

Risk and profit: unanswered questions about the strategic review of water charges 2006-10

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“Public sector companies can often support much lower levels of interest cover than private concerns because of the lower risks.”: (OFWAT-International Comparisons of Water and Sewerage Services)

1. Introduction

1.1 In a paper in the January 2006 issue of this Commentary, [Cuthbert and Cuthbert, 2006], we identified a number of errors in the financial control of the water industry in Scotland. These errors had resulted in serious overcharging in the strategic review 2002-06, with, we argued, knock on effects to the 2006-10 period. A meeting with the Chairman of the Water Industry Commission, Sir Ian Byatt, was held on 22nd February at the Scottish Parliament to discuss one particular symptom of this, the high levels of new capital expenditure funded out of revenue in the water industry in Scotland.

To illustrate the latter point, on the basis of outturn figures in Scottish Water’s published accounts, [Scottish Water, annual] and the projections in the Final Determination of Charges 2006-10, [Water Industry Commission for Scotland, 2005], the amount of net new capital expenditure, (that is the formation of capital assets over and above depreciation), funded from revenue will be at least £600 million in 2002-06, and is projected to be over £400 million in 2006-10. The amount of net new capital formation funded out of revenue over the period 2002-10 will therefore be over £1 billion: over the same period, the total amount of net new capital formation will be around £2.1 billion. Given the normal principle that net new capital formation should be funded from borrowing, the high proportion of net new capital formation being funded from revenue represents a strong prima facie case that there will have been very substantial overcharging of water customers in Scotland over the period.

1.2 At the meeting, Sir Ian refused to discuss the strategic review 2002-06, arguing that this was not the legal responsibility of the Water Industry Commission, which was formally constituted only in July 2005. However, Sir Ian was prepared to discuss the 2006-10 period, and argued that the revenue caps set in strategic review 2006-10 were justified in terms of the need to meet targets for certain key financial ratios: these ratios, and the targets set for them, were the same as used by OFWAT in its review of charges for the water industry in England and Wales: [OFWAT, 2004]. Sir Ian justified the use of the same ratios, and indeed the same targets for these ratios as in England and Wales, by the need to avoid risk. Our initial response at the meeting was that the use of the same ratios and targets for private companies like the English water and sewage companies, and a public body like Scottish Water, was unjustifiable, given that public and private bodies face very different risk profiles. We undertook at the meeting to develop more fully our thoughts on the differences in risk for public and private bodies: this forms the primary subject of this paper. Our conclusion is that the straight application of OFWAT targets is indeed unjustifiable: this will inevitably result in overcharging, and the funding of too much capital expenditure out of revenue. We look to Sir Ian to justify his position that it is appropriate to apply the OFWAT ratios and targets to Scottish Water without modification.

1.3 The above discussion on appropriate financial ratios and targets forms the main subject matter of this paper. However, in carrying out this research, we observed an apparent difference in the calculation of current cost profit between that used in strategic review 2006-10 in Scotland, and the definition used by OFWAT in their Regulatory Accounts: [OFWAT, 2003]. This is described in the penultimate section of the paper. The effect is that profits in Scotland are significantly understated, compared to what they would be if OFWAT conventions were used. On the basis of OFWAT definitions, it appears that strategic review 2006-10 is projecting pre-tax profits of almost £900 million, and post-tax profits of over £500 million, over the period 2006-10. These high profit levels are again consistent with the view that substantial overcharging of customers has continued in strategic review 2006-10.

2. How appropriate are the OFWAT financial ratios and targets for the purpose of controlling risk in Scotland

2.1 Chapter 26 of the Final Determination of Charge for 2006-10 sets out the key financial assumptions that were used in the determination of the charge caps. An important part of this process was the use of financial ratios and targets to assess the financial strength of Scottish Water. The ratios chosen, and their target values, were the same as five out of the six ratios used in OFWAT’s 2004 price review for England and Wales. The relevant ratios and targets are set out in the following table.

Financial ratios

Financial Ratio	Target Value
Cash Interest Cover	Around 3 times
Adjusted cash interest cover	Around 1.6 times
Funds from operations: Debt	Greater than 13%
Retained cash flow: Debt	Greater than 7%
Gearing	Less than 65%

The definitions of these ratios, given on page 273 of the Final Determination, are as follows:

Cash Interest Cover

= (Net Operating Cash Flow - Tax)/ Interest,
where net operating cash flow = Turnover - Operating Expenditure.

