

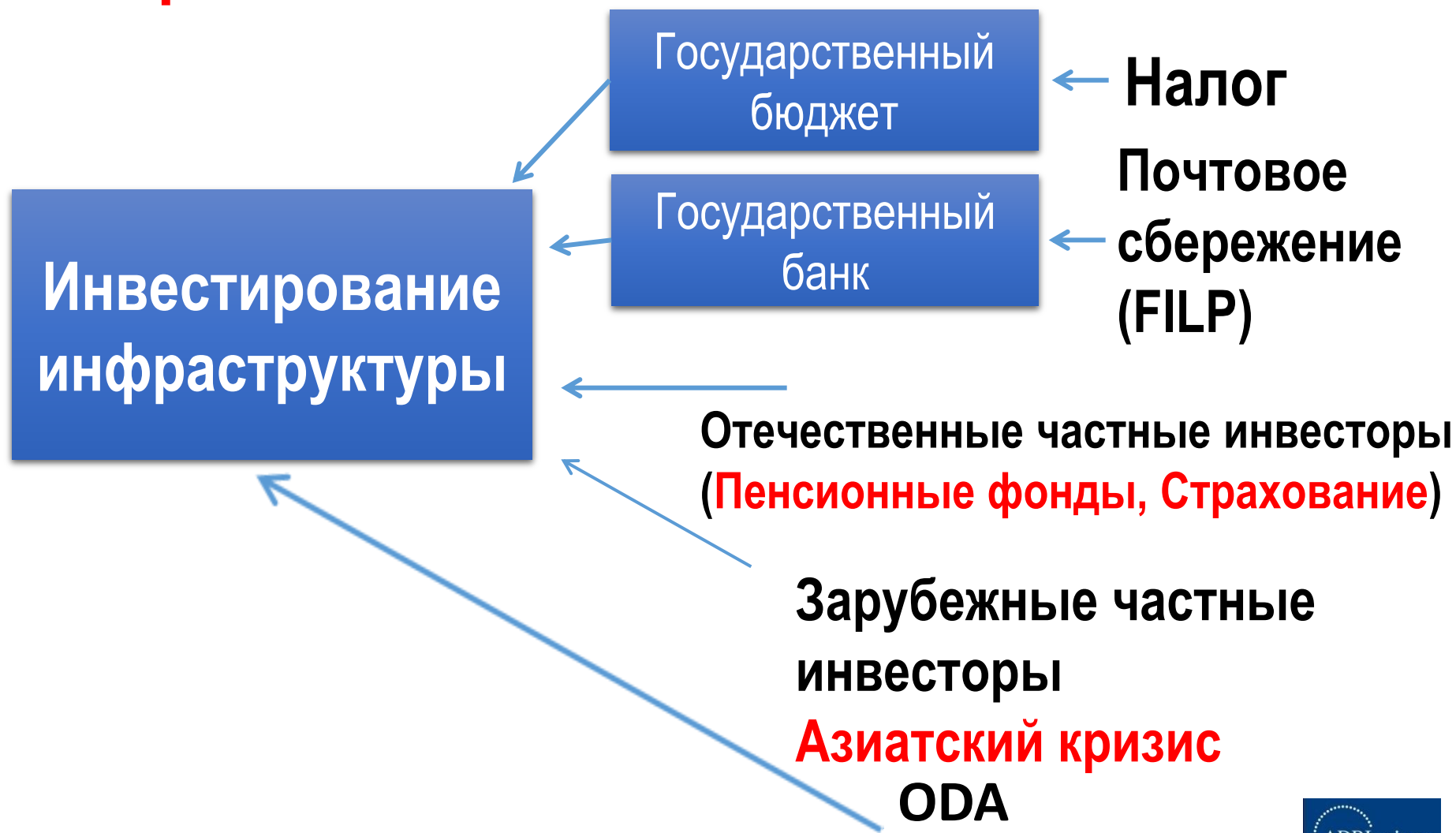
Финансирование инфраструктуры и способ увеличить ставку дохода

Наоюки Ёшино

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Финансирование инфраструктуры: Использование долгосрочных внутренних сбережений



