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Future Prospects of the Garment Industry of Cambodia*

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Abstract

This paper examines the impact of the participation of Vietnam to WTO as well as of the abolition of restrictions on Chinese exports of textiles and clothing to the US and EU on the Cambodian Economy, by using a computable general equilibrium model. A seminal aspect of this paper is that this paper has succeeded in constructing a Cambodia specific computable general equilibrium model by using one of the first ever input-output tables of Cambodia with 35 different production sectors. One of our most striking simulation results is that the welfare loss would be about 905 million US dollars when either the amount of exports of apparel products from Cambodia or the amount of imports of textiles to Cambodia decreases by 30 percent caused by the participation of Vietnam to WTO as well as the abolition of restrictions on Chinese exports. Another striking result is that the government should reduce the production tax rate for the apparel sector by 68.1 percent in order to keep the welfare of Cambodia unchanged when exports of apparel products decreases by 30 percent. Our simulation results predict that the Cambodian economy has substantially been damaged by the participation of Vietnam to WTO as well as the abolition of restrictions on Chinese exports to EU and the US.

Key Words: Cambodia, Computable General Equilibrium Model, Garment Industry, WTO, Textile, Clothing, Apparel, China, Vietnam, Safeguard Restrictions, Multi-Fiber Arrangement (MFA)

JEL Classification: C68, D57, D58, D60, E17, F13, F14 and F17

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1 Introduction

This paper examines the impact of the participation of Vietnam to WTO as well as of the abolition of restrictions on Chinese exports of textile and clothing to the US and EU on the Cambodian garment industry, by using a computable general equilibrium model with one of the first ever input-output tables of Cambodia of year 2004.

The Cambodian economy has heavily relied on its garment industry. The share of the garment industry in the total amount of exports accounts for about 75%, and it has been contributing to the Cambodian economy substantially over the last decade, while poor infrastructure and weak governance have been recognized as obstacles in Cambodia. It has also been providing stable employment opportunities particularly to low skilled females in rural provinces, and the Cambodian economy has expanded by the strong exporting power of its garment industry. The garment industry has been performing quite well even after the Multi-Fiber Arrangement (MFA) was expired in early 2005[1].

However, several advantageous conditions for the Cambodian garment industry have been vanishing: Vietnam has become a member of WTO since early 2007, and restrictions imposed by EU and the US on Chinese exports of textiles and clothing have been removed since the end of 2007 and 2008, respectively. Both Vietnam and China have been exporting similar garment products to the US and EU, and the economic behavior of both countries in the textile and clothing markets of the US and EU substantially affects the Cambodian economy. For instance, 80% of the total value of exports of clothing from Cambodia to the US is estimated to have been generated by the same products as those Vietnam has exported to the US, and 70% of the total value is also estimated to have been generated by the same products as those from China, of which amount has so far been limited by the restriction imposed by the US and EU. As ADB pointed out in its Economic Outlook of year 2006, the participation of Vietnam to WTO has resulted in a substantial increase in Vietnam's exports of textiles and clothing to the US and EU. The abolition of restrictions on Chinese

[1]See Asian Development Bank (2004).

exports to the US and EU at the end of year 2008 also seems to have given damages on the Cambodian garment industry. Thus, the Cambodian government is expected to have correct economic policies under the threat of possible destruction of its garment industry, and it is quite important to investigate the negative effects of the current changes surrounding Cambodia on its economy in order to lead Cambodia to the right direction.

This paper numerically studies these effects on the Cambodian economy by employing a computable general equilibrium model in which the participation of Vietnam to WTO as well as the abolition of restrictions on Chinese exports to the US and EU are both incorporated. The advantages of the model are that it can numerically present the effects, and also that it takes into account all possible channels of the effects on the economy. A seminal aspect of this paper is that this paper has succeeded in constructing a Cambodia specific computable general equilibrium model by using one of the first ever input-output tables of Cambodia of year 2004. Any input-output tables of Cambodia have not been made ever, and this is the first research to produce the social accounting matrix of Cambodia, with which realistic simulations can only be conducted. One of the first ever input-output tables of Cambodia consists of 35 different production sectors, and potential effects not only on the garment industry but also on other different industries can also be investigated.

The results from several simulation scenarios are given as follows: First of all, the negative effect of the participation of Vietnam to WTO as well as the abolition of restrictions on Chinese exports to the US and EU on the welfare of Cambodia is substantially large. When the amount of exports of apparel products decreases by 30%, then the negative effect on welfare is estimated to be about 905 million US dollars. If the participation of Vietnam to WTO or the abolition of restrictions on Chinese exports results in a 30 % decrease in imports of textiles to Cambodia, then the negative effect on welfare is estimated to be about 906 million US dollars. Secondly, if the participation of Vietnam to WTO or the abolition of restrictions on Chinese exports results in a decrease in exports of apparel products from Cambodia or in imports of textiles to Cambodia by more than 15 %, then a substantial

decrease either in the production tax rate for the apparel sector or in the import tariff rate for the textiles sector is needed to keep the welfare level unchanged. Finally, if the government uses the production tax on other sectors to maintain welfare at the same level as before, then the production tax rate for the 'other agriculture' sector, which has been considered in Cambodia as the exporting sector, should be reduced by 74.9% in order to offset the negative effect of the decrease in exports of apparel products on welfare, while the production tax rate for the 'apparel' sector should be reduced by 68.1%. In terms of the other potential exporting sector, or the 'paddy' sector, the government has to subsidy the sector rather than imposing the production tax, in order to keep the Cambodian welfare unchanged. The subsidy rate is estimated to be 3.27%, while the production tax with 0.08% average tax rate has currently been imposed. Furthermore, if the Cambodian government relies on finanacial resources oustside Cambodia from internaitonal institutions such as IMF, WB, and ADB, or donor countries in order to conduct a policy, then reducing the production tax rate for the apparel sector is the best policy to offset the negative effect of the decrease in exports of apparel products, since the amount of the shortage of tax revenue caused by the reduction in the production tax rate is the smallest.

The paper is organized as follows. The next section briefly describes the current garment industry, and section 3 surveys the related literature. Section 4 describes the first ever input-output table of Cambodia, and the social accounting matrix made in detail. Section 5 proposes our simulation analysis with implications from several simulation scenarios, and Section 6 concludes our paper.

2 The Background

There is no doubt that the garment industry has been contributing to the Cambodian economy as one of the top four sectors[2], and its contribution could be found in the achievement

[2]Other three sectors are tourism, agriculture, and construction sectors.

of annual two-digit economic growth rates[3]. The Economic Institute of Cambodia estimates that the share of the garment industry in the total amount of exports in year 2006 accounts for about 75%, and also that the average annual growth rate of the industry between 1995 and 2005 is about 38%[4]. IMF also estimates that the total share of the garment industry in GDP is 13.5% in year 2004, and 12.5% in year 2005[5].

The large number of employment opportunities has also been created by the garment industry. The garment industry generates 70% of the total amount of employment opportunities in the formal manufacturing sector, and the total number of the employed in the garment industry increased from 293,600 in year 2006 to 350,000 in year 2007. It is also estimated that apart from its own job opportunities other 242,000 job opportunities have indirectly been generated more by the garment industry. The share of female employees, who were mainly supplied from rural provinces, in the total number in the industry is about 90%, and the garment industry has been playing an important role in several aspects.

In terms of its exports, the main trading partners are the US and EU, and the amount of its exports has been increasing even after the Multi-Fiber Arrangement (MFA) was expired at the beginning of year 2005, while the amount was expected to decrease at the beginning of the expiry of the MFA[6]. Although the economic value of its exports was only 26.2 million US dollars in year 1995, it has reached about 2,75 billion US dollars in year 2007. As shown in Figure 1, the value of its exports has continued to increase. According to ILO (2008)[7], over 70% of its exports was shipped to the US, and 22% went to Europe. Thus, over 90% of its exports was shipped to the US or EU, and this pattern has continued for several years. Note that Cambodia exports clothing, or apparel products, to the US and EU, and also that it

[3]See World Bank (2007).

[4]See the Econoimc Institute of Cambodia (2006).

[5]See IMF (2006).

[6]Appart from the Multi-Fiber Arrangement (MFA) and restrictions on Chinese exports to the US and EU, there are several factors which have lead the Cambodian garment industry to being successful; the enough amount of cheap labor supply, and its compliance with international standards of working environments. FIAS (2005) pointed out that buyers in the US and EU considerred working environments of employees at their purchase as one of the most important reasons, and also that Cambodia was ranked above Vietnam and China in this aspect.

[7]See ILO-Better Factories Cambodia (2008), http://www.betterfactories.og.

imports textiles mainly from China. Textiles refer to raw materials such as fabric and yarn, and the Cambodian garment industry is a typical production sector to add values on its exports by importing raw materials used for its production. Table 1 and 2 show the amount of exports to the US and EU by different countries, respectively. As shown in both tables, the share of China is the highest both in the US and EU, and the share keeps increasing even when restrictions on Chinese exports started in year 2006. It can also be found in both tables that Vietnam steadily increases its share over time, although its value is still not so high. In particular its share in the US substantially increased in year 2007 when Vietnam became a member of WTO. Thus, there is a possibility that Vietnam could drastically increase its exports in the near future, since it has become a member of WTO since early 2007, and it is obvious that both China and Vietnam can be potential competitors in the near future under the free trade regime for Cambodia in the US and EU markets. In particular, the abolition of the restrictions on Chinese exports to EU and the US at the end of year 2007 and 2008 would result in possible destruction of the Cambodian garment industry.

3 Related Literature

In terms of the effects of the expiry of the Multi-Fiber Arrangement (MFA), a number of studies have predicted that previously advantaged countries would lose their benefits. ADB (2004) estimated that it would result in an annual decrease in the Cambodian GDP at 1.5 % and also in a substantial decrease in employment opportunities. Nordas (2004) pointed out that previously advantaged producers in the US, EU, and Canada would also lose their benefits from the expiry of MFA, and also that China and India would gain from the expiry. Bargawi (2005) concluded that the expiry would induce a rapid decrease in the prices of textiles and clothing products in the global market, and also that Cambodia would suffer from the welfare loss due to the expiry.

On the other hand, Oxfam International (2004) emphasized on its positive effects of the

expiry, while it estimated that the MFA had caused an annual decrease in 27 million job opportunities and in 40 billion exports among developing countries. It argued that some developing countries would benefit from the expiry through the global reconstruction of the textile and clothing industry over the world. Wattanapruttipaisan (2005) and Whalley (2006) also pointed out its positive effects particularly on the Chinese and Indian economies.

Regarding the possible effects of the participation of Vietnam into WTO and of the abolition of restrictions on Chinese exports of textiles and clothing products on the world economy as well as on the Cambodian economy, there have been several studies and reports. Chandra (2005) pointed out that the abolition of restrictions on Chinese exports would damage the Indian economy after the abolition. ADB (2007), World Bank (2007), IMF (2007), the Economic Institute of Cambodia (2007), and the Cambodian Institute of Development Study (2007) all pointed out possible negative effects on the Cambodian economy in their reports.

How this paper differs from past studies is that a rigorous theoretical framework is used to explore the effects of the participation of Vietnam to WTO as well as the abolition of restrictions on Chinese exports on the Cambodian economy. The model of this paper employs a computable general equilibrium (CGE) model. To our best knowledge, there has been no study which numerically discussed several issues related to Cambodia by using a CGE model. This is simply because any input-output table of Cambodia has not been obtained ever, and a social accounting matrix, which is dispensable for a static CGE model, cannot be made without an input-output table. A seminal aspect of this paper is that this paper has succeeded in constructing a Cambodia specific computable general equilibrium model by using one of the first ever input-output tables of Cambodia, and this is the first research to produce the social accounting matrix of Cambodia, with which realistic simulations can only be conducted. This paper can examine the argument of the above reports by using a rigorous theoretical framework, and also numerically studies these effects on the Cambodian economy by presenting several scenarios. The advantages of the model are that it can numerically

present the effects, and also that it takes into account all possible channels of the effects on the economy. Thus, potential effects not only on the garment industry but also on other different industries can also be investigated.

In terms of the input-output table of Cambodia, until very recently any input-output tables of Cambodia were not available, and the first two tables have recently been made independently. One of the first ever input-output tables of Cambodia has been made by Oum (2007), and the other table has been made by Kobayashi et al (2006). The input-output table by Oum (2007) consists of 35 different production sectors, and the input-output table by Kobayashi et al (2006) consists of 43 different production sectors. The table by Oum (2007) overcomes the drawbacks of Kobayashi (2006), and the table by Oum (2007) is used in this paper. Note that the main research interest of these two papers is found in the construction of an input-output table of Cambodia, and the seminal aspect of this paper is that a computable general equilibrium (CGE) model has been made based on one of the first ever input-output tables of Cambodia. Thus, this is the first paper which has not only constructed a CGE model, but also investigated the Cambodian garment industry within a computable general equilibrium framework.

Before moving on to the detailed explanation about our simulation analysis, the input-output table as well as the social accounting matrix used in this paper are described briefly in the next section.

4 Data

One of the most seminal aspects of this paper is that this paper uses one of the first ever input-output tables of Cambodia of year 2004 made by Oum (2007). One of the first ever input-output table of Cambodia used in this paper consists of 35 different production sectors. The 35 different production sectors produce each commodity so that there are 35 different commodities. There are also 4 different factors; capital, unskilled labor, skilled labor, and

land. The input-output table by Oum (2007) mainly uses the data from the Economic Institute of Cambodia, and it also uses the data from National Institute of Statistic (NIS) and National Bank of Cambodia (NBC).

For simplicity, in order to concentrate on the garment industry, this paper re-categorizes the 35 different production sectors into 14 different production sectors in our social accounting matrix. The 14 different production sectors consist of (1.) paddy(No. 1), (2.) other agriculture (No. 2˜8), (3.) textile (No. 9), (4.) apparel (No. 10), (5.) manufacturing (No. 11˜17), (6.) equipment (No. 18˜21), (7.) other manufacture (No. 22), (8.) utility (No. 23˜24), (9.) construction (No. 25), (10.) hotel (No. 26), (11.) service (No. 27˜30), (12.) finance (No. 31), (13.) real estate business (No. 32), and (14.) other services (No..33˜35). The numbers in the parentheses of the above groups correspond to those defined in the input-output table by Oum (2007). The simplified input-output table used in this paper is given by Table 3, and the social accounting matrix used in the CGE model is also given by Table 4.

5 Simulation Analysis

In order to obtain the numerical effects of the participation of Vietnam to WTO as well as of the abolition of restrictions on Chinese exports to the US and EU on the Cambodian economy, a computable general equilibrium model is used in this paper. The computable general equilibrium model of this paper employs the conventional model[8], in which there are households (consumers), private firms of 14 different sectors, and the government. The detailed explanation about the model is given in Appendix. Households are assumed to maximize their utility, which is defined over 14 different final consumption goods (commodities). The government is assumed to collect several taxes in order to satisfy its budget constraint. The behavior of private firms is described by the conventional tree structure, where private firms are assumed to maximize their profits as if they consider their profits at several steps

[8]In terms of the conventional model, see Shoven and Whalley (1992) or Hosoe et. al. (2004).

of their decision making process. The conventional tree structure is given by Figure 2. At step 1, a private firm, i, is assumed to use unskilled labor, skilled labor, capital, and land to produce its composite goods, Y_i. Then, the firm is assumed to produce its domestic goods, Z_i, by using its own Y_i and $X_{i,j}$ at the second step. $X_{i,j}$ denotes the final consumption goods produced by firm j used by firm i for its production. Thus, $X_{i,j}$ is the amount of the final consumption goods produced by firm j for the intermediate production process of firm i. At the third step, the firm is assumed to decompose its domestic goods, Z_i, into exported goods, E_i, and final domestic goods, D_i. This step is concerned about its optimal decision in terms of the amount of its product to be exported. At the final step (the fourth step), the firm is assumed to produce its final consumption goods, Q_i, by using its final domestic goods, D_i, and imported goods, M_i. This step corresponds to its optimal decision on how much it uses imported goods, M_i, and its own goods, D_i, to produce its final consumption goods, Q_i, which are consumed by domestic households. Note that all market clearing conditions are used to determine all prices endogenously in their corresponding markets, and also that that at each step the private firm is assumed to determine the amount of relevant variables in order to maximize its profits.

By the assumption of the above tree structure, all decision making processes can be simplified, and the optimal behavior about all different decisions can be incorporated. Note that all parameter values in the model are calculated by using the actual social accounting matrix discussed in the previous section, so that calculated values of endogenous variables obtained within the model also become quite realistic. Note also that the social accounting matrix used in this paper has been made from one of the first ever input-output tables of Cambodia. The benchmark model obtained by using the actual social accounting matrix is given in the next section.

5.1 Benchmark and Calibration

The benchmark case should reflect the actual economy of Cambodia in order to make the subsequent simulation scenarios realistic. Thus, the benchmark model should carefully be calibrated until the calculated values of all endogenous variables obtained within the model become close to the actual values. Table 5 shows the calculated values of relevant endogenous variables and their corresponding actual values in year 2004. As shown in Table 5, the benchmark case has successfully been able to reproduce the real economy within the model. Table 6 also shows the values of all parameters which resulted in the successful benchmark case. Note that all parameter values were calculated by using the actual social accounting matrix so that the benchmark case could realize a very realistic circumstance close to the actual economy of Cambodia. Since the benchmark case represents the actual Cambodian economy, it is now used to compare the current Cambodian economy with possible situations caused by the participation of Vietnam to WTO as well as of the abolition of restrictions on Chinese exports to the US and EU, by simulating several scenarios in the next section.

5.2 Several Scenarios

This section presents several scenarios in order to investigate the potential effects of the participation of Vietnam to WTO as well as of the abolition of restrictions on Chinese exports to the US and EU. As mentioned before, the Cambodian garment industry imports textiles (raw materials) mainly from China, and it exports their products, or apparel products, to the US and EU. Thus, the potential effects of the participation of Vietnam to WTO as well as of the abolition of restrictions on Chinese exports to the US and EU can be explored through the two channels; the effect on the exports of apparel products (clothing), and the effect on the imports of textiles (raw materials).

Scenario 1: The Effect on the Exports from Cambodia

The effect on the Cambodian exports of apparel products will be explored by changing

the economic value of exports of apparel products. The participation of Vietnam to WTO as well as the abolition of restrictions on Chinese exports to the US and EU is obviously expected to result in a more competitive environment for the Cambodian garment industry. A more competitive environment would eventuate in a decrease in the economic value of exports of apparel products from Cambodia. The decrease in the economic value of exports of apparel products from Cambodia is a direct effect of an increase in supply of garment products by Vietnam and China. In this scenario, the effect of a gradual decrease in the economic value of exports of apparel products will be simulated. The economic values of exports of apparel products are simulated to decrease by 5, 10, 15, 20, 25, and 30% from the actual value. As shown in Table 7, the actual level of exports of apparel products is 2138.1631 million US dollars.

