Price Control for Northern Ireland's Gas Transmission Networks GT22

Annex 3 – Cost of Capital

May 2022

An Updated Estimate of GNI (UK)'s Cost of Capital

Prepared for the Utility Regulator

FIRST ECONOMICS

www.first-economics.com

4 April 2022

1. Introduction

This short paper provides an update to First Economics' calculation of GNI (UK)'s GT22 cost of capital for the period October 2022 to September 2027.

2. Comments on GNI (UK)'s response to the UR's draft determination

GNI (UK) was the only party to respond to the cost of capital estimate set out in the UR's draft determination document. GNI (UK)'s main points are set out in table 1 along with our observations.

Table 1: Review if GNI (UK)'s draft determination response

GNI (UK) response	Comments
The UR's beta and cost of equity sit below the recent PR19 and RIIO-2 final determinations in the UK	This is factually incorrect. The comparison is: - UR, GT22 DD: beta = 0.76; cost of equity = 4.92% - Ofgem, RIIO-2: beta = 0.76; cost of equity = 4.55% - Ofwat, PR19: beta = 0.71; cost of equity = 4.19% - CMA, PR19: beta = 0.71; cost of equity = 4.73% The UR's proposed beta and cost of equity are at the top end of and above recent regulatory decisions respectively.
The overall WACC sits below the recent PR19 and RIIO-2 final determinations in the UK	This is correct. But the differential is wholly a function of the different ways in which companies borrow. Specifically: - companies in the UK are servicing relatively expensive fixed-rate debt that was originally issued in the 2000s and 2010s; while - GNI (UK) has no such legacy debt. It is therefore natural that GNI (UK)'s cost of debt, and hence its overall cost of capital, should sit below UK peers.
There is no basis for changing the gearing figure from 65% to 60%	The above-mentioned Ofgem/Ofwat/CMA decisions all used a gearing figure of 60%. Using the same figure is in line with recent regulatory practice and aids comparisons across sectors. Importantly, as a matter of overarching principle, the value of the cost of capital should not change materially with gearing. There is no reason to think that the GNI (UK) cost of capital calculated at 65% gearing should be different to the cost of capital at 60% gearing.

It is not appropriate to estimate the cost of debt using prevailing market rates. Spot rates display significant volatility in the short term. A long-term approach, as set out in GNI (UK)'s previous submission, is more appropriate.	As set out in the First Economics report that accompanied the draft determination, neither GNI (UK) nor its parent possesses any embedded fixed-rate debt. It is not logical to set a cost of debt allowance by reference to historical interest rates that GNI (UK) does not and need not pay. The UR can and should take account of recent volatility and any other factors that may impact future interest rates (e.g. monetary policy, COVID) before it makes it final determination. The aim will be to set a central forecast of interest rates during the GT22 period.
The UR should have calculated a WACC range rather than a point estimate	The UR necessarily requires a point cost of capital estimate in order to calculate GNI (UK)'s price control. The point being made here is presumably part of the argument that GNI (UK) makes about aiming up, which is considered in the next row.
The UR should have aimed up 25 basis points above its cost of equity estimate	The CMA last year found that Ofgem's decision not to aim up in its RIIO-2 decisions was not wrong. The UR is aligned with Ofgem and the CMA on this matter. As set out in First Economics' report, the UR's approach of setting the expected market return component of the cost of equity in line with long-term historical averages likely results in some overstatement of the prevailing cost of capital and can be said to obviate the need to aim up elsewhere.

For the reasons set out above, we are not persuaded that any aspect of the UR's draft determination calculation was wrong, nor do we propose to make adjustments to our estimation methodology. We do, however, need to update the estimate that we provided to the UR in October 2021 to take account of new market information from the last six months.

3. Update

3.1 Beta

We do not consider that it is necessary to revise our estimate of GNI (UK)'s beta. We explained in our previous report that the UR has no reason to deviate from the 0.35 asset beta that Ofgem used in its most recent determination for the GB transmission business, and we note that GNI (UK) did not challenge this logic in its response.

3.2 Gearing

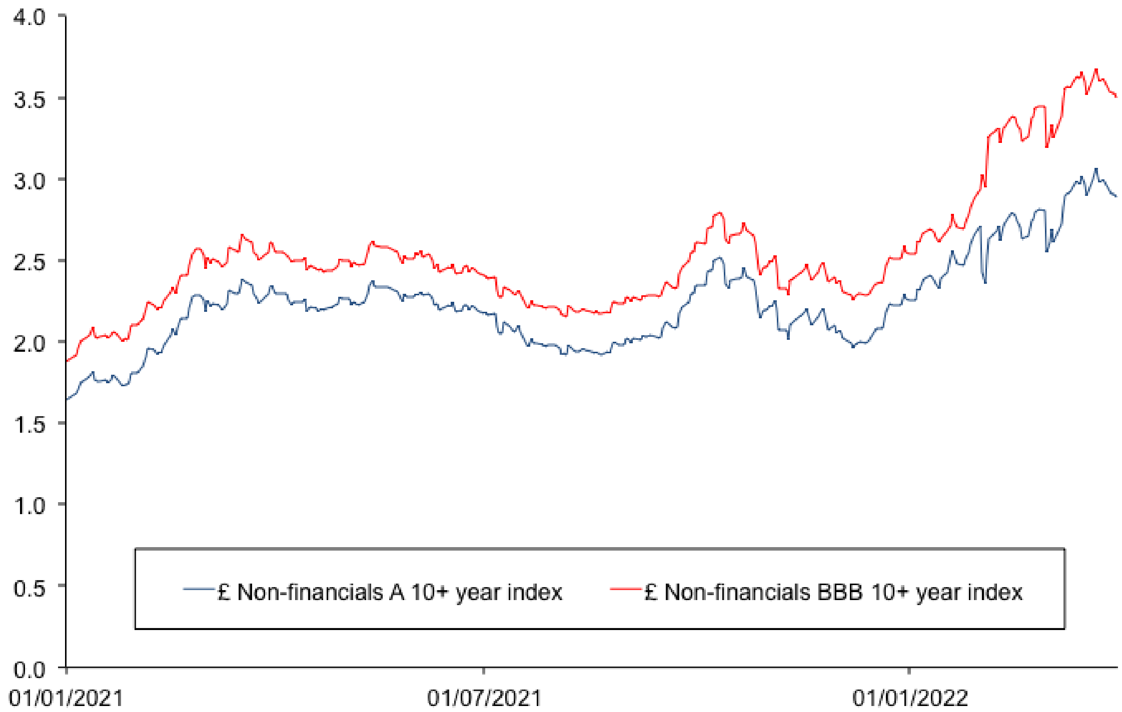
We also retain our 60% gearing assumption.

