

COMPETITION AND TRADE PROPOSALS FOR THE UK WATER INDUSTRY

Britain is supposedly a wet country where it always rains. All foreign tourists know to bring an umbrella - as Shakespeare wrote in 1601, "The rain it raineth every day". However, at least in England, this is now far from true even if it ever was – particularly in Southern and Eastern England. In East Anglia, on average, it rains only 1-day-in-3. In large parts of Southern and Eastern England, average annual rainfall is 600-650 mm per year. This is less than Rome, Sydney or New York and comparable to or even lower than many semi-arid regimes. In addition, central predictions of climate change suggest that, by 2050, annual river flows could fall by around 15% with summer river flows falling by over 50% - again particularly in the South and East of England.

Furthermore, Southern and Eastern England are the main regions where net population is growing while Eastern England accounts for one-quarter of total UK wheat production. Conversely, there are still large unused water resources in the Northern and Western England (and Wales) - areas with static or declining net populations. In consequence, current as well as expected future water resource shortages are pointing to major and growing water resource imbalances between regions. This perspective has encouraged many, including me, to explore water trading and competition options so as to provide stronger incentives for the efficient use of declining water resources.

The structure of the UK water industry is also unusual. In France, Germany, Italy and many other countries, there are hundreds if not thousands of small water companies each supplying their own locality as vertically integrated monopolies. These are normally publicly owned or operated as leased concessions. Full private operation (including investment) is relatively uncommon. Typically, in Continental Europe and elsewhere, water prices cover operating costs and maybe a margin but with some or all of capital costs coming from local or national public revenues.

In contrast, in the UK, there is only one water company in each of Scotland and Wales while in England there are only 9 water and sewage companies (which are located around river basins) and 11 water only companies. These are very large water companies by world standards. Apart from Scottish Water, the others have been 100% privately owned since 1989 and they finance their operations and all their investments from their own financial resources.

In England and Wales, the companies operate as fully vertically integrated utilities. The problems of repeat price reviews at 5-yearly intervals have created major and growing difficulties for Ofwat, the England and Wales water regulator, as well as for the companies.

These issues were a major reason why WICS (the Scottish water regulator) introduced retail competition in 2008. In Scotland, they were made worse by having a single water company supplying a population of 5 million people plus industry and agriculture. Since then, all Scottish Water customers other than household customers can buy their water

from a number of suppliers by retailers other than Scottish Water. In 2010, there were four other licensed retailers besides Scottish Water's licensed retailer. However, there is no upstream water competition in Scotland. The other retailers are all obliged to buy their wholesale water from Scottish Water – but at the same price that Scottish water charges its own retail arm.

The example of Scotland and the failure in England and Wales of the “inset” regime to generate effective retail competition for even the largest industrial companies has led to renewed interest in competition – both retail competition and upstream competition – at least for England. Some of the water companies (e.g. Severn Trent, Northumbria and Anglia) have published proposals on how to encourage wholesale water trading and competition. Ofwat has published a number of papers with proposals on making greater use of markets, particularly on how upstream markets might contribute to this, while the Environment Agency has published ideas on how to improve abstraction licence flexibility and trading.

In England and Wales, the incremental costs of supplying water vary enormously across the country. The average incremental social cost (AISC) of new water supplies varies from well under £10 per cubic meter in parts of the North and West of the country to over £100 per cubic meter in parts of the East and the South East.

There is some trade in water, but trade levels are very low given water resource and AISC differentials. Around 5% of delivered water is bought in from other companies. Around four-fifths of this is of raw water e.g. the long-standing contract by which large volumes of raw water are transported from North Wales to Birmingham. The trade in treated water is much smaller but, interestingly, makes up 8% of delivered water in the South East of England as opposed to 1% nationally. However, traded water volumes have not noticeably increased over the last 20 years even though water shortage concerns have risen substantially. Instead, companies still have incentives to promote large and costly investments such as Thames Water's solar powered desalination plant.

This set of concerns has attracted the interest of policy-makers and utility economists who have followed the developments of competition (wholesale and retail) in industries such as telecoms, electricity and gas. Of course, there are many differences between water supply and these other industries, but there are also major similarities such as the role of the core monopoly network and the problems around affordable tariffs.

In 2008, the government commissioned Martin Cave, a leading competition economist and telecoms specialist, to carry out a review of competition and innovation. His review advocated extending retail competition over a period of years to all customers other than households and also made recommendations about upstream (wholesale) competition.

Focusing on the water scarcity issues, I have been advocating a major push towards greater trade in abstraction rights and in wholesale water trade to supplement retail competition, using compulsion if necessary. I have also argued for explicit scarcity based abstraction prices, which are currently illegal in the UK. This line of thought is very

much influenced by developments in UK, EU and US electricity and natural gas over the last 20 years and would also require growing separation of water pipe networks – particularly interconnector pipes – from water extraction and treatment as well as from wholesale and retail sales.

There is a growing consensus in favour of extending retail competition in England's water supply industry. There is, though, less consensus about upstream arrangements. Although some water companies are in favour of more trade, they are – not surprisingly – opposed both to compulsory trade and to network separation. As with electricity and natural gas, opponents of competition point to the risks of lost economies of scope if previously vertically integrated companies are forced to unbundle. For various reasons, not least the experience in electricity and gas, I think that these fears are greatly exaggerated – particularly if reforms were to take place over a 10-20 year period which is what one might expect.

In the meantime, the UK Government has promised a White Paper on water reform, which is expected for later this year. Ofwat has been carrying out intensive studies on these issues and has recently published an Informal Consultation paper on the future structure and regulation of the industry which is pro-competition but in a measured and evolutionary way.

The debate has been engaged but it will long continue. One reason for caution is that there is much less evidence on likely engineering, production and consumer responses for water than there was for energy and telecoms where substantive competition and unbundling changes to proceed. That, in itself and aside from political concerns, should rightly suggest a pragmatic and experimental approach to developing competition in the British water industry.

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