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TRADE LIBERALISATION WITH LABOR MARKET DISTORTIONS: THE CASE OF INDONESIA [1]

BY

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ABSTRACT

There is still considerable debate on the issue of trade liberalization in the form of tariff reductions, particularly about its economic benefits and its forms. In contrast to standard assumptions, trade liberalization in developing countries commonly occurs in a context of multiple distortions, notably in the labor market in the form of wage rigidities. Governments have introduced various regulations resulting in wage rigidities with the objective of providing lower cost inputs or restraining relative wage bargaining, thereby limiting the cost of the public sector wage bill. Prediction of trade liberalization effects within this context is by no means clear. An important issue relating to tariff liberalization is, therefore, the economic effects that will ensue within a context of labor market distortions, compared with the effects that would occur if such distortions were removed.

A second issue concerns the ways in which the trade liberalization is implemented. Trade liberalization in the form of tariff reductions can be implemented in a variety of ways, including standard percentage reductions in the set of prevailing rates (lump sump rate across the board), differing reductions to achieve a uniform rate

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and differing reductions to achieve an optimum tariff in the second best situation. The different forms of tariff liberalization give rise to different effects, not only on trade but also on welfare, income, employment and distribution that is relevant to the choice of appropriate policies.

Although trade liberalization has been investigated in the context of tax distortions (for example, Konan and Maskus, 2000; Yilmaz, 1999), relatively little attention has been paid to trade liberalization in the context of labor market distortions. Notable exceptions are the intertemporal model of liberalization reforms in the context of financial and labor market distortions developed by Battle (1997), the effects of unions on the outcomes of economic reform (Devarajan *et al.*, 1997) and the effects of trade and labor market distortions on trade volumes and the wage gap between skilled and unskilled workers (Bussolo *et al.*, 2002). Thus, the issue of the relative effectiveness of different forms of tariff liberalization in the context of rigid or flexible labor markets remains obscure. It is, however, of considerable practical importance for developing countries which are considering reforms in their trade and labor market regimes.

This paper will build on the literature on trade policy by extending the analysis of tariff reductions to encompass the effects of labor market reform. The effects will be measured not only in terms of changes in welfare but also as changes in income and employment, and in the distribution of income between household groups. The analysis will focus on Indonesia, which is an interesting example of a country that is undertaking ongoing trade reforms. Tariff reductions have been a feature of the economy during recent years and a trend of further reductions is likely. However, intermittent increases in tariffs during also appeal to the government which, as in other developing countries, has limited reserves for financing ongoing expenditure during downturns in economic activity. The availability of quantitative estimates of the range of effects of alternative policy reforms is clearly useful for guiding the liberalization process. The main aims of the paper are to examine and quantify the effects of alternative types of tariff reductions and labor market regimes on welfare, income, employment, the government budget, trade balance and income redistribution in Indonesia, within a general equilibrium, multi-sectoral context. The analysis will be undertaken for different types and levels of tariff reductions, in the context of three different labor market regimes - with wage rigidity in all sectors, rigidity in some sectors or flexibility in all sectors. The case of Indonesia is interesting as the labor

market rigidities stem from a range of government regulations, highlighting the role of the regulatory context in determining the effects of liberalization. Different exchange rate and budgetary contexts will also be taken into account. As the effects of tariff policy reform are mediated by the prevailing exchange rate regime, ranging from fixed (with an endogenously determined balance of payments) to market-determined so that results will be provided for both types of exchange rate regime. Results will also be provided for both neutrality and non-neutrality of the government budget as although neutrality is a constraint to policy formation over the medium to long term, non-neutrality can occur within the very short term.

I. INTRODUCTION

Proponents of trade liberalisation argue that it will expand markets for products and services, introduce competition, reduce transportation and production costs which all, in turn, stimulate exports, increase production and benefit workers. This proposition is, however, usually based on a relatively simple model and stylised facts, far from the reality of the complex, multi-sectoral linkages of an economy. Moreover, results from empirical studies are still inconclusive, reflecting the conflicting effects of trade liberalisation.[2] The actual impacts of trade liberalisation may increase or decrease welfare in an economy due to the existing taxation on foreign trade and other economic distortions in the 'border' and 'domestic' markets, as well as in production sector. The global market can bring unemployment, skew income distribution, and endanger the environment.

