

One-to-many Assignment Models of Heterogeneous Labor to Heterogeneous Capital

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Abstract

This paper considers the models in which heterogeneous workers are assigned to heterogeneous firms on a one-to-many basis. Heterogeneous workers have different levels of abilities, and heterogeneous firms have different qualities. In this paper, I analyze the one-to-many assignment models of heterogeneous workers to heterogeneous firms in a general form, such as $f(x, y, q)$, where x , y , and q are workers' abilities, firms' qualities, and the number of workers per firm, respectively. This paper introduces the optimum assignment pass conditions and derives the wage and profit functions. I also analyze the properties of the wage and profit functions and deal with two special cases, Cobb-Douglas and Constant elasticity of substitution production forms.

Keyword: Assignment model; Heterogeneity; One-to-many assignment; Wage and profit distribution.

JEL Classification: D24, D33, D41.

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