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# Regulation and comparative discretion of publicly and privately owned water companies in The Netherlands, England and Wales

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## Abstract

Any water company is subject to regulation, either through bylaws, national or supra-national regulations. In this contribution we assess how these regulatory regimes affect the discretion of privately owned companies in England and Wales and publicly owned water companies in the Netherlands. The issue is studied by comparing the discretion of such companies to pursue strategies of their choice. We look in particular at the constraints and the opportunities posed by the regulatory regime on the provider's discretion in dealing with clients, offering products/services, setting tariffs, organizing themselves and establishing relationships with external actors. Our research shows that the regulatory context invites water providers to differ in their strategies for markets, products and tariff setting. The regulatory context seems not to be a determinant for their strategies with respect to their internal and external organization. The findings of our research are particularly relevant for future research in comparing publicly and privately owned producers. Hence, in future comparative research between companies from different regulatory regimes, it is important to acknowledge the influence regulation may have on the actions and performance of companies, next to demographical and hydrological features.

*Keywords:* Management; Privatization; Regulation; Strategy; Water

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## Introduction

There is a lot at stake in the provision of drinking water. Water operators are subjected to regulation since, apart from people's primary concern about the quantity and quality of tapped water, the water industry is riven with externalities (Jeffery, 1994; Glaister, 1996)<sup>1</sup>. As the stakes are high and the distribution system is inevitably monopolistic, regulatory regimes are imposed to remedy the lack of self-regulating market mechanisms (Carney, 1990; Robinson, 1997; Wills-Johnson *et al.*, 2003). The EU and individual EU countries impose regulatory regimes for water companies, resulting in

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<sup>1</sup> They list, for example, environmental consequences, health effects, traffic disruption caused by water related construction, etc.

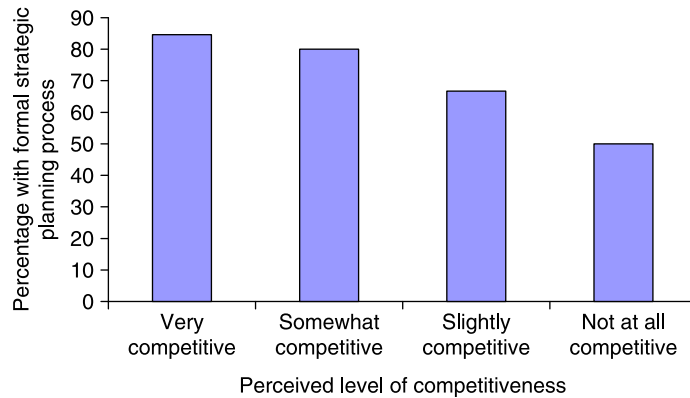


Fig. 1. Perceived levels of competition and formal strategic planning (Sisson, 1992).

restrictions to the provider's discretion to pursue actions of their choice. The aim of this paper is to research the regulatory impositions on public and private water companies in the Netherlands, England and Wales and their impact on formulating and pursuing strategic actions. The sector specific and regulatory constraints may hinder them in realizing the assumed benefits of private sector involvement (Jeffery, 1990; Brown & Iverson, 2004). For example, in the UK just three years before the privatization of the water companies, the White Paper on Water Privatization (HSMO, 1986) concluded:

“Private enterprise is both more flexible and readier to pursue energetic and innovative approaches than the public sector. The demands of the market will give management and staff the impetus they need to secure greater efficiency. Freeing the authorities from the constraints imposed by state ownership will help them to carry out their tasks with vigour and imagination (para 38).”

The truth of such statements has been debated for a long time (van Dijk, 2004). The inability to find an answer is largely due to the absence of clear convincing empirical evidence. Difficulties in standardizing benchmarking indicators have hindered useful cross-company comparisons (Ogden, 1995; Robinson, 1997). Moreover, the unique character of the water sector prevents theories from other sectors from being generalized (Bahae, 1992; Ward *et al.*, 1995).

One of the many changes that the private sector is assumed to bring about is that private parties select their strategic actions differently. This is the change we want to address in this paper. The relevance of strategic management to the water sector was confirmed by a survey among 248 water utilities (Sisson, 1992). Although he did not make a distinction between public and private companies, Sisson recognized that water utilities that experienced higher levels of competition were more likely to have implemented a formal strategic planning process (Figure 1).