Scenario 2: The Effect on the Imports to Cambodia

The Cambodian garment industry imports textiles (raw materials) particularly from China, and around 50% of the total sales of apparel products (clothing) is generated by imported textiles from China. This implies that Cambodia will also be affected by the abolition of restrictions on Chinese exports to the US and EU through the changes in the amount of textiles imported from China. An expansion of Chinese exports to the US and EU would induce an increase in demand for textiles within China, so that it would reduce the amount of textiles which could otherwise be exported from China to Cambodia. In this scenario, the effect of a gradual decrease in the economic value of imports of textiles (raw materials) imported to Cambodia on the Cambodian economy. The effects of the changes in the economic values of imports of textiles are simulated to decrease by 5, 10, 15, 20, 25, and 30% from the actual level. Table 9 shows that the actual amount of imports of textiles is 1229.811852 million US dollars.

Scenario 3: The Effect of the Government Policy

In this scenario, the effects of two government policy instruments will be simulated;

the production tax on production of apparel products, and the import tariff on textiles. The Cambodian government can decrease the production tax rate for production of apparel products as well as the import tariff rate for imports of textiles, in order to protect the garment industry. The effect of the changes in both rates will be explored based on utility. The welfare comparison is given by the equivalent variation in this paper. The effect of the reduction of the production tax rate will be simulated when the amount of exports of apparel products decreases, while the effect of the reduction of the tariff rate will be explored when the amount of imports of textiles decreases.

The effect of the reduction of both rates by 5, 10, 15, 20, 25, and 30% from the actual rate will be studied. The actual rates are calculated from the actual input-output table by dividing the total amount of the tax by the corresponding economic value, so that the calculated rate is the actual average rate. The actual average rate of the production tax on apparel products is 1.02%, and the actual average tariff rate for textiles is 1.17% as shown in Table 5.

Scenario 4: The Effect of Other Government Policies

The participation of Vietnam to WTO as well as the abolition of restrictions on Chinese exports to the US and EU is expected to reduce the welfare of Cambodia. On the other hand, the reduction of the production tax rate for apparel products and the import tariff rate for textiles will partly offset the negative effect of a decrease in exports of apparel products as well as in imports of textiles on the Cambodian garment industry. Note that the Cambodian economy has heavily relied on its garment industry, and also that the share of the garment industry in the total amount of exports accounts for about 75%. This implies that the Cambodian economy has expanded by the export-driven power, and the key issue to have stable economic growth for Cambodia is to stimulate other sectors which export their products, when a large damage on the garment industry is not avoidable. This scenario tries to find the production tax rate for other exporting sectors in order to maintain welfare at the same level as before. This scenario also investigates how much the government needs

to finance the budget to maintain welfare. Since the reduction of the production tax rate should be followed by a decrease in the total amount of tax revenue, the government has to face the shortage of tax revenue to maintain welfare provided that the government does not change all other government policies. In order to highlight the pure effect of the reduction in the production tax rate, the government is assumed to keep other policies unchanged except for the production tax rate. The amount of the shortage of tax revenue is interpreted as the amount of government deficits. This scenario assumes that government deficits are financed by resources provided by international institutions outside Cambodia, so that there is no effect on the Cambodian economy in the short-run. This scenario is interpreted as the case where the Cambodian government borrows money to conduct a policy from international institutions such as IMF, WB, and ADB, or from other donor countries as ODA.

This scenario simulates changes in the production tax rate when the amount of exports of apparel products decreases. The production taxes on the four different sectors are explored; the production tax on the 'apparel', 'paddy', 'other agriculture', and 'services' sectors. The production tax rate for each sector is adjusted to maintain the same welfare level as before a decrease in the amount of exports of apparel products occurs. This scenario simulates the endogenous production tax rate which results in the unchanged welfare level even after the garment industry is damaged. It is assumed that the government can give subsidies to the sector if the zero production tax rate for the sector is not low enough to keep the welfare of Cambodia unchanged. The negative production tax rate is interpreted as the subsidy rate.

Note that the ' paddy' and the 'other agriculture' sectors are both considered in Cambodia as the potential sectors which could expand the amount of exports when the garment industry is heavily damaged. Note also that the amount of exports of the 'services' sector is the second largest next to the apparel sector. This scenario explores how much the government has to change the production tax rate for the potential exporting sector at least to maintain the welfare level when the garment industry is damaged by the participation of Vietnam to WTO as well as the abolition of restrictions on Chinese exports to the US and EU.

5.3 Results and Implications

The simulation results are presented from Table 7 to 12. As it is shown in Table 5, the values of the benchmark model are very close to the actual values of year 2004, and the benchmark situation in all the tables corresponds to the situation before Vietnam participated to WTO or the restrictions on Chinese exports to EU and the US were abolished. Thus, the comparison of the simulated results with the benchmark case explores the effect of the participation of Vietnam to WTO as well as the abolition of restrictions on Chinese exports on the Cambodian economy. The potential effect of the participation of Vietnam to WTO as well as the abolition of restrictions on Chinese exports on the whole economy of Cambodia through all possible channels are given as follows.

Scenario 1: The Effect on the Exports from Cambodia

In this scenario, the effect of a decrease in the amount of exports of apparel products from Cambodia, which the participation of Vietnam to WTO and the abolition of restrictions on Chinese exports to EU and the US would have resulted in, has been simulated. Table 7 shows the effect on the economic value of economic variables including welfare measured by the equivalent variation, and Table 8-1 and 8-2 present the effect on the quantity as well as the price of the final consumption good, Q. Note that the economic value of the amount of exports of apparel products in the benchmark case is 2138.16 million US dollars, and the economic value of the amount of exports of apparel products when it is reduced by 5, 10, 15, 20, 25, or 30% from the actual value of year 2004 is 2031.25, 1924.34, 1817.43, 1710.53, 1603.62, and 1496.71 million US dollars, respectively.

Table 7 shows the detailed effect of the decrease in exports of apparel products on the Cambodian economy measured in the economic value. The value of the equivalent variation measures the negative effect on the welfare of Cambodia in money, and the negative effect of a 30% decrease in exports of apparel products is estimated to be 904.89 million US dollars. As the estimated values of the equivalent variation listed in the last row of Table 7 show,

the potential negative effect of the participation of Vietnam to WTO as well as the abolition of restrictions on Chinese exports to EU and the US on the whole economy of Cambodia is estimated to be very large.

In terms of the effect on the domestic final consumption good, Q, Table 8-1 and 8-2 show the results. Table 8-2 shows the relative changes in the quantity and the price of Q. These two tables show that the price of the sectors such as '(1) paddy', '(2) other agriculture', and '(10) TrdHotel (=Tourism)' changes more sensitively, but the quantity of these sectors does not compared to other sectors. This implies that the market of these goods is relatively inelastic than other goods, and the negative effect of a decrease in exports of apparel products is adjusted mainly by the price change rather than the quantity.

Scenario 2: The Effect on the Imports to Cambodia

Scenario 2 has simulated another effect of the abolition of restrictions on Chinese exports to EU and the US; a decrease in imports of textiles to Cambodia, mainly from China. The simulation results are given from Table 9 to 10-2. Table 10-1 and 10-2 present the effect of a decrease in imports of textiles on the quantity as well as the price of the final consumption good, Q. Note that the economic value of the amount of imports of textiles in the benchmark case is 1229.81 million US dollars, and the economic value of the amount of imports of textiles when it is reduced by 5, 10, 15, 20, 25, or 30% from the actual value of year 2004 is 1168.32, 1106.83, 1045.34, 983.85, 922.36, and 860.86 million US dollars, respectively.

Table 9 shows the detailed effect of the decrease in imports of textiles measured in the economic value. As Table 9 shows, a decrease in imports of textiles to Cambodia also gives a damage to the Cambodian economy substantially. The negative effect of a 30% decrease in imports of textiles is estimated to be 905.66 million US dollars. Furthermore, the magnitude of the negative effect on welfare would be larger than that of the negative effect of a decrease in exports of apparel products. The comparison of the equivalent variation of scenario 2 with that of scenario 1 shows not only that the estimated negative effect of a decrease in imports of textiles is larger than that of a decrease in exports of apparel products in all

cases from 5 to 30% decreases, but also that the difference becomes larger as decreases in the economic value of exports of apparel products and imports of textiles becomes larger. When the economic value of exports of apparel products and of imports of textiles decreases by 5, 10, 15, 20, 25, and 30% from the benchmark case, then the negative effect of a decrease in imports of textiles is estimated to be 0.65, 0.67, 0.69, 0.71, 0.74, and 0.76 million more dollars than that of a decrease in exports of apparel products, respectively.

In terms of the effect on the domestic final consumption good, Q, Table 10-1 and 10-2 show the results. Table 10-2 shows the relative changes in the quantity and the price of Q. Table 10-1 and 10-2 both show similar results to Table 8-1 and 8-2.

Scenario 3: The Effect of the Government Policy

In this scenario, the effect of changes in two government policy instruments has been simulated. Table 11-1 shows the effect of the reduction of the production tax rate for the apparel sector when exports of apparel products decreases, while Table 11-2 shows the effect of the reduction of the tariff rate for the textiles sector when imports of textiles decreases. The reduction of both rates is expected to protect the garment industry. The effect of the reduction is measured by the equivalent variation in Table 11-1 and 11-2. As it is expected, the reduction of both rates induces an increase in welfare measured in money. However, except for the cases in which a decreasing rate of either exports of apparel products or imports of textiles is relatively small, the equivalent variation in both tables shows a negative value, implying that even a 30% decrease in either the production tax rate or the import tariff rate cannot recover the benchmark situation. Thus, a 30% decrease in either the production tax rate or the import tariff rate is not large enough to maintain the same welfare level as before. For instance, when the amount of exports of apparel products decreases by 30%, the welfare loss is estimated to still be 51.50 million US dollars even though the production tax rate for the apparel sector is reduced by 30% from the tax rate of 1.02% to 0.71% as shown in Table 11-1. In the case of a 30% decrease in the amount of imports of textiles, Table 11-2 shows that the estimated welfare loss is still 109.72 million US dollars even when the tariff rate for

the textiles sector is reduced by 30% from the tariff rate of 1.17% to 0.81%.

When the decreasing rate of either exports of apparel products or imports of textiles is relatively small, the government can improve welfare by reducing either the production tax rate for apparel products or the import tariff rate for textiles. Table 11-1 shows that a higher welfare level can be achieved by reducing the production tax rate by 15% (25%) when the amount of exports of apparel products decreases by 5% (10%). Table 11-2 also shows that a higher welfare level can be achieved by reducing the import tariff rate by 25% when the amount of imports of textiles decreases by 5%.

Then the next question would be how much the government should reduce either the production tax rate or the import tariff rate in order to keep the welfare level unchanged even after either the amount of exports of apparel products or the amount of imports of textiles decreases. The next scenario has simulated several cases to answer the question.

Scenario 4: The Effect of Other Government Policies

The Cambodian economy has expanded by the export-driven power, and it is important for the Cambodian government to stimulate the exporting sectors in order to achieve stable economic growth if a large damage on the garment industry is not avoidable. Scenario 4 has examined the production tax rate for several exporting sectors in order to maintain welfare at the same level as before. In this scenario, three exporting sectors have been investigated apart from the apparel sector; 'paddy', other agriculture', and 'services' sectors. Both of the 'paddy', and 'other agriculture' sectors have been considered in Cambodia as the potential sectors which could expand exports in order to achieve higher economic growth. As Table 4 shows, the amount of exports of the 'services' sector is the second largest.

The simulation results are presented in Table 12. Table 12 also shows the amount of the shortage of tax revenue when the government reduces the production tax rate for the corresponding sector in order to keep the welfare level unchanged even after exports of apparel products decreases. For instance, if exports of apparel products decreases by 30%, then the production tax rate for the 'other agriculture' sector should be reduced by 74.9% in

order to offset the negative effect of the decrease in exports of apparel products on welfare, while the production tax rate for the 'apparel' sector should be reduced by 68.1%. Note that when exports of apparel products decreases by 30% the reduction in the production tax rate for the 'services' sector to the zero value is not large enough, and the government has to subsidize the 'services' sector by giving a negative production tax rate. The subsidy rate is 1.03%. In terms of the 'paddy' sector, the government has to subsidy the sector even when a 5% decrease in exports of apparel products occurs. When the amount of exports of apparel products decreases by 30% from the level of year 2004, then the subsidy rate should be 3.27%, while the production tax rate for the 'paddy' sector is 0.08%, thus implying that the government has to reduce the production tax rate by 4250% from the level of year 2004, in order to offset the negative effect of the decrease in exports of apparel products.

Another result is that reducing the production tax rate for the apparel sector is the best policy to offset the negative effect of the decrease in exports of apparel products on welfare, since the amount of the shortage of tax revenue is the smallest when the production tax rate for the apparel sector is reduced. Note that the shortage must be financed by other government policies. If it is difficult for the government to increase the tax rate of other taxes, then issuing government bonds would be an alternative method which the government tends to use. If the government can keep the welfare level unchanged with the smallest amount of the shortage of tax revenue by reducing the production tax rate for the apparel sector, then such a policy should be implemented.

6 Concluding Remarks

This paper has examined the impact of the participation of Vietnam to WTO as well as of the abolition of restrictions on Chinese exports of textile and clothing to the US and EU on the Cambodian garment industry, by using a computable general equilibrium model with one of the first ever input-output tables of Cambodia of year 2004.

The results from several simulation scenarios are given as follows: First of all, the negative effect of the participation of Vietnam to WTO as well as the abolition of restrictions on Chinese exports to the US and EU on the welfare of Cambodia is substantially large. When the amount of exports of apparel products decreases by 30%, then the negative effect on welfare is estimated to be about 905 million US dollars. If the participation of Vietnam to WTO or the abolition of restrictions on Chinese exports results in a 30 % decrease in imports of textiles to Cambodia, then the negative effect on welfare is estimated to be about 906 million US dollars. Secondly, if the participation of Vietnam to WTO or the abolition of restrictions on Chinese exports results in a decrease in exports of apparel products from Cambodia or in imports of textiles to Cambodia by more than 15 %, then a substantial decrease either in the production tax rate for the apparel sector or in the import tariff rate for the textiles sector is needed to keep the welfare level unchanged. Finally, if the government uses the production tax on other sectors to maintain welfare at the same level as before, then the production tax rate for the 'other agriculture' sector should be reduced by 74.9% in order to offset the negative effect of the decrease in exports of apparel products on welfare, while the production tax rate for the 'apparel' sector should be reduced by 68.1%. In terms of the other potential exporting sector, or the 'paddy' sector, the government has to subsidy the sector rather than imposing the production tax, in order to keep the Cambodian welfare unchanged. The subsidy rate is estimated to be 3.27%, while the production tax with 0.08% average tax rate has currently been imposed. Furthermore, if the Cambodian government relies on finanacial resources oustside Cambodia from internaitonal institutions such as IMF, WB, and ADB, or donor countries in order to conduct a policy, then reducing the production tax rate for the apparel sector is the best policy to offset the negative effect of the decrease in exports of apparel products, since the amount of the shortage of tax revenue caused by the reduction in the production tax rate is the smallest.

Appendix: Model[9]

The Cambodian economy is assumed to consist of 14 different production sectors, households, and the government. All the production sectors are assumed to maximize their profit, and households are assumed to maximize their utility. The government is assumed to determine its tax revenue and its consumption in order to satisfy its budget constraint. The economy is assumed to be fully competitive, so that all prices are determined in the relevant market in order to equate the amount of demand to the amount of supply at its fully competitive level in equilibrium.

Households are assumed to be homogenous, and their utility is given by:

$$U\left(X_1, X_2, \cdots, X_{14}\right) = \prod_{i=1}^{14} X_i^{\alpha_i}, \tag{1}$$

where X_i denotes consumption of good i. $\sum_{i=1}^{14} \alpha_i = 1$ is assumed. The parameter value of each α_i is determined by using the actual social accounting matrix, which is given in Table 4.

Households are assumed to maximize (1) with respect to their consumption goods subject to their budget constraint such that:

$$\sum_{i=1}^{14} p_i X_i = I\left(1 - \tau^I\right) - S^I,$$

where p_i and I denote the price of good i and income, respectively. τ^I is the proportional income tax rate, and it is calculated by using the actual social accounting matrix. S^I denotes the amount of savings, and households are assumed to save the constant amount relative to their disposal income[10]. The amount of savings is assumed to be given by

$$S^I = s^I\left(1 - \tau^I\right) I,$$

[9] This conventional model depends on Hosoe et. al.(2004).

[10] The assumption that the amount of savings is exogenously given is made only for the model to be consistent to the actual social accounting matrix, and this assumption is very common in the literature.

where the constant ratio, s^I, is calculated by using the actual social accounting matrix, and it is given exogenously. Then income is given by

$$I = r\overline{K} + w_{us}\overline{L^{us}} + w_s\overline{L^s} + hN,$$

where $\overline{K}$, $\overline{L^{us}}$, $\overline{L^s}$, and $\overline{N}$ denote the initial endowments of capital, unskilled labour, skilled labor, and land, respectively. r, w_{us}, w_s, and h are the prices of capital, unskilled labour, skilled labor, and land, respectively. Note that the amounts of $r\overline{K}$, $w_{us}\overline{L^{us}}$, $w_s\overline{L^s}$, and $h\overline{N}$ are all obtained from the actual social accounting matrix.

The first order conditions yield the demand functions such that:

$$X_i = X_i\left(p_i, Y; \alpha_i\right) = \frac{\alpha_i I\left(1-\tau^I\right)\left(1-s^I\right)}{p_i},\ i = 1, 2, \cdots, 14. \tag{2}$$

Note that α_i can be calculated by using (2) and the actual social accounting matrix so that:

$$\alpha_i = \frac{p_i X_i}{I\left(1-\tau^I\right)\left(1-s^I\right)} = \frac{p_i X_i}{\left(1-s^I\right)\left(1-\tau^I\right)\left(r\overline{K} + w_{us}\overline{L^{us}} + w_s\overline{L^s} + h\overline{N}\right)},\ i = 1, 2, \cdots, 14,$$

where $p_i X_i$ can also be obtained from the actual social accounting matrix.

