RELEVANCE OF MARGIN BASED APPROACH

OFCOM

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FINAL REPORT

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Disclaimer

1. INTRODUCTION

In March 2012, Ofcom decided on its approach to monitoring financeability for Royal Mail, following a consultation in October 2011. This approach was supported by advice from CEPA in the form of a published report[1].

There have been important changes since then. In October 2013 Royal Mail was privatised and has since further changed its financial structure in terms of the mix of debt and equity used to finance the business. The industry landscape within which it operates has also continued to change. More generally regulators have continued to consider issues around the financeability of asset light businesses, adding to the volume of evidence available.

CEPA has been asked by Ofcom to help update its thinking on whether an EBIT margin remains the most appropriate indicator of the commercial rate of return to monitor the financial sustainability of the universal service network. In addition, it has asked us to consider what other metrics, if any, should be used to measure the short-term financial health of a company.

Specifically, this report addresses two questions:

1. What are the advantages and disadvantages of using the EBIT margin (i.e. return on sales) of the Reported Business as a measure of the commercial rate of return for the universal service provider in comparison with other relevant metrics (e.g. return on capital employed) and in comparison with applying these metrics to other relevant entities (e.g. the Relevant Group)?
2. What are the hypothetical circumstances in which there may be an immediate threat to the financial sustainability of a company like Royal Mail? What triggers, precursors and sequences of events might lead potentially to insolvency (including refinancing issues or default on interest payments, but not business factors such as mail volume decline or cost control issues)? How can these triggers and precursors be identified?

In general, the purpose of monitoring is to identify either returns that are too high or a company experiencing financial distress. The second question focuses specifically on assessing financial health, and the risk that returns generated are insufficient to meet Royal Mail's financing obligations. It is therefore concerned with downside risks. The first question is two-sided and could relate to the commercial rate of return being too high or too low.

Having decided what metrics Ofcom wishes to monitor it must decide what the appropriate benchmark values or ranges are for the various metrics. However, this is not within the scope of this report.

[1] http://stakeholders.ofcom.org.uk/binaries/consultations/securing-the-postal-service/annexes/financeability.pdf. A summary of aspects of this report is provided in Annex B of this report.

This report is structured as follows:

- Part I addresses the first question. Within this: Section 2 provides some background; Section 3 reviews the potential approaches to measuring the commercial rate of return, focussing on EBIT margin and ROA; and Section 4 provides considerations for an appropriate approach to assessing the commercial rate of return of the universal service.
- Part II addresses the second question. Within this: Section 5 breaks down the potential pathology of financial failure, and Section 6 provides considerations for an appropriate approach to assessing the financial health of Royal Mail.

In addition, Annex A provides a bibliography, and Annex B provides a brief recap on CEPA's previous advice.

PART I – MONITORING COMMERCIAL RATE OF RETURN

2. BACKGROUND

2.1. Ofcom's 2012 determination

Ofcom, which in October 2011 replaced Postcomm as the relevant regulatory authority for postal services in the UK, decided in its March 2012 statement that, given the prevailing circumstances at the time, ex ante price regulation was inappropriate for Royal Mail and that it would allow greater commercial freedom for the business for seven years. Ofcom also decided that a return on sales or margin based approach was more relevant than a traditional utility WACC and RAB approach given the fact that Royal Mail's universal service network was largely based around people and that operating costs were significantly higher than the value of the tangible assets.

Given the decision to allow Royal Mail greater freedom, Ofcom put in place a monitoring regime which used the operating margin as the key measure of commercial returns and, as such, financial sustainability. This was supported by other regulatory financial reporting. Having considered the question of what would be an appropriate value for the operating margin as part of the determination, Ofcom considered that an indicative EBIT margin range of 5-10% was appropriate and consistent with the need for Royal Mail to earn a reasonable commercial rate of return commensurate with the level of risk within the business.

2.2. Changes since then and their implications

The current review of the financial sustainability metrics for the universal service network follows from Ofcom's earlier review of end-to-end competition. While the decision document published in December 2014 did not find any immediate threat to the financial sustainability of the universal service network, it did note greater uncertainty about Royal Mail's future financial position for 2017/18 and 2018/19. Ofcom also noted that this uncertainty arose from a number of factors other than end-to-end competition, such as Royal Mail's position in the parcels market and its progress on improving efficiency. It therefore decided to broaden its review and given the changes in the market and Royal Mail's funding and ownership structure, this was included with the wider review.

Other regulators have also considered this same issue since 2012 – whether as part of an ex ante determination or an ex post evaluation. Most recently, the Competition and Markets Authority (CMA) is in the process of assessing the profitability of retail energy supply as part of its energy market investigation. Additionally, other UK regulators – Ofwat and NIAUR – have considered this question as well as regulators in Ireland and the Netherlands. This provides Ofcom with an opportunity to measure its own approach against that of other regulatory bodies – including both consideration of the conceptual issues and challenges in implementing different options.

Royal Mail's privatisation has also altered the situation. This has had two effects. First, the amount of information available on Royal Mail has increased in line with its new position as a listed company. This provides Ofcom with an opportunity, where appropriate, to reflect more information in its regulation and monitoring of Royal Mail. For example, measures of shareholder returns can now incorporate market evidence and it is also possible to directly estimate an equity beta for the company. Second, Royal Mail's financial position has changed with its 2013 privatisation. Its net debt had been dropping since 2011, and the decline grew sharper after privatisation.[2] More significant than changes in the amount of debt however are the changes in its composition: Royal Mail's previous HMG facilities have been replaced by private bank debt. This now includes a revolving credit facility and a Eurobond.

Royal Mail's position means that other market participants are now taking an interest in monitoring the company's financial position, and there is increased secondary information available to supplement Ofcom's own analysis. For example, equity analysts now review the company and the credit rating agencies also undertake evaluations given the rated bond that was issued in 2014.

Finally, the postal market continues to develop with technology continuing to affect different elements in different ways – e-substitution leading to fewer letters but online shopping increasing parcel delivery. Total letter volumes continue to fall while parcel volumes are increasing. The changing volumes and how they can affect profitability of different parts of Royal Mail's business is important context for the financial structure of the business and any market monitoring.