Although trade liberalisation is supposed to bring about long-term benefits by allowing countries to reap gains from specialisation in production on the basis of their comparative advantage, a number of problems may occur. These can take the form of: a balance of trade deficit (as lower tariff will encourage consumers to purchase increased quantities of the cheaper imports); a government budget deficit (the government receives less revenue from the lower tariffs and indirect taxes); overall effects on domestic industries, distribution of income and welfare.

The effects of trade liberalisation are often examined without consideration of the ways in which labour market operates as well as the ways on which the trade liberation is conducted. The former is a common feature of government's interventions in labour markets which is prevalent in the developing countries, while the latter can be very important for the policy implications. There is also a strong case that the effects of trade liberalisation could be unique to an economy, depending on – in addition to the labour market above- the production structure, industrial policy, tax system, and other government policies. These issues highlight the importance of designing an appropriate model representative of the underlying economy for addressing various issues concerning trade liberalisation.

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[2] Readers interested on this issue are referred to, for instances, Wood, A (1997), Edwards, S (1998), Rodrik, D (1999), Dollar, D. and Kraay, A (2000), Forbes, K.J (2000), Knowles, S (2001) and some of the references cited in the articles.

A computable general equilibrium (CGE) model of the Indonesian economy is developed to serve the purpose (see Greenaway *et al.* 1993; Shoven and Whalley 1992; and Robinson *et al.* 1999 for fuller discussions of CGE modelling). In the model, three different frameworks of labour are introduced to represent, respectively, *Fully Competitive, Rigid and Fully Rigid* labour markets. In the fully competitive case, wages of different labour adjust to clear the labour market as in the competitive labour market scenario, while in the fully rigid case the wage rates are fixed and the adjustment is done in the quantity base, making a possibility for unemployment. The two frameworks represent the neo classical case and the Keynesian model. On the other hand, the rigid framework is to represents the middle ground between the two paradigms as the wage rigidity and therefore possibility for unemployment is only allowed for certain types of labour, namely farmers and production workers. These different labour market frameworks can be crucial for the overall results and distributional issues as economic and distributional impact of trade liberalisation are passed through labour market, in addition to the product market.

For results of CGE modelling also depend on the macro closures related to the international sectors, two different modelling framework of "Fixed Exchange Rate with Endogenuous BOP Deficits" and "Flexible Exchange Rate with Fixed BOP Deficits" are also introduced in the modelling simulation. Moreover, to further complete the discussion, the simulation are also conducted in two different budget/fiscal policies, namely whether the government- as a result of embarking on trade liberalisation- will maintain its level of tax revenue or not. This revenue neutrality can be an important issue for developing countries where tariffs are still an important part of the government income.

The trade liberalisation process itself is modelled in three different ways to represent moving towards, respectively, lower level and dispersion of tariffs, uniform tariff and optimal tariff in the second best situation. The lowering tariff level and dispersion is very common in the World Bank/IMF approach of trade reform, while the move towards uniform tariff is to examine whether the optimality of the existing tariff structure[3]. The optimal tariff scenario is conducted in such a way so that the welfare costs of the existing tariff has already taken into account. In other words, the optimal tariffs are calculated so that the revenue from tariff is maintained and the

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[3] If a move towards uniform tariff results in an improvement of welfare that means the existing tariff is still not optimal, and vice versa.

welfare costs of the tariff is minimised. Therefore, the use of the CGE model developed in this study is a step further from the similar practices of developing CGE models for calculating the welfare cost of the existing taxation (see, among others, Clarete and Whalley 1987; Rutherford and Paltsev, 1999) as the welfare cost of sectoral tariff is then used as a base for designing optimal tariff in the second best situation.

Therefore, the simulation analysis is conducted in the set of scenarios as a result of a combination of two different macro closure, two alternatives of government tax income neutrality (for lowering level and dispersion of tariffs), three methods of trade liberalisation methods, and three frameworks of labour market. Detailed combination of the scenario analysis is summarised in the Table 1.