## The theoretical framework

An analysis of the regulatory constraints for water companies is an essential condition for studying the strategies of water companies. Researchers have noted that different institutional circumstances may be conducive to certain strategic actions (Desarbo *et al.*, 2005). The concept of “strategic actions” is interpreted by using a classification developed by Boyne & Walker (2004) which was tailored specifically for public service organizations. They identify five strategic actions:

Table 1. Research framework strategic actions and ownership.

Regulatory regime on	Private water companies (England and Wales)		Public water companies (The Netherlands)	
	Regulatory opportunities	Regulatory constraints	Regulatory opportunities	Regulatory constraints
<i>Strategic actions</i>				
Market				
Services				
Revenues				
Internal organization				
External organization				

- (1) *Markets—*which clients does the company want to serve? Although the primary scope of water companies is severely constrained owing to the monopolistic character of the distribution network, they are sometimes able to enter new markets or (partially) exit markets.
- (2) *Services—*which products or services does the company want to offer? Water companies can provide products or services other than water, or water of different qualities. Services could include affiliated services like sewerage, but can extend to any service that the water companies might see as a valuable endeavour.
- (3) *Price—*what price does the company want to charge the clients for the service? A major part of the strategy focus of any organization is ensuring that they have sufficient revenues to compensate the costs.

These three strategic actions have a great similarity with the strategies of focus, differentiation and cost leadership, defined by Porter (1980). Boyne & Walker (2004) propose to add two other strategic actions because of the constraints that public organizations may face in altering the selection of markets, services or prices. The strategic challenge for many managers in the public realm is to find better ways to deliver existing services in a fixed market with limited revenues. Therefore two additional types of strategic actions are:

- (4) *Internal organization—*how to structure the internal organization? These strategic actions refer to variables such as shaping the organizational structure, culture or style of leadership, the strategic planning process and the adoption of performance measurement systems.
- (5) *External organization—*how to interact with external parties? These arrangements may include collaboration, networks, consortia or joint ventures, partnerships and outsourcing services to private or non-profit parties.

Based upon this categorization the research framework is established (Table 1). We selected England and Wales to represent the private companies and the Netherlands as representative sample of the public water companies. Both countries are relatively homogenous and have comparable economic, social and cultural conditions.

### Applying the framework to the regulatory regimes

For each of the five identified strategic actions, an analysis is made of what extent regulatory bodies of England and Wales and the Netherlands respectively constrain or provide opportunities for water providers.

*Strategic action 1: markets*

Which clients does the company want to serve? We identified seven strategic market actions that a water company can pursue, which will be dealt with in detail below. These are: market exit, bulk supply, common carriage, inset appointments, unregulated supply, mergers and acquisitions within the country and mergers and acquisitions outside of the country.

*Market exit. England and Wales:* There is no possibility of market exit for the water companies for, as the water companies have been licensed in 1989 for a period of at least 25 years to be water undertakers for specific geographical regions across England and Wales. However, they do not have exclusive rights and they are not considered to be legalized monopolies (Nickson & Muscoe, 2004). The license of the statutory undertaker can be terminated (condition O of the license agreement), although with a ten-year notice period. The possibility for market exit is further reduced by the Water Industry Act of 1999 which removed the companies' power to disconnect customers for non-payment of charges. In 2003, over 4.4 million households are in arrears and 3 in 100 never pay at all, causing a bad debt to the water companies of £130 million annually.

*The Netherlands:* The Dutch water companies, just like in England and Wales, have the obligation to serve customers located within the assigned region. In the Netherlands this is based upon 30-year concession contracts. In contrast to England and Wales, Dutch domestic consumers do not have the possibility of selecting a water company of their choosing. They are "tied" to their water companies and can be disconnected for non-payment, providing that the company by-laws allow it. According to data provided by the Dutch Minister of Economic Affairs (Brinkhorst, 2005) approximately 2,000 of the 7.3 million connections (0.03%) is temporarily disconnected. These disconnections, in general, last no longer than several days, and before being disconnected a collection procedure of almost a full year is followed. Within this period, defaulters are reminded several times, both in writing as by phone, before a debt-collection agency is called in.

*Bulk supply. England and Wales:* In bulk supply, one water company sells an amount of water to a neighbouring company. Bulk supply is widely practiced in the British water industry (Booker, 1994). As an inter-company trade, these arrangements are negotiated between the two companies themselves and regulation does not interfere, provided that the water resources are not negatively affected and the customers are not negatively implicated. Only in case of dispute between the two companies the regulator (OFWAT) can intervene and determine the tariff for bulk water (Jeffery, 1990).

*The Netherlands:* The Dutch water companies also sell bulk-water to each other. This is done through inter-company arrangements that are not regulated.

