that operators with SMP at the retail level can be required to fulfill the following ex ante regulatory obligations, i.e. SMP remedies, to ensure effective competition in the markets: (i) supply under non-discriminatory conditions and refrain from abusive bundling of services, and (ii) charge tariffs that are in accordance with the relevant costs.²¹⁹

Sonatel's current Reference Interconnection Offer lacks alignment with competition principles across markets where it has significant market power

155. Sonatel's current Reference Interconnection Offer is not fully aligned with competition principles across the 12 markets where it has SMP, leading to an ineffective regulation of wholesale markets. Despite ARTP's identification of Sonatel as operator with SMP, the setting of a list of regulated access tariffs and the auditing of accounts by an independent third party appointed by the regulator have proved insufficient to instill competition in the Senegalese market. This lack of effectiveness partially stems from two factors: i) the Telecommunications Code is unclear as regards the cost model that should guide the setting of tariffs (with reference only to the general term 'relevant costs'), and ii) the detailed conditions on the obligation to grant third party access are supposed to be set forth in a specific Decree which is yet to be approved.²²⁰ In fact, the Code limits itself to establishing that operators with SMP must annually publish a technical and tariff interconnection offer with a price catalogue,²²¹ but then it is unclear what costs the interconnection charges should be oriented towards,²²² and the Code leaves the conditions regarding the application of the Chapter on interconnection to be developed by a subsequent Decree.²²³ As a consequence, the regulatory framework does not provide for a cost-based access pricing and procedures to ensure that Sonatel, as an incumbent provider of essential facilities, does not discriminate against third parties.

Lack of cost-based access pricing and procedures to ensure incumbent providers of essential facilities do not discriminate against third parties

²¹⁷ According to the 2017 Draft Telecoms Code (and Implementation Decree N12), the catalogue with SMP operators must be revised whenever it is necessary and, at least, every two years.

²¹⁸ Telecommunications Code, Article 14.

²¹⁹ Telecommunications Code, Article 15.

²²⁰ Telecommunications Code, Article 16. A firm which is designated as having SMP must regularly produce a document with the terms and conditions at which it will provide access to specified services. This document must be approved by the regulator: *see* <https://stats.oecd.org/glossary/detail.asp?ID=6751>.

²²¹ Telecommunications Code, Article 49.

²²² Telecommunications Code, Article 50: 'relevant costs'.

²²³ Telecommunications Code, Article 52.

156. Indeed, Sonatel has been the only operator of the fixed network for internet access. This may be indicative of the fact that the telecommunications regulatory framework licensing regime has prevented market entry and that SMP regulation has not been effective. In this regard, the Telecommunications Code or the subsequent bylaws should clearly establish that all national and international termination rates converge on a cost-based measure, such as the long run average incremental cost (LRAIC) of an efficient operator. In addition, ARTP would need to consider issuing guidelines to be used for the granting of authorizations to wholesale telecom operators to increase legal certainty for the right holders and other operators that might need to secure access to the network.

157. The shortcomings of SMP regulation have not been bridged through an effective *ex post* competition law enforcement by the National Competition Commission (NCC) or by ARTP at the national level, nor by WAEMU at the regional level. Senegal has opted for a system where sector-specific regulators are endowed with competition law enforcement powers. In addition to the NCC, the following sector-specific regulators also hold a competition law mandate in their specific sectors: the Telecommunications and Postal Regulatory Authority (ARTP), the Public Procurement Regulatory Authority (ARMP), and the Power Sector Regulatory Commission (CRSE) (for details on the governance of ARTP see Box 19 above). Even though the Telecommunications Code bestows ARTP with the powers to enforce the competition provisions of the Telecommunications Code and to issue decisions, there has been no enforcement so far.

Although there are alternative options for international data transmission, conditions of service are highly influenced by Sonatel

157. Despite Sonatel not holding a legal monopoly over international data transmission,²²⁴ the fact is that it controls access to the main international gateway, which is not effectively regulated. This lack of regulatory intervention by ARTP over the international gateway segment of the market has the effect of favoring the incumbent, which may further strengthen its dominant position in the market.

158. The lack of regulation for accessing the international gateway is likely to contribute to the high cost of international calls and data transmission in Senegal. This stems from Senegal's high cross-connect cost for international connectivity, which is up to three times higher than other countries in the region, as well as from an ineffective regulatory framework that has not been able to counteract the power of Sonatel over international gateway access. In fact, although there are, in theory, two alternative options for international data transmission, the conditions of service remain highly influenced by Sonatel.

159. International experience demonstrates that where access to the international gateway has been opened to competition, prices fell and demand went up.²²⁵ For

²²⁴ Only Sonatel and Expresso have direct access to international connectivity.

²²⁵ See World Bank Group/African Competition Forum ('ACF'), Breaking Down Barriers - Unlocking Africa's Potential through Vigorous Competition Policy, 27 July 2016, p. 111.

instance, when Chile fully opened international services to competition, the weighted average call charges to major destinations declined by 50 percent between 1991 and 1998, and traffic increased fourfold.²²⁶ More recently, the Singaporean experience clearly illustrates the gains stemming from the liberalization of international gateways. Originally, voice and data transmissions over via submarine cables were considered to be natural monopolies in the hands of the incumbent. However, in 2004, Singapore's regulator, the Infocomm Development Authority (IDA), established a regulatory framework which aimed at boosting competition in international gateway so as to substantially increase international bandwidth capacity and significantly reduce the cost of international communications. In practice, IDA mandated the incumbent to give access to lease capacity to the submarine cable landing stations which it controlled at cost-based rates. In 2004, IDA strengthened the regulatory framework by ensuring that operators could also access capacity that is owned or leased by third parties, in order to offer them backhaul and transit services. This opening of international gateways to competition led to more players entering the market and to a drop greater than 90 percent in international dialing charges since 2000, whilst charges for international private leased circuits dropped by around 95 percent. Moreover, the total submarine capacity greatly increased and Singapore became a communications hub in the region.²²⁷

160. In addition to having a positive impact on voice services, competition in the international gateway market can also lower prices for access to the Internet. Overall, the opening of the international gateway market to competition increases consumer welfare by fostering lower prices, higher volumes of international traffic, and higher-quality telecommunications services as competition between multiple providers leads to improved and more reliable international connectivity.

Insufficient rules to encourage MVNO entry

161. Rules on setting adequate charges for MVNOs and establishing obligations of non-discrimination and transparency, together with potential obligations for operators with SMP could be considered. Empirical evidence shows that customers often benefit from the entrance of MVNOs in the telecommunications market, through lower prices for voice calls and text messages (Kiiski 2006). Regulators can foster the entry of MVNOs in the market by imposing obligations to host MVNOs when they assign radio spectrum to MNOs,²²⁸ or as part of the remedies which can be imposed on operators with SMP through asymmetric regulation. MVNOs run on the networks of existing operators, but provide services independently, including issuing subscriber identification module (SIM) cards, billing, and customer care. It is possible to identify several categories of

²²⁶ World Bank Working Paper No. 42, "Competition in International Voice Communications", 2004, p. 7.

²²⁷ <http://www.itu.int/itu-news/manager/display.asp?lang=en&year=2009&issue=01&ipage=26>

²²⁸ Competitive spectrum assignment is essential to limit the incumbent market power and to foster market entry in typically oligopolistic markets. Hence, the price of the spectrum rights should be primarily determined by a market mechanism through an auction proceeding, instead of being administratively set by the Government. In addition, the procedure to assign radio spectrum should be open, non-discriminatory and transparent to achieve the goal of instilling competition in mobile markets. By subjecting the outcome of the tender to approval by incumbents, the Government frustrates the goals of a competitive spectrum assignment and facilitates cartel behavior between incumbents to the detriment of Senegalese consumers.

MVNOs, including: pure resellers of services offered by MNOs; MVNOs that issue their own SIM cards and offer differentiated packages to subscribers; MVNOs that control their subscriber base and can switch it from one MNO to another at any point in time; and MVNOs that obtain exclusive bandwidth capacity from an MNO, instead of traffic.²²⁹

162. Entry of MVNOs should be subject to commercial agreements and proportionate authorization regimes. Contrary to best practice, Senegal currently awards MVNO rights pursuant to a burdensome licensing regime based on a tender procedure, which hinders market entry. The recent award of three licenses through tender was subject to approval by incumbents (MVNOs licenses awarded to GfM, which uses the brand You Mobile (Sonatel network), Sirius Télécoms (Tigo network) and Origines SA (Expresso network)).²³⁰

Need for better results for consumers following the adoption of number portability framework

163. ARTP has implemented a procedure for number portability in accordance with international best practices. The process is free for consumers, with a 2-hours service interruption, and the transfer of the line within 24 hours between firms.

164. However, the results of the number portability procedure have been modest so far, primarily because of the high cost (10 USD) associated with number portability. Operators appear unwilling to incur such a high cost to win new clients. If the number portability process were effective, one should expect an initial strong demand following the launch of number portability by the regulator. Typically, demand is much higher than the demand registered in Senegal during the first year after the introduction of number portability. The cost associated with transferring the number appears to be a main factor hindering portability; with such a high cost, operators do not have the incentive to facilitate this transfer. In any event, a detailed analysis of the functioning of the portability system and of the retail market is key. For example, if a subscriber asks his operator to change to a different supplier, he may face a counter-offer that meets the one offered by its competitor, leading him not to change supplier. Such win-back or commercial-rebound strategies may be deemed anticompetitive when adopted by a dominant operator.²³¹ ARTP is expected to lower the termination rates to mitigate the club effects which currently favor Sonatel's network and increase the risks of anticompetitive behavior. Going forward, it will be important that these policy changes be disseminated to make them truly effective.

²²⁹ Laurent Benzoni and Pascal Dutru, "The Radio Spectrum Ladder of Investment to promote Innovation and Competition in Mobile Markets", *Digiworld Economic Journal*, No. 102, 2nd Q. 2016.

²³⁰ Financial Afrik. 2017. *3 Opérateurs Retenus pour les Licenses MVNO*. Available at: <https://www.financialafrik.com/2017/06/12/senegal-3-operateurs-retenus-pour-les-licences-mvno/>

²³¹ See for example a recent decision by the French competition authorities regarding the retail market for natural gas. (http://www.autoritedelaconcurrence.fr/user/standard.php?id_rub=662&id_article=2960&lang=fr)

Asymmetric mobile services interconnection rates may not be set appropriately and may encourage club effects

165. Typically, in countries that have adopted the calling party pay system, the regulation of termination tariffs has often led to anticompetitive practices downstream at the retail level. This is so because the dominant operator can benefit from “club effects,” which allow it to retain part of the traffic that would otherwise flow towards their competitors and to induce loyalty among its subscribers, as well as to unduly capture subscribers from its competitors. When a dominant player’s on-net calls are cheaper than off-net calls, subscribers have the incentive to call the subscribers of the same operator as well as to join the dominant operator’s network so as to benefit from the possibility of calling much broader subscribers at a cheaper price (a “club effect”). Hence, the on-net/off-net differentiation can have a foreclosure effect of the smaller operators.

166. Asymmetric mobile interconnection charges recently established based on Sonatel’s interconnection offer (which are not cost-based) may generate “club effects” and on/off net discrimination. This is due to an asymmetry between on- and off-net traffic, which is beneficial to Sonatel. This asymmetry means that, for an identical termination charge, Sonatel receives a higher return from its competitors than vice versa.

167. Only an operator with market power can profitably implement such tariff differentiation strategies, which can take multiple forms, including: unlimited calls, packages limited to calls for other Sonatel’s subscribers, tariff differentiation between on- and off-net which are not proportional to the costs of wholesale tariffs, etc. Sonatel has engaged in virtually all of these strategies in Senegal. These practices are not specific only to the Senegalese markets. Orange has already been convicted for engaging in similar anticompetitive practices in France²³² and also lodged complaints against dominant players to the French Competition Council in two instances.²³³

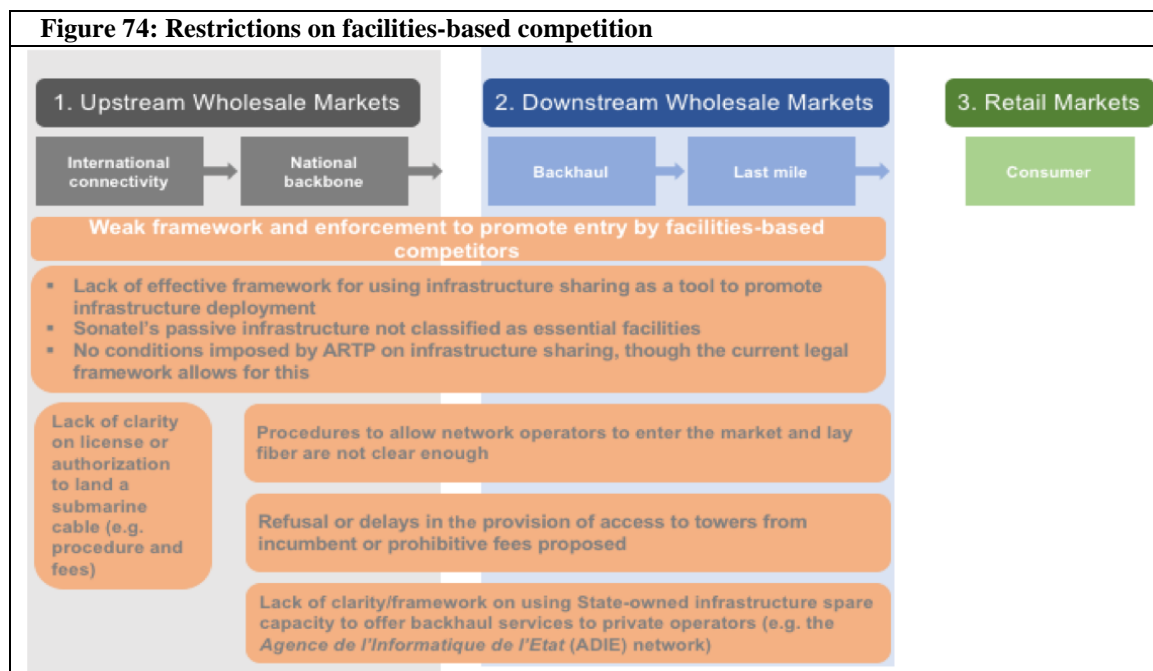
168. ARTP took steps to tackle the on-net/off-net differentiation strategies through asymmetric regulation of termination charges at the wholesale level. ARTP is expected to lower the termination rates to mitigate the club effects which currently favor Sonatel’s network and increase the risks of anticompetitive behavior. Going forward, it will be important that these policy changes be disseminated to make them truly effective. However, if regulators either fail to set mobile termination rates that reflect the actual costs of mobile termination or do not consider the incentives that an MNO such as Sonatel might have to persist in a strategy of above cost off-net price, then a mere wholesale regulatory

²³² Décision du 13 décembre 2012 relative à des pratiques mises en œuvre dans le secteur de la téléphonie mobile à destination de la clientèle résidentielle en France métropolitaine ; <http://www.autoritedelaconcurrence.fr/user/avisdec.php?numero=12D24> ; Décision du 9 décembre 2009 relative à des pratiques mises en œuvre par Orange Caraïbe et France Télécom sur différents marchés de services de communications électroniques dans les départements de la Martinique, de la Guadeloupe et de la Guyane ; <http://www.autoritedelaconcurrence.fr/user/avisdec.php?numero=09-D-36>

²³³ Décision du 25 septembre 2014 relative à des pratiques mises en œuvre dans le secteur des réseaux et des services de communications mobiles ; <http://www.autoritedelaconcurrence.fr/user/avisdec.php?numero=14-D-10> ; Conseil de la concurrence. - Décision n° 2009-P/K-10 du 26 mai 2009. - Affaire CONC-P/K-05/0065 ; http://www.etaamb.be/fr/rapport_n2009011265.html

decision might fail to address on-net/off-net price differentials. In such case, the wholesale intervention should be coupled with an intervention at the retail level in order to be ineffective. In Kenya, for example, the Communications Authority adopted in 2010 a rule requiring dominant providers to implement a price cap for off-net call prices to the level of their on-net prices. By adopting a combined wholesale and retail regulatory strategy, the CA managed to effectively tackle the “club effects” in a market with persistent high percentages of on-net traffic, significant asymmetries between MNOs, and a dominant operator committed to such differentiation strategies.²³⁴

Lack of framework to promote entry by facilities-based competitors



Source: Authors' elaboration.

Lack of effectiveness of the infrastructure sharing framework in promoting access and deployment of infrastructure

169. The Senegalese telecom regulatory framework does not provide for a well-defined approach to identify essential facilities (non-replicable assets) and to allow access to those facilities by competitors on a fair and non-discriminatory basis. This access to essential facilities is paramount in the telecom sector because the dominant operator controls access to certain infrastructures and assets that are essential for competitors to provide services in the market. These essential facilities are also known as “non-replicable assets” because the costs of duplicating cannot be justified by any reasonable business plan or because there is no public will to see multiple physical networks serving the same purpose. Hence, they are often subject to ex ante regulation that

²³⁴ Telecommunications Management Group. 2011. *On-net/Off-net Price Differentiation: Review of International Precedent*, p. 9. Available at <https://www.comcom.govt.nz/dmsdocument/7958>

ensures all operators can access them on a level playing field.²³⁵ Furthermore, as explained above, since the incumbent has the incentive and the ability to discriminate in favor of its vertically integrated subsidiaries through control of these non-replicable assets, further regulatory intervention may be necessary to require a transparent separation between the parts of the incumbent controlling the bottleneck assets and the other divisions.

170. The Ministry of Post and Telecommunication (MPT) enacted a Decree in 2016 establishing that a network operator should respect the principles of cost-orientation, transparency and non-discrimination when it faces a request for network sharing from another operator.²³⁶ However, this Decree which enables the company seeking access to file a complaint before ARTP in case of unjustified refusal to share access to the infrastructure has been ineffective in countering Sonatel's market power and in ensuring a coherent and consistent access to its network. Furthermore, the infrastructure sharing framework seems to be insufficient in incentivizing Sonatel's competitors to deploy their own infrastructure to become facilities-based competitors.

Refusal or delays in the provision of access to towers from incumbent

171. Even though Sonatel has been declared a dominant operator, ARTP has not imposed conditions governing access to its towers. Reportedly, in many cases Sonatel seems to have delayed the provision of access to towers due to technical issues or proposed a prohibitive fee. The absence of regulation hampers Sonatel's competitors' ability to develop an effective service competition and to eventually 'climb the ladder of investment' towards other forms of infrastructure-based competition. Sonatel's civil work and passive infrastructure have not been classified as essential facilities despite their non-replicable character. Even though the Telecommunications Code has specific rules governing network access and interconnection, it lacks a clear framework for regulating non-replicable assets – i.e., essential facilities, which are held by operators with SMP. Consequently, Sonatel's competitors cannot obtain access to Sonatel's civil work and passive infrastructure, and this lack of access hinders the development of service-based competition.

Absence of competition guidelines governing the sharing of infrastructure

172. Infrastructure sharing agreements are important instruments to promote a more efficient use of assets and to enable competition in the market - however, this must be balanced with their potential to restrict competition among competitors in a way that outweighs the procompetitive efficiencies. The MPT has adopted a Decree in

²³⁵ Commission staff working document - Impact Assessment - Accompanying document to the Proposal for a Directive of the European Parliament and the Council amending European Parliament and Council Directives 2002/19/EC, 2002/20/EC and 2002/21/EC - Accompanying document to the Proposal for a Directive of the European Parliament and the Council amending European Parliament and Council Directives 2002/22/EC and 2002/58/EC - Accompanying document to the Proposal for a Regulation of the European Parliament and the Council establishing the European Electronic Communications Markets Authority {COM(2007) 697 final}.

²³⁶ Decree 2016-1988.

2016 regulating infrastructure sharing;²³⁷ however, it does not address the potential competition issues that may stem from such agreements. Hence, ARTP would need to consider adopting a framework for the competition assessment of active and passive infrastructure sharing, including radio spectrum, which takes into account the following factors: (i) the degree of cooperation/autonomy between the parties to the agreement, which is also a function of the passive or active nature of the infrastructure; (ii) the parties' market power; (iii) its duration; and (iv) the characteristics of the area covered (broadness and density) (for an example of guidelines on the application of competition law to mobile network/infrastructure sharing agreements in Romania, see Box 20).

Box 20: Guidelines on the application of Competition law to mobile network / infrastructure sharing agreements in Romania

The Romanian Competition Council (RCC) and the Romanian National Regulatory Authority, ANCOM, adopted Guidelines on the application of the Competition law to mobile network / infrastructure sharing agreements in Romania.