Adjusted Cash Interest Cover

= (Net Operating Cash Flow - Depreciation - Infrastructure Renewals -Tax)/ Interest

Ratio of Funds from Operations : Debt

= (Net Operating Cash Flow - Tax -Interest)/ Net Debt

Ratio of Retained Cash Flow : Debt

= (Net Operating Cash Flow - Tax - Interest - Dividends)/ Net Debt

Gearing =Net Debt / RCV,

where RCV is the Regulatory Capital Value, which represents the value of the regulated business on which Scottish Water can earn a return: this is essentially a proxy for the market value of the business.

Note that since Scottish Water, as a public company, does not pay dividends, retained cash flow will equal funds from operations: so the value of the fourth ratio will always equal the third ratio.

2.2 In our meeting with Sir Ian Byatt, he stressed that the key ratio and target, which more than any other had determined the revenue caps, was the third ratio, namely, "funds from operations:debt".

Chapter 26 of the Final Determination justifies the application of the OFWAT ratios and targets as follows:

"We have also noted that these financial ratios were developed in consultation with the water companies, the City, and the credit rating agencies. We believe that these ratios are therefore likely to represent a fair market assessment of the appropriate split between current and future financing needs. We can see no reason why Scottish Water should not seek to match the financial strength of the companies in England and Wales".

On the face of it, this is a surprising statement, given the quotation from OFWAT reproduced at the start of this paper. In this section, we argue in greater detail a) why indicators of the OFWAT type cannot be relied upon as the primary method of assessing or controlling a company like Scottish Water: and

b) why in any event, the OFWAT targets have to be modified before being applied to Scottish Water, because of the different circumstances facing Scottish Water as compared to the English and Welsh Water and Sewerage Companies, (WASCs).

2.4 As the quotation in the paragraph above makes clear, the OFWAT ratios have been primarily modelled on the kind of indicator used by the markets to assess the risks associated with a company. Two of the classic traps, and therefore risks, into which a company can fall are:-

Runaway cycle of borrowing

This is the risk that a company gets itself into a position where it is borrowing to cover current costs like operating expenses, depreciation, and interest. This could lead to an exponential growth in debt unbacked by productive capital assets, with ultimate danger of financial collapse.

Collapse of customer base through over-charging

This is the risk that, because customer charges are set too high, the revenue generating base of customers may grow more slowly than the requirement for revenue, leading to a vicious circle of further increases in charges, and so on. In a competitive market, this could be followed by rapid collapse: in a monopoly market, collapse is unlikely to be rapid, but may nevertheless ensue in the longer term. Note that, because there is a substantial fixed cost element in water company operations, (in terms of a largely fixed capital base, depreciation, and interest charges), once the customer base starts to shrink, the rise in unit fixed costs poses a real danger of a self-perpetuating cycle becoming established. There are a number of ways in which a company might fall into this particular trap - for example, it might come about through failure to achieve required operating cost efficiencies, or through attempting to finance too high a proportion of capital expenditure out of revenue.

2.5 The first of the above two risks will be associated with high levels of borrowing throughout, while at least in its initial stage, the second risk may well be associated with low borrowing. The OFWAT ratios, with their stress on debt and interest costs, are weighted towards detecting the emergence of the first of these risks. For a private company operating in a competitive market, this is probably fair enough, since the second risk, over-charging, will normally be penalised anyway by the operation of competition, leading to an easily detectable decline in profits and in market share. There is thus little need for the market to have developed special indicators to detect the problem of over-charging.

2.6 For a company operating in a market where there is limited competition, however, (like a water company), then the normal competitive checks against over-charging will not apply. In these circumstances, the asymmetry in the OFWAT financial ratios does matter: if too much reliance were placed on the OFWAT ratios alone, then while this would avoid the danger of over-borrowing, (because the OFWAT ratios guard against this), there would be a very real risk of falling into the opposite trap of over-charging. Of course, for a water company or similar utility, the place of the market check on over-charging is supposed to be taken by the role of the regulator, one of whose primary responsibilities is to guard against over-charging. Thus, in England and Wales, Severn Trent Water Company was recently fined by the regulator for over-charging. The important point we wish to make here, however, is that for companies in the position of Scottish Water or the WASCs, it is not enough to set revenue caps purely or primarily by reference to the types of financial ratios listed above: it is also necessary to consider carefully and directly whether there is evidence of over-charging, which could show up, for example, in the form of excess profits. We shall argue later that there is indeed evidence, as regards the strategic review 2006-10, of over-charging being overlooked, or of being given insufficient weight.

