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PPP INSIGHTS

AN EXPLANATORY NOTE ON ISSUES RELEVANT TO PUBLIC-PRIVATE PARTNERSHIPS

The Affermage-Lease Contract in Water Supply and Sanitation

Incentive Structures and New Developments

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Abstract

Today, public-private partnerships (PPPs) in the water supply and sanitation sector, including the affermage model, are increasingly hybrid models. This means that certain contractual arrangements can no longer be easily classified into a single category on the PPP spectrum. Instead, as experiences in counties such as Senegal, Cameroon and France illustrate, these new models take elements from different options to create new, mixed models, better suited to incentivize performance by the operator in a particular context; and to manage complex political realities.

In an affermage arrangement, the operator bills and collects revenues directly from customers. The operator's "price" is traditionally based on an agreed-upon proportion of the water tariff (per m3) that is produced and sold. This price is usually subject to a competitive tender. Traditionally, the difference between the tariff and this price is then paid to the contracting authority—either the asset holding company or the government, depending on the institutional framework. The contracting authority uses these funds to pay for past and future capital investments.

Today, there are a number of examples of an evolved, more sophisticated affermage model—which could be described as the affermage plus (+) model—one that is based on an incentive-driven and more equitable distribution of efficiency gains between the operator and the contracting authority. In the performance-based affermage + model, the operator's expenses are reduced through efficiency improvements. Consequently, the operators' fee reduces and the payment to the contracting authority increases. The operational surplus increases and its eventual distribution depends on the operator meeting both its financial and technical contractual performance targets.

The affermage + model may be more politically attractive to public authorities, especially where officials and civil society may feel that private operators might be able benefit disproportionately from PPP arrangements. Also, the affermage + model strengthens the bargaining power of the public authority to demand improved service delivery from the operator.

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Key preconditions for the successful implementation of an affermage + arrangement include: (i) an incentive mechanism based on an audited and validated baseline, and (ii) a capable contracting authority, allowing for a balance of power and mutual respect between partners. Experience shows that a sequential approach is the preferred way forward, starting with a technical assistance or an input-based, professional support partnership and moving towards a deeper partnership, such as the output-based, affermage + contract.

This output-based affermage + option is structured with appropriate investment obligations and allocation of risks between the operator and the contracting authority. These are based on each entity's ability to manage risks—and both are rewarded on their performance and the respective levels of risk assumed.

Whilst this hybrid model is developed within the context of a civil law jurisdiction and is a contract for provision of a public service, a number of the features could be adapted to common law systems adapting the operation and maintenance contracts or lease contracts.

Introduction

Delegated management contracts today have more of a mixed, hybrid nature than in the past. They take selected elements from different contractual models to create a new, tailored model. The result is that many delegated management contracts can no longer be easily classified into a single category on the public-private partnership (PPP) spectrum.

One innovative version of the *affermage* contract that is gaining in popularity has a more equitable distribution of efficiency gains for all contracting parties. In this paper we explore the recent trends of the performance-based *affermage* and lease models; and analyze the characteristics and benefits of a particular innovative *affermage* model, which includes a more equitable model of revenue distribution between partners.

I. The affermage model

An *affermage* is one type of a delegated management contract in the private-public partnership (PPP) spectrum. Under this type of a contract, the operator is responsible for operations and maintenance. The operator collects the tariff directly from consumers on behalf of the contracting authority (CA). The CA is usually responsible for major rehabilitation and new capital works. However, the contract defines the exact terms and responsibilities for financing and implementing maintenance, rehabilitation and new works.

The operator earns an operator's price based on an agreed-upon proportion of the water tariff (per m3) that is produced and sold. The difference between the tariff and this price is paid to the CA, which may be either an asset holding company, or the government, depending on the sector's institutional framework. The CA uses these funds to pay its expenses, including debt service on capital investments.

The *affermage* combines public financing with attracting private efficiency. It may be attractive in situations where private equity and commercial debt for the water supply and sanitation sector are not readily available. CAs may also prefer an *affermage* to a management contract because the *affermage* transfers the commercial risk to the operator which is believed to create incentives to perform.

