

# RISKS IN PPP: PROCESS AND INSTITUTIONAL ANALYSES

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PPP has been pursued as the new governance form in worldwide experience, although it still encounters the difficulties in the existing institutional environment. From the perspective of analysing risks which derive from institutional weaknesses, this paper aims to reveal the process and institutional features of PPP project. Through examining the Electronic Toll Collection project in Taiwan, the analysis argues that the institutional features of the project have the impact on the process of actor interaction which leads to the eventuation of certain risks and the actual risk allocation in post contract stage that differ from the expected. The institutional weaknesses, particularly in the aspect of over zealous political attitude to PPP, the lack of public participation and the inadequate legal framework require further attention in PPP development.

Keywords: actor interaction, institutions, Public Private Partnerships, risk, Taiwan.

## INTRODUCTION

When the concept of PPP has risen since the late 1970s, it has been widely used around the world. However, it is pointed out that Partnership is still an ideal to be aspired to rather than a description of the actual working relationship between public and private contracting parties (Edwards 2004: 8). This argument implies that the normative characteristics of PPP have not been fulfilled in the real projects. Many researches and experience throughout the last two decades, revealed the problems, in other words, the widening gap between the practice and the ideal situation of PPP.

When PPP is understood from the network governance perspective, it has two distinct features: 1) process feature refers to the fact that PPP is not only the interaction between the public and the private sector who sign the contract, but the interaction process between various actors. The strategies and resources are affected by the institutional features; 2) institutional features which are the institutional and governance characteristics of the project underpinning the actor interaction. The actor relationships are affected by the existing governance and institutional environment of the project, which may or may not contribute to the expected partnership (Klijn and Koppenjan 2003).

The process feature and the institutional features have been discussed from various perspectives in the literatures.

Through analyzing the institutional and strategy barrier to PPP on the analysis of two Dutch cases, Klijn and Koppenjan (2003) suggest that the explanation of the inability to develop partnerships lies in a combination of the factors from process and

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institutional features of the project: the complexity of actor composition; the strategic choices of public and private actors; and the institutional factors. Therefore, a tension is created between on the one hand the wishes to have the partnership and the existing weak institutional structures and the conflicting strategies of actors on the other hand (Klijn and Koppenjan 2003: 145).

The strong impact of the existing institutional characteristics on the project is also analyzed by Koch and Buser (2006). They use the term meta-governance to describe the institutional framework such as the regulatory framework as an umbrella for PPP networks. Further to Klijn and Koppenjan's discussion, they point out that although the public service is moving away from hierarchy and bureaucracy to network governance which is the partnership from a mix set of player (e.g. the private investors, the voluntary organizations, and the citizens), the governance and meta-governance as a whole still maintain hierarchy, in which principal-agent relationships exist. They contend that the meta-governance and/or principal agent elements both are overarching the network elements; meaning that the public services are developed in a hybrid organization with network characteristics but also with a hierarchical element (Koch and Buser 2006: 550).

Consistent with the arguments above, Onibokun and Kumuyi (1999) argue that these existing institutional characteristics are ignored to some extent in many PPPs. Although there is an increasing interest in PPP, the focus is more on the technical or financial issues, rather than the political, sociological and environmental relationships. As focusing on public interest, they further note that techno-financial approaches have failed to develop an institutional set up necessary to empower citizens to participate effectively (Onibokun and Kumuyi 1999, cited from Ahmed, et al 2004: 475).

The research referred to above reveal that although PPP is aiming to achieve a more innovative and cooperative form of governance, the existing institutional environment may hamper this progress.

These institutional features affect the PPP through having impact on the strategies and resource of the actors in the interaction. The impact of the existing institutional features are often illustrated in the phenomenon that the actors still play the traditional roles in PPP arrangement which however asks for new relationship. As Brinkerhoff argued, partnership can assist to resolve conflict, but such connection may be limited by the traditional role of the actors and by factors in the environment which can disturb the partnership, especially power imbalance (Brinkerhoff and Brinkerhoff 2004). Through reviewing the problems of PPP from international experience, Bovaird gives examples of the traditional roles of the actors played with the conflict of interests, such as the hierarchical dominance of the public sector, and the over stress on the pursuance of profit from the private partner, and the closed decision making network between them to exclude non members such as the public. He therefore stresses that although the language of 'relational contracting' and 'partnering' may often be used in such arrangements of PPP, the actual relationship between the actors often appears to reflect traditional 'transactional' or even 'confrontational' contracting (Bovaird 2004). Hofmeister and Borchert (2004), by focusing on the political behaviour of the government which can jeopardize the PPP, acknowledge a lack of understanding between the actors of each other's position in PPP. Lobina (2005) from the perspective of the private partner, reveals how the interests, objective and resource of the private sector shape their relationship with local stakeholders, citizens and local governments, therefore explains the discrepancy between the theory pointing at

private participation as the way forward and the results of private participation in practice.