[2] As per Royal Mail's 2014-15 accounts, net debt has dropped from £1,272m at the end of March 2011 to £275m at the end of March 2015. Given the company's market value of equity is in excess of £5 billion, the net debt gearing of the firm is around 5%.

3. APPROACHES

In this section we characterise and assess the range of options available to Ofcom to measure the commercial rate of return of the universal service network, and their advantages and disadvantages. Two options are widely used in regulated sectors: a margin based approach (or return on sales), and a return on assets approach.

Ofcom has previously considered this issue, through a consultation in 2011 followed by a review of the analysis and a final decision in March 2012. We previously provided advice to Postcomm/Ofcom in this area as part of the consultation. In light of this, this short report provides an update on the issue taking into account new information and any changes during the period from March 2012 to now.

3.1. Margin based approach

Ofcom has monitored the financial sustainability of the universal service network using a return on sales (margin) since it introduced the current framework in March 2012. This section sets out how and why this might continue to be appropriate, and considers the implications of recent changes.

3.1.1. Measuring the commercial rate of return using return on sales

One approach to measuring profitability is that of a return on sales. Under this approach, profit is assessed on the basis of a percentage of either the costs or the revenue of the business. It has been used with other asset light businesses – primarily retail but not only so – and for postal regulation outside the UK. Recent examples of this approach being applied by regulators, including the Dutch regulator in its allowed return on sales for Post NL, are discussed in the following section.

There are clear advantages to a return on sales approach. It is readily understood, since the relevant components are simple, easily identifiable and objectively measurable. As discussed in more detail in Section 3.2, this is not necessarily the case for asset based measures. Our analysis of 2011 suggested that asset based measures might understate the level of returns that would be consistent with financeability. Using a return on sales measure would more easily allow Ofcom to determine an appropriate level of profitability consistent with the universal service network remaining financeable and robust to credible downside risks.

When this issue has been considered in other contexts it is often as part of a price control decision on setting allowed returns. In such cases the margin based approach has further advantages associated with it. It is incentive compatible inasmuch as greater profits are derived by increasing (or at least mitigating the decline) in sales, and is likely to create appropriate incentives for choices between opex and capex. By contrast, using an asset based measure to set allowed returns gives an incentive to invest in tangible assets. In a business facing structural decline, this incentive may not be compatible with minimising costs to customers (both in the short- and long-term). The following section considers whether these arguments continue to have relevance for Ofcom's current regulatory approach.

There are some practical issues associated with the use of a margin based approach (albeit these also apply to an equal or greater extent to alternative asset-based approaches):

- Although it may be conceptually clear how a return on sales should be measured, there remain options available and decisions to be made in order to determine the appropriate threshold margin to measure.
- Relevant comparators may be difficult to identify and information from those comparators may be difficult to interpret.
- Judgement is needed regarding the time frame over which return on sales ought to be assessed.

These issues should more properly be thought of as general challenges inherent in benchmarking returns for a regulated entity (whether as part of a price control or monitoring regime). Furthermore, the margin based approach may help to ease some of these challenges. In particular, while comparators for asset based measures face problems over commonality of measurement, a simple return on sales comparison is relatively straightforward.[3]

3.1.2. What has changed?

On the basis of developments since March 2012, there is relatively little that might undermine the case for continuing to use a return on sales metric as part of a monitoring regime. Other regulators have seen fit to draw on return on sales measures as part of both monitoring regimes and price controls in the regulation of asset light businesses:

- Most recently, the CMA has referred to companies' EBIT margins in its 2015 assessment of returns in the GB energy retail market.[4] This is despite its formal guidelines primarily referring to a rate of return on capital. The CMA has made use of flexibility in those guidelines to consider various return on sales indicators (including gross profit and EBITDA, as well as EBIT), recognising the likely uncertainty over the recognition and measurement of elements of the capital base.

  The CMA also made reference to a rate of return on capital approach as part of this investigation. This is discussed in Section 3.2.

[3] The degree to which challenges apply to calculating a return on assets is discussed further in Section 3.2 below. For example, since October 11 2015 there has been two years of stock market data on Royal Mail – a common benchmark for the amount of data required to carry out a robust estimation of a company's cost of capital.

[4] 'Energy market investigation – Profitability of retail energy supply: profit margin analysis', CMA, 16 March 2015.

- In its approach to 2015-20 price controls for determining prices for household water retail, Ofwat included an allowance for returns based on a retail net margin.[5] It justified this approach with reference to the asset light nature of retail, noting that "retail activities and services are unlikely to require significant capital investment". Ofwat used an EBIT margin as the basis for its calculations. By contrast, its allowances for wholesale networks were based on a return on capital approach.
- The Dutch Authority for Consumers & Markets (ACM) regulates PostNL's USO tariffs through a price cap intended to limit return on sales to 10%.[6] This is done through the addition of "tariff headroom" to assessed costs.
- In Northern Ireland, the Utility Regulator (UR) decided on a return on sales approach in its 2013 decision for the 2014 Power NI energy supply price control.[7] This was consistent with its previous decisions, which had been justified on the basis that a supply business is not asset focused. The earlier consultation in relation to the price control[8] did note that a return on assets approach could be used as an input to or cross-check on a margin calculation. However, this did not ultimately result in the UR deviating from its established approach of incorporating a margin on sales in its final determination.

These represent fresh contributions to the weight of precedent supporting the use of a margin based approach to assessing profitability of asset light entities. In addition, credit rating agencies continue to include return on sales as an important factor in their ratings decisions – although this is as part of a portfolio of various metrics that focus more on assessing overall financial health rather than the commercial rate of return per se.

One aspect of the context surrounding Ofcom's approach to monitoring profitability has changed little during the period from 2012 to 2015. In particular, Royal Mail's relevant EBIT margin remained below the stated target range of 5-10% until 2014-15.[9] Commenting specifically on the appropriateness of the target range is outside the scope of this report.