2.7 We now show that, in any event, there are strong arguments for saying that the OFWAT ratios have not been calculated appropriately for Scotland, but either need to be modified, or in one case, (the gearing ratio), should not be calculated at all. The reasons are as follows.

Gearing ratio

2.8 The gearing ratio, as noted above, is the ratio of debt to RCV. We argue that this ratio is meaningless for Scotland, given the way RCV is currently calculated in Scotland. As the discussion on page 270-1 of the Final Determination makes clear, the RCV for Scottish Water was not based on any absolute method of determination, but was calculated so that, in 2009-10, "the cash allowed return on the RCV and the allowance for embedded debt was equal to the difference between the required level of revenue and the allowed level of costs." In other words, the RCV for Scotland is an imputed figure, calculated so that the product of RCV times the assumed rate of return gives a required amount of cash: this means that the value of the RCV is a relative concept, which varies in inverse proportion to the assumed rate of return. A problem arises when such a relative concept as the RCV is compared with an absolute concept, namely, debt, as is done in calculating the gearing ratio. It is difficult to see how the concept of gearing for Scotland can have any meaning, unless some more objective and absolute way of calculating Scottish RCV can be determined. Note that this problem does not arise in England, since RCV there is based upon rolling forward the market value from the time of privatisation.

Another problem with the Scottish method of calculating RCV arises because of the error acknowledged on page 295 of the Final Determination in double counting inflation in rolling forward RCV. This error apparently has a very large effect on assessed RCV values: the following quotation, from page 296, indicates the effects of correcting for this error- "If we changed our model so that it implied an initial RCV using a real rate of return, the initial RCV would become around £11 billion. This is around double the upper end of the range suggested by the Commissioner's analysis. In our view, such a large RCV could not be justified."

What we take from this quotation is that there must be a further huge element of uncertainty about the particular RCV values attributed to Scottish Water in the Final Determination. Given the relative and uncertain nature of the Scottish RCV figure, calculation of a gearing ratio based on the Scottish RCV is meaningless.

The difficulty of comparing debt between Scottish Water and the WASCs.

2.9 The remaining four OFWAT ratios all depend in some way or other on debt, (or the related quantity, interest). There is, however, a fundamental difference between a public body like Scottish Water, and the private WASCs in England, in that the former only has access to two main sources of finance, (debt, and retained profits), while the latter have access to three, (debt, retained profits, and equity). To restrain Scottish Water and the English companies to the same level of debt, therefore, would be to throw a greater burden on retained profits for Scottish Water, since, unlike the English companies, it does not have the option of accessing equity finance.

This point is acknowledged on page 345 of the Final Determination, where there is the following discussion about the possibility of relaxing the OFWAT "funds from operations divided by debt" target, (the key third ratio), for Scottish Water: "The rationale for allowing this ratio to be breached would be that Scottish Water is funded entirely by customer charges and debt, and there is no indication that the Scottish Executive will seek to require Scottish Water to pay a dividend on any retained earnings. From this standpoint, complying with this ratio could reasonably be regarded as challenging."

In the event, the Final Determination did not go down the road of relaxing the third ratio constraint, because the resulting reductions in charges would have breached the Ministerial Guidance on charges, and because of public expenditure constraints. However, the important point for present purposes is that the sentiment expressed in the above quotation is one with which we absolutely agree: setting the same targets in respect to debt ratios for Scottish Water as for the English companies is much tougher for Scottish Water.

2.10 To get round this problem, we really need to consider the following question: "If the equity finance of the WASCs were replaced by conventional debt, how much conventional debt could they take on without experiencing any additional risk?"

If one regards the equity finance raised by the WASCs as a form of proxy debt, then

(a) it is much more expensive than conventional debt: as can be seen from the information in tables 1 and 7 of [OFWAT, 2005a,], the WASCs have recently been paying annual dividends equivalent to over 18% of the equity capital actually raised: and this is after tax.

But

(b) a private company, in any given year, does not have to pay a dividend: so equity finance provides a greater cushion against imminent failure in times of financial stringency. An element of equity finance gives a company a less brittle financial structure.