The impact of the process and institutional characteristics on PPP can be shown through the perspective of risk. The research above contribute to the argument of this study that when considered in the risk definition, the process and institutional features of PPP are the underlying reasons of why some risks eventuate and the actual risk allocation in post contract stage that differ from the contract expected.

For the purpose of this study, the risks are defined into the risk from the technical sources and the risks from the source of institutional characteristics. When the risks derive from the technological and market reasons, these risks with the nature of technical-rationality are easily managed through the contract design (Johnston and Gudergan 2007). However, there are also risks which derive from the underlying institutional factors of the project such as the legal, political and the civil society aspects, and are illustrated through the actor strategies. These risks are hard to deal with solely through the legal contract, as the process and the institutional features of PPP are taken into account (Hodge 2004; Loosemore 2007). The risk category will be applied to the analysis of the following case study in Taiwan.

### **CASE STUDY: ETC PROJECT**

Taiwan Electronic Toll Collection (hereafter ETC) project is one of the 44 priority PPP projects of the Executive Yuan (the national government of Taiwan, thereafter EY). Under the facilitation of Public Construction Committee (PCC), Ministry of Transportation and Communication (MOTC), this project was tendered by Taiwan Area National Freeway Bureau (TANFB). This project started tendering in 2003, and was ordered back to re-tendering in 2006. During this period, this Build, Operate Transfer (BOT) project process turned out to be more complex than expected, accompanied by various difficulties, which can be viewed as the process of various risks eventuation.

In 2003, 'ETC construction and operation BOT project' began tendering. In the tendering plan, the private sector is responsible for the finance, construction, operation, maintenance, and promotion of the ETC system to users; it collects tolls to TANFB's account, and TANFB agrees to pay a service charge (a percentage of the collected toll) to the private sector (TANFB 2003). At the end of 2003, Far Eastern (FE), defeated another competitors: Yu Tong (YT), and was chosen as the senior bidder. This meant that, FE would sign the contract with TANFB, if the coming negotiation between TANFB and FE was successful.

However, unsatisfied with this tender result, YT appealed to TANFB, complaining that the tendering and bidding procedure was unfair. After 20 days without reply from TANFB, YT appealed to PCC for further judgment. PCC decided to have a review meeting on 28th, April, 2004, but TANFB suddenly announced the rejection of the complaint by YT and signed the final contract with FE on 26th, April, just 1 day before the PCC meeting. In the review meeting, PCC announced that FE's senior bidder qualification was invalidated as FE did not meet the tendering requirement. However, the ETC system has been installed by FE at 21 existing toll booths around Taiwan.

When the project came into the operation stage, it encountered the opposition from the users and the public when FE carried out their On Board Unit (OBU) promotion plan. As part of the ETC project, the users need to buy an OBU through FE, in order to pay

tolls when they drive through the toll booths without stopping. Angered by the high charge of the OBU and recent scandals, the users started to boycott FE's facility.

At the same time, YT continued to appeal to the Taipei Senior Administrative Court. The judgment of Taipei Senior Administrative Court was regarded as an influential decision. It cancelled FE's qualification, giving the reason that the procedure of selecting bidders disobeyed the principle of public interest and equity, and the public and private partners (TANFB and FE) had not considered the public interest during the project process, especially the high charges users would have to pay for using ETC (Taipei Senior Administrative Court 2006).

When the public became involved, the situation changed unfavourably for the MOTC, TANFB and FE. The Executive Yuan forced FE to make a new price plan to meet the public interest, even though this meant changing an agreed contract. MOTC, caught in this unexpected situation, decided to appeal to the Supreme Court, and leave FE to operate the ETC system until the final judgment was made. In September, 2006, the Supreme Court maintained the previous judgment and announced that MOTC's appeal had failed. The ETC project was ordered to return to the stage of tendering.

The latest progress of the ETC project is that the project was re-tendered but only FE submitted a bid. Due to the technology specification, it seems that only FE has confidence to operate the equipment, which is left in place for the winning bidder to take over. After this period of chaos, ETC take up is now increasing. However, according to a PCC interviewee, the ETC take up has taken far longer than planned.

