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STRUCTURE OF EFFECTIVE PROTECTION TO MANUFACTURING INDUSTRIES IN KUWAIT

Key Words

***Protection; Trade
Policy; Manufacturing
Industries.***

Abstract

Protection of the manufacturing industries in Kuwait is granted to protect them from foreign competition with the understanding that in the future they will be able to compete in the international market. The current structure of protection to industries is an amalgamation of various economic incentives given to the manufacturing industries for their development. This paper analyzes the collective impact of different policy measures (incentives) on the degree of protection that is granted to the manufacturing industries in Kuwait. Using primary and secondary data, the paper prepares estimates of effective rates of protection. These estimates are prepared for different industry groups, and according to different stages of industrial processing and market orientation of industries. The paper concludes by making a set of policy recommendations to further rationalize the structure of industrial protection in a future economic reform program.

Introduction

Protection to manufacturing industries is often granted on the basis of the infant industry argument. Protection, however, often constrains the improvement in productivity as the producers develop inertia to improve efficiency; while excessive profits erode incentives to improve the

productivity. In addition to production losses, the protection results in consumption loss as the consumers have to pay higher prices for the protected goods. These losses arise because a tariff distorts incentives to consume and produce.

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The structure of effective protection is a term used to denote a set of trade policies that influence the value-added at domestic prices in the manufacturing sector. More specifically, the effective rate of protection (ERP) seeks to capture in a single figure support to productive factors resulting from a complex tariff structure. By including the price-distorting effects on intermediate inputs as well as on output, the ERP provides a measure of the “net” effect of border prices via trade policies on the incentives facing domestic producers. The measurement of the ERP is a two stage process - first determining the nominal protection of the policies in question, and second, analyzing the implications for effective protection on different firms and industry groups.

The present structure of protection to industries in Kuwait is an amalgam of various policy measures taken at different points in time to pursue different policy objectives. These measures include input subsidy, tariff and non-tariff barriers, subsidized loans and preferential government procurement. To analyze the collective impact of all these policy measures on the degree of protection, this paper examines the structure of protection in Kuwait by computing effective rates of protection and putting forward policy suggestions to further rationalize the protection structure.

The paper is divided into six sections. After this introductory section, the second section provides an overview of the industrial sector and industrial policies in Kuwait. The third section provides the methodology to estimate the effective rates of protection. The fourth section discusses the data requirements to estimate effective rates of protection. Empirical findings regarding the structure of the effective rates of protection are analyzed in the fifth section. The final section concludes the paper and offers some policy suggestions to rationalize the industrial protection.

Overview of the Industrial Sector in Kuwait

Structural Characteristics

Kuwait has made rapid economic progress and, with a per capita income of around \$20,000, it is categorized amongst the high-income economies. This prosperity, however, is predominantly linked to one sector, namely oil. Oil occupies a dominant position in the economy. About one-half of the national output is contributed by petroleum and petroleum-related activities. Over 92 percent (average of 1997 to 2002 period) of export earnings are from petroleum and petroleum-based products, like lubricants and chemicals, and the remaining exports are contributed by manufactured goods

and other products. Income from oil and oil wealth invested abroad is the main source of government revenues. This one-sector-dominated-economy has generated imbalances and exposed the economy to unexpected and volatile exogenous shocks.

The share of the manufacturing industries in the GDP is about 11%, and is dominated by downstream petroleum industries. This share comes to about 3% if the contribution of the petroleum and petrochemical industries is excluded from the industrial value added. The contribution of non-petroleum manufacturing industries in total national employment has sharply gone down from 9.1% in 1976 to 5% in 1999, while there has been a small increase in the contribution of value added of these industries in the GDP. The non-petroleum manufacturing industries mainly consist of small- and medium-scale units. Most of these are import-competing industries. In the home market, the domestic manufacturing industries face severe competition from foreign products. For raw materials, the manufacturing sector depends heavily on foreign markets. Except for fuel, electricity and water, all other raw materials are imported.

Currently, there are 4,104 manufacturing units in Kuwait. Most of

them are small-scale units employing fewer than 10 workers. In terms of establishments, textile industry is the biggest amongst manufacturing industries. It accounts for about 53% of the manufacturing establishments. On the other hand, in terms of value added and book value of fixed capital, chemical and chemical products industries dominate the industrial sector. It accounts for about 73% of the industrial value-added and 70% of the book value of fixed assets. In terms of employment and number of establishments, however, the chemical and chemical products industries are small, accounting for approximately 14% of employment in the industrial sector and 1.4% of total number of industrial establishments.

