Dear Meg,

Sale of pre-2012 income contingent student loans: economic assumptions underpinning the Transitions-based Earnings and Repayments Model (TERM)

During the Committee’s evidence session on the Sale of Student Loans, 10 September, Lee Rowley MP asked for details of the economic assumptions underpinning the Transitions-based Earnings and Repayments Model (TERM). I have outlined these below, along with a brief overview of how the assumptions interact with the rest of the model to set the context within which economic factors are used. I hope this is useful in helping the Committee to understand how the model works and am happy for the Committee to publish this letter in order to share this information more widely.

I would also like to offer the members of the Committee a briefing session on the model with the UK Government Investments team. It is not our intention that the sale model is a ‘black box’ and we would be very happy to help members understand more of what we are doing. Similar briefings were provided to investors and ratings agencies as part of the sales process, and we answered detailed questions from them on the functioning of the model, because understanding how the model worked was fundamental to their investment analysis.

Overview of TERM

The modelling challenge for TERM is to project future earnings for the sold pool of about 400,000 borrowers. As I set out in my oral evidence to the Committee, our analysis has demonstrated that for borrowers in our sale pool the key determinant of an individual’s earnings in any year is their earnings in the previous year and their age.

Therefore, we use ‘transition matrices’ to assign a probability to what an individual may earn next year based on their current earnings and their age. To produce these transition matrices we utilised data of an individual’s historic movements between different levels of earnings from Student Loans Company (on individuals who have a student loans) data and Her Majesty’s Revenue and Customs (on an anonymised sample of the tax paying population) data. We then utilise these probabilities to project borrowers between different earnings levels, creating an earnings pathway for a borrower.
As these projections are done in constant terms, meaning they reflect promotional or job changes affecting pay rather than macroeconomic wage growth, they are then overlaid with wage growth assumptions (derived from Office of Budget Responsibility (OBR)’s latest forecast). This provides earnings projections in nominal terms. The repayments threshold (also projected in line with macroeconomic assumptions where relevant) is then applied to borrowers’ earnings to determine their repayments. The economic assumptions around the repayment threshold and interest on the loans, RPI and Bank of England base interest rates, are also derived from the latest OBR forecasts.

I hope the Committee finds this information helpful. I am copying this letter to Jonathan Slater, Permanent Secretary Department for Education, Charles Roxburgh, Second Permanent Secretary HM Treasury, Sir Amyas Morse, Comptroller and Auditor General and Richard Brown, Treasury Officer of Accounts.

Yours sincerely,

JUSTIN MANSON

DEPUTY CHIEF EXECUTIVE

UK GOVERNMENT INVESTMENTS