

The Influence of Capital and Transportation in the Implementation of the Public Private Partnership Scheme



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ABSTRACT: Indonesia as a country that is currently carrying out developments requires a lot of funds to carry out infrastructure development. The methods used carrying out infrastructure development is by implementing a Public Private Partnership or PPP scheme. Several experts have put forward the definition of PPP, which is contained in No. 38 of 2015 Presidential Regulation concerning Government Cooperation with Business Entities in the Provision of Infrastructure. In reality the implementation of the PPP scheme is said to be able to influence several things including the use of capital and transportation.

KEYWORDS: Public Private Partnership (PPP), Capital, Transportation

BACKGROUND

In the current era, Indonesia is continuously carrying out infrastructure development to increase the rate of economic growth. In addition, infrastructure development is also carried out to improve people's welfare. The government needs to provide a large amount of funds for development because Indonesia's territory is very wide. According to a World Bank study, the availability and adequacy of infrastructure accounts for at least 30% of the development process.¹

However, Indonesia cannot carry out development alone because the costs required are enormous. International City or what is commonly called the County Management Association (ICMA) said that apart from infrastructure funding from the National Budget or Regional Budget, several alternatives for infrastructure financing have been found. Among others:²

- 1) A new source of funds;
- 2) New financing measures; or
- 3) New funding overview.

Therefore, attracting investors is the right choice and one of the steps is to determine the use of the Public Private Partnership (PPP) scheme. By using this scheme, the government can use its assets by leveraging the skills of the private sector.³

In general, the PPP scheme includes an alternative contract-based financing procedure in the procurement of public services.⁴ According to William, PPP also includes a form of rent in the public sector and the private sector which consists of several decisions, namely the private sector carries out government functions for a certain period of time while the public sector receives compensation for this.⁵ According to Tom Hocking, PPP is also said to be an investment from government capital and sourced from private entity funds or public funds that will achieve public benefits.⁶

Through this scheme, several advantages are obtained in practice, namely:⁷

- a. Rapidly available capital for infrastructure development;
- b. Responsibility for design and construction moved to the private sector, and was collected by government funding;

¹ Bahtiar Rifai. 2014. Implementation of Government and Private Cooperation in Infrastructure Development of the Drinking Water Sector in Indonesia. *Journal of Economics and Development*. 22.2.166.

² Maman Suhendra. 2017. Provision of Infrastructure with Public-Private Partnership Schemes in Indonesia. *Journal of Public Financial Management*. 1.1.42.

³ Ahmad Sulton Arlyansyah, et al. 2015. Public-Private Partnership in Waste Management at TPA Tamangapa Makassar City. *Journal of Public Administration Science*. 6.

⁴ Moch. Yafie Abbas. Public Private Partnership in the Development and Management of Suncity Plaza Sidoarjo.

⁵ Hardianti Somp. 2019. Public Private Partnership in Infrastructure Development Case Study of Makassar City Toll Road Construction. Thesis Department of State Administration, Faculty of Social and Political Sciences, University of Muhammadiyah Makassar. 16.

⁶ Director General of State Assets. 2014. Towards Optimizing Management of State Assets, State Receivables, and Auctions. 17. V. 18.

⁷ Muhammad Tang Abdullah. 2020. 104.

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- c. Reducing costs that are not important when the project implementation period is carried out by the private government;
- d. Allocation of risk to the most competent party to handle it.

Several elements of government-private cooperation were found, as revealed by Anderson, including:⁸

- a. It consists of at least two parties, namely the government and the private sector.
- b. We need co-workers who are able to act according to their capacity.
- c. Trust one another, including relationships.
- d. All parties working together must have both material and non-material capital resources. Each organizational structure will be assigned responsibilities, financial, tasks, and objects.

There are seven factors supporting the success of the PPP scheme, namely:⁹

- a. Network (Networking);
- b. Cooperation (Cooperation/ collaboration);
- c. Coordination (Coordination);
- d. Willingness;
- e. Trust or Ability (Trust/ability);
- f. Conductive environment (A conducive environment).

According to Sipala, there are 22 indicators supporting the success of the PPP scheme including:¹⁰

- a. Adjustment of regional regulations in support of the PPP scheme;
- b. Commitment to provide a budget for the implementation of the PPP scheme;
- c. Interest of national and international financial institutions in providing loans for PPP schemes; And
- d. Priority for regional development through the PPP scheme.