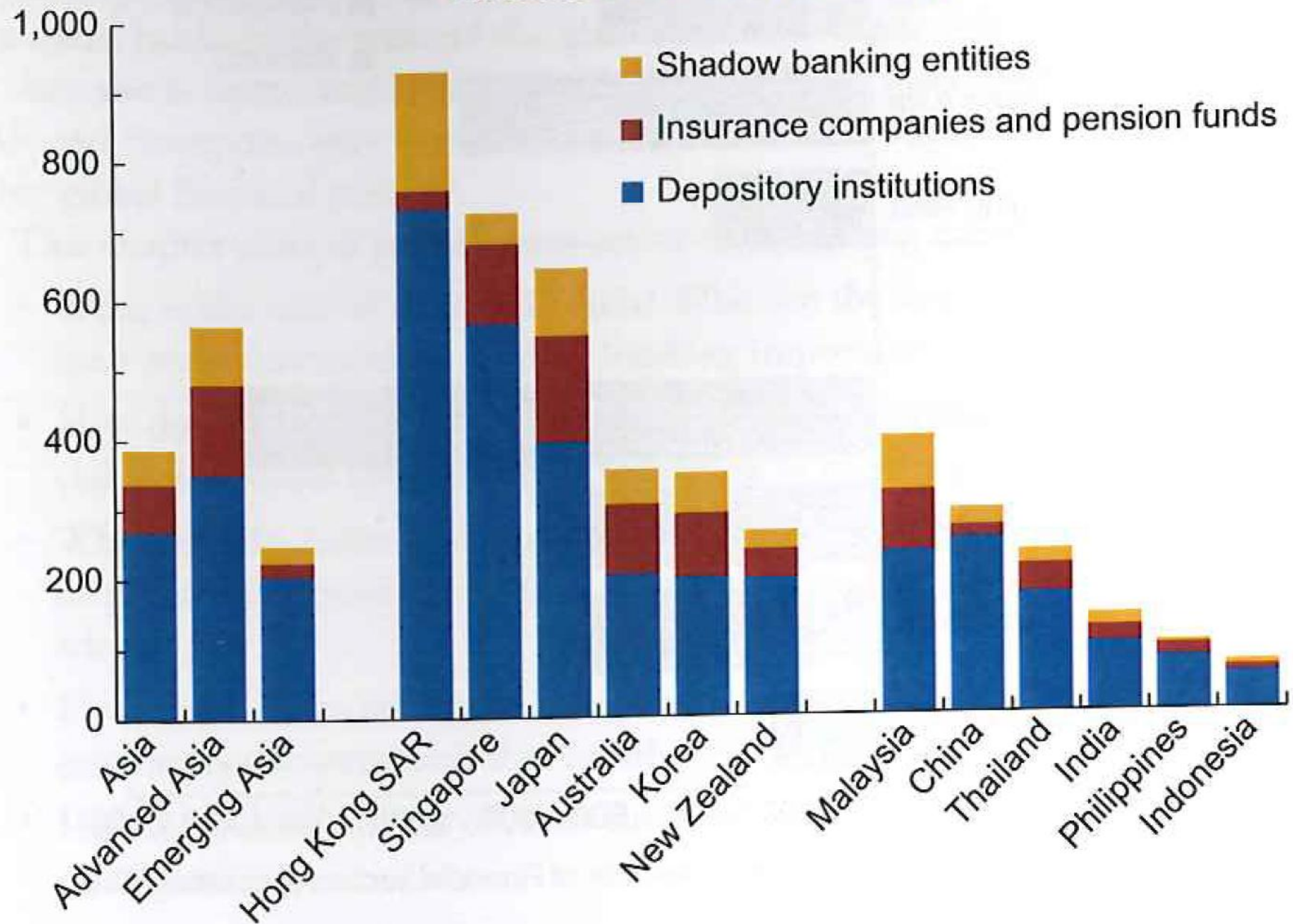
Необходимые долгосрочные инвесторы

1. Банковские депозиты – Займы (2-5 лет)
2. Страхование жизни (20, 30 лет)
3. Пенсионные фонды (20, 30, 40 лет)

Долгосрочные финансирование

4. Управление активами долгосрочные инструментами
5. Финансовое образование должно быть развитым

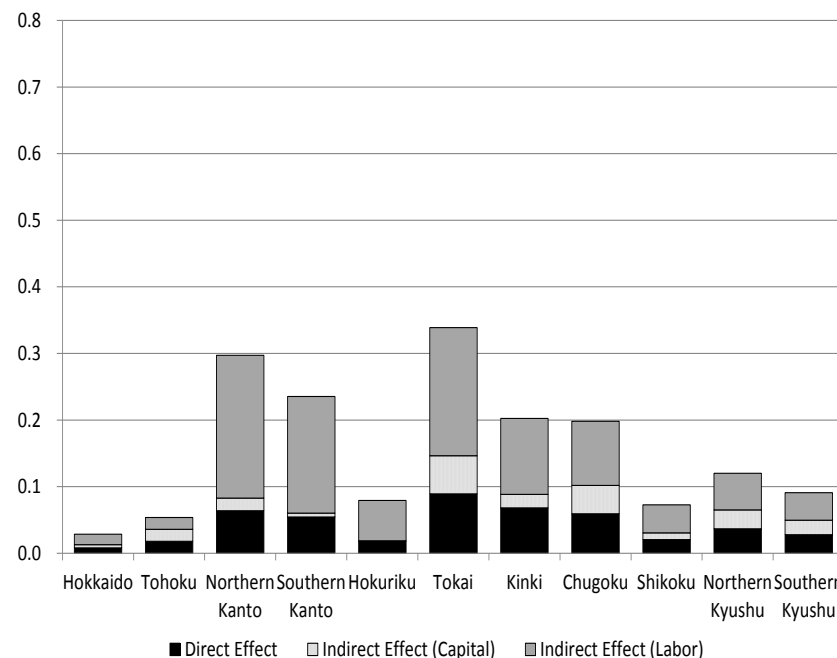
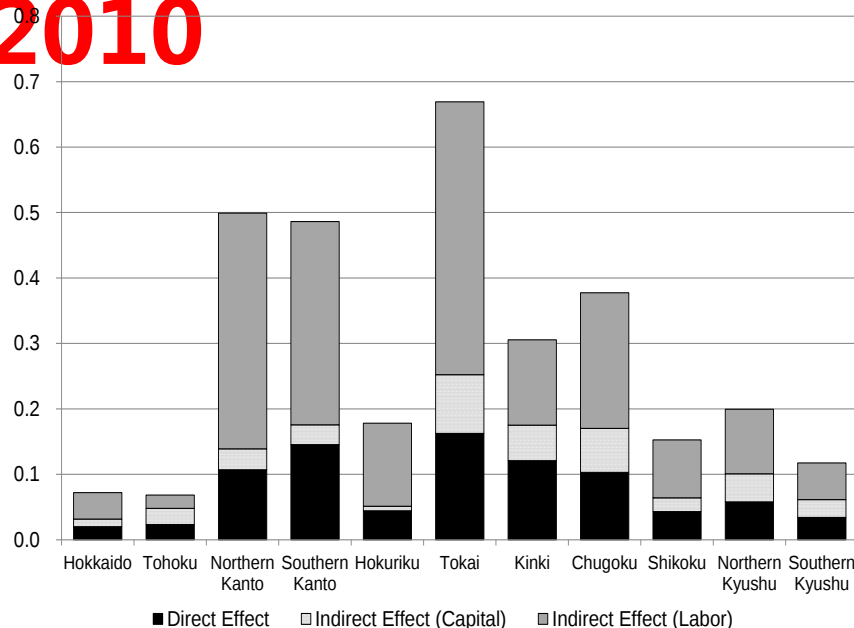
1. Assets of Financial Institutions



