

Own-Price Elasticity of Labour Demand:

A Case study of Danish Steel Works, Ltd.



Mr. Kent Busk

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for the Degree of Masters of Arts in Business and Managerial Economics**

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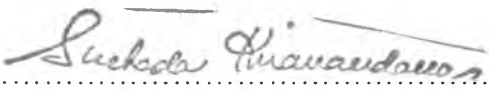
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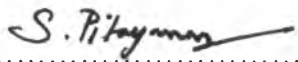
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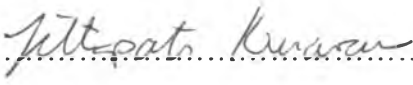
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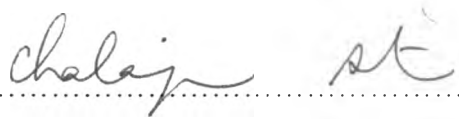
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This paper attempts to build a model explaining the long run own-price elasticity of demand for labour-hours at the Danish Steelworks, Ltd. The model is constrained to conceive the firm as isolated from the rest of the steelworks industry.

The theoretical mathematical foundation explaining labour supply, labour demand, and the firms responsiveness to factor price changes is built. Next, the study proceeds with a static analysis where the Cobb-Douglas production function's parameters are estimated, under the assumptions of homogeneous labour-hours and production output. Last, the estimates of the firm's responsiveness to increase in labour-hours cost concerning employment of labour-hours are given and its implications are discussed.

The study finds that an increase in cost of labour-hours will force the firm to expand output, and hence, reduce the degree of the substitution away from labour-hours. This interesting result is explained under the assumption that the production function is homogeneous and that the firm is operating on an increasing return to scale.

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I have spent three years as engineer at the Danish Steel Works, Ltd. after graduating as mechanical engineer. My tasks were mainly plant optimising, project management and co-ordination.

In the period working there I got a basic understanding of steel production. My motivation for conducting this labour-demand study is to get an understanding of the economics in production of steel.

My first general interest in the subject stems from my first experience that managing a production is not solely dependent on the technical production possibilities but rather influenced by other equally important factors such as factor-input markets and production-output markets.

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