Table 1: Combination of scenario analysis

A. Macro Closures	B. Fiscal Neutrality*)	C. Trade Liberalisation Methods	D. Labour Markets
1. Fixed Exchange Rate with Endogenuous BOP Deficits 2. Flexible Exchange Rate and Fixed BOP Deficits	1. Left Un-financed 2. Revenue Neutral	1. Lower level and dispersion of tariffs 2. Uniform tariff 3. Optimal tariff	1. Fully Competitive 2. Rigid 3. Fully Rigid

*). Only for the lower level and dispersion of tariffs scenario as the in the uniform and optimum tariff scenarios the revenue neutrality is always the case. The revenue neutrality is achieved as the government income form taxation is maintained at the benchmark level

The move towards greater openness or trade liberalisation seems inevitable, given the Indonesian government's commitments to the World Trade Organisation (WTO), Asia-Pacific Economic Co-operation (APEC) and Association of South East Asian Nations (ASEAN) agreements to liberalise international trade. The lowering of tariffs, in conjunction with other measures, has been part of the policy package of the IMF/World Bank conditional loans in which the Indonesian government is currently involved.

This is the first attempt at developing and such a model as previous applications of CGE modelling to the Indonesian economy were not concerned with the issue above

(Azis 1996; Behrman *et al.* 1989; Devarajan *et al.* 1997; Roland-Holst 1992; Thorbecke *et al.* 1992).

The main focus of the analysis is on key economic indicators such as macroeconomic aggregates and external performance as well as on welfare and household income distribution. The tariff reduction is chosen to represent trade liberalisation for the reasons that welfare costs of import tariff are relatively much higher than those of other taxes so that concentrating on tariff reduction seems very sensible. On the final demand side, tariff will make consumers in favor 'distorted' domestic products over imports and the higher import prices -as a results of tariffs- also enter the production system through the use of imported intermediate inputs (Clarete and Whalley 1987, Rutherford and Paltsev 1999).

The paper is organised as follows. The next section will set out why the trade liberalisation is important especially for developing countries, followed by the trade liberalisation measures adopted in the Indonesian economy. The main characteristics of the CGE model is then discussed, including its development. The analysis of the results is then presented, followed by conclusions and policy implications.

II.   THE NEED FOR TRADE LIBERALISATION

Foreign trade has a crucial role in economy and has variously been described as the 'engine' of growth. Economic policies related to foreign trade are, therefore, very crucial for trade orientation and export performance, which all, in turn, affect economic growth. Kreuger (1998) and Booth (1999) argue that export-friendly policies are essential for economic growth, contributing to a common lesson from successes of Taiwan, South Korea and the fast-growing economies of South East Asia. Despite these facts, taxation on foreign trade has long been very common, becoming one of the main sources of government revenue especially in developing countries. In Sub Sahara Africa, for instance, trade taxes contributes to nearly 27% of total revenue and in some other African countries the shares are even more than 40% (Devarajan et al. 1999). In most cases, taxes on foreign trade in developing countries are more important than taxes on income, especially as a source of government revenue (Kumar 1992)

There is, however, an increasing awareness regarding the advantages of economic policies in favor of openness and export-led growth, leading to the important and pressing questions regarding their actual implementation (Greenaway & Morrissey 1992). This can be seen from the major shift in the emphasis of economic policies by many developing countries, away from inward-oriented, import-substituting policies to outward-oriented, export-led growth policies. This change, to some extent, reflects the dissatisfaction with results of previous import substitution policies and the desire to emulate the strong growth performance of the 'outwardly-oriented' new industrialized countries (Edwards 1993 and Krueger 1998). Dornbusch (1992) also identifies four overlapping sources for the enthusiasm on free trade: anti-statism, poor economic performance, information, and the World Bank pressure and evidence of success. The international donors and lenders, such as the World Bank and IMF, have also attempted to push developing countries in the direction of greater outward orientation by making their assistance conditional on economic reform, which in most cases includes trade liberalization (Edwards 1997). This is highlighted from the fact that almost 80 per cent of Structural Adjustment Loans (SALs) have trade policy reform conditions attached (Greenaway & Morrissey, 1992). In addition to its conditionality, the World Bank has also promoted reform (hereafter the terms of reform and liberalization are used interchangeably to refer more or less the same thing) through its other lending programs, policy dialogue and applied research directed towards highlighting the best practices (Edwards 1997).