An overwhelmingly large proportion (about 82%) of the manufacturing industries in Kuwait consists of establishments that employ less than 10 workers. These are essentially tailoring, carpentry, and engineering workshops. This indicates that most of the manufacturing establishments fall under the category that is generally referred to as the informal industries. Establishments employing 50 or more workers account for less than 4.8% of total industrial establishments. The majority of the small establishments, out of the total industrial establishments, 4089 (or 99.6%) are privately owned. Although small

in number, the publicly owned establishments in the year 1999 accounted for about 72% of the total value-added and 66% of the total book value of fixed assets of manufacturing industries. In terms of employment, the publicly owned establishments account for only 11.6% of the total employment in industries. This indicates that privately-owned industries comprise small- and medium-scale and labor-intensive establishments. On the other hand, the publicly-owned industries are large and capital-intensive establishments.

Industrial Policies

Main objective of Kuwait's industrial policy is to diversify the economic base of the national economy and reduce its dependence on the export of crude oil. More specifically, the objectives of the industrial policy are: (1) to expand the industrial base to increase the share of manufacturing industries in the GDP, to create more jobs for national manpower, and establish strong industrial links; (2) to restructure the industrial sector to

produce value-added and exportable products; and (3) to create advanced scientific, technological and information base for industries in the country.

Current industrial incentive systems in Kuwait can be characterized by subsidies on water, land, gas, electricity, and loans; indirect subsidies to national labor; tariffs and non-tariff barriers (including restrictions and prohibitions on imports)⁽¹⁾; government preference for domestic goods; industrial and import license; and institutional support for international and local industrial fairs and exhibitions (Box 1).

The government insures infrastructure facilities, like industrial estates and the provision of other hard and soft infrastructures. Neither is any income tax assessed on domestic firms nor is there any requirement for such firms to disclose their financial position. The government offers special support (e.g., annual awards) to manufacturing units that demonstrate creativeness and strong competitive strength. There is no explicit export subsidy program in Kuwait.

(1) Between May 15th 1950 and December 31, 2002, customs duty charged by the State of Kuwait was 4% except for products (similar to domestically produced products) that are protected by the industrial policy. Since January 1, 2003, the customs duty rate is increased to 5% with the implementation of the GCC Customs Union Accord. Average customs duty rate was about 3.2% in 2000 as many goods are either exempted from customs duty or they are imported duty free. There are two types of NTBs: one where imported products are regulated through different agencies and two where import of certain products is banned due to religious, health and safety reasons.

Box 1**Industrial Incentives Available to Manufacturing Industries in Kuwait**

1. Tax Concessions	Duty Free Imports:	Machinery, equipment and raw materials (up to 10 years for import-substitute industries, for export industries it continues).
	Tariff Protection:	Protective import duty of 15% on some items along with imports being subject to clearance by specified government agencies (this measure is not currently in application).
	Corporate Income Tax:	No corporate income tax on Kuwaiti companies. KFAS contribution normally was 1.98% but since 2003, it is 1%. Contribution to the national labor support fund is 2.5% of profit. Foreign firms pay income tax at the current rate of 25%.
2. Industrial Loans	Interest Rate:	5-7.5% per annum (Note: On September 23, 2003, the rate was reduced to 3.5%).
	Allowance Period:	One Year
	Settlement Period:	Five years
3. Concessions on Land and Utilities	Land Rent per Sq. Mt.	Industrial: Fils. 200 Non-industrial: Fils 2400 (Note: Now for new industrial plots KD 3 is charged).
	Electricity Per KWH	Shuaiba Area: Fils 1, Others: Fils 2.
	Water (000, Gallons)	Shuaiba Area: Fils 250 Others: Fils 800
4. Government Procurement		10% price preference over foreign goods. 5% price preference for GCC member goods.

Note: KFAS = Kuwait Foundation for the Advancement of Sciences. GCC = Gulf Cooperation Council.

Discretionary powers are also accorded to authorities to exempt industrial units from customs duties on the import of machinery, equipment, spare parts, raw materials or inter-

mediate products. This enables the policy regime to intervene to allocate resources among the manufacturing industries, sometimes optimally and sometimes sub-optimally.