A. AFFERMAGE VS. LEASE

The commonly used English translation of *affermage* into lease contract may be misleading. The words *affermage* and *lease* are indeed often used interchangeably, although they are in principle technically different. In the *affermage* contract, applied in contexts using civil law, the operator has an intangible personal right to the

infrastructure (similar to a patent or a copyright), but not the real property right of a leasehold (bail or location). The affermage contract sets forth how the infrastructure is to be used in the public interest.

The lease contract, originally designed within a common law context, however may be constructed as a synthetic equivalent to the *affermage.*

Within the family of delegated management contracts, the *affermage* is a variant of the concession. The basic legal principles governing the *affermage* are the same as those of the public service concession. In both the *affermage* and the concession, the operator is responsible for operation, maintenance and renewal of certain categories of assets (e.g. non-fixed assets, meters, and domestic connections). However, unlike the *affermage,* in the concession model, the operator is also responsible for capital investments.

Table 1 describes a few of the key differences and similarities between the *affermage* and the lease models. The *affermage* incentivizes operational efficiency by awarding the contract to the lowest bidder—versus the lease, whereby the highest bid (i.e. highest payment to the CA) is awarded the contract. The affermage's performance incentives are typically structured according to water production to encourage efficient water use, and the lease's incentives are based on water sales. An *affermage* is typically regulated by contract and its regulation focuses on contract compliance and the achievement of targets. A lease is regulated through a cost-plus or price-cap regime and requires close monitoring of operations and maintenance (O&M) expenditures. For the lease model, it may preferable for the regulatory framework to be established prior to engaging in any lease arrangements.

B. THE CONTRACTUAL FRAMEWORK

An *affermage*/lease contractual framework typically features five contracts: (i) the delegated management contract; (ii) the concession contract; (iii) the performance contract; (iv) the technical assistance contract; and (v) the end-user contract.

For sample water affermage agreements, please visit the PPP in Infrastructure Resource Center for Contracts, Laws and Regulation (PPPIRC) , at www.worldbank.org/ppp, specifically the page on water affermages found at: http://ppp.worldbank.org/public-private-partnership/water-and-sanitation-lease-and-affermage-contracts.[1]

(i) *Delegated management contract:* The contractual framework of the *affermage* is underpinned by a delegation of management contract between a public contracting authority (the '*signatory*') and an operator. The operator's legal status may be public or private. This contract defines the responsibilities for O&M of fixed assets and the provision of water and sanitation services. The contract typically outlines the terms for performance reporting to the CA and is based on a performance-incentive structure.

(ii) *Concession contract:* In cases where a separate asset holding company (AHC) has

1 If you are not able to reach the link directly, you may find water affermage agreements through the "Water" page, or by searching the "Library" of the PPPIRC.

Table 1: Key features of the affermage and lease models

Features	Affermage	Lease
Operator's price	based on €/m^3 produced and sold (*volumetric*)	annual monetary, non-volumetric, based on cost-plus
Competitive bidding process	Lowest bid (operator's price) wins *The operator's price covers O&M costs, including some renewal costs*	Highest bid (lease fee) wins *The lease fee is paid to the CA by the operator*
Performance incentives	linked to water production (m^3)	linked to water sales
Bulk metering	Mandatory	Optional, is not a prerequisite
Domestic metering	Mandatory	Optional, is not a prerequisite
Regulation	by contract (contract compliance in achieving target performance)	cost-plus or price-cap

been established, there is usually a concession and development contract between the government and the AHC; and a performance contract between the AHC and the operator (*discussed separately below*).

The concession contract between the AHC and the Government defines each party's roles and responsibilities. The Government has the right to supervise the AHC under conditions specified in the concession contract. The AHC (a) develops and manages the water supply facilities and public works; (b) implements the investment program; and (c) has the exclusive right to acquire and construct works and facilities for production, transport, storage and distribution in the service area.

(iii) *Performance contract:* These typically set targets for measuring the operator's performance and provide incentives for achieving these targets. If the AHC is the signatory of the delegated management contract, the performance contract will be annexed to it. If the government is the signatory, the performance contract is a stand-alone contract.