Network or infrastructure sharing agreements can vary greatly with regard to the level of integration between network operators, with competition issues arising when network sharing restricts competition or creates a dominant position in the market.

The competition law implications of infrastructure sharing agreements are a function of the extent of the cooperation between the parties. Typically, passive infrastructure sharing agreements tend to raise fewer concerns: as they do not involve significant information and forecast exchange between competitors, they do not require the sharing of extensive network elements and do not result in a situation of high commonality of costs. As the degree of cooperation increases (such as active infrastructure sharing, spectrum sharing or network roaming), the risks of collusion resulting from such more extensive cooperation increase.

The key factors against which such various forms of cooperation are assessed are the following:

- (i) geographic scope of the agreement – the broader the geographic scope, the greater its possible anticompetitive impacts;
- (ii) market power – the market power of the operators participating to the agreement is another element of consideration as the greater the combined market shares of the operators involved, the more significant the impact of the infrastructure sharing agreement will be for the overall market;
- (iii) duration – while some forms of infrastructure sharing agreements are structural and permanent by nature (such as active or passive infrastructure sharing), other forms of cooperation such as national roaming can easily be scaled back in time in order to avoid detrimental impacts on investments on mobile network infrastructure;
- (iv) commercial independence – the main benefits of infrastructure sharing are that operators continue to compete at service levels (as opposed to what typically happens following a merger between two mobile operators). It is therefore key that each party of a network sharing agreement retains as much commercial freedom as possible.

Source: WBG Markets and Competition team elaboration.

Lack of clarity on license/authorization to land a submarine cable

²³⁷ Decree 2016-1988.

173. The Telecommunications Code does not provide for any procedure or fees to be charged by the administration for the licensing or authorization of a submarine cable. Hence, although Sonatel does not have a legal monopoly over the operation of a submarine cable landing station, the absence of a clear regulatory framework in this regard increases uncertainty, thus limiting entry by other actors, and potentially reinforcing the incumbent's position.

Authorization procedures to allow operators to lay fiber are not clear

174. Although the law does not provide for a legal monopoly for laying fiber, the existing authorization procedure lacks clarity and therefore has had the effect of favoring the incumbent and of reinforcing its market dominance. ARTP has designed a plan to grant licenses to new players in Dakar. According to the plan, the Dakar market is divided in 3 or 4 areas, combined with coverage conditions in rural areas. This allocation of territories risks creating competition distortions, since it will unduly create geographic monopolies by attributing exclusive rights to each of the operators over a certain territory. Moreover, even though Law 2017-13 from 20 January 2017 replaced the licensing regime by an authorization regime, which allows ISPs to deploy and operate their own infrastructure, the way in which this regime is designed is also likely to limit entry, which may hinder the expansion of coverage. Nonetheless, further developments are needed to streamline the process for granting an authorization for ISPs.²³⁸

Lack of framework governing State support to broadband deployment

175. In addition to limiting market entry in both urban and rural areas, this licensing procedure risks creating another competition distortion in terms of cross-subsidization between areas where it would be viable for the private sector to invest in fiber and rural areas where State support may be necessary. In this regard, public service obligations should be clearly identified to prevent unnecessary cross-subsidization, notably: (i) the parameters on the basis of which the compensation is calculated should be established in advance in an objective and transparent manner; (ii) the compensation should not exceed what is necessary to cover all or part of the costs incurred in the discharge of public service obligations, taking into account the relevant receipts and a reasonable profit for discharging those obligations; and (iii) the level of compensation needed should be determined on the basis of an analysis of the costs of a typical undertaking, well run and adequately provided.²³⁹

176. ARTP may further develop a framework to establish when the Government decides to engage in commercial activities without crowding-out private sector initiative. In the case of the EU, the European Commission applies the "EU Guidelines for the application of State aid rules in relation to the rapid deployment of broadband networks" for the assessment of state aid to broadband measures. These Guidelines identify

²³⁸ New Article 32 bis of the Telecommunications Code (introduced by Law 2017-13).

²³⁹ These are the so-called Altmark criteria in the EU: Case C-280/00 *Altmark Trans GmbH* [2003] ECR I-7747, paras. 89-93.

three categories of geographic areas: (i) *White areas* are defined as having no existing broadband infrastructure or any planned private investment in the foreseeable future. Granting authorities should check if private investors have plans to roll out their own infrastructure in the near future. These areas therefore will most likely be identified as a market failure. Thus, their funding will, in all likelihood, be in line with the objective of common interest. (ii) *Grey areas* are areas in which one network operator is present and another network is unlikely to be developed in the near future. This can be due to private parties not being able to develop a broadband network infrastructure in an economically viable way without the help of the granting authority, for instance if the required up-front investment is too high for that specific region. A detailed assessment of broadband infrastructure, pricing and other entry barriers must be performed to assess a grey area as a potential area that is eligible for state measures. Examples are the absence of an open access architecture that can be shared with other operators. (iii) *Black areas* are those areas where State intervention is the least likely to be necessary because of the presence of two or more network operators under competitive conditions on the infrastructure level.²⁴⁰ All Commission decisions pertaining to the application of the Guidelines to the rapid deployment of broadband networks are published and available online. As of 2017, the Commission has thus far issued 152 decisions on State aid to broadband covering all Member States.²⁴¹ Although the majority of the decisions decided not to raise objections to the granting of State aid, there are also cases where the Commission declared the aid illegal. The first time the Commission decided to declare a subsidy for broadband network deployment illegal was in the *Appingedam* case. At stake was a public funding for the planned construction of a fiber access network in the Dutch town of Appingedam. However, because this project concerned an area already served by broadband networks, the Commission considered that the aid was not necessary to remedy either a market failure or unaffordable prices for broadband services. The Commission considered that the planned aid would distort competition and harm private investment to an extent which would outweigh the positive effects of the project (see also Box below).²⁴²

Box 21: Public support for broadband networks infrastructure deployment in Romania

As with other EU Member States, in Romania, public financing is required to supplement private investment in order to rapidly deploy broadband networks. In this context, the RO-NET aid framework scheme was designed to provide financial support for the development of 7 backhaul networks in predetermined regions. The infrastructure would remain in public ownership, but the exploitation of the network would be carried out by the operator(s) which has/have installed them for a period of 18 years, with payment of a concession fee.

The measure consists of a concession contract for the development of broadband infrastructure in so-called “white” areas, in which there was no existing or planned (i.e., over a three-year horizon) access or backhaul networks. A three-step approach was used to determine which localities would be eligible by reference to networks offering transmission speeds greater than 4Mbps for business or 1Mbps for residential users:

- (i) The Telecom regulator, ANCOM carried out a mapping study which resulted in a preliminary list of 6,155 localities with no broadband connectivity.

²⁴⁰ EU Guidelines for the application of State aid rules in relation to the rapid deployment of broadband networks (2013/C 25/01).

²⁴¹ See http://ec.europa.eu/competition/sectors/telecommunications/broadband_decisions.pdf

²⁴² Case C 35/2005, Broadband development Appingedam, Commission decision of 19.07.2006.

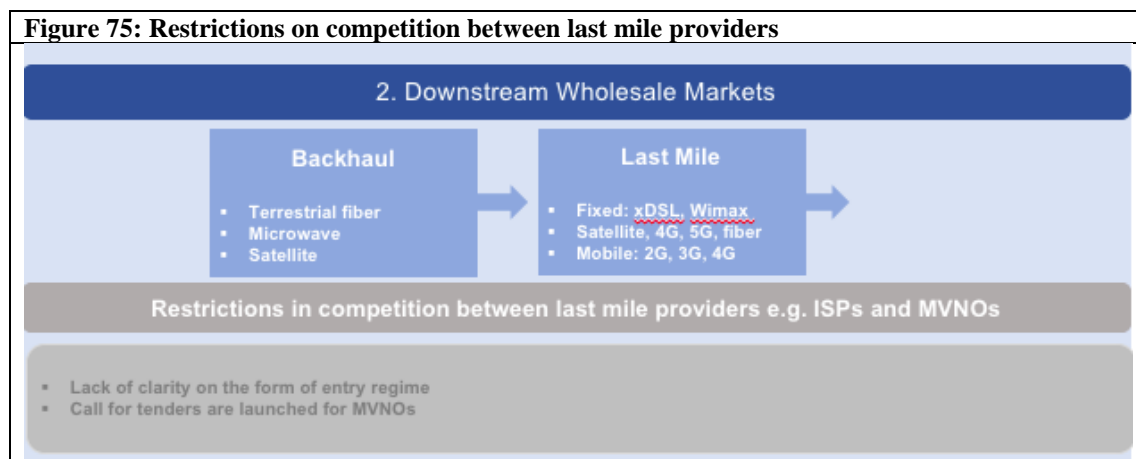
- (ii) The number of localities proved to be too high in light of the European Commission's administrative practice because, amongst other reasons, the Commission limits White Areas to those where there is not only currently no broadband network, but also in which no deployment of such network was foreseen in the next three years. This resulted in a reduction of the number of eligible areas to 2,287 localities.
- (iii) ANCOM finally identified 743 localities to be eligible to the Ro-net project. It was decided that the project would be limited to the establishment of a new backhaul network with a view to stimulating a competitive environment which would allow the establishment of local access networks on commercial basis.

Source: WBG Markets and Competition team elaboration.

A need for clarity on access to alternative state networks to offer backhaul capacity to the private sector

177. Moreover, the digital infrastructure of utility companies is not clearly regulated. In this regard, the Agence de l'Informatique de l'État (ADIE), owner and manager of public fiber optic infrastructure, has spare capacity in the network that it currently manages, which could be more efficiently used by private operators. The lack of clarity regarding the possibility of ADIE offering backhaul services to private operators constrains market entry and led to unused digital spare capacity. . Ongoing efforts have been focusing throughout 2016 and 2017 on the preparation of a technical/financial audit of ADIE's assets, which is key for the Government to adopt a new management model for ADIE in accordance with economic and financial efficiency criteria as well as national security objectives and public-private partnership principles. In this respect, the Government and ADIE have adopted an Arrêté establishing a Committee to handle this topic.

Restrictions on competition between last mile providers e.g. Internet Service Providers (ISPs) and Mobile Virtual Network Operators (MVNOs)



178. The Telecommunications Code should incorporate a “ladder of investment” approach for new entrants in the market along the value chain, notably ISPs and MVNOs. Establishing a pricing system in accordance with the “ladder of investment” should provide incentives for investments in infrastructure without establishing an artificial barrier to entry for new market players. The “ladder of investment” approach is underpinned by the final objective of achieving facilities-based competition which should not be jeopardized by service-based competition. Thus, it provides entrants with successive levels of access, the so-called rungs of the ladder, whilst inducing them to climb the ladder through the setting of an access charge that is increased over time or by withdrawing access obligations after a certain date (sunset clauses).²⁴³

179. Pursuant to the Telecommunications Code, all telecommunications networks and services open to the public, based on scarce resources or using the public domain, were subject to a licensing regime. Contrary to the authorization regime, which does not limit the number of operators in the market, the licensing regime requires the launch of a tender procedure by ARTP and a decision involving the Government on the selection of the licensee. This means private operators had to go through a burdensome process, characterized by a high degree of administrative discretion in order to establish themselves.²⁴⁴ For example, the total number of ISPs was limited by license until January 2017, when Law 2017-13 established an authorization regime.

180. The way in which licenses were granted raised competition concerns. An example is the process for the award of three radio local loop concessions launched in 2016, which resulted in the awarding of three concessions to Waaw Sa, Africa Access and Arc Informatique in February 2017. First, ARTP’s call for tender in 2016 unduly required that bidders must be controlled by Senegalese capital.²⁴⁵ This may have introduced discriminatory treatment vis-à-vis other WAEMU firms, unleveling the playing field and potentially facilitating cartel-like behavior by restricting the number of potential bidders. Second, under the terms of the licenses, the three concessionaires are not in geographical competition between themselves given the different coverage obligations. Hence, each of the licensees will benefit from its own geographical monopoly since further market entry is prohibited. The short duration of the concessions (10 years), limits the possibilities for recouping the concessionaires’ investment in the relevant facilities and may generate further negative effects (e.g. insufficient incentive for long-term investment).

181. These concerns have been alleviated by an authorization regime for ISPs, which requires further improvements. Although the licensing regime has been amended and some absolute restrictions on entry have been lifted, the procedure is not as open and streamlined as in various other jurisdictions. The recent contract specifications (*Cahier des*

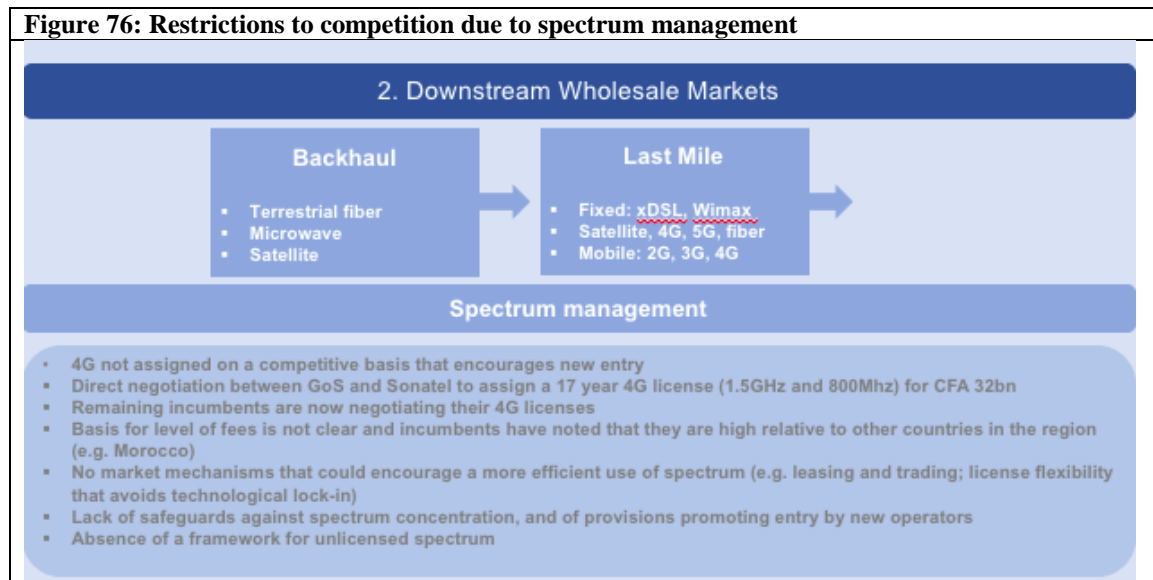
²⁴³ See Martin Cave, “Encouraging infrastructure competition via the ladder of investment”, *Telecommunications Policy*, Volume 30, Issues 3–4, April–May 2006, Pages 223-237; Bourreau, Marc, Pinar Doan, and Matthieu Manant. 2010, “A Critical Review of the “Ladder Investment” Approach”, *Telecommunications Policy* 34(11):683-696.

²⁴⁴ Telecommunications Code, Article 23.

²⁴⁵ SocialNetLink. 2017. *Plus de 950 millions pour l’acquisition des trois licences FAI au Sénégal*. Available at <https://www.socialnetlink.org/2017/02/plus-de-950-millions-pour-lacquisition-des-trois-licences-fai-au-senegal/>

Charges) for the exploitation of a network by an ISP highlight the lack of clarity of the regulatory framework. First, the contract specifications do not apply a uniform terminology to qualify the right of the ISP (i.e., license, authorization or concession); second, the right to supply internet access when combined with a spectrum license for a wireless local loop appears to be assigned without a prior competitive procedure.

Spectrum management



182. The limited availability of spectrum as a scarce resource determines entry in last mile mobile services. Entry cannot occur if Governments or regulatory authorities do not issue spectrum licenses. Furthermore, in markets with dominant operators, competition can be harmed if spectrum caps or other mechanisms are not considered for future assignments to preserve or encourage competition in the market. There is also a risk that market players could adopt foreclosure strategies by limiting the access of actual or potential competitors to available spectrum.

183. When the available spectrum is insufficient to meet the demand from new entrants, best international practice advises selecting new entrants through a competitive process. In both mobile and wireless markets, there are usually more market players interested than spectrum available for the service. By requiring potential licensees to compete for the license, scarce spectrum can be allocated to the operator that is best placed to maximize the benefit to customers and to succeed in a competitive market. Spectrum pricing principles should incentivize efficient use of spectrum – including separating management fees (based on administrative costs) from usage fees (based on either market-determined or administratively-calculated economic value). Spectrum pricing may also include the possibility of setting fees in favor of the new or smaller operators. Finally, including the possibility of spectrum trading and secondary markets in the regulatory framework can allow for efficient spectrum use over time.

184. Senegal has not yet deployed a full 4G network, despite there being adequate radio spectrum for that purpose. Moreover, the Telecommunications Code lacks rules that enable a more efficient allocation and assignment of radio spectrum. In particular, it lacks provisions enabling a secondary market for radio mobile wireless licenses (e.g. transfer and lease), as well as mechanisms limiting the incentives for spectrum hoarding (e.g. spectrum caps and usage fees). This ineffectiveness of the regulatory framework is liable to limit market entry and to further strengthen Sonatel's dominance.

185. Contrary to international best practice, Senegal has awarded spectrum through direct negotiation with the incumbents, which can lead to inefficient outcomes. In 2016, direct negotiations were held between GoS and Sonatel to assign a 17 year 4G license (1.5Ghz and 800Mhz) for CFA32bn. The remaining incumbents are now negotiating their 4G licenses. The Telecommunications Code is not clear regarding the administrative procedure to be followed in the case of assignment of spectrum rights. On the one hand, as it was previously explained, the Code determines that the license regime is applicable to telecommunications networks and services open to the public, based on scarce resources or use of the public domain. Although this rule seems to be designed for radio spectrum, the Code then states that the use of spectrum frequencies is subject to authorization (Article 71). Thus, the assignment of radio frequencies would not be subject to a tender procedure, even though the Code determines that radio spectrum authorizations are assigned pursuant to objective, transparent and non-discriminatory conditions.²⁴⁶ The lack of clarity of the Code persists since the Decree setting the conditions detailing the application of the Chapter on radio spectrum has not been approved yet.²⁴⁷

186. The Government resorted to bilateral negotiations after the incumbents appear to have colluded to boycott an open tender. It should be noted that the original tender for 4G licenses in January 2016 was limited to the existing firms, meaning there was a higher risk of collusive behavior among participants. After the launch of the tender, the three mobile operators jointly refused to submit bids. In a joint letter to the ARTP, the operators argued that the price of 30 million FCFA was excessive and proposed their own valuation in an amount of 14.5 million FCFA for the three licenses.²⁴⁸ Despite this joint boycott, ARTP did not start any investigation for the breach of the competition rules set forth in the Telecommunications Code.²⁴⁹ ARTP opened a procedure against Sonatel, with its Board voting in favor of the adoption of a sanction against Sonatel for breach of the public procurement rules, but did not ultimately take any action against the company.

²⁴⁶ Telecommunications Code, Article 72.

²⁴⁷ Telecommunications Code, Article 77.

²⁴⁸ Agence Ecofin. 2016. *Selon Sonatel, la licence 4G au Sénégal vaut 14,5 milliards Fcfa et non 30 milliards Fcfa*. Available at <http://www.agenceecofin.com/operateur/2001-35241-selon-sonatel-la-licence-4g-au-senegal-vaut-14-5-milliards-fcfa-et-non-30-milliards-fcfa>. The letter read: « A titre d'exemple, au Maroc, 2 des 3 opérateurs ont payé l'équivalent de 30 milliards FCFA alors que ce pays est 2,5 fois plus peuplé que le Sénégal et 3,5 fois plus riche. Sous ce rapport, le prix total des licences 4G au Sénégal serait évalué autour de 14,5 milliards FCFA »

²⁴⁹ Enquete Plus. 2016. *Orange, Tigo et Expresso exclus du processus*. Available at <http://www.enqueteplus.com/content/attribution-de-la-licence-4g-au-s%C3%A9n%C3%A9gal-orange-tigo-et-expresso-exclus-du-processus>

187. Furthermore, it appears that the Government has chosen to sideline ARTP by directly negotiating with Sonatel to renew its global license (fixed and mobile) in 2016, including an extension of its scope to deploy a 4G network. ARTP appears to not have participated in the process that led to the assignment of this license, which clearly reveals the process's opaque and ad hoc nature, which ends up positively discriminating in favor of Sonatel, the former incumbent. Sonatel's new license has a duration of 17 years and cost Sonatel a total of FCFA 100 million, 68 million for the renewal of the concession, FCFA 20 million for the assignment of frequencies in the 1800MHz band (2x10MHz) and FCFA 12 million for the 800 MHz frequency bands.²⁵⁰ Although spectrum auctions are widely regarded as international best practice for the assignment of radio frequencies, the fact is that, in Africa, only Nigeria has successfully carried-out a spectrum auction. The spectrum auction for 30MHz of 2.3GHz radio spectrum was launched in 2013 and it brought a new entrant to the market, even though the actual roll-out of the network only started in 2016.²⁵¹ Nigeria attempted to launch a new spectrum auction in 2016 for the assignment of 2.6GHz spectrum but no bidder met the reserve price. Other African countries that have abandoned plans to launch spectrum auctions include Mozambique, South Africa, Ghana, Kenya, Senegal and Egypt.²⁵²

188. Since, so far, only Sonatel was assigned radio spectrum to deploy a 4G network, it will benefit from an advantage vis-à-vis its competitors that can reinforce its market dominance. In practice, this will allow Sonatel to consolidate a 4G network before any of its competitors, creating benefits for Sonatel from bandwagon effects and unleveling the playing field.

