

NARSC 2021

Call for Submissions

Special Sessions on

Regional Forensic Analysis and Informal Economy

Rafael Garduño
Universidad Panamericana, Mexico
rgardunor@up.edu.mx

Haoying Wang
New Mexico Tech
Haoying.Wang@nmt.edu

Regional forensic analysis has emerged as an important application of regional science due to the number of observed cases, technological advances, and the data science revolution. Regional scientists can use their knowledge, data analytics, and spatial methods (e.g., spatial econometrics) to diagnose and prevent undesired activities that might negatively impact individuals and society, such as the growing cybersecurity events and cross-border crimes in recent years. Regional forensic analysis can assist in diagnosing and prevent traditional criminal activities. For example, Toronto experienced several arsons that were difficult to prevent in the 90s. It was not until they studied fire accelerants' sales near the arsons before and checked the cellphone calls near the towers where arsons occurred that they managed to capture the arsonist.

Another example is the huge increase in Oxycontin sales in New Orleans in the late 90s. The spreading of the drug did not raise the alarm until years later. If these unusual activities had been analyzed earlier, the problem could have been stopped in time.

This special session aims to inspire using of regional forensic analysis in the study of the informal economy. Here we define informal economy broadly. It ranges, for instance, from illegal activities and the black market, family economy, bartering, to cryptocurrency. Crime has always hurt regional economic development. Different studies show the devastating effect crime has on different regions in the last decades, either by drying off FDI or by discouraging labor migration and economic activities. Nuñez et al. (2017) did an interesting study in Mexico, showing how crime work is a disamenity for Mexican cities affecting their regional economic performance. But that some traditional drug-trafficking regions (such as Tijuana and Culiacan), where crime appears to be the *modus-vivendi*, have learned to live with this disamenity and it does not reduce economic activity. Alvarez et al. (2017) analyze how crime, among other factors, influence the states' efficiency. They discover that crime negatively affects the efficiency of the states, but that its effect is significant after a certain level: those states (such as Sinaloa and Baja California, where Culiacan and Tijuana are located respectively) with high levels of crime tend to "learn to live with it." However, we need other studies to understand how to deal with crime to learn how to be resilient to this problem faster.

An interesting study of bartering and its effect on regional economics was realized by Caroline Humphrey (1985). Humphrey analyses how barter makes payments unnecessary, making a disintegration on the regional economy. Barter helps where money stops

functioning as a payment method, but the economic activity does not stop working. It only switches to barter. Later, Humphrey (1992) studied the case of northeast Nepal and explains how barter creates social relations that help the regional economy. It will be interesting to explore the effects barter has had on different regional economies across the globe.

Something similar happens with cryptocurrencies. This new type of currency has helped to continue making transactions even when the local currency (or even the local economy) is not working anymore. One example is what has happened in Venezuela in the last year. Due to high inflation and economic crisis, many Venezuelans have resorted to cryptocurrencies to safeguard as much of their wealth as possible before leaving Venezuela in search of a better future.

Given these considerations, there is a need to examine how regional forensic analysis can help understand informal economies in different countries and regions. This special session will allow us to learn from different cases worldwide and adapt the policy solutions to other places. Specific topics in these sessions may include but are not limited to:

- Measuring the size of the informal economy.
- Effect of crime on regional economic development.
- How cryptocurrency influences regional economic development.
- The role of the family economy in regional economic development.
- The role of bartering in regional economic development.
- Regional forensic analysis methodologies.

If you are interested in presenting your research on these topics in the special session, please submit an abstract (of up to 6,000 characters) through the conference portal. Information on how to submit it can be found [here](#). You will receive an abstract ID number once you submit it. Please send it with a copy of your abstract (with all authors' names, email, and affiliation) to [Rafael Garduño](#) or [Haoying Wang](#) NLT **June 25th, 2021**.

Bibliography

- Alvarez, A., Garduño-Rivera, R., & Nuñez, H. M. (2017). Mexico's North-South divide: The regional distribution of state inefficiency 1988–2008. *Papers in Regional Science*, 96(4), 843-858.
- Humphrey, C. (1985). Barter and economic disintegration. *Man*, 48-72.
- Humphrey, C. (1992). Fair dealing, just rewards: the ethics of barter in North-East Nepal. *Barter, exchange, and value: an anthropological approach*, 107-141.
- Nuñez, H. M., Paredes, D., & Garduño-Rivera, R. (2017). Is crime in Mexico a disamenity? Evidence from a hedonic valuation approach. *The Annals of Regional Science*, 59(1), 171-187.