(iv) *Technical assistance contract:* Most often there will be a technical assistance contract for services and assistance provided by the majority shareholder on a sole source basis to the operator, who will be locally incorporated. There is a need to monitor the relations between the operator and its majority shareholder, as there will be strong incentives to siphon operator's revenues through contracts awarded on sole source basis to companies affiliated to the majority shareholder.

(v) *End-user contract:* The customer contract between operator and customer outlines the terms and conditions of service, including the level of service, the expected payment for services and frequency, and coercive measures for non-payment.

Figure 1: Affermage/lease contractual framework—Government is signatory

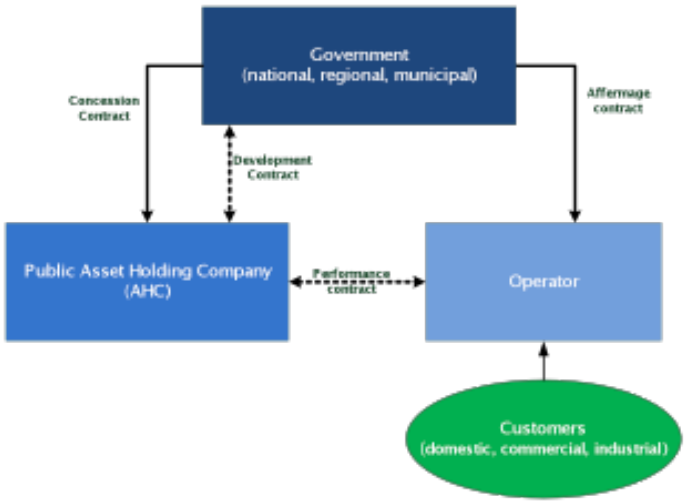


Figure 2: Affermage/lease contractual framework—Asset Holding Company is signatory

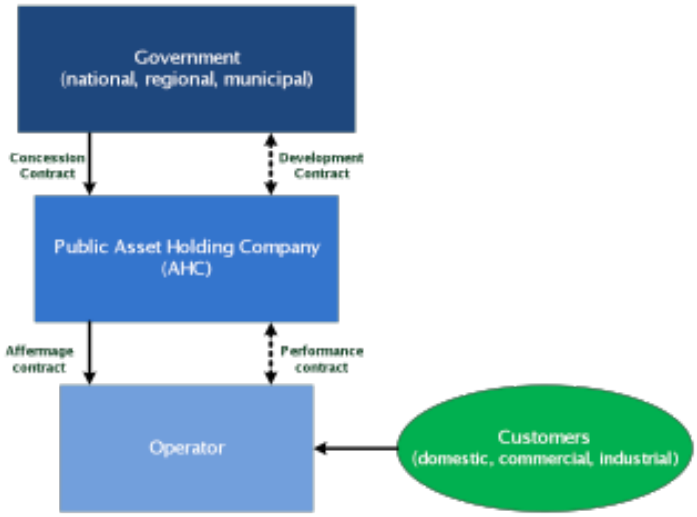


Table 2: The affermage model—roles & responsibilities

	Role	Functions
Government	Define the water sector policy and strategy	• Define the sector's policy • Define the institutional framework • Manage water resources • Establish the regulatory framework • Review and approve tariffs and subsidies
Asset Holding Company	Manage resources *(on behalf of the government)*	• Manage assets *(development, amortization, debt service)* • Develop and implement master plan and investment plan • Secure finance • Acts as the contracting authority for new works • Liaise with the public / implement awareness campaigns • Monitor the quality of operations and maintenance (maintenance audit) • Monitor / oversee the operator's performance based on contractual targets
Operator	Deliver services *(technical operations and commercial management)*	• Operate and maintain infrastructure *(fixed assets and operations materials)* • Renew operations materials • Purchase meters and materials for connections • Renew and extend the distribution network *(based on contractual obligations)* • Project management of extension works of distribution network, financed by donors • Studies to justify necessity of renewal and extension works • Billing and bill collection • Customers public relations, and customer accountability

C. FLOW OF FUNDS

There are various scenarios possible for the flow of funds.

