

Fiscal Decentralization and the Composition of Local Government Expenditure: Evidence from South Korea

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Introduction

- In the past three decades, the majority of countries around the world have undergone some form of decentralization.
- A large body of literature has analyzed the various consequences of fiscal decentralization.
 - E.g., government size, economic growth, inequality, and corruption
- However, relatively less scholarly attention has been paid to the relationship between fiscal decentralization and the composition of government expenditure.



Introduction

- Governments are allocated limited resources to achieve policy goals, and policymakers decide where to spend these resources to effectively attain the goals.
- Empirical evidence shows associations between:
 - the composition of government spending and economic growth
 - a particular functional type of spending and the well-being of a society
- This study investigates the relationship between fiscal decentralization and the composition of local government expenditure by utilizing data from Korean local governments.



Contributions of this Study

- It exploits a rich dataset with local governments in South Korea, not cross-country or provincial data.
 - It is theoretically more plausible to test the effects of fiscal decentralization at a local level given Tiebout's (1956) assumption.
- It employs fiscal decentralization measures that comprehensively include various aspects of fiscal decentralization.
 - i.e., revenue, tax, expenditure, and intergovernmental transfers
- It improved an empirical method by using fractional probit regression with a Mundlak model.
 - But endogeneity issues remain unaddressed.



Theoretical Frameworks

- “First-generation” fiscal federalism (Oates 1972, 2008; Stein 1999)
 - Decentralization increases public sector efficiency.
 - Local governments are better positioned than the central government to reflect citizens’ preferences.
- “Second-generation” fiscal federalism (Qian & Weingast 1997)
 - It views government officials as selfish agents, and decentralization is a mechanism that limits the expansion of government.
 - However, fiscal decentralization can lead to “a race to the bottom”, in which local governments make policy decisions alone and make coordination between governments more difficult.



Theoretical Frameworks

- The implicit idea: fiscal decentralization may change the composition of government expenditure.
 - by enabling public agents to more readily reflect citizen preferences on spending categories
 - by competing with neighboring jurisdictions to encourage local economic development.



Theoretical Frameworks

- Keen and Marchand (1997)
 - In a world where individuals are immobile and capital is mobile, fiscal decentralization overproduces public infrastructure that attracts mobile capital and underproduces consumption goods, such as spending on welfare.
- Borck (2005)
 - Jurisdictions are incentivized to overproduce public goods that benefit mobile skilled workers and underproduce public goods that benefit immobile low-skilled workers.



Empirical Evidence

- In general, findings show that fiscal decentralization imposes a downward pressure on welfare expenditure.
- Fiscal competition among local jurisdictions may increase capital expenditure related to infrastructure and assets but reduce current expenditure related to salaries and administration.