Региональные диспропорции экономических последствий большие различия в побочном воздействии

1990

2010



Прямое воздействие и побочные эффекты



прямое воздействие

Y = результат, K_r = личный капитал, L = труд
 K_g = общественный капитал
(инфраструктура)

Возврат побочных последствий для инвесторов

The production technology of the private sector is represented by the following production function.

$$Y = f(K_p, L, K_G) \quad (1)$$

where Y denotes output (in value added) in the private sector. The output is produced by combining private capital stock, K_p , labor input, L , and infrastructure stock, K_G .

In this paper, we assume the translog production function.

$$\begin{aligned} \ln Y = & \alpha_0 + \alpha_K \ln K_p + \alpha_L \ln L + \alpha_G \ln K_G \\ & + \beta_{KK}(1/2)(\ln K_p)^2 + \beta_{KL} \ln K_p \ln L + \beta_{KG} \ln K_p \ln K_G \\ & + \beta_{LL}(1/2)(\ln L)^2 + \beta_{LG} \ln L \ln K_G + \beta_{GG}(1/2)(\ln K_G)^2 \end{aligned} \quad (2)$$

Assuming the production function represented by equation (1), and that factor prices and infrastructure are given for producers in the private sector, the effect of infrastructure on productivity is expressed as:

$$\frac{dY}{dK_G} = \frac{\partial Y}{\partial K_G} + \frac{\partial Y}{\partial K_p} \frac{\partial K_p}{\partial K_G} + \frac{\partial Y}{\partial L} \frac{\partial L}{\partial K_G} \quad (9)$$

Here, the effect of infrastructure is divided into three parts; the first term on the right hand side of equation (9) represents *direct effect*; the second term is the *indirect effect* on output with respect to the resulting change in the input of private capital and the third term is the *indirect effect* on output with respect to the resulting effect on labor input.