Although each firm is assumed to make a decision over several different items, its multiple decision is described by the tree structure. In the tree structure, the optimal behavior of each firm which makes a decision over different items is described as if the firm always makes a decision between two different choices at different steps. This assumption simplifies a complicated decision over several items by each firm. Each step is also shown in Figure 2.

Step 1: The production of composite goods

Each firm is assumed to produce its composite goods by using capital, unskilled labor, skilled labor, and land. Each firm is assumed to maximize its profit given by:

$$\pi_i = p_i^Y Y_i\left(K_i, L_i^{us}, L_i^s, N_i\right) - rK_i - w_{us}L_i^{us} - w_s L_i^s - hN_i, \tag{3}$$

where Y_i and p_i^Y denote the composite goods produced by firm i and its price, respectively. K_i, L_i^{us}, L_i^s, and N_i denote capital, unskilled labor, skilled labor, and land used by firm i in order to produce its composite goods, respectively. The production technology is given by:

$$Y_i\left(K_i, L_i^{us}, L_i^s, N_i\right) = K_i^{\beta_{K,i}}\left(L_i^{us}\right)^{\beta_{L^{us},i}}\left(L_i^s\right)^{\beta_{L^s,i}} N^{\beta_{N,i}},\ i = 1, 2, \cdots, 14, \tag{4}$$

where $\beta_{K,i} + \beta_{L^{us},i} + \beta_{L^s,i} + \beta_{N,i} = 1$ is assumed for all $i = 1, 2, \cdots, 14$. Each firm is assumed to maximize (3) with respect to skilled labor, unskilled labor, land, and capital subject to (4), and the first order conditions yield the demand functions such that:

$$K_i = K_i\left(p_i^Y, r, w_{us}, w_s, h; \beta_{K,i}, \beta_{L^{us},i}, \beta_{L^s,i}, \beta_{N,i}\right) = \frac{\beta_{K,i}}{r} p_i^Y Y_i, \tag{5a}$$

$$L_i^{us} = L_i^{us}\left(p_i^Y, r, w_{us}, w_s, h; \beta_{K,i}, \beta_{L^{us},i}, \beta_{L^s,i}, \beta_{N,i}\right) = \frac{\beta_{L^{us},i}}{w_{us}} p_i^Y Y_i, \tag{5b}$$

$$L_i^s = L_i^s\left(p_i^Y, r, w_{us}, w_s, h; \beta_{K,i}, \beta_{L^{us},i}, \beta_{L^s,i}, \beta_{N,i}\right) = \frac{\beta_{L^s,i}}{w_s} p_i^Y Y_i, \tag{5c}$$

$$N_i = N_i\left(p_i^Y, r, w_{us}, w_s, h; \beta_{K,i}, \beta_{L^{us},i}, \beta_{L^s,i}, \beta_{N,i}\right) = \frac{\beta_{N,i}}{h} p_i^Y Y_i, \tag{5d}$$

$$i = 1, 2, \cdots, 14.$$

Note that $\beta_{K,i}$, $\beta_{L^{us},i}$, $\beta_{L^s,i}$, and $\beta_{N,i}$ can be calculated by using (5a), (5b), (5c), (5d), and the actual social accounting matrix so that:

$$
\begin{aligned}
\beta_{K,i} &= \frac{rK_i}{p_i^Y Y_i}, \\
\beta_{L^{us},i} &= \frac{w_{us} L_i^{us}}{p_i^Y Y_i}, \\
\beta_{L^s,i} &= \frac{w_s L_i^s}{p_i^Y Y_i}, \\
\beta_{N,i} &= \frac{hN_i}{p_i^Y Y_i} \\
i &= 1, 2, \cdots, 14,
\end{aligned}
$$

where $rK_i, w_{us}L_i^{us}$, $w_s L_i^s$, hN_i and $p_i^Y Y_i$ can be obtained from the actual social accounting matrix.

Step 2: The production of domestic goods

Each firm is assumed to produce domestic goods, Z_i, by using intermediate goods and its own composite goods, which production has been described at step 1. The optimal behavior of each firm in terms of the production of domestic goods can be described such that:

$$
\begin{aligned}
\underset{Y_i, X_{i,j}}{Max}\ \pi_i &= p_i^Z Z_i - \left(p_i^Y Y_i - \sum_j^{14} p_j^X X_{i,j} \right), \\
st \quad Z_i &= \min \left(\frac{X_{i,j}}{ax_{i,j}}, \frac{Y_i}{ay_i} \right),\ i = 1, 2, \cdots, 14,
\end{aligned}
$$

where $X_{i,j}$ and p_j^X denote intermediate good j used by firm i and its price, respectively. p_i^Z is the price of Z_i. $ax_{i,j}$ denotes the amount of intermediate good j used for producing one unit of a domestic good of firm i , and ay_i denotes the amount of its own composite good for producing one unit of its domestic good. Note that the production function at this stage is assumed to be the Leontief type. Using $ax_{i,j}$ and ay_i, and assuming that the market is fully competitive, the zero-profit condition can be written by:

$$p_i^Z = p_i^Y ay_i + \sum_j^{14} p_j^X ax_{i,j},\ i = 1, 2, \cdots, 14.$$

Step 3: Decomposition of Domestic Goods into Exported Goods and Final Domestic Goods

The optimal decision making by firm i in terms of the amount of exports of its goods is described as the the decomposition of Z_i $(i = 1, 2, \cdots, 14)$ into exported goods, E_i, and final domestic goods, D_i. Each firm is assumed to maximize its profit such that:

$$\pi_i = p_i^e E_i + p_i^d D_i - (1 + \tau_i^p)\, p_i^Z Z_i, \tag{6}$$

where p_i^e and p_i^d denote the price when the domestic goods are sold abroad, and the price when the domestic goods are sold domestically, respectively. Note that p_i^e is measured in the domestic currency. τ_i^p is the tax rate of a production tax imposed on the production of Z_i, and it is calculated by using the actual social accounting matrix. The decomposition is assumed to follow the Cobb-Douglas technology such that:

$$Z_i = E_i^{\kappa_i^e} D_i^{\kappa_{ii}^d},\ i = 1, 2, \cdots, 14 \tag{7}$$

where $\kappa_i^d + \kappa_i^e = 1$ ($i = 1, 2, \cdots, 14$) is assumed. Each firm is assumed to maximize (6) with respect to E_i and D_i subject to (7), and the first order conditions yield

$$E_i = E_i\left(p_i^e, p_i^d, p_i^Z; \tau_i^p, \kappa_i^d, \kappa_i^e\right) = \frac{\kappa_i^e\,(1 + \tau_i^p)\, p_i^Z Z_i}{p_i^e}, \tag{8a}$$

$$D_i = D_i\left(p_i^e, p_i^d, p_i^Z; \tau_i^p, \kappa_i^d, \kappa_i^e\right) = \frac{\kappa_i^d\,(1 + \tau_i^p)\, p_i^Z Z_i}{p_i^d},\ i = 1, 2, \cdots, 14. \tag{8b}$$

Note that κ_i^e and κ_i^d can be calculated by using (8a), (8b), and the actual social accounting matrix so that:

$$\kappa_i^e = \frac{p_i^e E_i}{(1+\tau_i^p)\, p_i^Z Z_i},$$
$$\kappa_i^d = \frac{p_i^d D_i}{(1+\tau_i^p)\, p_i^Z Z_i},\ i = 1, 2, \cdots, 14,$$

where $p_i^e E_i$, $p_i^d D_i$, $p_i^Z Z_i$ and $\tau_i^p p_i^Z Z_i$ can be obtained from the actual social accounting matrix.

Step 4: The Production of the final goods

Denote the final consumption goods by Q_i $(i = 1, 2, \cdots, 14)$. The final consumption goods are assumed to be produced by using the final domestic goods, D_i, and the imported goods, M_i. This step corresponds to the optimal decision making behavior of each firm in terms of the amount of imported goods which are used in its production process. The production technology at this final step is given by the following Cobb-Douglas function:

$$Q_i = M_i^{\gamma_i^m} D_i^{\gamma_i^d},\ i = 1, 2, \cdots, 14, \tag{9}$$

where γ_i^j $(j = m, d; i = 1, 2, \cdots, 14)$ is the ratio between imported goods and final domestic goods, and it is assumed that $\gamma_i^m + \gamma_i^d = 1$ $(\ i = 1, 2, \cdots, 14)$. Each firm is assumed to maximize its profit with respect to M_i and D_i subject to (9). Its profit is given by:

$$\pi_i = p_i^Q Q_i - (1+\tau_i^m)\, p_i^m M_i - p_i^d D_i,\ i = 1, 2, \cdots, 14,$$

where p_i^Q and τ_i^m denote the price of its final consumption goods, Q_i, and the import tariff rate, respectively. The import tariff rate is calculated by using the actual social accounting matrix. Then, the first order conditions yield

$$M_i = M_i\left(p_i^m, p_i^d, p_i^Q; \tau_i^m, \gamma_i^m, \gamma_i^d\right) = \frac{\gamma_i^m p_i^Q Q_i}{\left(1+\tau_i^m\right) p_i^m{}_i}, \tag{10a}$$

$$D_i = D_i\left(p_i^m, p_i^d, p_i^Q; \tau_i^m, \gamma_i^m, \gamma_i^d\right) = \frac{\gamma_i^d p_i^Q Q_i}{p_i^d},\ i = 1, 2, \cdots, 14. \tag{10b}$$

Note that γ_i^m and γ_i^d can be calculated by using (10a), (10b), and the actual social accounting matrix so that:

$$\gamma_i^m = \frac{\left(1+\tau_i^m\right) p_i^m M_i}{p_i^Q Q_i},$$
$$\gamma_i^d = \frac{p_i^d D_i}{p_i^Q Q_i},\ i = 1, 2, \cdots, 14,$$

where $p_i^m M_i$, $p_i^d D_i$, $p_i^Q Q_i$ and $\tau_i^m p_i^m M_i$ can be obtained from the actual social accounting matrix.

The government is assumed to impose several taxes to satisfy its budget constraint. Its budget constraint is given by:

$$\sum_{i=1}^{14} p_i^Q X_i^g + S^g = T^I + T^p + T^m,$$

where the left hand side is the total government expenditure, and the right hand side is the total government revenue. X_i^g and S^g denote government consumption of final consumption good i, and the government savings, respectively. The total government revenue, or the total tax revenue is given by:

$$T^I = \tau^I I = \tau^I \left(r\overline{K} + w\overline{L} \right),$$
$$T^p = \sum_{i=1}^{14} \tau_i^p \left(p_i^Z Z_i \right),$$
$$T^m = \sum_{i=1}^{14} \tau_i^m \left(p_i^m M_i \right),$$

where T^I, T^p, and T^m denote the total income tax revenue, the total production tax revenue, and the total import tariff revenue, respectively. The government is assumed to save the constant amount relative to the total amount of tax revenue, and the government savings are assumed to be given by

$$S^g = s^g \left(T^I + T^p + T^m \right),$$

where the constant ratio, s^g, is given exogenously.

The equilibrium condition of each factor market is given by:

$$\overline{K} = \sum_{i=1}^{14} K_i,$$
$$\overline{L^{us}} = \sum_{i=1}^{14} L_i^{us},$$
$$\overline{L^s} = \sum_{i=1}^{14} L_i^s,$$
$$\overline{N} = \sum_{i=1}^{14} N_i.$$

In terms of the market clearing condition of good i $(i = 1, 2, \cdots, 14)$, a private investment sector is introduced in order to close the economy in this paper[11]. Denoting the amount of

[11]This is also the conventional assumption in the literature.

good i consumed by the private investment sector by X_i^s, the market clearing condition of good i is given by:

$$Q_i = X_i + X_i^g + X_i^s + \sum_j^{14} X_{i,j},\ i = 1, 2, \cdots, 14,$$

where the left hand side is the total supply, and the right hand side is the total demand for good i. Note that the budget constraint of the private investment sector is given by:

$$\sum_{i=1}^{14} p_i^Q X_i^s = S^g + S^I + S^f,$$

where the left hand side is the total amount of its consumption, and the right hand side is the total amount of its income. S^f denotes the total amount of savings by the foreign sector, or the deficits in the current account, and it is given by subtracting exports from imports. Since both the amount of exports and the amount of imports can be obtained from the actual social accounting matrix, S^f can be calculated from the actual social accounting matrix, and thus it is exogenously given in the model. Furthermore, the foreign trade balance is given by

$$\sum_{i=1}^{14} p_i^{w,e} E_i + S^f = \sum_{i=1}^{14} p_i^{w,m} M_i,$$

where $p_i^{w,e}$ and $p_i^{w,m}$ denote the world prices of export goods, and import goods of good i, respectively, and both of them are assumed to be given exogenously. Since p_i^e and p_i^m are both measured in the domestic currency, they are also expressed such that:

$$p_i^e = \varepsilon p_i^{w,e},$$
$$p_i^m = \varepsilon p_i^{w,m},\ i = 1, 2, \cdots, 14,$$

where ε denotes the exchange rate. Note that the exogeneity assumption in terms of the

world prices implies that the exchange rate is endogenously determined within the model.

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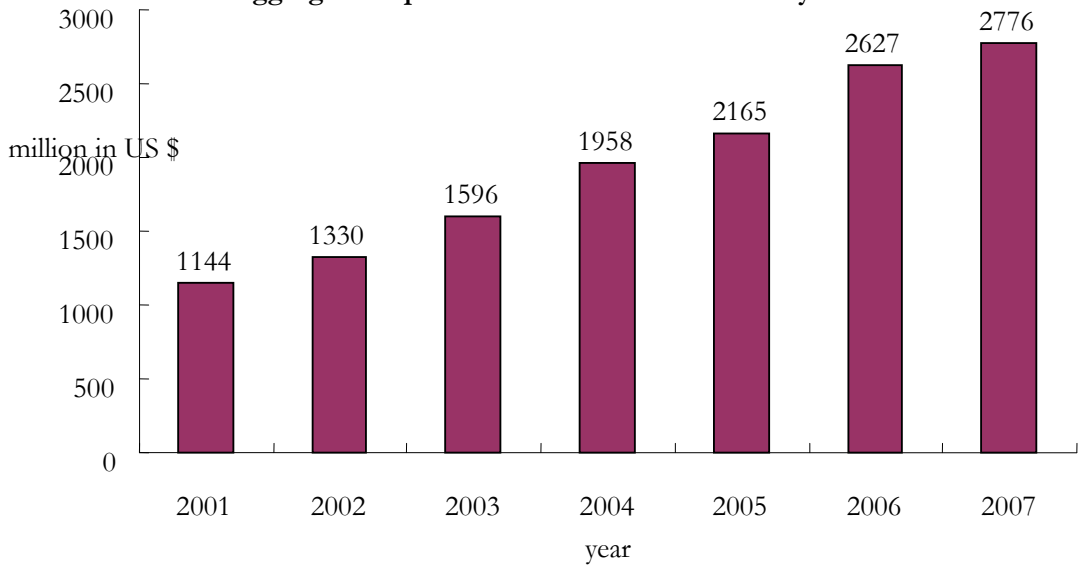
Figure 1

Aggregate Exports Value of Garment Industry



Data Source: Ministry of Commerce, 2007

Table 1: US Import Values of Clothing (Apparel Products)

	Clothing Value in Million USD					Market Share (%)				
Country	**2003**	**2004**	**2005**	**2006**	**2007**	**2003**	**2004**	**2005**	**2006**	**2007**
Cambodia	1,239.6	1,429.0	1,712.8	2,135.9	2,424.9	2.03	2.21	2.49	2.98	3.28
China (PRC)	7,257.6	8,927.9	15,142.9	18,517.6	22,744.4	11.87	13.78	22.04	25.85	30.77
Vietnam	2,374.6	2,562.5	2,724.7	3,222.1	4,358.5	3.88	3.96	3.97	4.50	5.90
Bangladesh	1,848.1	1,977.6	2,371.7	2,914.1	3,103.4	3.02	3.05	3.45	4.07	4.20
Indonesia	2,158.0	2,402.8	2,875.4	3,670.3	3,981.1	3.53	3.71	4.18	5.12	5.39
India	2,001.5	2,217.1	2,976.2	3,186.9	3,169.9	3.27	3.42	4.33	4.45	4.29
Pakistan	1,015.5	1,137.7	1,258.9	1,412.0	1,498.6	1.66	1.76	1.83	1.97	2.03
Sri Lanka	1,435.8	1,549.4	1,650.2	1,682.4	1,573.4	2.35	2.39	2.40	2.35	2.13
Thailand	1,711.6	1,799.4	1,807.8	1,839.7	1,766.3	2.80	2.78	2.63	2.57	2.39
World	61,162.1	64,767.7	68,713.3	71,629.8	73,922.2					

Source: Office of Textiles and Apparel (OTEXA) at http://www.otexa.ita.doc.gov.

Table 2: EU Import Values of Clothing (Apparel Products)

	Clothing Value in Millin USD					Market Share (%)				
Country	**2003**	**2004**	**2005**	**2006**	**2007**	**2003**	**2004**	**2005**	**2006**	**2007**
Cambodia	479.1	645.7	592.7	693.6	723.7	1.00	1.15	0.96	1.00	0.91
China (PRC)	11,600.6	14,340.7	21,129.6	23,709.8	29,974.0	24.12	25.60	34.40	34.03	37.67
Vietnam	592.6	788.9	859.1	1,286.3	1,546.3	1.23	1.41	1.40	1.85	1.94
Bangladesh	3,521.4	4,626.8	4,407.9	5,794.7	6,037.2	7.32	8.26	7.18	8.32	7.59
Indonesia	1,539.9	1,663.9	1,495.0	1,774.8	1,638.7	3.20	2.97	2.43	2.55	2.06
India	2,693.2	3,083.4	4,035.0	4,785.5	5,254.9	5.60	5.50	6.57	6.87	6.61
Pakistan	922.2	1,140.5	970.6	1,138.9	1,245.8	1.92	2.04	1.58	1.63	1.57
Sri Lanka	800.4	1,012.3	993.4	1,216.2	1,428.6	1.66	1.81	1.62	1.75	1.80
Thailand	965.0	1,112.4	978.1	1,104.6	1,094.7	2.01	1.99	1.59	1.59	1.38
Total EU27	48,094	56,014	61,424	69,675	79,559					

Source: International Textiles and Clothing Bureau (ITCB) at http://www.itcb.org/Trade.htm.