In addition, there are several obstacles to PPP scheme collaboration including:¹¹

- a. Land and/or land acquisition issues;
- b. Institutional problems;
- c. Financing problems; And
- d. Legislation issues.

No. 38 of 2015 explains the Presidential Regulation which discusses Government Cooperation with Business Entities in the Provision of Infrastructure (PPP Presidential Regulation), Indonesia has implemented the PPP scheme. Infrastructure that can be cooperated with the PPP scheme is natural gas, oil, electricity, waste water, transportation, irrigation, roads, and so on.¹² There are various forms of PPP cooperation, namely:¹³

- a. Build and Transfer (BT)

This scheme goes as follows:¹⁴

- Private parties as project builders carry out financing and development;
- When the project has been completed, it is handed back to the government and the contractor is not entitled to collect project profits.

- b. Build, Operate, Transfer (BOT)

Government Regulation concerning Management of State or Regional Property contained in No. 6 of 2006. An example is used by PDAM companies with PT. Gods Build Partners.¹⁵ This scheme goes as follows:¹⁶

- The position of service users as project builders;

⁸ Farida Fitriyah. 2016. The Public Private Partnership Model in Improving Clean Water Resources Services in PDAM Gresik Regency. *Journal of Public Policy and Management*. Vol. 4. No. 1. 3.

⁹ Fahmi Dzakky. 2021. Public Private Partnership: Alternatives to Domestic Infrastructure Development. *Journal of Social and Cultural Shari'a*. 8.2.576.

¹⁰ Marianus Talomau. 2018. Factors of Readiness to Implement Public-Private Cooperation Schemes for Provision of Infrastructure in the Regions. *Infrastructure Journal*. 4.1.76.

¹¹ Repository UAI. 2019. Pengembangan Investasi Infrastruktur: Kerja sama Pemerintah-Swasta dan Kawasan Ekonomi Khusus. 8.

¹² M. Gasali, M and Roberta Zulfhi Surya. 2016. Public Private Partnership as a Source of Funding for Infrastructure Development other than APBN/APBD in Indragiri Hilir Regency. *Journal of BAPPEDA*. 2.3.180.

¹³ Presidential Regulation No. 38 of 2015 concerning Government Cooperation with Business Entities in the Provision of Infrastructure.

¹⁴ Asian Development Bank. 2020. *Public-Private Partnership Monitor Indonesia*. XIII.

¹⁵ Suaibatul Aslamiyah, et al. The Partnership Model as a Strategic Effort to Improve Clean Water Services. *Journal of Public Administration*. 2.1.92.

¹⁶ Moch. Yafie Abbas. *Public Private Partnership in the Development and Management of Suncity Plaza Sidoarjo*. 2.

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- If the project has been completed then he must fight for and run the project within the agreed timeframe to get a profit (profit).
- When the time has expired, the project is returned to the service provider.

c. Build, Operate, Leasehold, and Transfer (BOLT)

This scheme goes as follows:

- Local government as the owner of the assets;
- Construction of the project on land owned by the local government is the task of a third party;
- Fighting for and running the project by leasing it to other parties is the task of third parties;
- The share of the rental proceeds according to the agreement with the local government is the responsibility of a third party;
- After the collaboration ends, awarding all projects to local government is the third party's task.

d. Build, Transfer, Operate (BTO)

This scheme goes as follows:

- Local government as the owner of the assets;
- Building projects on land owned by local government carried out by third parties;
- Providing the project to the local government after completion is the task of a third party;
- Carrying out projects during cooperation and rewarding local governments with mutual agreements is the duty of third parties;
- Related to the compensation for managing the project during the cooperation is borne by the third party;
- Handover of land and buildings to the local government after the completion of the cooperation is the task of a third party;

e. Renovate, Operate, and Transfer (ROT)

This scheme goes as follows:¹⁷

- Local government as the owner of the assets;
- Third parties rehabilitate and manage projects during cooperation;
- The results of project management are entirely third party rights;
- Collateral is prohibited;
- The maximum period of cooperation is five years;
- Third parties submit projects after the cooperation ends.

f. Renovate, Operate, Leasehold, and Transfer (ROLT)

This scheme goes as follows:

- Local government as the owner of the assets;
- Building repairs carried out by third parties;
- Third parties manage and operate buildings by way of leasing from the local government to be leased again to other parties;
- Maintenance and insurance costs are borne by third parties;
- The parties can agree on risk sharing.