A 'best practice' for trade liberalization includes replacing quantitative restrictions with tariffs, simplifying tariff structure, broadening tariff base, levying lower and more uniform tariff rates, and exempting or reducing tariffs on intermediate inputs. Other common measures are simplification of import and export procedures, and unification of multiple exchange rates. A removal of quantitative restrictions avoids rent seeking activities, a simpler tariff structure is easier to administer, a broader tax base yields larger revenues, a lower and uniform tax rate reduces unintended distortions (besides also being easier to administer) and an exemption on intermediate input taxes may encourage domestic production. The aim of trade liberalization is opening domestic market, as in highly protected markets the scale of operations is small, competition from international markets is absent, and rent seeking is pervasive. Resources are thus inefficiently used and the incentives for innovation are minimal. By contrast, in open economies manifold channels for beneficial foreign

influences on a country's economy are at work, ranging from technology transfer and foreign investment to competition and stability of rules regulations (since the domestic economy is now a part of the international market). The reduction in protection and removal of any price distortions will encourage exports and at the same time discourage resources from going into import substitution industries. The trade liberalization will, therefore, facilitate the growth of real exports.

III. TRADE LIBERALISATION MEASURES IN INDONESIAN ECONOMY

Despite all of the above, trade liberalization remains an unfinished business as the governments in developing countries continue to rely on international trade taxes as a source of revenue.[4] Indonesia is no exception in this case as clearly summarised in the Table 2. It indicates - among others- that tariff has more than doubled over the period of 1985-1993 despite the claim that this is the trade liberalisation era.

Table 2. Government Income by Source

Source of Income	1985 Value (mil. Rp)	Share (%)	1990 Value (mil. Rp)	Share (%)	1993 Value (mil. Rp)	Share (%)
1. Factor Income/ Capital payments	66.9	0.4	1937.8	4.7	4249.8	6.9
2. Taxation on						
• Households	1817.7	9.7	1997.8	4.8	3848.4	6.2
• Firms/Corporate	13998.3	74.9	24845.3	59.9	31014.8	50.1
• Commodity/Sector	2789.9	14.9	12269.4	29.6	22355.8	36.1
- Domestic	2029.2	10.9	9204.5	22.2	15963.7	25.8
- Import Tariff	760.6	4.1	3064.9	7.4	6392.1	10.3
3. Rest of the world	29.7	0.2	464.9	1.1	398.5	0.6
Total	18702.4	100.0	41515.2	100.0	61867.2	100.0

Source: Calculated from the Indonesian SAMs in 1985, 1990 and 1993.

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[4] In this context, it is not surprisingly that many authors have suggested trade liberalization should be accompanied by appropriate fiscal adjustment to be more likely successful (see for instances Devarajan et al. 1999, Mitra 1992, Greenaway and Milner 1991). On studying the role of the World Bank in the trade liberalization, Edwards (1997) also concludes that fiscal issues matter and suggests to find alternative sources of government income before embarking on trade liberalization. One main obstacle for governments in developing countries to conduct trade liberalization is a perceived loss of income from tax revenue as a result of adopting policy such as tariff reduction. While the potential benefits of the program may take time to realize, they still need to be weighed with its associated costs. This situation can create a reluctant attitude towards the program, highlighting the importance of alternative financing.

The Indonesian government's attitude towards trade liberalization can be described as reluctant and inconsistent, to say the least, as major changes in the direction of trade and industrial policies have always been linked to and triggered by major political and economic crises. Moreover, most major economic policy changes have been in response to unfavorable external conditions, such as falling in the world price of petroleum and other primary commodities, rather than being motivated by the benefits of economic reform (see Pangestu 1996 and Hill 1996 on this issue). There is also a sequencing issue in the Indonesian case, as capital account and financial market have been liberalized substantially at the earlier stages, while the foreign trade liberalization has been conducted only after 1985 (see Table 3) and mostly in response to balance of payments problems. Government policies tend to go back to be more protective if there is no problem in the balance of payments. In short, the trade liberalization has never been conducted in a systematic and consistent way in a search for the benefits of open trade. Table 4 summaries trade liberalization measures adopted by the Indonesian government since 1945 (i.e. independent year) up to date which was classified into six stages to reflect the nature of government policies at each stage.