Figure 2

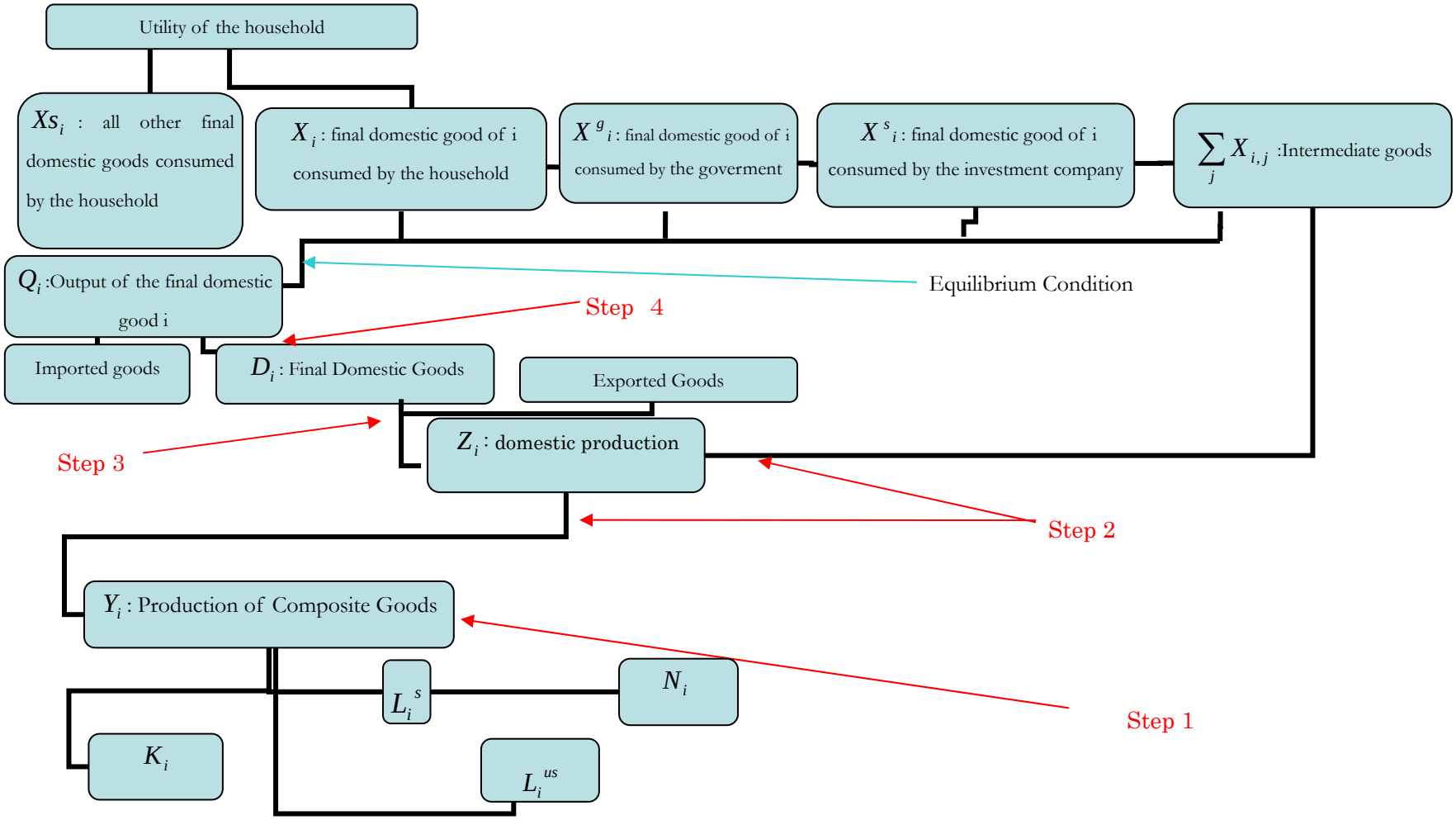

Utility of the household
Xs_i : all other final domestic goods consumed by the household
X_i : final domestic good of i consumed by the household
$X^g{}_i$: final domestic good of i consumed by the goverment
$X^s{}_i$: final domestic good of i consumed by the investment company
$\sum_j X_{i,j}$:Intermediate goods
Q_i :Output of the final domestic good i
Equilibrium Condition
Step 4
Imported goods
D_i : Final Domestic Goods
Exported Goods
Step 3
Z_i : domestic production
Step 2
Y_i : Production of Composite Goods
L_i^s
N_i
Step 1
K_i
L_i^{us}

Table 3: Simplified I-O Table (Unit: 1 million US Dollars)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(20)	(21)	(22)	(23)	(24)	(25)
(1)	4.7922	312.259	0	0.0001	0.143	0	0.2126	0.0001	0	0.0001	0.0001	0.0002	0.171	0.1118	13.4575	0.0003	0.0003	136.8616	-2.4425	-0.2571
(2)	2.7597	735.974	6.9031	0.9597	147.6625	0.0805	11.2716	0.1563	9.083	36.663	17.3515	13.3967	72.8822	258.125	1905.219	6.951	0.0237	171.0409	-227.012	-17.5119
(3)	0.3772	6.4444	31.6651	1172.591	30.1679	0.2679	21.469	0.8029	0.3377	6.0764	2.505	8.9599	3.9927	6.5083	17.573	13.4947	0.0006	30.6618	-1229.81	-14.384
(4)	0.0276	1.2062	1.599	24.8757	3.257	0.2187	0.4778	3.668	0.1734	8.1712	5.2387	4.5714	4.2781	5.9835	89.8358	93.2424	1.2375	2138.163	-111.745	-1.307
(5)	46.7669	309.9428	14.4085	47.067	490.8796	17.8916	115.9879	82.3155	232.9392	50.4907	344.583	18.2695	58.8598	95.617	259.5041	132.7216	0.0271	213.3001	-1208.88	-164.684
(6)	7.664	71.5465	2.7629	12.7719	46.6462	83.6934	8.5967	67.2686	29.1544	31.9889	273.7412	18.8928	50.9722	67.5136	155.3084	241.3272	0.0005	0	-910.356	-91.1208
(7)	0.1087	5.939	0.6448	55.062	10.8626	0.337	70.6464	1.5033	1.1785	2.3876	4.2173	3.2538	2.1099	19.9552	71.7137	0	0	127.8576	-69.8195	-7.3495
(8)	0.6179	12.6504	2.143	4.9312	19.3157	0.4027	0.8851	22.7318	0.1499	10.1042	4.8631	4.6083	3.9308	14.6569	143.7804	0.0001	0.0004	0	-5.6477	-0.0661
(9)	1.3891	4.2271	0.1894	1.7288	7.4572	0.1772	0.5247	6.9525	1.7472	4.7878	2.4439	3.8883	4.0487	51.1697	0	533.2707	0.0002	0	-16.0395	-0.1876
(10)	41.3072	136.8931	8.1245	109.8345	101.5296	7.5322	37.4531	3.8256	7.377	9.6723	12.0913	10.1662	24.5466	84.5378	117.0006	45.3955	0.0001	279.726	-29.3681	-0.3435
(11)	9.9447	108.4852	5.3176	67.5641	158.0245	4.1566	13.3645	12.1175	14.1155	81.9042	120.5846	34.2005	25.6482	68.8946	192.1834	12.0132	0.0153	360.7626	-128.429	-1.5292
(12)	3.264	24.7751	1.6087	11.3942	15.6011	0.5998	4.2292	6.2539	1.4402	50.8159	16.0157	23.5927	7.7758	31.6481	22.0115	1.5262	36.1674	0	-3.2757	-0.0383
(13)	14.089	40.1612	0.9322	10.9312	11.0553	0.8203	2.1389	4.3738	2.6677	38.5164	28.5126	21.9335	9.5624	25.2086	129.1236	4.3421	72.3824	12.3656	-50.1517	-0.5866
(14)	3.7407	16.2141	3.0632	14.2387	10.5767	0.8658	2.5625	4.8172	1.7398	23.8821	17.3522	31.3815	14.5762	195.9056	899.3943	0.0228	380.3362	80.1962	-13.4416	-0.1572
(15)	307.5916	852.9247	10.0243	245.4189	37.309	14.6222	4.458	4.3614	118.7488	263.4354	40.9153	5.6083	30.0265	135.9675						
(16)	0.9756	13.2299	1.5685	36.0301	7.2882	3.4073	0.5835	2.1378	21.2584	55.3625	10.4399	4.3418	22.7967	147.9039						
(17)	2.3578	275.4474	17.914	434.9156	50.6337	31.5522	5.5805	15.9832	158.588	322.0528	254.0651	45.5535	39.8295	455.3549						
(18)	17.1784	203.1887	0	0	0	0	0	0	0	0	0	0	0	0						
(19)	0.358	20.4714	0.8324	22.8582	9.5961	1.748	0.166	0.7889	7.0766	10.9899	4.4172	2.7864	2.3711	22.2048						

Production Sectors: (1) Paddy (No. 1), (2) Other Agriculture (No. 2~8), (3) Textiles (No. 9), (4) Apparel (No. 10), (5) Manufacturing (No. 11~17), (6) Equipment (No. 18~21), (7) Other Manufacturing (No. 22), (8) Utility (No. 23~24), (9) Construction (No. 25), (10) Tourism (No. 26), (11) Services (No. 27~30), (12) Financial Sector (No. 31), (13) Real Estate Business (No. 32), (14) Other Services (No. 33~35)
Income Generating Sectors: (15) Unskilled Labor (No. 42), (16) Skilled Labor (No. 43), (17) Capital (No. 44), (18) Land (No. 45)
Taxes: (19) Tax on domestic production (No. 46), (25) Tax on Imports (Tariff)
Consumption: (20) Household, (21) Investment, (22) Government
Foreign Trade: (23) Exports, (24) Imports

Table 4: **Social Accounting Matrix** (Unit: 1 million US Dollars)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(20)	(21)	(22)	(23)
(1)	4.7922	312.259	0	0.0001	0.143	0	0.2126	0.0001	0	0.0001	0.0001	0.0002	0.171	0.1118	13.4575	0.0003	0.0003	136.8616
(2)	2.7597	735.974	6.9031	0.9597	147.6625	0.0805	11.2716	0.1563	9.083	36.663	17.3515	13.3967	72.8822	258.125	1905.219	0.0237	6.951	171.0409
(3)	0.3772	6.4444	31.6651	1172.591	30.1679	0.2679	21.469	0.8029	0.3377	6.0764	2.505	8.9599	3.9927	6.5083	17.573	0.0006	13.4947	30.6618
(4)	0.0276	1.2062	1.599	24.8757	3.257	0.2187	0.4778	3.668	0.1734	8.1712	5.2387	4.5714	4.2781	5.9835	89.8358	1.2375	93.2424	2138.1631
(5)	46.7669	309.9428	14.4085	47.067	490.8796	17.8916	115.9879	82.3155	232.9392	50.4907	344.583	18.2695	58.8598	95.617	259.5041	0.0271	132.7216	213.3001
(6)	7.664	71.5465	2.7629	12.7719	46.6462	83.6934	8.5967	67.2686	29.1544	31.9889	273.7412	18.8928	50.9722	67.5136	155.3084	0.0005	241.3272	0
(7)	0.1087	5.939	0.6448	55.062	10.8626	0.337	70.6464	1.5033	1.1785	2.3876	4.2173	3.2538	2.1099	19.9552	71.7137	0	0	127.8576
(8)	0.6179	12.6504	2.143	4.9312	19.3157	0.4027	0.8851	22.7318	0.1499	10.1042	4.8631	4.6083	3.9308	14.6569	143.7804	0.0004	0.0001	0
(9)	1.3891	4.2271	0.1894	1.7288	7.4572	0.1772	0.5247	6.9525	1.7472	4.7878	2.4439	3.8883	4.0487	51.1697	0	0.0002	533.2707	0
(10)	41.3072	136.8931	8.1245	109.8345	101.5296	7.5322	37.4531	3.8256	7.377	9.6723	12.0913	10.1662	24.5466	84.5378	117.0006	0.0001	45.3955	279.726
(11)	9.9447	108.4852	5.3176	67.5641	158.0245	4.1566	13.3645	12.1175	14.1155	81.9042	120.5846	34.2005	25.6482	68.8946	192.1834	0.0153	12.0132	360.7626
(12)	3.264	24.7751	1.6087	11.3942	15.6011	0.5998	4.2292	6.2539	1.4402	50.8159	16.0157	23.5927	7.7758	31.6481	22.0115	36.1674	1.5262	0
(13)	14.089	40.1612	0.9322	10.9312	11.0553	0.8203	2.1389	4.3738	2.6677	38.5164	28.5126	21.9335	9.5624	25.2086	129.1236	72.3824	4.3421	12.3656
(14)	3.7407	16.2141	3.0632	14.2387	10.5767	0.8658	2.5625	4.8172	1.7398	23.8821	17.3522	31.3815	14.5762	195.9056	899.3943	380.3362	0.0228	80.1962
(15)	307.5916	852.9247	10.0243	245.4189	37.309	14.6222	4.458	4.3614	118.7488	263.4354	40.9153	5.6083	30.0265	135.9675				
(16)	0.9756	13.2299	1.5685	36.0301	7.2882	3.4073	0.5835	2.1378	21.2584	55.3625	10.4399	4.3418	22.7967	147.9039				
(17)	2.3578	275.4474	17.914	434.9156	50.6337	31.5522	5.5805	15.9832	158.588	322.0528	254.0651	45.5535	39.8295	455.3549				
(18)	17.1784	203.1887	0	0	0	0	0	0	0	0	0	0	0	0				
(19)	0.358	20.4714	0.8324	22.8582	9.5961	1.748	0.166	0.7889	7.0766	10.9899	4.4172	2.7864	2.3711	22.2048				
(25)	0.2571	17.5119	14.384	1.307	164.6842	91.1208	7.3495	0.0661	0.1876	0.3435	1.5292	0.0383	0.5866	0.1572				
(20)															2071.412	327.3241	2109.828	220.3671
(22)																	106.665	299.523
(21)															125.8263			
(24)	2.4425	227.012	1229.81	111.7454	1208.882	910.3558	69.8195	5.6477	16.0395	29.3681	128.4291	3.2757	50.1517	13.4416	587	41.8226		455.4851

Table 5: Economic Values of the Benchmark Model

	private consumption		gov. consumption		The amount of Q (final goods)		Unit: 1million US dollars model	model
	actual	model	actual	model	actual (value)	model (value)	quantity	price
(1) Paddy	13.4575	13.4575	0.0003	0.0003	331.148303	331.148282	452.8323902	0.73128223
(2) OtherAgri	1905.2187	1905.2187	0.0237	0.02370001	3225.4622	3225.47116	2873.783279	1.12237801
(3) Textiles	17.573	17.573	0.0006	0.0006	1323.2333	1323.23508	132.4085832	9.99357478
(4) Apparel	89.8358	89.8358002	1.2375	1.23750062	248.062	248.06022	2819.142447	0.08799137
(5) Manufacturing	259.5041	259.5041	0.0271	0.02710001	2318.2718	2318.27181	1202.253903	1.92827139
(6) Equipment	155.3084	155.3084	0.0005	0.0005	1169.8494	1169.85322	208.8935301	5.60023672
(7) OtherManuf	71.7137	71.7137001	0	0	249.9198	249.917117	306.372254	0.81573025
(8) Utility	143.7804	143.7804	0.0004	0.0004	245.7719	245.773217	257.3979997	0.95483732
(9) Construction	0	0	0.0002	0.0002	624.0025	624.001744	824.1601534	0.75713651
(10) TrdHotel	117.0006	117.0006	0.0001	0.0001	757.2872	757.285552	1455.199273	0.5203999
(11) Service	192.1834	192.1834	0.0153	0.01530001	928.5342	928.52756	1495.802462	0.62075547
(12) Finance	22.0115	22.0115	36.1674	36.1674182	258.7195	258.718159	310.4785484	0.83328836
(13) RealEstBuss	129.1236	129.1236	72.3824	72.3824365	416.7512	416.750508	400.5903449	1.04034087
(14) Other Service	899.3943	899.394302	380.3362	380.336392	1620.6696	1620.66786	2290.087223	0.70768827

Table 5 (Continued): Economic Values of the Benchmark Model

	The amount of D (domestic goods)		model	model	The amount of M (imported goods)		Unit: 1million US dollars model	model
	actual (value)	model (value)	quantity	price	actual (value)	model (value)	quantity	price
(1) Paddy	328.4487	328.448679	745.5441889	0.44054891	2.4425	2.44249984		
(2) OtherAgri	2980.9393	2980.94758	3378.801357	0.88225003	227.012	227.012631	399.3354893	0.56847597
(3) Textiles	79.039402	79.0395082	233.5476137	0.33842995	1229.8102	1229.81185	127.7201817	9.62895476
(4) Apparel	135.009401	135.008432	224827.7479	0.0006005	111.7454	111.744598	15.10182428	7.39941057
(5) Manufacturing	944.705801	944.705804	1776.48544	0.53178359	1208.8818	1208.8818	919.1219454	1.31525725
(6) Equipment	168.373402	168.373951	208.8936376	0.80602719	910.3558	910.358771	208.8936376	4.35800143
(7) OtherManuf	172.750401	172.748546	584.9899289	0.29530174	69.8195	69.8187504	72.0157064	0.96949338
(8) Utility	240.058301	240.059587	257.3982102	0.93263891	5.6477	5.64773026	257.3982102	0.02194161
(9) Construction	607.775302	607.774566	824.160024	0.73744728	16.0395	16.0394806	824.160024	0.01946161
(10) TrdHotel	727.575401	727.573817	2743.28776	0.26521965	29.3681	29.3680361	0.000263146	111603.595
(11) Service	798.575101	798.56939	2843.838616	0.28080686	128.4291	128.428182	28.85811427	4.45033173
(12) Finance	255.405301	255.403977	310.4783096	0.82261456	3.2757	3.27568302	310.4783096	0.01055044
(13) RealEstBuss	366.012801	366.012193	450.5381436	0.81238891	50.1517	50.1516167	171.6227025	0.29222018
(14) Other Service	1607.070601	1607.06888	2707.038304	0.59366315	13.4416	13.4415856	5.95881E-06	2255749.74

