Hometown Investment Trust Funds: Finance for Start-up Businesses

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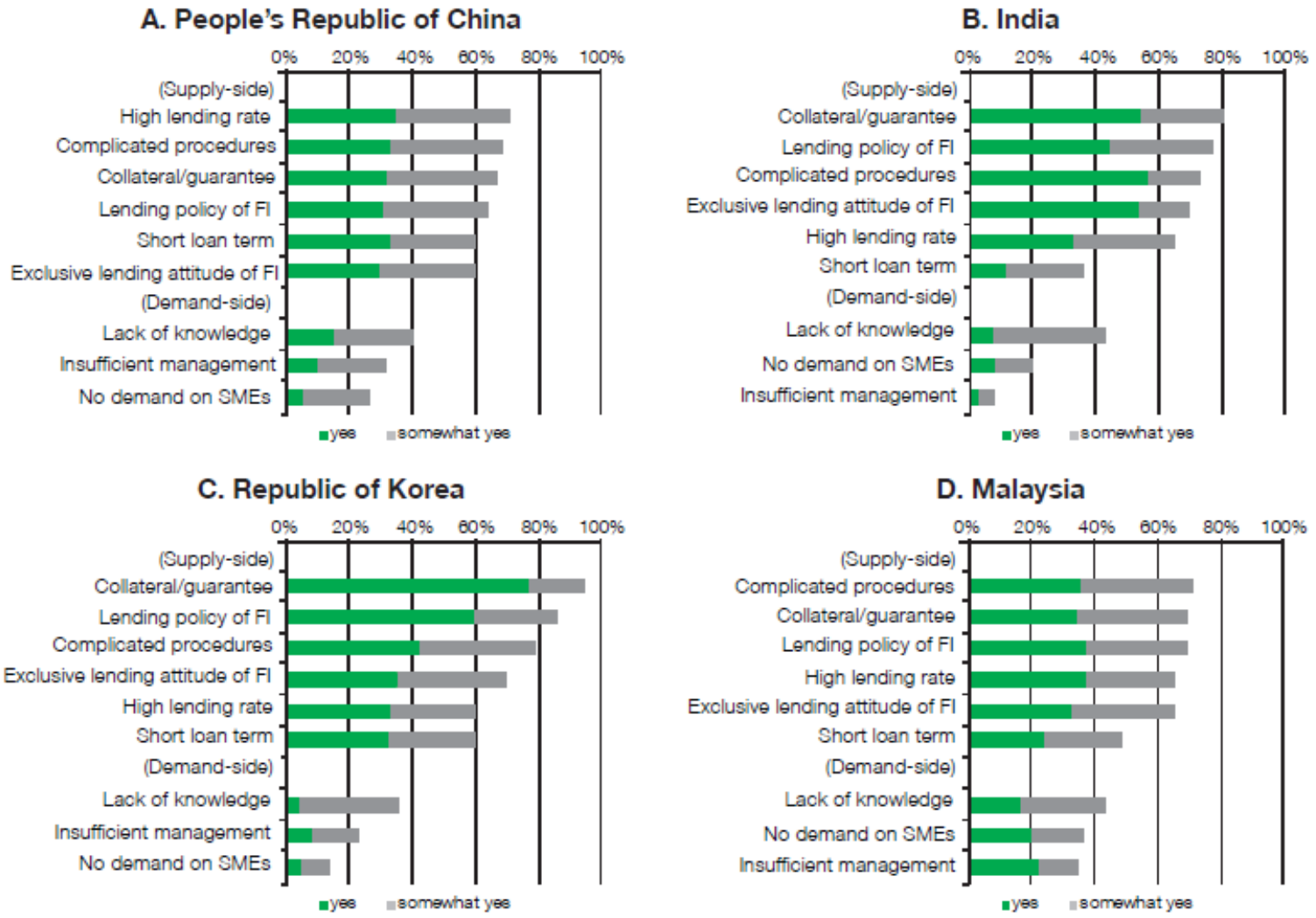
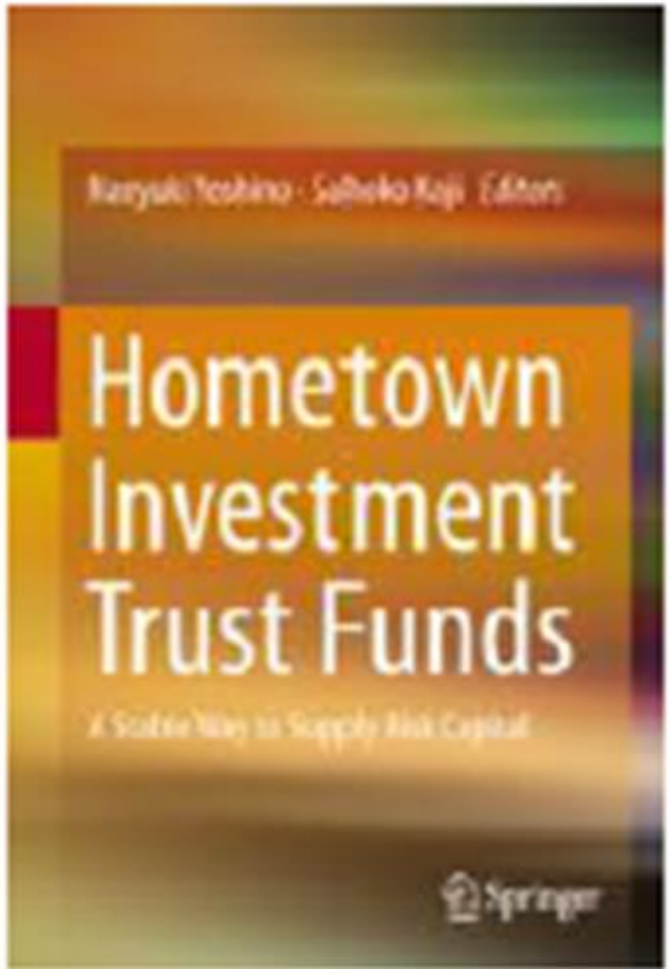
Barriers for SMEs in Accessing Financial Institutions, Collateral, Higher interest rate, long term process



Source: ADB–OECD study on enhancing financial accessibility for SMEs: Lessons from recent crises. Mandaluyong City, Philippines: Asian Development Bank, 2013