Незатрагиваемая область

Главный путь

Побочный эффект

Трудоустройство

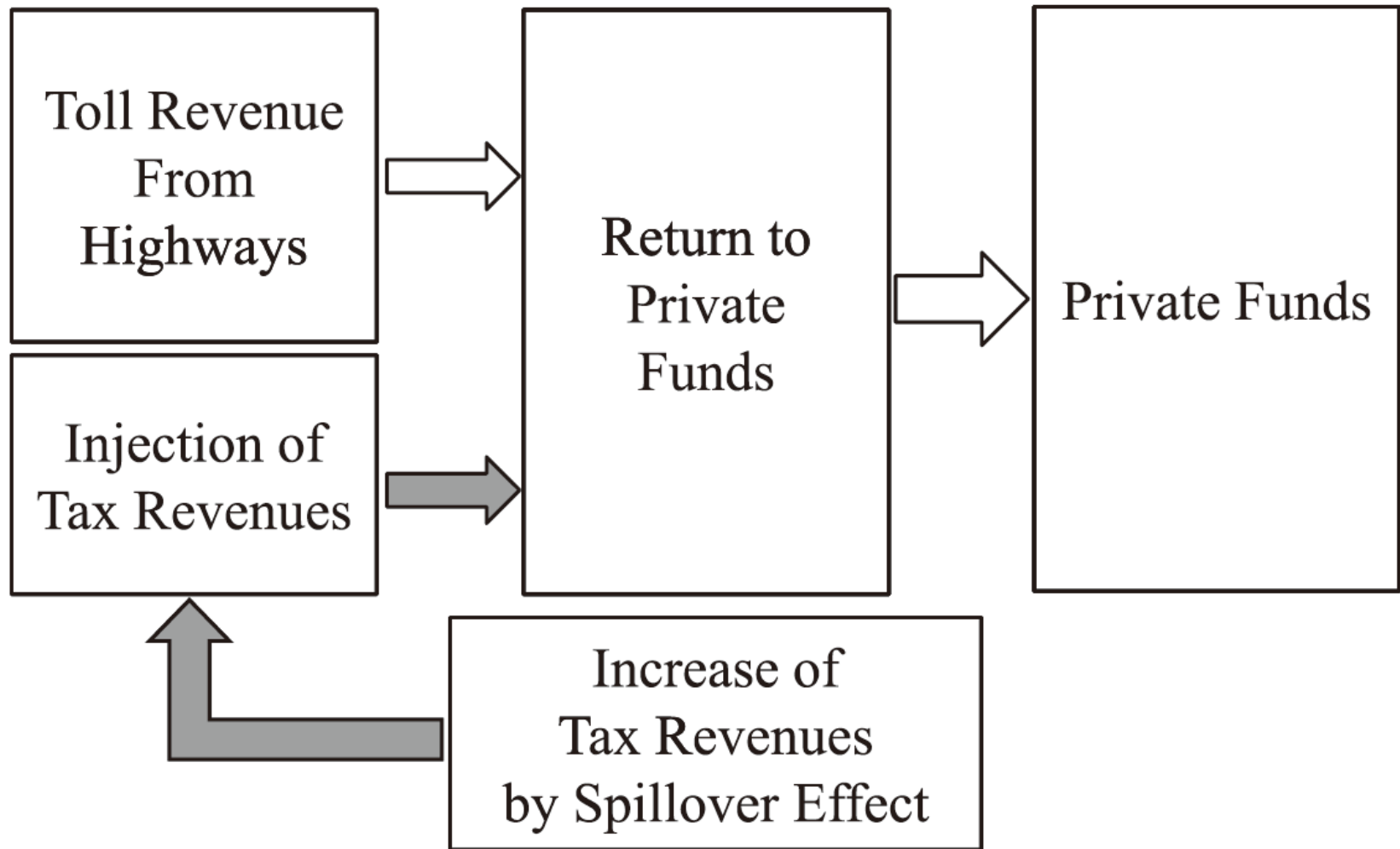
Незатрагиваемая область

Личное инвестирование
развитие SME

Побочный
эффект

Figure 4

Injection of a fraction of tax revenues gained from spillover effect



2010	Личный капитал	Общественный капитал	Прямое возд-вие	Косвенное возд-вие		20% возвратные	Фабрикация (%)
				Капитал	Труд		
Производство							
Хоккайдо	0.084	0.028	0.008	0.005	0.016	0.004	50.8
Тохоку	0.111	0.054	0.018	0.018	0.018	0.007	40.0
Северное Канто	0.068	0.297	0.064	0.019	0.215	0.047	73.2
Южное Канто(ТОКИО)	0.052	0.235	0.054	0.006	0.175	0.036	66.5
Хокурику	0.077	0.079	0.018	0.001	0.061	0.012	69.1
Токай	0.093	0.339	0.089	0.057	0.192	0.050	55.9
Кинки	0.056	0.202	0.068	0.020	0.114	0.027	39.5
Чугоку	0.075	0.198	0.059	0.043	0.096	0.028	47.0
Шикоку	0.089	0.073	0.021	0.010	0.042	0.010	50.8
Северное Кюшу	0.093	0.120	0.037	0.028	0.055	0.017	45.5
Южное Кюшу	0.098	0.091	0.028	0.022	0.041	0.013	45.7

2010 Сектор услуг	Личный капитал	Общественный капитал				20% возвратные	Фабрикация (%)
			Прямое возд-вие	Косвенное возд-вие			
				Капитал	Труд		
Хоккайдо	0.197	0.122	0.043	0.053	0.027	0.016	37.2
Тохоку	0.222	0.189	0.066	0.107	0.015	0.025	37.0
Северное Канто	0.235	0.273	0.095	0.124	0.054	0.036	37.5
Южное Канто(ТОКИО)	0.254	0.917	0.315	0.444	0.158	0.120	38.2
Хокурику	0.220	0.217	0.075	0.118	0.024	0.028	37.8
Токай	0.203	0.429	0.149	0.176	0.105	0.056	37.8
Кинки	0.202	0.316	0.110	0.131	0.075	0.041	37.7
Чугоку	0.212	0.121	0.044	0.068	0.010	0.016	35.6
Шикоку	0.224	0.193	0.069	0.099	0.026	0.025	36.3
Северное Кюшу	0.213	0.178	0.063	0.087	0.028	0.023	36.3
Южное Кюшу	0.228	0.157	0.057	0.090	0.009	0.020	34.7

Побочный эффект → Возврат инвесторам

		1956-60	1961-65	1966-70	1971-75	1976-80	1981-85
Прямой эффект(Kg)		0.696	0.737	0.638	0.508	0.359	0.275
Косвенный эффект (Kp)		0.453	0.553	0.488	0.418	0.304	0.226
Косвенный эффект (L)		1.071	0.907	0.740	0.580	0.407	0.317
20% Возврат		0.3048	0.292	0.2456	0.1996	0.1422	0.1086
%Фабрикация		1986-90	1991-95	1996-00	2001-05	2006-10	39.5
		0.215	0.181	0.135	0.114	0.108	
		0.195	0.162	0.122	0.1	0.1	
		0.193	0.155	0.105	0.09	0.085	
		0.0776	0.0634	0.0454	0.038	0.037	
		36.1	35.0	33.6	33.3	34.3	

Пример: Южная Тагальская магистраль (STAR), Филиппины Микро-данные

- Проект «Южная Тагальская магистраль» (STAR) в провинции Батангас, Филиппины (к югу от Манилы) представляет собой модифицированный проект строительство-эксплуатация-передача (СЭП).
- 41,9 км платная дорога СТАР, построенная для улучшения дорожной связи между Манилой и Батангас, обеспечивает легкий доступ к Международному порту Батангас, и тем самым ускоряет промышленное развитие в Батангас и близлежащих провинциях.