Table 5 (Continued): Economic Values of the Benchmark Model

	The amount of E (exported goods)				The amount of Y (composite goods)		Unit: 1million US dollars	
	actual (value)	model (value)	model quantity	model price	actual (value)	model (value)	model quantity	model price
(1) Paddy	136.8616	136.8616	136.8616	1	328.1034	328.1034	316.1848894	1.03769475
(2) OtherAgri	171.0409	171.0409	171.0409	1	1344.7907	1344.7907	1112.713274	1.20856894
(3) Textiles	30.6618	30.6618	30.6618	1	29.506801	29.506801	85.92228539	0.34341266
(4) Apparel	2138.1631	2138.1631	2138.1631	1	716.364601	716.364601	2098.652963	0.34134495
(5) Manufacturing	213.3001	213.3001	213.3001	1	95.230901	95.230901	207.8599396	0.45814937
(6) Equipment	0	0	0	1	49.581701	49.581701	155.0996025	0.31967652
(7) OtherManuf	127.8576	127.8576	127.8576	1	10.622001	10.622001	23.77202961	0.44682769
(8) Utility	0	0	0	1	22.482401	22.482401	90.1354372	0.2494291
(9) Construction	0	0	0	1	298.595201	298.595201	657.2106147	0.45433716
(10) TrdHotel	279.726	279.726	279.726	1	640.850701	640.850701	1257.920158	0.5094526
(11) Service	360.7626	360.7626	360.7626	1	305.420301	305.420301	2221.100696	0.13750853
(12) Finance	0	0	0	1	55.503601	55.503601	366.7190165	0.15135185
(13) RealEstBuss	12.3656	12.3656	12.3656	1	92.652701	92.652701	123.4548843	0.75049846
(14) Other Service	80.1962	80.1962	80.1962	1	739.226301	739.226301	1920.139691	0.38498569

Table 5 (Continued): Economic Values of the Benchmark Model

Unit: 1million US dollars

	capital income		skilled labor income		unskilled labor income		land income	
	actual	model	actual	model	actual	model	actual	model
(1) Paddy	2.3578	2.3578	0.9756	0.9756	307.5916	307.5916	17.1784	17.1784
(2) OtherAgri	275.4474	275.4474	13.2299	13.2299	852.9247	852.9247	203.1887	203.1887
(3) Textiles	17.914	17.914	1.5685	1.5685	10.0243	10.0243	0.000001	0.000001
(4) Apparel	434.9156	434.9156	36.0301	36.0301	245.4189	245.4189	0.000001	0.000001
(5) Manufacturing	50.6337	50.6337	7.2882	7.2882	37.309	37.309	0.000001	0.000001
(6) Equipment	31.5522	31.5522	3.4073	3.4073	14.6222	14.6222	0.000001	0.000001
(7) OtherManuf	5.5805	5.5805	0.5835	0.5835	4.458	4.458	0.000001	0.000001
(8) Utility	15.9832	15.9832	2.1378	2.1378	4.3614	4.3614	0.000001	0.000001
(9) Construction	158.588	158.588	21.2584	21.2584	118.7488	118.7488	0.000001	0.000001
(10) TrdHotel	322.0528	322.0528	55.3625	55.3625	263.4354	263.4354	0.000001	0.000001
(11) Service	254.0651	254.0651	10.4399	10.4399	40.9153	40.9153	0.000001	0.000001
(12) Finance	45.5535	45.5535	4.3418	4.3418	5.6083	5.6083	0.000001	0.000001
(13) RealEstBuss	39.8295	39.8295	22.7967	22.7967	30.0265	30.0265	0.000001	0.000001
(14) Other Service	455.3549	455.3549	147.9039	147.9039	135.9675	135.9675	0.000001	0.000001

Table 5 (Continued): Economic Values of the Benchmark Model

The amount of taxes — Unit: 1million US dollars

	actual (value)	model (value)
income tax	125.8263016	125.826305
production tax	106.665	106.665
tariff	299.523	299.523265

savings — Unit: 1million US dollars

	actual (value)	model (value)
private	587	587
government	41.8226013	41.8226224
foreign	455.485107	455.48772

calculated tax rates

	production tax rate	production tariff rate
(1) Paddy	0.08%	10.53%
(2) OtherAgri	0.65%	7.71%
(3) Textiles	0.76%	1.17%
(4) Apparel	1.02%	1.17%
(5) Manufacturing	0.84%	13.62%
(6) Equipmtment	1.05%	10.01%
(7) OtherManuf	0.06%	10.53%
(8) Utility	0.33%	1.17%
(9) Construction	1.18%	1.17%
(10) TrdHotel	1.10%	1.17%
(11) Service	0.38%	1.19%
(12) Finance	1.10%	1.17%
(13) RealEstBuss	0.63%	1.17%
(14) Other Service	1.33%	1.17%

	income tax rate
household	2.66%

Table 6: Parameter Values of the Benchmark Model

	α_1	α_2	α_3	α_4	α_5	α_6	α_7	α_8	α_9	α_{10}	α_{11}	α_{12}
Values	0.00335	0.47439	0.00437	0.02236	0.06461	0.03867	0.01785	0.03580	0.00000	0.02913	0.04785	0.00548
	α_{13}	α_{14}	ay_1	ay_2	ay_3	ay_4	ay_5	ay_6	ay_7	ay_8	ay_9	ay_{10}
Values	0.03215	0.22394	0.70567	0.42943	0.27103	0.18339	0.08292	0.29756	0.03535	0.09396	0.49707	0.64322
	ay_{11}	ay_{12}	ay_{13}	ay_{14}	γ_1^m	γ_2^m	γ_3^m	γ_4^m	γ_5^m	γ_6^m	γ_7^m	γ_8^m
Values	0.26455	0.21971	0.24641	0.44396	0.00815	0.07581	0.94026	0.45574	0.59249	0.85607	0.30877	0.02324
	γ_9^m	γ_{10}^m	γ_{11}^m	γ_{12}^m	γ_{13}^m	γ_{14}^m	γ_1^d	γ_2^d	γ_3^d	γ_4^d	γ_5^d	γ_6^d
Values	0.02600	0.03923	0.13996	0.01280	0.12174	0.00839	0.99184	0.92418	0.05973	0.54425	0.40750	0.14392
	γ_7^d	γ_8^d	γ_9^d	γ_{10}^d	γ_{11}^d	γ_{12}^d	γ_{13}^d	γ_{14}^d	κ_1^d	κ_2^d	κ_3^d	κ_4^d
Values	0.69122	0.97675	0.97399	0.96076	0.86003	0.98718	0.87825	0.99160	0.70587	0.945735	0.720497	0.059393

	κ_5^d	κ_6^d	κ_7^d	κ_8^d	κ_9^d	κ_{10}^d	κ_{11}^d	κ_{12}^d	κ_{13}^d	κ_{14}^d	κ_1^e	κ_2^e
Values	0.815804	1	0.57467	1	1	0.722302	0.68882	1	0.967319	0.95247	0.29413	0.054265

	κ_3^e	κ_4^e	κ_5^e	κ_6^e	κ_7^e	κ_8^e	κ_9^e	κ_{10}^e	κ_{11}^e	κ_{12}^e	κ_{13}^e	κ_{14}^e
Values	0.279503	0.940607	0.184196	0.0	0.42533	0.0	0.0	0.277698	0.31118	0.0	0.032681	0.04753

	$\beta_{K,1}$	$\beta_{K,2}$	$\beta_{K,3}$	$\beta_{K,4}$	$\beta_{K,5}$	$\beta_{K,6}$	$\beta_{K,7}$	$\beta_{K,8}$	$\beta_{K,9}$	$\beta_{K,10}$	$\beta_{K,11}$	$\beta_{K,12}$
Values	0.007186	0.204825	0.607114	0.607115	0.531694	0.636368	0.525371	0.71092	0.531114	0.50254	0.831854	0.82073

	$\beta_{K,13}$	$\beta_{K,14}$	$\beta_{L^{us},1}$	$\beta_{L^{us},2}$	$\beta_{L^{us},3}$	$\beta_{L^{us},4}$	$\beta_{L^{us},5}$	$\beta_{L^{us},6}$	$\beta_{L^{us},7}$	$\beta_{L^{us},8}$	$\beta_{L^{us},9}$	$\beta_{L^{us},10}$
Values	0.429879	0.615988	0.937484	0.634243	0.339728	0.342589	0.391774	0.294911	0.419695	0.193992	0.397692	0.411071

	$\beta_{L^{us},11}$	$\beta_{L^{us},12}$	$\beta_{L^{us},13}$	$\beta_{L^{us},14}$	$\beta_{L^{s},1}$	$\beta_{L^{s},2}$	$\beta_{L^{s},3}$	$\beta_{L^{s},4}$	$\beta_{L^{s},5}$	$\beta_{L^{s},6}$	$\beta_{L^{s},7}$	$\beta_{L^{s},8}$
Values	0.133964	0.101044	0.324076	0.183932	0.002973	0.009838	0.053157	0.050296	0.076532	0.068721	0.054933	0.095088

	$\beta_{L^{s},9}$	$\beta_{L^{s},10}$	$\beta_{L^{s},11}$	$\beta_{L^{s},12}$	$\beta_{L^{s},13}$	$\beta_{L^{s},14}$	$\beta_{N,1}$	$\beta_{N,2}$	$\beta_{N,3}$	$\beta_{N,4}$	$\beta_{N,5}$	$\beta_{N,6}$
Values	0.071195	0.086389	0.034182	0.078226	0.246045	0.200079	0.052357	0.151093	0.00000	0.00000	0.00000	0.00000

	$\beta_{N,7}$	$\beta_{N,8}$	$\beta_{N,9}$	$\beta_{N,10}$	$\beta_{N,11}$	$\beta_{N,12}$	$\beta_{N,13}$	$\beta_{N,14}$
Values	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Table 7: The Effect of a Decrease in Exports of Apparel (Clothing) in Value

Unit: 1 million US dollars

PRIVATE CONSUMPTION	Benchmark	5% decrease	10% decrease	15% decrease	20% decrease	25% decrease	30% decrease
1 Paddy (1)	13.45750002	12.78927591	12.11640075	11.44352637	10.77065121	10.09777604	9.42490085
2 Other Agri (2-8)	1905.218703	1810.616208	1715.355251	1620.094403	1524.833446	1429.572487	1334.311525
3 Textile (9)	17.57300003	16.70042322	15.82177302	14.94312382	14.06447362	13.18582339	12.30717315
4 Apparel (10)	89.83580016	85.37505721	80.8832662	76.39148028	71.89968923	67.4078981	62.91610684
5 Manufact (11-17)	259.5041005	246.6185795	233.6433716	220.6681784	207.6929703	194.7177621	181.7425534
6 Equipmt (18-21)	155.3084003	147.5966545	139.8312328	132.0658198	124.300398	116.5349761	108.7695539
7 OtherManuf (22)	71.71370012	68.15279922	64.56711342	60.98143167	57.39574584	53.81005993	50.22437393
8 Utility (23-24)	143.7804003	136.6410704	129.4520488	122.2630353	115.0740137	107.8849919	100.6959698
9 Construct (25)	0	0	0	0	0	0	0
10 TrdHotel (26)	117.0006002	111.1910053	105.340974	99.49094935	93.64091799	87.79088651	81.94085487
11 Service (27-30)	192.1834003	182.6406485	173.0314763	163.4223151	153.8131428	144.2039704	134.5947977
12 Finance (31)	22.01150004	20.91853216	19.81795692	18.71738292	17.61680766	16.51623238	15.41565707
13 RealEstBus (32)	129.1236002	122.7120451	116.2558636	109.7996895	103.343508	96.88732634	90.43114452
14 OtherServ (33-35)	899.3943016	854.7354152	809.7656901	764.796016	719.8262905	674.8565642	629.8868365

Table 7 (Continued): The Effect of a Decrease in Exports of Apparel (Clothing) in Value

Unit: 1 million US dollars

GOV CONSUMPTION	Benchmark	5% decrease	10% decrease	15% decrease	20% decrease	25% decrease	30% decrease
1 Paddy (1)	0.0003	0.000285119	0.000270119	0.000255119	0.000240119	0.000225119	0.000210119
2 Other Agri (2-8)	0.023700012	0.022524426	0.021339425	0.020154425	0.018969424	0.017784423	0.016599422
3 Textile (9)	0.0006	0.000570239	0.000540239	0.000510239	0.000480239	0.000450239	0.000420239
4 Apparel (10)	1.237500624	1.176117155	1.114242107	1.052367128	0.990492079	0.92861703	0.866741978
5 Manufact (11-17)	0.027100014	0.025755778	0.024400777	0.023045777	0.021690776	0.020335775	0.018980774
6 Equipmt (18-21)	0.0005	0.000475199	0.000450199	0.000425199	0.000400199	0.000375199	0.000350199
7 OtherManuf (22)	0	0	0	0	0	0	0
8 Utility (23-24)	0.0004	0.000380159	0.000360159	0.000340159	0.000320159	0.000300159	0.000280159
9 Construct (25)	0.0002	0.00019008	0.00018008	0.00017008	0.00016008	0.00015008	0.00014008
10 TrdHotel (26)	0.0001	9.50398E-05	9.00398E-05	8.50398E-05	8.00398E-05	7.50398E-05	7.00398E-05
11 Service (27-30)	0.015300008	0.014541085	0.013776084	0.013011084	0.012246084	0.011481083	0.010716083
12 Finance (31)	36.16741825	34.37341382	32.5650424	30.75667303	28.9483016	27.13993015	25.33155865
13 RealEstBus (32)	72.38243652	68.79206656	65.17294374	61.55382498	57.93470213	54.31557922	50.69645622
14 OtherServ (33-35)	380.3363919	361.4706501	342.4538253	323.4370218	304.4201969	285.4033715	266.3865458

Table 7 (Continued): The Effect of a Decrease in Exports of Apparel (Clothing) in Value

Unit: 1 million US dollars

Q (FINAL GOOD)	Benchmark	5% decrease	10% decrease	15% decrease	20% decrease	25% decrease	30% decrease
1 Paddy (1)	331.1482817	314.7210674	298.1636493	281.6062503	265.0488325	248.4914144	231.9339957
2 Other Agri (2-8)	3225.471163	3065.369188	2904.095569	2742.822133	2581.548514	2420.274893	2259.001268
3 Textile (9)	1323.235078	1257.137605	1190.975823	1124.81412	1058.65234	992.4905597	926.32878
4 Apparel (10)	248.0602201	235.6572147	223.254209	210.8512176	198.4482109	186.0452037	173.642196
5 Manufact (11-17)	2318.271808	2203.422691	2087.509076	1971.59559	1855.681973	1739.768353	1623.854729
6 Equipmt (18-21)	1169.853218	1111.956274	1053.463576	994.9709442	936.478248	877.9855519	819.4928559
7 OtherManuf (22)	249.9171168	237.4989608	225.0031201	212.5072925	200.01145	187.5156059	175.0197598
8 Utility (23-24)	245.7732167	233.582066	221.2933931	209.0047348	196.7160634	184.4273922	172.1387211
9 Construct (25)	624.001744	593.3256795	562.1255898	530.9255325	499.7254419	468.5253497	437.3252558
10 TrdHotel (26)	757.2855517	719.7017081	681.8374271	643.9731884	606.1089074	568.2446248	530.3803404
11 Service (27-30)	928.52756	882.4528395	836.0264871	789.6001844	743.1738262	696.7474653	650.3211003
12 Finance (31)	258.7181591	245.8876157	232.9517145	220.0158264	207.0799225	194.1440185	181.2081134
13 RealEstBus (32)	416.7505077	396.077594	375.2400672	354.4025644	333.5650375	312.7275101	291.8899818
14 OtherServ (33-35)	1620.667861	1540.229227	1459.195823	1378.162511	1297.129105	1216.095697	1135.062286

Table 7 (Continued): The Effect of a Decrease in Exports of Apparel (Clothing) in Value

Unit: 1 million US dollars

D (DOMESTIC GOOD)	Benchmark	5% decrease	10% decrease	15% decrease	20% decrease	25% decrease	30% decrease
1 Paddy (1)	328.4486788	312.1553833	295.7329454	279.3105264	262.8880888	246.4656508	230.0432123
2 Other Agri (2-8)	2980.947584	2832.98297	2683.935534	2534.888268	2385.840833	2236.793395	2087.745954
3 Textile (9)	79.03950818	75.09137242	71.13939533	67.18742295	63.23544597	59.28346901	55.33149206
4 Apparel (10)	135.0084323	128.2580137	121.507595	114.757184	108.0067648	101.2563452	94.50592543
5 Manufact (11-17)	944.7058043	897.9042916	850.6689915	803.4337437	756.1984424	708.9631402	661.7278365
6 Equipmt (18-21)	168.3739515	160.040994	151.622291	143.2035976	134.784895	126.3661923	117.9474897
7 OtherManuf (22)	172.7485463	164.1648269	155.5274101	146.8900023	138.2525842	129.615165	120.9777444
8 Utility (23-24)	240.0595871	228.151851	216.1488599	204.145883	192.1428933	180.1399038	168.1369144
9 Construct (25)	607.7745657	577.8962329	547.5075021	517.118803	486.7300714	456.3413383	425.9526034
10 TrdHotel (26)	727.5738174	691.4645578	655.0858637	618.7072101	582.328516	545.9498203	509.5711229
11 Service (27-30)	798.5693903	758.9433598	719.0149123	679.0865075	639.158055	599.2296002	559.3011419
12 Finance (31)	255.4039773	242.7377933	229.967601	217.1974218	204.4272269	191.657032	178.8868359
13 RealEstBus (32)	366.012193	347.856154	329.5555431	311.2549533	292.9543423	274.6537308	256.3531187
14 OtherServ (33-35)	1607.068877	1527.305201	1446.951747	1366.598383	1286.244926	1205.891468	1125.538006

Table 7 (Continued): The Effect of a Decrease in Exports of Apparel (Clothing) in Value

Unit: 1 million US dollars

M (IMPORTS)	Benchmark	5% decrease	10% decrease	15% decrease	20% decrease	25% decrease	30% decrease
1 Paddy (1)	2.442499843	2.321335185	2.199210163	2.077085282	1.954960263	1.832835241	1.710710215
2 Other Agri (2-8)	227.0126309	215.7444568	204.3938209	193.043198	181.6925622	170.3419262	158.99129
3 Textile (9)	1229.811852	1168.381002	1106.890384	1045.399838	983.909221	922.4186043	860.9279877
4 Apparel (10)	111.7445982	106.1573708	100.5701433	94.9829222	89.39569424	83.80846607	78.22123764
5 Manufact (11-17)	1208.881804	1148.992792	1088.548689	1028.104654	967.6605492	907.2164437	846.7723362
6 Equipmt (18-21)	910.3587709	865.3044091	819.7864414	774.2685254	728.7505594	683.2325935	637.7146276
7 OtherManuf (22)	69.81875041	66.34951969	62.8585864	59.36765679	55.87672299	52.38578874	48.89485396
8 Utility (23-24)	5.647730257	5.367584473	5.085197683	4.802811227	4.520424472	4.238037721	3.955650972
9 Construct (25)	16.03948057	15.25097614	14.44900204	13.64702878	12.84505467	12.04308051	11.24110631
10 TrdHotel (26)	29.36803608	27.91050969	26.44210775	24.97370746	23.50530552	22.03690352	20.56850146
11 Service (27-30)	128.4281816	122.0554116	115.6340061	109.2126074	102.7912011	96.36979434	89.94838706
12 Finance (31)	3.275683023	3.113232914	2.949448847	2.785664949	2.621880848	2.458096748	2.294312632
13 RealEstBus (32)	50.15161669	47.66384517	45.15626417	42.64868605	40.14110503	37.63352395	35.12594277
14 OtherServ (33-35)	13.44158558	12.77443914	12.10235978	11.43028116	10.75820178	10.08612238	9.414042954