189. Further, putting in place safeguards against concentration of spectrum in the hands of a few players would also allow for a more efficient use of spectrum. Since radio spectrum is an essential input for MNOs to compete in the mobile market, it is key that Senegal ensures that radio spectrum is not hoarded by the incumbents in a way that limits market entry or expansion by other operators. For example, in the US, the Federal Communications Commission (FCC) may limit participation in spectrum auctions (e.g. bidding credits, spectrum caps), as a way of promoting competition in mobile wireless communications markets.²⁵³ Moreover, the FCC employs a screening test to identify those markets that may require further investigation in light of the post-merger concentration of spectrum.²⁵⁴ However, Sonatel's license does not include any requirement to supply third parties with access to fixed and mobile infrastructures (fourth mobile operator, ISPs, roaming in rural areas).

²⁵⁰ Décret n° 2016-1081 du 03 août 2016, cf. article 3. Available at <http://www.jo.gouv.sn/spip.php?article10896>

²⁵¹ <https://www.thisdaylive.com/index.php/2016/04/21/bitflux-begins-commercial-rollout-of-2-3ghz-services/>

²⁵² <https://manypossibilities.net/2017/04/the-failure-of-spectrum-auctions-in-africa/>

²⁵³ Article 309(j)(3)(B) of the Communications Act of 1934, Pub. L. No. 73-416, 48 Stat. 1064 (codified with amendments in sections of 47 U.S.C.).

²⁵⁴ FCC, Policies Regarding Mobile Spectrum Holdings, WT Docket No. 12-269, Report and Order, FCC 14-63, p. 105.

190. In tandem, Senegal could also benefit from the introduction of market-based mechanisms that could encourage a more efficient use of spectrum, namely by opening the possibility for spectrum trading and leasing, subject to ARTP's monitoring, and by increasing the flexibility of ARTP's licenses by not locking them to a specific technology, unless necessary for interference reasons. Furthermore, in light of recent technological developments, such as the Internet of Things, which rely on unlicensed spectrum, it is increasingly important to assess the introduction of a framework governing unlicensed spectrum.

191. The method for calculating radio spectrum fees should aim to ensure an optimal use of this scarce resource and to compensate the State for the administrative costs incurred with management tasks. However, in Senegal, spectrum charges seem to be outdated and overly high, in some cases representing 10 percent of the operators' revenues. Furthermore, the fees charged in Senegal are typically much higher than those charged in other countries from the same region (e.g. Morocco). By treating radio spectrum fees as a mechanism of taxation rather than an instrument to ensure efficiency in spectrum use, the Government increases the operators' incentives to pass-on associated costs to the consumers through higher tariffs.

192. The Government of Senegal is currently drafting a new Telecommunications Code Law and Implementation Decrees to address some of the regulatory shortcomings mentioned above. A preliminary analysis indicates that, if enacted, this new telecommunications package will introduce necessary changes, but also leave room for further improvements (see Box below).

Box 22: Preliminary Analysis of the Draft Amendments to the Telecommunications Code and Draft Implementation Decrees

A new Draft Telecommunications Code Law and 11 draft Implementation Decrees are currently under discussion in Senegal. Some of the main changes of the proposed Telecommunications Package include:

- Creation of an advisory Board within the Presidency of the Republic (Digital National Council)
- ARTP is renamed ARCEP and is given regulatory powers over the postal sector in addition to electronic communications
- Strengthening of the telecoms regulator's powers to impose remedies on operators with SMP
- Strengthening of the telecom regulator's powers to enforce the Competition Act's rules in addition to the specific competition rules of the Telecommunications Code by allowing it to impose fines for anticompetitive conduct up to CFA 20 million
- Establishment of an infrastructure sharing regime
- Listing of universal service obligations' principles
- Enhanced consumer protection rules
- Clarification of spectrum management rules
- Establishment that ISPs and MVNOs are subject to a simple authorization procedure
- Enhancing the independence of the regulator by giving its Board the power to appoint the position of Director General.
- Specification of non-replicable essential facilities with regulated access: local loop, submarine cables' capacity
- Duty to offer objective, transparent and non-discriminatory conditions to MVNOs
- Number portability is part of dominant operators' interconnection catalogue
- Power to impose remedies at retail level (e.g. tariffs tackling on-net/off-net differentiation)
- Possibility to impose asymmetric tariffs that favor new comers for at least a 3-year period

The Draft Telecommunications Code and Implementation Decrees might require further revisions. Issues requiring revision include:

- Presumption of dominance for operators with market shares larger than 25%, even though the SMP Implementing Decree determines that SMP is only presumed in the case of market shares above 40% during a 3-year period (non-rebuttable presumption if market share is larger than 50%)
- Unclear distinction between a license and an authorization: representatives from the President of the Republic and Government intervene and take the final decision both in the awarding of licenses and authorizations
- Although the new Code is clearer in specifying that tariffs should be cost-oriented, providing some detail for certain tariffs (e.g., LRAIC for local loop unbundling), the cost methodology for all tariffs is not always clear
- Lack of reference to the competition issues that may result from infrastructure sharing agreements
- Although ISPs are subject to an authorization procedure, they are still required to enter into an additional concession agreement with the State, which sets the conditions of the authorization (e.g. object, duration and renewability)
- Even though the Telecommunications Code establishes that radio spectrum will be assigned competitively through licenses, the implementation Decree appears to limit transparent, objective and non-discriminatory assignments in those cases where there is more than one party interested in the same set of frequencies (and might not be known before the tender)
- Spectrum assignment requires the creation of a commission with representatives from the President of the Republic, Prime Minister, Telecom Ministry, Information Ministry, Interior Ministry, Finance Ministry and Media Regulator, which might require subsequent review based on practice to avoid suboptimal outcomes
- Mobile Network Operators are prohibited from transferring assigned spectrum licenses
- Fees charged for spectrum licenses and number rights appear to have no connection with their administrative costs
- The conditions governing number portability will only be determined in a subsequent ARCEP decision
- Lack of state aid analysis of the projects that benefit from funding by the Universal Service Fund

Source: WBG Markets and Competition Team elaboration based on draft Telecommunications Code and 11 Draft Implementation Decrees

193. Less distortive policies are available that would enable the Government to achieve its policy objectives. The table below summarizes the unintended consequences of Government interventions used to achieve various policy objectives, and suggests less distortive measures available to the Government of Senegal to achieve the same policy objectives. The policies would contribute for the development of an innovative and competitive telecommunications sector and increase consumer welfare in Senegal.

Table 14: Unintended consequences of Government policies in telecoms

Intended policy objectives	Current policy instruments	Unintended effect on market dynamics / competition	Less distortive measures to achieve policy objective
Increase internet penetration	<ul style="list-style-type: none"> • Authorization for entry for ISPs but each with geographic exclusivity • Change of entry regime for ISPs in 2016 from license to authorization but lack of procedural clarity • 	<ul style="list-style-type: none"> • Regional exclusivity for ISPs creates regional market power and facilitates collusion between ISPs • Despite the change in entry regime from license to authorization in 2016, the current regime creates the risk for administrative discretion and capping of the total number of ISPs 	<ul style="list-style-type: none"> • Eliminate regional exclusivity for ISPs • Streamline the authorization regime for ISPs
Increase mobile penetration and deployment of 4G network	<ul style="list-style-type: none"> • Attempt to assign spectrum through a tender procedure restricted to the incumbents • Direct assignment of 4G license to Sonatel without competitive tender • Allows for MVNO entry in the market subject to agreement by MNOs • Regulatory framework enables number portability but no retail regulation • High spectrum fees, which risk discouraging market entry 	<ul style="list-style-type: none"> • Facilitates collusion between MNOs in the tender procedure • By restricting the number of bidders, the State may end-up receiving less than the market value for the spectrum licenses and hinders market entry by newcomers who could deliver better prices and more innovative services for consumers • Direct assignment of 4G license to Sonatel gives former incumbent a time advantage that distorts the level playing field • Cumbersome procedural regime for activities that could be subject to an authorization regime, such as for the MVNOs 	<ul style="list-style-type: none"> • Assign spectrum competitively through a tender procedure that is not restricted to operators • Avoid phased assignment of radio frequencies for 4G so as to prevent undue first-mover advantages • Rationalize administrative control of entry MVNOs .Enable ARTP to impose remedies in the retail market combined with remedies in the wholesale market • Spectrum fees should reflect administrative costs incurred or incentivize the efficient use of radio

		<ul style="list-style-type: none"> • Although the regulatory framework allows for number portability, the lack of retail regulation enables MNOs to charge prohibitive fees • Spectrum fees neither ensure an efficient use of the resource nor compensate the State for administrative costs incurred 	frequencies (anti-hoarding purpose)
Increased market access and reduction of incumbents' market power	<ul style="list-style-type: none"> • Telecommunications Code uses the concept of SMP as a trigger for asymmetric regulation but presumes that operators with a market share of 25% have market power • ARTP determines which operators have SMP on an infrequent basis • Catalog of relevant markets where operators have SMP is infrequently reviewed • Telecommunications Code allows for the imposition of remedies but no enforcement by ARTP • ARTP has the power to enforce competition rules <i>ex post</i> but has not yet enforced them • MPT has adopted a Decree establishing that a network operator should respect the principles of cost-orientation, transparency and non-discrimination when it faces a 	<ul style="list-style-type: none"> • Catalog of operators with SMP is over-inclusive and ends-up covering operators without actual market power • By not annually reviewing the list of relevant markets characterized by operators with SMP, ARTP is unable to follow recent technological changes and ends-up both overregulating markets where there is no longer SMP and under-regulating emerging markets where operators have SMP • ARTP does not impose effective remedies on operators with SMP and does not align • ARTP has not effectively enforced the infrastructure sharing Decree 	<ul style="list-style-type: none"> • Eliminate the Telecommunications Code presumption of dominance for operators with a market share of at least 25% • ARTP should annually review the list of operators with SMP • ARTP should set effective remedies on the markets where operators have SMP • ARTP should effectively enforce <i>ex post</i> the competition rules set forth in the Telecommunications Code

request for network sharing
from another operator

5.2.4 Recommendations

194. To tackle the competition-related constraints identified above, **the following tables provide a series of actionable and prioritized pro-competition solutions related to the current regulatory framework governing the telecom sector and the overall functioning of the sector.** They also identify the bodies with responsibility to implement the recommendations. Notwithstanding, it is acknowledged that for the recommendations to be successful, a broad coalition is necessary, including the President’s Office, the Ministry of Economy and Finance, the MPT, ARTP, ADIE, and the private sector association (OPTIC).

Table 15: Recommendations for the telecommunications sector

Recommendations	Responsibility	Priority
Recommendations to encourage entry and level playing field between services-based competitors		
2.1 Focus regulation on markets that need it. Markets should meet the ‘three criteria test’: (1) high and non-transitory barriers to entry; (2) market structure does not tend towards effective competition; (3) inadequacy of competition law to tackle market failure.	Government and Parliament	High
2.2 Refocus ex ante regulation on SMP operators. Alleviate the regulatory burden that falls on operators without SMP. ARTP could consider (i) imposing obligations on Sonatel to grant fair, transparent and non-discriminatory access to the non-replicable infrastructure and assets it owns (including civil engineering, such as ducts and poles); and (ii) setting-up lower termination rates to mitigate the club effects which currently favor Sonatel’s network and increase the risks of anticompetitive behavior.	ARTP	High
2.3 Analyze effective competition to declare SMP. Considering eliminating in the Telecommunications Code 25-percent-market-share presumption of dominance or replacing it by a rebuttable presumption of 40%.	Government and Parliament	Medium
2.4 Boost the technical independence of ARTP. Ensure check and balances and implement a transparent and technical selection process to appoint Board members and the Director, and involve the President of the Republic in the selection of all Board members. Undertake a functional review of ARTP to identify areas for making its mandate more effective.	Government and Parliament	High
2.5 Adopt the bylaws necessary to ensure the effectiveness of the Telecommunications Code to open markets to competition (e.g. applicable costs to termination rates and charges for access to infrastructure, spectrum assignment rules and fees, integrate asymmetric regulation principle).	Ministry of Post and Telecommunications (MPT)	High
2.6 Strengthen powers to investigate and sanction anticompetitive conduct (e.g. margin squeeze, refusal to deal)	ARTP with support of MTP	Low

2.7 Promote a clarification or a change in regional rules regarding the competences of Senegal's authorities with powers to enforce the national competition rules (notably, the National Competition Commission and the ARTP in the telecom sector) vis-à-vis the WAEMU Commission	Government Parliament	and	High
2.8 Develop mechanisms of collaboration both at the regional level (National Competition Commission (NCC)/ ARTP with the WAEMU Commission), and at the national level (NCC, ARTP, other sectoral regulators). This collaboration could involve memoranda of understanding (MoUs) on how these bodies will exercise their functions when dealing with issues involving the enforcement of competition rules, exchange of information, development and exchanging of skills and expertise, etc.	ARTP, NCC, WAEMU Commission		High
Recommendations to promote entry by facilities-based competitors			
2.9 Identify services where regulation can allow for facilities-based competition or support services-based competition.	MPT		High
2.10 Evaluate developing a framework for broadband support that prevents negative effects on private investment.	ARTP		High
2.11 Prevent cross-subsidization between competitive and non-competitive market segments. Identify public service obligations.	ARTP		High
2.12 Consider implementing principles of the "Ladder of investment" to accompany the entry of new players, notably ISPs, MVNO.	ARTP		Medium
2.13 Clarify the regulatory regime applicable to State-owned infrastructure to facilitate access (e.g. network of the Agence de l'Informatique de l'État - ADIE).	ARTP		Medium
2.14 Consider regulating Sonatel's passive infrastructure under open access principles (considering essential facilities).	ARTP		Medium
Recommendations on boosting competition between last mile providers e.g. ISPs/MVNOs	Responsibility		Priority
2.15 Rationalize administrative control of entry for ISPs and MVNOs. <ul style="list-style-type: none"> The scope of the authorization regime should be broadened so that it applies to all administrative procedures where no scarce resources, such as frequencies, are involved. Market entry by MVNOs should only be subject to a general authorization regime. Continue the process of streamlining entry by setting a general authorization regime with minimal requirements at any time for the facilities-based or services-based operators without quantitative limitations, geographical restrictions, and undue technological restrictions. Only scarce frequencies, some infrastructure segments and some areas (low density) (which would be identified by ARTP after in-depth specific analysis) should require calls for tenders. 	MPT and ARTP		High

<ul style="list-style-type: none"> • There should be no decision on the number of market players when no scarce resources (spectrum) are involved. • Ensure a technical and agile assessment for granting licenses by ARTP and the Commission with representatives from the Government and the President of the Republic. 		
Recommendations on strengthening spectrum management	Responsibility	Priority
2.16 Design a spectrum management policy so to facilitate the access to spectrum to those operators that will use spectrum in the most efficient way and considering technology neutrality.	MPT and ARTP	High
2.17 Design and adopt open competitive tenders for spectrum assignment, with provisions to allow for new entry.	ARTP & spectrum management agency (MPT)	High
2.18 Review and reform spectrum pricing principles to incentivize efficient use of spectrum – including separating management fees (based on administrative costs) from usage fees (based on either market-determined or administratively-calculated economic value); allowing for spectrum trading and leasing subject to ARTP's monitoring; and adopt more flexible spectrum licenses that do not lock operators into a particular technology (unless justified by interference reasons).	ARTP & spectrum management agency (MPT)	Medium
2.19 Develop a framework for unlicensed spectrum that can address the challenges posed by new technological developments (e.g. Internet of Things)	ARTP & spectrum management agency (MPT)	Medium
2.20 Design a package of measures and launch a process to allow for entry of a fourth mobile 4G+ operator.	ARTP & spectrum management agency (MPT)	Medium

6. Effectiveness of the Competition Policy and Law to Address Anticompetitive Conduct and Regulations

6.1 The Effects of ECOWAS and WAEMU's Competition Laws on Senegal's Competition Policy

195. Senegal is a Member State of two regional organizations: the West African Economic and Monetary Union (WAEMU)²⁵⁵ and the Economic Community of West African States (ECOWAS),²⁵⁶ each with its own set of competition rules. Because of this dual membership, Senegal is subject to contradictory jurisdictional rules, which deeply impact its national competition policy: whilst ECOWAS permits the application of national competition law to conduct that does not affect trade between Member States, WAEMU prohibits parallel national competition rules and centralizes all competition enforcement in

²⁵⁵ Union Économique et Monétaire Ouest Africaine (UEMOA)

²⁵⁶ Communauté économique des États de l'Afrique de l'Ouest (CEDEAO).

the regional WAEMU Commission (see Box 23 below and Annex 7 for a detailed review of the ECOWAS and WAEMU competition rules).

Box 23: ECOWAS' and WAEMU's competition law frameworks

The Economic Community of West African States (ECOWAS), or Communauté économique des Etats de l'Afrique de l'Ouest (CEDEAO) was established in Lagos on 28 May 1975 (amended by the Cotonou Treaty from 24 July 1993) with the mission of integrating West African States' economies and societies to boost development and welfare. Although there is no explicit reference to it in the Treaty, the development of a regional competition policy and competition law can be understood in light of ECOWAS' objective of establishing a common market.

ECOWAS two main competition law regulations were adopted in 2008 and consist of: (i) the Supplementary Act A/SA.1/06/08, adopting substantive competition law rules; and (ii) the Supplementary Act A/SA.2/06/08 establishing a regional competition authority for ECOWAS, that should cooperate with national and regional competition authorities, especially in the West African Economic and Monetary Union (WAEMU). A further Supplementary Act on competition law exemptions to certain categories of agreements and practices in the air transport sector was adopted in 2012 ECOWAS' competition law applies to agreements, practices, mergers and distortions caused by Member States which are likely to have an effect on trade within ECOWAS. Hence, ECOWAS Member States may adopt and enforce their own national rules provided they are not inconsistent with ECOWAS competition rules and that all inconsistencies are eliminated within the shortest time possible.

The Treaty of Dakar from 1994 establishing WAEMU also included competition rules prohibiting anticompetitive agreements (Article 88), abuse of dominance (Article 89) and attributed enforcement competences to the ECOWAS Commission (Article 90). However, in contrast to ECOWAS, WAEMU has exclusive competence to legislate on competition matters and its Commission has exclusive enforcement competences across the region, even when only national markets are affected. WAEMU's Member States, on the other hand can only enforce unfair competition rules. This centralized model does not stem from Dakar Treaty but rather from the WAEMU's Court of Justice Opinion 003/2000/CJ/UEMOA, where it was held that the Union had exclusive competence to adopt regulations on agreements, abuse of dominant position and state aid.

Sources: UNCTAD, Voluntary peer review of competition policies of WAEMU, Benin and Senegal, 2008; Mor Bakhoun, "Cohérence Institutionnelle et Effectivité d'une Politique Régionale de la Concurrence: Le Cas de l'Union Économique et Monétaire Ouest-Africaine (UEMOA)", *Revue Internationale de droit économique*, 2011/3 t.XXV, pp. 305-332.

196. The WAEMU Court of Justice ruled that national competition laws were superseded by WAEMU's competition law and that national competition agencies could not enforce competition law at the national level. Although Law 94-63 of 22 August 1994 on prices, competition and economic litigation (Competition Act) was not explicitly revoked, it became unenforceable by the NCC (which had operated since 1994 and had previously issued decisions against anticompetitive practices in Senegal).

197. In addition to the NCC, there are sector-specific regulators with a competition law mandate in their specific sectors (Telecommunications and Postal Regulatory Authority (ARTP),²⁵⁷ Public Procurement Regulatory Authority (ARMP), and Power Sector Regulatory Commission (CRSE)²⁵⁸), **which might give rise to legal uncertainty.**

²⁵⁷ See Box 17 above.