Methodology

Industrial incentives are defined to include policy measures that affect the allocation of resources among different industrial activities and their orientation between foreign and domestic markets. The application of industrial incentive measures thus entails a departure from a neutral state of affairs in which there is no discrimination among industrial activities or between foreign and domestic markets.

In evaluating a system of industrial incentives, one may undertake two distinct tasks: gauging the incidence on product prices of the industrial incentive measures applied, and predicting their economic effects. The first task involves ascertaining whether and to what extent the incentives applied favor (or disfavor) a particular industrial activity relative to other industrial activities and whether an activity receives net incentives (disincentives) as compared with the neutral state of affairs. The second task entails analyzing the effects of the incentives on the allocation of resources and other economic variables. (Krugman and Obstfeld, 1997).

Ideally, the incidence of incentive measures and their economic effects should be analyzed in a general equilibrium framework. Such analyses would require counterfactual experi-

ment to estimate the values of the relevant variables for the events that neutrality applies. A comparison of the values predicted by the model under the actual system of incentives and under the counterfactual experiment would then indicate the incidence, and the economic effects, of the incentives applied.

At the outset, it would be useful to make a clear distinction between nominal rate of protection (NRP) and effective rate of protection (ERP). The NRP is accorded to industries by using tariff, non-tariff barriers (NTBs) on finished products. It measures the percentage excess of the domestic price (DP) over the foreign price (FP) of a product. That is,

$$NRP = (DP - FP)/FP \quad (1)$$

If tariffs are the only protective device, then

$$DP = FP(1 + T) \quad (2)$$

Where, T = tariff rate.

If NTBs are also protection instruments used to control imports then Eq. 2 can be modified as:

$$DP = FP(1 + TE) \quad (3)$$

Where, TE = tariff equivalent.

In reality, tariffs and NTBs are levied on both finished and intermediate goods while domestic inputs are subsidized. When making decisions,

producers take into account the effect of all policy instruments not only on finished products they produce but also on inputs they use in the production processes. This is because the imposition of, say, tariffs, on a product provides protection to the production process while tariffs on inputs reduce the protection. When the tariff structure (covering both inputs and output) escalates, the NRP underestimates the true level of protection enjoyed by a domestic industry. This implies that trade restrictions have different effects on each stage of production. This suggests that any study analyzing the impact of changes on incentive structures on industries should look beyond NRP. The ERP is a concept that takes into account this aspect of protection of industries.

The ERP essentially provides information on how much value is added to the production as a result of composite effect of tariff and NTBs on finished products and tariffs and subsidies on inputs used in the production processes (Corden, 1966). Balassa and Associates (1982) define the ERP as the percentage of excess domestic value added, due to tariffs, NTBs, subsidies and other incentives, on the finished product and its inputs, over the value added at world market's prices. Thus, the ERP differs from the NRP by taking into account tariffs, NTBs and subsidies on inputs

used to produce the finished product. The higher the tariffs and NTBs imposed on imported inputs are, the less effective is the tariff that applies to goods that are partially produced with these imported inputs.

Following Balassa and Associates (1982), the ERP is measured as:

$$ERP_i = \frac{VAD_i - VAW_i}{VAW_i} = \frac{P_i - \sum_j a_{ji} P_i}{\frac{P_i}{1+T_i} - \sum_j \frac{a_{ji} P_i}{1+T_j}} - 1 \quad (4)$$

where,

ERP_i = the effective rate of protection for the i th industry,

VAD_i = the value added, at domestic prices, in the i th industry,

VAW_i = the value added, at world prices, in the i th industry,

P_i = domestic price of the i th product,

a_{ji} = input-output coefficient for the j th input in domestic price used in the production of the i th product,

T_i = nominal protection rate on the i th product, and

T_j = nominal protection rate on the j th input.

In Eq. 4, tariffs are not regarded as the only form of trade restriction. When tariffs are the only trade restriction, then, T_i and T_j are considered as tariffs, and when other restrictions on imports are in place, then T_i and T_j are tariff equivalents.

Calculation of the ERP is straightforward wherever all inputs are tradable goods whose domestic prices are affected by protection. In the case where some of the inputs are non-traded, alternative methods (presented by Balassa, 1982 and Corden, 1966) are suggested to treat non-traded inputs in the calculation of the ERP. This is because, as opposed to traded inputs, the supplies of non-traded inputs cannot be assumed to be infinitely elastic. Industries producing non-traded inputs are protected indirectly each time protection raises the value-added in an industry which is intensive in the use of non-traded inputs.