The relevance of this depends on the purpose of monitoring the profitability of the universal service network. We understand that its primary purpose is to enable the regulator to observe whether the business is financially sustainable over a reasonable time period. It would also be useful for the indicator to show whether the business is earning returns above the target range through the universal service, which may be excess returns and

[5] *'Setting price controls for 2015-20 – final methodology and expectations for companies' business plans'*, Ofwat, 2013.
[6] https://annualreport.postnl.nl/docs/PostNL_AR2014/index.php?nr=85, accessed 23rd July 2015.
[7] *'The 2014 Power NI supply price control – Decision paper'*, UR, 19 December 2013.
[8] *'Approach to the 2014 Power NI supply price control – Consultation paper'*, UR, 8 February 2013.
[9] This is on the basis of including pension costs calculated on an accounting basis. For its monitoring purposes, Ofcom considers that Royal Mail's EBIT should be adjusted to restate pension costs on a cash basis; it has called this measure the "financeability EBIT". This measure remained below the 5-10% range until 2014-15 when it moved above 5%.

possibly requiring regulatory intervention. Its suitability for monitoring the financial health of Royal Mail is considered in Part II of this report.

The changes outlined in this section do not undermine the case for Ofcom referring to a margin based approach to assess the profitability of the universal service network. However, the approach taken by the CMA in relation to the energy retail market may support the case for including additional measures alongside return on sales, either as part of routine monitoring or under specific circumstances. As the CMA has noted, however, the information requirements of alternative approaches can be challenging, and we consider this issue in the following section.

3.2. Return on assets approach

This section first summarises the theoretical approach to applying a return on assets measure, and how it is applied in the UK regulatory context. This aspect of our advice is much as it was in our 2011 report. We then consider the implications of recent changes.

3.2.1. Measuring the commercial rate of return using return on assets

There are two components to the measurement of the commercial rate of return under this approach: the value given to the assets, and the rate of return earned on those assets. In the UK, the former is typically termed the Regulated Asset Base (RAB), and the latter the Weighted Average Cost of Capital (WACC).

UK regulation of networks places significant weight on the concept of the RAB as a way of:

- establishing the value of the assets of a regulated company;
- allowing those asset costs to be recovered from consumers across multiple price control periods;
- providing a route for the inclusion of new capex as it is required, for example to improve quality or to meet new capacity requirements; and
- providing a simple measure of the "underlying" financial value of a company to the markets to facilitate funding decisions.

But, it should be remembered that the RAB is not really an economic or accounting concept, rather it is better viewed as an IOU. This has been made clear in the past by regulators such as Ofgem, for example, as part of the RPI-X@20 review.[10] Ofgem introduced the concept of "fast" and "slow" money, with fast money being an allowance for expenditure to be recovered through allowed revenue within the same year and slow money being incorporated into the RAB and remunerated over the longer term. Rather than formally

[10] See https://www.ofgem.gov.uk/network-regulation-riio-model/background-rpi-x20-review (accessed 26 August 2015) for an overview of the review. The main decision document is: 'RIIO: A new way to regulate energy networks – Final decision', Ofgem, October 2010.

denoting individual costs incurred as being either capex or opex, Ofgem allocated expenditure into the two categories by applying a high level percentage to capex and opex combined (or "totex"). This meant that a clear link between the RAB and capex was broken. However, the link in energy sector price controls prior to the RPI-X@20 review (such as DPCR5) had been tenuous prior to that as various capex incentives and disallowals[11] had meant that the RAB only broadly reflected investment.

Although the return on assets approach is a construct, as noted above, it is one that regulators, managers and investors place significant emphasis on and consequently it is worth re-considering whether it is possible to make the approach work for Royal Mail. Prior to privatisation, the primary concern with this approach, based on the methodology typically applied by regulators to infrastructure assets, is that both the WACC and the RAB would likely be understated for Royal Mail.

In part this was due to the difficulty of estimating a suitable benchmark return in the absence of many quoted postal companies against which to compare.[12] Alternative comparators typically used by UK regulators include other regulated infrastructure networks. Our financial analysis carried out for the 2011 report indicated that returns at this level would not be consistent with appropriate resilience to credible downside risks.A deeper concern with the return on assets approach is the difficulty of accurately measuring the asset base of an asset light company. It is not clear that the book value of Royal Mail's assets would capture the intangible value of the business utilised to deliver the universal service network. For a company such as Royal Mail – and particularly for its universal service network operations – these intangible assets will include its trained workforce, existing national scale network and its brand value. It could also include IT assets such as software (though these are actually valued in Royal Mail's financial statements).

Financial markets typically value intangibles based on estimates of the future profits that they generate. They do not do this by looking at the cost of those assets. There is an inherent circularity in any method of valuing the intangibles appropriately for the purpose of regulatory monitoring. If a business with intangible assets is earning excessive profits, then using those profits to estimate the value of intangible assets will result in an inflated asset valuation. This will in turn have the effect of reducing the measured return on those assets – making it appear that the commercial rate of return is not excessive.

Thus, the 2011 report considered that possible solutions to the problems with the return on assets approach were not sufficiently robust to be the basis on which to assess a suitable measure of the commercial rate of return.

[11] Instances where capex is incurred by the regulated entity but the regulator does not permit that cost to be reflected in the RAB.

[12] As we discuss in Section 3.2.2 below, it is now possible to estimate benchmark returns for Royal Mail directly. Although this may allow for a more robust calculation, challenges in interpretation still remain.

3.2.2. What has changed?

The preceding section set out our conceptual view, which remains similar to our 2011 report. We now turn to the question of what has (and has not) changed in the intervening period. Overall, determining an appropriate value for both components (the WACC and the RAB) remains challenging in the case of Royal Mail.

The recent work of the CMA in the energy retail market is instructive in this regard. Royal Mail's business has far more in common with retail energy supply than it does with energy networks, where return on assets indicators play a central role. Both retail energy supply and the universal service network are asset light businesses, in contrast to energy networks where regulated companies are required to invest heavily in – and therefore need to recover costs related to – the assets that make up that network.