²⁵⁸ Law No. 98-29 of 14 April 1998 on electricity in Senegal and Bill No. 2011-01 of 24 February 2011 concerning the Telecommunications Code. Pursuant to the latter: "in case of anticompetitive practices in the telecommunications sector and notwithstanding article 9 of Bill No. 94-63 of 22 August 1994 on prices,

The competition powers of sector-specific regulators are set forth in Law No. 2002-23 of 4 September 2002, on the regulatory framework for the concessionaires of public services. Pursuant to this Law, one of the missions of the regulatory authorities consists in taking all measures necessary to ensure healthy and fair competition in the regulated sector and to boost private sector participation.²⁵⁹ The competition powers of regulatory authorities include the enforcement of the prohibition of anticompetitive practices (Box 24).²⁶⁰ It remains to be confirmed whether the competition provisions in this law are still applicable in the respective sectors. As mentioned in the previous section, the 2011 Telecommunication Code also includes competition rules that would be applicable in the telecommunication sector.

Box 24: Competition powers of sector-specific regulators are set forth in Law No. 2002-23

Article 21 of Law No. 2002-23, prohibits anticompetitive practices which have as their object or effect the prevention, restriction or distortion of competition in the market, and in particular those which:

- Limit market access or freedom to compete by other companies;
- Hinder price setting through market mechanisms by artificially favoring their rise or decline through anticompetitive dumping or cross-subsidization. The latter is considered to be anticompetitive whenever it serves to subsidize services which are open to competition through financial resources resulting from exclusive services;
- limit or control production, markets, technical development, or investment;
- refuse timely access to technical information on essential facilities and relevant commercial information for other companies to carry out their activity.

Similarly, to the Competition Act, in Law No. 2002-23 the definition of abuse of dominance is not in line with standard antitrust analysis since it establishes certain prohibitions of unilateral practices independently from their effect on the market. Pursuant to Article 22, an abuse of dominance may consist of: (i) any abuse by one or more undertakings of a dominant position within the common market or in a substantial part of it; or (ii) in the state of dependency as regards a client or a supplier without equivalent alternatives. These abuses may consist in the refusal or discriminatory access to networks or services open to public as well as unjustified or discriminatory break-down of established commercial relations. The concept of dominant position is ascertained based on the significant influence of an operator in the market. In particular, it may take into consideration: the turnover of the operator and the market dimension; the control of channels to access final consumers; its access to financial resources and its engagement in anticompetitive practices.

Source: Markets and Competition Team elaboration.

6.2 Senegal's National Competition Commission (NCC)'s Powers under WAEMU's Competition Law

Lack of effective powers for competition law enforcement at the national level

competition and economic disputes, without prejudice to the powers of WAEMU and ECOWAS Community institutions, operators are seizing the regulatory authority of such practices. The Regulatory Authority issues a decision on the reality of these anticompetitive practices after hearing concerned. The decision of the Regulatory Authority may be challenged before the High Administrative Court and before any competent Community institution after exhausting all domestic remedies.”

²⁵⁹ Law No. 2002-23, Article 4.

²⁶⁰ Law No. 2002-23, Article 5.

198. At the WAEMU level, the WAEMU Commission has exclusive competence to enforce the competition rules,²⁶¹ even though National Competition Authorities (NCAs) participate in the Competition Advisory Committee, which issues a non-binding opinion prior to the Commission's decision.²⁶² The WAEMU Commission has exclusive competence to investigate: (i) State aid; (ii) anticompetitive State practices; and (iii) anticompetitive practices with a cross border effect.²⁶³ Before issuing a decision on an anticompetitive practice, the WAEMU Commission must first obtain a non-binding opinion issued by the Advisory Committee consisting of two members appointed by each Member State.²⁶⁴ NCAs perform a secondary role in the enforcement of WAEMU competition rules. Their role is limited to a permanent monitoring of the national markets in order to identify failures stemming from anticompetitive practices,²⁶⁵ and to cooperate with the WAEMU Commission during the investigation stage.²⁶⁶ Whilst the WAEMU Commission is under the obligation to inform NCAs about the investigations carried out nationally,²⁶⁷ the latter are subject to a wide array of obligations vis-à-vis the WAEMU Commission, including: (i) sending the requests for negative certificate; (ii) sending notifications for exemptions and complaints; (iii) sending a quarterly report to the Commission with information on market inquiries; (iv) following the implementation of the decisions establishing a sanction; (v) reporting state aids and sending quarterly report to the Commission; and (vi) issuing an annual report on competition in the country.²⁶⁸

199. Pursuant to WAEMU law, the Senegalese NCC may only conduct preliminary investigations and market analyses. WAEMU's rules set forth the obligation for national competition authorities (NCAs) to issue quarterly reports on their activities to keep the WAEMU Commission informed. Under WAEMU competition law, the NCC may conduct

²⁶¹ Article 90 of the WAEMU Treaty.

²⁶² Directive N° 02/2002/CM/UEMOA Relative à la Coopération entre la Commission et les Structures Nationales de Concurrence des États Membres pour l'Application des Articles 88, 89 et 90 du Traité de l'UEMOA, Article 4

²⁶³ Directive N° 02/2002/CM/UEMOA Relative à la Coopération entre la Commission et les Structures Nationales de Concurrence des États Membres pour l'Application des Articles 88, 89 et 90 du Traité de l'UEMOA, Article 5.2. The Commission also has exclusive competence to investigate and adopt decisions on the matters referred in the Regulations: 02/2002/CM/UEMOA on anticompetitive practices within WAEMU; N° 03/2002/CM/UEMOA, on the procedural rules applicable to anticompetitive agreements and abuses of dominance within WAEMU; and N° 04/2002/CM/UEMOA regarding State aids within WAEMU and the criteria for applying Article 88 (c) of the WAEMU Treaty concerning illegal aid (Article 5.4).

²⁶⁴ Règlement N° 03/2002/CM/UEMOA relatif aux procédures applicables aux ententes et abus de position dominante à l'intérieur de l'UEMOA, Article 28.4

²⁶⁵ Directive N° 02/2002/CM/UEMOA Relative à la Coopération entre la Commission et les Structures Nationales de Concurrence des États Membres pour l'Application des Articles 88, 89 et 90 du Traité de l'UEMOA, Article 3.1

²⁶⁶ Directive N° 02/2002/CM/UEMOA Relative à la Coopération entre la Commission et les Structures Nationales de Concurrence des États Membres pour l'Application des Articles 88, 89 et 90 du Traité de l'UEMOA, Article 3.4

²⁶⁷ Directive N° 02/2002/CM/UEMOA Relative à la Coopération entre la Commission et les Structures Nationales de Concurrence des États Membres pour l'Application des Articles 88, 89 et 90 du Traité de l'UEMOA, Article 5.3

²⁶⁸ Directive N° 02/2002/CM/UEMOA Relative à la Coopération entre la Commission et les Structures Nationales de Concurrence des États Membres pour l'Application des Articles 88, 89 et 90 du Traité de l'UEMOA, Article 3.3

investigations at the WAEMU Commission's request. These investigations are conducted in accordance with the scope and purpose set-out in the order issued by the WAEMU Commission. The order must also describe how the inspection should be carried out and the consequences in case of failure to comply (e.g. applicable penalties). The NCC's agents may also be requested to assist the WAEMU Commission's officials during an inspection. Finally, in accordance with the Competition Act, the NCC has the power to carry-out inspections and to subpoena companies to testify and submit documents.²⁶⁹ Agents of the Ministry of Commerce can also request intervention by civil, military and para-military forces.²⁷⁰

200. The lack of effectiveness of the NCC has only accentuated since 2003, when WAEMU competition law entered into force. On the one hand, the centralization of enforcement powers in the WAEMU Commission prevents it from acting in the area of competition law. On the other hand, the WAEMU Commission lacks resources to effectively enforce competition in the internal market, which creates an enforcement gap in the Member States.²⁷¹ In fact, the NCC has not been enforcing the country's competition rules since WAEMU's competition law came into force. The Government has put forward plans to reform the country's competition law but such changes have not been yet implemented.

201. Even before 2003, the NCC had a poor track record in terms of competition law enforcement.²⁷² This was a consequence of the legal burdens created by the Competition Act in what concerns the imposition of sanctions and of insufficient human and financial resources.²⁷³ Prior to 2003, the NCC had concluded one cartel case in the insurance sector and one abuse of dominance case in the air travel sector. The cartel case pertained to a decision by the Senegalese Federation of Insurance Companies in 2002 to exclude a brokerage company from the market. The NCC adopted a decision and published it in the newspapers, triggering many members of the association to comply with the decision.²⁷⁴ The abuse of dominance case concerned a decision by Air France in 2002 to reduce the compensation paid to travel agencies.²⁷⁵ The NCC found Air France to be dominant in the market of direct flights between Dakar and Paris and that its decision to unilaterally lower the percentage of ticket sales paid to travel agencies from 10 percent to 7 percent amounted to an abuse of its dominant position. In both cases, the Competition

²⁶⁹ Competition Act, Article 75.

²⁷⁰ Competition Act, Article 76.

²⁷¹ WBG, Republic of Senegal. 2016. *An Assessment of the Short Term Impact of the ECOWAS-CET and EU-EPA in Senegal*, p. 15

²⁷² Arguing that not a single domestic competition authority effectively enforced its national competition law even before WAEMU's competition law became effective: Mor Bakhoun and Julia Molestina. 2011. *Institutional Coherence and Effectivity of a Regional Competition Policy: the Case of the West African Economic and Monetary Union (WAEMU)*, Max Planck Institute for Intellectual Property and Competition Law Research Paper No. 11-17, p. 7

²⁷³ Malick Diallo. 2013. *Senegal: Competition Commission*, The African and Middle Eastern Antitrust Review 2014

²⁷⁴ Malick Diallo. 2013. *Senegal: Competition Commission*, The African and Middle Eastern Antitrust Review 2014

²⁷⁵ Jeune Afrique. 2003. *Air France condamnée au Sénégal*. Available at <http://www.jeuneafrique.com/68410/archives-thematique/air-france-condamn-e-au-s-n-gal/>

Commission did not impose sanctions to the companies concerned on the ground that it must first issue a cease and desist order before it can actually impose fines.²⁷⁶

202. Currently, the NCC lacks sufficient funding to fulfil its WAEMU law mandate of conducting preliminary investigations and market analyses. The NCC's annual budget is manifestly insufficient to perform its mission, as well as to allow it to hire the required specialized staff (around USD 53,000 in 2016). Although the NCC was created as an independent institution, funding and staffing rules make it highly dependent on the Government. Because the Government effectively staffs and provides funds the agency, it ends up controlling it *de facto* (the Commission's staff simultaneously works for the Directorate of Internal Trade).²⁷⁷ The NCC's Board lacks both technical and administrative staff to perform market studies as required under WAEMU's competition law. NCC's Board members only work part-time (formed by representatives of the judiciary and one Government representative) and only meets sporadically. Furthermore, the NCC lacks permanent headquarters since 1994.²⁷⁸ This insufficiency of human and budgetary resources has weakened the functioning of the NCC and rendered competition law enforcement ineffective in Senegal.

Lack of effectiveness of WAEMU competition rules enforcement

203. In parallel, the WAEMU Commission has also been largely ineffective in enforcing the competition rules across the internal market. Most Member States have not adjusted their national laws in accordance with WAEMU law in the terms imposed by the Court of Justice; the WAEMU Commission remains severely constrained in terms of resources; and there is lack of effective cooperation between the WAEMU Commission and the national authorities, chiefly Senegal's NCC.²⁷⁹

204. The WAEMU Commission has not yet enforced the competition rules on anticompetitive agreements and abuse of dominance, even if it has been active in several State aid and internal market cases involving Senegal.²⁸⁰ State aid can take various forms, including among others tax exemptions, loan guarantees, provision of resources at below market prices, subsidies, capital injections. State aid may have a negative impact on competition, even if it was originally designed to offer Government

²⁷⁶ Malick Diallo. 2013. *Senegal: Competition Commission*, The African and Middle Eastern Antitrust Review 2014.

²⁷⁷ Mor Bakhroum and Julia Molestina. 2011. *Institutional Coherence and Effectivity of a Regional Competition Policy: the Case of the West African Economic and Monetary Union (WAEMU)*, Max Planck Institute for Intellectual Property and Competition Law Research Paper No. 11-17, pp. 11-12.

²⁷⁸ Makhfou Mahécor DIOUF, Commissaire aux enquêtes économiques, Secrétaire général de la Commission de la Concurrence du Sénégal, "Plaidoyer pour le renforcement des politiques de la concurrence : le cas de la Commission nationale de la Concurrence du Sénégal", 08 décembre 2016.

²⁷⁹ Mor Bakhroum and Julia Molestina. 2011. *Institutional Coherence and Effectivity of a Regional Competition Policy: the Case of the West African Economic and Monetary Union (WAEMU)*, Max Planck Institute for Intellectual Property and Competition Law Research Paper No. 11-17, pp. 4-5.

²⁸⁰ There are, however, two ongoing cases related to the abuse of dominance: Mor Bakhroum and Julia Molestina. 2011. *Institutional Coherence and Effectivity of a Regional Competition Policy: the Case of the West African Economic and Monetary Union (WAEMU)*, Max Planck Institute for Intellectual Property and Competition Law Research Paper No. 11-17, p. 12.

support to private or state-owned enterprises (SOEs) for specific objectives. If not properly designed, state aid may provide an undue advantage to specific firms, reinforce a dominant position, thus facilitating anticompetitive behaviors or reduce a firm's incentive to make investments, thus generating market inefficiencies (see Box 25 for State aid rules in WAEMU). For instance, in case *SOCOCIM v. Senegal and Cement of Sahel*, the Commission of WAEMU considered a tax exemption awarded to be distortive of competition and it ordered Senegal to bring an end to such exemptions. In another case regarding tax exemptions by Senegal, the Commission decided that a tax exemption on the import of packaging in kraft paper placed local producers in a competitive disadvantage and it ordered Senegal to bring an end to the discriminatory tax regime. Senegal has also complained to the Commission in cases involving State aid awarded by other Member States. In the *ASKY* case, an agreement was struck between the Government of Togo and ASKY, by which the former granted immunities and tax exemptions to the latter. This agreement, which had not been notified to the Commission was the object of a complaint by Senegal on the grounds that it violated WAEMU's State aid rules. The WAEMU has also opened a case against Senegal for breach of the internal market rules. In case "Norme NS-072", Senegal adopted an indirect protectionist measure consisting of a regulation requiring a maximum 30% content of fat acid in refined palm oil, allegedly on the basis of health reasons. Because of this new regulation, refined palm oil imported from Cote D'Ivoire was no longer allowed to be commercialized in Senegal. In a decision from 2010, the Commission required Senegal to eliminate this regulation.²⁸¹

205. Given the lack of enforcement of WAEMU competition law by the WAEMU's Commission, it is argued that Senegal's Competition Act and sector-specific competition rules effectively remain in force in Senegal. In fact, the NCC has even issued competition decisions in 2002 and 2003, after the WAEMU Court of Justice judgment 2000 ruling that Member States should not enforce competition rules. Notwithstanding the Court of Justice's Opinion No. 03/2000, Senegal has not actually revoked its Act No. 94-63 of 22 August 1994 on prices, competition and economic disputes ('Competition Act'). During the drafting of WAEMU's secondary legislation, the Senegalese Competition Commission drafted an opinion arguing against the centralized approach defended by the Court of Justice.²⁸² This rejection of a centralized approach has not softened since. In fact, the Competition Commission put forward a strategic plan for the period of 2014-2017 seeking to revamp and modernize its competition law and competition authority, to disseminate a competition culture in Senegal and to effectively enforce the competition rules for the benefit of consumers, businesses and the economy.²⁸³ In this context, a draft law was prepared, which *"aims to incorporate merger provisions and includes, inter alia, deterrent sanctions, more investigative powers, fair trials and*

²⁸¹ Mor Bakhoun and Julia Molestina. 2011. *Institutional Coherence and Effectivity of a Regional Competition Policy: the Case of the West African Economic and Monetary Union (WAEMU)*, Max Planck Institute for Intellectual Property and Competition Law Research Paper No. 11-17, p. 13.

²⁸² See Rapport 2002-2003 de la Commission Nationale de la Concurrence du Sénégal, ex vi Mor Bakhoun and Julia Molestina. 2011. *Institutional Coherence and Effectivity of a Regional Competition Policy: the Case of the West African Economic and Monetary Union (WAEMU)*, Max Planck Institute for Intellectual Property and Competition Law Research Paper No. 11-17, p. 4

²⁸³ Malick Diallo. 2013. *Senegal: Competition Commission*, GCRI African and Middle Eastern Antitrust Review 2014.

better protection of undertakings' rights during investigations and dawn raids. The bill also provides for a transformation of the Competition Commission to a Competition Authority, which would have more resources and the possibility to cooperate and exchange information with national, regional and international competition agencies."²⁸⁴ However, and despite its ambitious goals, the bill was never adopted.

Box 25: State Aid Rules in WAEMU

The WAEMU Treaty has specific rules on State aid with Article 88(c) determining the incompatibility with the internal market of any aid granted by a Member State or through State resources in any form whatsoever which distorts or threatens to distort competition by favoring certain undertakings or the production of certain goods shall, in so far as it affects trade between Member States. The conditions specifying the circumstances in which State aid is illegal are specified in Regulation N° 04/2002/CM/UEMOA pursuant to which new state aid must be notified to the Commission and is subject to a standstill effect, i.e., it cannot be adopted before the Commission's approval. In assessing the compatibility of State aid, the Commission takes into account the needs of Member States concerning their economic and social development. When aid is declared illegal, the WAEMU Commission may order its recovery by the Member State concerned. In case of failure to comply, the Commission can issue a press release and proceed with the suspension of financial assistance by the WAEMU to the Member State and the submission of a recommendation to the recommendation to the West African Development Bank to review its operational policy regarding the Member State.

Source: Markets and Competition Team elaboration.

206. The jurisdictional model adopted by WAEMU has been pointed out as one of the main factors behind the lack of competition enforcement in Senegal.²⁸⁵ For the centralized approach advocated by the Court of Justice to be successful, it is necessary that NCAs are adequately resourced and that cooperation with the WAEMU Commission is smooth and effective. However, not only does the WAEMU Commission face strong limitations in terms of resources but NCAs also faced downsizing and a resource drain following the adoption of the centralized approach. As a result, there is limited capacity to support the WAEMU Commission with staff and other means during the investigation. With the exception of the competition authority of Burkina Faso, national competition authorities have been reluctant to cooperate with the WAEMU Commission. In the case of Senegal, there has been a near absence of collaboration with the Competition Commission, which led the WAEMU Commission to work primarily with the Direction du Commerce Intérieur (DCI), a branch of the Ministry of Commerce entrusted with economic investigations nationally.²⁸⁶

In a scenario where the Competition Act would be enforceable, there would be several legal amendments worth considering

²⁸⁴ Malick Diallo. 2013. *Senegal: Competition Commission*, GCRI African and Middle Eastern Antitrust Review 2014.

²⁸⁵ Malick Diallo, *Senegal: Competition Commission*, GCRI African and Middle Eastern Antitrust Review 2014, 31 October 2013.

²⁸⁶ Mor Bakhoun and Julia Molestina. 2011. *Institutional Coherence and Effectivity of a Regional Competition Policy: the Case of the West African Economic and Monetary Union (WAEMU)*, Max Planck Institute for Intellectual Property and Competition Law Research Paper No. 11-17, pp. 10-11.

207. In the event the Competition Act should be revised, Senegal would need to align the legislative amendments with international good practice. An effective competition law applies across all sectors of the economy and to all economic agents, be they public or private. In line with international best practice, Senegal's Competition Act applies across all sectors of the economy and to all economic agents, be they public or private (i.e., it also covers SOEs). However, the Competition Act does not cover all potential anticompetitive practices that may have an effect in Senegal. The Competition Act includes provisions on anticompetitive agreements and abuse of dominance, but not on merger control, which was regarded as a potential obstacle to the creation of national champions in Senegal.²⁸⁷

208. The Competition Act prohibits collective anticompetitive business practices that have as their object or effect a restriction of competition.²⁸⁸ Agreements that are restrict competition are null and void.²⁸⁹ Although the Competition Act states that the NCC analyses whether the anticompetitive practices are prohibited or may be exempted under the law, it does not provide any substantive test or framework for the assessment of competition law exemptions. Business practices should only be prohibited when they have a net anticompetitive effect, and therefore substantially lessen competition in the market. As a result, restrictive business practices should only be exempted whenever their pro-competitive gains outweigh the anticompetitive effects (e.g. US, EU, Botswana, Burundi and Tunisia).²⁹⁰ The only exception to this general rule of reason in the analysis of competition restrictions concerns the so-called hardcore horizontal cartels (price fixing, market division and bid rigging), which are strictly prohibited without the need to show actual harmful effect and without permitting an analysis of net efficiency. By not providing a clear test and an analytical framework for granting exemptions on grounds of economic efficiency, the Competition Act may open the door to discretionary decisions and thus undermine legal certainty for the parties of almost any agreement susceptible of being prohibited by the Competition Act.