Start up businesses and farmers



Hometown Investment Trust Funds : Springer

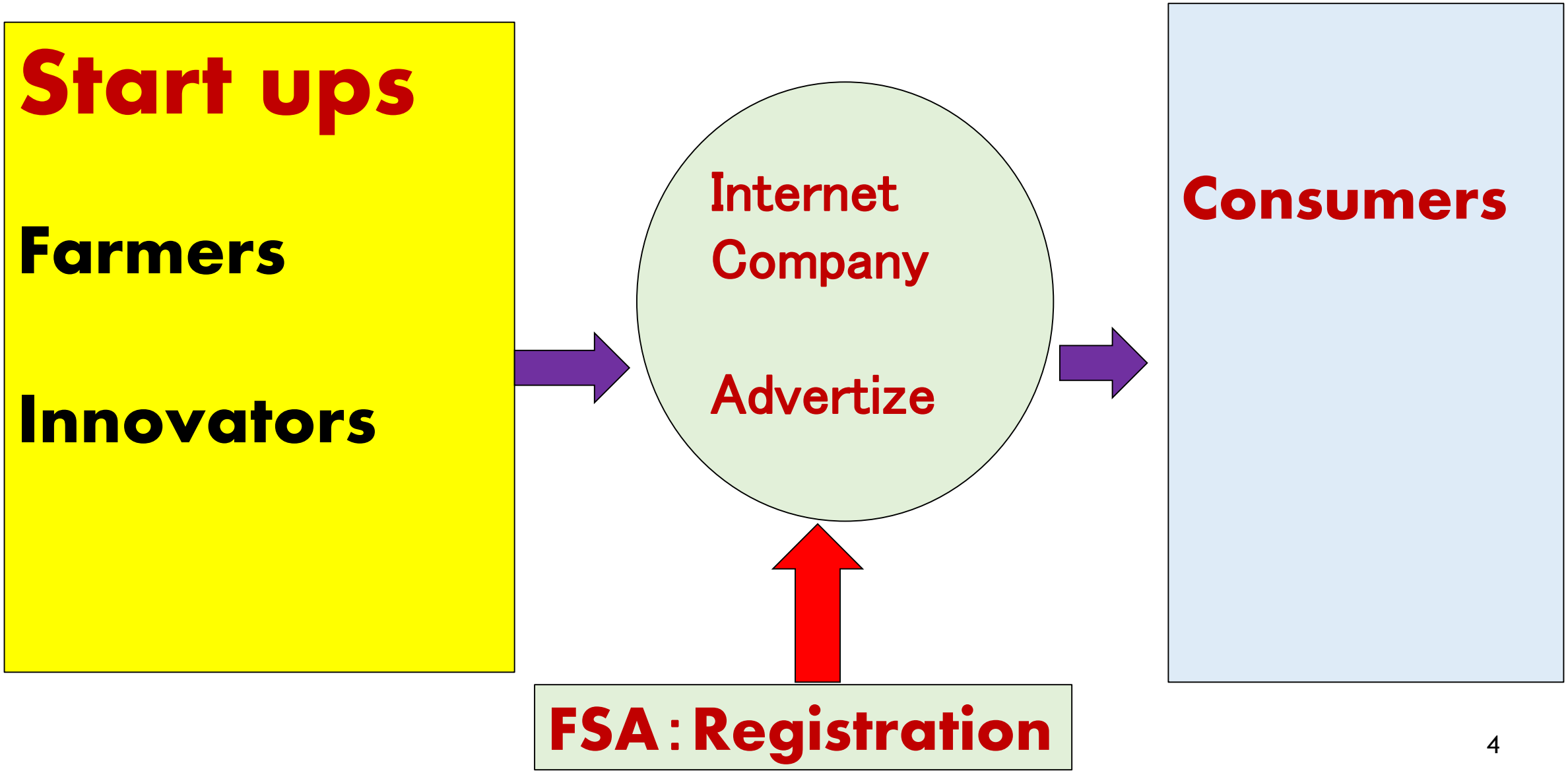
A Stable Way to Supply Risk Capital

Yoshino, Naoyuki; Kaji Sahoko (Eds.) 2013,

Japan, Cambodia Vietnam, Peru, Mongolia

Access to Digital Technology, Internet

Internet On-line trade



Roof top Solar Fund

300 $/ per person

Vegetables' Fund.
Each investor, 100 US Dollar
Total 52,500 $

Soup Fund
200 US Dollar
Total 32,000 $

Agricultural Funds

Beans and Wine

TRUST is important

1, Regular meetings with producers (every quarter)
2, Look for good products and advertise by internet
3, Give advise to innovators
4, Order the products though internet
5, Payment and Delivery
6, Reputation
7, Trust of community, Trust by customers

Village Funds for Green Energy

1, Collect Small Amount of Money

2, Solar power panel with battery

3, Use solar power for local manufacturing

4, Use solar power for agriculture

5, Sales of village products will increase

6, Construct Another solar power plant

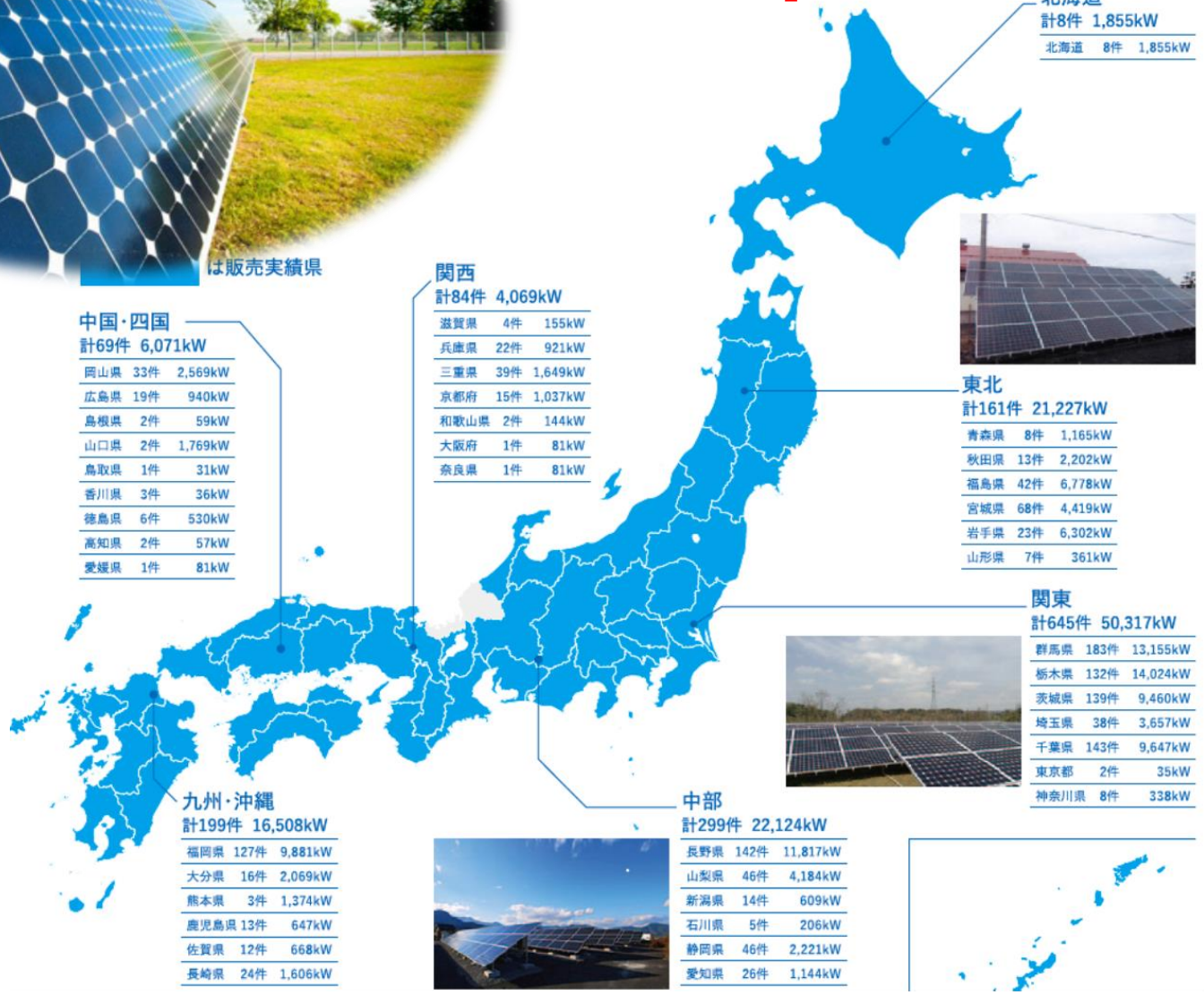
7, Step by step approach to increase electricity in the village