g. Build, Transfer, Leasehold (BTL)

This scheme goes as follows:

- Local government as the owner of the assets;
- A third party builds on top of the asset;
- Third parties hand back the building upon completion;
- Working on and working on buildings by way of contracts with other parties carried out by third parties;
- Giving a share of the rental proceeds to the local government is carried out by a third party;
- Third parties bear maintenance costs and all rewards during the cooperation period are borne;

Indonesia has used the PPP scheme in several projects. According to Bappenas, the successful implementation of PPP in 22 projects from the electricity, information and telecommunications sectors, as well as roads and bridges was valued at USD 15,390,660,000.00 through funding from the private sector.¹⁸

Literature Reviews

¹⁷ Muhammad Tang Abdullah. 2020. 109.

¹⁸ The National Planning Agency of the Republic of Indonesia. 2021. *Public Private Partnership 2021: Infrastructure Projects Plan in Indonesia*. 14.

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According to William J. Parente from the USAID Environmental Services Program, the definition of PPP is "an agreement or contract, between a public entity and a private party, under which : (a) a private party undertakes government functions for specified period of time, (b) the the private party receives compensation for performing the function, directly or indirectly, (c) the private party is liable for the risks arising from performing the function and, (d) the public facilities, land or other resources may be transferred or made available to the private party."

Based on the explanation above, several characteristics can be drawn in PPP, including an agreement between the government and the private party, the private party carries out its function in the utilization of assets within a certain period of time, both parties receive compensation directly or indirectly, and the private party is responsible for risks that arise during the implementation of cooperation. The PPP concept can benefit the state as the owner of the assets because the private sector can provide financial assistance in infrastructure development and carry out operations if the assets used as objects have been completed. Each party also benefits directly or indirectly from this collaboration. This certainly benefits the government as the owner of the assets as well as the private sector itself.

With the application of the PPP principle, of course, it can change the point of view in the current management of BMN where idle BMN, if managed professionally, can provide great benefits for the state as the owner of BMN. There are lots of sectors that can be exploited or exploited in the PPP concept. Apart from infrastructure projects, there are also non-infrastructure projects that can be utilized under the PPP concept. DJKN, which is the institution responsible for managing state assets, must of course see this as a very profitable opportunity in terms of state revenue. Through the utilization scheme with KSP which has been supported by legal instruments PP number 27 of 2014 and Minister of Finance Regulation Number 78/PMK.06/2014 concerning Utilization of State Property it has become a necessity for DJKN in maximizing state revenues through KSP. Based on the previous explanation, it can be concluded that the PPP principle is in line with the form of Utilization of KSP as stipulated in PP No. 27 of 2014 concerning BMN/D Management. We can see that KSP is actually a form of the PPP concept. DJKN as a developing organization must have a new paradigm in managing the assets it is responsible for. The new paradigm in question is the paradigm in viewing the potential for state revenue if an asset is to be utilized in the form of a KSP. As an institution that is undergoing transformation, DJKN must determine benchmarking in order to analyze and compare the business processes that have been carried out with the same business processes that have been carried out in other countries to then carry out monitoring and evaluation (monev) of the results of the process. The following are several countries that can be used as benchmarks for DJKN in implementing PPP principles:

No	Country	Reasons to choose PPP
1	United States	Increase Operational Efficiency
2	UK	Increasing competition
3	South Korea	Accessing proven new technology
4	India	Creating jobs
5	Thailand	Providing services that are not yet available
6	Philippines	Realize transparent procurement
7	South Africa	Promote additional investment

Source: Parente, 2006

Based on the table above, there are several reasons for each country to implement the PPP principle. One thing that can be concluded from the several reasons for each country above is that each country has the same goal, namely optimizing the potential for state revenue. Thailand has a reason for choosing PPP because it wants to provide public service sectors that have not previously been provided by the government. This provides an example where through the PPP principle, Thailand can optimize state revenues that previously could not be provided by the public sector.

There are several advantages of PPP which, according to the author, have made several countries use it as one of the principles used in managing state assets, including:

1. PPP generates state revenue;
2. PPP makes the government's investment capital for a project lower;

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3. PPP can optimize the use of idle assets;
4. PPP can create public services that previously could not be fulfilled by the government.