209. Contrary to standard antitrust analysis, Senegal's Competition Act establishes certain prohibitions of unilateral practices independently from their effect on the market: refusal to sell following a normal request;²⁹¹ abuse of economic dependency;²⁹² unjustified price discrimination;²⁹³ lack of price transparency;²⁹⁴ resale price maintenance;²⁹⁵ and resale at loss.²⁹⁶ Standard abuse of dominance analysis tends to focus on pricing and non-pricing exploitative and exclusionary conduct by firms with market power:

²⁸⁷ OECD. 2011. *Table-Ronde sur le Contrôle des Fusions Transnationales: Défis à Relever par les Pays en Développement et les Économies Émergentes, Contribution de Sénégal*, 27 January 2011, p. 2

²⁸⁸ Competition Act, Article 24.

²⁸⁹ Competition Act, Article 25.

²⁹⁰ World Bank Group/African Competition Forum. 2016. *Breaking Down Barriers: Unlocking Africa's Potential through Vigorous Competition Policy*, p. 24.

²⁹¹ Competition Act, Article 26.

²⁹² Competition Act, Article 27.

²⁹³ Competition Act, Article 28.

²⁹⁴ Competition Act, Article 28.

²⁹⁵ Competition Act, Article 29.

²⁹⁶ Competition Act, Article 30.

exploitative abuses refer to practices whereby the dominant firm takes advantage of its market power to extract rents from consumers in a way that could not have been obtained by a non-dominant firm (e.g. excessive prices or imposition of unfair terms and conditions); exclusionary abuses concerns practices directed against rivals that indirectly cause a loss to consumer welfare by limiting the rivals' ability to compete (e.g. predatory pricing). Senegal's Competition Act's regulation of what may constitute perfectly standard rational business behavior can act as a barrier to competition by unduly prohibiting companies from bringing down prices or innovating. In this regard, the Competition Act should require that market dominance is established in order for the provisions of the Competition Act on abuse of dominance to be applicable.²⁹⁷

210. Due to the absence of effective merger control enforcement at the WAEMU level,²⁹⁸ Senegal would need a framework for analysis that permits the authority to identify the likely anticompetitive effects of a merger, but also to retain sufficient flexibility to adapt to developments in the field of economics. Internationally, merger review has shifted from a focus on market structure and the strengthening of a dominant position towards a focus on the likely effects on market outcomes. For instance, the EU has introduced in 2004 the concept of substantial impediment to effective competition and explicitly allows the incorporation of efficiencies in the analysis.²⁹⁹ Other jurisdictions, in the African region, that have adopted the concept of substantial lessening or lowering of competition for merger review include COMESA, Kenya, Zambia, Botswana and South Africa. Accordingly, the Competition agency should have the burden to prove if any competitive harm arises due to the transaction while merging parties need to demonstrate the existence and breadth of efficiencies. A transaction should be prohibited only if it is shown that it lessens (or is likely to lessen) competition. For this purpose, authorities consider how competition might be affected; i.e., what dimensions over which firms compete could worsen due to the merger (e.g., prices, quality, product variety, innovation). Assessments take into account *unilateral effects* of the entity that will be created after the transaction and *coordinated effects* that will be facilitated by the transaction. *Unilateral effects* are generated by the ability of profitably exercising market power to a materially greater degree than would have been possible for either of the merged parties prior to the merger. Ease of entry, capacity constraints, availability and responsiveness of alternative suppliers, buyer power, and efficiencies are key elements to identify the extent of unilateral effects. *Coordinated effects* refer to the likelihood that firms remaining in the market after the merger will be able to coordinate or strengthen existing coordination to exercise market power. For this purpose, competition agencies should assess (a) the ability to identify terms of coordination, (b) the ability to detect deviations from the terms of coordination, (c) the ability to punish deviations that would undermine the coordinated interaction, and (d) the

²⁹⁷ UNCTAD, Model Law on Competition (2010) – Chapter II, p. 7. A dominant position is defined as follows: “*economic strength enjoyed by an undertaking, which enables it to prevent effective competition on a relevant market, by affording it the power to behave to an appreciable extent independently of its competitors, its customers and ultimately of consumers. In such a situation, the company in question has the ability to raise prices consistently and profitably above competitive levels.*”

²⁹⁸ Notwithstanding the regulatory framework set forth in Regulations 02 and 03/2002/CM/UEMOA.

²⁹⁹ Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings (the EC Merger Regulation), Official Journal L 24, 29.01.2004, p. 1-22.

extent to which existing competitive constraints and other factors would likely deter or disrupt effective coordination.

211. Most competition authorities in Africa have a general mandate to carry out advocacy activities, with some being particularly effective in their efforts to open markets to competition (e.g. efforts in the areas of banking and public procurement in South Africa, mobile financial services in Zimbabwe, saw milling in Zambia, health care and tea processing in Kenya, cement in Tanzania, sugar in Malawi, and steel in Egypt).³⁰⁰ Senegal's Competition Act also foresees an advocacy role for the NCC, establishing that the latter is mandatorily consulted by the Government on all draft regulations with a direct effect on: (i) imposing restrictions on market or professional access and (ii) imposing standard price or sales conditions.³⁰¹ However, the law does not provide further details regarding the intervention of the Commission or the consequences stemming from its opinion (e.g., is the opinion binding? If not, must the Government justify its departure from the Committee's opinion? Is there a mechanism to follow-up the implementation of its opinions?).

212. Although no fines have been imposed by the NCC under Senegal's Competition Act, the level of pecuniary sanctions seems largely inadequate to produce sufficient deterrent effects. The NCC can impose sanctions or injunctions.³⁰² It can impose sanctions in case the company fails to comply with the injunctions; fines may range between 100,000 and 20,000,000 CFA francs (around 34,000 USD).³⁰³ Fine setting procedures were to be established by a Decree, which was never enacted.³⁰⁴

213. The maximum amount of the fine would need to be set in such a way to have a deterrent effect and would preferably be expressed as a percentage of the turnover of the infringer. Fines should be indexed to inflation and their method of calculation should factor the gravity of the infraction and the firm's capacity to pay (e.g. in the EU, fines may reach up to 10% of the annual turnover). Relatively low fines are, however, usual in African countries: even in the case of a country with an established enforcement record, such as South Africa, fines are only 9 percent of the excess profits, on average considering 4 cases, compared to 26 percent in the European Union.³⁰⁵ In addition, the NCC would need to consider publishing guidelines explaining the methodology for calculating the applicable fine and describing the aggravating and mitigating circumstances.³⁰⁶ The law would also need to establish sanctions for failure to cooperate with the NCC, including: failure to comply with orders issued; failure to supply information or documents required within the time limits specified; and making false or misleading statements.³⁰⁷

³⁰⁰ World Bank Group/African Competition Forum. 2016. *Breaking Down Barriers: Unlocking Africa's Potential through Vigorous Competition Policy*, p. ix.

³⁰¹ Competition Act, Article 9.

³⁰² Competition Act, Article 11.

³⁰³ Competition Act, Article 13.

³⁰⁴ Competition Act, Article 15.

³⁰⁵ Published in World Bank. 2017. *A Step Ahead: competition Policy for Shared Prosperity and Inclusive Growth*.

³⁰⁶ UNCTAD, Model Law on Competition (2015) – Revised chapter XI, p. 9.

³⁰⁷ UNCTAD, Model Law on Competition (2015) – Revised chapter XI, p. 2.

6.3 Recommendations

214. The table below proposes several actionable and prioritized solutions to strengthen effectiveness of the competition policy and law in Senegal.

Table 16: Recommendations to improve the competition legal framework

Recommendation	Responsibility	Priority
WAEMU level		
1. Develop efforts within WAEMU to approve legislation delegating powers to national competition authorities to investigate and decide on anticompetitive practices that occur on the national territory and do not have cross-border effects.	Government	High
2. Press for the issuing of rules at the WAEMU level regulating cooperation between the WAEMU Commission and national competition authorities.	Government	High
3. Press for the strengthening and adequate resourcing of the WAEMU Commission to enhance competition enforcement.	Government	Medium
National level		
4. Encourage NCC to carry out market studies and improve communication and collaboration with sector-specific regulators and other Government institutions to address competition issues.	NCC	High
5. Depending on the clarification of regional vs national powers, consider setting up an independent NCC with the adequate financial, human and technical resources to make it fully operational in terms of competition law enforcement.	Government	High
6. In a scenario where the Competition Act would become enforceable, review the competition law in order to align with international best practice (e.g. provisions on abuse of dominance, prohibition of cartels, adequate sanctions).	Government and Parliament	High

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8. Annexes

Annex 1: Senegalese export commodities and destinations

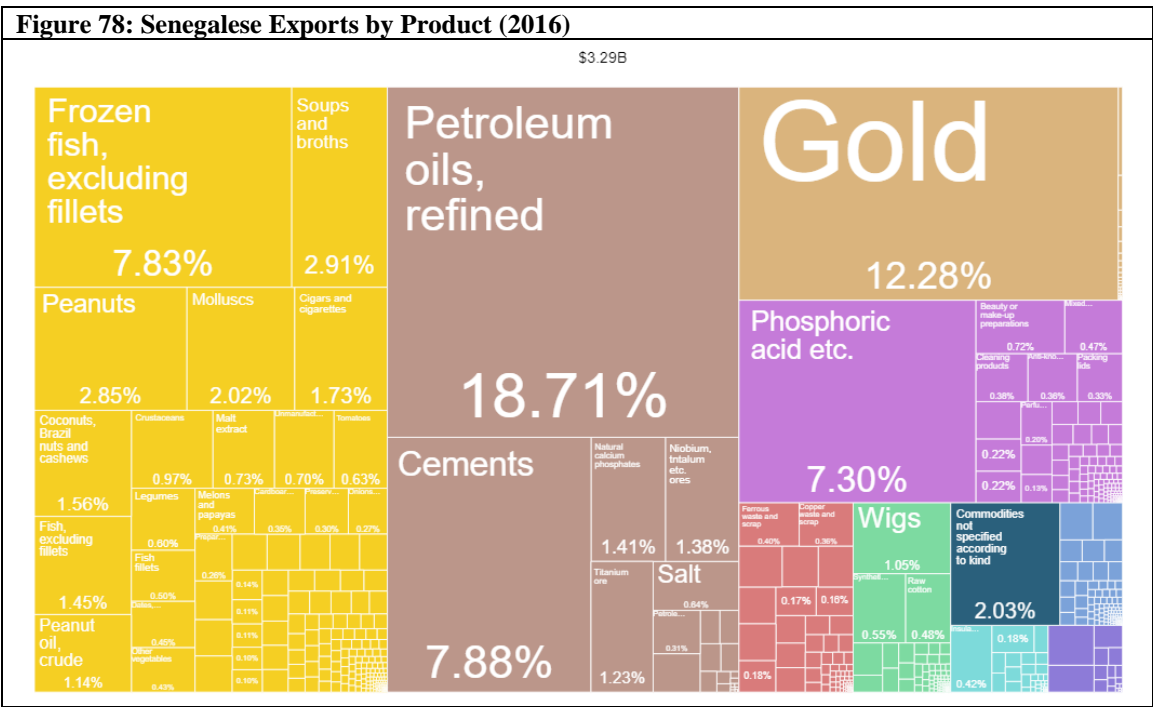
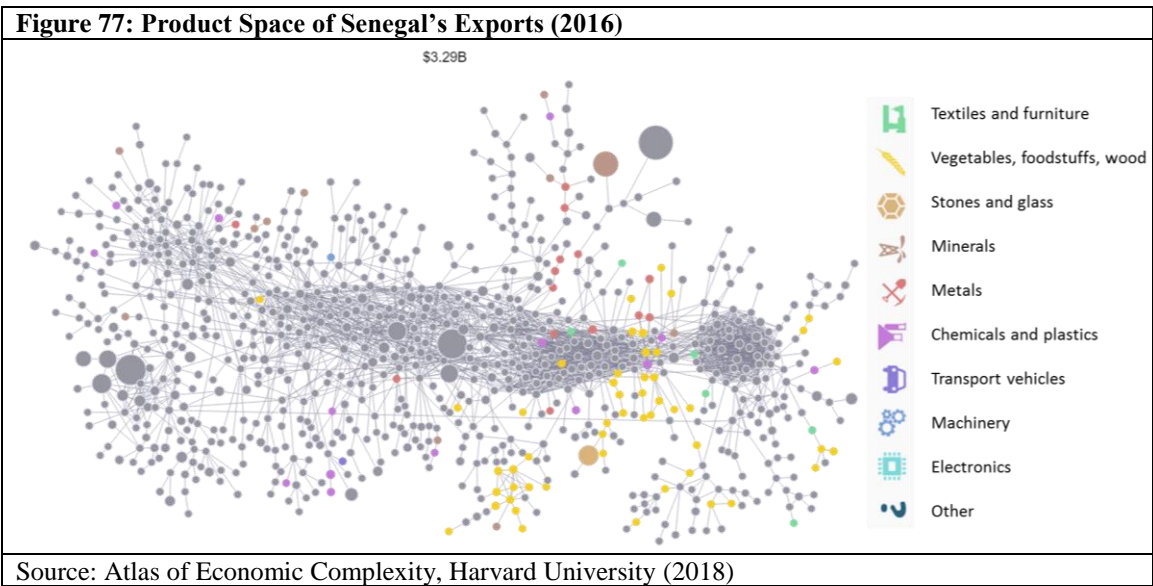
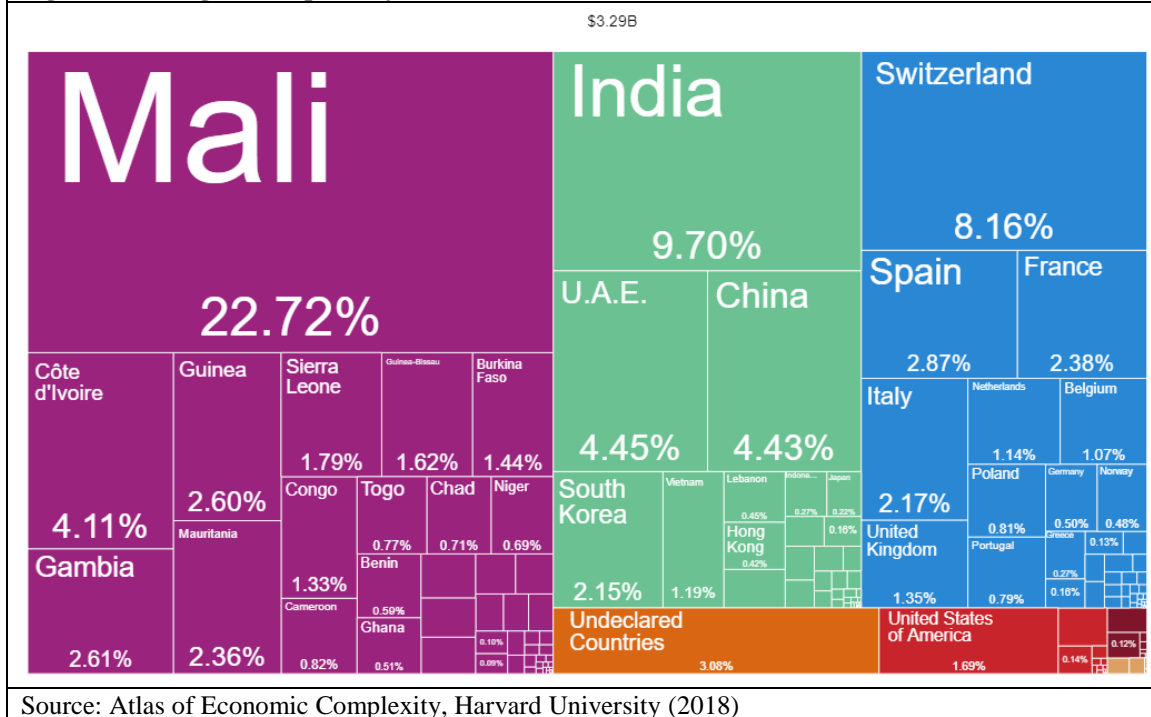


Figure 79: Senegalese Exports by Destination (2016)



Annex 2: PMR

Box 26: The Low-Level PMR Indicators

State control

- Public ownership
 - *Scope of state-owned enterprises*: pervasiveness of state ownership across 30 business sectors measured as the share of sectors in which the state controls at least one firm.
 - *Government involvement in network sectors*: Government stakes in the largest firms in 6 network sectors (electricity, gas, rail transport, air transport, postal services and telecommunication).
 - *Direct control over business enterprises*: existence of special voting rights by the Government in privately-owned firms and constraints to the sale of Government stakes in publicly-controlled firms (based on 30 business sectors).
 - *Governance of state-owned enterprises*: degree of insulation of state-owned enterprises (SOEs) from market discipline and degree of political interference in the management of SOEs.
- Involvement in business operation
 - *Price controls*: extent and type of price controls in 8 sectors (air transport, road freight transport, retail distribution, telecommunication, electricity, gas, water, professional services).
 - *Use of command & control regulation*: extent to which the Government uses coercive (as opposed to incentive-based) regulation.

Barriers to entry and rivalry

- Complexity of regulatory procedures
 - *Licence and permits system*: use of 'one-stop-shops' and the 'silence is consent' rule for issuing licenses and accepting notifications.
 - *Communication and simplification of rules and procedures*: the Government's communication strategy and efforts to reduce and simplify the administrative burden of interacting with the Government.
- Administrative burdens on startups
 - *Administrative burdens for corporations*: administrative burdens on creating a public limited company.
 - *Administrative burdens for sole proprietor firms*: administrative burdens on creating an individual enterprise.
 - *Barriers in services sectors*: entry barriers in professional services, freight transport services and retail distribution.
- Regulatory protection of incumbents
 - *Legal barriers*: pervasiveness of barriers to entry in 30 business sectors as a share of sectors in which there are explicit legal limitations on the number of competitors.
 - *Antitrust exemptions*: scope of exemptions from competition law for public enterprises.
 - *Barriers in network sectors*: entry barriers in 8 network sectors (gas, electricity, water, rail transport, air transport, road freight transport, postal services and telecommunication) and degree of vertical separation in 3 network sectors (gas, electricity and rail transport).

Barriers to trade and investment

- Explicit barriers to trade and investment
 - *Barriers to FDI*: restrictiveness of a country's FDI rules in 22 sectors in terms of foreign equity limitations, screening or approval mechanisms, restrictions on the employment of foreigners as key personnel and operational restrictions (e.g. restrictions on branching and on capital repatriation or on land ownership)
 - *Tariff barriers*: simple cross-product average of effectively applied tariffs.
- Other barriers to trade and investment
 - *Differential treatment of foreign suppliers*: discrimination of foreign firms with respect to taxes and subsidies, public procurement, entry regulation and appeal and procedures.

- *Barriers to trade facilitation:* recognition of foreign regulations, use of international standards and international transparency of domestic regulation.

Source: Koske et al (2013)

Table 17: Sectors with SOE presence in Senegal

National, state or provincial Governments <u>control at least one firm</u> in the sector	Yes	No
Electricity generation, import, transmission, distribution and supply	X	
Natural gas production, import, transmission, distribution and supply	X	
Telecommunication fixed line, mobile and internet services		X
Post basic and courier services	X	
Railways transport	X	
Air transport		X
Operation of air transportation infrastructure	X	
Operation of water transportation infrastructure	X	
Operation of road infrastructure	X	
Water collection, treatment and supply	X	
Manufacture of tobacco products		X
Manufacture of refined petroleum products	X	
Manufacture of basic metals		X
Manufacture of fabricated metal products, machinery and equipment		X
Building and repairing of ships and boats		X
Manufacture of railway and tramway locomotives and rolling stock		X
Manufacture of aircraft and spacecraft		X
Construction		X
Wholesale trade, incl. of motor vehicles		X
Retail trade, incl. of motor vehicles		X
Accommodation, food and beverage service activities		X
Other urban, suburban and interurban passenger transport	X	
Financial service activities, except central banking, insurance and pension funding	X	
Insurance, reinsurance and pension funding	X	
Other business activities		X
Human health activities	X	
Motion picture distribution and projection		X
TOTAL	13	14

Source: OECD/WBG PMR

Note: Shaded areas highlight network sectors

Simulation of effect of improvements in PMR scores on value added and GDP growth

Following existing literature on the effects of restrictive product market regulations reforms on growth,³⁰⁸ notably Barone and Cingano (2011), Conway et al. (2006), Arnold

³⁰⁸ World Bank Group (2012) Viewpoint, Public Policy for the private sector, *Competition Policy: Encouraging Thriving Markets for Development*. Note Num. 331 at p.5, available at

et al. (2008) and De Rosa et al. (2009), this review presents an ex-ante estimation of potential impact of reforms in specific network markets (electricity, gas, water supply, telecommunications), transport, retail, and other business services, that would reduce restrictive product market regulations on value added and associated GDP growth.