Revitalization of Tsukubane Hydro Power (Nara state)

250 investors, total 525 thousand US dollars, Japan

Original Dam was constructed more than 100 years ago

Solar Power projects in Japan



Various Private Financial Investors in Asia

1, **Banks --- Safer projects**

Brown field (infrastructure)

Invest into operation period

Securitization after certain period of time

Privatized projects by the government

2, **Insurance and Pension funds** (Brown fields)

Long term projects (10 years –20- 30 years)

3, **Revenue Bonds (floating interest rate)**

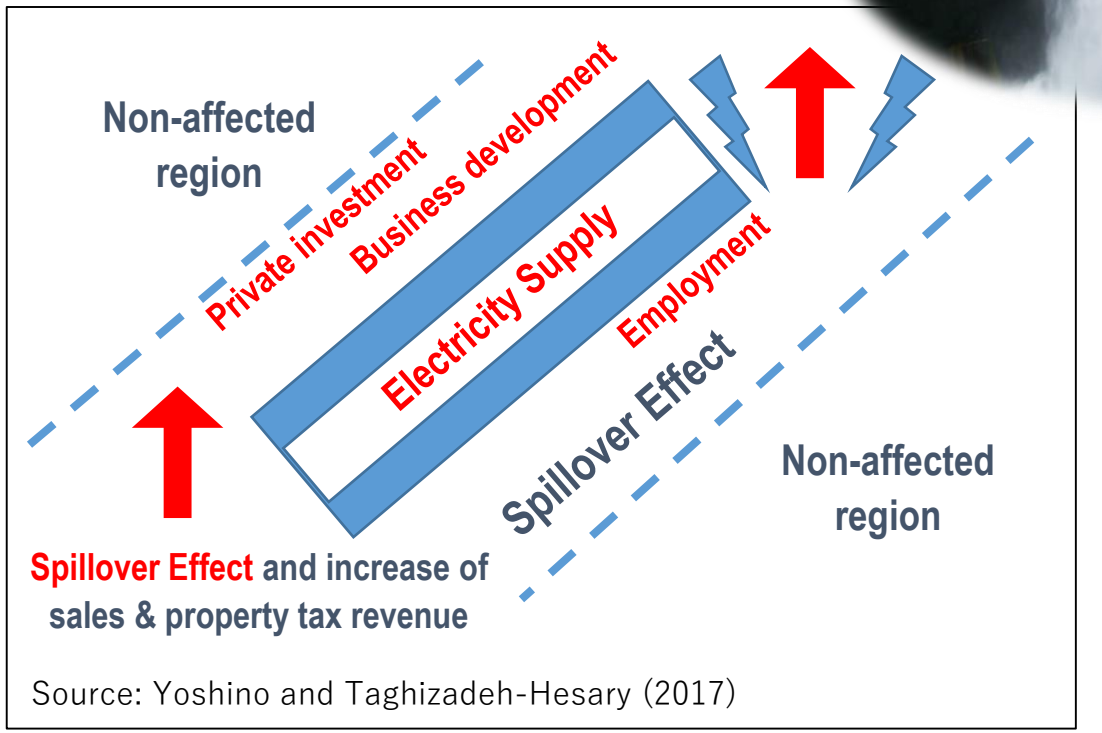
uncertain income streams

4, **Equity Investments**

Construction period and Green fields

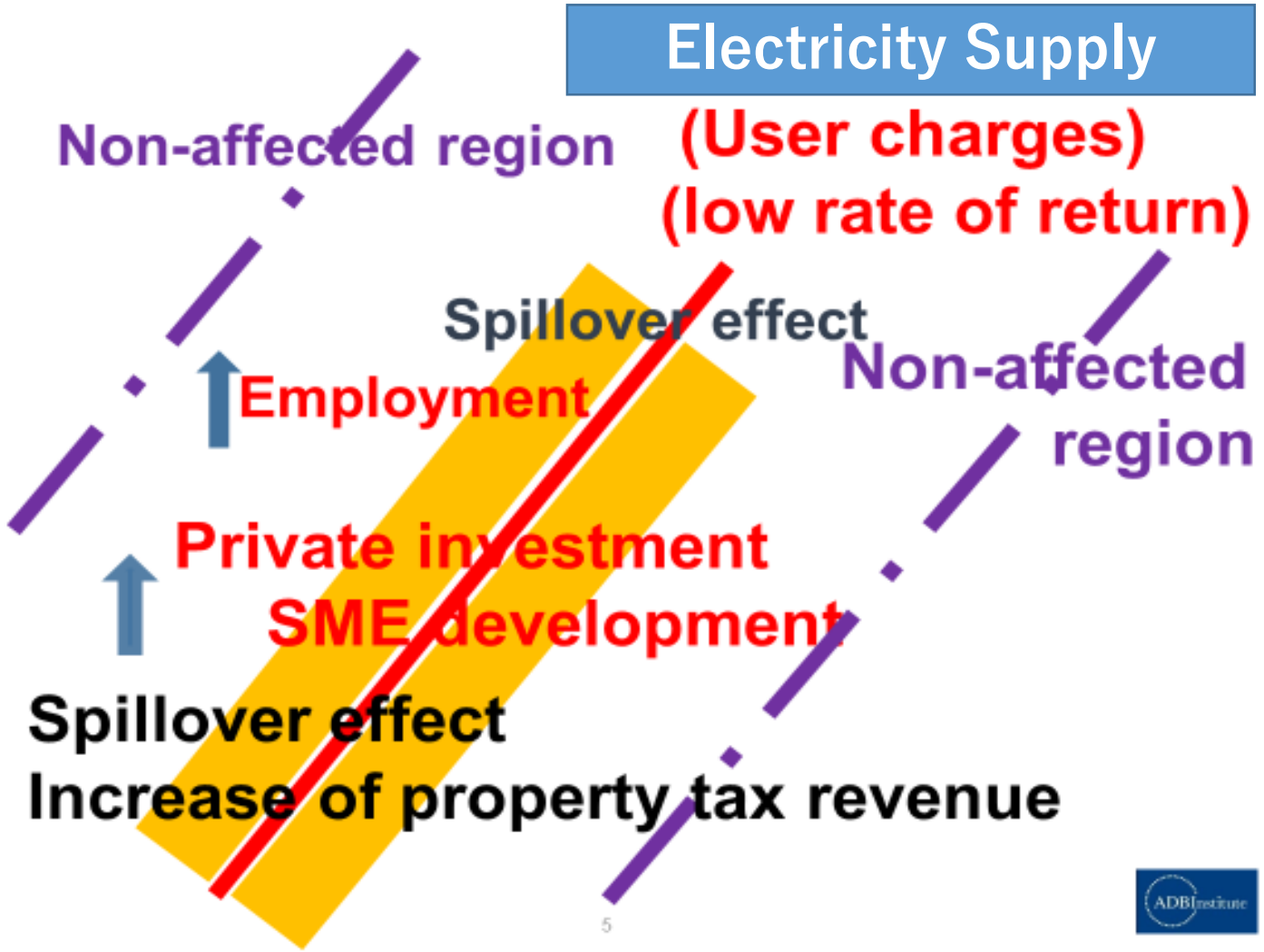
Injection of Increased tax revenues from the spillover effect into energy projects in order to increase the rate of return for private investors