Table 3: Indicators of Reform (%)

Measure	1985	1991
Average tariff: Unweighted	27	22
Production weighted	19	17
Import Licensing: Import weighted	43	13
Production weighted	41	12
Index of Dispersion[1]	108	89

[1] Measured by the coefficient of variation.
Source: World Bank (1992), Indonesia Growth, Infrastructure and Human Resources, Report No. 10470-IND.

Table 4: Summary of Trade Liberalization Measures Adopted in the Indonesian Economy, 1945–To Date.

TRADE LIBERALIZATION MEASURES ADOPTED IN EACH PERIOD

The Chaotic Years (1945–65)	Stabilization and Rehabilitation (1966–73)	The Oil Windfalls and Boom Years (1974–81)	Adjustment to External Shocks (1982–84)	Further Trade Liberalization (1985–mid 1997)	The Economic Crisis and Afterwards (1997–to date)
⇧ High inflation and frequent economic policy/government changes. ⇧ Dominant role of taxation on trade. ⇧ Imposing multiple exchange rates, export surcharges, quantitative restrictions on imports and tariffs	⇧ New investment law, development plan and balance budget. ⇧ Abolish multiple exchange rates and peg to US $. ⇧ Adopt an open capital account.	⇧ Dominant role of oil. ⇧ Non-tradable and import substituting industry. ⇧ Dutch Disease. ⇧ Ignore trade liberalization. ⇧ More protective.	⇧ International Debt and Mexico crises. ⇧ Tax and financial reforms. ⇧ Export promoting measure (TRIMs). ⇧ 'Approved' importer system. ⇧ Promoting Use of Domestic Products. ⇧ Ambivalent towards trade liberalization.	⇧ Regionalism of AFTA & APEC. ⇧ Sign GATT-Code (on subsidies & countervailing duties). ⇧ Rationalise tariffs. ⇧ Deregulate shipping & custom unions. ⇧ Duty exempt and duty drawback. ⇧ Removes export licenses and convert QRs with tariffs.	⇧ The Asian Crisis and IMF package. ⇧ Reduce tariff more. ⇧ Abolish export taxes and import restrictions. ⇧ Liberalise domestic market.

IV. MAIN FEATURES OF THE MODEL

Production/Supply Side

In the model, output was specified as an input-output function of intermediate input and value added. The intermediate input consumption was set as a constant elasticity of substitution (CES) aggregation of domestically produced and imported commodities[5] in the form of:

$$INT_i = A\left[\alpha_d \, D_i^{(\sigma_i-1)/\sigma_i} + (1-\alpha_d) M_i^{(\sigma_i-1)/\sigma_i}\right]^{\sigma_i/(\sigma_i-1)}$$

(S.1)

where A = scale parameter, α_d = share parameter for domestically produced commodities as a share of total commodities available in the domestic economy ($0<\alpha_d<1$), and D_i and M_i are domestically produced and imported commodities, respectively. The elasticity of substitution between domestically produced and imported commodities is represented by σ_i.

The value added was set as a Cobb Douglas function of eight different types of labour (farmers wages and non wages, production wages and non-wages, clerical wages and non-wages and professional wages and non-wages) and five different types of capital (land and agricultural, non-corporate private domestic, corporate private domestic, foreign, and government capital). In the fully competitive case the wage rates adjust to clear the market while in the fully rigid case the wage rates are fixed so that the adjustment is on the number of workers, making a possibility for unemployment. I the rigid case only the wage rates of farmers and production workers are fixed to reflect the excess supply and various government interventions to control the wage rates of these types of workers. For other types of labour and capital, wages and rents are flexible to clear the market. The market-clearing levels reflect the marginal productivity of the factor. Total production is then allocated to domestic demand and exports. Details about the main equations used in the model are provided in Sugiyarto *et al*. (2002).