Based on the WBG MCPAT, four scenarios are estimated:

- Scenario 1: The simulation is based on the differential of the reform effect between network markets, transport, retail and other business services and non-service-intensive sectors as a proxy for the size of the reform effect for only above-average service and network intensive sectors.³⁰⁹ The analysis identifies Senegalese sectors with above-average technical coefficients of the abovementioned inputs based on the Input-Output tables for Senegal (2014) as intensive in those services. In this scenario, additional value added is estimated using data on 2014 value added in sectors intensive in network inputs, retail, telecommunication and other business services and the additional GDP growth is estimated based on the share of additional value added in 2014 GDP.
- Scenario 2: Includes the same assumptions as in Scenario 1 and takes into account the reform effect for only above-average network and service intensive sectors. In this scenario, additional value added is estimated using data on 2014 value added in sectors intensive in network inputs, transport, retail, and other business services, and the additional GDP growth is estimated based on the share of additional value added in 2014 GDP.
- Scenario 3: Includes the same assumptions as in Scenario 1 and takes into account the reform effect for only above-average network and service intensive sectors. In this scenario, additional value added is estimated using 2014 value added in sectors intensive in network inputs, transport, retail, and other business services and the additional value added is estimated based on the share of value added in 2014 gross value added.
- Scenario 4: Takes into account the reform effect for highly intensive service sectors. Highly intensive sectors are those whose technical coefficients for the abovementioned network and services inputs exceed the 75th percentile of the technical coefficients for those services and network inputs across all sectors. In this scenario, additional value added is estimated using data on 2014 value added in sectors that are highly intensive in the abovementioned network inputs and services and the additional GDP growth is estimated based on the share of additional value added in 2014 GDP.

Table 18 presents the results of the sensitivity analysis using these four alternative estimation methods. The results are robust to the assumptions presented above and suggest

<http://siteresources.worldbank.org/EXTFINANCIALSECTOR/Resources/282884-1303327122200/VP331-Competition-Policy.pdf>.

³⁰⁹ Based on Barone and Cingano (2011), the differential of growth in value added of industries at the 75th and 25th percentiles of intensity in professional services was estimated to be approximately 0.8 percentage points higher in a country at the 25th than at the 75th percentile of regulatory restrictiveness. Fixed prices and no supply constraints are assumed.

that if Senegal undergoes reforms that decrease regulatory restrictiveness of the network sectors, transport, retail and other business services, growth in value added in industries intensive in the abovementioned services and network inputs would translate into additional 0.2 up to 0.5 percent growth of annual GDP, all else being equal.

Table 18: Simulated effect of improvements in PMR scores on value added and GDP growth

Estimation method			
Additional value added	Additional growth of annual GDP	Additional value added (million CFA Franc)	Additional growth of annual GDP (percent)
Scenario 1. Estimated using data on 2014 value added in sectors intensive in gas, electricity, water supply, telecoms, transport, retail, and other business services	Based on the share of additional value added in 2017 GDP	32,297	0.339
Scenario 2. Estimated using data on 2014 value added in sectors intensive in gas, electricity, water supply, telecoms, transport, retail, and other business services	Based on the share of additional value added in 2014 GDP	32,297	0.426
Scenario 3. Estimated using data on 2014 value added in sectors intensive in gas, electricity, water supply, telecoms, transport, retail, and other business services	Based on the share of additional value added in 2014 gross value added	32,297	0.489
Scenario 4. Estimated using data on 2014 value added in sectors that are highly intensive in gas, electricity, water supply, telecoms transport, retail, and other business services	Based on the share of additional value added in 2017 GDP	22,819	0.239

Sources: OECD: Input-Output table for Senegal (2014), IMF World Economic Outlook (April 2017): GDP 2017 and 2014 (million CFA Franc);

Highly intensive sectors are those whose technical coefficients for network inputs (electricity, gas and water supply), post and telecommunication, transport and other business services, exceed the 75th percentile of the technical coefficients for the network inputs (electricity, gas and water supply), post and telecommunication, transport and other business services across all sectors.

Annex 4: Sector Prioritization Matrix for Senegal Competitiveness Assessment

Table 19: Sector prioritization matrix

Sector	Contribution to Economy					Development Plans
	Percentage contribution to GDP	% of Consumer Expenditure/ Consumer Price Index Weights	Employment by sector	Spillover effects	Contribution to exports	
Agriculture	Contribution to GDP: 17% ³¹⁰ ; 15.6% ³¹¹ Contribution to GVA: 15.3% in 2014 ³¹²	Food & Beverages: 53.6% of consumption basket ³¹³	46.1% ³¹⁴ of employed		2/3 ³¹⁵	
Groundnut	60% of agricultural GDP ³¹⁶	Groundnut oil represents 0.3% of consumption expenditure. Whole groundnuts not in top 100 products in product basket. But: 255,000 tons of	482,000 family farms (63% of Senegalese agriculture). ³¹⁹ 482,000 ³²⁰	Low. Groundnuts at the far edge of product space. ³²¹	3.08% (oil) and 0.41% (whole nuts) of total exports in 2011 ³²²	1 st sector to be mentioned under agriculture in Plan Senegal Emergent ³²⁴

³¹⁰ World Bank. 2016. *World Bank Smallholder Farmers in Senegal Receive Support to Improve Agricultural Productivity*. Available at <http://www.worldbank.org/en/news/press-release/2016/05/17/world-bank-smallholder-farmers-in-senegal-receive-support-to-improve-agricultural-productivity>

³¹¹ CIA. 2017. *World Factbook*. Available at <https://www.cia.gov/library/publications/the-world-factbook/fields/2012.html>

³¹² UN. 2017. *Senegal Country Profile*. Available at <http://data.un.org/CountryProfile.aspx?crName=senegal>

³¹³ Republic of Senegal. 2017. *April 2017 CPI*

³¹⁴ UN. 2017. *Senegal Country Profile*. Available at <http://data.un.org/CountryProfile.aspx?crName=senegal>

³¹⁵ World Bank. 2016. *WAPP – 2A Project Document*, p. 3

³¹⁶ World Bank. 2015. *Etude Diagnostique de la Chaîne de valeurs arachide au Sénégal: Propositions de réformes*, p. 16

³¹⁹ World Bank. 2015. *Etude Diagnostique de la Chaîne de valeurs arachide au Sénégal: Propositions de réformes*, p. 41

³²⁰ World Bank. 2015. *Etude Diagnostique de la Chaîne de valeurs arachide au Sénégal: Propositions de réformes*, p. 10

³²¹ Center for International Development. 2017. *Atlas of Economic Complexity – Senegal*. Available at <http://atlas.media.mit.edu/en/visualize/network/hs92/export/sen/all/show/2013/>

³²² World Bank. 2013. *Étude Diagnostique sur l'Intégration du Commerce du Sénégal (DTIS)*

³²⁴ Republic of Senegal. 2014. *Plan Sénégal Emergent*, p. 28

		groundnuts were consumed locally. ³¹⁷ Alternatively: 350,000 ³¹⁸		80% of export receipts. ³²³	
Cereals (rice, millet, corn, sorghum)		Rice: 5.4% of consumption, 7.4% if included as part of whole meals ³²⁵ Calorie intake between 2004-08: 30.2% (rice), 11.2% (corn), 11.9% (millet/sorghum), 10% (wheat) ³²⁶		2% (2011) ³²⁷	Self-sufficiency targeted
Livestock	4.2% of GDP (2012) and 28.8% of agriculture GDP. ³²⁸		Low.		Mentioned in Plan Senegal Emergent and in IFC analysis
Aquaculture/ Fisheries	2.2% of GDP (2012) ³²⁹ for fisheries.	2.5% of consumption basket for “sardinelle”	600,000 ³³⁰ for fisheries	Low.	Regarded as potential growth sector by the IFC

³¹⁷ European Commission. 2016. *Analyse d'économie politique (PEA) des filières de l'arachide et du riz*, p. 27

³¹⁸ USDA. 2016. *Oilseeds and Products Annual 2016*. GAIN Report. Senegal., p. 2

³²³ World Bank. 2015. *Etude Diagnostique de la Chaîne de valeurs arachide au Sénégal: Propositions de réformes*, p. 16

³²⁵ CPI Data

³²⁶ Michigan State University. 2011. *Etude sur la consommation alimentaire en Afrique de l'Ouest*, p. 18 Available at http://fsg.afre.msu.edu/srai/Etude_consommation_rapport_regional_revue_diallo.pdf

³²⁷ World Bank. 2013. *Étude Diagnostique sur l'Intégration du Commerce du Sénégal (DTIS)*, p. 60

³²⁸ Republic of Senegal. 2014. *Plan Sénégal Emergent*, p. 29

³²⁹ Republic of Senegal. 2014. *Plan Sénégal Emergent*, p. 29

³³⁰ Republic of Senegal. 2014. *Plan Sénégal Emergent*, p. 29

Mining/Fertilizer		N/A			37.47% (2011) ³³¹	Regarded as priority sector in Plan Senegal Emergent
Tourism		Restaurants/Hotels: 1.2% of consumption basket ³³²	75,000 ³³³	Low.		
Energy		“Logement, eau, électricité, gaz et autres combustibles”: 18.35% ³³⁴		High. Ranked 162 nd of 190 in Doing Business.	N/A	Priority in Plan Senegal Emergent
Telecoms	6.3 % contribution to GDP in 2014. ³³⁵	Communication: 1.76% ³³⁶ Telecoms: 4.5% ³³⁷	19,000 in direct formal employment. ³³⁸	High. Senegal had the highest iGDP in Africa in 2012. ³³⁹	N/A	Strategie Senegal Numerique

³³¹ World Bank.2013. *Étude Diagnostique sur l'Intégration du Commerce du Sénégal (DTIS)*, p. 60

³³² Republic of Senegal. 2017. *April 2017 CPI*

³³³ Republic of Senegal. 2014. *Plan Sénégal Emergent*, p. 30

³³⁴ Republic of Senegal. 2017. *April 2017 CPI*

³³⁵ Ministère des Postes et des Télécommunications. 2016. *Stratégie Sénégal Numérique 2016-2025*, p. 9

³³⁶ Republic of Senegal. 2017. *April 2017 CPI*

³³⁷ CPI Data

³³⁸ Ministère des Postes et des Télécommunications. 2016. *Stratégie Sénégal Numérique 2016-2025*, p. 10

³³⁹ McKinsey Global Institute. 2013. *Lions go digital: The internet's transformative potential in Africa*. Available at <http://www.mckinsey.com/industries/high-tech/our-insights/lions-go-digital-the-internets-transformative-potential-in-africa>

Annex 5: Calculations for the “middle way” policy reforms

Current policy

Cost of subsidies

Between the years 2005 and 2015, the Government spent an average of F CFA 4,573,688,400 subsidizing the purchasing of raw groundnuts for oil processors.³⁴⁰ Furthermore, SUNEOR/SONACOS has received an average of F CFA 17 per kg of groundnuts in operational subsidies between the years 2011 and 2015.³⁴¹ Given SONACOS' purchases of roughly 100,000 tons of groundnuts in the 2016/17 season,³⁴² operational subsidies add up to F CFA 1.7 bn. **The total subsidy costs therefore amount to F CFA 6,273,688,400 (~USD 10,561,764).**

Government Revenues

In 2015, Senegal imported \$119,987,000 worth of vegetable oils.³⁴³ Since the source of the data does not specify whether the imports are crude or refined, it will be assumed that all imports were refined. Since taxes on refined oil imports are higher than on crude oil imports, this likely leads to an overestimation of the revenues generated from imports. The maximum tariff rate applicable to all refined vegetable oils is 20%,³⁴⁴ in which case the **earnings from import taxes add up to US\$23,997,400 or F CFA 14,254,455,600** (using an average 2015 exchange rate of 594 F CFA/\$). However, since the actual adjusted tax rate for vegetable oil imports is higher (47% for palm oil in 2013³⁴⁵) this likely understates the generated income. **Using the 47% higher bound, the revenue generated from import taxes amounts to USD 56,393,890 or F CFA 33,497,970,660.**

In addition to revenue from imports, the recently abolished export tax of 15 F CFA on nuts in shell and 40 F CFA on kernel generated revenue for the Government. In the absence of a break-down of exports of nuts in shell versus kernel, it will be assumed that all exports were carried out in kernel in order to err on the side of a higher revenue. In the 2016/17 season, 123,175,694 kg of kernel had been exported by the second to last week of the season.³⁴⁶ Given the 40 F CFA/kg tax, this adds up to **export tax revenue of F CFA 4,927,027,760 or USD 8,294,660 prior to the suspension of the tax.**

Revenue from import and export taxes therefore lied between 19,181,433,360 F CFA and F CFA 38,424,998,420 per year (USD 32,291,975 to USD 64,688,550). Subsidies cost the Government F CFA 6,273,688,400 (ca. USD 10,561,764.98).

³⁴⁰ CNIA (2017). *Statistiques sur les productions d'arachide et les subventions*.

³⁴¹ World Bank. 2016. *Competitiveness and comparative advantage of the groundnut value chain in Senegal*, p. 14

³⁴² CNIA. 2017. *Situation collecte commercialization des arachides 28eme semaine*

³⁴³ Atlas of Economic Complexity

³⁴⁴ WB. 2015. *Policies, Prices, and Poverty*, p. 14.

³⁴⁵ WB. 2015. *Policies, Prices, and Poverty*, p. 44

³⁴⁶ CNIA. 2017. *Situation collecte commercialization des arachides 28eme semaine*

→ Overall, therefore, **the policy prior to the abolishment of purchasing subsidies and the suspension of the export tax generated revenues for the Government between F CFA 12,907,794,960 and F CFA 32,151,310,020 (between USD 21,730,295 and USD 54,126,785).**

Oil processor losses

SONACOS has made losses in the past 3 years. In 2014, the loss amounted to F CFA 35 per kg of nuts in shell. This was taken as reference as it precedes the influx of Chinese exporters challenging the processors' ability to purchase throughput, because it is the smallest loss in these past 3 years between 2014 and 2016 and because 2014 was a year where throughput was similar to that of the on-going year (106,084 tons in 2014 compared to roughly 100,000 in 2017).³⁴⁷ Assuming similar profit margins for all oil processors and total purchased quantities of 160,000 tons of raw nuts,³⁴⁸ **the oil processors' losses for this season amount to F CFA 5.6 bn (ca. USD 9,427,609.43).**

Overall value chain profits

Combining the Government's revenue and the processors' losses means **that the value chain creates total profits between F CFA 7,307,794,960 (USD 12,302,685.12) and F CFA 26,551,310,020 (ca. USD 44,699,175.12).**

Reform scenario "middle way"

Fiscal implications

Given the suggested phasing out of export taxes on kernel and maintaining the abolition of the various subsidies, **the Government would stand to lose its revenue of between F CFA 13 and 32 billion (USD 21,885,522 to USD 53,872,054).**

Export revenue

The following assumes that the current price differential between the minimum price set by the CNIA (i.e. the price typically paid in practice by OPS) and the price paid by exporters is almost wholly explained by greater seller power held by farmers relative to exporters than relative to OPS who tend to operate under collective decisions made at the CNIA, coupled with a greater willingness to pay from exporters due to favorable whole groundnut prices on international markets compared to the price local processors would be willing to pay given the prices of groundnut oil and local processing costs. Under this assumption, if the proposed market reforms take place, farmers should be able to sell more to exporters at higher prices. In recent years Senegal has produced a total of around 1m tons of groundnuts.³⁴⁹ Assuming that 350,000 tons continue to be consumed locally and

³⁴⁷ World Bank. 2016. *Competitiveness and comparative advantage of the groundnut value chain in Senegal*, Annex 1, p. 7

³⁴⁸ CNIA. 2017. *Situation collective commercialization des arachides 28eme semaine*

³⁴⁹ USDA. 2017. *Production, Supply and Distribution Database*. Available at: <https://apps.fas.usda.gov/psdonline/app/index.html#/app/home>

another 150,000 are lost due to challenges in post-harvest handling,³⁵⁰ roughly 500,000 tons of groundnuts would be available for export. Using a conversion rate between nuts in shell and kernel of 57.228%,³⁵¹ this yields 286,140 tons of kernel available for export. Given that global exports of groundnuts in recent years have exceeded 3 million tons and have almost reached 4 million in 2016/17,³⁵² it is assumed that the global market could absorb Senegalese exports. At a current price of USD1.89 per kg of groundnut kernel, the Senegalese groundnut market would generate net revenue of USD540,804,600 or F CFA 302,850,576,000 (using an exchange rate of 560 F CFA/USD). Taking the farmgate prices paid by exporters in the 2015/16 season for raw groundnuts of between 250 and 300 F CFA per kg as the production cost, this yields net profits for the Senegalese value chain of between F CFA 152,850,576,000 and F CFA 177,850,576,000.

In summary, by switching to producing for whole nut exports as opposed to domestic groundnut oil production, the Senegalese groundnut market stands to generate profits between F CFA 153 and 178 billion (between USD 257,575,758 and 299,663,300).