In its methodology and approach paper of December 2014, the CMA set out an approach to assessing the financial performance of the energy retail sector that sought to incorporate both return on assets and return on sales measures. This approach could be taken to imply that a RAB and WACC approach at least in principle has its merits as an indicator for Royal Mail. Indeed, the CMA appeared in its approach paper to view return on sales indicators as playing a secondary role:

> *"…we recognise that for the retail supply of gas and electricity, there is likely to be some uncertainty over the recognition and measurement of elements of the capital base. As a result, we consider that it is appropriate to take into account a range of profitability measures – not only ROCE – in coming to a view on the financial performance of the relevant firms."*

However, this is likely to have been driven by the CMA's formal guidelines, which emphasise ROCE "except in situations where capital employed cannot be reliably valued". This creates a presumption that ROCE would be the first indicator to which the CMA turns.

The statement on approach anticipated the practical difficulties that would be associated with estimating the size of the asset base, in particular. The CMA noted that "the level of capital recorded on the firms' balance sheets may not reflect the actual level of capital that a firm would need to employ in order to operate in this sector".

That was the CMA's view in December 2014. In March 2015 it published its first analysis of retail energy supply profitability. By then the scale of the practical challenges had become clearer:

> *"Our work in relation to retail supply ROCE is ongoing and we have not yet drawn any preliminary conclusions from it. Many firms have had difficulty providing us with balance sheet information for their retail businesses. From the information provided, we observe large variations in balance sheet values for tangible fixed assets (including building and IT systems) and for working capital. We are examining the reasons for these variations and the extent to which they are due to differences in*

accounting treatment and allocation issues rather than reflecting substantive differences in the amount of capital that an energy retail business of a given size needs to operate. Some of the observed differences, eg in working capital, may be due to relative efficiencies (eg in debtor management). A further issue that we are considering is whether certain adjustments are required to account for off-balance sheet items, such as notional collateral and customer acquisition costs. We are continuing to analyse capital employed and are considering how to model the capital base of an efficient supplier on a modern equivalent asset basis."

The work of the CMA therefore highlights two challenges. The first challenge is the one the CMA anticipated in its approach statement: that of valuing intangible or off-balance sheet assets. A similar issue would be expected to apply in the postal sector, in relation to intangible assets such as a trained workforce and existing national network. The second is that of disaggregating the value of assets and allocating them across different areas of the business. This, too, would apply in the case of Royal Mail, where only a part of its business, the universal service network, is subject to monitoring by Ofcom.[13]

As a purely practical matter then there are clearly substantial obstacles in gathering and interpreting the data required to use return on asset indicators in a meaningful way in the context of retail energy supply. However, this issue has not always prevented regulators of asset light entities from seeking to apply a return on assets approach:

- The CAA applies a return on assets approach to determine allowed returns for NATS (En Route) plc (NERL), the provider of air traffic control services in the UK. As in previous NERL price controls, discussion and critique focused on the estimation of returns parameters rather than the approach itself. In particular, Oxera argued (as First Economics had done in the previous price control) that NERL's relatively high "operational leverage" should result in a relatively high returns benchmark.[14] In this regulatory context, the term operational leverage refers to NERL's small RAB relative to its revenues; that is, its asset light nature. More generally, however, operational leverage refers to the degree to which a company's cost base is fixed, with a relatively large fixed cost base translating into a relatively high operational leverage.
- In Ireland, the Commission for Energy Regulation (CER) applied a return on assets approach for EirGrid's 2010 decision on allowed revenue for EirGrid in its role as

[13] Although there are existing rules governing the allocation of capital to the Reported Business, these may need to be revisited for the purpose envisaged here.

[14] *'What is the cost of capital for NATS (En Route) plc for RP2?'*, Oxera, July 2013. Since NERL is not a listed entity for which a direct cost of capital estimate can be computed, this would imply either selecting comparator benchmark companies also having a relatively high operational leverage, or adjusting an estimate from a comparator with lower operational leverage. An example of the latter approach was seen in the Competition Commission's (CC) approach to the Bristol Water appeal in 2010 (*'Bristol Water plc'*, Competition Commission, August 2010). The CC specifically increased its estimate of the asset beta for Bristol Water based on its higher operational leverage relative to comparators.

system operator.[15] As for the case of NATS, however, discussion in relation to the 2010-15 price control centred on the difficulties that would arise in calculating an asset value in order to support a return on assets approach for an asset light company such as EirGrid.[16]

These examples demonstrate that whilst it is possible to apply a return on assets approach to asset light companies, such an approach is not without its challenges. Each of these cases is different from that of Royal Mail, however, in one respect: neither NERL nor EirGrid sells a product or service directly. Rather they facilitate the operation of a network (the air transport network in the case of NERL and the electricity network in the case of EirGrid) on behalf of network owners and users. As a result, the alternative of a return on sales approach is perhaps less intuitively relevant than it would be for a postal services or energy supply business.

One of the obstacles to applying a return on assets approach to Royal Mail at the time of our 2011 report was the lack of information upon which to base relevant calculations. However, over the past few years given the privatisation of Royal Mail, more information has become available. In particular, this includes share price information which allows:

- a direct calculation of a Royal Mail equity beta (while this is at the Group Level, it is still informative of what the universal service network equity beta would be)[17]; and
- the possible impact of intangible assets to be assessed through a comparison of the market value of the equity to the book value (the market-to-asset ratio, MAR).