Table 7 (Continued): The Effect of a Decrease in Exports of Apparel (Clothing) in Value

Unit: 1 million US dollars

E (EXPORTS)	Benchmark	5% decrease	10% decrease	15% decrease	20% decrease	25% decrease	30% decrease
1 Paddy (1)	136.8616	130.0723308	123.2292491	116.3861753	109.5430938	102.7000121	95.85693017
2 Other Agri (2-8)	171.0409	162.5509833	153.9989364	145.4468992	136.8948522	128.342805	119.7907576
3 Textile (9)	30.6618	29.13019982	27.59710946	26.06402091	24.53093055	22.99784019	21.46474981
4 Apparel (10)	2138.1631	2031.25492	1924.346739	1817.438686	1710.530505	1603.622325	1496.714145
5 Manufact (11-17)	213.3001	202.7330353	192.0680281	181.4030327	170.7380252	160.0730175	149.4080094
6 Equipmt (18-21)	1.68373E-06	1.60041E-06	1.51622E-06	1.43203E-06	1.34785E-06	1.26366E-06	1.17947E-06
7 OtherManuf (22)	127.8576	121.5044615	115.11158	108.7187057	102.3258244	95.93294287	89.54006103
8 Utility (23-24)	2.40058E-06	2.28151E-06	2.16148E-06	2.04145E-06	1.92142E-06	1.80139E-06	1.68136E-06
9 Construct (25)	6.07775E-06	5.77897E-06	5.47508E-06	5.17119E-06	4.86731E-06	4.56342E-06	4.25953E-06
10 TrdHotel (26)	279.726	265.8432848	251.8569817	237.8706943	223.8843913	209.8980878	195.9117838
11 Service (27-30)	360.7626	342.8610858	324.8229521	306.7848384	288.7467041	270.7085695	252.6704344
12 Finance (31)	2.55405E-06	2.42739E-06	2.29969E-06	2.17199E-06	2.04428E-06	1.91658E-06	1.78888E-06
13 RealEstBus (32)	12.3656	11.75220416	11.133924	10.51564457	9.897364425	9.279084271	8.6608041
14 OtherServ (33-35)	80.1962	76.21582032	72.20600945	68.19620308	64.18639213	60.17658111	56.16676997

Table 7 (Continued): The Effect of a Decrease in Exports of Apparel (Clothing) in Value

Unit: 1 million US dollars

Y (COMPOSITE GOOD)	Benchmark	5% decrease	10% decrease	15% decrease	20% decrease	25% decrease	30% decrease
1 Paddy (1)	328.1034	311.8272326	295.4220586	279.0169035	262.6117298	246.2065558	229.8013811
2 Other Agri (2-8)	1344.7907	1278.039642	1210.800092	1143.560618	1076.321067	1009.081515	941.8419615
3 Textile (9)	29.506801	28.03289465	26.55755425	25.08221559	23.6068752	22.1315348	20.65619439
4 Apparel (10)	716.364601	680.5463624	644.7281238	608.9099279	573.0916893	537.2734508	501.4552122
5 Manufact (11-17)	95.230901	90.51308282	85.75153677	80.989996	76.22844984	71.46690358	66.70535717
6 Equipmt (18-21)	49.581701	47.12786571	44.6487801	42.16969724	39.6906116	37.21152589	34.73244013
7 OtherManuf (22)	10.622001	10.09420254	9.563102369	9.032002798	8.500902637	7.96980246	7.438702258
8 Utility (23-24)	22.482401	21.36720189	20.24308156	19.1189625	17.9948422	16.87072187	15.74660148
9 Construct (25)	298.595201	283.9161958	268.9864329	254.0566855	239.1269223	224.1971584	209.2673938
10 TrdHotel (26)	640.850701	609.0454781	577.002936	544.9604297	512.9178879	480.8753449	448.8328005
11 Service (27-30)	305.420301	290.2649444	274.9939262	259.722925	244.4519062	229.1808874	213.909868
12 Finance (31)	55.503601	52.75102368	49.97584314	47.20066556	44.42548466	41.65030391	38.87512303
13 RealEstBus (32)	92.652701	88.05666186	83.42402566	78.79139484	74.15875871	69.52612251	64.89348618
14 OtherServ (33-35)	739.226301	702.5362665	665.5749434	628.6136618	591.652338	554.6910136	517.729688

Table 7 (Continued): The Effect of a Decrease in Exports of Apparel (Clothing) in Value

Unit: 1 million US dollars

CAPITAL INCOME	Benchmark	5% decrease	10% decrease	15% decrease	20% decrease	25% decrease	30% decrease
1 Paddy (1)	2.3578	2.240837032	2.122947003	2.00505711	1.887167084	1.769277055	1.651387021
2 Other Agri (2-8)	275.4474	261.7750825	248.0027095	234.230352	220.4579788	206.6856053	192.9132314
3 Textile (9)	17.914	17.01917042	16.12347021	15.22777105	14.33207085	13.43637063	12.54067041
4 Apparel (10)	434.9156	413.1698148	391.4240296	369.6782704	347.9324852	326.1867	304.4409148
5 Manufact (11-17)	50.6337	48.12526432	45.59357878	43.06189606	40.53021047	37.99852483	35.4668391
6 Equipmt (18-21)	31.5522	29.99065814	28.41304778	26.83543917	25.25782879	23.68021838	22.10260792
7 OtherManuf (22)	5.5805	5.303209565	5.024184499	4.74515975	4.466134692	4.187109626	3.908084545
8 Utility (23-24)	15.9832	15.19038208	14.39122188	13.59206259	12.79290241	11.9937422	11.19458196
9 Construct (25)	158.588	150.7917793	142.8623778	134.9329845	127.0035829	119.0741808	111.1447784
10 TrdHotel (26)	322.0528	306.0694187	289.9667752	273.8641497	257.7615062	241.6588622	225.5562176
11 Service (27-30)	254.0651	241.458056	228.7547983	216.0515548	203.3482968	190.6450386	177.94178
12 Finance (31)	45.5535	43.29437575	41.01670035	38.73902737	36.46135168	34.1836761	31.90600042
13 RealEstBus (32)	39.8295	37.85375683	35.86228134	33.87080816	31.87933269	29.8878572	27.89638165
14 OtherServ (33-35)	455.3549	432.7542607	409.9865108	387.2187864	364.451036	341.6832852	318.9155337

Table 7 (Continued): The Effect of a Decrease in Exports of Apparel (Clothing) in Value

Unit: 1 million US dollars

SKILLED LABOR INCOME	Benchmark	5% decrease	10% decrease	15% decrease	20% decrease	25% decrease	30% decrease
1 Paddy (1)	0.9756	0.927203583	0.878423571	0.829643615	0.780863605	0.732083593	0.683303579
2 Other Agri (2-8)	13.2299	12.57321058	11.91171543	11.25022104	10.58872588	9.927230714	9.265735528
3 Textile (9)	1.5685	1.490151212	1.411726193	1.333301267	1.254876249	1.17645123	1.098026211
4 Apparel (10)	36.0301	34.22859457	32.42708914	30.62558586	28.82408043	27.022575	25.22106957
5 Manufact (11-17)	7.2882	6.9271365	6.562726423	6.19831675	5.833906666	5.469496573	5.105086469
6 Equipmt (18-21)	3.4073	3.238670187	3.068305148	2.897940299	2.727575258	2.557210213	2.386845164
7 OtherManuf (22)	0.5835	0.554506367	0.52533136	0.496156386	0.46698138	0.437806373	0.408631365
8 Utility (23-24)	2.1378	2.031758272	1.924868245	1.817978339	1.711088316	1.604198289	1.497308256
9 Construct (25)	21.2584	20.21333242	19.15041222	18.08749312	17.02457289	15.96165262	14.89873229
10 TrdHotel (26)	55.3625	52.61487618	49.84675056	47.07862806	44.31050247	41.54237678	38.77425098
11 Service (27-30)	10.4399	9.921858447	9.399863339	8.877868812	8.355873685	7.833878554	7.311883405
12 Finance (31)	4.3418	4.126478111	3.909388073	3.692298266	3.4752082	3.258118144	3.041028079
13 RealEstBus (32)	22.7967	21.66586923	20.52603394	19.38619998	18.24636472	17.10652944	15.96669412
14 OtherServ (33-35)	147.9039	140.5629826	133.167786	125.7725977	118.377401	110.9822041	103.587007

Table 7 (Continued): The Effect of a Decrease in Exports of Apparel (Clothing) in Value

Unit: 1 million US dollars

UNSKILLED LABOR INCOME	Benchmark	5% decrease	10% decrease	15% decrease	20% decrease	25% decrease	30% decrease
1 Paddy (1)	307.5916	292.3329578	276.9533741	261.573808	246.1942246	230.8146408	215.4350565
2 Other Agri (2-8)	852.9247	810.5882783	767.9420338	725.2958376	682.6495927	640.0033469	597.3570998
3 Textile (9)	10.0243	9.523572069	9.02235695	8.521142424	8.019927307	7.518712188	7.017497064
4 Apparel (10)	245.4189	233.1479521	220.8770041	208.6060709	196.3351229	184.064175	171.7932271
5 Manufact (11-17)	37.309	35.46068106	33.59523066	31.72978234	29.8643319	27.99888143	26.1334309
6 Equipmt (18-21)	14.6222	13.89853644	13.16742627	12.43631692	11.70520674	10.97409655	10.24298634
7 OtherManuf (22)	4.458	4.236485663	4.01358561	3.790685811	3.567785764	3.344885711	3.121985647
8 Utility (23-24)	4.3614	4.145060589	3.926990534	3.708920727	3.490850678	3.272780623	3.054710557
9 Construct (25)	118.7488	112.9110831	106.973642	101.036207	95.09876574	89.16132421	83.22388238
10 TrdHotel (26)	263.4354	250.3611822	237.1894093	224.0176512	210.8458784	197.6741051	184.5023313
11 Service (27-30)	40.9153	38.88502906	36.83926364	34.79350049	32.747735	30.70196948	28.6562039
12 Finance (31)	5.6083	5.330168868	5.049753818	4.769339068	4.488923982	4.208508911	3.928093827
13 RealEstBus (32)	30.0265	28.53703485	27.03570948	25.53438585	24.0330605	22.53173513	21.03040971
14 OtherServ (33-35)	135.9675	129.2190222	122.4206457	115.6222769	108.8239003	102.0255236	95.22714662

Table 7 (Continued): The Effect of a Decrease in Exports of Apparel (Clothing) in Value

Unit: 1 million US dollars

LAND INCOME	Benchmark	5% decrease	10% decrease	15% decrease	20% decrease	25% decrease	30% decrease
1 Paddy (1)	17.1784	16.32623415	15.46731394	14.60839471	13.74947452	12.89055431	12.03163407
2 Other Agri (2-8)	203.1887	193.1030705	182.9436333	172.7842075	162.6247701	152.4653326	142.3058947
3 Textile (9)	0	0	0	0	0	0	0
4 Apparel (10)	0	0	0	0	0	0	0
5 Manufact (11-17)	0	0	0	0	0	0	0
6 Equipmt (18-21)	0	0	0	0	0	0	0
7 OtherManuf (22)	0	0	0	0	0	0	0
8 Utility (23-24)	0	0	0	0	0	0	0
9 Construct (25)	0	0	0	0	0	0	0
10 TrdHotel (26)	0	0	0	0	0	0	0
11 Service (27-30)	0	0	0	0	0	0	0
12 Finance (31)	0	0	0	0	0	0	0
13 RealEstBus (32)	0	0	0	0	0	0	0
14 OtherServ (33-35)	0	0	0	0	0	0	0

Table 7 (Continued): The Effect of a Decrease in Exports of Apparel (Clothing) in Value

Unit: 1 million US dollars

THE AMOUNT OF TAXES	Benchmark	5% decrease	10% decrease	15% decrease	20% decrease	25% decrease	30% decrease
INCOME TAX	125.826305	119.5784751	113.2871584	106.9958489	100.7045322	94.41321535	88.12189835
PRODUCTION TAX	106.665	101.366933	96.03368185	90.70043671	85.36718546	80.03393413	74.70068265
TARIFF	299.5232647	284.6797609	269.7035928	254.7274416	239.7512735	224.7751052	209.7989365

Unit: 1 million US dollars

THE AMOUNT OF SAVINGS	Benchmark	5% decrease	10% decrease	15% decrease	20% decrease	25% decrease	30% decrease
PRIVATE	587	557.8528659	528.5028594	499.1528861	469.8028793	440.452872	411.1028638
GOVERNMENT	41.8226224	39.74810413	37.65697243	35.56584309	33.47471137	31.38357962	29.29244783
FOREIGN	455.4877076	433.4685482	410.6941409	387.9197555	365.145349	342.3709418	319.5965338

Unit: 1 million US dollars

equivalent variation	Benchmark	5% decrease	10% decrease	15% decrease	20% decrease	25% decrease	30% decrease
EV		−138.597749	−282.365819	−430.613166	−583.595124	−741.588382	−904.894226

Table 8-1: The Effect of a Decrease in Exports of Apparel (Clothing) on Q (final consumption good)

	Benchmark		5% decrease		10% decrease		15% decrease		20% decrease		25% decrease		30% decrease	
	QUANTITY	PRICE	QUANTITY	PRICE	QUANTITY	PRICE	QUANTITY	PRICE	QUANTITY	PRICE	QUANTITY	PRICE	QUANTITY	PRICE
1 Paddy (1)	452.8323902	0.731282233	446.1520336	0.705412155	438.9038072	0.679337122	431.0768929	0.653262225	422.5990939	0.627187413	413.3857127	0.60111273	403.3366847	0.575038186
2 Other Agri (2-8)	2873.783279	1.122378012	2797.269214	1.095843465	2716.355378	1.069114738	2631.292063	1.042386048	2541.75147	1.015657331	2447.370664	0.98892862	2347.746285	0.962199912
3 Textile (9)	132.4085832	9.99357478	126.5098858	9.937070112	120.5378759	9.880511118	114.4971079	9.823952238	108.3863732	9.76739334	102.2044565	9.71083447	95.95010705	9.654275628
4 Apparel (10)	2819.142447	0.087991375	2693.929761	0.087477119	2567.018168	0.086970249	2438.397294	0.086471232	2308.060793	0.085980496	2176.006738	0.08549845	2042.236579	0.085025505
5 Manufact (11-17)	1202.253903	1.928271392	1144.94916	1.924472079	1086.883396	1.920637563	1028.585376	1.916803054	970.0535764	1.912968539	911.286652	1.909134024	852.2831825	1.905299509
6 Equipmt (18-21)	208.8935322	5.600236665	199.7340622	5.567183995	190.3692236	5.533791419	180.8906889	5.500398889	171.2963538	5.467006314	161.5840938	5.433613739	151.751721	5.400221166
7 OtherManuf (22)	306.372254	0.815730255	291.3821065	0.815077369	276.273918	0.814420419	261.1413513	0.813763471	245.9843137	0.813106523	230.8027621	0.812449574	215.5966367	0.811792626
8 Utility (23-24)	257.3980022	0.954837313	244.9365532	0.953643149	232.3437916	0.95243945	219.7191749	0.951235753	207.0625539	0.950032054	194.3738203	0.948828355	181.6528517	0.947624656
9 Construct (25)	824.1601616	0.757136505	795.7658471	0.745603348	765.9710165	0.733873185	735.2082705	0.722143036	703.4295977	0.710412874	670.5838614	0.69868271	636.6163972	0.686952547
10 TrdHotel (26)	1455.199273	0.520399897	1416.625022	0.50803967	1375.817084	0.495587266	1332.905475	0.483134926	1287.723141	0.470682624	1240.085021	0.458230376	1189.785318	0.445778186
11 Service (27-30)	1495.802462	0.62075547	1424.908558	0.619304891	1353.136893	0.617843244	1281.024916	0.616381598	1208.570033	0.614919951	1135.769877	0.613458306	1062.621975	0.611996661
12 Finance (31)	310.4785515	0.833288348	295.6803816	0.831599359	280.6997157	0.82989651	265.6574619	0.828193663	250.5532048	0.826490815	235.3865799	0.824787966	220.1571981	0.823085118
13 RealEstBus (32)	400.5903449	1.040340869	384.4766666	1.030173294	367.9095458	1.019924793	351.0061225	1.009676304	333.7560114	0.999427804	316.1484566	0.989179303	298.1722312	0.978930803
14 OtherServ (33-35)	2290.087223	0.707688269	2202.116673	0.699431254	2111.370236	0.691113192	2018.412888	0.68279514	1923.162616	0.67447708	1825.533634	0.66615902	1725.435712	0.657840961

Table 8-2: The Effect of a Decrease in Exports of Apparel (Clothing) on Q (final consumption good) in the Relative Changes

