Fiscal Decentralization and Economic Growth: A Test for Granger Causality

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Abstract: This paper tests the existence and the direction of causality between fiscal decentralization and economic growth. The previous literature has implicitly assumed that decentralization causes economic growth, and has largely ignored the possibility that economic growth can cause fiscal decentralization as well. This paper applies the Granger-causality test to panel data from 21 countries between 1975 and 1995, and finds that fiscal decentralization does not cause economic growth, but that economic growth causes fiscal decentralization.

Keywords: fiscal decentralization, economic growth, Granger causality

INTRODUCTION

With the New Public Management, there has been a growing trend for decentralization in both developed and developing countries (Iimi, 2005). In particular, fiscal decentralization, the delegation of fiscal power from the national government to subnational governments, is viewed as part of a reform package to enhance the performance of public sectors (Davoodi & Zou, 1998). Consequently, recent studies have focused on measuring the impact of fiscal decentralization on economic growth. So far, however, the empirical evidence is mixed and ambiguous (see for example Oates, 2002; Asatryan, 2010).

This paper examines the existence and the direction of causality between fiscal decentralization and economic growth using the Granger-causality test. Based on panel data from 21 countries between 1975 and 1995, the homogenous Granger-causality tests suggest that fiscal decentralization does not cause economic growth. Instead, the tests suggest that economic growth causes fiscal decentralization.

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Manuscript received November 3, 2011; out for review November 8, 2011; review completed December 12, 2011; accepted December 14, 2011.

These findings contradict the implicit or explicit assumption of earlier studies that fiscal decentralization causes economic growth, and provide a potential explanation for the mixed empirical evidence in those studies.

One argument for the causality from fiscal decentralization to economic growth is the “decentralization theorem” by Oates (1972). When differences exist in demand schedules and cost functions for public goods across jurisdictions, if the national government cannot distinguish this difference, fiscal centralization can imply a uniform level of public goods consumption across all jurisdictions. With fiscal decentralization, however, the local governments can reflect the heterogeneity across jurisdictions and adjust the level of public goods consumption accordingly, which should improve efficiency and lead to higher economic growth.

Another argument is that fiscal decentralization would induce vertical (national vs. subnational governments) and horizontal (among subnational governments) competition (Tiebout, 1956; Weingast, 1995). Then, competing governments would have an additional incentive to improve efficiency and social welfare, which should lead to faster economic growth.

However, it is also possible that economic growth causes fiscal decentralization. For example, national-government-driven economic growth may lead to faster economic growth initially but greater inequality among jurisdictions (Williamson, 1965). Then, after economic growth reaches a certain level, such a country may have to decentralize fiscal power to improve regional equality and social stability. In this case, economic growth causes fiscal decentralization, not the other way around.

Likewise, after economic growth reaches a certain level, consumers in different jurisdictions may look for more diverse goods and services beyond homogenous necessities. Then, fiscal decentralization to empower local governments to reflect such regional heterogeneity would be efficient.

Therefore, causality can run in either direction between decentralization and economic growth. In particular, from a simple correlation between decentralization and economic growth, one cannot conclude that decentralization causes economic growth.

It is, however, generally difficult to test the causality between two variables, and there exists no definitive statistical test for the direction of causality. With this caveat, the Granger-causality test has been most popular. As discussed in the Empirical Methodology section below, the Granger-causality test relies on an intuitive idea that if X can help in predicting Y, but Y cannot help predicting X, X must cause Y.

While the original Granger-causality test was developed for time series data, the Granger-causality test for panel data has been developed recently. In this paper, I apply the homogenous Granger-causality test for panel data by Hurlin and Venet (2001) and Hurlin (2004).