



Available online at www.sciencedirect.com

ScienceDirect

Journal of Policy Modeling 37 (2015) 789–803

*Journal of
Policy
Modeling*

www.elsevier.com/locate/jpm

The informal economy of Rostov Oblast on the eve of the Ukrainian refugee crisis[☆]

Gregory Brock

Department of Finance & Economics, Georgia Southern University, Statesboro, GA 30460-8152 USA

Received 27 June 2015; received in revised form 12 July 2015; accepted 17 August 2015

Available online 24 August 2015

Abstract

Using a stochastic frontier production function at the raion (county) level of aggregation, Rostov Oblast rural economy's formal economic growth 2009–2013 is analyzed in conjunction with satellite luminosity data capturing both the formal and informal economy. Satellite luminosity data reveal a growing economy with higher levels of secondary education, access to a federal highway and availability of natural gas associated with wealthier raions. The region's ability to absorb unregistered Ukrainian refugees with both the wealthiest and one of the poorest performing raions right on the Ukrainian border is questionable though on the eve of the crisis most raions exhibited a growing informal and formal economy.

© 2015 Society for Policy Modeling. Published by Elsevier Inc. All rights reserved.

Keywords: Efficiency; Informal economy; Regional economics; Refugees

JEL classification: O17, O47, P27, R11

1. Introduction

The Ukrainian crisis has struck adjacent Rostov Oblast particularly hard with the number of unregistered refugees several times higher than the 40,000 registered refugees. As many refugees are being kept in rural areas to avoid an urban crisis, an analysis of the local economies just before

[☆] The author is grateful to logistical and computer support for this research from the Dept. of Innovations and Economic Planning (Southern Federal University – Taganrog Campus) especially Professors S. Grinenko and Y. Razvadovskaya in February/March 2015.

E-mail address: gbrock@georgiasouthern.edu

<http://dx.doi.org/10.1016/j.jpolmod.2015.08.005>

0161-8938/© 2015 Society for Policy Modeling. Published by Elsevier Inc. All rights reserved.

the refugee flow can give a sense of the ability of a Russian region to absorb one consequence of the humanitarian crisis Putin has created. Standard input/output data within a stochastic production function framework plus satellite data give a sense of how well the informal and formal sub-regional economies perform over time just prior to the crisis. The impact of Russian troop exercises and bases is unknown though rural infrastructure development is quite low.

The literature on the informal economy of Russia and the former Soviet Union indicates a struggle to measure informality using various data such as electricity consumption, adjusted GDP and household surveys (Gimpelson and Kapeliushnikov, 2014; Kim, 2013; Vorobyev, 2015) with persistent doubts that official statistical estimates are too low. Official statistics claim to include some aspects of the informal economy such as hidden wages in the value added measure of GDP but some data appear to be using just an arbitrary assumption of 9% informality across space and asset type (invest-don.com/ru/new_element 289, accessed 3/23/15). We measure the informal economy in a single Russian region – Rostov Oblast – at the raion level using satellite luminosity data that has been used to measure informality in the world economy (Ghosh et al., 2010), Mexican remittances (Ghosh, Andersen, Powell, Sutton, & Elvidge, 2009), European regions and U.S. states (Doll, Muller, & Morley, 2006) and Mexican counties within a single region (Brock, Tan, & Yarbrough, 2014). Luminosity data are assumed to capture both the formal and informal economy. The informal economy is measured by the residual when these data are compared with the official economy. While Russian regions have readily available Gross Regional Product (GRP) data, no disaggregated Gross Raion (county) Product (GCP) data exist so estimates are created to facilitate a comparison. If luminosity increases over time while GCP falls, the informal economy is growing. If the opposite occurs, the formal economy is growing. If both measures move in the same direction, the result is indeterminate though a large positive luminosity change and a tiny positive official economy change suggest the informal economy may be substantial.

Rostov Oblast is in southern Russia and contains 43 rural raions plus 12 urban centers including the capital of Rostov-on-the-Don (Fig. 1). One urban center, Taganrog, was the sole sample unit in decades long studies of Soviet/post-Soviet poverty and the informal economy (see Gustafsson & Nivorozhkina, 2005 and their literature review). However Taganrog is quite unique given the legacy of being an important historic trading port that might have been Russia's capital. Attempts by popular mayor Shilo to decentralize decision making to restore this status resulted in his still unsolved assassination with the city now run by a KGB contemporary of Putin. A few large bankrupt Soviet era firms plus a lot of Moscow based money and unclear property rights make Taganrog a difficult place to do business. Microeconomic studies that include unique data and discussions of the informal economy in Taganrog while interesting are unlikely to reflect the situation in neighboring rural raions with Taganrog possibly a "Potemkin village" for understanding Russian household poverty. The economic potential for Rostov Oblast is immense given large amounts of arable land, transshipment of goods especially natural gas, and simply the strategic location of the region within the overall federation and Southern Federal District (SFD) in particular (e.g. Belokrylova & Kiseleva, 2014). The industrial base inherited from the Soviet era may hinder growth due to low demand and outdated assets that have seen little foreign investment for a region of such importance with disproportionate federal subsidies even before the Ukrainian crisis not being effective at stimulating growth and reducing the informal economy (Markaryan, 2008). A very recent estimate using electricity consumption suggests the informal economy is between 50 and 60% of Rostov's overall economy with the sharp temporary rise in 2008 to a high of 60% suggestive of what might be happening now during the 2014–2015 crisis (Vorobyev, 2015).

Download English Version:

<https://daneshyari.com/en/article/10479333>

Download Persian Version:

<https://daneshyari.com/article/10479333>

[Daneshyari.com](https://daneshyari.com)