

PAKISTAN TRADE POLICIES: MODELLING THE EFFECTS OF IMPORT DUTIES ON AGRICULTURAL PRODUCTS: A SIMULATION EXERCISE USING QUADRATIC PROGRAMMING

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ABSTRACT

The study was designed to analyze the welfare effects of import duties on agricultural products in the economy of Pakistan. The aim of the exercise was to assess the desirability of the policy of import-substitution, using simulation in the context of an input-output allocation model. This implied two levels of distributing consumer demand over goods. First, between products, and then in two sub-systems between domestic supply and imports of the otherwise similar product. The model was solved using Matprog (mathematical programming) (DOS). Evaluation version.⁷ Our data context was the availability of just one time-observation- point of a full set of variables. The analysis is based on the data of the Pakistan input - output table 1989 - 90 we used simulation, to investigate whether or not there were credible values of substitution- elasticities, at which a policy of import protection through import duties might appear optimal. Key words: Import-duties, substitution-elasticities, simulation, agricultural- products.

INTRODUCTION

Since her inception in August 1947 Pakistan has been pursuing different trade policies depending on the domestic and global situations. Pakistan, has not, however, adhered to a single trade strategy. Prior to 1988, Pakistan's economic policies were by and large inward looking with import-substitution seen as an important element of development process. Since 1988, Pakistan has implemented an economic reform and structural adjustment program. The economy has taken steps towards more market orientation and openness (Pakistan trade policy review 1995).

We have designed this study is to establish what policy is the more beneficial for increasing the welfare of the people. This is an attempt to evaluate its effects in the light of available data. The focus is on the choice between a policy of import-substitution through import-duties and the promotion of exports.

The idea of substitutability between inputs on the price basis is valid for inputs in production sectors, as well as in final demand. In this paper we restrict

ourselves to the substitution between different categories of consumer goods.

In our case there is price-based substitution between imported and domestically produced products, and the substitutability between the domestically produced and the imported products of the same category is higher than between products of different types.

I present here a model of import protection through import duties and investigate its desirability of verifying it against the available data. I submit that import duties are the mainstay of public revenue in this typical third world country and are, for administrative and political reasons likely to stay that. Therefore, no increase in the rate of import duty other than an association with an increase in the volume of public spending. Against a general background of economic growth there are, however, two types of reduction in the rate of import duties: those that are within the limit of allowing the same or a higher tax-revenue out of a higher level of imports, and those that force a reduction in public spending. Any policy to reduce public spending would probably reduce employment, standard of living and so on.