In an *affermage* context, in a simplified version, the Operator collects tariffs directly from its customers and deposits this revenue into its own account (the tariff account). Its revenue per m^3 (P_e) is calculated by multiplying the volume of water billed (V_b) by the average tariff (T_{avg}).

$$P_e = V_b * T_{avg}$$

The Operator remits a contribution (P_{ca}) to the Contracting Authority (either the Government or the AHC) to be used for investments and debt service. The P_{ca} is calculated as follows:

$$P_{ca} = V_b * [Tavg - P_e]$$

The bid award criterion is based on the lowest operator's fee P_e.

In the lease arrangement, likewise the *affermage,* the Operator also collects tariffs directly from its customers.

Either the operator or the CA can hold the tariff account (see Figures 1 and 2). The Operator collects tariffs directly from customers and deposits this revenue into a tariff account.

In case the Operator holds the tariff account, he remits to the AHC the operational surplus, i.e. the difference between collected tariff revenues and O&M expenditure. This difference can be negative, then the AHC has to subsidize the operational deficit and/or can opt to increase tariffs (subject to prevailing tariff review regulations)

In case the CA (e.g. AHC) holds the tariff account, then he reimburses the Operator costs of O&M out of the tariff revenue.

It is clear that in both cases there is need that the AHC (or the regulator) closely monitors costs of O&M (price cap regulation) as the operator will have the tendency to inflate these.

Figure 3: Lease—flow of funds *(Operator holds the tariff account)*

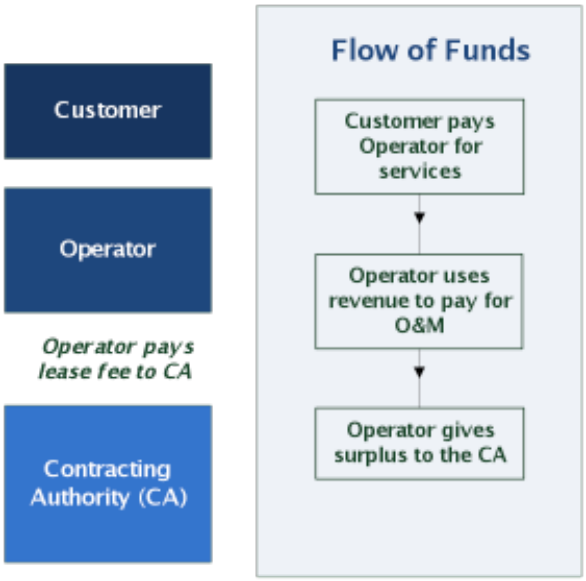
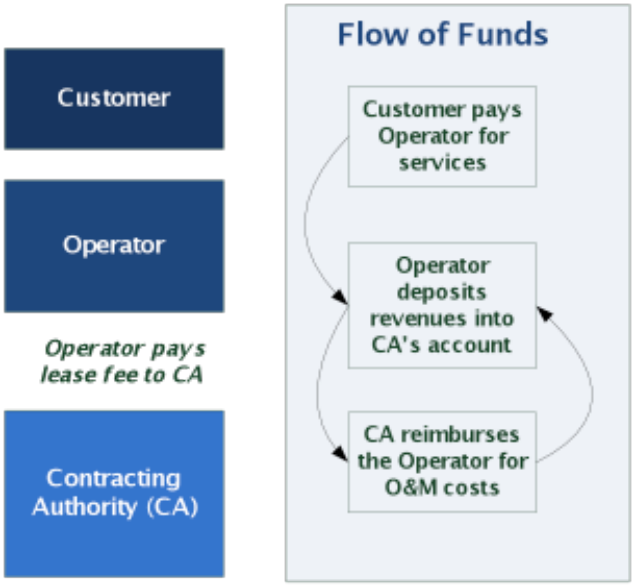


Figure 4: Lease—flow of funds *(CA holds the tariff account)*



Finally, in the lease model, the operator always pays a lease fee to the Contracting Authority for leasing its infrastructure. In the lease the bid award criterion is the highest lease fee offered.

