

The world's economic centre of gravity

Géza Tóth

Institute of World and
Regional Economics,
University of Miskolc,
Miskolc, Hungary
E-mail:
geza.toth@ksh.hu

Zoltán Nagy

Institute of World and
Regional Economics,
University of Miskolc,
Miskolc, Hungary
E-mail:
nagy.zoltan@uni-miskolc.hu

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Recently, an analysis has been conducted on the world's economic centre of gravity (Economist 2012, Grether-Mathys 2010, Quah 2011). Our aim is to examine all the countries of the world's economic centre of gravity together, while examining the continents separately. In our study, the geometric centre of the area for all countries is weighted by nominal GDP obtained from the World Bank database for the years 1970–2014 (GDP data at current US \$ market prices). Although this method can be problematic, particularly for wide-area countries, it can address the most important trends of spatial displacements. Here, we used the official map of Eurostat as a base map with ETRS89 projection.

During the study, analyses on all the countries were carried out, while the continents were analysed separately (America, Africa, Asia [including Australia and Oceania], and Europe). In our model, Russia was considered as a part of Europe. In the model, changes in the country's borders related to influencing factors including the interpretation of the illustration on the gravitational movement trends were examined, and not just the fluctuations from one year to another. We illustrated each year for reasons of visibility, in the global study; however, in the case of continents, only a period of six years was taken into account.

Globally, the economic centre of gravity moved from the northwest to the southeast, essentially without a significant overshoot. The movement from the

northwest part of Spain towards Tunisia indicates that the Northern hemisphere is still dominant, but it is steadily weakening against the Southern hemisphere. In 1970, the centre of gravity was also located in the Western Hemisphere. It shows the North American and European superiority, which had clearly moved to the Eastern hemisphere after 2008, thereby indicating a loss of position in the global economy of these regions.

In *Africa*, the centre of gravity was moving essentially close to the geometric centre of the continent during the analysed period, primarily in the Central African Republic, the Republic of Congo, and the Democratic Republic of Congo. In 1970, the centre of gravity was located in the southern part of this region. Although we can see a very small movement between the continents, in 2014, the gravity centre – after a considerable spatial dispersion – shifted northwards.