## **ANALYSIS: RISKS, PROCESS AND INSTITUTIONAL FEATURES**

### **Risks in pro-contract and post contract stage**

The process of the project witnessed two risks: demand risk and operational risk.

So far, the most distinct problem is that the demand for ETC lanes is lower than the expected when creating ETC. In other words, the demand risk eventuated. Reviewing the history of the PPP project, it is interesting to see that the demand risk eventuation did not derive from source of market, such as competition, general economic downturn or demographic change, but directly from the public opposition against the OBU plan.

In the contract, the risk is shared between the public and the private sector. The private sector will deal with the market aspect of the OBU promotion, while the public sector is responsible for the policy promotion. However, the experience of ETC shows that the demand risk eventuated due to the strong public boycott. During the process of dealing with the demand risk, the public sector was involved much more than the private partner FE. In other words, the risk was mostly transferred back to the public sector.

Another eventuated risk is operational risk. In this case it refers to FE's equipment lying idle during the period of the lawsuit and re-tendering following the court decision. The contract design expects the risk that the equipment may lie idle because of the legal and policy reasons, and allocates the risk between the public and the private partner. The public sector is responsible for the legal and policy obstacles which may lead to the operational risk, while the private partner also has to make sure the legal and policy guarantees have been obtained before they operate. Furthermore, the private sector is required to seek insurance for the risk.

Although the risk mitigation is arranged in the contract, the post contract stage witnesses the eventuation of operational risk. The operation had to be halted during the lawsuit period and the period of re-tendering after the court decision. The eventuation of this operational risk resulted in the financial loss of both the public and the private partner. A more serious result is that it caused the failure of government's initial tendering. The result shows that the public sector borne more of the cost of the risk than the private partner FE.

The process of demand risk and operation risk shows that these risks, although managed in the pro-contract stage, still eventuated in the post contract stage. The difference between the pro contract and the post contract stage can be explained through the analysis of process and the institutional features in the following section.

### **Process feature behind the risks**

The process of the demand risk and operation risk eventuation is the process of interaction between the following actors: TANFB and FE as the central actors, and the peripheral actors who are the public, users, the EY and MOTC. It is argued here that although the risk has been allocated between the central actors, the involvement of the peripheral actors has strong impact on the risk eventuation and risk allocation result. Furthermore, the public sector was locked in by the private sector in the process of dealing with risk.

Firstly, in this case, two peripheral actors hold strong resources. One is the public and users who directly eventuates the risk. It is the conflict strategy of the public, which made strong impact on the project progress. One impact is that it challenges the relationship between both sides which has to change from alliance to conflict. Another impact is on the court decision which is made against the background of the public boycotts on the OBU plan. By strongly affecting the court decision, the public protect their interest to some extent, although they still have to 'pay the bill' for the public sector at the end.

Another peripheral actor is the upper level governments EY and MOTC. Under the support of MOTC and EY, the TANFB and FE formed a quick alliance by signing a contract to resist the challenge from YT and PCC. In the interview, it is interesting to see that FE were invited by TANFB to accompany them in the interview and answered the questions together. However, when the public and the court involve in, the alliance relationship between FE and TANFB changed into conflict particularly when the MOTC and EY were involved in. The interviewees from FE complained that they received the pressure from the 'upper level governments' to adjust the OBU price. With more involvement of the bureaucratic power, it is more like the interaction between FE and the upper level government MOTC and Executive Yuan than TANFB.

Secondly, in this case, although the central actors TANFB and FE work together for the risk mitigation, TANFB is locked into the FE in dealing with the risks. The direct reason is from the flaw of the contract design, which makes FE the sole provider for OBU. This status gives FE the resources to lock the public sector side in. This situation is similar to the Libra project, in which the public sector side was locked into the private partner with threatening to withdraw from the contract (Lonsdale 2005). The government is locked even more into the private partner when the project is involved in a lawsuit. Facing the judiciary crisis, FE reacted with the claim that the operation loss caused by the court decision will be transferred back to the government. The strategy of FE is based on their resource that it has the right of claiming state

compensation from the government. Furthermore, because of the lock in situation, the government also has to bear more of the cost of the risks than the private partner: in the latest progress, FE resumed the operation right because of the technology specification; therefore, their loss is reduced. But for the government, its policy loss could never be regained.

### **Institutional features behind the risks**

The actor interaction in the ETC project is underpinned by the institutional characteristics in the following aspects: the public participation, the political and legal institutional environment of ETC. These institutional characteristics are the interaction rules in the actor interactions, and explain the strategies and resources of the actors.