D. INCENTIVES TO SERVE THE POOR

Some country's legal frameworks may include a Universal Service Obligation (USO), which imposes a general obligation on the operator to provide service to all people living within the operator's jurisdiction. In some developing countries, the situation is less clear. For example, it may be unclear as to whether or not the operator has the mandate to serve the informal settlements within its service area.

Under an *affermage* contract, the operator's price is based on the volume of water produced (e.g. Senegal) or sold (e.g. Cameroun) and not differentiated by consumer class (high-income or a low-income area—or whether it is a residential, industrial or small business customer). Hence there should be no disincentive for the operator from serving low-tariff (below cost) paying customers, since the operator's price does not fluctuate based on whether the water was actually sold at a reduced, lifeline tariff.

In cases where a subsidized, lifeline tariff is used to ensure a minimum level of water for poor households, financial losses incurred by serving these households are absorbed by the CA and not by the operator. An issue may arise, however, if, as a result, the average tariff becomes lower than the operator's price, and if, at the same time, the operator is uncertain about the ability to recover the shortfall or deficit from the CA. Then the operator may actually have an incentive to minimize the shortfall by focusing service on high-revenue segments of the market which may exclude the poor.

Under the *lease model,* there is little to no incentive to serve low-income consumers and a clear disincentive to serve customers billed at below-cost rates—unless the operator has an explicit mandate to do so, either through a USO or contractual coverage targets.

Under an *affermage* there is no structural disincentive to serve the poor as the operator's fee is based on the volume of water and is thus 'blind' to the end-users' class. Nevertheless, there should be in the contract explicit targets/incentives and a clear mandate to serve the poor, to avoid that the operator may prefer to spend its efforts in higher—income areas, which he may perceive to be more 'orderly' and require less effort for more return.

E. THE OPERATOR'S PRICE AND THE NRW PERFORMANCE INCENTIVE

In an *affermage*/lease, the Operator's price covers the following main items:

- Operating and maintenance expenses for production and distribution facilities, including all operator charges stipulated in the contract;
- General expenditure and profits of operation;
- Cost of renewing the distribution system, as specified in the contract and performance agreement;
- Cost of assisting the CA to procure and supervise rehabilitation works for the distribution system, as stipulated in the affermage agreement.

The Operator's income is calculated by multiplying his price—or *prix du fermier*—(P_e [€/m^3])—by the volume of water produced (V_p [m^3/yr]).

$$\text{operator's income} = P_e * V_p$$

The operator's price (P_e) is his bid price. It is typically adjusted annually for inflation and other economic fluctuations.

The operator's income may also be made dependent on its performance in a number of key areas, depending on the contractual targets stipulated in the agreements. For example, the operator's income may be designed to incentivize and reward high-performance in areas such as non-revenue water (NRW) reduction or billing and collection efficiency.

The operator is set contractual targets for reducing NRW ($E_{t,c}$) and improving bill collection efficiency ($E_{c,c}$).

Using the definitions in the box, the operator's annual total revenue from water sales is:

$$T_{avg}*Vr = T_{avg}*V_p*E_{t,a}*E_{c,a} \quad (1)$$

The amount to be paid to the CA for each year of the *affermage* agreement is:

$$[T_{avg}—Pe]*V_p*E_{t,c}*E_{c,c} \quad (2)$$

On an annual basis, the basic structure of the operator's fee is thus [(1) – (2)]:

$$P_e*V_p*E_{t,c}*E_{c,c} + T_{avg}*V_p*[E_{t,a}*E_{c,a} - E_{t,c}*E_{c,c}] \quad (3)$$

V_p [m^3/yr]: volume of water produced

V_b [m^3/yr]: volume of water billed

V_c [m^3/yr]: volume of water paid for

$E_{t,a} = [V_b/V_p]_a = [1 - NRW]_a$: actual technical (distribution) efficiency

$E_{t,c} = [V_b/V_p]_c = [1 - NRW]_c$: contractual technical (distribution) efficiency