3.3 Cost of debt

We continue to benchmark our allowed cost of debt to forecasts of the yields on two iBoxx secondary market bond indices that are commonly used by regulators.

Figure 1 shows that yields have increased noticeably in the last six months in response to expectations of a tightening in monetary policy.

Figure 1: iBoxx bond yield indices



Source: iBoxx.

Yields at the end of March 2022 were approximately 2.9% for A rated debt and 3.5% for BBB rated debt, up around 55 basis points and 90 basis points respectively from six months earlier. Our updated cost of debt calculation therefore starts from a revised average value of 3.2%.

We then provide for a small move up in borrowing costs consistent with forward gilt rates. The forward curve at the end of March 2022 has the yield on 10-year nominal gilts increasing by around 40 basis point by September 2027, indicating that the GT22 cost of debt will on average be approximately 20 basis points higher than current market cost of debt at 3.4%.

As in our October 2021 report, we next make an allowance of 25 basis points for fees.

Finally, we need to convert our all-in nominal cost of debt of 3.65% into a real terms equivalent. The Office for Budget Responsibility's latest CPI inflation forecast is set out in table 2 below

	Oct 2022 to Sept 2023	**Oct 2023 to Sept 2024**	**Oct 2024 to Sept 2025**	**Oct 2025 to Sept 2026**	**Oct 2026 to Sept 2027**	**Average**
CPI	5.9%	1.5%	1.8%	2.0%	2.0%	2.6%

Source: OBR March 2022 economic forecast.

The OBR's forecast puts average annual inflation during the GT period at 2.6%. This means that we convert the nominal cost of debt into a real, CPI-stripped cost of debt of 1.0%

3.4 Risk-free rate

The economy-wide increase in interest rates during the last six months also necessitates revisions to our earlier risk-free rate estimate.

We continue to use a 50:25:25 weighted average of the yields on 20-year nominal gilts and two iBoxx AAA non-government bond indices respectively.[1] The real, CPI-stripped[2] value of the weighted average yield at the end of March 2022 was -0.8%.

3.5 Expected market return

We proposed in our October 2021 report to defer to the CMA's PR19 estimate of the CAPM expected market return of 6.8%. Shortly after the finalisation of our report, the CMA found in an appeal decision that Ofgem's use of a 6.5% figure in the first round of RIIO-2 determinations was not "wrong". We subsequently used Ofgem's 6.5% estimate in a report that we prepared for the UR on the GD23 cost of capital.

The use of different expected market return values in different decisions is illustrative of the wide range of admissible of estimates for what is inherently an unobservable parameter. After considering the evidence, our advice to the UR is that it should use a figure of 6.5% in its upcoming GT22 decision:

- a value of 6.5% addresses, at least in part, the concern that we expressed in our October 2021 report about using a long-term benchmark for total market returns at a time of historically low returns on other asset classes; and
- aiming down slightly makes sense in the current inflation climate given that it is unlikely that shareholders' required returns move 1-for-1 in line with inflation.

We also note the benefits of the UR adopting a consistent approach across regulatory decisions.

4. Conclusion

Table 3 brings the preceding inputs together into our current best estimate of GNI (UK)'s GT22 cost of capital.

Table 3: Proposed estimate of GNI (UK)'s GT22 real, CPI-stripped cost of capital

	October 2021	March 2022
Gearing	0.6	0.6
Cost of debt (%)	1.15	1.0
Risk-free rate (%)	-1.1	-0.8
Market return (%)	6.8	6.5
Asset beta	0.35	0.35
Equity beta	0.76	0.76
Post-tax cost of equity (%)	4.92	4.77
Vanilla WACC (%)	2.66	2.51

The final estimate of 2.51% is lower than the 2.66% figure that we put forward in our October 2021 report. However, when converted into nominal terms (i.e. recognising that GNI (UK)'s total GT22 return will come in part from the in-year return and in part from the indexation of the regulatory asset base), the allowed return works out to be approximately 45 basis points higher than our October 2021 proposal.

[1] The iBoxx £ non-gilts AAA 10+ year series and iBoxx £ non-gilts AAA 10-15 year series.
[2] Using long-term forecasts of inflation that match the average tenor of the relevant bonds.