#### *The exclusion of public participation versus the sufficient channels of public voice*

The reasons for the public opposition which led to the demand risk eventuation can be explained through the contradictory situation of in the aspect of public participation in public policy: on the one hand the exclusive nature of the PPP decision making process and the public access to policy through the various channels of public voice on the other hand.

Firstly, the exclusive nature of the PPP decision making process in the ETC case explains the strategies of the government, the private sector and the users. The ignorance of public interest was shown in the planning of the ETC project. The handbook of ETC project planning covers the evaluation on technology, operation, finance, law, regulation and facility acquisition. Only the operation evaluation has the item of 'the user acceptance', which is based on the result of the user survey. The survey shows the unpopularity of OBU instalment among the public. However, there were no records in the plan regarding the efforts of dealing with the OBU charge, and the evaluation report concluded that there was a high degree of public acceptance (TANFB 2003: 4-4).

Secondly, the tendering criteria also lacked consideration of public interest. Within the tendering criteria set by MOTC and TANFB, only the item of no.12.3 with the title of 'ETC charges to road users' is to measure the public interest. This item includes the acceptance of users for the OBU function and the price plan; the reasonability of the OBU charge, and other cost to users for using ETC. However, this item is only evaluated as 500 credits, accounting for 7.5% of total 2000 credits for the whole evaluation (Taipei Senior Administrative Court 2006).

The lack of public interest consideration in project planning and the tendering stages is not exceptional to ETC. it is more about the institutional weakness in Taiwan that public interest has not been really taken into account in the public policy. In the policy forming process the consideration of public interest has been overwhelmed by the financial interest of public and the private partners in the PPP promotion policy. In the aspect of government attitude, the interviewees from the public sector regarded public opposition as part of the 'complaint culture' in Taiwan: 'people always disagree with new things (for example PPP) until they realize the benefit after a long time'.

On the other hand, this institutional weakness can be compensated by the sufficiency of channels for public voice, which is the important component contributing to a civil society. In the ETC progress, various media institutions, including newspapers, TV programs and website news involved in the progress reports. The media exposure provides information for the action of the public. Furthermore, the media openness

also provides a channel for the expression of the public voice. Another channel for public voice is the developed social groups including NGOs standing for public interest. During the ETC case, Taiwan Consumer's Foundation (TCF) played important role in exerting pressure on government. During two years of ETC progress, TCF issued nine press releases arguing for the road users' interest. Another NGO group: Taiwan People's Alliance (TPA), with the objective of Social Monitoring, Social Auditing, Social Early-warning, Social Litigation, set out the 'Taiwan: Anti BOT' category, outlining BOT cases encountered public opposition. In the ETC case, through these sufficient and open channels, the public are able to exert influence on the project process, particularly the court decision. These examples show that although the response from public policy area still lags behind, Taiwan has developed an open social environment for public interest expression which provides strength to the public in the PPP development. So far in Taiwan, as recorded by TPA, many PPP projects have been suspended or clamped under the strong public opposition such as the Jibei tourism BOT project and Ali mountain tourism BOT project.

These controversial institutional characteristics regarding the public voice and civil society are the underlying reasons for the strategies of actors including the users, the government and the private partner FE, and thereafter the eventuation of risks. On the one hand, the lack of understanding and inclusion of public interest in the legal and policy institutions explain the exclusive strategies of the public and private partners in dealing with public interest and public opposition. On the other hand, the public has their strong resource from the social institution that provides access for public voice expression, therefore causing the demand risk eventuation and affecting the risk allocation.

*Strong political promotion and the bureaucratic partnership of PPP*

Political institutional factor is another institutional factor behind the risks. This actual risk allocation in which the TANFB was locked in by the private sector FE is explained through the political institutional characteristics in the following two aspects.

Firstly, the strong political wish to promote PPP in Taiwan increases the likelihood of the government being locked into the private partner. Taiwan adopts the top down approach to promote PPP in infrastructure sector. The strong political incentive implies the belief that the incoming of private finance could resolve the problem of public finance shortage. Therefore, how to procure and ensure private investment becomes the priority of the PPP promotion policy and even the contract. Therefore, in the ETC case, the tendering criteria stresses on the private interest. In the contract, not only is the FE is the monopoly provider, but also the public sector has to use authority power to promote OBU sale in order to support the private partner's profit. In such a situation, the result of the risk allocation can not only be blamed on the contract design, but more the underlying political rush. This overwhelming political attitude for PPP promotion locked the government itself into the private partner, and forced it to pay for the cost of risks, which was supposed to transfer to the private partner.