$E_{c,a} = [V_c/V_b]_a$: actual bill collection efficiency

$E_{c,c} = [V_c/V_b]_c$: contractual bill collection efficiency

T_{avg} = average water tariff per m^3 billed: total annual billed revenue from water sales/volume billed for (V_b) (net of taxes) (weighted average of all tariffs)

Thus, the operator's income is based on two components:

i. the bid price [P_e] applied to the contractual target volume to be sold and collected {P_e*V_p*$E_{t,c}$*$E_{c,c}$}; and

ii. the full value of the average tariff applied to the difference between the operator's actual performance and the contractual target performance {T_{avg}*V_p*[$E_{t,a}$*$E_{c,a}$ – $E_{t,c}$*$E_{c,c}$]}.

As a result of this structure, the operator bears the risk for failing to attain its targets; but is also fully rewarded for outperforming. The operator is thus given a strong incentive to decrease NRW and improve bill collection efficiency. (cf discussion below)

The income of the Contracting Authority is calculated as follows:

$$V_p*[T_{avg} - P_e]*E_{t,c}*E_{c,c}$$

The CA does have some influence on its income. For example, it may implement investments that increase overall water production capacity (increasing V_p); and in some cases, it may be able to influence the average tariff (through decision by the regulator or the overseeing Ministry)

F. DISCUSSION

A private Operator will do exactly what the government (or CA) asks, as long as it is made worth their while (and is technically feasible and within their control). The starting point is that the government reasonably does not want to pay for water that is **lost** (dribbles into the ground or evaporates), **stolen** (illegal connections) or **given away** for free (not billed or bill not paid). So, in principle primary compensation is based on water actually paid for. The simple way to do this would be to just pay a flat rate per m^3 of water paid for. This is what many countries do.

A smarter approach (e.g. Senegal) is to use, what is called, a "**two-part operator tariff**" with many of the same properties as the traditional two-part consumer tariff. (cf. preceding paragraph)

The government agrees, in effect:

1. For a given volume of water produced, it will pay at two rates. Up to a target paid-for volume it will pay the bid price. But if the operator does better than the target, then the excess will be compensated at the full consumer tariff. And, symmetrically, if it does worse than the target then the operator will be penalized at the full consumer tariff.
2. For a given level of combined technical and billing efficiency, if the operator produces more water, it will be paid at your bid price adjusted for the difference between the target and actual efficiency. That is, if the efficiency is the same as the target, then the operator will be compensated at its bid price. If the efficiency exceeds the target, then the operator will be compensated at a higher price than the bid. Conversely, if efficiency falls short of the target, he will be paid less than the bid price.

By doing so, the CA gives a strong signal that it cares a great deal about improving technical and bill collection efficiency and is willing to pay a bonus for it, which is potentially substantial.

As a result, the Operator will likely invest in establishing e.g. a GPS-based system for dealing with water leaks and interruptions. Hence, the two-part operator incentive structure is a particularly important determinant of success and sustainability. Since underperforming can be quite costly, the Operator is motivated to meet and exceed its targets.

Finally, it is essential that the party having direct interest in reducing losses, the operator, be the one responsible for designing and executing works to reduce NRW, i.e. works relating to system maintenance, repair, rehabilitation and renewal of the system. The bidding documents need to ensure that this principle be adhered to as much as possible. The contract need to specify, therefore, that maintenance and repair are the responsibility of the operator, as are renewal of operating equipment, distribution system and service connections.

G. THE PAYMENT MECHANISM

The precise amount to be paid by the Operator to the CA for each year of the contract can only be determined at the end of each year in question. However, the contract typically calls for monthly payments to the CA—and this is adjusted at the

end of the twelve-month period depending on the operator's actual revenue and performance. It may be the case that the Operator owes the CA an additional amount—or even that the Operator overpaid the CA, in which case the CA must reimburse the Operator.