Unit: %

	5% decrease		10% decrease		15% decrease		20% decrease		25% decrease		30% decrease	
	QUANTITY	PRICE	QUANTITY	PRICE	QUANTITY	PRICE	QUANTITY	PRICE	QUANTITY	PRICE	QUANTITY	PRICE
1 Paddy (1)	−1.47523824	−3.5376326	−3.07588045	−7.10329184	−4.80431564	−10.6689325	−6.67648715	−14.2345616	−8.71109893	−17.8001731	−10.9302485	−21.3657655
2 Other Agri (2-8)	−2.66248555	−2.3641364	−5.47807143	−4.74557353	−8.43804813	−7.12700743	−11.5538221	−9.50844367	−14.8380227	−11.8898794	−18.3046856	−14.2713149
3 Textile (9)	−4.45492071	−0.56540996	−8.9652098	−1.13136355	−13.5274276	−1.69731598	−18.142487	−2.26326859	−22.8113057	−2.82922093	−27.5348284	−3.39517299
4 Apparel (10)	−4.44151684	−0.58443884	−8.94329691	−1.16048427	−13.5057082	−1.72760476	−18.1289759	−2.28531413	−22.8131682	−2.83314674	−27.5582339	−3.37063736
5 Manufact (11-17)	−4.76644266	−0.19703208	−9.5961849	−0.39588979	−14.4452455	−0.5947471	−19.3137511	−0.79360477	−24.2018138	−0.99246241	−29.1095516	−1.19132003
6 Equipmt (18-21)	−4.38475516	−0.5902013	−8.86782293	−1.1864721	−13.4053185	−1.78274207	−17.9982491	−2.37901287	−22.647632	−2.97528365	−27.3545143	−3.5715544
7 OtherManuf (22)	−4.89278884	−0.08003699	−9.82410632	−0.16057218	−14.7633809	−0.24110709	−19.7106427	−0.3216421	−24.6659059	−0.40217711	−29.62919	−0.48271214
8 Utility (23-24)	−4.84131535	−0.12506456	−9.73364609	−0.25112784	−14.6383527	−0.37719091	−19.555493	−0.50325416	−24.4851092	−0.62931737	−29.4272488	−0.75538066
9 Construct (25)	−3.4452423	−1.52325994	−7.06041711	−3.07253964	−10.7930346	−4.62181767	−14.6489201	−6.17109738	−18.6342785	−7.72037725	−22.7557425	−9.26965703
10 TrdHotel (26)	−2.65078824	−2.37514023	−5.45507346	−4.76799304	−8.40392102	−7.16083362	−11.5088108	−9.55366691	−14.7824601	−11.9464899	−18.239011	−14.3393017
11 Service (27-30)	−4.7395231	−0.2336796	−9.5377279	−0.46914225	−14.3586838	−0.70460469	−19.2025642	−0.94006719	−24.0695275	−1.17552948	−28.9597389	−1.41099183
12 Finance (31)	−4.76624546	−0.20268961	−9.59126989	−0.40704245	−14.4361307	−0.61139516	−19.3009618	−0.81574792	−24.1858805	−1.02010084	−29.0910122	−1.22445366
13 RealEstBus (32)	−4.02248295	−0.97733116	−8.15815945	−1.9624411	−12.3777877	−2.94754982	−16.6839602	−3.93265964	−21.0793618	−4.91776951	−25.5667954	−5.90287934
14 OtherServ (33-35)	−3.84136241	−1.16675865	−7.80393798	−2.34214375	−11.8630562	−3.51752738	−16.0222983	−4.69291218	−20.2854103	−5.86829684	−24.6563321	−7.04368153

Table 9: The Effect of a Decrease in Imports of Textiles (Raw Materials) in Value

Unit: 1 million US dollars

PRIVATE CONSUMPTION	Benchmark	5% decrease	10% decrease	15% decrease	20% decrease	25% decrease	30% decrease
1 Paddy (1)	13.45750002	12.78610581	12.11322975	11.44035447	10.7674784	10.09460236	9.42172627
2 Other Agri (2-8)	1905.218703	1810.167408	1714.906322	1619.645348	1524.384262	1429.123179	1333.86209
3 Textile (9)	17.57300003	16.69628366	15.81763227	14.93898192	14.06033052	13.18167915	12.30302773
4 Apparel (10)	89.83580016	85.35389517	80.86209807	76.37030624	71.87850912	67.38671212	62.89491487
5 Manufact (11-17)	259.5041005	246.5574498	233.5822243	220.607014	207.6317884	194.6565632	181.6813373
6 Equipmt (18-21)	155.3084003	147.5600695	139.7946372	132.0292141	124.2637818	116.4983497	108.7329171
7 OtherManuf (22)	71.71370012	68.13590608	64.55021542	60.96452896	57.37883827	53.79314769	50.2074569
8 Utility (23-24)	143.7804003	136.607201	129.4181697	122.2291467	115.0401153	107.8510841	100.6620525
9 Construct (25)	0	0	0	0	0	0	0
10 TrdHotel (26)	117.0006002	111.1634443	105.313405	99.46337265	93.61333337	87.76329426	81.91325481
11 Service (27-30)	192.1834003	182.5953771	172.9861919	163.377018	153.7678327	144.1586478	134.5494623
12 Finance (31)	22.01150004	20.91334706	19.81277032	18.71219487	17.61161812	16.51104141	15.41046463
13 RealEstBus (32)	129.1236002	122.6816282	116.225438	109.7692554	103.3130652	96.85687511	90.40068469
14 OtherServ (33-35)	899.3943016	854.5235507	809.5537646	764.5840314	719.614245	674.64446	629.6746724

Table 9 (Continued): The Effect of a Decrease in Imports of Textiles (Raw Materials) in Value

Unit: 1 million US dollars

GOV CONSUMPTION	Benchmark	5% decrease	10% decrease	15% decrease	20% decrease	25% decrease	30% decrease
1 Paddy (1)	0.0003	0.000285031	0.000270031	0.000255031	0.000240031	0.000225031	0.000210031
2 Other Agri (2-8)	0.023700012	0.022517453	0.021332451	0.02014745	0.018962447	0.017777445	0.016592442
3 Textile (9)	0.0006	0.000570062	0.000540062	0.000510062	0.000480062	0.000450062	0.000420062
4 Apparel (10)	1.237500624	1.175753104	1.113877971	1.052002911	0.990127779	0.928252648	0.866377514
5 Manufact (11-17)	0.027100014	0.025747805	0.024392802	0.023037801	0.021682798	0.020327795	0.018972792
6 Equipmt (18-21)	0.0005	0.000475052	0.000450052	0.000425052	0.000400052	0.000375052	0.000350052
7 OtherManuf (22)	0	0	0	0	0	0	0
8 Utility (23-24)	0.0004	0.000380041	0.000360041	0.000340041	0.000320041	0.000300041	0.000280041
9 Construct (25)	0.0002	0.000190021	0.000180021	0.000170021	0.000160021	0.000150021	0.000140021
10 TrdHotel (26)	0.0001	9.50104E-05	9.00103E-05	8.50103E-05	8.00103E-05	7.50103E-05	7.00103E-05
11 Service (27-30)	0.015300008	0.014536584	0.013771582	0.013006581	0.01224158	0.011476578	0.010711577
12 Finance (31)	36.16741825	34.36277398	32.5544001	30.74602836	28.93765449	27.12928066	25.32090676
13 RealEstBus (32)	72.38243652	68.77077289	65.15164512	61.53252164	57.91339389	54.29426623	50.67513842
14 OtherServ (33-35)	380.3363919	361.3587617	342.3419109	323.3250826	304.3082318	285.2913816	266.2745306

Table 9 (Continued): The Effect of a Decrease in Imports of Textiles (Raw Materials) in Value

Unit: 1 million US dollars

Q (FINAL GOOD)	Benchmark	5% decrease	10% decrease	15% decrease	20% decrease	25% decrease	30% decrease
1 Paddy (1)	331.1482817	314.6390184	298.0815775	281.5241575	264.9667172	248.4092774	231.8518358
2 Other Agri (2-8)	3225.471163	3064.56827	2903.294432	2742.020784	2580.746947	2419.473115	2258.199275
3 Textile (9)	1323.235078	1257.074983	1190.913112	1124.751321	1058.589451	992.4275827	926.2657147
4 Apparel (10)	248.0602201	235.682318	223.2792961	210.8762877	198.4732644	186.0702411	173.6672166
5 Manufact (11-17)	2318.271808	2202.599131	2086.685357	1970.77172	1854.857946	1738.944175	1623.030398
6 Equipmt (18-21)	1169.853218	1111.473099	1052.98032	994.4876129	935.9948373	877.5020637	819.00929
7 OtherManuf (22)	249.9171168	237.4624116	224.9665545	212.4707104	199.9748507	187.4789902	174.9831278
8 Utility (23-24)	245.7732167	233.5229321	221.2342432	208.9455686	196.6568803	184.3681931	172.0795059
9 Construct (25)	624.001744	592.8098934	561.6097608	530.4096644	499.209531	468.009398	436.8092641
10 TrdHotel (26)	757.2855517	719.5115545	681.6472223	643.7829341	605.9186011	568.0542693	530.1899346
11 Service (27-30)	928.52756	882.2154608	835.7890447	789.362681	742.9362603	696.5098387	650.083412
12 Finance (31)	258.7181591	245.8227022	232.8867821	219.9508769	207.0149562	194.0790354	181.1431133
13 RealEstBus (32)	416.7505077	395.9704079	375.1328526	354.2953231	333.4577679	312.620213	291.7826562
14 OtherServ (33-35)	1620.667861	1539.823625	1458.790111	1377.756692	1296.723176	1215.689663	1134.656145

Table 9 (Continued): The Effect of a Decrease in Imports of Textiles (Raw Materials) in Value

Unit: 1 million US dollars

D (DOMESTIC GOOD)	Benchmark	5% decrease	10% decrease	15% decrease	20% decrease	25% decrease	30% decrease
1 Paddy (1)	328.4486788	312.0740031	295.6515427	279.2291028	262.8066429	246.3841834	229.9617222
2 Other Agri (2-8)	2980.947584	2832.24277	2683.195132	2534.147669	2385.100032	2236.0524	2087.004761
3 Textile (9)	79.03950818	75.08763191	71.13564951	67.18367185	63.23168953	59.27970726	55.32772504
4 Apparel (10)	135.0084323	128.2716764	121.5212488	114.7708286	108.0204003	101.269972	94.51954304
5 Manufact (11-17)	944.7058043	897.5686874	850.3333223	803.0980132	755.8626479	708.627284	661.3919179
6 Equipmt (18-21)	168.3739515	159.9714517	151.5527372	143.134033	134.7153189	126.2966051	117.8778913
7 OtherManuf (22)	172.7485463	164.1395632	155.5021351	146.8647159	138.2272859	129.5898554	120.9524235
8 Utility (23-24)	240.0595871	228.0940919	216.0910851	204.0880923	192.0850861	180.082081	168.0790759
9 Construct (25)	607.7745657	577.3938598	547.0050873	516.61635	486.2275768	455.8388039	425.4500301
10 TrdHotel (26)	727.5738174	691.2818648	654.9031214	618.5244204	582.1456763	545.7669333	509.3881876
11 Service (27-30)	798.5693903	758.739205	718.8107027	678.8822455	638.9537393	599.0252323	559.0967208
12 Finance (31)	255.4039773	242.6737113	229.9035004	217.1333043	204.3630928	191.5928813	178.8226684
13 RealEstBus (32)	366.012193	347.7620175	329.4613816	311.1607683	292.8601325	274.5594969	256.2588597
14 OtherServ (33-35)	1607.068877	1526.903003	1446.549439	1366.195969	1285.842404	1205.48884	1125.135273

Table 9 (Continued): The Effect of a Decrease in Imports of Textiles (Raw Materials) in Value

Unit: 1 million US dollars

M (IMPORTS)	Benchmark	5% decrease	10% decrease	15% decrease	20% decrease	25% decrease	30% decrease
1 Paddy (1)	2.442499843	2.320730003	2.198604814	2.076479778	1.954354592	1.83222941	1.710104216
2 Other Agri (2-8)	227.0126309	215.6880872	204.3374359	192.986798	181.6361469	170.2854961	158.9348447
3 Textile (9)	1229.811852	1168.322802	1106.832101	1045.341473	983.850773	922.3600735	860.8693749
4 Apparel (10)	111.7445982	106.1686792	100.5814444	94.99421562	89.40698019	83.81974475	78.23250875
5 Manufact (11-17)	1208.881804	1148.56334	1088.119154	1027.67504	967.2308537	906.7866692	846.3424818
6 Equipmt (18-21)	910.3587709	864.9284103	819.4103799	773.8924057	728.3743778	682.8563516	637.3383253
7 OtherManuf (22)	69.81875041	66.33930902	62.84837117	59.35743693	55.86649833	52.37555952	48.88462016
8 Utility (23-24)	5.647730257	5.366225609	5.083838452	4.801451622	4.519064479	4.23667736	3.954290241
9 Construct (25)	16.03948057	15.23771826	14.43574306	13.63376879	12.83179358	12.02981837	11.22784314
10 TrdHotel (26)	29.36803608	27.90313541	26.43473149	24.96632927	23.49792532	22.02952141	20.56111739
11 Service (27-30)	128.4281816	122.0225788	115.6011645	109.1797574	102.7583424	96.33692731	89.91551149
12 Finance (31)	3.275683023	3.112411031	2.948626725	2.784842609	2.621058297	2.457273983	2.293489652
13 RealEstBus (32)	50.15161669	47.65094643	45.143362	42.63578066	40.12819625	37.62061186	35.11302725
14 OtherServ (33-35)	13.44158558	12.77107514	12.09899486	11.42691536	10.75483507	10.08275479	9.410674475

Table 9 (Continued): The Effect of a Decrease in Imports of Textiles (Raw Materials) in Value

Unit: 1 million US dollars

E (EXPORTS)	Benchmark	5% decrease	10% decrease	15% decrease	20% decrease	25% decrease	30% decrease
1 Paddy (1)	136.8616	130.0384204	123.1953293	116.3522469	109.509156	102.6660654	95.822974
2 Other Agri (2-8)	171.0409	162.5085121	153.9564535	145.4044051	136.8523465	128.3002882	119.7482294
3 Textile (9)	30.6618	29.12874876	27.59565634	26.06256574	24.52947332	22.99638089	21.46328847
4 Apparel (10)	2138.1631	2031.471298	1924.562978	1817.654779	1710.746455	1603.838136	1496.92981
5 Manufact (11-17)	213.3001	202.657261	191.9922391	181.3272299	170.6622079	159.9971863	149.3321642
6 Equipmt (18-21)	1.68373E-06	1.59971E-06	1.51552E-06	1.43134E-06	1.34715E-06	1.26296E-06	1.17878E-06
7 OtherManuf (22)	127.8576	121.4857629	115.092873	108.6999903	102.3071002	95.91421029	89.52132007
8 Utility (23-24)	2.40058E-06	2.28093E-06	2.1609E-06	2.04087E-06	1.92084E-06	1.80081E-06	1.68078E-06
9 Construct (25)	6.07775E-06	5.77395E-06	5.47006E-06	5.16617E-06	4.86228E-06	4.55839E-06	4.25451E-06
10 TrdHotel (26)	279.726	265.7730459	251.7867239	237.8004182	223.814096	209.8277743	195.8414517
11 Service (27-30)	360.7626	342.7688566	324.7306981	306.6925607	288.6544021	270.616244	252.5780849
12 Finance (31)	2.55405E-06	2.42675E-06	2.29905E-06	2.17134E-06	2.04364E-06	1.91594E-06	1.78824E-06
13 RealEstBus (32)	12.3656	11.74902379	11.13074279	10.51246256	9.894181578	9.27590061	8.657619592
14 OtherServ (33-35)	80.1962	76.19574976	72.1859334	68.17612178	64.16630539	60.15648913	56.14667269

Table 9 (Continued): The Effect of a Decrease in Imports of Textiles (Raw Materials) in Value

Unit: 1 million US dollars

Y (COMPOSITE GOOD)	Benchmark	5% decrease	10% decrease	15% decrease	20% decrease	25% decrease	30% decrease
1 Paddy (1)	328.1034	311.745938	295.3407414	278.9355655	262.5303695	246.1251739	229.7199767
2 Other Agri (2-8)	1344.7907	1277.705717	1210.466075	1143.226513	1075.986871	1008.747232	941.5075878
3 Textile (9)	29.506801	28.03149825	26.55615587	25.08081525	23.60547286	22.13013048	20.65478809
4 Apparel (10)	716.364601	680.6188573	644.8005721	608.982327	573.1640406	537.3457554	501.5274682
5 Manufact (11-17)	95.230901	90.4792523	85.7176997	80.95615274	76.19460013	71.43304766	66.67149495
6 Equipmt (18-21)	49.581701	47.10738735	44.62829832	42.14921229	39.67012328	37.1910343	34.71194524
7 OtherManuf (22)	10.622001	10.09264913	9.561548255	9.030447978	8.499347088	7.968246217	7.437145319
8 Utility (23-24)	22.482401	21.36179255	20.23767075	19.11355021	17.98942837	16.86530656	15.7411847
9 Construct (25)	298.595201	283.6693836	268.7396001	253.809834	238.8800503	223.9502669	209.0204831
10 TrdHotel (26)	640.850701	608.8845612	576.8419757	544.7994276	512.7568417	480.714257	448.6716701
11 Service (27-30)	305.420301	290.1868634	274.9158243	259.644803	244.3737637	229.1027249	213.8316852
12 Finance (31)	55.503601	52.73709758	49.96191299	47.18673172	44.41154724	41.63636287	38.86117834
13 RealEstBus (32)	92.652701	88.03283204	83.40018951	78.76755275	74.13491035	69.50226804	64.86962537
14 OtherServ (33-35)	739.226301	702.3512616	665.389888	628.4285579	591.467184	554.5058113	517.5444368

Table 9 (Continued): The Effect of a Decrease in Imports of Textiles (Raw Materials) in Value

Unit: 1 million US dollars

CAPITAL INCOME	Benchmark	5% decrease	10% decrease	15% decrease	20% decrease	25% decrease	30% decrease
1 Paddy (1)	2.3578	2.240252837	2.122362646	2.004472603	1.886582416	1.768692233	1.650802037
2 Other Agri (2-8)	275.4474	261.7066861	247.9342943	234.1619187	220.3895269	206.6171354	192.8447432
3 Textile (9)	17.914	17.01832265	16.12262123	15.22692088	14.33121947	13.43551805	12.53981663
4 Apparel (10)	434.9156	413.2138276	391.4680141	369.7222249	347.9764107	326.2305972	304.4847826
5 Manufact (11-17)	50.6337	48.10727683	45.57558782	43.0439018	40.51221278	37.98052383	35.44883476
6 Equipmt (18-21)	31.5522	29.97762637	28.40001383	26.82240321	25.24479069	23.66717819	22.08956563
7 OtherManuf (22)	5.5805	5.302393442	5.023368011	4.744342892	4.465317451	4.186292019	3.907266573
8 Utility (23-24)	15.9832	15.18653647	14.38737523	13.58821487	12.7890536	11.98989236	11.19073107
9 Construct (25)	158.588	150.660694	142.7312815	134.8018783	126.8724658	118.9430534	111.0136408
10 TrdHotel (26)	322.0528	305.9885516	289.8858863	273.7832397	257.6805742	241.5779092	225.4752432
11 Service (27-30)	254.0651	241.393104	228.6898289	215.9865688	203.2832936	190.5800188	177.8767433
12 Finance (31)	45.5535	43.28294618	41.00526745	38.72759145	36.44991282	34.17223426	31.89455559
13 RealEstBus (32)	39.8295	37.84351288	35.85203467	33.86055893	31.86908077	29.87760265	27.88612437
14 OtherServ (33-35)	455.3549	432.6402998	409.8725187	387.1047645	364.3369832	341.5692027	318.8014211

