



Economic growth can be measured by counting tax revenue

It can be hard to measure the effects of infrastructure investment on an economy. Knowing whether an investment worked means somehow identifying the revenue it generated amidst the noise of an economy in full swing.

An Asian Development Bank Institute study used tax revenue as a measure of growth, and found significant contributions generated by the construction and operation of the line and the eventual connection of Japan's southern-most island to the larger network of high-speed trains known as *shinkansen*, linking Kyushu with Osaka and Hiroshima on Japan's largest island of Honshu.

One group of affected prefectures saw tax revenues increase by ¥134 billion during construction, by ¥97 billion once the line was finished but operating as a stand-alone line, and by ¥229 billion once it was joined to the Sanyo line that connected it with Honshu.

Personal tax revenues saw greater gains during construction, while corporate tax revenues grew more once the system was connected to the Sanyo line in 2011.

The prefectures directly along the Kyushu line saw greater gains than did the prefectures adjacent to them, although those prefectures did also experience significant spillover effects.

Prefectures along the Sanyo line saw the greatest gains from construction of the Kyushu line once the two lines were connected, confirming earlier research that suggested the greatest gains come from a rail system's connection with large cities.

This episode was based on [research](#) by Naoyuki Yoshino, dean of the Asian Development Bank Institute, and Umid Abidhadjaev, project consultant on infrastructure at ADBI.

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- <https://soundcloud.com/adbinstitute/economic-growth-can-be-measured-by-counting-tax-revenue/>

Read the working paper

- <https://www.adb.org/publications/impact-infrastructure-investment-tax-estimating-spillover-effects-kyushu-high-speed>

Know more about ADBI's work on spillover effects

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