Data Access, AI Intensity, and Scale Advantages

Authors : Chuping Lo

Abstract : This paper presents a simple model demonstrating that ceteris paribus countries with lower barriers to accessing global data tend to earn higher incomes than other countries. Therefore, large countries that inherently have greater data resources tend to have higher incomes than smaller countries, such that the former may be more hesitant than the latter to liberalize cross-border data flows to maintain this advantage. Furthermore, countries with higher artificial intelligence (AI) intensity in production technologies tend to benefit more from economies of scale in data aggregation, leading to higher income and more trade as they are better able to utilize global data.

Keywords : digital intensity, digital divide, international trade, scale of economics

Conference Title : ICEBIS 2024 : International Conference on Economics and Business Information Sciences

Conference Location : Tokyo, Japan

Conference Dates : February 26-27, 2024