In order to optimally support the KSP process between the government and the private sector, DJKN as an asset manager must try to create a market friendly climate and set of regulations. DJKN as an institution that only plays a role in managing state assets must have such qualities. Improvement of DJKN's business processes, especially in terms of managing state assets, must be carried out immediately. If the KSP process can be maximized, it is not impossible that the DJKN as the manager of state assets can become one of the main generating institutions for state revenue. The potential for utilization through KSP is very large, bearing in mind that Ministries/Agencies are not fully aware of this potential.

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Public Private Partnership (PPP), recently is becoming popular issue among stakeholders in infrastructure development in Indonesia. In other countries, infrastructure facilities such as Toll Road, Water Supply Network, Electricity Power, Harbour, Airport, Health Services, and Education have already been using PPP scheme. PPP is needed due to the limitation of government budget, infrastructure life time based on the quantity and the quality, and also the private sector skill/technology capability. In term of infrastructure quality competitiveness, based on the survey resulted in the World Competitiveness Report 2008-2009, showed that Indonesia is on the 96th rank among 134 countries surveyed. It can be argued that Indonesian infrastructure quality is still low in comparison to the other South East Asian Countries, even from its neighborhood countries. Government budget for infrastructure investment including transportation in 2010-2014 is very limited namely around 32% including from bilateral and multilateral loan. Therefore the 62% government budget remains must be fulfilled by another scheme such as Public Private Partnership.

METHOD

The method used is a literature study with sources from several articles including journals and existing laws and regulations as well as econometric methods. This article uses data over time and between countries as panel data. The analysis was carried out using secondary data. The research shows that economic growth can be affected by low transaction costs by also controlling several variables.

The econometric model is,

$$RGDP_{i,t} = \beta_0 + \beta_1 K_{i,t} + \beta_2 L_{i,t} + \beta_3 LPPP_{i,t} + \beta_4 dtf_{prop_{i,t}} + \beta_5 day_{prop_{i,t}} + \beta_6 Cost_{prop_{i,t}} \dots (1)$$

$$RGDP_{i,t} = \beta_0 + \beta_1 K_{i,t} + \beta_2 L_{i,t} + \beta_3 LPPP_{i,t} + \beta_4 dtf_{cont_{i,t}} + \beta_5 day_{cont_{i,t}} + \beta_6 Cost_{cont_{i,t}} \dots (2)$$

$$dtf_{overall_{i,t}} = \beta_0 + \beta_1 LPPP_{i,t} + \beta_2 dtf_{prop_{i,t}} + \beta_3 day_{prop_{i,t}} + \beta_4 Cost_{prop_{i,t}} \dots (3)$$

$$dtf_{overall_{i,t}} = \beta_0 + \beta_1 LPPP_{i,t} + \beta_2 dtf_{cont_{i,t}} + \beta_3 day_{cont_{i,t}} + \beta_4 Cost_{cont_{i,t}} \dots (4)$$

Model (1) and model (2) show the effect of property rights and contract enforcement on economic growth in several ASEAN countries. RGDP is annual real growth.

K is the percentage of fixed capital formation.

L is the population growth rate.

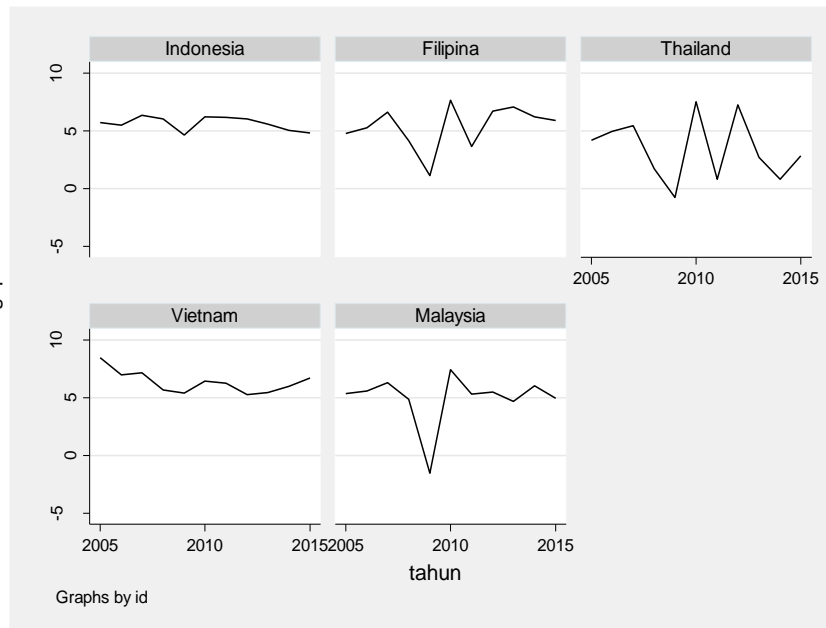
LPPP is the logarithm of the annual infrastructure project value in a given country.

i shows observations on the country in question.