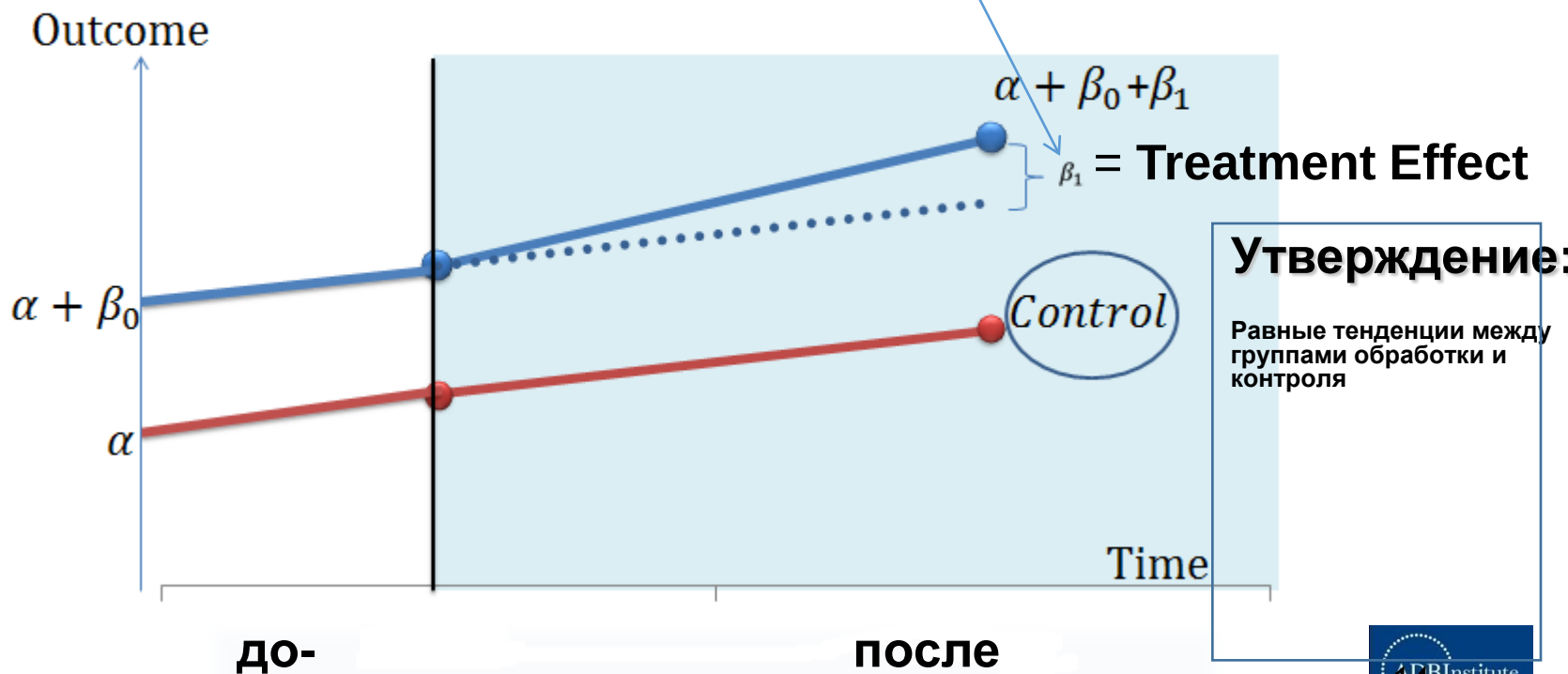


Анализ метода «разность разностей» (DiD)

$$\text{Outcome} = \alpha + \beta_0 D + \sum_{t+2}^{t-4} \beta_1 D \times T + \varepsilon$$

Где : $D = 1$ (обрабатываемая группа)
 $D = 0$ (Контрольная группа)

T = период для обработки



Difference-in-Difference Regression: Spillover

	(1) Property tax	(2) Property tax	(3) Business tax	(4) Business tax	(5) Regulatory fees	(6) Regulatory fees	(7) User charge	(8) User charge
Treatment D	1.5535 (1.263)	0.736 (0.874)	1.067 (1.316)	0.438 (1.407)	1.372 (1.123)	0.924 (1.046)	0.990 (1.095)	0.364 (1.028)
Treatment D × Period _{t+2}	0.421** (0.150)	-0.083 (0.301)	1.189*** (0.391)	0.991** (0.450)	0.248*** (0.084)	-0.019 (0.248)	0.408*** (0.132)	-0.010 (0.250)
Treatment D × Period _{t+1}	0.447** (0.160)	0.574*** (0.118)	1.264*** (0.415)	1.502*** (0.542)	0.449** (0.142)	0.515*** (0.169)	0.317** (0.164)	0.434** (0.167)
Treatment D × Period _{t0}	0.497*** (0.128)	0.570** (0.223)	1.440*** (0.417)	1.641*** (0.482)	0.604** (0.183)	0.642*** (0.181)	0.350 (0.271)	0.422 (0.158)
Treatment D × Period _{t-1}	1.294** (0.674)	0.387 (0.728)	2.256** (0.957)	1.779** (0.470)	1.318** (0.649)	0.838* (0.448)	0.959 (0.714)	0.197 (0.560)
Treatment D × Period _{t-2}	1.163* (0.645)	0.336 (0.594)	2.226** (0.971)	1.804** (0.531)	1.482** (0.634)	1.044** (0.413)	0.941 (0.704)	0.247 (0.531)
Treatment D × Period _{t-3}	1.702* (0.980)	0.450 (0.578)	2.785** (1.081)	2.070*** (0.544)	1.901*** (0.630)	1.238*** (0.369)	1.732*** (0.598)	0.676 (0.515)
Treatment D × Period _{t-4} , forward	2.573*** (0.900)	1.100 (0.758)	3.428*** (0.928)	2.560*** (0.350)	2.288*** (0.563)	1.509*** (0.452)	2.030*** (0.607)	0.787 (0.745)
Construction		2.283** (1.172)		1.577 (1.196)		1.207 (0.855)		1.942* (1.028)
Constant	14.69*** (0.408)	-2.499 (8.839)	14.18*** (0.991)	2.230 (9.094)	13.66*** (0.879)	4.597 (6.566)	13.08*** (0.649)	-1.612 (7.84)
N	80	73	79	73	80	73	77	73
R ²	0.29	0.41	0.37	0.44	0.43	0.50	0.26	0.39

Clustered standard errors, corrected for small number of clusters; * Significant at 10%. ** Significant at 5%. *** Significant at 1%.

