



RESEARCH PROJECT ON TOBACCO TAXATION IN WEST AFRICA «FISCAL SOLUTIONS FOR MAXIMUM REDUCTION OF SMOKING IN WEST AFRICA»



The tax for smoking? An analysis of the relationship between the price of tobacco and quitting smoking in Nigeria and Senegal

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INTRODUCTION

It is recognized that tobacco consumption creates risks and social costs related to health care. Several efforts are made every year to reduce smoking. The World Health Organization has developed a framework convention to help countries implement a range of measures to reduce tobacco use. One of the measures is related to the increase of taxes on tobacco. However, it is reported that in more than 80% of the countries in the world, tobacco taxation does not reach the highest level of enforcement. This gap remains to be overcome in most countries with regard to the application of the tax measure. This is the case of the ECOWAS countries, where there is a lack of use of taxation as a tobacco control policy. The effectiveness of measures to increase cigarette prices on smoking behavior therefore remains to be proven. In order to potentially assess this effectiveness, CRES has carried out research on the impact of tobacco price on quitting smoking in Senegal and Nigeria. This policy brief provides information on the results of quitting smoking in these two ECOWAS countries for which data are available.

METHODOLOGY

The impact of the cigarette price on quitting smoking was measured by the percentage of chances of quitting smoking. Models of survival or duration to explain the occurrence of an event were used to calculate this percentage and to test whether quitting smoking would occur for each individual smoker. The modeled event is the probability of quitting smoking at a given time, conditional

on the smoker having already spent some time smoking. The duration of smoking is defined as the difference between the age of initiation and the age of quitting (for old smokers) or age at the time of the survey (for current smokers). Data from the Global Adult Tobacco Survey (GATS) for 2012 and 2015 were used for Nigeria and Senegal, respectively. The nationally representative survey was

conducted with people aged 15 and over living in households. A sample of 432 smokers in Nigeria and 315 smokers in Senegal were finally used for the purpose of the analysis. The range of available cigarette prices is obtained from the National Statistical Offices and extends from 2001 to 2012 for Nigeria and from 2008 to 2014 for Senegal.

RESULTS

The results of the analysis provide some evidence of a positive and significant effect of the price of tobacco on quitting smoking in Nigeria. On the other hand, no evidence was found of the relationship between the price of cigarettes and quitting smoking in Senegal. Specifically, the results of the analysis indicated that:

