Department for Business, Innovation & Skills

BIS Business Critical Models – June 2014

Background

The Macpherson review of Quality Assurance of Government models which reported in March 2013, recommended that departments consider making a list of Business Critical models publicly available.

In response to this, and to provide transparency about the most important models used by the Department for Business, Innovation and Skills, a list of 'Business Critical models by the Department is given below:

Higher Education Student finance expenditure model

The model is used to estimate Government outlay on maintenance grants and other student allowances, maintenance loans and fee loans. It is used to inform policy decisions on student support (e.g. at the time of Spending Reviews and White Papers) and is updated regularly throughout the year for financial management purposes.

Higher Education Student Number Projections Model

The model is used to estimate the number of students at HEFCE-funded institutions. It is used to inform policy decisions on student numbers and entrant controls through policy simulation and forecasting and outputs from the model feed into the student expenditure forecasting model.

Higher Education Income Contingent Student Loan Repayment Model

The model is used to estimate the losses on income contingent repayment (ICR) loans issued to students in England. The model provides a valuation of the current ICR loan book (the stock charge) and enables budgeting to be carried out for loans yet to be issued (the RAB charge).

Higher Education Income Contingent student loan sale model

The model is a micro simulation model of student loan borrowers in 2002-2005 that meet the criteria for inclusion in the loan sale. For each student cohort (grouped by statutory repayment due dates) an earnings model generates forecasts of earnings and employment for a sample of graduates.

Models that Allocate Higher Education Funding and Student Number Control

The models are used to allocate and monitor allocations of the HEFCE recurrent and capital grants for Teaching and Research totalling approximately £4 billion and control the number of full-time undergraduate entrants to HE.

24+ Advanced Learning Loans Model

The 24+ Advanced Learning Loans model estimates the proportion of money lent out that will not be repaid (known as the RAB charge) on 24+ Advanced Learning Loans.

Employer Ownership Pilot Appraisal Model

This model is a tool for appraising and shortlisting applications to Round 2 of the Employer Ownership Pilot. The model provides a quantitative estimate of the net benefits associated with the participation elements of projects, based on the information within the application form.

Adult Skills and 16-18 Apprenticeship Allocation Calculations

The model calculates the distribution of funding year and financial year budgets for Adult Skills and 16-18 Apprenticeships to circa 1,000 providers.

Regional Growth Fund Appraisal Toolkit

The model informs Independent Advisory Panel (IAP) and Ministerial decisions on which projects and programmes should be awarded RGF support by providing estimates of the Benefit-Cost Ratio (BCR) and Cost per net job (Cpnj).

Advanced Manufacturing Supply Chain Initiative Value for Money Model

The model forms part of the Advanced Manufacturing Supply Chain Initiative (AMSCI) competition process. It is one step in the wider AMSCI appraisal process and provides a value for money (VfM) assessment of individual project bids.

Energy Intensive Industries Compensation Model

The Energy Intensive Industries (EII) Compensation Model has three main purposes:

- support the decision as to whether a company is eligible for compensation.

- support the decision on how much compensation a company should receive.

- store the output and decisions so that the relevant data can be fed into specific reports (e.g. to the European Commission) and into the team's compensation expenditure forecasting model.