Южная Тагальская магистраль (STAR) , Филиппины

Налоговые поступления в трех городах Ёшино и Понтинс (2015) Обсуждение ADBI страница 549

表 8 フィリピンの STAR 高速道路の影響のない地域と比較した事業税の増加額
(単位：100 万ペソ)

	t_{-2}	t_{-1}	t_0	t_{+1}	t_{+2}	t_{+3}	t_{+4} 以降
Lipa 市	134.36	173.50	249.70	184.47	191.81	257.35	371.93
Ibaan 市	5.84	7.04	7.97	6.80	5.46	10.05	12.94
Batangas 市	490.90	622.65	652.83	637.89	599.49	742.28	1208.61

(出所) Yoshino and Pontines (2015)より筆者作成

Заключение

Южная Тагальская магистраль (STAR) , Филиппины

Налоговые поступления в трех городах Ёшино и Понтинс (2015) Обсуждение ADBI страница 549

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Заклучение

Трансграничное инфраструктурное инвестирование

Роль многостороннего института

Большой
Город

Страна А

Страна В

Косвенный эффект,
продвижение МСП

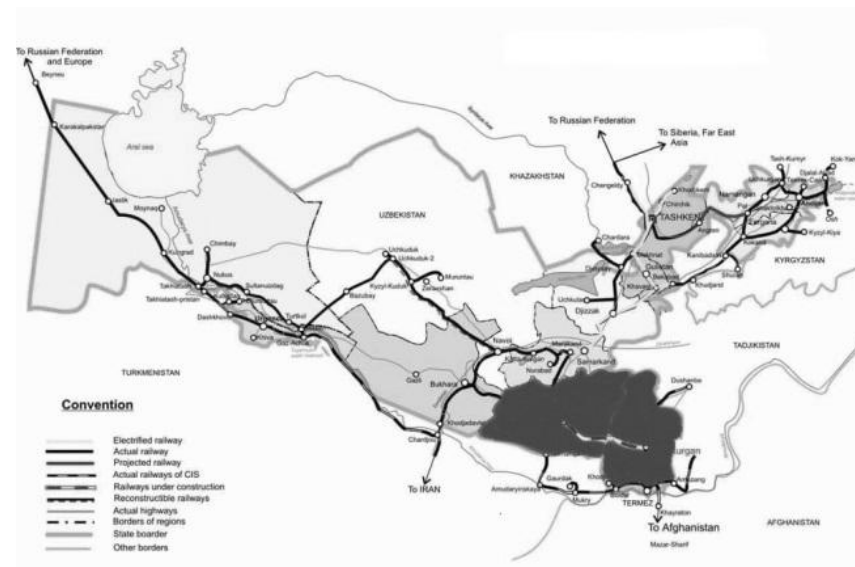
Косвенный эффект
→ Рост в налоговых
поступлениях

Железнодорожный путь Узбекистана

Уровень роста ВВП

$Y_{control, before}$

$Y_{treatment, before}$



Time

Разделение регионов, пострадавших и не пострадавших от железнодорожного подключения к "испытуемой группе" и "Контрольной группе"

«Разница в разнице» : снижение

- incorporating time varying covariates

Control group $E[\Delta Y_{0it}|i, t, X_{it}] = \alpha + \gamma_i + \varphi_t + X'_{it}\beta$

Treated group $E[\Delta Y_{1it}|i, t, X_{it}] = E[Y_{0it}|i, t, X_{it}] + \delta$

- $\Delta Y_{it} = \alpha_i + \varphi_t + X'_{it}\beta + \delta(D_{rail} \times D_{post})_{it} + \epsilon_{it}$

ΔY_{it} - GDP growth rate

α_i - sum of autonomous (α) and region specific (γ_i) rate of growth

φ_t - year specific growth effect

X_{it} - time varying covariates

$(D_{rail} \times D_{post})_{it}$ - dummy variable indicating that observation belong to treated group after treatment period

δ - difference in difference coefficient

ϵ_{it} - error term

ВВП



ВВП	Период	Эффект возможности подключения внешних эффектов	Региональный эффект внешних эффектов	Соседствующий эффект внешних эффектов
Эффекты запуска	Короткий	2.83***[4.48]	0.70[0.45]	1.33[1.14]
	Средний	2.5***[6.88]	0.36[0.29]	1.27[1.46]
	Длинный	2.06***[3.04]	-0.42[-0.29]	2.29**[2.94]
Ожидаемый	Короткий	0.19[0.33]	0.85[1.75]	-0.18[-0.20]
	Средний	0.31[0.51]	0.64[1.30]	-0.02[-0.03]
	Длинный	0.07[0.13]	-0.006[-0.01]	0.50[0.67]
Отложенные эффекты		1.76*[1.95]	-1.49[-0.72]	2.58*[2.03]
Ожидаемый	Короткий	-1.54[-1.66]	1.42[0.78]	-1.32[-0.92]
	Средний	0.32[0.44]	0.84[1.42]	0.13[0.13]
	Длинный	0.11[0.15]	0.10[0.16]	0.87[1.19]
Postponed Effects		-0.14[-0.20]	-1.71[-1.35]	1.05[1.44]

Additional tax revenue, Regional GDP growth and Railway Company Net Income, LCU (bln.)

Period	Coefficients	T(20)*ΔY (Tax revenue)	ΔY Affected (Direct + Spillover effects)	Company net income (Revenue - Costs)
Short term (2009-2010)	2.83*** [4.48]	16.0	79.9	315.5
Mid-term (2009-2011)	2.48*** [6.88]	16.3	81.5	411.7
Long-term (2009-2012)	2.06*** [3.04]	14.7	73.5	509.0

Source: Authors' calculations

Японский сверхскоростной поезд



**Влияние железной дороги Кюшу Шинкансен на поступления
КОРПОРАТИВНОГО НАЛОГА во время 1 фазы операции периода
(2004-2010), млн. JPY (исправленного для CPI, база 1982)**

1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	
9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8	8	8	8	8	8	8	8	8	9	9	9	9	9	9	9	9	0	0	0	0	0	0	0	0	0	1	1	1	1	1	
2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3

