

## **SOURCES AND NATURE OF RISK**

- With a history of rate of return regulation, the debate surrounding the regulation of utilities in the United States, has sometimes focused on whether regulation reduces the risks utilities face by sheltering them from demand and cost changes or whether it increases risks for utilities by failing to respond rapidly to changes in their external environment.
- In the United Kingdom, which has a relatively short history of RPI-X regulation, the issue appears to take on a slightly different dimension and discussions are centred on the notion that utilities face risks by virtue of being prone to regulatory intervention.
- Most companies viewed the discretionary nature of the regulatory regime as the greatest contributory factor to risk and this was said to stem from the interpretation of legislation in the Acts governing the statutory duty of regulators.

### **1. Price Controls**

- Companies viewed price-control consultation processes to be a source of uncertainty because of arbitrary negotiation procedures which led to difficulties in forecasting outcomes.
- Investment analysts said business and financial risks for the utilities were either minimal or mechanistic to take account of, and consequently viewed regulatory/political actions as the most likely sources of changes in expected profits and the factor differentiating utilities from unregulated companies.
- The highly personalised nature of the UK regulatory regime and the lack of a broad regulatory framework were cited as factors which made regulatory outcomes unpredictable. Analysts however thought regulatory risk in the water industry had been subdued because OFWAT had been very clear in setting out views on issues like the cost of capital, financial ratios and the overall returns to be provided for investors.
- Some regulators thought although independence of regulatory decisions could be perceived as a source of risk, it was nevertheless necessary to mitigate the effects of information asymmetry. Others said that despite intervention by regulators it was questionable whether utilities could be regarded as risky investments since there were very few examples of utilities in the UK whose actual financial returns were below the assumed cost of capital in their regulated activities.

### **2. Other Regulatory Sources**

- Companies expressed concern about the variety of channels other than price control mechanisms through which regulators increased the uncertainty they faced. This has led some managers to coin the phrase 'regulatory chiselling' to describe the phenomenon of regulators imposing additional conditions on companies between regulatory reviews.
- The requirement to carry out substantial long-term investment programs without the guarantee of adequate revenues in the subsequent regulatory reviews that would encompass the life cycle of investments was viewed as a source of uncertainty.

## **2. Other Regulatory Sources (continued)**

- Some analysts expressed concern about the impact regulators could have on the perceptions of risk through their public pronouncements. However some companies and analysts viewed any difficulties arising from regulatory discretion as transient and an inevitable consequence of the inexperience of all parties involved in the regulatory process.
- Regulators also viewed the novelty of regulatory regime as a contributory factor to the misperception of risks within their industries. Some stressed the need to realise that these risks were not entirely unpredictable and were to an extent dependent on the behaviour of companies, in the same way that non-regulated companies exploiting monopoly power could expect to face intervention from the Office of Fair Trading or the European Commission's DGIV.

## **3. Asymmetry**

- In the context of US rate of return regulation it had been argued that regulatory risk was the risk due to an asymmetric distribution of expected returns because of the tendency of regulatory bodies to restrict returns on profitable projects whilst disregarding losses made by companies. Although the prospect of this risk should be theoretical reduced in an RPI-X environment, because of the opportunity for utilities to earn abnormal returns, a few companies said their overriding concern was the fact that the effects of discretionary actions by regulators were often asymmetric.

## **4. Financial Viability**

- The prospect of severe financial difficulty was viewed as a hypothetical issue by the majority of companies. Analysts thought regulators had carried out their statutory duties effectively and regulators said the monopolistic nature of markets made it difficult to envisage situations where companies would be in severe financial difficulty.

## **5. Public Opinion/Political Developments.**

- Companies said they faced an uncertain environment because regulators were increasingly being influenced by the news media and becoming less steadfast in their decision-making. A number of companies in the water industry suggested that recent attempts by OFWAT to persuade them to adopt voluntary sharing mechanisms indicated that it was yielding to political pressure.
- Whilst the preceding views appears to suggest a causation running from political pressure to changes in the regulatory environment, most regulators and analysts saw the causation running in the opposite direction. OFWAT felt its decisions had been justified because they had prevented public displeasure escalating to a point which could have created tremendous uncertainty by leading to a risk of intervention by politicians.

'The decision was to warn the companies that this is not very smart behaviour, because we may throw away all the money that needs to be ploughed back and also you will antagonise the public and create these regulatory risks' [OFWAT]

## **5. Public Opinion/Political Developments (continued)**

- Analysts thought ramifications from a political change of the regulatory framework were likely to be far more severe than actions regulators were likely to pursue in carrying out their statutory duties. A statement on the introduction of competition into domestic gas supply by Peter Lilley at the 1991 Conservative Party conference which caused a ten percent drop in BG's share price was cited as an example of a political action that had substantial financial implications for utilities.