Spill over effects of electricity supply

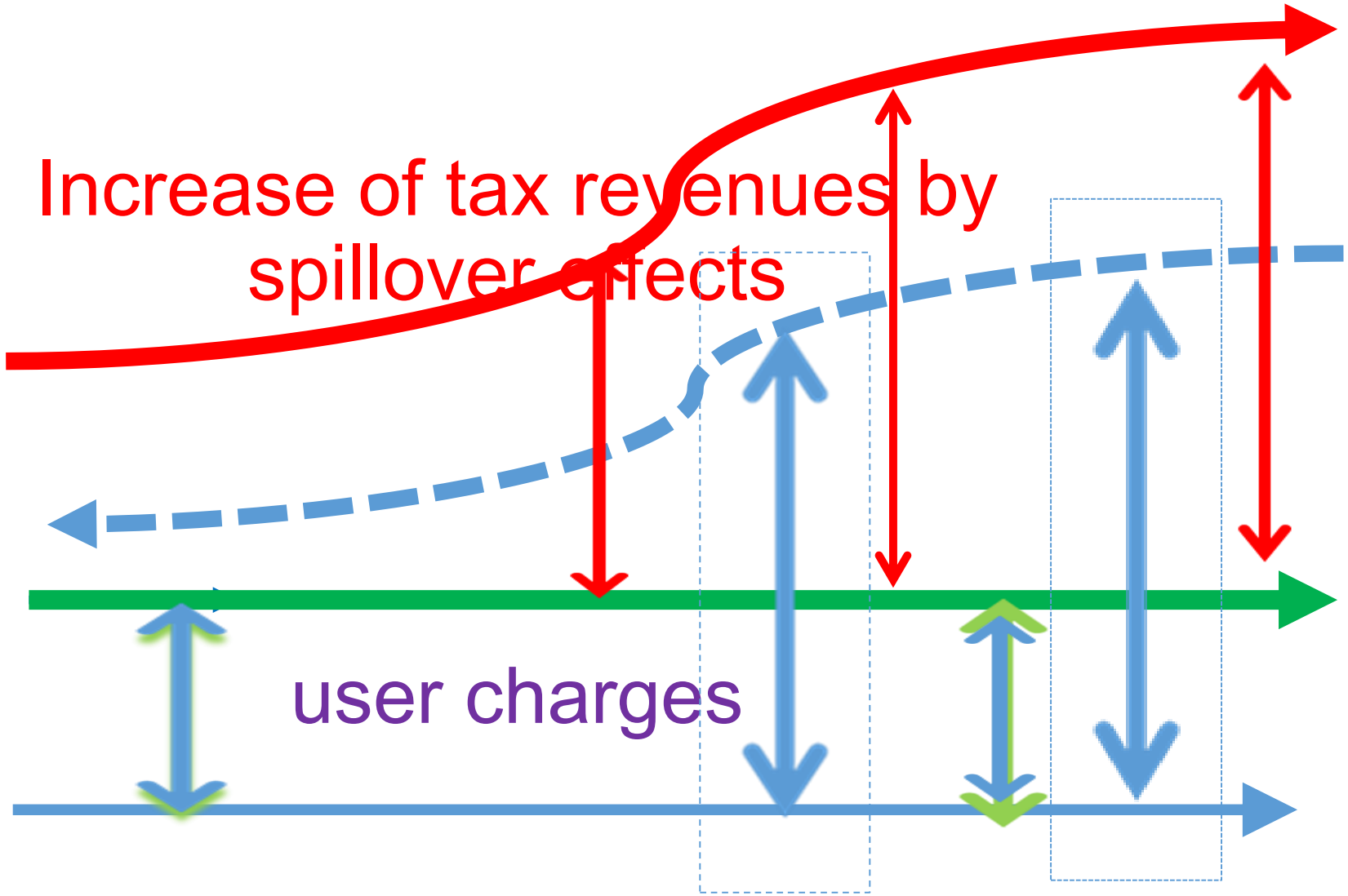


Source: Yoshino and Taghizadeh-Hesary (2017)