СОСТАВ ГРУППЫ

Вариативность	Понижение 1	Понижение 2	Понижение 3	Понижение 4	Понижение 5	Группа 2	Группа5
Испыт2	-4772.54 [-0.2]					Kagoshima Kumamoto	Kagoshima Kumamoto
Количество налогоплательщи ков	5.8952514* [1.95]	5.8957045* [1.95]	5.896112* [1.95]	5.8953585* [1.95]	5.8629645* [1.91]	Group3 Kagoshima Kumamoto Fukuoka	Oita Miyazaki
Исп3		-15947.8 [-0.87]					
Исп5			-13250.4 [-1.06]				
Исп7				-6883.09 [-0.7]		Группа7 Kagoshima Kumamoto Fukuoka	ГруппаCon Kagoshima Kumamoto Fukuoka
ИспCon					-28030.8 [-0.65]	Oita Miyazaki	Osaka Hyogo
Постоянная	-665679 [-1.35]	-665418 [-1.35]	-665323 [-1.35]	-665358 [-1.35]	-658553 [-1.32]	Saga	Okayama
N	799	799	799	799	799	Hiroshima	
R2	0.269215	0.269281	0.269291	0.269241	0.269779	Nagasaki	Yamaguchi
F-критерий	1.934589	2.106448	2.074548	2.100607	8.497174	* p < 0.1	

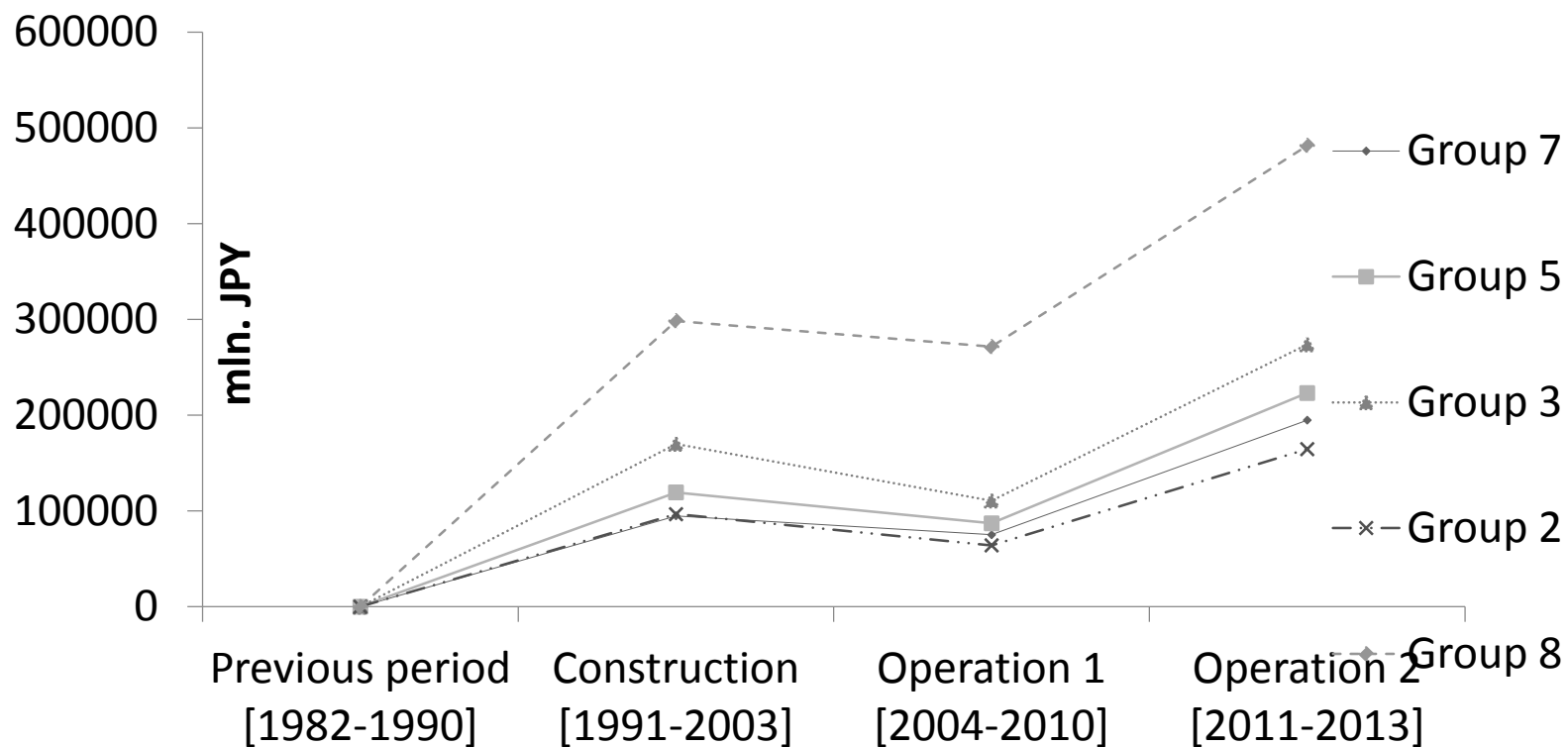
Примечание: Почтение 2 – Время Фиктивных Группы и т.д. Т значительна (1001-2003) и в скобках. Условные обозначения: * $p < 0,1$; ** $P < 0,05$; *** $P < 0,01$. стандартные кластеризация ошибки используются, что позволяет гетероскедастичности и произвольной автокорреляции в префектуре, но обрабатывать ошибки, как некоррелированных через префектур

**Impact of Kyushu Shinkansen Rail on
E TAX revenue during 2nd PHASE OF OPERATION period
{2011-2013} , mln. JPY (adjusted for CPI, base 1982)**