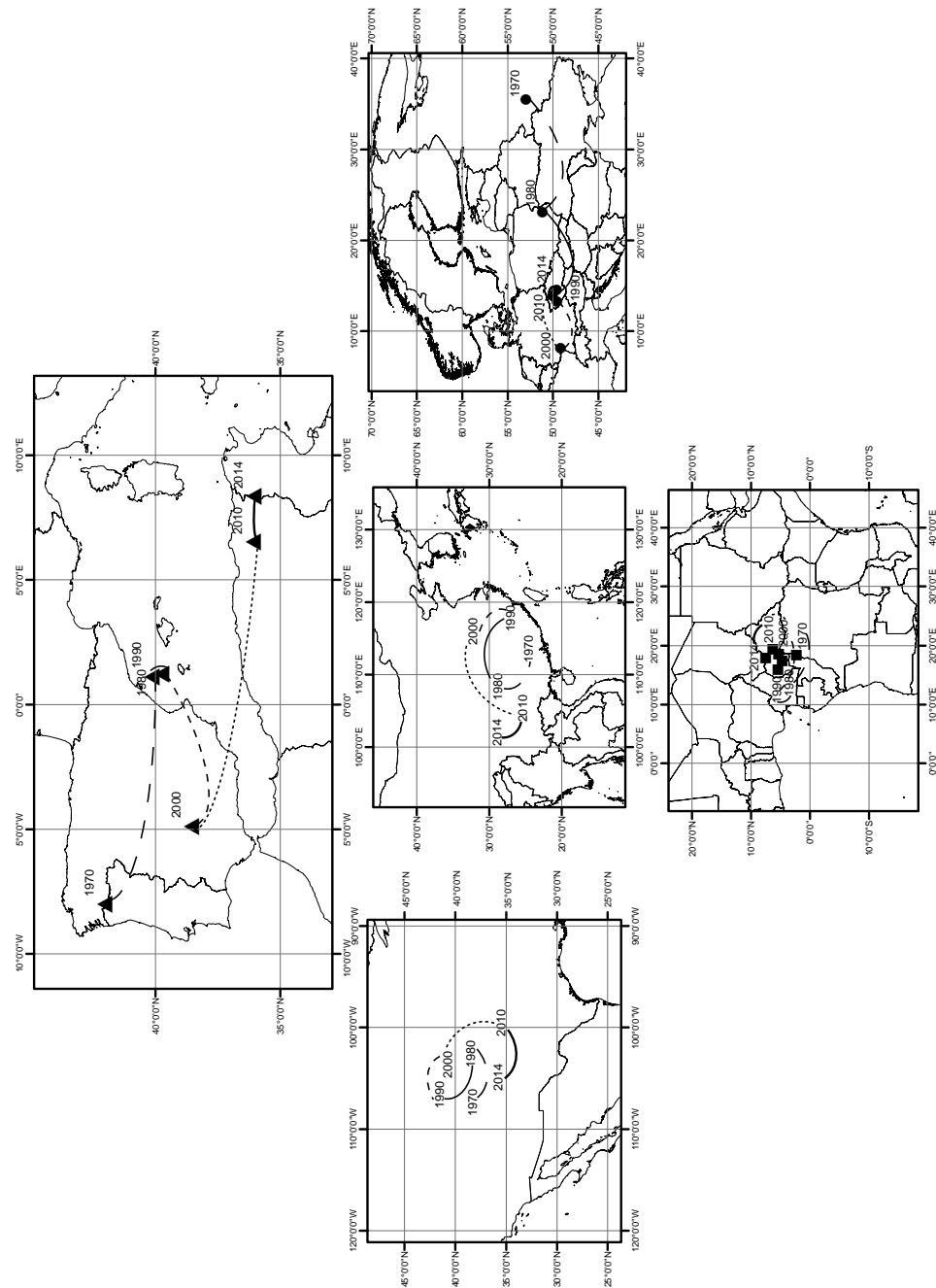
The economic centre of gravity of the *Americas* moved towards the United States, during the whole period. Beyond this, however, no change has been identified; however, we can find several underlying processes. First, from 1970 to 1999, the centre of gravity gradually shifted to the southeast, as a demonstration of the economic strengthening in Central and South America. This process came to a halt from about 2000 to 2004 and then intensified until the year 2011 when the southernmost part became the economic centre of gravity. Since then, the centre of gravity has again moved towards the north-northwest, owing to the economic recovery in North America.

The economic centre of gravity of *Asia, Australia, and Oceania* has been in the territory of the People's Republic of China, from 1970 to the present day, which provides enough evidence on the significance of the country in this vast region. In the 1970s and 1980s, the gravity centre mainly moved to the southeast of China, which is due to Australia's economic weight. This changed during the 1990s when Japan and South Korea were dominant economic powers in the region. In the 21st century, however, the centre increasingly shifted to the west, with one axis pointing to the oil-rich Middle Eastern countries and the other axis to India.

Finally, at the outset, analysis concerning *Europe* reveals that Russia and Soviet Union could not be broken down by continents, thereby affecting the study's results. The reason behind this decision, of course, was that Russia's economy in terms of performance in the European part of the continent is much more significant than that of Asia. At the outset, when examining Europe and Russia together, it is important to draw attention to the fact that the band's geometric centre is situated in the territory of Russia that is in Asia; therefore, we had to evaluate the position and movement of the economic centre of gravity in comparison to Asia.

In 1970, the centre of gravity moved from the Russian territories to the southwest towards France by the end of the 20th century. In the 21st century, however, because of the gradual economic strengthening of Central and Eastern Europe, it headed towards the northeast, and it was found in the Czech Republic in 2014.

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- QUAH, D. (2011): The Global Economy's Shifting Centre of Gravity *Global Policy* 2 (1): 3–9.

Data and maps

<http://ec.europa.eu/eurostat/web/gisco/geodata>
<http://data.worldbank.org/indicator/NY.GDP.MKTP.CD>