Processors' profits

To make up for foregone revenue from groundnut oil production, domestic oil producers could focus on the refining of imported crude palm oil. Domestic demand for groundnut oil has averaged 12,000 tons in between 2010 and 2016.³⁵³ This demand, equivalent to 13,143,768 liters,³⁵⁴ would have to be covered by imported palm oils. Given an international palm oil price of US\$0.55 or 306.76 F CFA per liter and a conversion rate of 0.95 between crude and refined palm oil,³⁵⁵ Senegalese refiners would have to purchase 13,835,545.26 liters of crude palm oil at a cost of F CFA 4,244,210,526.32. At current prices of F CFA 1,500 to 2,000 per liter of refined palm oil in Senegalese stores, the revenue should lie somewhere between F CFA 19,715,652,000 and F CFA 26,287,536,000. Assuming production costs equivalent to those of groundnut oil, which averaged 29 percent of revenue of for SONACOS between the years 201 and 2016, **the profits would lie between F CFA 9,753,902,393.68 and F CFA 14,419,940,033.68 (between USD 16,420,711.10 and USD 24,275,993.32).**

³⁵⁰ Gain. 2016. Oilseeds and Products Annual 2016

³⁵¹ CNIA. 2017. *Situation collecte commercialization des arachides 28eme semaine*

³⁵² USDA (2017)

³⁵³ USDA (2017)

³⁵⁴ Assuming a conversion rate between 1 liter = 912.98 gram of palm oil (<http://www.webconversiononline.com/weightof.aspx?quantity=1&measure=liter&ingredient=palmoil>)

³⁵⁵ Presentation by Prof. Abd Karim Alias (<https://www.youtube.com/watch?v=F71jVjBK6FU>)

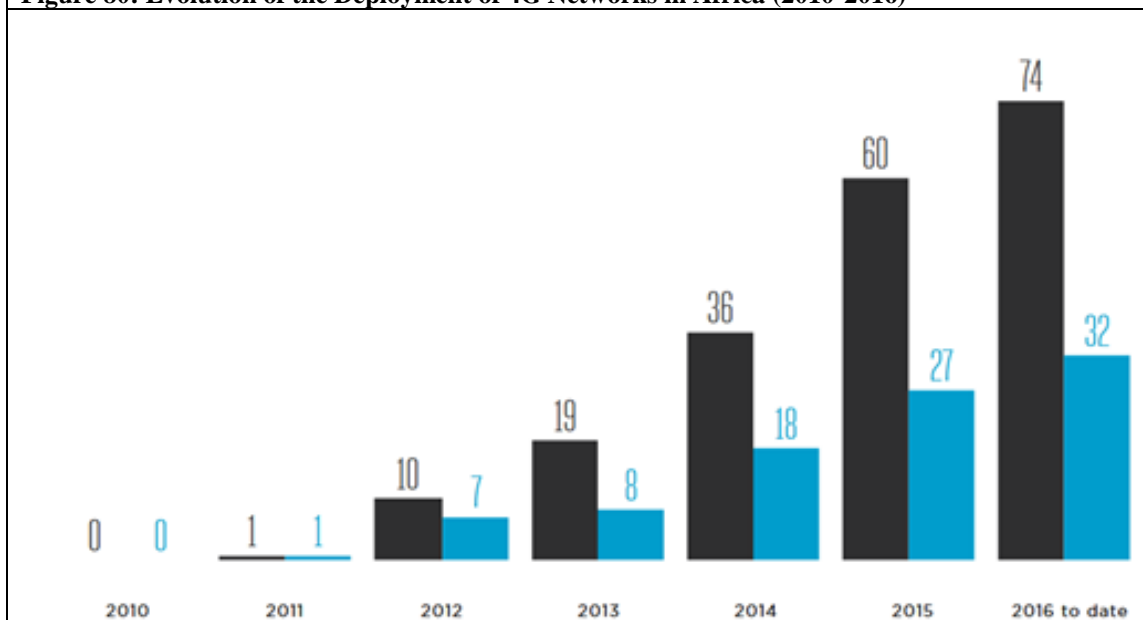
Annex 6: Telecommunications

Ranking	Country	Q1 2016	Q2 2016	Q3 2016	Q4 2016	Q1 2017	Q2 2017
1	Egypt	2,64	2,38	2,38	1,47	1,19	1,17
2	Tunisia	2,01	1,97	1,85	1,79	1,78	1,66
3	Ghana	1,67	2,16	2,10	2,04	2,17	2,24
4	Nigeria	3,62	3,46	2,32	2,29	2,29	2,25
5	Kenya	2,34	2,36	2,35	2,35	2,31	2,30
6	Tanzania	3,73	3,72	3,73	3,74	2,36	2,34
7	Ethiopia	3,26	3,21	3,15	4,16	3,07	3,03
8	Rwanda	3,84	4,18	4,06	4,12	3,06	3,04
9	Sudan	2,84	2,18	3,19	3,04	2,99	3,18
10	Mauritius	3,12	3,18	3,17	3,13	3,15	3,23
11	Sierra Leone	14,75	6,29	4,55	4,50	3,47	3,38
12	Guinea	3,57	3,62	3,81	3,76	3,69	3,76
13	South Africa	3,74	3,33	3,55	3,59	3,78	3,88
14	Gambia	4,83	4,43	4,44	5,92	4,30	4,19
15	Uganda	1,48	1,51	1,50	1,43	1,41	4,23
16	Namibia	3,49	3,68	3,92	3,97	4,18	4,64
17	Madagascar	4,75	4,74	4,98	4,67	4,75	4,86
18	Cape Verde	5,01	5,14	5,07	4,90	4,83	4,98
19	Liberia	10,55	5,00	5,00	5,00	5,00	5,00
20	Malawi	7,27	7,59	5,75	5,73	5,70	5,69
21	Mali	10,52	6,25	6,17	5,97	5,90	6,21
22	Botswana	5,24	5,93	6,10	6,14	6,19	6,25
23	Burundi	6,22	6,17	5,81	5,79	6,01	6,40
24	Libya	6,67	6,86	6,65	6,51	6,45	6,60
25	Cameroon	2,95	3,02	6,84	8,83	6,53	6,73
26	Burkina Faso	9,32	9,54	9,42	6,91	6,83	7,20
27	Zambia	6,39	7,07	6,93	6,11	6,17	7,64
28	Mozambique	6,80	5,80	4,59	5,79	6,64	7,91
29	Benin	8,02	6,94	6,85	6,49	6,55	8,08
30	Algeria	7,48	7,36	6,87	10,97	8,25	8,31
31	Morocco	10,28	10,40	8,26	8,09	8,05	8,32
32	Senegal	8,24	8,44	8,33	8,07	7,97	8,40
33	Lesotho	7,00	7,37	7,86	7,95	8,37	8,57
34	Niger	9,06	5,17	5,10	8,23	8,13	8,57

35	Togo	12,25	12,55	8,70	8,42	8,32	8,77
36	D.R Congo	8,29	8,29	8,29	8,29	8,80	8,80
37	Zimbabwe	12,91	8,95	8,95	8,95	8,95	8,95
38	Gabon	11,00	11,26	11,55	12,43	9,19	9,48
39	Mauritania	11,02	10,26	10,08	10,04	8,40	9,95
40	Comoros					8,68	10,09
41	Congo Brazzaville	8,60	8,09	7,99	4,25	10,09	10,40
42	Sao Tome and Principe	11,88	10,86	10,67	10,27	10,14	10,70
43	Cote d'Ivoire	8,31	8,51	8,40	8,26	8,16	10,78
44	Chad	11,20	10,09	9,97	10,95	10,82	11,15
45	Central African Republic	11,40	11,67	11,53	11,15	11,01	11,35
46	Swaziland	10,14	10,69	11,39	11,52	12,13	12,42
47	Seychelles	15,18	15,13	14,04	13,94	13,88	13,76
48	Angola	8,08	7,60	7,57	17,97	17,97	19,29
49	South Sudan		3,48	3,48	39,36	38,67	37,67
50	Guinea-Bissau	13,82					66,43
51	Somalia						

Source: <http://www.researchictafrica.net>.

Figure 80: Evolution of the Deployment of 4G Networks in Africa (2010-2016)



Source: GSMA Intelligence

Figure 81: 2G/3G Coverage Areas by the Different Mobile Operators

SONATEL

2G COVERAGE

Legend:
• Deep Indoor
• Indoor (intermediate)
• Indoor
• Outdoor

3G COVERAGE

Legend:
• Deep Indoor
• Indoor (intermediate)
• Indoor
• Outdoor

TIGO

2G COVERAGE

Legend:
• Rflev >= -92 dBm

3G COVERAGE

Legend:
• RSCP >= -100 dBm

EXPRESSO

2G COVERAGE

Carte de Couverture
• Très bonne couverture
• Couverture Faible
• Couverture Inexistante

3G COVERAGE

Carte de Couverture 3G
• Zones couvertes par le 3G
• Zones à faible couverture 3G
• Couverture 3G inexistante

NB: For Expresso, 3G coverage is only identified in green

Source: Stratégie Sénégal Numérique 2025, pp. 11-12.

Annex 7: Review of the ECOWAS and WAEMU competition law frameworks

ECOWAS competition law framework

ECOWAS was established in Lagos on 28 May 1975 (amended by the Cotonou Treaty from 24 July 1993) with the mission of integrating West African States' economies and societies to boost development and welfare. Although there is no explicit reference to it in the Treaty, the development of a regional competition policy and competition law can be understood as stemming from the ECOWAS Treaty objective of establishing a

common market. ECOWAS core competition law framework was adopted in 2008 and consists of: (i) the Supplementary Act A/SA.1/06/08,³⁵⁶ adopting substantive competition law rules; and (ii) the Supplementary Act A/SA.2/06/08 establishing a regional competition authority for ECOWAS, that should cooperate with national and regional competition authorities, especially in the West African and Monetary Union (WAEMU).³⁵⁷

ECOWAS competition rules are to be enforced by the Regional Competition Authority, which is yet to be established.³⁵⁸ A Consultative Committee is established to work closely with the Regional Authority and that will be formed by two representatives from each Member State who are experts in the field of competition³⁵⁹ and an additional representative from a sector-specific regulator or of a professional association whenever the issue dealt by the authority is economically important to that sector (Article 13(5)).³⁶⁰ A mechanism of consultation between ECOWAS and WAEMU's regional authorities is also foresaw in the ECOWAS Treaty, in order to address potential jurisdictional conflicts and to develop capacity building programs at both national and regional levels.³⁶¹

Under ECOWAS law, Member States may adopt and enforce their own national rules provided they are not inconsistent with ECOWAS competition rules³⁶² and that all inconsistencies are eliminated within the shortest time possible.³⁶³ Hence, ECOWAS' Member States remain free to enforce their national competition rules in relation to anticompetitive practices without an effect on the ECOWAS regional market: in effect, pursuant to ECOWAS' Supplementary Act A/SA.1/06/08, the regional competition rules only apply to *"agreements, practices, mergers and distortions caused by Member States which are likely to have an effect on trade within ECOWAS."*³⁶⁴

In terms of scope of application, Supplementary Act A/SA.1/06/08 establishes that the rules on competition shall also be applicable to SOEs.³⁶⁵ On the other hand, the following activities may be excluded from the scope of the Supplementary Act: (i) labor-related matters, including collective bargaining agreements; (ii) activities excluded by treaty or international agreement; (iii) professional associations' activities that develop professional standards necessary to protect the public; and (iv) any other activity excluded by the Council of Ministers after consultation with the ECOWAS Competition Authority.³⁶⁶

³⁵⁶ Acte Additionnel A/SA.1/06/08 Portant Adoption des Regles Communautaires de la Concurrence et de Leurs Modalités D'Application au Sein de la CEDEAO, Article 4(1)

³⁵⁷ Acte Additionnel A/SA.2/06/08 Portant Création, Attributions et Fonctionnement de L'Autorité Régionale de la Concurrence de la CEDEAO.

³⁵⁸ Article 13(1) of Supplementary Act A/SA.1/06/08' and Articles 2 and 7 of Supplementary Act A/SA.1/06/08.

³⁵⁹ Supplementary Act A/SA.1/06/08, Article 13(4).

³⁶⁰ Supplementary Act A/SA.1/06/08, Article 13(5).

³⁶¹ Article 14 of the WAEMU Treaty (WAEMU and ECOWAS overlap in dealing with the same geographic region (all members of the former are also members of the latter but not the other way around).

³⁶² Article 13(6) of Supplementary Act A/SA.1/06/08.

³⁶³ Article 12(2) of Supplementary Act A/SA.1/06/08.

³⁶⁴ Article 4(1) of Supplementary Act A/SA.1/06/08.

³⁶⁵ Supplementary Act A/SA.1/06/08, Article 5(3).

³⁶⁶ Supplementary Act A/SA.1/06/08, Article 5(2).

ECOWAS competition law includes a prohibition of anticompetitive agreements and of abuse of a dominant position. Article 5 prohibits “*all agreements between enterprises, decisions by associations of enterprises and concerted practices which may affect trade between ECOWAS Member States and the object or effect of which are or may be the prevention, restriction, distortion or elimination of competition within the Common Market.*” Conduct that infringes Article 5(1) is null and void in the Member States of ECOWAS.³⁶⁷ This includes agreements, decisions by associations of enterprises and concerted practices that:

- directly or indirectly fix purchase or selling prices, terms of sale, or any other, trading conditions;
- limit or control production, markets, technical development, or investment;
- share markets, customers, or sources of supply;
- apply dissimilar conditions to equivalent transactions with other trading parties; thereby placing them at a competitive disadvantage; or
- make the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts.³⁶⁸

The ECOWAS regional authority can exempt from the Article 5(1) prohibition those agreements, decisions by associations of enterprises and concerted practices that contribute “to improving the production or distribution of goods or to promoting technical or economic progress, while allowing consumers a fair share of the resulting benefit”. Exemptions can be granted insofar as they do not: (i) impose on the concerned enterprises, restrictions which are not indispensable to the attainment of these objectives; and (ii) afford such enterprises the possibility of eliminating competition in respect of a substantial part of the products in question. The regional authority may also authorize any person to engage in the practices prohibited by the Supplementary Act in accordance with the conditions to be defined in a subsequent (and not yet approved) Supplementary Act.³⁶⁹

Both the acquisition and abuse of a dominant position are prohibited under Article 6 of Supplementary Act A/SA.1/06/08. The following constitute a non-exhaustive list of behaviours which constitute an abuse of dominance:

- limiting access to a relevant market or otherwise unduly restraining competition;
- directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions;
- limiting production, markets or technical development to the prejudice of consumers;
- applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage;
- making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts.

³⁶⁷ Supplementary Act A/SA.1/06/08, Article 5(3).

³⁶⁸ Supplementary Act A/SA.1/06/08, Article 5(2).

³⁶⁹ Supplementary Act A/SA.1/06/08, Article 11(3).

The Supplementary Act A/SA.1/06/08 determines that mergers, takeovers, joint ventures, acquisitions and other business combinations shall be prohibited when the resulting market share leads to an abuse of dominance resulting in a substantial reduction of competition in the ECOWAS Common Market.³⁷⁰ However, ECOWAS competition rules do not yet establish any mechanism of review of mergers in the Common Market, meaning they are only subject to control under national competition law merger regimes.

Supplementary Act A/SA.2/06/08 provides further details on how to analyse the effects of a merger in ECOWAS, determining that the Regional Competition Authority shall analyze “any potential for technical and economic progress created by the proposed transaction, which may be in the interest of the consumer and may not constitute a hindrance to competition.”³⁷¹ Mergers can, however, be authorised or exempted if the transaction is in the public interest.³⁷² Although this concept is not defined, Supplementary Act A/SA.2/06/08 determines that the following elements should be taken into account when authorizing a merger:

- the vulnerability of the sectors concerned;
- the impact that the said agreement or practices will have on the capacity of small and medium enterprises to effectively compete;
- the promotion of socio-economic development within the Community; and
- any other relevant consideration.³⁷³

Supplementary Act A/SA.1/06/08 also has a set of competitive neutrality rules regulating the activity of the State in the market. Pursuant to Article 8 of the Supplementary Act, “any aid granted by a Member State or through State resources in any form whatsoever which distorts or threatens to distort competition by favoring certain enterprises or the production of certain goods shall, in so far as it affects trade between Member States, be incompatible with the ECOWAS Common Market.” According to Article 8(2), the following categories of State aid are compatible with the Common Market: (i) aid having a social character, granted to individual consumers, provided that such aid is granted without discrimination related to the origin of the products concerned; and (ii) aid to remedy the damage caused by natural disasters or exceptional occurrences. Then, under Article 8(3), the following types of aid may be considered as compatible with the Common Market:

- aid to promote the socioeconomic development of areas of the Community where the standard of living is exceptionally low or in which there is serious underemployment;
- aid to promote the execution of an important project of Community interest or to remedy a serious disturbance in the economy of a Member State;

³⁷⁰ Supplementary Act A/SA.1/06/08, Article 7(1).

³⁷¹ Supplementary Act A/SA.2/06/08, Article 4(2)(iv).

³⁷² Supplementary Act A/SA.1/06/08, Article 7(3).

³⁷³ Supplementary Act A/SA.2/06/08, Article 4(3).

- aid to facilitate the development of certain economic activities or of certain economic areas, where such aid does not adversely affect trading conditions to an extent contrary to the common interest;
- aid to promote culture and heritage conservation where such aid does not affect trading conditions and competition in the Community to an extent that is contrary to the common interest; and
- such other categories of aid as may be specified by a decision of the Authority of Heads of State and Government on the recommendation of the Council of Ministers acting on a proposal from the ECOWAS Competition Authority.

Notwithstanding the prohibition to grant State aid incompatible with the internal market, ECOWAS has not yet adopted any rules or Guidelines on State aid. Thus, there is no mechanism in place to assess the compatibility of State aid measures or guidance on how to evaluate whether the conditions set forth in Supplementary Act A/SA.1/06/08 are met.³⁷⁴

In addition to including State aid rules, Supplementary Act A/SA.1/06/08 establishes that Member States should neither enact nor maintain in force measures contrary to the ECOWAS' competition rules as regards public enterprises and enterprises to which the State grants exclusive and special rights.³⁷⁵ Competition rules are also applicable to enterprises that are entrusted with operating services of general economic interest or that have the character of a revenue-producing monopoly, insofar as it does not obstruct them from performing their specifically assigned tasks.³⁷⁶

WAEMU competition law framework

With the aim of establishing a Common Market, one of the objectives of WAEMU is to introduce “common competition rules that apply to public and private companies and to public subsidies”.³⁷⁷ WAEMU was established on 10 January 1994 by the Treaty of Dakar, which was signed by seven West African countries, which share a common external tariff and a single currency, the CFA franc: Benin, Burkina Faso, Côte d'Ivoire, Mali, Niger, Senegal and Togo (joined by Guinea-Bissau on 2 May 1997). The WAEMU's Treaty Preamble determines that Member States are committed to respect the principles of a market economy that is competitive and favors an optimal allocation of resources.

WAEMU's competition law addresses the main forms of anticompetitive conduct, as well as anticompetitive State aid. The primary competition rules of WAEMU are set forth in the Treaty.³⁷⁸ Article 88 of the Treaty prohibits:

“(a) Agreements, associations and concerted practices among companies having the aim or effect of restricting or distorting free competition within the Union;

³⁷⁴ Supplementary Act A/SA.1/06/08, Article 8(3).

³⁷⁵ Supplementary Act A/SA.1/06/08, Article 8(1).

³⁷⁶ Supplementary Act A/SA.1/06/08, Article 8(2).

³⁷⁷ WAEMU Treaty, Article 76(c).

³⁷⁸ WAEMU Treaty, Section III, paragraph 4.

- (b) Any practice by one or more companies amounting to an abuse of dominant position in the common market or in a significant part thereof;*
(c) State aid liable to distort competition by favoring specific companies or products.”

Although the WAEMU Treaty entered into force in 1994, implementing regulations and guidelines on the competition rules were only adopted in 2002. According to Article 89 of the WAEMU Treaty, the Council of Ministers may adopt organizational rules for the Commission and implementing regulations on the prohibitions listed in article 88 and the penalties for violating those prohibitions.³⁷⁹ The following competition regulations and directives have been adopted pursuant to the WAEMU Treaty:

- Regulation No. 02/2002/CM/UEMOA relating to anti-competitive practices within the West African Economic and Monetary Union;
- Regulation No. 03/2002/CM/UEMOA relating to procedures governing cartels and abuse of dominant position within the West African Economic and Monetary Union;
- Regulation No. 04/2002/CM/UEMOA relating to State aid within the West African Economic and Monetary Union;
- Directive No. 01/2002/CM/UEMOA relating to transparency in financial relations between member States and public enterprises and between member States and international and foreign organizations; and
- Directive No. 01/2002/CM/UEMOA relating to cooperation between the Commission and the competition structures of member States for the implementation of articles 88, 89 and 90 of the constituent Treaty of the West African Economic and Monetary Union.

Under Regulation 02/2002/CM/UEMOA, anticompetitive practices are prohibited and void without the need for a prior decision.³⁸⁰ In this regard, the Regulation prohibits all agreements between undertakings, decisions by associations of undertakings and concerted practices which may affect trade between Member States and which have as their object or effect the prevention, restriction or distortion of competition within the internal market. This prohibition covers, in particular, those agreements that:

- Limit access to the market or other companies' freedom to compete;
- Directly or indirectly fix prices, selling prices, or that generally hinder the setting of prices by the market and artificially result in a price increase or decrease; in particular, agreements between companies at different vertical stages aimed at establishing resale price;
- Share markets or sources of supply, especially, agreements between production or distribution companies establishing an absolute territorial protection;
- Limit or control production, markets, technical development, or investment; Apply dissimilar conditions to equivalent transactions with other trading parties;
- Make the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts.

³⁷⁹ Pursuant to a two-thirds majority.

³⁸⁰ Règlement N° 02/2002/CM/UEMOA relatif aux pratiques anticoncurrentielles à l'intérieur de l'UEMOA, Article 2

The standard for assessing competition law exemptions in WAEMU is primarily based-upon efficiency. Pursuant to Article 89(3) of the WAEMU Treaty, the Commission may declare Article 88(a) of the WAEMU Treaty inapplicable in the case of: any agreement or category of agreements between undertakings, any decision or category of decisions by associations of undertakings, any concerted practice or category of concerted practices, which contributes to improving the production or distribution of goods or to promoting technical or economic progress, while allowing consumers a fair share of the resulting benefit, and which does not: (i) impose on the undertakings concerned restrictions which are not indispensable to the attainment of these objectives; (ii) afford such undertakings the possibility of eliminating competition in respect of a substantial part of the products in question.³⁸¹ In addition to individual exemptions which are given for a limited time period,³⁸² Regulation 03/2002/CM/UEMOA enables the WAEMU Council to adopt category exemptions to specialization agreements, research & development and technology transfer agreements.³⁸³

Pursuant to Regulation N° 02/2002/CM/UEMOA, any abuse by one or more undertakings of a dominant position within the internal market or in a substantial part of it shall be prohibited as incompatible with the internal market in so far as it may affect trade between Member States.³⁸⁴ Such abuse may consist in:

- Directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions;
- Limiting production, markets or technical development to the prejudice of consumers;
- Applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage;
- Making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts.

