

Letters and Viewpoints

(Contributions to this section are invited but we reserve the right to edit at our discretion—Ed.)

From R.B. Flavell, Imperial College of Science and Technology

Dear Sir,

It has been brought to my attention that your Journal has published two papers recently on the inadequacy of the dual prices when calculated for a degenerate L.P. by a commercial code.^{1,2} These papers do appear to be re-inventing the wheel. The results have been well known for a long time amongst the mathematical-programming fraternity, and I and some colleagues published some papers 10 years ago on this topic,^{3,4} and these papers were not in isolation (see Strum⁵ and Knolmayer,⁶ to name but two).

In particular, we investigated alternative sets of dual prices, showed how to generate consistent ones, and even produced alternative balance sheets to satisfy different sets of people. One interesting result that neither recent paper appears to have picked up is that there may exist a number (greater than two) of internally inconsistent sets of dual prices at a degenerate vertex. Some of the prices in the sets may even be negative and still satisfy the optimality conditions.

Yours faithfully,
R.B. FLAVELL

References

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