*Common carriage. England and Wales:* Common carriage, when one company supplies water or sewerage services to its customers by using another company's network, may include the shared use of a pipe network, treatment works or storage capacity. Common carriage is based on the insistence of OFWAT that operators should grant access to their facilities under certain terms. The guiding principle in England and Wales is that each individual customer is entitled to receive water for domestic purposes from any water company, irrespective of where they live. Although common carriage is conceptually and theoretically interesting, in practice such sharing of facilities runs into severe quality and hygienic complications and has not occurred yet. It is estimated that the potential future market for common

carriage is to be around £250 million, relatively small compared to the regulated revenues of over £7 billion of the existing water companies (Nickson & Muscoe, 2004). Still, if water companies refuse entrants access to their facilities without an objective justification or on unreasonable terms, they risk infringement of the Competition Act of 1998.

*The Netherlands:* Dutch domestic customers do not have the right to receive water services from a water company of their choosing. They are restricted to using their current monopoly service provider; hence there is no possibility for common carriage arrangements.

*Inset appointments. England and Wales:* Another possibility for a water company to enter the market of another English or Welsh water company is by using the mechanism of inset appointments, as allowed and promoted by the regulator OFWAT based on the Competition and Services (Utilities) Act of 1992. In this case an interested water company could apply to OFWAT to serve (groups of) clients that lie within another operators' supply area without using the infrastructure of the incumbent operator. These inset appointments are limited to large clients that use more than 100 megalitres (MI) of water per year or to sites that are not yet served (green fields). Although the possibility for water companies to make use of inset appointments has been available for almost more than 10 years, it has been relatively unsuccessful. Only nine insets have been approved to date (Nickson & Muscoe, 2004).

*The Netherlands:* Dutch water companies are allowed to use a mechanism similar to inset appointments. They can compete for so-called "footloose" customers, who are large-scale customers who use water as a means of production. In 2000 the Dutch cabinet instated the Water Supply Act to protect public drinking water companies in the short run, by forbidding privatization as far as "tied" customers are concerned, these being households and small industries. But the Water Supply Act opens the market for all other uses, in other words the "footloose" customers. Just like in England and Wales, companies that consume more than 100 MI of water per year are allowed to choose from which company they buy their water (Kuks, 2001).

*Unregulated supply. England and Wales:* Another possibility for a water company to obtain a new customer in England and Wales is by starting to supply one of the 300,000 customers that currently rely on unregulated supply. Unregulated supply refers to the 50,000 private very small water providers that supply water for domestic purposes to this group. Most of these providers (75%) are single dwellings (Memon & Butler, 2003).

*The Netherlands:* The number of potential customers relying on unregulated supply is far less in the Netherlands compared to the UK, as the vast majority of consumers are already connected. However, water companies can connect those that are not already connected by another water company. Just like the large consumers discussed under inset appointments, these unregulated users are considered to be "footloose customers".

*Mergers and acquisitions within the country. England and Wales:* In theory, each of the 24 water companies can be bought and sold like any other company (Nickson & Muscoe, 2004), including the possibility for hostile takeovers. Proposals for change of ownership have to be referred to OFWAT as the Competition and Services Act clearly states provisions for replacing an appointed undertaker. A recent ruling of the court in the case of Welsh Water insisted that a change of ownership of an established water company should go by a system of competitive bids (Pielen *et al.*, 2004). OFWAT is not supportive towards more mergers, as a further reduction in the number of companies affects its ability to make



comparisons between companies (Carney, 1990; Byatt, 1993). The Water Industry Act of 1991 requires that the Competition Commission be asked for approval if the gross assets of each of the water companies to be merged exceed an amount of 44 million euros. The Competition Act of 1998 outlaws any agreement that (may) have a damaging effect on competition. The Act prohibits agreements between water companies that intend or actively prevent, restrict or distort competition and also forbids conduct that amounts to the abuse of a dominant position in a market that may affect competition. Hostile takeovers may be allowed. For example, the French company Lyonnaise des Eaux launched a hostile takeover of the licensed operator Northumbrian, which was allowed by the Competition Commission. Examples of less successful hostile takeovers are from Severn Trent and Wessex Water, both requesting the Competition Commission to takeover South West Water. Both their bids were blocked on the grounds of the loss of information for the regulator and its ability to undertake comparative competition. European restrictions on merging are in place in case the combined aggregate turnover of all the undertakings concerned is more than 5 billion euros.