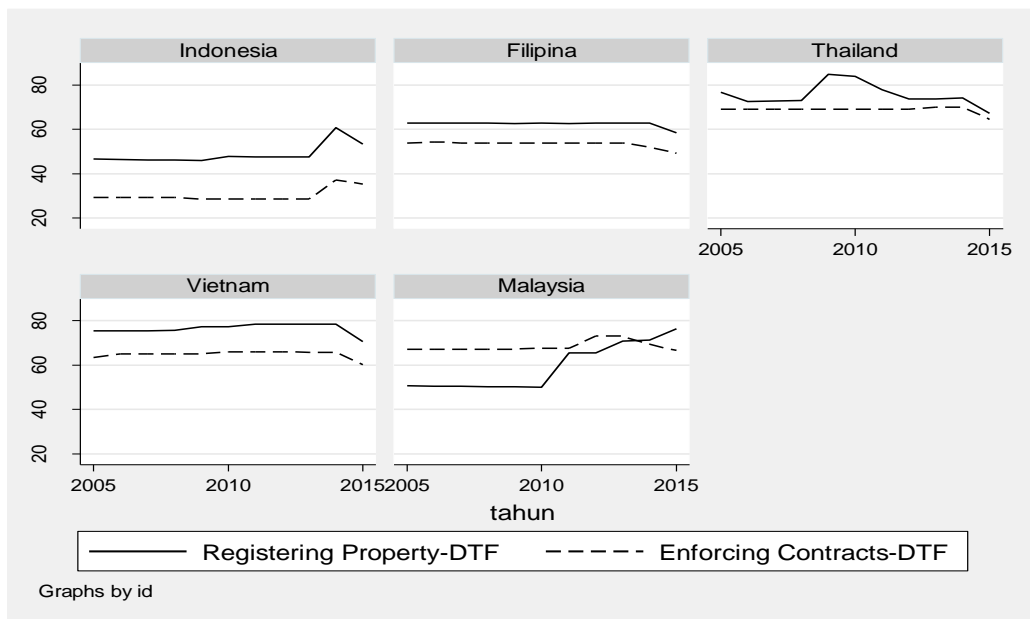
t is used from 2005 – 2015

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RESULTS AND DISCUSSION



It can be seen that the countries whose real PDR growth is quite stable are Indonesia and Vietnam. When compared, the Philippines, Malaysia, and Thailand experienced quite large fluctuations. By analyzing using the dtf value, Malaysia is a country with adequate institutions for doing business. For the other four countries still need to compete.



When viewed from the contract issue, Indonesia has a problem because it requires a longer duration and the costs incurred are also getting bigger. Malaysia experienced significant developments in this regard because its property rights were guaranteed.

Dependent Variable: Real GDP Growth	(1)	(2)
Independent Variables:	PLS	FE
K	0.175* (0.0947)	0.135 (0.291)
L	-1.439 (1.178)	-6.118*** (0.439)
Lppp	-0.137 (0.113)	0.145 (0.0996)
registeringpropertydtf	-0.104*** (0.0363)	
registeringpropertyproceduresnum	0.606** (0.293)	

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registeringpropertytimedays	0.0120 (0.0213)	
registeringpropertycostofpropert	-0.367*** (0.140)	
enforcingcontractstimedays		0.00187 (0.00738)
enforcingcontractsdtf		0.0855* (0.0327)
enforcingcontractscostofclaim		-0.268*** (0.0380)
Constant	8.335* (4.329)	19.00** (5.350)
Observations	13	13
R-squared		0.912
Number of id	5	5

Standard errors in parentheses
*** p0.01, ** p0.05, * p0.1

In model (1), it can be seen that an increase in fixed capital formation can affect real GDP growth. In model (2), the dtf value of the contract and the percentage of claim costs are variables that consistently influence real GDP growth.