The latter indicator, the MAR, is used as a cross-reference in many regulated sectors. It is more typically used in price control regimes in order to assess whether an ex ante WACC allowance was appropriate. In this context, a MAR significantly greater than one – indicating that the market value of equity exceeds the book value of equity – could imply that the regulator has allowed the regulated entity to earn returns above its actual cost of capital.[18]

Since Royal Mail is not subject to ex ante price regulation[19], a MAR greater than one is likely to arise for one of two reasons. It could reflect either that the book value of equity does not fully reflect the accumulated investment in the business due to the presence of intangible assets, or that there is an expectation of shareholders to be able to exploit some form of

[15] *'Decision on TSO and TAO transmission revenue for 2011 to 2015',* CER, November 2010. CER published its consultation on the 2016-20 period on 17th August 2015, but this consultation has not been reviewed for this iteration of the report.
[16] EirGrid's asset light role as system operator is distinct from the more asset intensive role associated with a company that owns, invests in and maintains the infrastructure of an energy network.
[17] In principle it would be possible to disaggregate the equity beta as Ofcom does for some of the regulated BT services.
[18] Small differences may be explained by differences in expected efficiency savings etc. but significant differences are likely to arise because of major errors or a margin between the WACC estimate used to calculate allowed returns and the true WACC used by market participants.
[19] With the exception of the "safeguard cap" applied to second class stamps (up to 2kg).

market power into the future. There is an inherent difficulty in distinguishing between these two cases. Although availability of new information means that some of the previous concerns about using the traditional WACC and RAB measure for setting or monitoring profits can be addressed, there will therefore remain some intractable difficulties in interpreting an appropriate return on assets for Royal Mail.

3.3. Relevant entity

The second aspect of the question relates to which entity or part of the business the commercial rate of return should be monitored for. A starting point for answering this question is relatively clear: Ofcom seeks to monitor the rate of return of operating the universal service network. Other things being equal, this is the portion of Royal Mail's business that should be monitored.

Choosing which part of the business should be monitored is, however, a trade off of the following factors:

- the *relevance* of information being monitored; and
- the *ease of measurement* of that information.

Strictly speaking, only the commercial rate of return for the universal service network is relevant to this question. However, depending on the indicator being used, it may not be easy to collect information directly related to the universal service network.

Under a margin based approach, it is likely to be reasonably straightforward to collect the most relevant information. While there are still likely to be some cost allocation issues, these should not present a significant obstacle to measuring the return on sales of the universal service network specifically.

Under a return on assets approach, cost allocation issues may be greater. As noted in Section 3.2, calculating a return on assets for Royal Mail would require estimation of the value of its intangible assets. Calculating a return on assets for the universal service network specifically would require those intangible assets to be allocated across Royal Mail's various business areas. This would be particularly challenging – and indeed it may be the case that any such answer is somewhat arbitrary.

4. AN APPROPRIATE APPROACH FOR ROYAL MAIL

As described in Section 3 of this report, there are two approaches available:

- a margin based approach, looking at a measure of the return on sales; and
- a return on assets approach, looking at the cost of capital applied to the asset base.

Ofcom's focus to date has been on the margin based approach, owing to several concerns that were raised about the application of a return on assets approach for a postal company. Most of these concerns could, in the future, at least partly be addressed. The information required to determine a return on assets for Royal Mail is now available, although the definition of assets employed is important since it can lead to significantly different results. However, there is a significant overlap between the ranges for a return on assets approach with the margin approach currently applied to Royal Mail.

So, while there are further issues to consider with the return on assets approach – especially around the definition of the assets employed – it does now seem to be a potential approach for the universal postal service. Whether this would provide superior information to the return on sales approach is not clear. Rather, it would provide an additional data point from which to triangulate an overall view.

When deciding an appropriate profitability metric there is also a subsidiary question that needs to be considered: are profits being measured on an ex ante or ex post basis? If profits are being measured as an element of a forward looking price setting process then the requirements for certainty, clarity and transparency are greater. Ultimately, in setting allowed returns, a regulator must decide on a single number to capture an appropriate level of profitability. This would argue for a single approach that is already accepted by the market: that of a margin.

However, this has not been Ofcom's position in relation to the universal service network. Where the metric(s) is (are) being used to assess the commercial rate of return, then having more than one metric that captures different aspects of the return and which are accepted by the market as complements, would seem to be appropriate. This would argue for Ofcom to consider both the margin and the return on assets, given the information sources now available to it. In order to operationalise the latter approach, however, Ofcom would need to undertake further work on the definition of assets.

As noted in Section 3.3, if a return on assets measure is to be used, this would raise further questions about the level at which the calculation is carried out. This is largely a practical issue: if a credible mechanism can be found to allocate the value of intangible assets between different areas of the Royal Mail business, then it may be possible to calculate a return on assets for the universal service network specifically. If a credible mechanism cannot be found, however, then it may only be possible to calculate a value at the group level. In that case, although the group level return on assets would be a useful additional data point, it would not be given as much weight as the return on sales for the universal service specifically.

Finally, when deciding on an appropriate approach for Ofcom to adopt for Royal Mail there is one further question that has to be addressed – for what exact purpose is (are) the metric(s) being used? There are two possibilities here: the metrics could be used to identify either returns that are too high or too low. The former case is about assessing whether any regulatory safeguards are required to protect consumers; the latter is about assessing financial health and financeability.

Part II of this report considers the approach that would need to be taken to assess the financial health of a company such as Royal Mail. In this context, as we will discuss, it is important to consider both longer term accounting profitability and shorter term potential pressures on cash flow.

Our conclusion in this part of the report, however, concerns the underlying profitability of the universal service network. It can be argued that cash-based metrics are less relevant in this case: cash availability is crucial to assessing whether a business is able to meet its financing obligations, but accurate measures of accounting profit provide the best indication of underlying profitability. Ofcom's current approach is to monitor the "financeability EBIT", which is an accounting measure (EBIT) adjusted to take into account adjustments related to pensions costs. As such, focusing on this measure to capture whether the underlying financial health of the company is reflected in the return on sales is appropriate.

