

Trade, Income and Economic Structure

Xue Yang*

Department of Economics, University of Dammam, Dammam, Saudi Arabia

Description

The rate of growth in embodied water use was three times higher than the rate of growth in water used by these economies directly. This was primarily attributable to the significant increase in virtual water imports. The global increase in water imports was directly related to the growing imports. In this context, we combine production and consumption perspectives to examine changes in water use across the EU27. To accomplish this, we employ the environmentally extended input-output method to determine the volume of water used in domestic production and trade at the sector and country levels. We make use of multi-regional input-output data from the World Input Output Database for the empirical analysis. Additionally, we identify and quantify the factors that account for shifts in these trends through the use of a structural decomposition analysis. We estimate the intensity, technology and scale effects that are associated with domestic production and trade. This analysis is carried out for various clusters and identifies distinct patterns based on income criteria. Our findings confirm that demand increased during that time, that structural change had a positive but negligible effect and that water intensity decreased, but neither of these factors was sufficient to offset the negative effects of economic expansion on water [1].

The world's rapid economic expansion and globalization over the past few decades have put a significant strain on natural resources. Climate change is now on the international political and institutional agenda as one of the most daunting challenges facing humanity, with economic globalization accelerating this process. Given the convergence of growing water demands for economic and social uses in a context of uncertain supplies, the intensification of water scarcity in many regions is a global concern. The impact of climate change on water availability has been extensively documented in the literature. This results in decreased water flow quality, irregularities in the availability of water resources and an increase in user competition. Through global supply chains, globally distributed production activities are key drivers of environmental change and put stress on local ecosystems in a globalized economy where resources, inputs, productions and final products are internationally connected. Due to the extensive global integration of supply chains, this results in a growing separation of producer and consumer responsibilities, as well as severe regional and local water pressures resulting from the long-distance consumption of goods. As a result, highlighting the connections between the actions of consumers and the effects on the environment that come from international trade is a necessary step toward societies that are more sustainable, responsible and probably fair. The purpose of our paper is to investigate the main factors driving this process and the water use associated with the EU27 activity during that time [2].

These years are especially interesting because they show how quickly the second globalization wave has accelerated. We propose a multi-regional input-output model (MRIO) to estimate the EU27 countries' (and the EU region as a whole's) water footprint, or the amount of water contained in the goods ultimately consumed within the EU27. Environmentally extended MRIO models take into account the full supply chain's direct and indirect connections between sectors and countries. They also make it possible to connect the production and consumption perspectives. It is also possible to determine the contribution that each country's domestic demand and production make, as well as the role

*Address for Correspondence: Xue Yang, Department of Economics, University of Dammam, Dammam, Saudi Arabia, E-mail: Yang11@yahoo.com

Copyright: © 2023 Yang X. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Received: 02 January 2023, Manuscript No. jamk-23-94683; Editor assigned: 04 January 2023, PreQC No. P-94683; Reviewed: 16 January 2023, QC No. Q-94683; Revised: 21 January 2023, Manuscript No. R-94683; Published: 28 January 2023, DOI: 10.37421/2168-9601.2023.12.415

that imported goods and inputs play. Expanding these connections to water, we identify the industry and location where this water is used and link it to the final consumption of goods and services at various stages of the production chain. We will distinguish between the internal water footprint, also known as the consumption of domestic water resources in the production of goods and services that are consumed domestically and the external water footprint, also known as virtual water imports (VWM), also known as the consumption of foreign water resources in the form of goods and services imported from other nations, which also provides information on the external dependence on foreign water resources.

Both of these types of footprints are important for understanding the external dependence on foreign water resources. There is a lot of research on the water footprint of countries or regions and how water intensity is broken down in an input-output framework. However, none of these studies have tried to address the water use trends in the EU27 that are related to how income is distributed in Europe using a structural decomposition analysis (SDA). As was mentioned earlier, we make use of a multi-regional input-output model that has been extended to water resources. This model is an accurate tool for dealing with the accounting of natural resources based on consumption because it allows for tracking of international supply chains and represents differences in production technologies. The decline in water intensity, the direct but negligible effect of structural change and the significant positive impact of demand growth during that time period are all shown by our findings. Besides, these discoveries likewise point at a continuous replacement of homegrown water use for virtual water imports. More specifically, the significant increase in virtual water imports from nations outside of the EU was primarily responsible for the rise in embodied water [3].

A significant externalization of water pressures occurred in both high- and low-income regions as the use of domestic resources was significantly replaced by the incorporation of water into imported goods. However, due to their relatively significant agri-food-based nature, intensive use of water resources and significant connections to other economic activities, middle-income countries' internal and external water footprints increased. Countries like Spain, the United Kingdom, Germany and France were largely responsible for the expansion of water footprints. Overall, this rising WF can be explained by the strong connections that agriculture has with the food industry, hotels, restaurants and the textiles industry. In this context, despite significant improvements in water productivity it was necessary to use less water to achieve a dollar amount of GDP—this effect was insufficient to offset the significant rise in domestic and international demands, which were the primary drivers of the EU27 water footprint's trend [4,5].

Acknowledgement

None.

Conflict of Interest

No potential conflict of interest was reported by the authors.

References

1. Toma, Simona-Valeria, Ioana Veronica Alexa and Daniela Ancuța Șarpe. "Identifying the risk in higher education institutions." *Procedia Econom Bus Adm* 15 (2014): 342-349.
2. Couch, Daniel. "Conceptualising quality following conflict: Afghanistan's higher education policy." *Asian Edu Dev Stud* (2019).
3. Aguilera, Ruth V., Deborah E. Rupp, Cynthia A. Williams and Jyoti Ganapathi.

- "Putting the S back in corporate social responsibility: A multilevel theory of social change in organizations." *Acad Manage Rev* 32 (2007): 836-863.
4. Van Beurden, Pieter and Tobias Gössling. "The worth of values—a literature review on the relation between corporate social and financial performance." *J Bus Ethics* 82 (2008): 407-424.
 5. Cheung, Yan Leung, Weiqiang Tan, Hee-Joon Ahn and Zheng Zhang. "Does corporate social responsibility matter in Asian emerging markets?." *J Bus Ethics* 92 (2010): 401-413.

How to cite this article: Yang, Xue. "Trade, Income and Economic Structure." *J Account Mark* 12 (2023): 415.