Secondly, the nature of 'bureaucratic partnership' of PPP in Taiwan explains the strategies of actors from the public sector domain, particularly the TANFB, EY and MOTC. The bureaucratic partnership here refers to the command and control relationship between the actors, particularly in the public sector domain, in which the upper level government exerts hierarchical power in the project process (Ysa 2007, Harding 1998). The top down approach adopted in Taiwan shows that Taiwan PPP

falls into the category of ‘bureaucratic partnership’. As a result, on the one hand, the bureaucratic partnership gives support to the public sector who signs the contract; on the other hand, it also brings in much political pressure and leaves room for corruption. This institutional characteristic explains the quick alliance between TANFB and FE under the support from MOTC to resist the challenge from loss bidder FY and PCC. Also in the later public boycott crisis and lawsuit crisis, the EY and MOTC involved and exerted pressure on the negotiation between TANFB and FE, through administrative order. TANFB is more like a puppet under the control of political power rather than the central actor in the partnership. These institutional characteristics shape these actors’ strategies and resources which have been shown in the process of risk eventuation.

#### *Conflicting nature of PPP contract*

Although the operational risk has been considered in the contract, in the practice the judiciary judgment which resulted in the operational risk was out of contract expectation. The underlying reason was in the legal institutional aspect. The judgment of the court exposes a question in the legal framework which has not been answered: under the civil law country background of Taiwan, should PPP contract be defined as the private law contract or the administrative law contract?

The legal system in Taiwan is the civil law system that derives from European Continental law in which the administrative law and private law are two parts of the legal system. In general terms, administrative law involves interrelations between the state and the general population, whereas private law involves interactions between private citizens.

In ETC case, the judgment of the court was on the principle of administrative law as it judged that the central actors ignored the public interest. This judgment caused intensive debates regarding whether the PPP/BOT contract should be treated as the private law contract or the administrative law contract?

The opponents responded that PPP should be judged by private law rather than administrative law for the following reasons. Firstly, the private law contract nature of PPP can be found legislative root in Taiwan PPP Act (Article 12, PPP Act; the legislative explanation of Article 12, PPP Act). Secondly, if the PPP/BOT contract is treated as the administrative law contract, then the government may jeopardizes the private sector into the difficult situation in the contract, because the administrative law contract gives the public sector which represents public interest the superior legal status to the private sector (Jiang Jiaqi, 2006: 113).

The supporters of the court decision (Lin Mingjiang, 2006), however refuted with the following reasons: firstly, the public sector’s right of intensive intervention in the PPP/BOT contract justifies the administrative law nature of PPP contract. For example, the several issues of the public sector partner in the ETC contract, such as the land acquisition, concession right grant, transportation charge and even the right to terminate the project. These rights of public sector reflect the high level of involvement of the public authority. These all fall into the category of administrative law contract. Secondly, the PPP/BOT contract is for the public infrastructure with the aim of public interest. This ultimate aim of contract decides that it should be dealt with by administrative law. The third reason is the response to the argument of opponents regarding the legal root. Although PPP Act defines PPP as private law contract, it also has the articles regarding the protection of public interest (item 2 of article 12, article 52, 53), which is not in the category of private law contract.

Furthermore, the definition of private law contract in PPP Act is the compromise result as the administrative procedure law has not been implemented at that time.

This debate exposes the gap in Taiwan's legal institution to integrate PPP. In the level of PPP legal framework, the PPP ACT has not clarified yet the concept of PPP, which crosses the boundary between public and private areas. When a lawsuit occurs, should PPP be understood as the contract signed between two civil partner therefore private law will be apply to, or the issue belong to public arena involving public interest and be resolved by administrative law? This is a new problem which had never occurred before PPP came to Taiwan. Furthermore, the debate raised a challenge to the whole legal system of Taiwan. If PPP is categorized as within private law contract, the issue arises of how to protect public interest when the government becomes equal to the civil person in the contract? If PPP otherwise is categorized into administrative law contract, how to protect the private investor's interest when the public sector is in the superior status? In other words, no matter which law contract is applied to PPP, the civil law based legal system of Taiwan faces the challenge of how to balance the interest between the government, the private sector and the public. This gap of the legal institutional framework is the underlying reason for the conflict between these actors in the ETC case. Firstly, the category of PPP into private law contract in PPP Act becomes the legal base for the exclusive interaction between the public and the private sector. Furthermore, while PPP Act categorizes PPP as private law contract, in other articles, it still requires the aim of public interest. This obscure measurement of PPP leaves room for debate when ETC is involved in a lawsuit.