PART II – UNDERSTANDING FINANCIAL SUSTAINABILITY

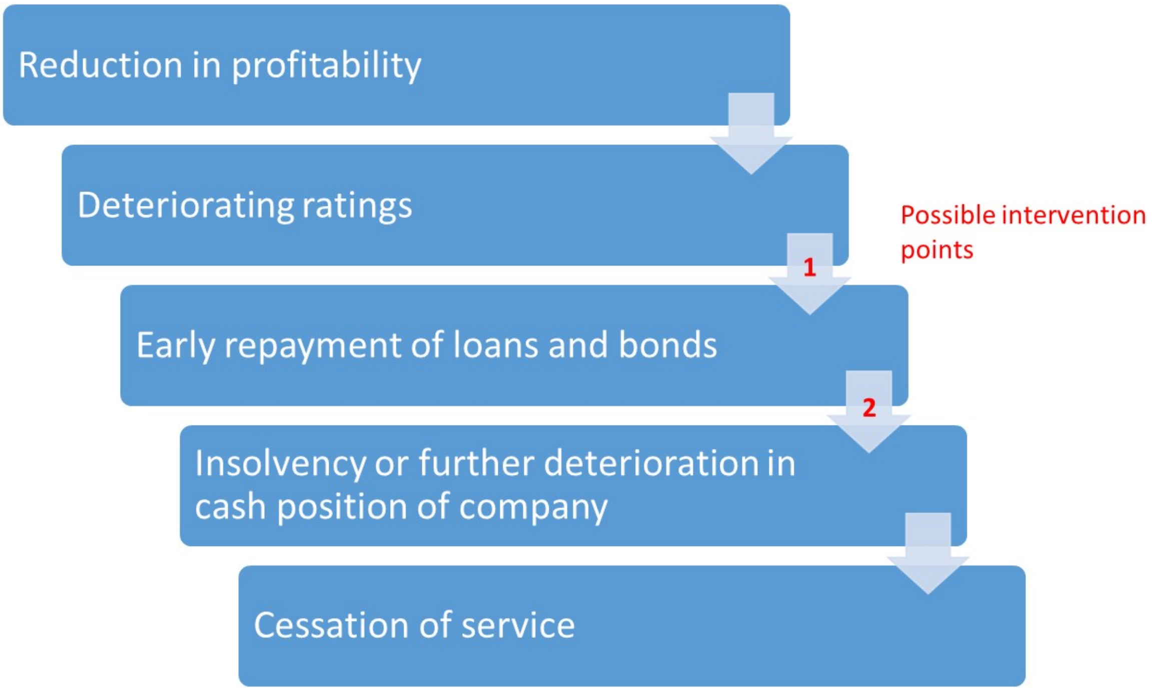
5. POTENTIAL 'PATHOLOGY' OF FINANCIAL FAILURE

Part II of this report is concerned with understanding the way in which problems with financial sustainability would work their way through the company and the ways in which financial indicators would change during this process. This should allow us to identify whether there are financial indicators, or target levels for these indicators, which would help Ofcom identify potential problems sufficiently far in advance to be able to work with stakeholders to ensure no adverse impact on the universal service network.

5.1. Overview of the stages of financial failure

This section is concerned with the way that a problem would flow through the company. It is summarised in Figure 5.1 below.[20]

Figure 5.1: Typical pathology



The first stage would be a reduction in profitability, arising either from a reduction in revenue or an increase in costs.[21] We will consider some of the possible non-operational reasons for such a deterioration later in this section.

As profitability declines the key financial metrics start to deteriorate. What those key metrics are we consider later in this section. However, what is important is that these

[20] It should be noted that we have ignored two of the potential causes of default, non-payment of interest or insolvency, and focused on the more credible breach of covenant scenario for default in this analysis.

[21] There are actually other reasons which could have an impact. For example, poor financial management with the bullet repayment of a loan catching the company at a time when it is unable to refinance the debt, or not able to refinance at a low cost, impacting on the company and the ratios it faces. This sort of poor management of obligations ought not to arise, but could in principle be an issue.

metrics are linked to either loan covenants or credit ratings. Once these ratings deteriorate to a point where default is triggered this will cause the repayment of the specific borrowings plus any other loans with cross-default clauses – these are standard in borrowings to ensure that all investors are treated equally.

Once the loans have been called Royal Mail would need to find resources such that it could repay the borrowings. Presuming that the company is not insolvent (when liabilities are greater than assets) it should be able to repay the loans but would either need to raise fresh equity from shareholders or sell assets. This could lead to a further deterioration in profitability and possibly a slow spiral into insolvency.

What types of event could trigger such a default and process? As noted, there are possible operational and non-operational (financial) reasons for such a default. Our focus is on the non-operational reasons as the operational ones are already well understood.

While Royal Mail has not to date drawn down much of its available debt, in principle it would be possible for the company to draw in excess of £1 billion, which if linked to reductions in cash, could lead to a significant increase in net debt. A net debt measure of gearing could increase from around 5% at the moment to over 30%. This would significantly increase the interest cost being paid by the company, currently around £25-30m. Further, if this increase in indebtedness was taking place close to the time of refinancing the syndicated loan facility there could be a further increase in interest costs – arising both because of the higher level of gearing of the company as well as because of the change in economic circumstances from when the existing facilities were organised. This could place yet further pressure on the company ratios. Finally, as noted in footnote 21, poor management of the timing of repayment of obligations such as bonds could also create an environment in which cash-flow requirements cause adverse financial situations even though the basic profitability of the company has not changed.