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						COMPOSITION OF GROUPS	
Вариативность	Понижение 1	Понижение 2	Понижение 3	Понижение 4	Понижение 5	Группа 2	Группа5
Испыт2	72330.012** [2.2]					Kagoshima Kumamoto	Kagoshima Kumamoto
Количество налогоплательщи ков	5.5277056*** [3.13]	5.5585431*** [3.14]	5.558603*** [3.14]	5.5706545*** [3.14]	5.9640287*** [3.07]	Group3 Kagoshima Kumamoto Fukuoka	Fukuoka Oita Miyazaki
Исп3		104664.34* [2]					
Исп5			82729.673** [2.1]				
Исп7				80998.365** [2.34]			ГруппаCon Kagoshima
ИспCon					179632 [1.58]	Kagoshima Kumamoto Fukuoka	Kumamoto Fukuoka
Постоянная	-568133.98** [-2.07]	-573747.28** [-2.08]	-574245.87** [-2.08]	-576867.56** [-2.09]	-642138.87** [-2.1]	Oita Miyazaki	Osaka Hyogo
N	611	611	611	611	611	Saga	Okayama
R2	0.350653	0.352058	0.352144	0.352874	0.364088	Nagasaki	Hiroshima
F	5.062509	5.486197	5.351791	5.431088	16.55518		Yamaguchi

Total tax revenue, mln. JPY



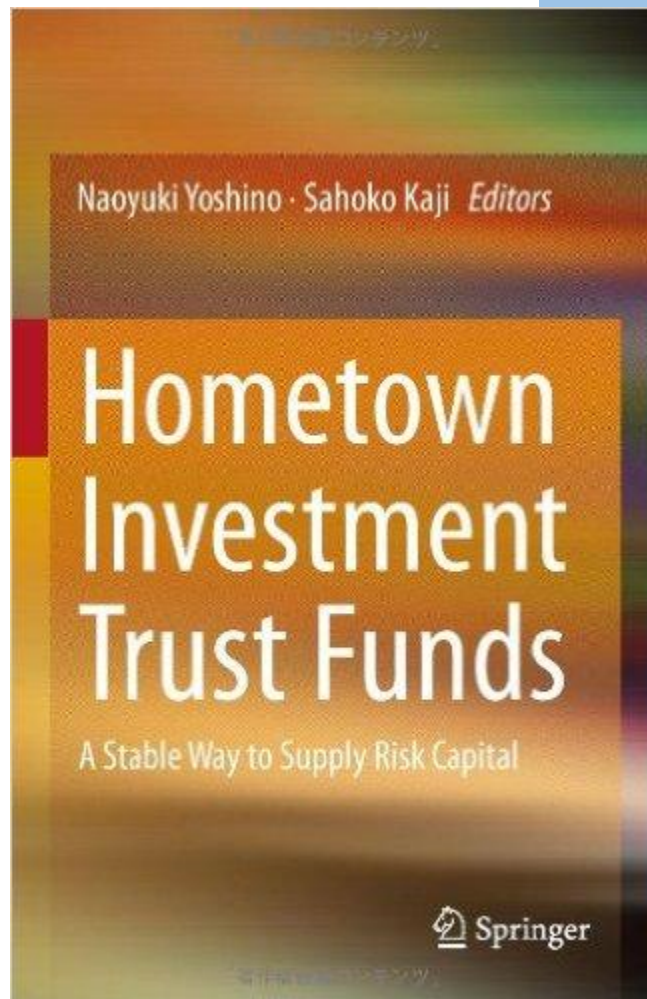
Общественно-государственное объединение (ОГО)

Дать стимулы для оперативного органа

Payoff table for infrastructure operating entity and investors

	Normal Case	Effort Case
Normal Case	$(50, r)$ Operating Entity Investors	$(50, \alpha r)$ Operating Entity Investors
Effort Case	$(100, r)$ Operating Entity Investors	$(100, \alpha r)$ Operating Entity Investors

Возможные решения Бизнесы Start up, фермеры



Местные Инвестиционные Целевые фонды

Стабильный способ подачи
рискового капитала

Yoshino, Naoyuki; Kaji, Sahoko (Eds.)
2013, IX, 98 p. 41 illus., 20 illus. in color

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**Япония, Кабоджа
Вьетнам, Перу**

Инвестирование в СМБ и стартапов



すべてを失い再起を断念しようになった時の

Agricultural Funds

Beans and Wine



Список литературы

Yoshino N. Kaji, S. (2013) Hometown Investment Trust Funds, Springer, March 2013

Yoshino, N., Taghizadeh Hesary, F. (2014), ‘Analytical Framework on Credit Risks for Financing SMEs in Asia’. Asia-Pacific Development Journal. United Nations Economic and Social Commission for Asia and the Pacific (UN-ESCAP)

Yoshino, N. and Taghizadeh Hesary F. (2015) “Analysis of Credit Ratings from Small and Medium-sized Enterprises: Evidence from Asia”, *Asian Development Review*, Vol.32, No2

Yoshino, N. and Pontines, Victor (2015) “The Highway-Effect on Public Finance: Case of the STAR Highway in the Philippines”, *GIE | AAA Special Kick-off Edition*, GIE Network publishing.

Nakahigashi, M and Yoshino, N. (2016) “Changes in Economic Effect of Infrastructure and Financing Method”, Public Policy Review, Vol.12, No.1.

Yoshino, Naoyuki (2010) “Financing Transport Infrastructure Investment”, OECD (ed.), Southeast Asian Economic Outlook 2010, OECD Publishing.

Yoshino, Naoyuki (2012) “Global Imbalances and the Development of Capital Flows among Asian Countries”, OECD Journal: Financial Market Trends, Vol. 2012/1

Yoshino, Naoyuki and Masaki Nakahigashi (2004) “The Role of Infrastructure in Economic Development”, ICFAI Journal of Managerial Economics, 2, pp. 7-24

Yoshino, Naoyuki and Victor Pontines (2015) “The Highway Effect on Public Finance: Case of the STAR Highway in the Philippines”, Asian Development Bank Institute (ADBI) Working Paper No.549.

Yoshino, Naoyuki, Victor Pontines and Umid Abidhadjaev (2015) “Impact Evaluation of Infrastructure Provision on Public Finance and Economic Performance: Empirical Evidence from Philippines and Uzbekistan”, Asian Development Bank Institute (ADBI), Working Paper, No.548.