The analysis of the process and the institutional features above reveals the institutional source of the demand risk and the operational risk. The weaknesses in the aspects of political, legal and the public participation form the existing institutional environment of the ETC project. These institutional characteristics explain the relationship between the public, the private sector and government during the process of actor interaction which led to the eventuation of risks and the actual risk allocation.

## CONCLUSIONS

The ETC case is the example of demonstrating the impact of the institutional feature and the process feature of the project on the PPP from the perspective of risk. The reason of the eventuation of some risks and the failure of risk transfer in post contract stage is that they derive from the existing institutional weaknesses which affect the strategies and the resource of various actors in the project. The resulted actor interactions are out of the control of the contract in which risks are only allocated between two parties.

Although PPP has been popular in the world wide experience and the PPP has been claimed to be the new governance form, the existence of institutional risks exposes the gap between real PPP practice under the existing institutional structure and the ideal PPP in theory. Besides to efforts to improve contract design to deal with risks, the institutional weaknesses which affect the actor interaction require further attention, particularly those which are illustrated through the political rush, the exclusion to the public and the inadequacy of legal framework.

## REFERENCES

Ahmed, S.A, Mansoor, Ali (2004) Partnerships for solid waste management in developing countries: linking theories to realities. *Habitat International* **28**, 467-479.

- Bovaird, T (2004) Public-private partnerships: from contested concepts to prevalent practice. *International Review of Administrative Sciences* **70**(2) 199-215.
- Brinkerhoff, D, Brinkerhoff, J (2004) Partnerships between international donors and non-governmental development organizations: opportunities and constraints. *International Review of Administrative Sciences* **70**(2), 253-70.
- Edwards, Pam, et al (2004) Evaluating the operation of PFI in roads and hospitals. *ACCA Research report*, No.84.
- Harding, A (1998) Public-private partnerships in the UK. In: J.Pierre, (Ed) *Partnerships in Urban Governance: European and American Experience*. London: MacMillan Press.
- Hofmeister, A, Borchert, H (2004) Public-private Partnerships in Switzerland: crossing the bridge with the aid of a new governance approach. *International Review of Administrative Sciences* **70**(2), 217-32.
- Hodge, G (2004) The risky business of public-private partnerships. *Australian Journal of Public Administration* **63**(4), 37-49.
- Jiang, Jiaqi (2006) The debate regarding the administrative law or private law nature of ETC contract. *Taiwan Bentu Faxue* **81**, 112-115.
- Johnston, J, Gudergan, S.P (2007) Governance of public-private partnerships: lessons learnt from an Australian case? *International Review of Administrative Science* **73**(4) 569-582.
- Klijn, Erik-Hans, Teisman, Geert, R (2003) Institutional and Strategic Barriers to Public—Private Partnership: An Analysis of Dutch Cases. *Public Money & Management* **23**(3), 137-46.
- Koch, Christian, Buser, Martine (2006) Emerging metagovernance as an institutional framework for public private partnership networks in Denmark. *International Journal of Project Management* **24**, 548-556.
- Lin, Mingjiang (2006) ETC judgement and the principle of public interest. *Yuedan Faxue zhazhi* July (134), 5-25.
- Lobina, E (2005) Problems with private water concessions: a review of experiences and analysis of dynamics. *Water Resources Development* **21**(1), 55-87.
- Lonsdale, Chris (2005) Post-contractual lock-in and the UK private initiative: The cases of national savings and investments and the Lord Chancellor's department. *Public Administration* **83**(1), 67-88.
- Loosemore, M and Ng, A (2007) Risk allocation in the private provision of public infrastructure. *International Journal of Project Management* **25**, 66-76.
- Onibokun, A.G, Kumuyi, A.J (1999) Governance and waste management in Africa. In: Onibokun, A.G.Ottawa (eds.) *Managing the monster: urban waste and governance in Africa*. Canada: IDRC.
- Taipei Senior Administrative Court, 2006. The judgment of the FE V.S TANFB. No. 752
- TANFB (2003) ETC BOT tendering plan report. Taiwan Area National Freeway Bureau (internal source).
- Ysa, Tamyko (2007) Governance forms in urban public-private partnerships. *International Public Management Journal* **10**(1), 35-57.