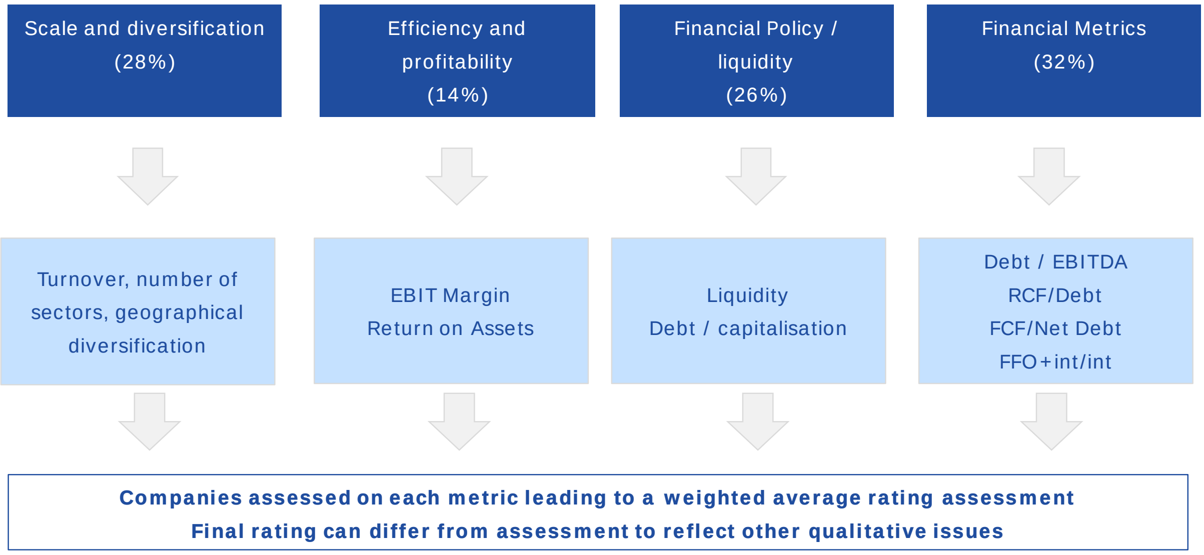
In Figure 5.1 we have identified two possible intervention points. The first (1) is when the ratios start to deteriorate but before the covenants are breached. The second (2) is once the covenants have been breached and the repayment of the borrowings is due to take place. These are intervention points that various stakeholders could respond to. In principle, (2) should be set at a level which does not imply insolvency – lenders want to be able to recover their funds. As such, an intervention even at point (2) should be able to ensure a continuation of the universal service. However, it may be prudent to consider intervention point (1) as a way of minimising the costs associated with refinancing/renegotiating the financial structure of the company. We return to these points in Section 6.

5.2. Approaches and indicators used

At the time of our 2011 report, although we reviewed the frameworks applied by credit rating agencies, this was not a core part of our work. Now that gross debt forms around 40% (although significantly less on a net basis) of Royal Mail's capital structure[22], the approach of the rating agencies may have more relevance. In addition, the establishment of the syndicated credit facility and the issuance of a ten year Eurobond in summer 2014 means that greater scrutiny of Royal Mail is taking place.

Moody's has a clear framework that it uses for assessing companies in the sector.[23] Companies are assessed on a range of criteria, and a rating awarded to each (on the same scale as the rating methodology). These factors include the standard type of credit metrics based on financial analysis. In addition, some qualitative factors reflecting the scope, and riskiness of the business are also included. This is summarised in Figure 5.2.

Figure 5.2: Moody's rating methodology



Source: CEPA analysis of Moody's rating methodology

As can be seen from this, Moody's considers both a margin and a return on assets (WACC x RAB) type approach as appropriate measures of profitability – giving both equal weight in the methodology.

While the measures of profitability and efficiency are important, greater weight is given to the financial metrics by Moody's, including various static and dynamic measures of gearing – dynamic measures are ones which capture the ability of the company to pay down its borrowings.

[22] Gross debt represents the total obligations a company has towards its creditors, i.e. outstanding loans, bonds, credit facilities and, in the case of Royal Mail, finance leases. Net debt adjusts this figure to reflect cash and cash equivalents held by the company.

[23] Moody's (December 2011). Global postal and express delivery methodology.

Although we do not have access to the Standard & Poor's (S&P) full methodology (and it is not publicly available), we understand that the broad principles are similar to those applied by Moody's. S&P rate the Royal Mail Eurobond, and their July 2014 rating and commentary allows us to highlight some specific features. They too place significant emphasis on a measure of dynamic gearing. In particular, S&P considers:

- Funds from operations (FFO): Net debt; and
- Debt: EBITDA.[24]

Although reference is made to Royal Mail's EBIT margin, the focus is on the ability of the business to generate sufficient cash to meet its financial obligations.

In addition to the rating metrics noted above, there are specific covenants in the loans.[25] Table 5.1 summarises the key metrics and their trigger levels.

Table 5.1: Covenants and key financial ratios

Measure	Definition	Trigger level(s)	Role
"Leverage"	Adjusted net debt: EBITDA	>3:1	Covenant
"Interest cover"	EBITDA: interest	<3.5:1	Covenant
Dynamic gearing	FFO/Adjusted net debt	<0.45[26] <0.30[27]	Credit rating metric

Source: Royal Mail accounts 2014-15, Note 5 to the Financial Statements; and Standard & Poor's credit rating statement and methodology.

As can be seen, the focus is on accounting ratios, although they do seek to be dynamic inasmuch as focusing on the ability to repay the debt rather than a consideration of the stock of equity compared to debt. The trigger levels are also set out very clearly and provide an indication of the material degree of change needed for a breach to arise.[28] In the case of the credit rating metric, two trigger levels are relevant given Royal Mail's current position, and Ofcom could consider responding differently depending on which trigger is breached.

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[24] FFO is a measure of cash flow generated by a company's operations. It is calculated by adding depreciation and amortization expenses to earnings.

[25] It is clear from the accounts that the covenants apply to the syndicated credit facility.

[26] This is the level that would trigger a revision of Standard & Poor's assessment of Royal Mail's financial risk from its current level of "modest" to "intermediate". Royal Mail's financial risk has been rated at this level as recently as 2014, and it is likely that such an assessment would be consistent with an overall investment grade credit rating.

[27] This is the level that would trigger a revision of Standard & Poor's assessment of Royal Mail's financial risk to "significant". It is likely that such an assessment would be consistent with a reduction in Royal Mail's overall credit rating.

[28] As an example, the 2014-15 accounts state that the current leverage is 0.4:1. This would imply, that if the EBITDA is unchanged, net debt would need to reach in excess of £2.5 billion before the ratio is breached – an increase well in excess of £2 billion from the current level.

5.3. Commentary on the approaches and indicators used

How do the various measures compare? What is clear is that two of them are strongly related. FFO/Adjusted net debt and "Leverage" both use measures of:

- Income – although one of these is more restrictive than the other – FFO is likely to be less than EBITDA owing to FFO incorporating financing costs and tax charges; and
- Net debt – although both make some adjustments, it is not clear that these are exactly the same adjustments.