The prohibition of abuse of a dominant position also encompasses mergers that create or reinforce a dominant position, which significantly impede effective competition in the market.³⁸⁵ Notwithstanding the existing legal gap, a concentration shall be deemed to arise where a change of control on a lasting basis results from: (i) the merger of two or more previously independent undertakings or parts of undertakings; (ii) the acquisition, by one or more persons already controlling at least one undertaking, or by one or more undertakings, whether by purchase of securities or assets, by contract or by any other

³⁸¹ Règlement N° 02/2002/CM/UEMOA relatif aux pratiques anticoncurrentielles à l'intérieur de l'UEMOA, Article 7

³⁸² Règlement N° 03/2002/CM/UEMOA relatif aux procédures applicables aux ententes et abus de position dominante à l'intérieur de l'UEMOA, Article 7

³⁸³ Règlement N° 03/2002/CM/UEMOA relatif aux procédures applicables aux ententes et abus de position dominante à l'intérieur de l'UEMOA, Article 6.2

³⁸⁴ Règlement N° 02/2002/CM/UEMOA relatif aux pratiques anticoncurrentielles à l'intérieur de l'UEMOA, Article 4.2

³⁸⁵ Règlement N° 02/2002/CM/UEMOA relatif aux pratiques anticoncurrentielles à l'intérieur de l'UEMOA, Article 4.1

means, of direct or indirect control of the whole or parts of one or more other undertakings; or (iii) the creation of a joint venture performing on a lasting basis all the functions of an autonomous economic entity.³⁸⁶ However, there is no secondary legislation that establishes a framework for the analysis by the WAEMU Commission of the likely anticompetitive effects of a merger.

The WAEMU Treaty has specific rules on State aid with Article 88(c) determining the incompatibility with the internal market of any aid granted by a Member State or through State resources in any form whatsoever which distorts or threatens to distort competition by favoring certain undertakings or the production of certain goods shall, in so far as it affects trade between Member States. The conditions specifying in which circumstances State aid is illegal are specified in Regulation N° 04/2002/CM/UEMOA,³⁸⁷ pursuant to which new state aid must be notified to the Commission³⁸⁸ and is subject to a standstill effect, i.e., it cannot be adopted before the Commission's approval.³⁸⁹ In assessing the compatibility of State aid, the Commission takes into account the needs of Member States in what concerns their economic and social development.³⁹⁰ When aid is declared illegal, the WAEMU Commission may order its recovery by the Member State concerned.³⁹¹ In case of failure to comply, the Commission can issue a press release and proceed with the suspension of financial assistance by the WAEMU to the Member State and the submission of a recommendation to the recommendation to the West African Development Bank to review its operational policy regarding the Member State.³⁹²

As per anticompetitive State action, Articles 4(a), 7 and 76(c) of the WAEMU Treaty set forth that Member States shall neither enact nor maintain in force any measure contrary to the rules contained in the Regulation or secondary legislation. In the case of public undertakings and undertakings to which Member States grant special or exclusive rights, they shall neither enact nor maintain in force any measure contrary to the rules contained in Article 88(a) and (b) of the WAEMU Treaty. Member States shall also not enact measures that enable private enterprises to escape the prohibitions of Article 88(a) and (b) of the WAEMU Treaty (anticompetitive agreements and abuse of dominance).³⁹³

³⁸⁶ Règlement N° 02/2002/CM/UEMOA relatif aux pratiques anticoncurrentielles à l'intérieur de l'UEMOA, Article 4.3

³⁸⁷ Règlement N° 02/2002/CM/UEMOA relatif aux pratiques anticoncurrentielles à l'intérieur de l'UEMOA, Article 5 and o N° 04/2002/CM/UEMOA relatif aux aides d'Etat à l'intérieur de l'UEMOA et aux modalités d'application de l'article 88 (c) du Traité

³⁸⁸ Règlement N° 04/2002/CM/UEMOA relatif aux aides d'Etat à l'intérieur de l'UEMOA et aux modalités d'application de l'article 88 (c) du Traité, Article 5

³⁸⁹ Règlement N° 04/2002/CM/UEMOA relatif aux aides d'Etat à l'intérieur de l'UEMOA et aux modalités d'application de l'article 88 (c) du Traité, Article 6

³⁹⁰ Règlement N° 04/2002/CM/UEMOA relatif aux aides d'Etat à l'intérieur de l'UEMOA et aux modalités d'application de l'article 88 (c) du Traité, Article 2.2

³⁹¹ Règlement N° 04/2002/CM/UEMOA relatif aux aides d'Etat à l'intérieur de l'UEMOA et aux modalités d'application de l'article 88 (c) du Traité, Article 16

³⁹² UNCTAD. 2007. Voluntary peer review of competition policy: West African Economic and Monetary Union, Benin and Senegal, pp. 16-17

³⁹³ Règlement N° 02/2002/CM/UEMOA relatif aux pratiques anticoncurrentielles à l'intérieur de l'UEMOA, Article 6.1

To enforce these provisions, the WAEMU Commission has the right to give recommendations and impose modifications to member countries' national legislations when the latter are likely to impact negatively on competition within the region.

Undertakings entrusted with the operation of services of general economic interest or having the character of a revenue-producing monopoly shall be subject to WAEMU Treaty's rules on competition, in so far as the application of such rules does not obstruct the performance, in law or in fact, of the particular tasks assigned to them.

For this purpose, the Commission may give exemptions from Article 88(a) and (b) of the WAEMU Treaty on anticompetitive agreements and abuse of dominance.³⁹⁴ In case a Member State fails to comply, the Commission may bring an action before the Court of Justice pursuant to the Additional Protocol 1 of the WAEMU Treaty.

The WAEMU Commission has exclusive competence to enforce the competition rules,³⁹⁵ even though National Competition Authorities (NCAs) participate in the Competition Advisory Committee, which issues a non-binding opinion prior to the Commission's decision.³⁹⁶ The WAEMU Commission has exclusive competence to investigate: State aids; anticompetitive State practices; and Anticompetitive practices with a cross border effect.³⁹⁷ Before issuing a decision on an anticompetitive practice, the Commission must first obtain a non-binding opinion issued by the Advisory Committee consisting of two members appointed by each Member State.³⁹⁸ NCAs perform a secondary role in the enforcement of WAEMU competition rules. Their role is limited to a permanent monitoring of the national markets in order to identify failures stemming from anticompetitive practices,³⁹⁹ and to cooperate with the WAEMU Commission during the investigation stage.⁴⁰⁰ Whilst the WAEMU Commission is under the obligation to inform

³⁹⁴ Règlement N° 02/2002/CM/UEMOA relatif aux pratiques anticoncurrentielles à l'intérieur de l'UEMOA, Article 6.2

³⁹⁵ Article 90 of the WAEMU Treaty.

³⁹⁶ Directive N° 02/2002/CM/UEMOA Relative à la Coopération entre la Commission et les Structures Nationales de Concurrence des États Membres pour l'Application des Articles 88, 89 et 90 du Traité de l'UEMOA, Article 4

³⁹⁷ Directive N° 02/2002/CM/UEMOA Relative à la Coopération entre la Commission et les Structures Nationales de Concurrence des États Membres pour l'Application des Articles 88, 89 et 90 du Traité de l'UEMOA, Article 5.2. The Commission also has exclusive competence to investigate and adopt decisions on the matters referred in the Regulations: 02/2002/CM/UEMOA on anticompetitive practices within WAEMU; N° 03/2002/CM/UEMOA, on the procedural rules applicable to anticompetitive agreements and abuses of dominance within WAEMU; and N° 04/2002/CM/UEMOA regarding State aids within WAEMU and the criteria for applying Article 88 (c) of the WAEMU Treaty concerning illegal aid (Article 5.4).

³⁹⁸ Règlement N° 03/2002/CM/UEMOA relatif aux procédures applicables aux ententes et abus de position dominante à l'intérieur de l'UEMOA, Article 28.4

³⁹⁹ Directive N° 02/2002/CM/UEMOA Relative à la Coopération entre la Commission et les Structures Nationales de Concurrence des États Membres pour l'Application des Articles 88, 89 et 90 du Traité de l'UEMOA, Article 3.1

⁴⁰⁰ Directive N° 02/2002/CM/UEMOA Relative à la Coopération entre la Commission et les Structures Nationales de Concurrence des États Membres pour l'Application des Articles 88, 89 et 90 du Traité de l'UEMOA, Article 3.4

NCA's about the investigations carried-out nationally,⁴⁰¹ the latter are subject to a wide array of obligations vis-à-vis the WAEMU Commission, including: (i) sending the requests for negative certificate; (ii) sending notifications for exemptions and complaints; (iii) sending a quarterly report to the Commission with information on market inquiries; (iv) following the implementation of the decisions establishing a sanction; (v) reporting state aids and sending quarterly report to the Commission; and (vi) issuing an annual report on competition in the country.⁴⁰²

Similarly to the European Commission, the WAEMU Commission is not an agency independent from the executive. The Commission is formed by eight Commissioners, one of which has specific competences in the field of competition. This Commissioner supervises the Directorate of Competition which is part of the Département du Marché Régional, du Commerce, de la Concurrence et de la Coopération (DMRC). However, and despite there being secondary legislation on competition law since 2002, the Competition Directorate was only established in 2007.⁴⁰³

Despite having broad powers of investigation, the WAEMU Commission faces bureaucratic constraints that hinder the effectiveness of enforcement. The Commission's powers of investigation are set forth in Regulation No. 03/2002. Pursuant to the Regulation, the Commission has the power to elaborate sector inquiries; issue negative certificate as regards anticompetitive agreements and abuse of dominance;⁴⁰⁴ issue injunctions;⁴⁰⁵ prohibit, undo or impose remedies once it is informed of an illegal merger,⁴⁰⁶ as well as impose interim measures, including sanctions in case of non-compliance.⁴⁰⁷ To gather evidence on anticompetitive practices, the WAEMU Commission can take possession and make copies of documents, carry-out on-site Interrogations, perform raids and access all places necessary and request cooperation from the Authorities of the Member States.⁴⁰⁸ Inspections can be made directly by the Commission or by national authorities at the Commission's request. The inspection mandate sets out the inspection's objective, scope and consequences in case of non-compliance. Every action by the Commission, be it an investigation, inquiry or other procedural action (including

⁴⁰¹ Directive N° 02/2002/CM/UEMOA Relative à la Coopération entre la Commission et les Structures Nationales de Concurrence des États Membres pour l'Application des Articles 88, 89 et 90 du Traité de l'UEMOA, Article 5.3

⁴⁰² Directive N° 02/2002/CM/UEMOA Relative à la Coopération entre la Commission et les Structures Nationales de Concurrence des États Membres pour l'Application des Articles 88, 89 et 90 du Traité de l'UEMOA, Article 3.3

⁴⁰³ Mor Bakhoun and Julia Molestina, Institutional Coherence and Effectivity of a Regional Competition Policy: the Case of the West African Economic and Monetary Union (WAEMU), Max Planck Institute for Intellectual Property and Competition Law Research Paper No. 11-17, pp. 5-6

⁴⁰⁴ Règlement N° 03/2002/CM/UEMOA relatif aux procédures applicables aux ententes et abus de position dominante à l'intérieur de l'UEMOA, Article 3

⁴⁰⁵ Règlement N° 03/2002/CM/UEMOA relatif aux procédures applicables aux ententes et abus de position dominante à l'intérieur de l'UEMOA, Article 4.1

⁴⁰⁶ Règlement N° 03/2002/CM/UEMOA relatif aux procédures applicables aux ententes et abus de position dominante à l'intérieur de l'UEMOA, Article 4.3

⁴⁰⁷ Règlement N° 03/2002/CM/UEMOA relatif aux procédures applicables aux ententes et abus de position dominante à l'intérieur de l'UEMOA, Article 6.1

⁴⁰⁸ Règlement N° 03/2002/CM/UEMOA relatif aux procédures applicables aux ententes et abus de position dominante à l'intérieur de l'UEMOA, Article 21

communications with the parties), requires a previous authorisation by its President following a request by the Competition Directorate. This centralised managerial approach severely curtails the flexibility and reduces its effectiveness overall.⁴⁰⁹

The WAEMU Commission may impose fines in case of breach of the competition rules but only after it has issued a cease and desist injunction. The fines may range between F CFA 500,000 and 100 million up to 10% of the company's turnover in the previous financial year or 10 per cent of the company's assets, depending on the seriousness and duration of the infringement in case of infringement of competition rules.⁴¹⁰ In addition, the Commission can impose a fine up to F CFA 500.000 in case companies submit wrong or false information⁴¹¹ and periodic penalty payments on companies in case of failure to comply with an injunction. In case of vexatious complaint, the Commission can impose a fine between F CFA 1.000.000 and 5.000.000.⁴¹² The sanctions imposed by the Commission do not have a criminal nature and are not to the detriment of compensation for the damages suffered by the consumers which can be redressed at the national level.⁴¹³ However, Parties can only seek redress of the damages suffered by virtue of anticompetitive practices before the national courts once the WAEMU Commission has issued a decision.⁴¹⁴

In 2000, the WAEMU Court of Justice issued a landmark Opinion on the issue of the division of competences between Commission and national Member States, which established the exclusive competence of the WAEMU in competition matters to the detriment of its Member States. The WAEMU Treaty does not provide a solution to the issue of the division of competences between WAEMU and Member States to legislate and enforce the competition rules.⁴¹⁵ However, answering to a question placed by the President of the Commission of WAEMU, the Court of Justice determined in its Opinion No. 03/2000, that member States did not have competence to regulate and monitor competition rules, stating that: *"The provisions of articles 88, 89 and 90 of the constituent Treaty of the West African Economic and Monetary Union pertain to the exclusive competence of the Union. Consequently, member States cannot exercise any competence in the area of competition covered by the Treaty [(does not preclude Member States' competence in the*

⁴⁰⁹ Mor Bakhoun and Julia Molestina. 2011. *Institutional Coherence and Effectivity of a Regional Competition Policy: the Case of the West African Economic and Monetary Union (WAEMU)*, Max Planck Institute for Intellectual Property and Competition Law Research Paper No. 11-17, p. 6

⁴¹⁰ Règlement N° 03/2002/CM/UEMOA relatif aux procédures applicables aux ententes et abus de position dominante à l'intérieur de l'UEMOA, Article 22.2

⁴¹¹ Règlement N° 03/2002/CM/UEMOA relatif aux procédures applicables aux ententes et abus de position dominante à l'intérieur de l'UEMOA, Article 22.1

⁴¹² Règlement N° 03/2002/CM/UEMOA relatif aux procédures applicables aux ententes et abus de position dominante à l'intérieur de l'UEMOA, Article 14

⁴¹³ Règlement N° 03/2002/CM/UEMOA relatif aux procédures applicables aux ententes et abus de position dominante à l'intérieur de l'UEMOA, Article 22.4

⁴¹⁴ Mor Bakhoun. 2005. *Répartition et Exercice des Compétences entre l'Union et les États Membres en Droit de la Concurrence dans l'Union Économique et Monétaire Ouest-Africaine (UEOMA)*, p. 346

⁴¹⁵ Mor Bakhoun. 2005. *Répartition et Exercice des Compétences entre l'Union et les États Membres en Droit de la Concurrence dans l'Union Économique et Monétaire Ouest-Africaine (UEOMA)*, p. 324

field of unfair competition, for instance)].⁴¹⁶ This Opinion is paramount as it sets the exclusive competence of the WAEMU Community bodies to rule on and enforce competition rules, even though it also requires a close cooperation between the Commission and national institutions.⁴¹⁷

To comply with Opinion No. 03/2000, Member States must amend their national competition laws in a way that does not conflict with WAEMU competition law, and to curtail the scope of activity of national competition authorities in accordance with the centralised model defined by the Court of Justice.⁴¹⁸ Following the issuing of Opinion No. 03/2000, Directive n° 2/2002/CM/UEMOA clearly established that Member States must conform their national laws to WAEMU's law⁴¹⁹ and adapt their national competition structures to the missions and competences set forth in the Directive.⁴²⁰ Directive n° 2/2002/CM/UEMOA prevails over national law in case of conflict⁴²¹ and can be directly invoked by individuals before national courts.⁴²²

National Competition Authorities (NCAs) have tried to circumvent the current division of competences by exploring loopholes in the Court of Justice's Opinion. For instance, the reframing of facts as an abuse of economic dependence which pertains to the field of unfair competition law, allows national authorities to prosecute conduct that would otherwise fall into the category of abuse of dominance. Although legally incorrect, this forced tailoring of the facts under the umbrella of unfair competition actually enables Member States to challenge anticompetitive conduct that would otherwise remain unchallenged by the WAEMU Commission.⁴²³

The reforms of national laws should have been completed within 6 months after the entry into force of the Directive (1 January 2003), even though this obligation has not

⁴¹⁶ Communauté économique des états de l'Afrique de l'Ouest, Cour de justice, 27 juin 2000, décision n°003/2000, available at: <http://www.juricaf.org/arret/UEMOA-COURDEJUSTICE-20000627-0032000>

⁴¹⁷ UNCTAD, Voluntary Peer Review of Competition Policy: West African Economic and Monetary Union, Benin and Senegal, 2007, p. 11

⁴¹⁸ Mor Bakhroum and Julia Molestina. 2011. *Institutional Coherence and Effectivity of a Regional Competition Policy: the Case of the West African Economic and Monetary Union (WAEMU)*, Max Planck Institute for Intellectual Property and Competition Law Research Paper No. 11-17, p. 3

⁴¹⁹ Directive N° 02/2002/CM/UEMOA Relative à la Coopération entre la Commission et les Structures Nationales de Concurrence des États Membres pour l'Application des Articles 88, 89 et 90 du Traité de l'UEMOA, Article 6.1

⁴²⁰ Directive N° 02/2002/CM/UEMOA Relative à la Coopération entre la Commission et les Structures Nationales de Concurrence des États Membres pour l'Application des Articles 88, 89 et 90 du Traité de l'UEMOA, Article 6.2

⁴²¹ WAEMU Treaty, Article 6.

⁴²² UNCTAD, UNCTAD, Voluntary Peer Review of Competition Policy: West African Economic and Monetary Union, Benin and Senegal, 2007, p. 4.

⁴²³ Mor Bakhroum and Julia Molestina. 2011. *Institutional Coherence and Effectivity of a Regional Competition Policy: the Case of the West African Economic and Monetary Union (WAEMU)*, Max Planck Institute for Intellectual Property and Competition Law Research Paper No. 11-17, p. 10; Mor Bakhroum. 2005. *Répartition et Exercice des Compétences entre l'Union et les États Membres en Droit de la Concurrence dans l'Union Économique et Monétaire Ouest-Africaine (UEOMA)*, p. 337

been enforced against Senegal.⁴²⁴ Notwithstanding the Court of Justice's Opinion No. 03/2000, Senegal has not actually revoked its Act No. 94-63 of 22 August 1994 on prices, competition and economic disputes ('Competition Act'). During the drafting of WAEMU's secondary legislation, the Senegalese Competition Commission drafted an opinion arguing against the centralised approach defended by the Court of Justice.⁴²⁵ This rejection of a centralised approach has not softened since. In fact, the Competition Commission put forward a strategic plan for the period of 2014-2017 seeking to revamp and modernise its competition law and competition authority, to disseminate a competition culture in Senegal and to effectively enforce the competition rules for the benefit of consumers, businesses and the economy.⁴²⁶ In this context, a draft law was prepared, which "*aims to incorporate merger provisions and includes, inter alia, deterrent sanctions, more investigative powers, fair trials and better protection of undertakings' rights during investigations and dawn raids. The bill also provides for a transformation of the Competition Commission to a Competition Authority, which would have more resources and the possibility to cooperate and exchange information with national, regional and international competition agencies.*"⁴²⁷ However, and despite its ambitious goals, the bill was never adopted.

⁴²⁴ Directive N° 02/2002/CM/UEMOA Relative à la Coopération entre la Commission et les Structures Nationales de Concurrence des États Membres pour l'Application des Articles 88, 89 et 90 du Traité de l'UEMOA, Article 6.3.

⁴²⁵ See Rapport 2002-2003 de la Commission Nationale de la Concurrence du Sénégal, ex vi Mor Bakhoun and Julia Molestina. 2011. *Institutional Coherence and Effectivity of a Regional Competition Policy: the Case of the West African Economic and Monetary Union (WAEMU)*, Max Planck Institute for Intellectual Property and Competition Law Research Paper No. 11-17, p. 4

⁴²⁶ Malick Diallo. 2013. *Senegal: Competition Commission*, GCRI African and Middle Eastern Antitrust Review 2014.

⁴²⁷ Malick Diallo. 2013. *Senegal: Competition Commission*, GCRI African and Middle Eastern Antitrust Review 2014.