## **6. Perceptions Post 6th March 1995 (Review of RECs price caps).**

- OFWAT and the water industry thought there were not many lessons to be learnt from OFFER's decision. Most companies expressed a tremendous amount of confidence in the DGWS's steadfastness and said a similar situation was unlikely to arise because of the specific circumstances required to trigger Interim Determinations. Other utilities said although the decision had not resulted in a change of their strategy towards regulators, it had illustrated that regulators were vulnerable to political pressure and it had also created the perception of lax regulatory regimes in all utilities which would have a detrimental effect on customer perceptions.
- On one hand most analysts said that whilst OFFER's decision could possibly be justified politically, it had nevertheless brought utility regulation into disrepute and had caused investors to demand a premium on share prices to compensate for this risk. However on the other hand the majority of analysts especially in the water and electricity industry had not had to consider any new factors in share valuation and some electricity analysts thought there was a tendency for investors to overreact to regulatory risk. One thought a possible reason why share price reactions could have been unnecessarily volatile was because a significant number of analysts had no incentive to provide accurate or stable recommendations to investors since they had the conflicting objective of generating sales commissions for their firms by being negative ahead of a review and positive thereafter.
- OFFER said although the intervention had been destabilising in the short-term it had reduced the likelihood of political intervention and therefore increased stability in the long run. Other regulators comments centred on the impact of the decision on pressures for changes in the regulatory system and officials were extremely concerned that commentators were neglecting the benefits of RPI-X regulation.

## **COST OF CAPITAL**

### **1. Appropriateness of Estimation Methodologies**

- Although there was consensus on the use of the CAPM as an estimation methodology, interviewees said there was a great deal of subjectivity regarding the estimation of its components in particular, the equity risk premium. Analysts said although the CAPM was the main theoretical cost of capital model used in share valuation, it was unsatisfactory because of the enormous sensitivity of estimates to some of the model's assumptions.

Although a discount rate of 12% or 15% could make all the difference between whether BT is on a buy or sell rating, I find it hard to justify a particular figure because there are arguments to support each point of view.'  
[Analyst]

## **2. Transparency and Consistency**

- Some companies said the cost of capital estimation methodologies used by regulatory bodies did not adequately reflect the variable and asymmetric nature of regulatory regimes. Other concerns centred on what managers perceived to be the arbitrary and opportunistic application of estimation methodologies by regulators and debates that seemed designed to give credence to the lowest possible estimates.

## **3. Perceived Effects of Regulatory Intervention on the Cost of Capital**

- Theoretically, at least according to the CAPM, regulatory risk in the form of interventions should not affect the cost of capital because they are firm-specific and should be diversifiable. When asked how regulation could impact on the cost of capital, most companies said any likely effect would depend on the occurrence and presentation of switches in regulatory policy but also said that since regulatory interventions were not necessarily systematic they were therefore unlikely to have an impact on the cost of capital as measured by the CAPM.
- BT said whilst its betas could possibly have been affected by regulatory actions it was nevertheless more concerned about changes in the required cost of capital due to asymmetric regulatory intervention which were not reflected in its betas.
- Most regulators said that since the majority of their discretionary interventions were unlikely to be correlated with movements in the market, it was difficult to envisage how these actions could affect betas and hence the cost of capital.

## **4. Contrasting views**

- The majority of water, gas and electricity analysts tended to disagree with the views of companies that argued for higher cost of capital estimates to compensate for regulatory risk. One water analyst said it was extremely unlikely that the DGWS's estimates were inadequate because they would have undermined OFWAT's financial model and resulted in a series of 'K' factors that companies would have found unacceptable.

'I, for example, would not say that because I think that the price review is high risk, therefore you add 1% to the cost of capital. I would actually do some analysis on the basis of fundamental parameters to try and give me an idea of how sensitive the financial performance was to changes in the 'X' factor, changes in the proportion of gain-sharing and that sort of thing. I would not actually say what happens if I increase the cost of capital because I do not actually think it has an effect.' [Analyst]

'Most people from the City would say the figure of 7% by the regulator was a bit on the high side.' [Analyst]

## **5. Significance of the cost of capital in acceptance of price-cap proposals**

- Companies said detailed calculations of the cost of capital did not form the basis of acceptance of price cap proposals. Water companies also suggested that although OFWAT had maintained its initial estimate of a lower cost of capital than suggested by industry, the issue had not been contentious because of the 'glide path' approach which had allowed a period of convergence between higher returns on existing capital and allowable returns on new capital.

## **5. Significance of the cost of capital in acceptance of price-cap proposals (continued)**

- Most utilities based their decisions on whether allowed revenues and financial ratios were acceptable to investors, irrespective of whether their regulator's proposals embodied an appropriate figure for the cost of capital. However managers stressed that because they viewed agreements to decisions as precedents for the next regulatory review, they normally notified regulators that although they accepted a proposed income stream they did not necessarily agree with their assumptions and methodology.