If, therefore, one was seeking an appropriate conversion factor from equity finance to conventional debt, the above two arguments would point in different directions: since equity finance is more costly than conventional debt, a given amount of equity finance would cost the same as a significantly larger amount of conventional debt: so in this sense equity finance would convert to conventional debt at a factor greater than one. But equity finance leads to a less brittle financial structure than conventional debt: so in this sense, equity finance should convert to conventional debt at a factor less than one. To balance up these two conflicting effects, we take a factor of 1 as a reasonable conversion factor from equity finance to conventional debt. Given the very high cost of equity finance to the WASCs, this is probably a conservative assumption: in other words, the WASCs could probably replace their equity finance with a larger amount of conventional debt without incurring any additional risk.

2.11 Another factor that must be taken into account in determining equivalent levels of debt between Scottish Water and the WASCs is the fact that Scottish Water can borrow more cheaply than a typical WASC, since the former is borrowing from the Scottish Consolidated Fund at public sector rates, rather than market rates. In setting water and sewerage charges for England and Wales for the period 2005-2010, OFWAT assumed that the real pre-tax cost of debt for the WASCs, (that is, the cost over the entire debt base of the companies), would be 4.3%, [OFWAT, 2004, page 219]: this would be equivalent to about 6.8% in nominal terms. From pages 121 and 122 of Appendix 9 to the Final Determination of water charges in Scotland, it can be seen that the projected average interest rate to be paid by Scottish Water on government loans varies between 5.8% and 5.3% over the period 2006 to 2010. Given these figures, it seems safe to assume, on a

conservative basis, that the cost of debt for the WASCs over the foreseeable future is likely to be at least 20% more than that for Scottish Water.

2.12 Given the above, therefore, it follows that the equivalent to the ratio of

$$\frac{\text{funds from operations}}{\text{debt}}$$

for Scottish Water would be the ratio

$$\frac{\text{funds from operations}}{1.2(\text{debt} + \text{equity finance})}$$

for the WASCs.

We therefore need to establish what value of the latter ratio would be equivalent to a target value of 13% for (funds from operations)/(debt) for the WASCs. The calculation is as follows.

First, from Table 7 in [OFWAT, 2005a], it can be seen that, in 2004, the debt of the WASCs was £24525 million, and their called up share capital plus share premium, (equivalent to the capital raised by means of equity), was £6596 million, implying that

$$\frac{\text{debt} + \text{equity finance}}{\text{debt}} = 1.27$$

Hence, for the WASCs, if

$$\frac{\text{funds from operations}}{\text{debt}} = 0.13,$$

then

$$\frac{\text{funds from operations}}{(\text{debt} + \text{equity finance})} = \frac{0.13}{1.27} = 0.102$$

and

$$\frac{\text{funds from operations}}{1.2 * (\text{debt} + \text{equity finance})} = \frac{0.102}{1.2} = 0.085$$

The equivalent target for the ratio of funds from operations to debt for Scottish Water should thus be around 8.5%, rather than 13%.

2.13 Clearly, the specific assumptions we have used in the above calculations are subject to fine tuning. Nevertheless, the basic principle remains, that if allowance were made for the more limited sources of finance available to Scottish Water, then the OFWAT targets would

need to be significantly adjusted. While we have worked through the arithmetic for the key third ratio, similar principles would apply to the other ratios involving debt or interest.

3. What light does the profit and loss account throw on how reasonable the revenue caps are, and what are the implications?

3.1 We have argued in the previous section that revenue caps set for Scotland using a straight application of the OFWAT targets for the financial ratios are likely to give a distorted outcome - being unduly cautious as regards risks associated with over-borrowing, and failing to give adequate warning about the risk of overcharging. If so, we could expect this to show up in the projected profit and loss account for Scottish Water, with the company having an unduly large profit after allowing for operating expenses, depreciation, interest, and other relevant charges. Comparison of the projected income and expenditure accounts for Scottish Water on page 358 of the Final Determination with, for example, outturn profit and loss accounts for the WASCs, (in OFWAT, 2005a), suggests some support for this hypothesis. For example, the outturn current cost post-tax profit for the water industry in England and Wales was £123 million in 2003-04, and £213 million in 2004-05. In comparison, the projected current cost post-tax surplus for Scottish Water in the final determination is £85.9 million in 2006-07 and totals £260.9 million over the five years 2006 to 2010, (and over £500 million pre-tax). Thus it is indeed the case that the projected surpluses of Scottish Water are larger, on a proportional basis, than the outturn profits had been for the WASCs. It could be argued that some or all of this difference represents the need to include some contingency allowance in the planned figures for Scottish Water: nevertheless, a cumulative pre-tax surplus of over £500 million does on the face of it appear somewhat excessive.