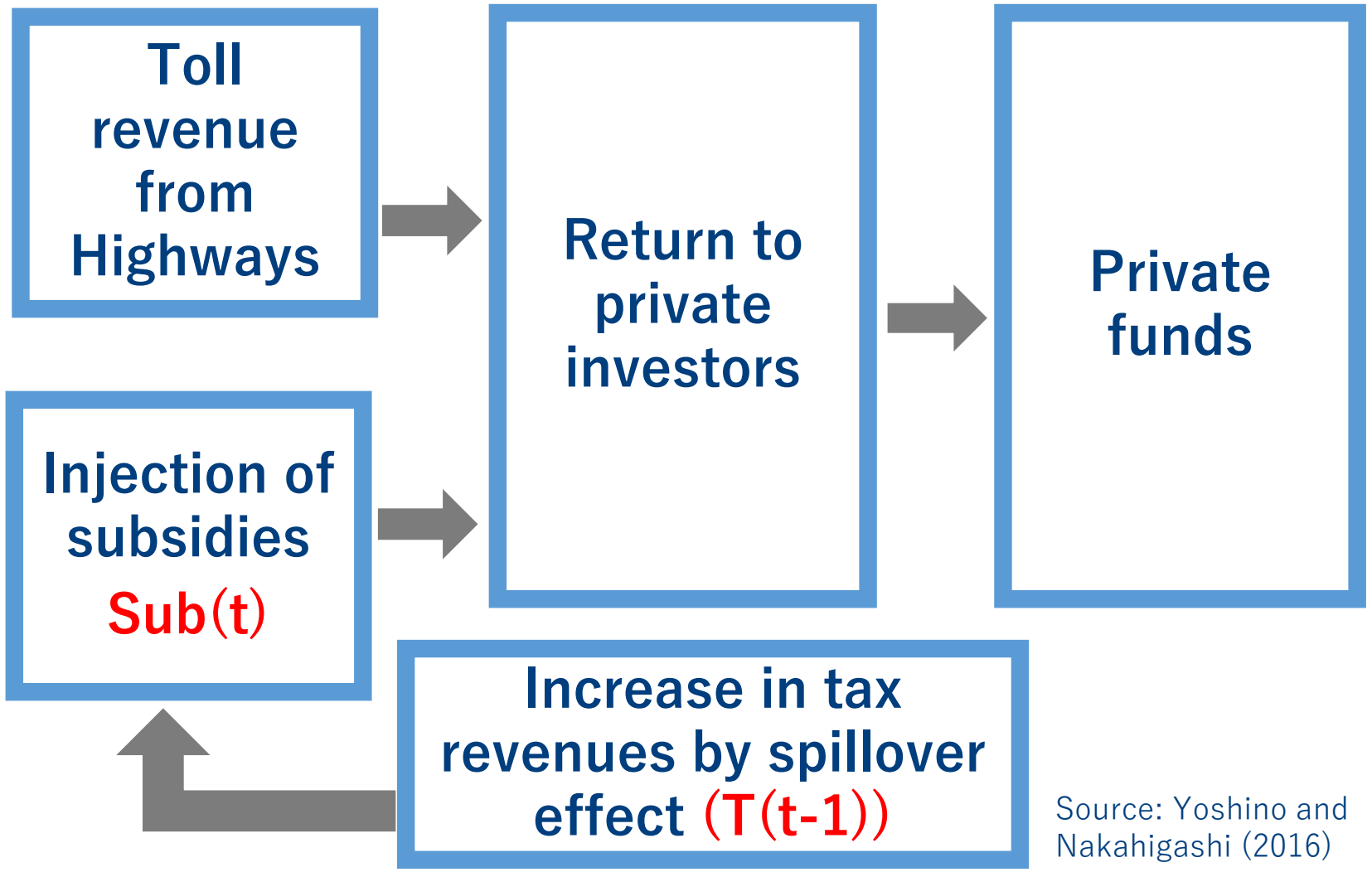
Spillover Effects of Infrastructure Investment



Injection of Increased Tax revenues



Injection of fraction of tax revenues as subsidy



Source: Yoshino and Nakahigashi (2016)

The Southern Tagalog Arterial Road (STAR Highway), Philippines, Manila

Tax Revenues in three cities

Yoshino and Pontines (2015)

ADBI Discussion paper 549

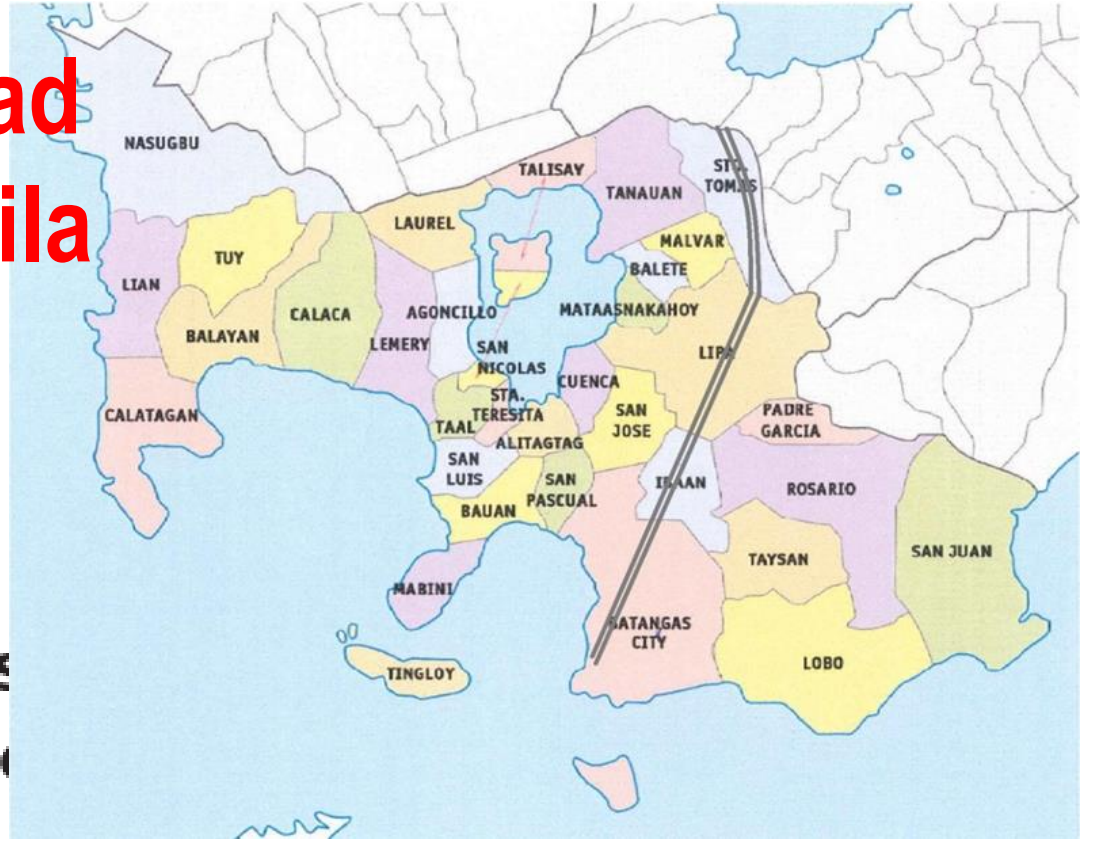


Table 3.3 Calculated Increase in Busines
Beneficiary Group Relative to Nonbenefi

	t-2	t-1	t	t+1	t+2	t+3	t+4
Lipa City	134.36	173.50	249.70	184.47	191.81	257.35	371.93
Ibaan	5.84	7.04	7.97	6.80	5.46	10.05	12.94
Batangas City	490.90	622.65	652.83	637.89	599.49	742.28	1,208.61