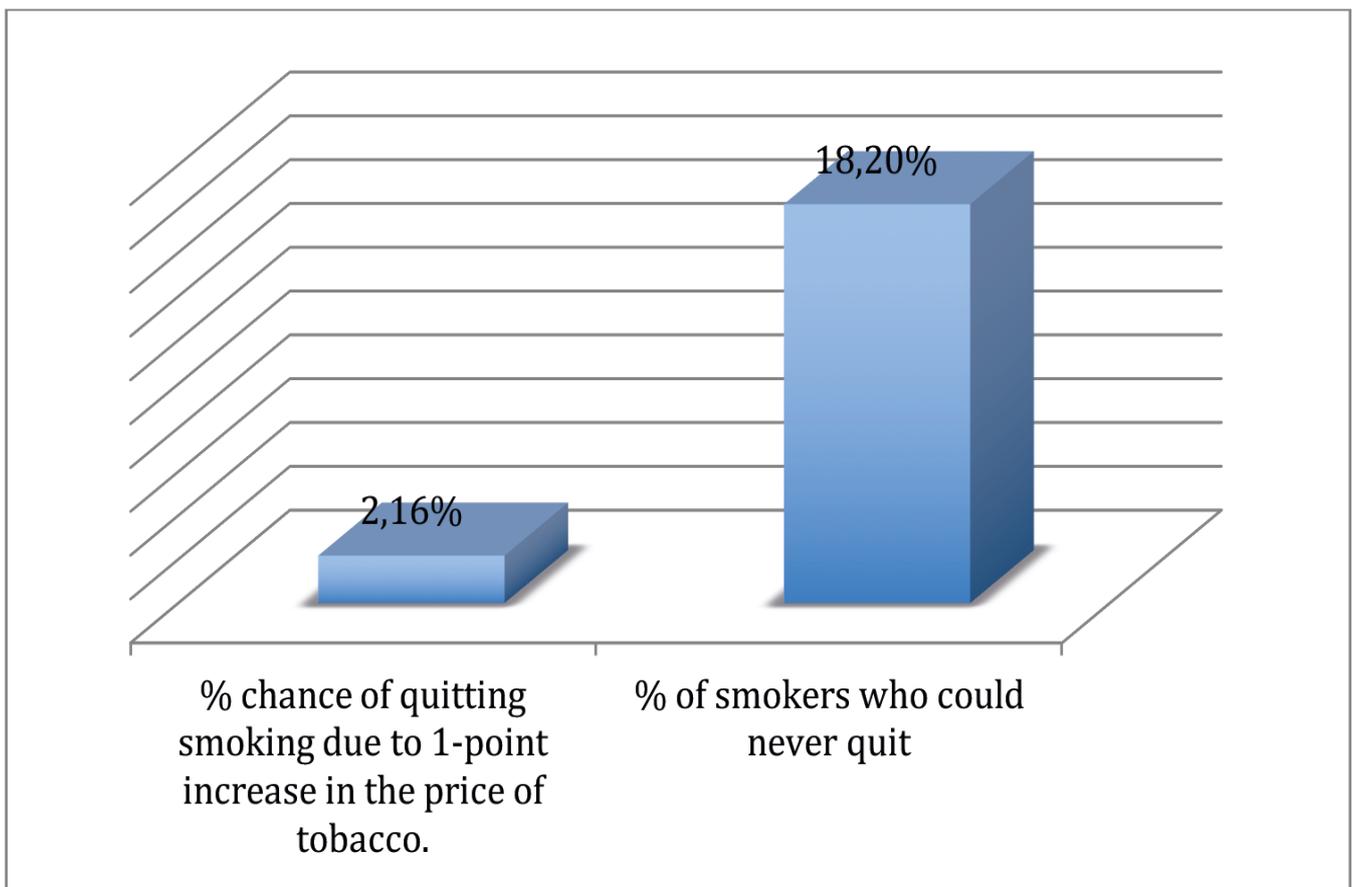
In Nigeria:

- A one point increase in the price of cigarettes

increases the chance of quitting smoking by about 2%.