3.2 However, a detailed examination of the projected accounts for Scottish Water as compared with the OFWAT accounts shows that there appears to be a very significant difference in the way in which the two sets of accounts are compiled. This relates to the term “financing adjustment”, which appears in both sets of accounts. In the OFWAT accounts, which are compiled in accordance with the Regulatory Accounting principles set out in [OFWAT 2003], the “financing adjustment” represents a significant income element in the profit and loss account, (ranging from £345 million to £667 million over the period 2000-01 to 2004-05.) For OFWAT, the financing adjustment “is equivalent to the effect that RPI inflation has in eroding the level of net debt that exists at the start of the financial year.” In a profit and loss account which includes depreciation of fixed assets adjusted for inflation on a current cost basis, as the OFWAT accounts do, then the logic of also including the benefit experienced through the erosion of outstanding debt by inflation appears unimpeachable.

3.3 In the final determination current cost accounts for Scottish Water, while there is a term for “financing adjustment”, the values included under this term are trivial, ranging from £4 million to £8 million per annum. On the other hand, if a financing adjustment had been calculated using the OFWAT methodology, representing the eroding effect of retail price inflation at 2.5% on Scottish Water’s debt, then, on the basis of the debt projections in Table 35.15 of the final determination, this would have amounted to the values set out in the following table,

Financing adjustment for Scottish Water on OFWAT basis: £ million

2006/07	65.0
2007/08	69.0
2008/09	74.1
2009/10	80.7
Total	288.8

Given that the projected accounts for Scottish Water, like the OFWAT accounts, include depreciation calculated on a current cost basis, there appears to be no good reason why the financing adjustment, as calculated in this table, should be excluded from the accounts of Scottish Water in the final determination. Inclusion of this financing adjustment would mean that cumulative pre-tax profits over the period 2006-10, calculated on the same current cost basis as used by OFWAT, would be over £800million, and post-tax profits would be £550 million. This appears grossly excessive. We argue that this is compelling evidence that the use of the straight OFWAT financial ratios and unadjusted OFWAT targets in determining revenue caps for the period 2006-10 has indeed been inappropriate, and has resulted in serious overcharging. This in turn is likely to expose Scottish Water to serious risk of erosion of the customer base, as the excess burden of water charges makes Scottish business less competitive.

3.4 In setting revenue caps for Scottish Water, therefore, we argue that not merely should the target on the key financial ratio have been significantly relaxed, (probably to around 8.5%), but that more account should have been taken of other dangers, like overcharging. This would have involved looking, among other things, at projected retained profits, (calculated using the OFWAT Regulatory Accounting conventions, to give a proper assessment of the likely impact of inflation). In addition, there should have been direct consideration of the amount of net new capital formation which it was planned to fund from revenue. If this had been done, then the twin indicators implicit in the Final Determination of:

a) retained pre tax profits of over £800 million, and post tax profits of £550 million, (on the OFWAT conventions), over the four years 2006-10, and

b) no less than £437 million net new capital creation funded out of revenue over the same period,

should surely have rung danger bells.

3.5 It might be argued that the Water Industry Commission, (WIC), could not in the event have departed significantly from the revenue caps set out in the final determination, because the Ministerial Guidance, and available public expenditure provision, were over-riding constraints. Over the period 2006-10, the final determination plans project that £30 million more public expenditure provision will actually be used than is being made available over the period: this implies that the available margin of unused public expenditure, which was projected to be £256 million at the start of 2006, would reduce to £222.6 million at the end of 2010- (Final Determination Table 34.10). It is clear that the revenue caps could not have been set significantly lower without eroding the safety margin of unused public expenditure provision to a dangerously low level- or even using it up altogether.

3.6 This argument, however, raises some deep issues about the proper role of the WIC. It seems to us that it would be perfectly reasonable for the WIC to raise with Ministers the implications of ministerial decisions, if these decisions were resulting in a situation where:

a) excess retained profits are projected, implying the continuation of substantial overcharging throughout the final determination period;

b) where normal principles of inter-generational equity are being breached, as regards the funding of capital expenditure, with today's customers paying out of charges for the creation of substantial amounts of net new capital assets for the benefit of future generations;

c) where, as a result of past and current overcharging, Scotland's industrial base, and potential for development, is being damaged.

3.7 In addition, it appears to us that there is another, longer term danger. This is the risk that the industry might be moving into a position where the public's clearly expressed preference for Scottish Water to continue in public ownership will be frustrated.

