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A panel data approach for program evaluation — Measuring the benefits of political and economic integration of Hong Kong with mainland China*

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Abstract

We propose a simple to implement panel data method to evaluate the impacts of social policy. The basic idea is to exploit the dependence among cross-sectional units to construct the counterfactuals for the missing values. We attribute the cross-sectional correlations to the presence of some (unobserved) common factors. However, instead of trying to estimate the impacts of these factors, we propose to use observed data instead. The limited Monte Carlo studies appear to favor our approach over the factor approach when neither cross-sectional nor time series dimension is large. We use our approach to evaluate the impact of political and economic integration of Hong Kong with China. Using the time series data of Australia, Austria, Canada, China, Denmark, Finland, France, Germany, Indonesia, Italy, Japan, Korea, Malaysia, Mexico, Netherlands, New Zealand, Norway, Philippines, Singapore, Switzerland, Taiwan, Thailand, U.K., and U.S. to construct what would have happened to Hong Kong's real economic growth had there been no interventions, we find that the reversion of sovereignty of Hong Kong from the U.K. to China hardly had any impact. However, the Closer Economic Partnership Agreement (CEPA) between Hong Kong and Mainland China has raised Hong Kong's real economic growth rate by about 4% a year.

Abstract only

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