Dependent Variable: Overall DTF	(3)	(4)
Independent Variables:	PLS	FE
Lppp	0.569* (0.309)	0.305* (0.132)
registeringpropertydtf	0.442*** (0.162)	
registeringpropertyproceduresnum	-0.535 (0.504)	
registeringpropertytimedays	-0.579*** (0.122)	
registeringpropertycostofpropert	-1.327*** (0.468)	
enforcingcontractsdtf		0.298 (0.261)
enforcingcontractstimedays		-0.108** (0.0285)
enforcingcontractscostofclaim		0.494** (0.161)
Constant	58.91*** (8.020)	78.16*** (1.993)
Observations	13	13
R-squared		0.833
Number of id	5	5

Robust standard errors in parentheses
*** p0.01, ** p0.05, * p0.1

In model (3) and model (4) it is found that the existence of transportation affects the ease of doing business in a country. In addition, the value of ease of doing business is affected by the cost, and the number of procedures of property rights and contract enforcement. In order to increase the ease of doing business in the country, efficiency and effectiveness of the system for administering property rights and contract enforcement is required.

Conclusion

From this study it was found that in order for real GDP to increase, the government must reduce costs and shorten the contract handling time. This research also shows that a country's real GDP is directly proportional to the number of days dealing with property rights. This is dangerous in terms of business competitiveness between the government and the private sector.

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Legislation

- 1) Presidential Regulation No. 38 of 2015 concerning Government Cooperation with Business Entities in the Provision of Infrastructure

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ATTACHMENT

Table 1. Data Descriptive Statistics

Variable		Mean	Std. Dev.	Min	Max	Observations	
rgdp	overall	5.137982	2.038219	-1.514	8.442	N =	55
	between		1.089014	3.409	6.327727	n =	5
	within		1.785499	-1.321564	9.235982	T =	11
k	overall	26.46896	5.821997	16.59156	39.56627	N =	55
	between		5.415767	19.37111	32.30807	n =	5
	within		3.161755	20.16463	33.72716	T =	11
l	overall	1.288345	.5356599	.213	2.711	N =	55
	between		.4811463	.5365455	1.701818	n =	5
	within		.3135291	.5158909	2.478891	T =	11
pppra~s	overall	5656.846	8422.441	46	26653	N =	13
	between		3538.201	1211.5	9215.5	n =	5
	within		7867.422	-3502.654	24106.35	T-bar =	2.6
overal~f	overall	65.45333	9.186591	54.29	81.2	N =	30
	between		9.914465	56.76667	78.265	n =	5
	within		1.744862	61.79833	68.57666	T =	6
regist~f	overall	64.48636	11.90671	46.02	84.9	N =	55
	between		11.67932	48.73818	76.52	n =	5
	within		5.533867	55.35909	81.54909	T =	11
regist~m	overall	6.02	2.106726	3.9	9	N =	55
	between		2.32422	4	9	n =	5
	within		.1914854	5.82	6.92	T =	11
regist~s	overall	44.18727	40.65007	6	146	N =	55
	between		33.50389	6	92.54545	n =	5
	within		27.1623	-35.35818	97.64182	T =	11
regist~t	overall	4.763636	2.903597	.6	10.8	N =	55
	between		3.02949	.9272728	8.745455	n =	5
	within		.976043	.8272728	6.818182	T =	11
enforc~f	overall	57.15564	14.86309	28.51	73.06	N =	55
	between		16.3108	30.22545	68.77091	n =	5
	within		2.033805	52.442	64.21018	T =	11
enforc~s	overall	530.9564	170.215	388.4	862	N =	55
	between		182.8944	403.4182	843.8182	n =	5
	within		41.44027	422.32	598.5382	T =	11
enforc~m	overall	42.22545	34.67246	15	115.7	N =	55
	between		38.3169	15.40909	109.9727	n =	5
	within		2.425017	40.33454	50.24364	T =	11
lppp	overall	7.333695	2.001488	3.828641	10.19066	N =	13
	between		.541411	6.824137	8.024334	n =	5
	within		1.930151	4.159332	10.23039	T-bar =	2.6

Table 2. Test Results

Test LM models (1)

$$rgdp[id,t] = Xb + u[id] + e[id,t]$$

Estimated results:

	Var	sd = sqrt(Var)
rgdp	1.242791	1.114805
e	.0223597	.1495316
u	0	0

Test: $Var(u) = 0$

chibar2(01) = 0.00

Prob > chibar2 = 1.0000

H0 is not rejected, it is better to use pooled least squares

F model test (2)

F test that all $u_i=0$: $F(4, 2) = 19.34$ Prob > F = 0.0498

H0 is rejected, so it is better to use the fixed effect.



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