Because overcharging in strategic review 2002-06 reduced the need to borrow, the Scottish Executive was able to transfer significant amounts of public expenditure provision out of the water budget: the exact amounts are unclear, but probably around £500 million was transferred out in total. The reduced amounts of provision remaining in the water

budget are very likely to cause real problems in the longer term- as the projections in the Final Determination itself illustrate. For example, projections on page 345 of the Final Determination show that, if investment continues over the period 2010-14 at the same level as now in real terms, then revenue will have to rise by 4.4% per annum over the period, (implying price rises significantly above inflation), and borrowing over the period will be some £150 million more than the public expenditure currently being made available: as a result, by the end of the period the safety margin of unused public expenditure provision would be almost exhausted. This would be an unsustainable position, unless prices rose even more steeply - or the Executive could find resources elsewhere within its budget to restore the provision it has transferred away from the water budget. It does not seem likely that the Executive would easily be able to find the required provision, given the other budgetary pressures it will be facing, and the fact that the privatised water industry in England does not generate any Barnett consequential for Scotland. In these circumstances, the Executive will feel strong pressure to privatise Scottish Water: this would be extremely unfortunate given that, as we have noted above, the clear preference of the Scottish public is for water to remain in public ownership.

4. Conclusion: The unanswered questions

4.1 In this paper we have shown that the straightforward application of the OFWAT financial ratios and targets to Scottish water is unjustifiable, given the different financing options open to Scottish Water, and the resulting different capital structures, compared to the English WASCs. But this is not just our view: the same conclusion is implicit in the OFWAT quotation given at the beginning of this paper- and, indeed, is also implicit in the quotation from the Final Determination given in para 2.9 above.

The first question which the Water Industry Commission requires to answer is: why, then, were the unadjusted OFWAT ratios and targets applied in strategic review 2006-10?

4.2 In section 3, we have identified what appears to be a critical difference in the methodology for calculating current cost profit, as between the regulatory accounts specified by OFWAT, and the WIC's strategic review 2006-10. The OFWAT approach includes as an income element in the current cost profit and loss account the benefit arising from the eroding effect of inflation on outstanding debt: this term is apparently omitted from the corresponding Scottish accounts in strategic review 2006-10. This results in profits in Scotland apparently being understated. On the OFWAT convention, (which clearly appears to be the correct approach), cumulative current cost pre-tax profits for Scottish Water are projected to be over £800 million over the period 2006-10: this appears to be a grossly excessive level.

Questions which require to be answered are:

Why was a different convention used in this part of the calculation, (particularly when, as regards the financial ratios employed, the Final Determination makes a supposed virtue of slavishly following the OFWAT conventions)?

What can possibly justify such high levels of retained profit?

4.3 Overall, the findings presented in this paper confirm that the overcharging in strategic review 2002-06, which we identified in our earlier papers, does extend, via different mechanisms, into the 2006-10 period. This means that:

- a) there is a real risk of erosion of the customer base, because of the depressing effect that continuing high charges will have on Scottish industry, and hence on the important industrial component of the customer base;
- b) the principles of inter-generational equity are being breached, because today's customers are being forced to fund unjustifiably high amounts of the creation of net new capital assets out of current revenue.
- c) More generally, because there is a real danger of Scottish Water being privatised, this would mean that Scotland would never receive the potential benefits which might legitimately have been expected from a publicly owned water company. Rather than paying what (on English experience) are likely to be excessive dividends to a private owner, public ownership gives the opportunity to return these dividends to customers in a variety of ways. These include lower charges, the pursuit of social justice objectives, and targeted support of industrial development. For example, it would be possible, by selective targeting of appropriate industrial uses, (as opposed to the present ill-judged blanket harmonisation of business charges), to pro-actively attract water intensive industry to Scotland - so exploiting what should be a natural comparative advantage. It should also not be forgotten that such a

policy on water charges would be one of the few ways in which Scotland could legitimately, and cost effectively, circumvent the restrictions on selective aid to industry implicit in the EU's anti-competitiveness Directives. If, in a climate of increasing global water shortage, the choice for Scotland lies between exporting water, and exporting virtual water, (that is, products whose manufacture involves high water usage), then we should be seeking to adopt the latter strategy - since that way, the value added in the manufacturing process remains in Scotland. It would be tragic if the opportunity of pursuing such a strategy were lost through privatisation.

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