Construction **Operation period**

Government Financing (Externality Effects)

1, Measure the negative external effects of CO_2 and NOX

2, Levy Tax on CO_2 and NOX

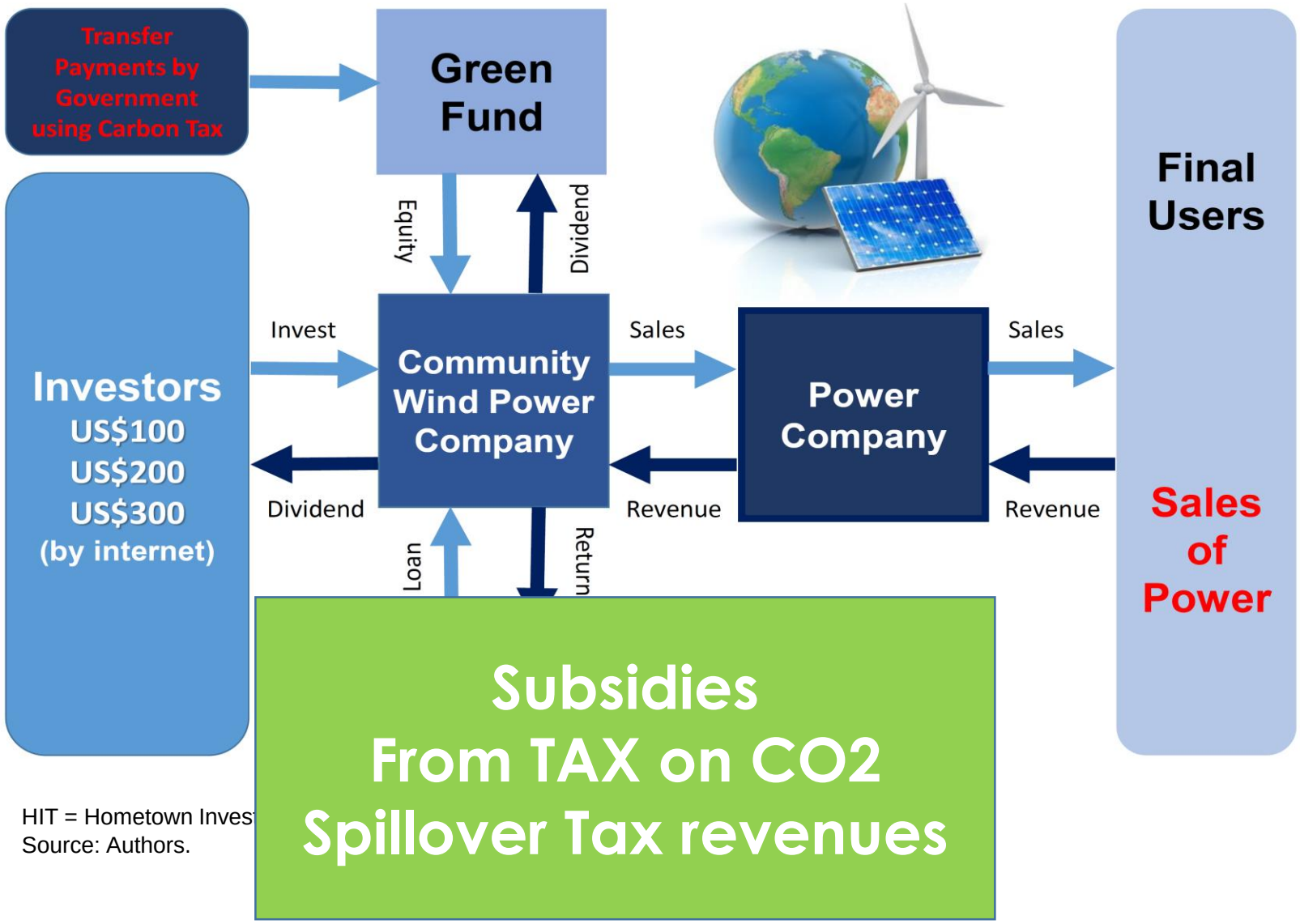
→ Transfer subsidies to renewable energy

3, Provide subsidy to renewable energy projects

→ Injection of tax revenues to investors in renewables

→ R&D (renewable energy sector)

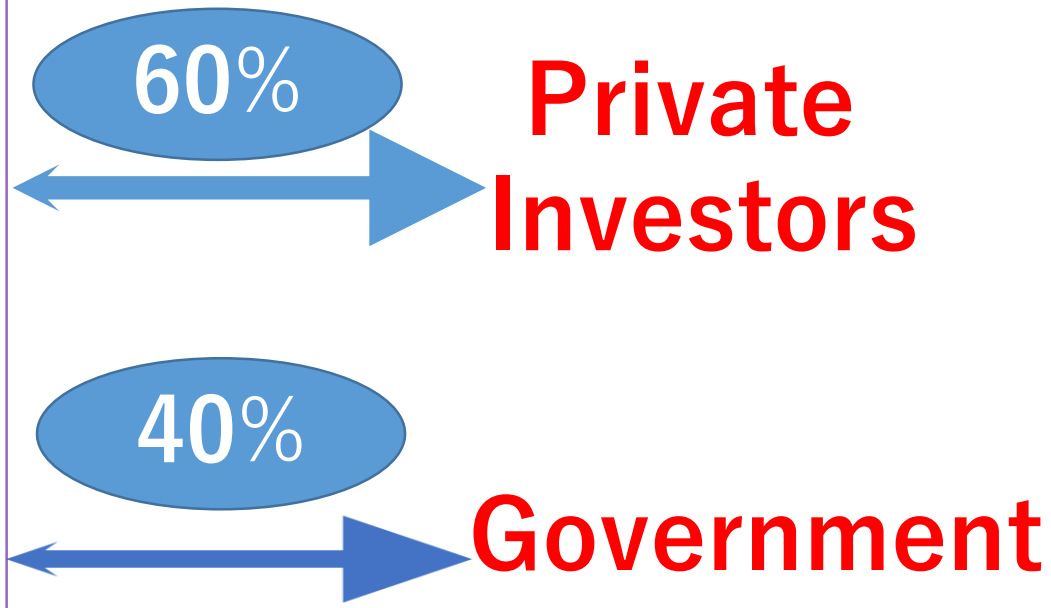
Financing Scheme for Renewable Energy Projects Using HITs and Carbon Tax



