Accepted Manuscript

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PII: S0022-0531(17)30018-2
DOI: http://dx.doi.org/10.1016/j.jet.2017.02.001
Reference: YJETH 4636

To appear in: *Journal of Economic Theory*

Received date: 27 June 2014
Revised date: 2 February 2017
Accepted date: 8 February 2017

Please cite this article in press as: O'Brien, D.P. All-units Discounts and Double Moral Hazard. *J. Econ. Theory* (2017), http://dx.doi.org/10.1016/j.jet.2017.02.001

All-units Discounts and Double Moral Hazard

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January, 2017

Abstract

An *all-units discount* is a price reduction applied to all units purchased if the customer's total purchases equal or exceed a given quantity threshold. Since the discount is paid on all units rather than marginal units, the tariff is discontinuous and exhibits a negative marginal price ("cliff") at the threshold that triggers the discount. This paper shows that all-units discounts arise in optimal agency contracts between upstream and downstream firms that face double moral hazard. I present conditions under which all-units discounts dominate two-part tariffs and other continuous tariffs. I also examine these tariffs when the upstream market faces a threat of entry. In the case considered, all-units discounts deter entry by less efficient rivals without distorting price and investment, whereas continuous tariffs either accommodate such entry or deter it by distorting price and investment.

Keywords: All-units discounts, retroactive rebates, double marginalization, double moral hazard, principal-agent, partnerships, teams

JEL Classifications: D42, D86, L12, L42

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