There is a controversy in the literature as to whether non-traded goods should be implicitly treated as value-added as in as in equation (4), or whether they should be “decomposed” into their traded goods and value-added contents.⁽²⁾

Usually, two variations of the ERP are calculated, using the Corden Method (1966) and the Balassa Meth-

od (1982). In the so-called Corden Method, for the purpose of calculation of ERP, non-traded inputs costs (for administration, domestic transport, repairs and maintenance, distribution, electricity and water) are included in the VAD and VAW. Corden (1966) asserts that just as tariffs on the final product will change its level of output, so would the demand for non-traded inputs and since there is no reason to believe that the supplies of non-traded inputs are infinitely elastic⁽³⁾, as opposed to those of traded inputs, the change in the demand for finished product will increase or decrease prices of non-traded inputs, whatever the case may be.⁽⁴⁾ This is why, Corden add non-traded input costs with the value added.

In contrast, under the so-called Balassa method, non-traded inputs are treated as if they are traded inputs by assuming that the supply of the former is also infinitely elastic. Balassa thinks that the domestic prices for non-traded inputs adequately reflect the inputs' opportunity costs. As a

(2) Except in the case of fixed coefficient technology, this attempt at decomposition can lead to difficulties.

(3) If producers are willing to supply inputs as much as they can at one particular price and supply nothing at any other price then supply is infinitely price elastic.

(4) It may be noted that Humphrey's (1969) simplistic measure of value-added in a particular tradable sector includes only the value-added by factors directly employed in that sector. Whereas Corden's (1966) comprehensive measure adds to this direct value-added the indirect value added by those factors in the non-tradable sectors, which is attributable, both directly and indirectly, to the production of the non-tradable inputs used in the particular tradable sector.

result, these inputs have the same value at domestic prices as at world market prices. Thus, VAD is obtained by deducting actual unadjusted input costs for nontraded goods from output values. On the other hand, border price equivalents of tradable inputs costs as well as domestic price values of non-traded inputs are deducted from the world price value of production of each processing unit to derive VAW. Both the methods are used to estimate EPR in this paper.

The ERP described in Eq. 4 corresponds to the so-called Z definition of the ERP (Soligo and Stern, 1965). If $Z > 0$, the industry is protected. If $Z < 0$, the cases of $-100 < Z < 0$ and $Z < -100$ need to be carefully interpreted. If $-100 < Z < 0$, the industry is negatively protected.⁽⁵⁾ If $Z < -100$, however, value added at world market prices is zero or negative, implying an extremely high rate of protection rather than negative protection.⁽⁶⁾ It may, thus, be noted that the ERP measure does not show a monotonic increase in the severity of protection.

To work out the degree of protection in a consistent way, the use of the

U definition is recommended, where $U = (VAD - VAW)/VAD = Z/(1 + Z)$ (Soligo and Stern, 1965 and Lewis and Guisinger, 1969). Using this definition, ERPs become negative only when an industry is penalized; and negative value added industries have an ERP exceeding 100. The U measure shows the percentage of the value-added at domestic prices due to protection but not the percentage increase in the value-added at world prices caused by protection. Interpretation of the U -measure of the ERP may, thus, be misleading as to the severity of protection. Therefore, this measure should only be used for ranking industries in a consistent way.

A caveat is in order before one starts interpreting the results of the analysis of the ERP. This is because the intuitively clear concept of the ERP is not without flaws. The main criticism is whether the key results of the analysis survive in general equilibrium.⁽⁷⁾ Currently, the general equilibrium modeling is increasingly used for policy simulation and provides a complete picture of a situation as compared to the estimates of effective

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- (5) Negative protection highlights how an activity might be harmed due to protection, even when tariffs on its output are positive, but also in highlighting how systematic biases can arise (Greenaway and Milner, 2003).
 - (6) The phenomenon of negative value-added at world price remind us of the detrimental outcome of a chaotic import-substitution regime.
 - (7) For a critique of the concept, see Bhagwati and Srinivasan (1973), Ethier (1977), Anderson (1998), and Greenaway and Milner (2003).