Hypotheses

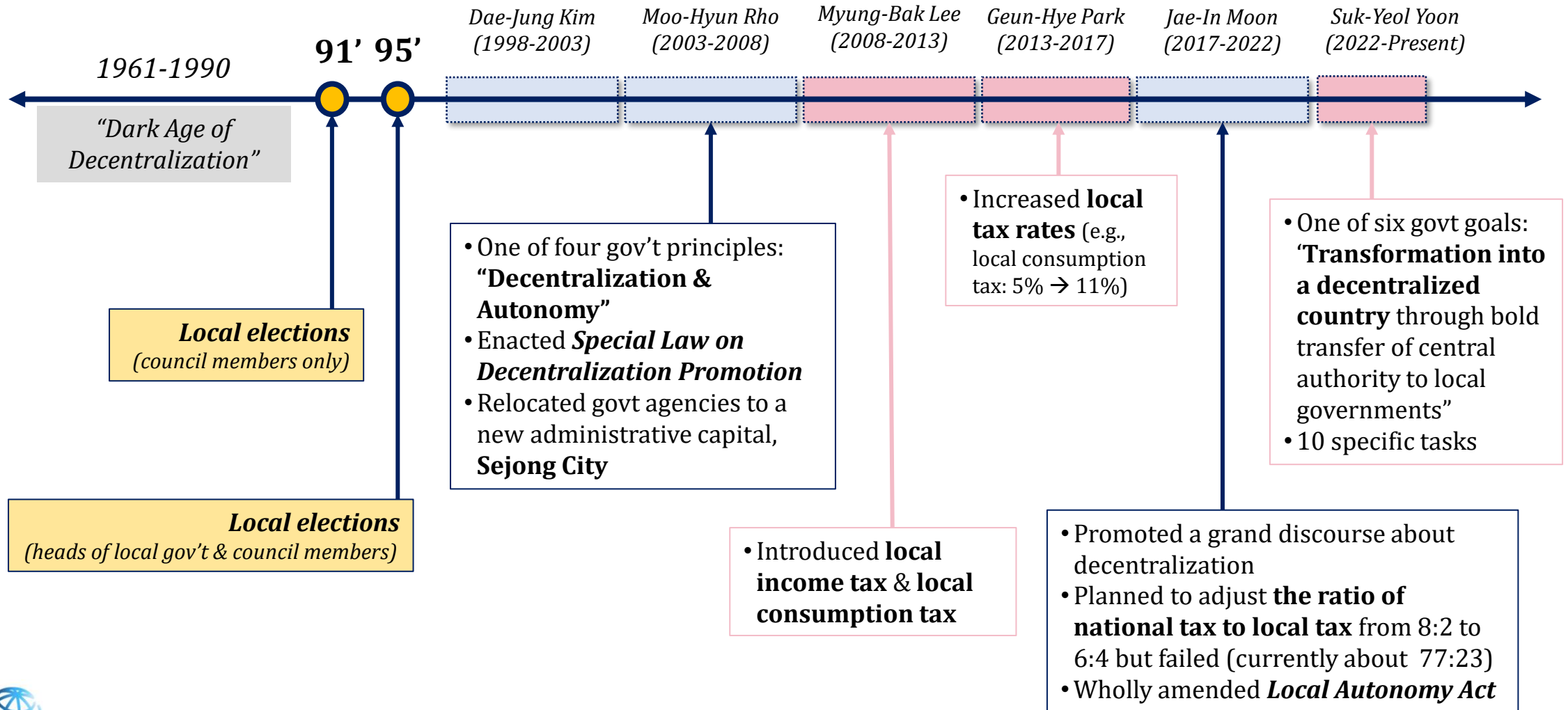
- H1: Fiscal decentralization is negatively associated with the share of expenditure on welfare.
- H2: Fiscal decentralization is associated with an increase in capital expenditure and a decrease in current expenditure.



Decentralization in South Korea

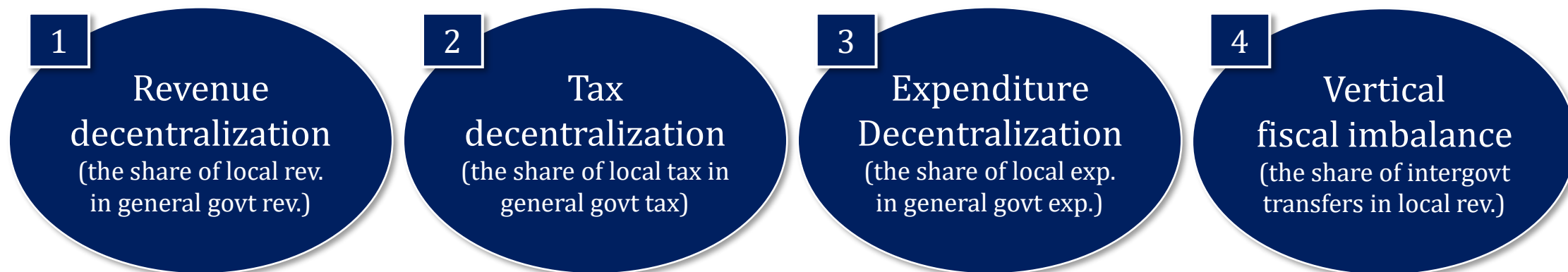
Progressive Admin.

Conservative Admin.