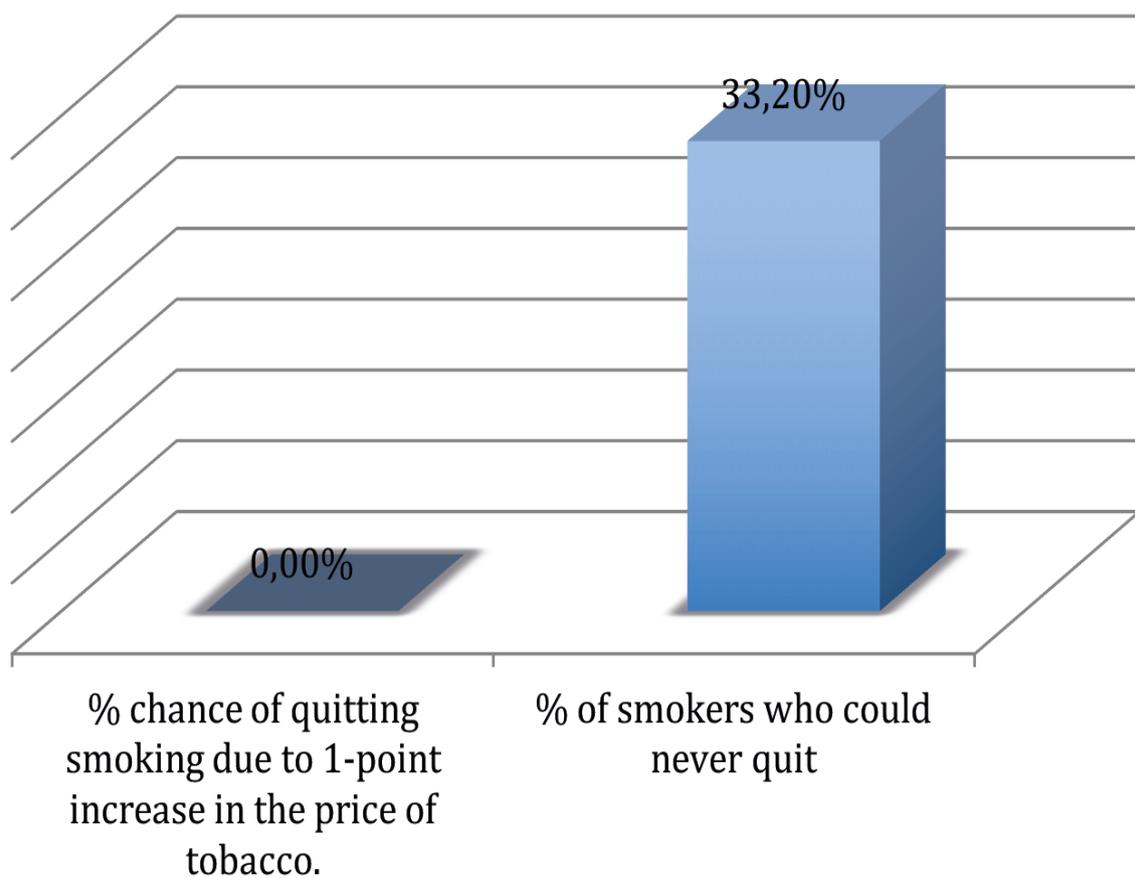
- There is a positive and significant relationship between the likelihood of quitting smoking and the smoker's approval of a tax increase on tobacco products.
- About 18% of smokers could never stop smoking.

Quitting smoking in Nigeria



- The lack of effect of the price of cigarettes on quitting smoking can be due to the existence of several different brands of cigarettes and therefore of high substitution possibilities between brands.
- The lack of a relationship between the price of smoking and quitting smoking may be due to the existence of a number of smokers already having an increased dependence on smoking.
- About 33% of smokers could never quit.

Quitting smoking Senegal



CONCLUSION AND RECOMMENDATIONS

Two main conclusions were derived from the results of the study.

- The effect of increasing the price of cigarettes on quitting smoking can be specific to each ECOWAS country.
- The price variability between cigarette brands can offer more alternatives to smokers in Senegal.
- There are opportunities to reduce the smoking rate through measures of the rising cost of tobacco purchase in Nigeria.

The following recommendations are formulated:

- It is judicious to take into account the reality of the existence of high substitution possibilities between different brands of cigarettes in Senegal.
- Complementary therapeutic measures should also be taken into account in order to reduce the duration of smoking in Nigeria and Senegal. A sizeable proportion of smokers could never stop smoking.
- The lack of evidence of the effect of cigarette price on quitting smoking in Senegal does not necessarily imply an exemption from taxation measures. The government can act on prices and thus generate tax revenues for the purpose of complementary therapeutic measures.

Le Centre de Recherche pour le Développement International (CRDI) a subventionné le Consortium pour la Recherche Economique et Sociale (CRES) pour la seconde phase de son projet de recherche sur la fiscalité des produits du tabac. Cette phase est intitulée « Des solutions fiscales pour une réduction optimale du tabagisme en Afrique de l'Ouest ». L'un des axes de cette phase avait pour objectif de faire le diagnostic de système fiscal que les pays de la CEDEAO appliquent aux produits du tabac.

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