Even though the annual dues to the CA are based on the volumetric amount of water produced or sold, the monthly, predetermined payments to the CA are based on the Operator's revenue collections for the previous month. This means that the non-payment or late payments of water bills, including those by Government Agencies, result in a lower monthly payment to the CA. The Operator's incentive to increase the bill collection efficiency remains however intact because, when the exact amount due to the CA for a given year is precisely calculated at the end of that year, it is not the amount of collected revenues but the volume of water produced which is then taken into account.

During the first year of the *affermage* contract, it is common to have a provisional agreement for the payment to the CA, which is reviewed and revised at the end of Year 1. This allows for any first-year teething issues, including the installation of the bulk meters or working on the backlog of payments owed by government authorities; and for ensuring that all parties have a common understanding of all of clauses.

II. An emerging hybrid contract—the affermage+

Today's emerging options for delegated management are increasingly hybrid contracts. One example of a hybrid is the enhanced lease (or *affermage amelioré*) whereby the operator may not be given the immediate responsibility for implementing capital investments, but is responsible for implementing certain renewal investments. Examples of the *affermage amelioré* may be found in counties such as Senegal and Cameroun.

A *subsidized concession* is another example of a hybrid contract, whereby the operator is responsible for contributing financially to capital investments that are subsidized with public contributions.

These emerging hybrids are less constrictive and provide more options for transferring the commercial risks and for attracting private finance. However, they work best in contexts where a certain level of reforms have already taken place and there is a strong and capable CA.

Another innovative model is a more sophisticated affermage model—what we call the *affermage-plus* (+) model, which is based on an incentive-driven and more equitable distribution of the surplus between the operator and the contracting authority. The *affermage* + model is also innovative for its combination of both operational and financial parameters for calculating the operator's revenue and bonus.

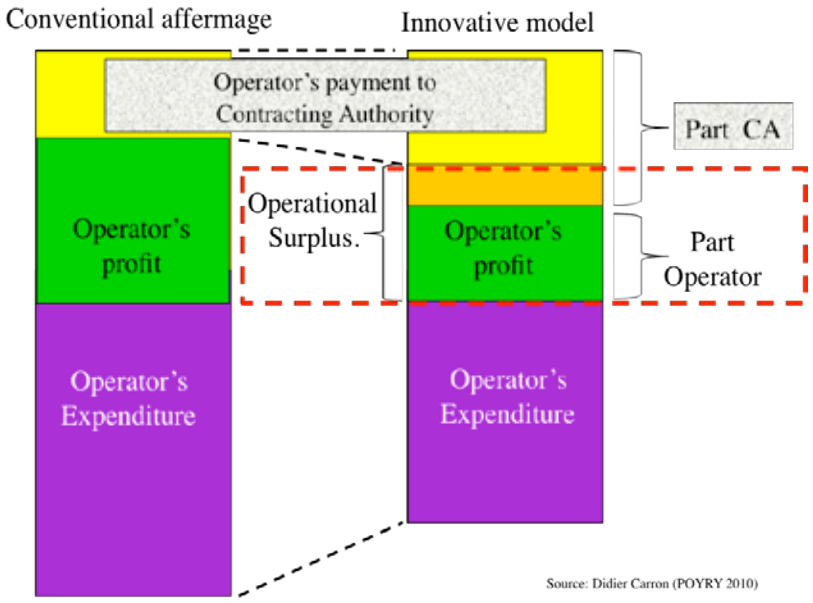
A. EXPENSES, FEES AND SURPLUS DISTRIBUTION

In a conventional *affermage* contract, the operator pays for operations and maintenance costs, remits to the CA the difference between average tariff and operator's price, but retains the entire operational profit. In the *affermage* + approach, the operational profit is shared between contracting parties based on an incentive structure that combines both operational and financial performance indicators—and which are explicitly defined in the contractual agreement.

Figure 5 illustrates the differences in the distribution of revenue between the conventional and the *affermage* + models. The most obvious differences between the two models include:

- reduced operational expenditure in the *affermage* + model (i.e. efficiency gains)
- a reduced operator's income in the *affermage* + model (i.e. more equitable distribution of operational profit)
- an increase in the operator's payment to the CA's in the *affermage* + model (i.e. more equitable revenue distribution)
- the introduction of a bonus based on the operator's financial performance in the *affermage* + model

Figure 5: Revenue distribution—*conventional affermage vs. affermage+*



In some affermage+ cases, the operator's surplus is transferred to an escrow account in order to create comfort for the Operator. The Operator can only access these funds when he reaches his performance targets (both technical and financial).