Variables

- Two approaches to measure fiscal decentralization:
 - Includes all fiscal decentralization measures in the model



- Factor analysis to summarize revenue, tax, and expenditure decentralization measures into a single factor (“fiscal decentralization”)



Variables

- Dependent variables
 - The ratio of expenditure on welfare to total local expenditure
 - Includes expenditure on social welfare, education, and health
 - The ratios of current and capital expenditure in total local expenditure
- Control variables
 - Demographic, economic, and political variables
 - Population (log), % age under 5, % age 65 and over, % population change, population density (log), GRDP per capita (log), number of businesses (log), unemployment rate, political ideology of local government head, % of progressive local council members



Data

- Data
 - 224 Korean local governments for the period between 2008 and 2018
- Data Sources
 - Dependent variables: Financial yearbooks of local governments
 - Explanatory variables: Financial yearbooks of local governments
 - Control variables: Korean statistical information service, Central election management committee, Korean employment information service



Empirical Model

- Model Specification

$$Comp_{i,t} = G(\beta_0 + \beta_1 Dec_{i,t-1} + \beta_2 X_{i,t} + \alpha_i + \theta_t + \varepsilon_{i,t})$$

- Estimation Strategy

- Because the dependent variables are fractional variables, it may not be appropriate to use an OLS regression.
- To deal with this fractional nature of dependent variables, this study employs a fractional probit regression with a Mundlak model.
- The Mundlak model allows the estimation of both within and between effects and provides better analysis than the usual within fixed effect models.
- All standard errors are clustered at the provincial level.



Results

	(1)	(2)	(3)
Variables	Welfare Expenditure	Current Expenditure	Capital Expenditure
Fiscal Decentralization t_{-1}	-.0271*** (.0023)	-.0215*** (.0027)	.0181*** (.0029)
	(1)	(2)	(3)
Variables	Welfare Expenditure	Current Expenditure	Capital Expenditure
Revenue decentralization t_{-1}	-.2553*** (.0948)	-.1684*** (.0604)	.1747*** (.0644)
Tax decentralization t_{-1}	-.1479*** (.0551)	-.1439** (.0724)	.0904 (.0819)
Expenditure decentralization t_{-1}	.0011 (.0590)	.0338 (.0670)	-.0364 (.0728)
Vertical fiscal imbalance t_{-1}	-.0003** (.0001)	-0.0002 (.0002)	.0003** (.0002)

Note. The table shows the average marginal effects (AME) of the fractional probit regression with a Mundlak model. Robust Delta-method standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1. All standard errors are clustered by province.



Robustness Check (QMLE with fixed effects)

	(1)	(2)	(3)
Variables	Welfare Expenditure	Current Expenditure	Capital Expenditure
Fiscal Decentralization t_{-1}	-.0271*** (.0028)	-.0212*** (.0037)	.0178*** (.0041)

	(1)	(2)	(3)
Variables	Welfare Expenditure	Current Expenditure	Capital Expenditure
Revenue decentralization t_{-1}	-.2582* (.1342)	-.1684** (.0794)	.1746*** (.0843)
Tax decentralization t_{-1}	-.1480*** (.0755)	-.1439 (.167)	.0903 (.1752)
Expenditure decentralization t_{-1}	.0025 (.0954)	.0338 (.1384)	-.0363 (.1406)
Vertical fiscal imbalance t_{-1}	-.0003 (.0003)	-.0002 (.0003)	.0003 (.0003)

Note. The table shows the average marginal effects (AME) of the QMLE with fixed effects. Robust Delta-method standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1. All standard errors are clustered by province.



Discussion and Conclusion

- This study hypothesized that fiscal decentralization would lead to strategic behaviors of local governments by adjusting the share of expenditure on each functional category.
- Findings show that local governments tend to reduce their spending portion on welfare when they are fiscally decentralized.
 - Fiscal competition fostered by decentralization may induce local governments to reduce programs that could impose financial burdens due to the influx of those who wish to benefit from them.
- Fiscal decentralization tends to shift the share of spending from the current to capital account.
 - It suggests that fiscal competition might incentivize local jurisdictions to increase the share of economically productive public investment.



Discussion and Conclusion

- It is mainly revenue-side decentralization (i.e., revenue and tax decentralization) that leads to the reallocation of local expenditure across spending categories.
 - A study by Kim et al. (2020) found that only revenue decentralization tends to improve citizens' trust in government in South Korea.
 - The increased discretion to source revenues may affect the structure of local spending as well as citizens' perceptions of governments.



Discussion and Conclusion

- This study did not directly test whether local spending is effective or efficient, nor whether it reflects actual citizen needs.
- Nevertheless, this study provides important empirical evidence that revenue-side decentralization induces local governments to engage in strategic behaviors by changing the composition of government expenditure.



Thank you