Stress test results

The anonymised stress test results for disclosing participants are available from the Authority's EMI website.

The Authority does not make a judgement about the different levels of risk tolerance exhibited in the results. Taking risky positions is a legitimate strategy and the Authority hopes that the stress test regime will help ensure that these sorts of positions are being taken by decision-makers who know the potential consequences. Decision makers are accountable for the impacts of their decisions even in the event that they lead to financial distress during times of scarce supply.

Interpreting stress test results

The EMI website contains three reports that present the stress testing results a number of different ways:

- Stress testing – summary – box and whisker plots summarising the distribution of results,
- Stress testing – dispersion of respondent counts – a stacked bar chart with banded results that also illustrates the distribution of results, and
- Stress testing – cash flow index – a stacked bar chart that indicates the relative impacts on cash flow for each quarter.

The first two stress test reports allow users to configure the results for all combinations of three stress measures (shareholder equity, cash flow, and cover ratio) and two stress scenarios (energy and capacity).

Each of the three stress test reports on EMI has accompanying notes to assist users in understanding the reports. The table below provides further explanation around the three stress measures. Some terminology is first defined.

Definitions

SE_h — Shareholder's equity from the most recent set of audited annual accounts

CF_h — Net cash flow from operating activities, as recorded in the most recent set of audited, annual financial accounts

ΔCF — Estimated net cash flow under the stress test scenario less the estimated net cash flow in the base case, i.e. $\Delta CF = CF$ under stress test – CF in base case

ΔS — The expected value of spot market sales under the stress test less the expected value of spot market sales in the base case, i.e. $\Delta S = S$ under stress test – S in base case

ΔP — The expected value of spot market purchases under the stress test less the expected value of spot market purchases in the base case, i.e. $\Delta P = P$ under stress test – P in base case

Stress measure	Shareholder equity	Cash flow	Cover ratio
Short description	The change in cash flow caused by the scenario divided by shareholder funds	The change in cash flow caused by the scenario divided by cash flow reported	The revenue caused by the scenario divided by the costs caused by the scenario.

Stress measure	Shareholder equity	Cash flow	Cover ratio
	from the last set of audited accounts.	in the last set of audited accounts.	
Formula	$$\dfrac{\Delta CF}{SE_h}$$	$$\dfrac{\Delta CF}{CF_h}$$	$$\dfrac{(\Delta S + max[\Delta CF - \Delta S - \Delta P, 0])}{(\Delta P + min[\Delta CF - \Delta S - \Delta P, 0])}$$
Long description	This measure indicates how much stress the scenario would place on the participant's balance sheet. Shareholders' funds are taken to be the value of assets less all obligations. Dividing the change in cash flow caused under the scenario by shareholders' funds gives an indication of how easily the participant could absorb the impact associated with the scenario.	This measure indicates how much stress the scenario would place on the participant's cash flow. Dividing the change in cash flow that would occur under the scenario by the last reported annual cash flow gives an indication of how the scenario will affect cash flow, and hence the ability of the participant to continue to meet its financial obligations.	This measure indicates how easily the firm would be able to pay for the costs caused by the scenario using only the revenue caused by the scenario, i.e. without recourse to additional funding sources.
Interpretation	A result close to zero indicates that the scenario will not greatly affect the participant. The further away a result is from zero, the greater the impact is. A result less than zero means that there is an adverse impact on the participant. A result greater than zero means there is a beneficial impact on the participant.		A result close to +1 indicates that the scenario will not greatly affect the participant. The further away a result is from +1, the greater the impact is. A result less than +1 means there is an adverse impact on the participant. However, a result less than zero is meaningless. A result greater than +1 means there is a beneficial impact on the participant.
Box and whisker plots	The EMI report truncates the box and whisker display at -1 and +1. Individual results may occur outside of these limits. Such individual results are indicated in the		The EMI report truncates the box and whisker display at zero and +2. Individual results may occur outside of these limits.

Stress measure	Shareholder equity	Cash flow	Cover ratio
	tool tip.		Such individual results are not revealed although the number occurring outside of these limits is indicated in the tool tip.
Sector aggregates	A sector aggregate is computed for each stress measure and is indicated on the EMI reports with a black diamond. The sector aggregates are computed by summing the numerators of all disclosing participants and dividing this by the sum of the denominators of all disclosing participants. The numerators and denominators are those used in the formulae above in this table. Note that these aggregates take no account of the size of any one participant relative to another and should not be interpreted as averages.		
Omitted results	Results are unable to be computed if the stress measure requires division by zero. This situation may arise if the last set of audited accounts reported a zero cash flow, or there are no previous accounts in the case of a new entrant.		Results are unable to be computed if the stress measure requires division by zero. This situation may arise if a disclosing participant has no exposure to the spot market. Results less than zero can arise when $\Delta P < 0$. Instances of this are omitted from reporting, as the result is meaningless.