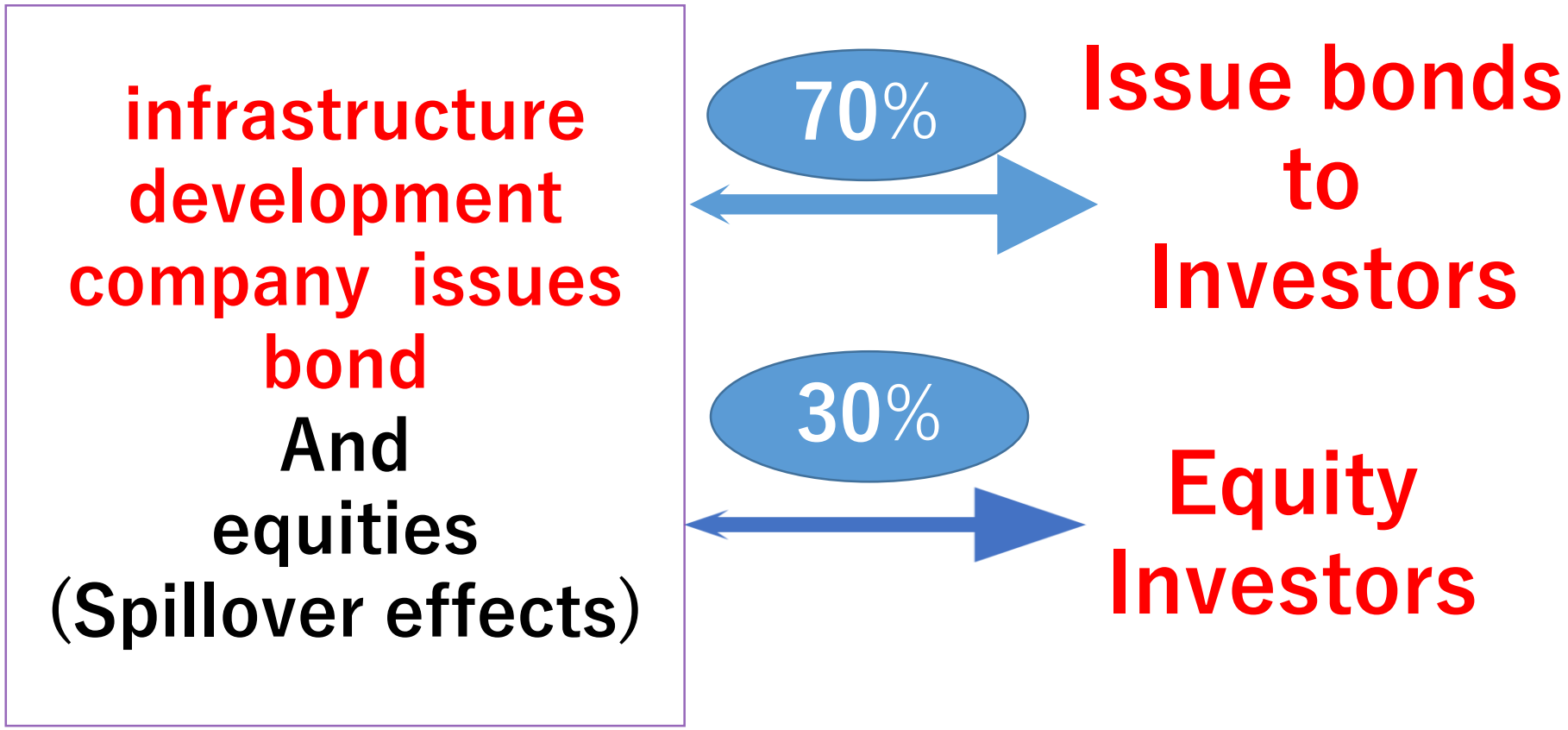
HIT = Hometown Inves
Source: Authors.

Infrastructure Revenue Bond

Regional Development Agency issues Revenue Bond (user charges) plus (Spillover effects)



Equity and Bond Investment in infrastructure



Macroeconomic Effect of Infrastructure Investment

Spillover Effects Estimated from a Macroeconomic Translog Production Function				
	1956-60	1961-65	2001-05	2006-10
Direct effect	0.696	0.737	0.114	0.108
Indirect effect (K_p)	0.452	0.557	0.091	0.085
Indirect effect (L)	1.071	0.973	0.132	0.125
20% returned	0.305	0.306	0.045	0.042
Increment	**43.8%**	**41.5%**	**39.0%**	**39.1%**

4. Analysis of SME credit risk using Asian data

- Selection of the variables
- Principal Component Analysis
- Cluster Analysis
- Interpretation of the results

Examined Variable

No.	Symbol	Definition	Category
1	Equity_TL	Equity (book value)/total liabilities	Leverage
2	TL_Tassets	Total liabilities/total assets	
3	Cash_Tassets	Cash/total assets	Liquidity
4	WoC_Tassets	Working capital/total assets	
5	Cash_Sales	Cash/net sales	
6	EBIT_Sales	Ebit/sales	Profitability
7	Rinc_Tassets	Retained earnings/total assets	
8	Ninc_Sales	Net income/sales	
9	EBIT_IE	Ebit/interest expenses	Coverage
10	AP_Sales	Account payable/sales	Activity
11	AR_TL	Account receivable/total liabilities	

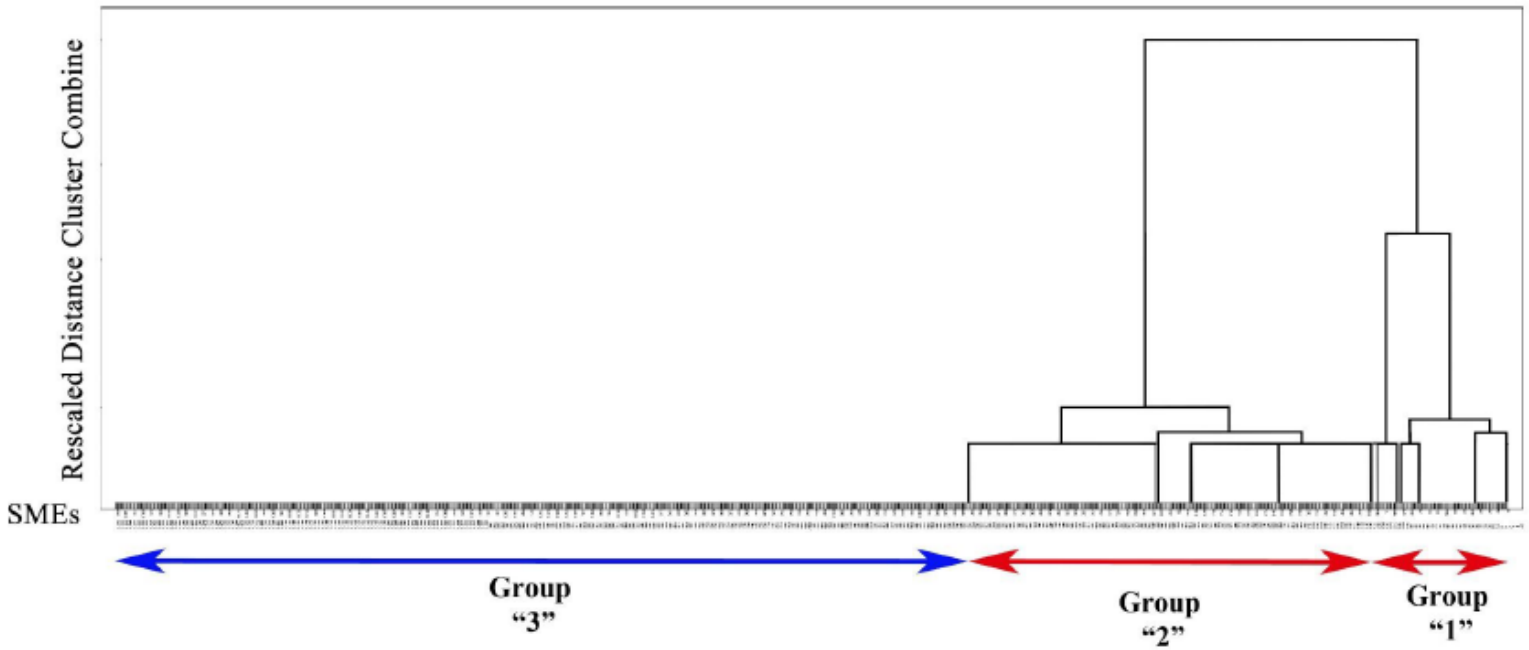
Factor Loadings of Financial Variables after Direct Oblimin Rotation