In case of poor performance vis-à-vis the contractual targets, the Operator may only earn a reduced part of the surplus, or even none. In case of high performance vis-à-vis the contractual targets, the Operator may earn a large part of the surplus, up to 100 percent, depending on the contractually agreed equation for distributing the surplus between the parties.

B. CALCULATING THE OPERATOR'S FINAL EARNINGS

To illustrate one example for calculating the Operator's final earnings, the example from the *Syndicat des Eaux d'Ile de France* (SEDIF) is used. In the SEDIF *affermage,* the Operator's surplus was calculated as a function of the operators' technical and financial performance as follows:

i. Operational performance
   - 25% on water quality, wastewater and asset management
   - 25% on quality of customer service

ii. Financial performance
   - 25% on profitability
   - 25% on cost controls (i.e. productivity efficiency)

The application of these operational and financial indicators requires reliable baseline data and they were audited and validated by an accredited independent third party prior to the tendering process.

The application of these operational and financial indicators also requires that in the contract both target and minimum values for each indicator are defined.

C. INCENTIVIZING INCREASED EFFICIENCY

The *affermage+* model is a performance-based contract, with the operator's profit varying as a function of a combination of both its technical and financial performance.

In situations where the operator's profit can be clearly quantified through a dedicated accounting system, the performance incentive mechanism may be applied on the total operational surplus, or on a given proportion (e.g. 50 percent).

In cases where the operator's operational profit cannot be easily quantified or ringfenced due to combined accounting for many interrelated activities or any other reasons, the incentive mechanism can instead be applied on a predetermined, fixed part of the operator's revenue.

D. ADVANTAGES OF THE AFFERMAGE+ MODEL

There are a number of advantages to the performance-based, affermage + model.

The (financial) gains of the operation (the operational surplus or profit) are shared between contracting parties in an equitable way on the basis of an incentive structure combining operational and financial PIs. The contractual arrangement may therefore be more politically attractive to public authorities, especially where officials and civil society may feel that private operators tend to disproportionately benefit from PPP arrangements.

The contract is designed so that, through open book operations with constant public access to the data, and public ownership of data, including most of the information system developed during the contract period, SEDIF will be in a position in two to three years before the end of the contract, to freely explore and choose another—maybe different—PPP contractual option, or, operate the service itself. The contractual design hence strengthens the bargaining power of the public authority (SEDIF) to demand improved service delivery from the operator

Key preconditions for the successful implementation of this type of affermage include: (i) an incentive mechanism based on an audited and validated baseline, and (ii) a capable contracting authority, leading to a balance of power and mutual respect between partners.

Experience shows that in low-and middle income countries, most often a sequential approach is the preferred way forward, starting with a technical assistance or an input-based, professional support partnership and moving towards a deeper partnership, such as the present output-based affermage + contract.

III. Conclusion

Delegated management contracts, and in particular the affermage-based option, today have more of a mixed, hybrid nature than in the past. These new hybrids borrow elements from different models to create new, more tailored arrangements for incentivizing efficiency gains and equitable distribution of revenue gains amongst partners, which makes this arrangement quite attractive for the water supply and sanitation sector.

References

Brocklehurst, C. and Janssens, J.G. (2004): Innovative Contracts, Sound Relationships: Urban Water Sector Reform in Senegal. World Bank, Water Supply and Sanitation Sector Board Discussion Paper Series, Paper No 1, Jan. 2004, 51p

Carron, D., Janssens, J.G. and Castro V. (2011): The Affermage-Lease Contract in Water Supply and Sanitation—the NRW incentive structure and new developments. Paper submitted for presentation at the 2nd IWA Development Congress, Kuala Lumpur, Malaysia, Nov. 2011

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