*The Netherlands:* The Dutch water companies have the ability to merge with or acquire other Dutch water companies, often even promoted by the regulatory bodies. The Dutch water companies have made extensive use of this strategic action. In 1980 there were about 100 companies, of which currently just 16 are left (VEWIN, 2003). Supervisory bodies regarded the mergers favourably as they considered a minimum size requirement of 100,000 connections for supply companies to achieve economies of scale (Kuks, 2001). Regulation permits hostile takeovers in the Netherlands. However, few examples are known. In 2000, Nuon Water attempted a hostile takeover of the Waterbedrijf Gelderland, but it never materialized. In 2006, the water provider Evides threatened to approach the shareholders of the neighboring water provider Hydron-Zuid Holland during negotiations for a merger. The management of Hydron Zuid-Holland felt pressurized and warned its shareholders. Subsequently both parties became highly demotivated to merge and is for the time being put on hold.

*Mergers and acquisitions outside of the country. England and Wales:* With certain exceptions, the regulatory provisions do not apply to business activities of the water companies that are not connected with carrying out their water services in the assigned service area (Jeffery, 1990). To protect the water customers in the assigned monopoly area from losses which could be incurred by other companies within the group, the regulator OFWAT ensures that there is no cross-subsidy between the water provider and associated companies (Byatt, 1993). Consequently, the basic organization of each company (Carney, 1990) is shaped as in illustrated in Figure 2.

In practice, the licensed water company is often part of a relatively complicated institutional environment. For example, Anglian Water has received a license to provide water services to East Anglia and the East Midlands. For this activity it makes an annual turnover of approximate £900 million with 3,600 employees. The parent company of Anglian Water is the Anglian Water Group (AWG), which also includes the support services group Morrison plc and AWG Property. AWG has 9,000 staff based in offices across the UK. The group's turnover was £1.5 billion. Again to complicate the corporate structure further, AWG is owned by a private consortium Osprey, comprising the Canada Pension Plan Investment Board, Colonial First State Global Asset Management, Industry Funds Management and 3i Group plc.

*The Netherlands:* The regulatory environment in the Netherlands discourages water companies from engaging in adventures outside the Netherlands. Company by-laws often do not permit operators to expand their activities beyond the service area. They use the argument that the revenues received from

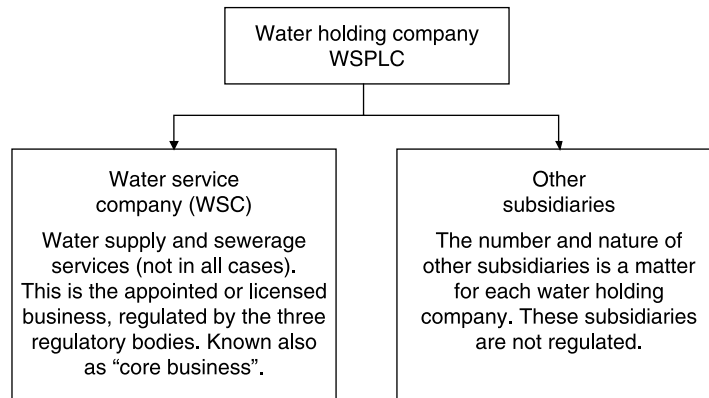


Fig. 2. Basic organization of each water company in England and Wales.

the local Dutch customers should only be used for these local Dutch customers and should and not be spent on possibly risky business opportunities outside of the country (Blokland *et al.*, 1999).

#### *Strategic action 2: services*

Which products or services does the company want to offer? This strategic action concerns the imposition of regulatory regimes on the core business and on non-core activities for the client group that is already served.

*Core-business of water. England and Wales:* According to the Water Industry Act of 1991, water companies cannot escape their statutory duty to deliver “wholesome” water to their assigned monopoly area. “Wholesome” is defined by reference to microbiological and chemical standards and other requirements set out in the Water Supply Regulations of 1989 and 2000. Section 70 of the Water Industry Act specifically makes it a criminal offence for a water company to supply water that is unsuitable for human consumption.

If a water operator tries to escape their statutory duties, the economic regulator OFWAT has the ability to issue an enforcement order. If a company does not comply with the order, OFWAT can ask the High Court to appoint a special administrator to run the company until arrangements can be made for a new company to take over.

*The Netherlands:* Just like the English and Welsh companies, the Dutch water companies must provide “wholesome” water. The Ministry of Housing, Spatial Planning and Environment supervises the quality of the drinking water produced. Recently the inspections have been replaced by trust, complemented by incidental inspection (van Dijk *et al.*, 2004).