protection which provides a partial view of the complete situation. For various reasons, however, this approach has not been taken in this paper. To begin with, computational limitations restrict the number of variables that may be included in an empirically estimated model. Also, a general equilibrium model has considerable information requirements, and specifying the parameters of production functions and demand functions inevitably involves arbitrary choices. Furthermore, a general equilibrium approach involves modeling the entire national economy - an undertaking that is beyond the scope of this paper. Hence, the incentives analysis conducted here is limited to a partial equilibrium framework. Moreover, as argued by Greenaway and Milner (2003) that the Computable General Equilibrium (CGE) modeling "... is not always an option nor might it be applicable at an economically meaningful level of aggregation. In such circumstances it will be more useful to be approximately right than precisely wrong". Thus, if ERP is used with certain care, not only its analytical use will be somewhat suggestive (Bhagwati and Srinivasn, 1984) but its empiri-

cal estimation will continue to guide policymakers.

Data Requirement

The estimation of the ERP requires computation of the value of output and inputs in terms of both domestic prices and world prices. The standard source of data on the value of output and inputs is the Industrial Establishment Survey published by the Ministry of Planning.

Not all the information required to compute ERP is available from the Industrial Establishment Survey. The data regarding values of output and inputs, and primary factors were thus obtained by conducting a field survey of local industries.⁽⁸⁾

A comprehensive survey of the manufacturing industries was conducted to generate firm-level data on inputs and outputs for the year 2003 covering 43 manufacturing establishments in Kuwait. These establishments belonged to different industrial groups including: food, beverage and tobacco; textiles; wood and wood products; paper and paperboard articles; chemical and chemical products; non-metallic mineral products; basic metals and

(8) The distinguishing characteristic of the present study is that as compared to most of the earlier studies (e.g., Fane and Phillips, 1991, Greenaway, 1988, and Salvatore, 1992), which rely on the input-output tables, it is based on a sample survey. The field survey provides information regarding outputs, inputs and primary factors (labor and capital) thus obtained from the field survey.

fabricated metals. The survey generated a vast amount of information which has been utilized for the computation of ERP. Secondary information regarding tariffs and other industrial incentives were obtained from the Public Authority for Industry.

It is worth noting that most of the production units in the survey produced more than one product as such their classification into different industries is made on the basis of the main product. This is because responding firms were unable to separate processes and their respective costs by each product they produce. As a result the ERP computed here is for total production of an industry group.

For the purpose of this study we have obtained the value-added by deducting the costs of materials and services purchased by each firm from its sales. The sales revenue is derived from the domestic and export sales data provided by the surveyed firms.

The value-added at world prices is calculated directly from the value of output of a firm. It is based on the potential revenue earnings from the sale of all of a firm's output in the export market, or alternatively the total cost of importing all of the establishment's output.

Structure of Effective Protection

The tariff and non-tariff barriers on imports, subsidies on inputs, preferential procurement of goods by the government, and the effectiveness of their implementation determine the actual level of protection enjoyed by the manufacturing industries in Kuwait. The higher the nominal protection to output, lower the nominal protection to inputs and higher the subsidies on inputs, the higher will be the effective rate of protection. On the other hand, if the nominal protection rate on output and inputs is equal then ERP and NRP are equal.

Average Effective Rates of Protection and Dispersion

Estimates reported here are obtained by using both the field survey and secondary data. Average effective rate of protection for the total of sampled industries corresponding to Z-definition of the EPR comes out to be 5.05% (Balassa method) and 3.92% (Corden method) (Table 1). These estimates are fairly low by the international standards. The effective rate of protection, corresponding to U definition, is 3.77% (Corden method). This implies that on average as much as 3.77% of the value-added at domestic prices in the manufacturing industries was contributed by the pro-