'In theory we tend to use the CAPM because that is the main currency of the debate and OFFER produces an estimate. We then have huge intellectual debates as to why they are different. In truth, we regard that as all good knock about stuff, really. The bottom line answer is, if we take our financial models and we put in allowed revenue, are the financial ratios that come out, including the ability to pay dividends, acceptable?'

## **6. A growing consensus ?**

- Comments by some water and electricity companies suggested that estimates of the cost of capital in decisions by the Monopolies and Mergers Commission (MMC) had proved to be a factor that limited the ability of companies to propose alternative estimates. Consequently managers said they avoided rigid applications of the CAPM and instead based arguments on the perceptions of risk, and sought external supporting evidence whenever possible to justify changes in the risk profile of the company.
- Decisions by the MMC have played a central role in decisions by regulators on the cost of capital. A crucial consideration in their estimation approaches had been the need to ensure that there was some consistency with their own previous estimates and decisions by other regulatory bodies.
- However one gas analyst did not think the MMC's decision had resolved the debate on the cost of capital and thought BG could be wrong in assuming that the decision provided a baseline for future estimates. Reasons given were that the MMC's approach to the cost of capital had been unsystematic and had simply utilised an examination of returns on public sector infrastructure projects and a survey of investor expectations in order to avoid the conflicting estimates that BG and OFGAS had produced despite utilising very similar methodologies.

## **PRESSING CONCERNS**

### **1. Regulatory Framework / Appeal Procedures**

- Companies expressed reservations about the organisational structure of regulatory bodies and said the personalised nature of the regulatory regime prevented anyone apart from the regulator from being well-informed and equipped with significant decision-making powers which in turn created uncertainty for essential industries that required stable frameworks for long-term planning. BT said their most pressing concern was the uncertainty created by the increasingly discretionary and interventionist nature of OFTEL.

## **1. Regulatory Framework / Appeal Procedures (continued)**

- A number of companies were concerned that regulatory decisions were often dominated by the personal objectives of a single individual, which led to difficulty in obtaining alternative opinions whenever disputes arose. Consequently whilst some officials were concerned that regulators would always find an excuse to intervene even in a period of regulatory stability, others were disturbed by the prospect that even though the MMC process provided a possible appeal mechanism, it was nevertheless unsatisfactory because it was overarching and in some sense a gamble.

'The MMC process is like breaking a nut with a sledgehammer and even then when the MMC makes a decision, the regulator technically does not have to abide by it. We feel that there is some real scope for an arbitration or appeals procedure.'

## **2. Competition**

- The majority of electricity companies cited their most pressing concern as ensuring they were able to cope with the uncertain nature of competition in electricity supply in 1998 and associated issues of safety of supply to customers, adequate metering, settlement, and licence arrangements that would facilitate the process.
- Views expressed by some water companies on competition were mixed. Some felt illogical political motives were behind the desire to introduce Inset Competition in the industry and said the prospect of 'cherry picking', could result in extremely different charges for different sections of company supply areas which would be politically unacceptable. On the other hand, one manager believed the introduction of competition and a contestable large user market would be an effective means of making companies more customer responsive as well as reducing the likelihood of regulatory intervention.

'This is one of the most heavily regulated industries. Having even tighter regulation means that you end up having management decisions taken elsewhere and that cannot be good for the industry. So we think that having an element of competition in the large user market is desirable. However, it has been quite difficult to convince the regulator about the merits of this issue.'

## **3. Public Opinion Effects/ Profit Sharing Proposals**

- Companies talked about the difficulty of explaining to customers that the present system of regulation was fair and delivered a lot of benefits.

'The regime as it stands does not actually allow companies ever be seen to be doing well. If the water company delivers dirty water or fails to supply water, the customer blames the company. If the water company makes a big profit and hands half of it back to the customer, the customer blames the water company or the Regulator or the Government for a system that allows the company to have made such a big profit that it actually felt it had to share some of it with its 'poor old customers'. I do not think the system will ever gain public confidence'

- Regulators, companies and analysts were consequently concerned that the perception of a failed regulatory regime was resulting in an increased threat of political intervention. Moreover, regulators stressed the high powered incentives properties of the RPI-X regime and said that whilst there was no such thing as a 'right' price cap, there was nevertheless scope for price caps to be set in such a way that companies would only have the opportunity to make greater than expected profits by increasing efficiency, which could in turn be taken into account of at the next review.

### **3. Public Opinion Effects/ Profit Sharing Proposals (continued)**

- The views of companies on profit-sharing proposals were mixed and did not differ significantly between the water and electricity industries. On one hand some thought reactions to 'excess' profits were unjustified and broke the tacit agreement which allowed companies to keep unexpected gains within price reviews. On the other hand some managers said the RPI-X system had been tainted to an extent which required some modification, but said this should take the form of voluntary contributions by companies as opposed to being formulaic.
- However some companies said that whilst the proposals could lead to manipulation of financial accounts and a loss of efficiency, they would nevertheless be worth accepting if they depoliticised the nature of regulation.