The third measure is more distantly related since it takes the interest charge generated form the net debt but not the stock of debt itself into account.

If we rearrange the two dynamic gearing measures we find that they imply that net debt cannot be greater than around 3x FFO (if Royal Mail is to maintain its credit rating above a minimum of BBB-) or 3x EBITDA (if Royal Mail is to avoid breaching its covenants). Now, it would seem likely that FFO may be the stricter measure – in this case if FFO is less than EBITDA (and the adjustments to net debt are the same) then FFO would be binding. This position is predicated on the fact that interest is currently greater than 3% of EBITDA, tax rates are 20% and depreciation is likely to be low given the scale of the asset base. This role would be increasingly true for FFO if profits are falling and/or interest charges are increasing. Consequently it may be the case that the credit rating metric from Standard & Poor's would be an appropriate measure to focus on – although since all these measures have to be calculated by Royal Mail it could make sense collecting all of them.

5.4. Proposal

It is clear that there is a simple mechanism by which a deteriorating financial situation or poor financial management could lead to breach of key financial metrics and a possible extreme impact on the company. Given the importance that the ratings agencies place on these measures when assessing the financial health of such a business, we would recommend that Ofcom also consider at least one of these in its suite of metrics for assessing the health of Royal Mail. If choosing just one ratio proves too difficult – our initial thought is that the dynamic gearing FFO measure is the most binding, although the relationship with interest cover still needs further consideration – then monitoring the whole suite could be appropriate.[29]

[29] A back of the envelope calculation with the current level of EBITDA and interest rates suggests that net debt would need to increase to in excess of £8 billion before the covenant is breached. This needs further analysis in terms of making the ratios dynamic to determine whether changes in EBITDA, net debt or the interest rate that has the most significant incremental impact.

6. AN APPROPRIATE APPROACH FOR ROYAL MAIL

What is clear is that the market is concerned both with profitability as well as the indebtedness of the business: various static and dynamic measures of gearing are used by the credit rating agencies. This could reflect the speed of change that is possible in an industry so dependent on external factors and which has high operational gearing. So, even though profitability in the short-term may be at an acceptable level, the market worries about the exposure that would be generated by significant gearing and how this could hamper a company's ability to respond to a changing market situation.

Given these concerns, if Ofcom is concerned about assessing the overall financial health of Royal Mail there are advantages in adopting a measure of dynamic gearing alongside the ex post profitability measures (return on assets and return on sales) discussed in Part I.

While the rating agencies use various measures of dynamic gearing, given the importance that Royal Mail places on the Standard & Poor's measure we would recommend using that measure.[30] Further, as shown in Section 5, we think that is the most binding of the ratios that are considered.

Further analysis would be helpful, specifically some simple dynamic modelling of the various measures to assess which are actually the most binding under various scenarios.

[30] There is an argument that says that since the credit rating agencies are already monitoring these metrics there should be no need for Ofcom to also monitor them. However, given the importance of the universal service network it would seem appropriate that Ofcom ensures timely information is available for it to monitor the operation of this market and so collect this information directly.

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ANNEX B SUMMARY OF CEPA'S 2011 ADVICE

In support of Ofcom's review of the regulatory framework for the postal sector, CEPA was appointed by Postcomm in March 2011 to advise on issues associated with ensuring financeability of the universal service network within an ex ante price control regime. This work included a review of the theory for setting returns in regulated industries and an assessment of how that might best be applied in the case of Royal Mail. This work concluded that a "traditional" utility approach to setting an allowed return for Royal Mail would be inadequate.[31]

We considered that applying a "traditional" utility approach to setting an allowed return for Royal Mail would raise three key issues.

First, the traditional approach would have created a risk that Royal Mail would be unfinanceable and insufficiently robust to credible downside risks. At the time, letter volumes were dropping and the risk of disruption was high. Given the relatively small asset base, a traditional utility approach using credible estimates for key parameters like the equity beta, would have provided Royal Mail with a relatively small forecast level of profits. Given the high operating gearing of the company, a relatively small reduction in revenue associated with no change in costs could easily have led to the company making losses. Using a regime design that had realistic possibilities of Royal Mail making losses would not have been sustainable.

Second, there was the potential that an incentive based ex ante regime built around a WACC and RAB framework could lead to perverse incentives for Royal Mail. Many traditionally regulated companies have focused on growing their RABs, both through investments and capitalising other costs. In an environment with growing volumes this is likely to be, in part, an appropriate incentive. But, in an environment with uncertain or falling volumes, increasing investment to earn a higher return could lead to higher prices and possibly even greater reductions in volumes.

Of course, if Royal Mail is not able to earn sufficient revenue from additional investment it may choose not to make that investment. But, if it believed that this could then help justify further regulatory intervention and possible decisions to limit competition etc then it might be a worthwhile strategic action.

Finally, much of the regulatory and Monopolies and Mergers Commission/Competition Commission precedent was for applying a return on sales/margin type approach. For example, this was true for energy retail during the transition to full competition in the 1990s in Great Britain. These businesses were ones which were either asset light or where

[31] A "traditional" approach in this context being the application of a weighted average cost of capital (WACC) to a Regulated Asset Base (RAB), based on treating Royal Mail's risk profile in a similar way to that of other regulated infrastructure companies.

intangible assets are a significant factor and valuing these for inclusion in a RAB and WACC based approach is difficult.

We therefore recommended alternative approaches using a broader range of evidence. These included:

- benchmarking Royal Mail's risk profile and required returns against other logistics companies whose businesses are similarly asset-light, rather than other regulated infrastructure companies; and
- benchmarking Royal Mail's return on sales rather than its return on capital.

In 2011, CEPA's approach towards the issue of financial sustainability of the universal service network was in the context of a more ex ante regulatory approach. It was looking towards an indicator of an appropriate regulated return for investors in a business such as Royal Mail. In this context, there is merit in a simple approach based on a single measure – and in the context of asset light businesses, that measure is generally a return on sales.