Table 1
Effective Rates of Protection for Sampled Industries

ISIC	Industry	Effective Rate of Protection	
		Balassa Method	Corden Method
3111	Slaughtering, Preparing & Preserving Meat	7.91	6.38
3117	Bakery Products	4.91	4.36
3121	Food Products, N.E.C.	4.96	4.38
3134	Soft Drinks & Carbonated Water Industries	9.29	6.31
3212	Madeup Textile Goods except Wearing Apparel	6.84	5.07
3220	Wearing Apparel except Footwear	-0.45	-0.43
3240	Leather Footwear except Repairing	11.51	8.26
3412	Containers & Boxes of Paper & Paper Board	10.89	10.05
3419	Paper & Paper Board Articles, N.E.C.	-1.64	-1.05
3512	Chemical Fertilizers & Pesticides	2.23	1.87
3521	Paints, Varnishes & Lacquers	8.38	3.91
3523	Soap & Cleaning Preparations	21.01	15.94
3559	Rubber Products, N.E.C.	29.83	24.29
3560	Plastic Products, N.E.C.	7.66	6.75
3620	Glass & Glass Products	9.02	5.51
3699	Non-metallic Mineral Products, N.E.C.	5.01	4.04
3813	Structural Metal Products	-0.19	-0.16
3819	Metal Products, N.E.C. except Machinery & Equipment	7.23	6.43
3831	Electrical Industrial Machinery & Apparatus	4.07	3.12
3839	Electrical Apparatus & Supplies, N.E.C.	5.23	3.64
3843	Motor Vehicles	4.69	4.25
Aver- age ERP		5.05	3.92

tection. It is worth underscoring this point that in the absence of protection to industries, the share of industries in the GDP would have been 3.77% lower than what is reported in the National Income Accounts.

The average protection rate conceals variations in the ERP across different manufacturing industries;

the ERP ranges between the negatively protected industries (-0.19% for structural metal products to -1.64 for paper and paper board articles, N.E.C.) and positively protected industries (4.07% for electrical industrial machinery and equipment to 29.83% for rubber products N.E.C.) (Table 1). Variations in the ERP are captured by the standard deviation,

which is 7.05 (Balassa method) 5.63 (Corden method), and the coefficient of variations, that is 1.40 (Balassa method) and 1.44 (Corden method); implying high variance. It needs to be underscored that it is the dispersion in the ERP rather than the average ERP which determines the allocative efficiency⁽⁹⁾ of the resources employed in industries. The magnitude of the ERP determines the technical efficiency of an industry.

Since both mean as well as the dispersion around the mean are affected by the extreme values, the structure of protection needs to be analyzed by dividing the industries by the degree of protection. Accordingly, the industries have been classified by five bands of effective rates of protection. They are:

- a. Negatively protected industries;
- b. Low protection industries where the ERP ranges between 0 and 10%;
- c. Moderately protected industries enjoying protection rates of more than 10% but no higher than the average rate of protection, i.e. 20%;

- d. Highly protected industries, i.e., the ERP exceeds 20%; and
- e. Infinite protection, i.e., value-added at the world prices is negative.

Table 2 reveals the number of industries in each of the five categories. The table shows that, according to the Balassa method 71% of industries have low protection; 14% have moderate protection; and 7.5% have high protection. Remaining 7.5% industries have negative protection, that is, they are being penalized by the policy. This last group of industries have positive value-added and are export-oriented. Fortunately, none of the industries in Kuwait suffer from the phenomenon of negative value added at world prices. That is, none of the industries is accorded with infinite protection.

Effective Rates of Protection by Stages of Processing. There is a cascade in the effective protection rate structure. That is, the level of effective protection increases as the stage of processing rises from inputs to the output stage (Table 3). Table 3 reveals that protection given to intermediate goods industries is much smaller

(9) Allocative efficiency refers to possible reductions in cost resulting from using different inputs in optimal proportions. Allocative inefficiency arises whenever the observed input ratio differs from the cost-minimizing input ratio. A firm is technically inefficient when the observed inputs exceed the minimum required to produce a given level of output. Allocative efficiency can be achieved through increased market competition. This process leads to optimal allocation of resources.

Table 2
Distribution of Industries by Degree of Effective Protection

Protection Bands	Percent of Industries	
	Balassa Method	Corden Method
0 < EPR 10	71	79
10 < EPR 20	14	9.5
EPR > 20	7.5	4.8
EPR < 0	7.5	6.7
Negative Value-added	-	-
Number of sampled industries	42	42
Average ERP (%)	5.05	3.92

Source: Authors' estimates.

Table 3
Effective Rates of Protection by Stages of Industrial Processing

Industries Bands	Effective Rate of Protection (%)	
	Balassa Method	Corden Method
Consumer Goods	6.49	5.15
Intermediate Goods	0.47	0.39
Capital Goods	5.12	3.63
Average EPR	5.05	3.92

Source: Authors' estimates.

Table 4
Effective Rates of Protection by Market Orientation of Industries

Market Orientation	Effective Rate of Protection (%)	
	Balassa Method	Corden Method
Export-oriented	4.42	3.43
Import-competing	11.51	9.00
Average EPR	5.05	3.92

Source: Authors' estimates.