Variables (Financial Ratios)	Component			
	Z1	Z2	Z3	Z4
Equity_TL	0.009	0.068	0.113	**0.705**
TL_Tassets	-0.032	**-0.878**	0.069	-0.034
Cash_Tassets	-0.034	-0.061	**0.811**	0.098
WoC_Tassets	-0.05	**0.762**	0.044	0.179
Cash_Sales	**-0.937**	0.021	0.083	0.009
EBIT_Sales	**0.962**	0.008	0.024	-0.004
Rinc_Tassets	0.014	**0.877**	0.015	-0.178
Ninc_Sales	**0.971**	-0.012	0.015	0.014
EBIT_IE	0.035	0.045	**0.766**	-0.098
AP_Sales	**-0.731**	-0.017	-0.037	-0.016
AR_TL	0.009	-0.041	-0.104	**0.725**

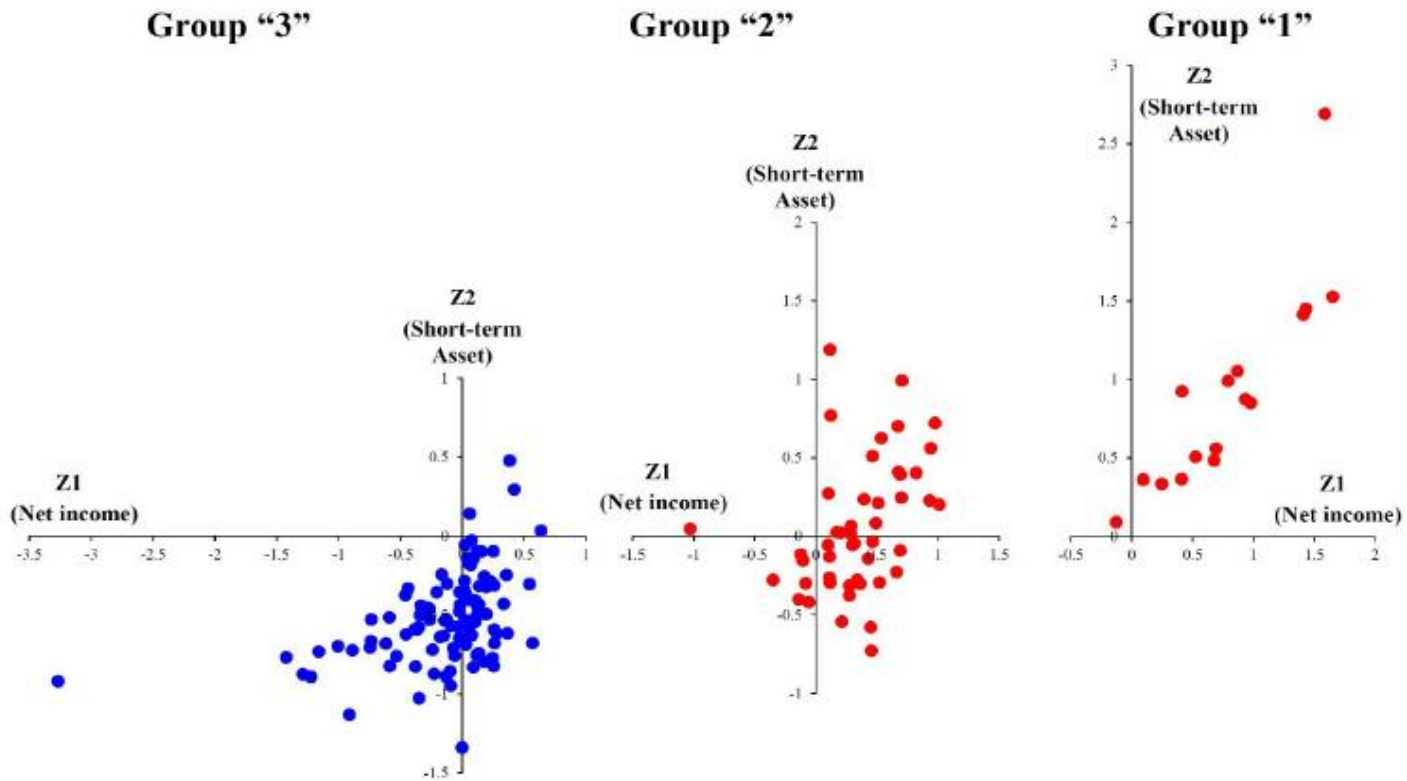
Note: The extraction method was principal component analysis. The rotation method was direct oblimin with

Cluster analysis: the average linkage method

Dendogram Using Average Linkage



Grouping Based on Principal Component (Z1-Z2) and Cluster Analysis



Note: Group 1 = healthiest SMEs; group 2 = in-between SMEs; group 3 = least healthy SMEs.

Robustness check of the method

$$Y = c + \alpha_1 Z_1 + \alpha_2 Z_2 + \alpha_3 Z_3 + u$$

Variable	Coefficient	Std. Error	Z-Statistic	Prob.	
C	1.14	0.09	13.06**	0	
Z1	1.00	0.16	6.31**	0	
Z2	-2.17	0.14	-15.40**	0	
Z3	-1.02	0.21	-4.75**	0	
McFadden R-squared: 0.76					

Reference:

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