*Non-core activities. England and Wales:* Many water companies have diversified into non-water activities. Just like adventures abroad, these non-core activities are excluded from the regulatory regimes and cross-subsidization is prohibited. In view of the popularity of diversifying, regulators are facing a dilemma since diversification of services has meant that companies are increasingly using their core skills and management time on diversification activities. This cannot always be expressed in a price and cross subsidization mechanism (Booker, 1994).



*The Netherlands:* The strategic choice to supply non-water services is constrained by regulatory impositions. Dutch regulators are pursuing a policy of bringing all the activities of public sector organizations that may find themselves competing with market players or market activities into legally, financially and organizationally independent units. This means that there is little choice for traditional water companies to transfer their activities other than water supply to a separate company. By dividing their assets in this way, they can prevent the business risks associated with their commercial activities being passed on to their tied customers (Kuks, 2001). Company by-laws also often do not permit operators to expand their activities beyond the core business of water (Blokland *et al.*, 1999). On the other hand, the Dutch government has adopted as official policy the pursuit of cooperation between water managers, municipalities and drinking water companies with a view to making use of environmental opportunities and increasing efficiency (V&W, 1998). Experiments are being launched with water chain companies set up to bring together the expertise needed to serve industrial companies and are geared to managing the complete company chain. However, they do not have a multi-utility character (Kuks, 2001).

*Strategic action 3: what price does the company want to charge clients?*

*England and Wales:* The economic regulator OFWAT strictly regulates the price setting of drinking water since the Competition and Service Act was passed in 1992. OFWAT sets the allowable price (also known as the K-factor) based upon the so-called price-cap mechanism that the companies are obliged to follow. K is calculated every five years, taking into account general retail price inflation as well as results from the yardstick competition that OFWAT is conducting. Since K is applied to a basket of regulated charges, covering both measured and unmeasured water and sewerage charges, as well as trade effluent charges; each company still has the ability to increase or decrease average charges for individual “basket items”.

*The Netherlands:* In the Netherlands the tariff is set by the company itself. Water utility management prepares an annual proposal for tariff height and structure for approval of the company shareholders based on the notion of cost recovery. Municipal and provincial governments, as owners of the water providers, have the power to agree with or reject the proposed tariff system. National government does not interfere in matters of water pricing. Hence, the only regulation enforced upon the tariff is the control of the shareholders to which the tariff needs to be proposed, although even that depends on the company by-laws. Since these shareholders are public entities such as municipalities or provinces, the Dutch regulatory system assumes this is sufficient to maintain a level of equity and affordability.

*Strategic action 4: internal organization*

How should the internal organization be structured? This strategic action focuses on internal organizational arrangements for service provision.

*England and Wales:* The English and Welsh companies have complete management control, although they need to consider specific regulatory provisions like, for example, the Guaranteed Standard Scheme (GSS), which contains information on customers’ rights (including compensation for supply interruptions). Yardstick competition is not only useful in respect of determining the price cap but is also intended to work as a motivation to improve performance. Participation in the yardstick comparison is compulsory (Robinson, 1997).

*The Netherlands:* Just like the English and Welsh water companies, Dutch public limited companies have complete managerial autonomy, although the company by-laws limit the manager in their freedom of operation. In the organization of the drinking water supply service, most Dutch drinking water companies have embraced a system of voluntary benchmarking since 1997, looking at four aspects: drinking water supply, cost efficiency, environmental performance and service performance. The objective of this benchmark is to increase the transparency of the drinking water companies' performance and to provide an instrument that can improve efficiency.

#### *Strategic action 5: external organization*

How should the organization interact with external parties? External organization refers to the inter-organizational relationships through which many organizations provide services. A distinction can be made between:

- (1) the relation with the “supplier” of raw water;
- (2) the relation with the suppliers of subcontracts and other materials.

*The relation with the “supplier” of raw water. England and Wales:* The Environmental Agency, mandated by the Environmental Act of 1995, continuously monitors the amount of environmental pollution generated by the water companies, including their effect on water resources caused by abstraction. To abstract water, companies need to apply for a time limited abstraction licence issued by the Environmental Agency. In case a licensed abstraction causes damage or loss to anyone, the person has the right to seek financial compensation from the abstractor. Moreover, water companies are obliged to submit water resource plans each year to the Environment Agency.