(0.47%, Balassa method) compared to capital goods industries (5.12%, Balassa method) and consumer goods industries (6.49%, Balassa method). This is a reflection of a rationalized protection structure for industries in

Kuwait. In the future, this status needs to be maintained in any economic reform program aimed at further rationalization of the industrial incentive system.

Effective Rates of Protection by Market Orientation. Export-oriented industries are accorded with lower effective protection (4.42%, Balassa method) as compared to import-substitution industries (11.51%, Balassa method) (Table 4). It is, therefore, evident that there is an anti-export bias in policies that is not encouraging export firms to grow and export in foreign markets on competitive basis. This is an important finding which provides sufficient evidence that calls upon to remove biasness in policies against export-oriented industries.

Conclusions and Policy Suggestions

Protection to manufacturing industries in Kuwait is granted on the basis of infant industry argument. The current structure of protection to industries is a fusion of different trade and industrial policy measures that were introduced to achieve different policy objectives.

This paper has analyzed the collective impact of different policy measures on the degree of protection that is granted to domestic industries in Kuwait. To estimate the ERP, both primary and secondary data were utilized.

Average ERP for different industry groups are relatively low in Kuwait when compared with estimates available from other countries, however

the analysis at different industries levels shows the ERP ranges between negatively protected industries and positively protected industries, implying high variance in protection granted to different industries. It became clearer as the analysis identifies unequal distribution of industries in the categories of low protection, moderate protection, high protection, and negative protection. Luckily none of the industries suffer from the phenomenon of negative value-added at world prices, an indicator of extreme industrial inefficiency. The analysis also finds a cascading in the effective protection rate structure; a desirable feature in the structure of protection. However, it finds that export-oriented industries are granted with lower effective protection as compared to import-substitution industries, a clear indication of the presence of anti-export bias in the trade policy regime. This needs to be neutralized for the development of the industrial sector in general and promotion of manufactured export goods in particular.

Based on the analysis, the following recommendations are made to further rationalize the structure of protection in a future economic reform program:

1. Efforts need to be made to remove high dispersion in the structure of protection across industries. It will

remove discrimination to different industries meted through the policy regime, and thus the policy will be consistent with the requirements of the World Trade Organization agreements. Before further rationalizing the structure of protection, it would be useful to conduct a comprehensive analysis like the one reported in this paper by covering all the industrial establishments in the country.

2. Cascading that is present in the protection structure is a good feature and needs to be maintained in any future economic reform program aiming at further rationalization of the tariff structure. This will help in establishing high value-added industries in the country.
3. There is a need to remove anti-export bias in policies, by creating a neutral policy regime for export-promoting and import-substitution industries, if the objective of export

development is to realize. It needs to be underscored that the removal of anti-export bias is vital for the improvement of competitive strength in export-oriented industries and to create efficiency everywhere in the economy. This is especially important as the export firms normally work in competitive environment, therefore promotion of competitive export-oriented industries is likely to have a snowballing effect on other sectors of the economy especially those complementing them.

Notes

The views expressed in the paper are those of the authors and do not necessarily reflect the views of the institute at which they work. The helpful comments by anonymous referees of the journal are gratefully acknowledged. The authors alone are, however, responsible for any remaining errors.

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الملخص

هيكل الحماية الفعّالة في الصناعات التحويلية في دولة الكويت

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تمنح الصناعات التحويلية في دولة الكويت حماية ضد المنافسة الخارجية حتى تتطور وتستطيع أن تنافس في الأسواق العالمية. ويتكوّن هيكل الحماية من الكثير من الحوافز الاقتصادية اللازمة لتطوير هذه الصناعات. وتقوم هذه الورقة العلمية بتحليل أثر إجراءات الحوافز المختلفة على درجة الحماية الممنوحة للصناعات التحويلية في دولة الكويت. ولقد تم استخدام البيانات الأساسية والثانوية لتقدير معدلات الحماية الفعّالة للصناعات التحويلية في دولة الكويت، حيث تم تقدير هذه المعدلات للمجاميع الصناعية المختلفة والأسواق المختلفة لهذه الصناعات. واختتمت هذه الدراسة باقتراح عدد من السياسات اللازمة لزيادة ترشيد وتفعيل هيكل حماية الصناعة في برنامج إصلاح اقتصادي مستقبلي.

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