Table 9 (Continued): The Effect of a Decrease in Imports of Textiles (Raw Materials) in Value

Unit: 1 million US dollars

SKILLED LABOR INCOME	Benchmark	5% decrease	10% decrease	15% decrease	20% decrease	25% decrease	30% decrease
1 Paddy (1)	0.9756	0.926961857	0.878181779	0.829401761	0.780621684	0.731841608	0.683061527
2 Other Agri (2-8)	13.2299	12.56992546	11.90842942	11.24693415	10.5854381	9.923942067	9.262445997
3 Textile (9)	1.5685	1.490076983	1.411651859	1.333226828	1.254801704	1.17637658	1.097951456
4 Apparel (10)	36.0301	34.23224076	32.43073298	30.62922723	28.82771939	27.02621162	25.22470374
5 Manufact (11-17)	7.2882	6.924547386	6.560136809	6.195726663	5.831316084	5.466905516	5.10249493
6 Equipmt (18-21)	3.4073	3.237262895	3.066897622	2.896532554	2.726167282	2.555802012	2.385436736
7 OtherManuf (22)	0.5835	0.554421033	0.525245988	0.496070975	0.466895929	0.437720884	0.408545837
8 Utility (23-24)	2.1378	2.03124391	1.924353744	1.817463697	1.710573526	1.60368336	1.496793188
9 Construct (25)	21.2584	20.19576069	19.13283903	18.0699186	17.00699692	15.94407525	14.88115356
10 TrdHotel (26)	55.3625	52.60097471	49.83284535	47.06471923	44.29658984	41.52846055	38.76033107
11 Service (27-30)	10.4399	9.919189477	9.397193653	8.875198441	8.353202611	7.831206798	7.309210956
12 Finance (31)	4.3418	4.125388734	3.908298379	3.691208284	3.474117937	3.257027599	3.039937249
13 RealEstBus (32)	22.7967	21.66000603	20.52016919	19.38033377	18.24049696	17.10066017	15.9608233
14 OtherServ (33-35)	147.9039	140.525967	133.1307603	125.7355623	118.3403555	110.9451489	103.5499421

Table 9 (Continued): The Effect of a Decrease in Imports of Textiles (Raw Materials) in Value

Unit: 1 million US dollars

UNSKILLED LABOR INCOME	Benchmark	5% decrease	10% decrease	15% decrease	20% decrease	25% decrease	30% decrease
1 Paddy (1)	307.5916	292.2567455	276.8771406	261.497555	246.1179506	230.7383467	215.3587412
2 Other Agri (2-8)	852.9247	810.3764884	767.7301859	725.0839335	682.4376309	639.7913295	597.1450255
3 Textile (9)	10.0243	9.523097673	9.02188188	8.520666685	8.019450892	7.518235099	7.017019307
4 Apparel (10)	245.4189	233.1727881	220.9018242	208.630874	196.3599097	184.0889458	171.8179812
5 Manufact (11-17)	37.309	35.44742713	33.58197418	31.71652343	29.85107047	27.98561756	26.12016456
6 Equipmt (18-21)	14.6222	13.89249714	13.16138597	12.43027568	11.69916451	10.96805335	10.23694217
7 OtherManuf (22)	4.458	4.2358337	4.012933356	3.790033261	3.567132908	3.344232564	3.121332208
8 Utility (23-24)	4.3614	4.144011222	3.925940882	3.707870786	3.489800439	3.271730099	3.053659748
9 Construct (25)	118.7488	112.8129279	106.8754786	100.9380362	95.00058684	89.06313754	83.1256881
10 TrdHotel (26)	263.4354	250.2950339	237.1232432	223.9514678	210.7796769	197.6078865	184.4360952
11 Service (27-30)	40.9153	38.87456903	36.8288008	34.78303497	32.73726672	30.69149853	28.64573023
12 Finance (31)	5.6083	5.328761721	5.048346261	4.767931138	4.487515691	4.207100254	3.926684802
13 RealEstBus (32)	30.0265	28.52931218	27.02798476	25.5266592	24.02533182	22.52400447	21.022677
14 OtherServ (33-35)	135.9675	129.1849939	122.3866081	115.5882303	108.7898445	101.9914589	95.19307297

Table 9 (Continued): The Effect of a Decrease in Imports of Textiles (Raw Materials) in Value

Unit: 1 million US dollars

LAND INCOME	Benchmark	5% decrease	10% decrease	15% decrease	20% decrease	25% decrease	30% decrease
1 Paddy (1)	17.1784	16.32197783	15.46305644	14.60413613	13.74521477	12.88629343	12.02737201
2 Other Agri (2-8)	203.1887	193.0526167	182.8931656	172.7337265	162.5742754	152.4148246	142.2553731
3 Textile (9)	0	0	0	0	0	0	0
4 Apparel (10)	0	0	0	0	0	0	0
5 Manufact (11-17)	0	0	0	0	0	0	0
6 Equipmt (18-21)	0	0	0	0	0	0	0
7 OtherManuf (22)	0	0	0	0	0	0	0
8 Utility (23-24)	0	0	0	0	0	0	0
9 Construct (25)	0	0	0	0	0	0	0
10 TrdHotel (26)	0	0	0	0	0	0	0
11 Service (27-30)	0	0	0	0	0	0	0
12 Finance (31)	0	0	0	0	0	0	0
13 RealEstBus (32)	0	0	0	0	0	0	0
14 OtherServ (33-35)	0	0	0	0	0	0	0

Table 9 (Continued): The Effect of a Decrease in Imports of Textiles (Raw Materials) in Value

Unit: 1 million US dollars

THE AMOUNT OF TAXES	Benchmark	5% decrease	10% decrease	15% decrease	20% decrease	25% decrease	30% decrease
INCOME TAX	125.826305	119.548835	113.2575098	106.966192	100.6748668	94.38354173	88.09221633
PRODUCTION TAX	106.665	101.3430856	96.00982716	90.67657498	85.34331653	80.01005823	74.67679966
TARIFF	299.5232647	284.5767388	269.6005502	254.6243796	239.6481912	224.6720032	209.6958147

Unit: 1 million US dollars

THE AMOUNT OF SAVINGS	Benchmark	5% decrease	10% decrease	15% decrease	20% decrease	25% decrease	30% decrease
PRIVATE	587	557.7145901	528.3645438	499.0145319	469.6644854	440.3144397	410.9643924
GOVERNMENT	41.8226224	39.73580063	37.64466608	35.553534	33.46239945	31.37126497	29.28013039
FOREIGN	455.4877076	432.6187575	409.8443129	387.0699043	364.2954655	341.5210249	318.7465895

Unit: 1 million US dollars

equivalent variation	Benchmark	5% decrease	10% decrease	15% decrease	20% decrease	25% decrease	30% decrease
EV		−139.248233	−283.037281	−431.30678	−584.312198	−742.330317	−905.662585

Table 10-1: The Effect of a Decrease in Imports of Textiles (Raw Materials) on Q (final consumption good)

	Benchmark		5% decrease		10% decrease		15% decrease		20% decrease		25% decrease		30% decrease	
	QUANTITY	PRICE	QUANTITY	PRICE	QUANTITY	PRICE	QUANTITY	PRICE	QUANTITY	PRICE	QUANTITY	PRICE	QUANTITY	PRICE
1 Paddy (1)	452.8323902	0.731282233	446.1174371	0.705282942	438.8664931	0.679207873	431.0365296	0.653132944	422.5552912	0.627058098	413.3380149	0.60098338	403.2845469	0.574908802
2 Other Agri (2-8)	2873.783279	1.122378012	2796.877135	1.095710724	2715.943332	1.068981962	2630.858498	1.042253236	2541.294659	1.015524484	2446.888701	0.988795736	2347.237032	0.962066994
3 Textile (9)	132.4085832	9.99357478	126.5042654	9.937016585	120.5321829	9.880457514	114.4913411	9.823898559	108.3805313	9.767339564	102.1985381	9.710780617	95.9441104	9.654221721
4 Apparel (10)	2819.142447	0.087991375	2694.185106	0.087478146	2567.276546	0.086971268	2438.659014	0.086472232	2308.325874	0.085981475	2176.275194	0.085499408	2042.508041	0.085026454
5 Manufact (11-17)	1202.253903	1.928271392	1144.537423	1.924444835	1086.469931	1.920610316	1028.170181	1.916775799	969.6366357	1.912941279	910.8679579	1.909106759	851.8627232	1.905272239
6 Equipmt (18-21)	208.8935322	5.600236665	199.6571647	5.566908157	190.2913821	5.533515539	180.8118874	5.500122957	171.2165736	5.46673034	161.5033168	5.433337724	151.6699289	5.399945104
7 OtherManuf (22)	306.372254	0.815730255	291.3379519	0.815075448	276.2296724	0.814418497	261.0970141	0.813761548	245.939884	0.813104599	230.7582407	0.81244765	215.5520236	0.811790699
8 Utility (23-24)	257.3980022	0.954837313	244.8760324	0.953637356	232.283101	0.952433656	219.6583139	0.951229958	207.0015212	0.950026257	194.3126161	0.948822557	181.5914752	0.947618855
9 Construct (25)	824.1601616	0.757136505	795.2809152	0.74540943	765.4704145	0.733679252	734.6912324	0.721949087	702.8952979	0.710218908	670.0314232	0.69848873	636.0448845	0.686758552
10 TrdHotel (26)	1455.199273	0.520399897	1416.425086	0.507977133	1375.606913	0.495524714	1332.684273	0.483072358	1287.490016	0.470620039	1239.838988	0.458167774	1189.525278	0.445715568
11 Service (27-30)	1495.802462	0.62075547	1424.542449	0.619297418	1352.768951	0.617835769	1280.655132	0.616374121	1208.198392	0.614912473	1135.39637	0.613450824	1062.246583	0.611989177
12 Finance (31)	310.4785515	0.833288348	295.6053606	0.831590813	280.6243645	0.829887962	265.5817802	0.828185114	250.4771917	0.826482263	235.3102326	0.824779413	220.0805148	0.823076561
13 RealEstBus (32)	400.5903449	1.040340869	384.3922906	1.030120576	367.8234427	1.019872061	350.9182405	1.009623559	333.6662945	0.999375045	316.056847	0.989126532	298.0786684	0.978878018
14 OtherServ (33-35)	2290.087223	0.707688269	2201.66783	0.699389619	2110.910395	0.691071546	2017.941652	0.682753483	1922.679554	0.674435411	1825.038304	0.666117341	1724.927643	0.65779927

Table 10-2: The Effect of a Decrease in Imports of Textiles (Raw Materials) on Q (final consumption good) in the Relative Changes

Unit: %

	5% decrease		10% decrease		15% decrease		20% decrease		25% decrease		30% decrease	
	QUANTITY	PRICE	QUANTITY	PRICE	QUANTITY	PRICE	QUANTITY	PRICE	QUANTITY	PRICE	QUANTITY	PRICE
1 Paddy (1)	-1.48287826	-3.55530199	-3.08412061	-7.1209661	-4.81322914	-10.6866113	-6.6861602	-14.252245	-8.72163214	-17.8178612	-10.9417622	-21.3834583
2 Other Agri (2-8)	-2.67612885	-2.37596317	-5.49240954	-4.75740341	-8.45313501	-7.13884048	-11.569718	-9.52027988	-14.8547937	-11.9017189	-18.3224062	-14.2831574
3 Textile (9)	-4.45916543	-0.56594558	-8.96950936	-1.13189993	-13.5317829	-1.69785312	-18.146899	-2.26380671	-22.8157755	-2.82975981	-27.5393573	-3.39571241
4 Apparel (10)	-4.43245928	-0.58327191	-8.93413176	-1.15932627	-13.4964246	-1.72646819	-18.119573	-2.28420063	-22.8036456	-2.83205803	-27.5486046	-3.36955827
5 Manufact (11-17)	-4.80068979	-0.19844499	-9.63057571	-0.39730282	-14.4797802	-0.59616054	-19.3484311	-0.79501848	-24.2366396	-0.99387638	-29.1445242	-1.19273427
6 Equipmt (18-21)	-4.42156701	-0.59512677	-8.90508667	-1.19139832	-13.4430417	-1.78766924	-18.036441	-2.38394077	-22.686301	-2.98021227	-27.3936692	-3.57648386
7 OtherManuf (22)	-4.90720091	-0.08027253	-9.83854811	-0.16080783	-14.7778525	-0.24134285	-19.7251446	-0.32187797	-24.6804377	-0.40241309	-29.6437517	-0.48294841
8 Utility (23-24)	-4.86482791	-0.12567127	-9.7572246	-0.25173462	-14.6619974	-0.37779787	-19.5792044	-0.50386131	-24.5088872	-0.62992469	-29.4510938	-0.75598816
9 Construct (25)	-3.50408182	-1.54887195	-7.12115798	-3.09815376	-10.8557697	-4.6474338	-14.7137497	-6.19671568	-18.701309	-7.74599746	-22.8250874	-9.29527924
10 TrdHotel (26)	-2.66452768	-2.3871572	-5.46951622	-4.780013	-8.41912186	-7.17285672	-11.524831	-9.56569331	-14.7993673	-11.9585194	-18.2568807	-14.3513344
11 Service (27-30)	-4.76399887	-0.23488345	-9.56232621	-0.47034642	-14.3834053	-0.70580917	-19.2274099	-0.94127198	-24.0944978	-1.17673483	-28.9848352	-1.41219749
12 Finance (31)	-4.79040849	-0.20371511	-9.61553924	-0.40806825	-14.4605065	-0.61242111	-19.3254444	-0.81677427	-24.2104708	-1.02112733	-29.1157106	-1.22548055
13 RealEstBus (32)	-4.04354585	-0.98239851	-8.17965351	-1.96750979	-12.3997258	-2.95261975	-16.7063563	-3.93773099	-21.1022305	-4.922842	-25.5901516	-5.90795314
14 OtherServ (33-35)	-3.86096178	-1.17264193	-7.82401761	-2.34802851	-11.8836334	-3.5234137	-16.0433919	-4.69880012	-20.3070396	-5.87418633	-24.6785177	-7.0495726

Table 11-1: The Effect of a Decrease in the Production Tax Rate for Apparel Products on Utility Measured by Equivalent Variation

Unit: 1 million US dollars

		decreasing rate of the production tax from the actual rate (actual rate)						
		0% (1.02%)	5% (0.97%)	10% (0.92%)	15% (0.87%)	20% (0.82%)	25% (0.77%)	30% (0.71%)
value of exports of apparel	0% (2138.16)							
	5% (2031.25)		−7.52215	−1.4369138	4.67538742	10.8149384	16.9819438	23.1765729
	10% (1924.34)		−21.06165	−14.973386	−8.8579634	−2.7152056	3.45509677	9.65310212
	15% (1817.43)		−35.25595	−29.164668	−23.046159	−16.900203	−10.726636	−4.5252599
	20% (1710.52)		−50.15379	−44.059539	−37.937969	−31.788857	−25.612027	−19.407309
	25% (1603.62)		−65.80884	−59.711662	−53.587074	−47.434846	−41.254815	−35.046782
	30% (1496.71)		−82.28034	−76.180326	−70.052787	−63.897519	−57.714344	−51.503048

Note: The unit of the actual economic value of exports of apparel products is 1 million US dollars

Table 11-2: The Effect of a Decrease in the Tariff Rate for Textiles on Utility Measured by Equivalent Variation

Unit: 1 million US dollars

value of imports of textiles	decreasing rate of the tariff from the actual rate (actual rate)						
	0% (1.17%)	5% (1.11%)	10% (1.05%)	15% (0.99%)	20% (0.93%)	25% (0.87%)	30% (0.81%)
0% (1229.81)							
5% (1168.32)		−15.3258	−11.6685	−7.99856	−4.31582	0.620233	33.2292
10% (1106.82)		−34.8489	−31.1905	−27.5194	−23.8355	−20.1386	−16.4289
15% (1045.33)		−55.7345	−52.0752	−48.403	−44.718	−41.0201	−37.3092
20% (983.84)		−78.1307	−74.4705	−70.7975	−67.1116	−63.4128	−59.7009
25% (922.35)		−102.208	−98.5467	−94.8731	−91.1865	−87.4868	−83.7741
30% (860.86)		−128.162	−124.501	−120.826	−117.139	−113.439	−109.726

Note: The unit of the actual economic value of imports of textiles is 1 million US dollars

Table 12: Production Tax Rates to maintain Welfare When the Economic Value of Exports of Apparel Products Decreases

decreasing rate of the economic value of exports of apparel products (actual value)	production tax on the 'apparel' sector (benchmark rate = 1.02%)			production tax on the 'paddy' sector (benchmark rate = 0.08%)			production tax on the 'other agriculture' sector (benchmark rate = 0.65%)			production tax on the 'services' sector (benchmark rate = 0.38%)		
	decreasing rate of the tax rate	actual tax rate	shortage of tax revenue	decreasing rate of the tax rate	actual tax rate	shortage of tax revenue	decreasing rate of the tax rate	actual tax rate	shortage of tax revenue	decreasing rate of the tax rate	actual tax rate	shortage of tax revenue
0% (2138.16)	0%	1.02%	0.00	0.00%	0.08%	0.00	0%	0.65%	0.00	0%	0.38%	0.00
5% (2031.25)	10.60%	0.91%	11.55	550.50%	−0.42%	11.59	11.20%	0.58%	11.59	56.70%	0.17%	11.70
10% (1924.34)	21.10%	0.80%	23.00	1250.00%	−0.96%	24.90	22.50%	0.51%	23.22	112.10%	−0.05%	23.40
15% (1817.43)	32.00%	0.69%	34.41	1871.00%	−1.44%	34.88	34.40%	0.43%	34.94	171.70%	−0.27%	35.23
20% (1710.52)	43.50%	0.57%	45.79	2593.00%	−2.00%	46.66	47.00%	0.35%	46.75	233.50%	−0.51%	47.14
25% (1603.62)	55.50%	0.45%	57.12	3450.00%	−2.66%	62.16	60.50%	0.26%	58.69	299.00%	−0.76%	59.16
30% (1496.71)	68.10%	0.32%	68.38	4250.00%	−3.27%	74.56	74.90%	0.16%	70.73	368.50%	−1.03%	71.31

Note: The unit of the actual economic value of exports of apparel products is 1 million US dollars

Note: The unit of the shortage of tax revenue is 1 million US dollars

Note: The minus tax rate implies the subsidy rate