*The Netherlands:* The water company is dependent on receiving a license to extract groundwater. The Province issues these licenses. Moreover water companies need to pay an abstraction charge of about 34 cents per cubic metre. As the regulatory bodies want to discourage the use of groundwater, there is a rebate of 28.5 per cubic metre in case surface water is injected into the groundwater prior to injection (van Dijk *et al.*, 2004).

*The relation with the suppliers of subcontracts and other materials. England and Wales:* To engage external parties, the Utility Contract Regulations, dating from 1996, regulate procurement in the water sector and other utility industries. On the basis of this regulation, OFWAT monitors companies' use of associates for subcontracting.

*The Netherlands:* Just like in England and Wales, Dutch water companies have to comply with procurement rules for tendering and bidding as formulated by the European Commission.

## **Conclusion**

A different institutional context is conducive to formulating different strategies. The research provides a first step in answering the question of what extent privately owned water companies have a different strategy compared to publicly owned water companies. An answer to this question is highly relevant as there is no clear convincing empirical evidence in the water industry that private sector involvement is

Table 2. Complete research framework, strategic actions and ownership.

Regulatory regime on	Private water companies (England and Wales)		Public water companies (The Netherlands)	
	Regulatory opportunities	Regulatory constraints	Regulatory opportunities	Regulatory constraints
<i>Strategic actions</i>				
Market	No exclusive rights given to incumbents; To use bulk supply, common carriage & inset appointments; Transfer of ownership; Activities outside England & Wales	Bound to assigned population; Cannot disconnect customers; No mergers inside England & Wales	To use bulk supply; To benefit from inset appointments; Mergers inside the Netherlands allowed	Bound to assigned population; Exclusive rights of incumbents; No change ownership; Activities outside the Netherlands not encouraged
Services	Differentiation	Bound to supply wholesome water; No cross-subsidization allowed		Bound to supply wholesome water; Separate other from water activities; Often restricted by by-laws Approval of shareholders
Revenues	Appeal to tariff setting by OFWAT; Indirect influence through negotiations and participating in yardstick	Price cap regime; Limitations to compulsory metering	Company sets itself the tariff individually; No limits to compulsory metering	
Internal organization	Each company has complete management control	Acknowledge customer rights; Compulsory yardstick participation	Each company has complete management control; Voluntary benchmarking	
External organization		Abstraction licenses; Submit water resource plans; Procurement rules for tendering		Abstraction licenses; Procurement rules for tendering

beneficial. The empirical answer to this question is difficult to produce by comparing companies in the water sector. Conditions may vary and influence the results, as we have learned from benchmarking (VEWIN, 2003).

From the analysis we conclude that, at least conceptually, the regulatory regimes in the two countries differ. In England and Wales, all customers are legally entitled to receive water from any water company, irrespective of where they are located, although this is difficult to carry out in practice. The Dutch approach is more restrictive. They classify customers into “tied” and “footloose” customers, whereby only the footloose customers have such an entitlement. Consequently, the English and Welsh regulatory context allows water companies to chase customers while such possibilities are more limited in the Netherlands. This may again be the reason why the regulator in England and Wales strongly constrains the possibilities for a water company to merge within another English or Welsh water company, intending to preserve both the possibility for competition in the market and comparative competition. On the other hand, the regulator is lenient for English and Welsh companies if the ownership goes from one private owner to another, or even if the water company starts to buy or merge with water companies outside of England and Wales. In the Dutch case it seems to be just the other way around. The government has actively promoted mergers within the Netherlands during the last few decades, but shifts in ownership are tightly regulated. The Dutch water companies are very much discouraged, or even prevented from merging with or being taken over by a foreign company.

The same conservative attitude of the Dutch regulatory regime is applicable to the provision of non-water services. Often the company by-laws prevent such undertakings. The English and Welsh regulator stays out of the diversification decision, although the regulator prohibits any cross-subsidization from its water business. In short, mergers and acquisitions in the Netherlands are limited to mergers between Dutch publicly owned water companies, while in England and Wales water companies are not allowed to merge, except with foreign companies.

The greater discretion English and Welsh water companies enjoy with respect to market and product strategies, may be a consequence of their smaller discretion with respect to tariff setting. Tariffs are strictly regulated in England and Wales, while in the Netherlands tariff setting is left largely to the discretion of company management.

In sum, the overall conclusion is that regulatory contexts in England and Wales and the Netherlands invite of water companies to take strategic actions in different directions. Future research should take this into account in explaining possible differences between managerial conduct and performance. In [Table 2](#) all the regulatory constraints and opportunities for the five strategic actions are summarized and compared.

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