Title: Transfers to riverside regions: their effects in a developing country

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## **Abstract**

In many countries transfers to subnational governments have had a long story on how the national governments provide economic resources to finance territorial sectoral needs. Under these conditions local governments' responsibility is to guarantee full and regular provision of basic services, in particular health, education and water supply and sanitation. Nevertheless, in many cases transfers have proven to be insufficient to fully accomplish the growing requirements and necessities especially in developing and underdeveloped countries.

For the particular case of Colombia, during the last thirty years the economic resources received by subnational governments (departments and municipalities) in the form of transfers from the central government, have been growing in real terms. Although own-source revenues have also increased and getting strengthen, the dependence on transfers have been increasing over the years reaching in many cases a participation over 75%.

The new Constitution in 1991 considered some changes within the transfers system, one of which was focusing on allocating extra transfers to specific groups of territories with particular drawbacks. One of those groups are municipalities along Magdalena River, the longest in the country which runs from south to north in an extension of 1,540 km. Riverbank communities group together a total of 111 municipalities which represent 10% of the total, and almost 11% of the country's total population. Despite the importance of these transfers, no research has been carried out in looking at the effects of the extra transfers on social and economic indicators. In particular, our purpose is to answer the following questions: i) to what extent the extra transfers received by Magdalena's riverside communities have affected socioeconomic indicators?; ii) are the effects (if any) differential across the regions? iii) have the transfers' reforms affected the amounts received by riverside communities?

In order to answer these questions, we use a difference in differences strategy in a yearly panel database. The period of time covered goes from the early nineties or the early two thousand through 2018, depending of the outcome variable considered. The identification strategy is based on the exogenous riverside condition of the 111 municipalities along the Magdalena River, which will be our treatment group. The control group is made up of the group of municipalities sharing border with the riverside municipalities, it is the second order riverside municipalities which do not benefit from the extra transfers. We believe this is an optimal control group since the only difference with the treatment group is their condition of not sharing a border with the Magdalena River. As a robustness check we also consider the riverside municipalities of the second longest river in the country (1,350 km), Cauca River, which also goes south to north parallel to Magdalena River which communities do no receive extra transfers as riverside municipalities.

The results show no significant effects on any of the social related outcomes considered, not in infant mortality related to water quality, such as gastrointestinal illness, in poverty, deforestation or general social investment. We also evaluated economic outcomes such as GDP growth and the

gross capital formation. The economic and political implications of these results shed light on the current scheme of regional focused transfers for riverside communities, making policy makers to understand if these strategies have been ineffective either because the resources are insufficient to be able to improve communities' quality of life, or because the resources have not been properly invested.

Keywords: riverside regions, subnational transfers, quality of life

JEL codes: R11, H70, I30

R11: Regional Economic Activity: Growth, Development, Environmental Issues, and

Changes

H70: State and Local Government • Intergovernmental Relations - General

I30: Welfare, Well-Being, and Poverty -General