Demand Side

Total final demand in the domestic market consists of demand for consumption and for investment purposes. Consumption is the sum of household and

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[5] Allowing imperfect substitution between the two commodities, with a different degree of substitution for each type of commodity, as reflected by the value of elasticity used.

government consumption, while the demand for investment is generated by the aggregated saving-investment (capital) account. Household is assumed to have a Cobb-Douglas utility function, while the government is assumed to have planned consumption reflected in the input-output specification. Accordingly, the government consumption is not affected by commodity prices or government's income. This will make government saving residual. In addition, the government has access to foreign borrowing for balancing its budget deficit.[6] Domestic firms can also borrow from the rest of the world, contributing to Indonesia's total foreign commitments. In addition, there are direct transactions among institutions (*i.e.* the Rest of the World, government, firms and households) in the form of direct taxes and other transfers that are taken into account in the models.

Consistent with the government consumption behavior, aggregate investment is fixed in quantity, reflecting the 'investment-driven' nature of the economy. This specification was chosen to reflect the fact that the Indonesian government (the main economic agent) has always set its budget and other macroeconomic targets at the beginning of the year which, in turn, affects the economic behavior of both firms and households. In addition to the main functional specifications for production and final demand, there are other equations in the model to define prices (for activities, commodities, and factors), incomes and expenditures (by institutions) and to balance the model which can also be seen in Sugiyarto *et al*. (2002). Important things to note are that the small country assumption is adopted for the import market and the balance of payments (BOP) can be fixed or residual, depending on the assumption of the underlying exchange rates. In the fixed exchange rate scenario, BOP deficit is residual to clear the market while in the flexible exchange rate the BOP deficit is fixed.

V. MAIN RESULTS

As discussed before, three different kinds of trade liberalisation are considered in this paper: the same cut across the boards, applying uniform tariff and optimal tariff in the second best situation to represent moving towards lower tariff level and dispersion, uniform rate and optimal rates. The across the board will reduce average

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[6] Since 1967, the Indonesian government has continuously adopted a budget deficit, which is financed by foreign funds.

and standard deviation of tariff, uniform tariff will only use one tariff rate for all commodities, and the optimal tariff will make minimise the welfare costs associated to the tariff. All trade liberalisation mechanisms are conducted in the two different macro closures of fixed and flexible exchange rates as well as three different labour market frameworks of fully competitive, rigid and fully rigid.

In the same cuts across the boards, a 20% reduction from the existing tariff is introduced together with the scenarios whether the government is to maintain its level of income or not. If this is the case, the government will compensate for any revenue lost as a result of tariff reductions so that there is no adverse effects on the government saving/investment and deficits that coming from the tariff reduction.

For the uniform tariff, only one tariff rate is applied across commodities/sectors such that the total revenue from tariff remains the same. Therefore, the revenue neutrality has already part of the necessary condition for applying uniform tariff.[7] The optimal tariff case is conducted by introducing new tariffs that has taken the sectoral welfare costs into account. Table 5 and 6 summarise the simulation results for the fixed and flexible exchange rate cases.

Fixed Exchange Rate with Endogenuous BOP Deficits

Comparing the results of A1 and A2 suggests that trade liberalisation in the form of tariff reduction is good for the economy, employment and welfare. Direct effect of the tariff cuts is (in addition to reduce government revenue from tariff) to lower the price of imported commodities in domestic market and since the domestic economy is a price taker, the lower prices will increase demand for imported products, contributing to an increase in the availability of products in the domestic economy. This will induce producers to produce more as reflected in the positive effect on GDP. Comparison across different labour markets reveals that having rigidity in some sector only is not good for the economy and if the government is able to maintain its income level the results even better.

Results of the uniform tariff simulation (A3) confirm that the existing tariff structure is not the optimal one as further verified by the results of the optimum tariff simulation. The two simulation suggest that the government can apply at least two

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[7] As otherwise will end up with arbitrary tariff rate.

different sets of tariffs that can generate the same amount of revenue but better economic results.

It is important to note that the lower positive effects of the uniform and optimum tariff compared to the 20% tariff reduction indicate that the 'misalignment cost' (or under optimal costs) of the existing tariffs is not so severe, less than the amount of benefits that can de derived by the 20 % tariff reduction.

Further comparing the effects (measured in Equivalent Variation or EV) across different types of households reveals that urban household seems to get the most benefits from trade liberalisation while the rural household seems to get the least. If greater benefit from trade liberalisation is associated with stronger links with tradable sector, the result suggests that the rural households have the least involvement in the tradable activities. This can only be further clarified by detailed mapping of types of labour (and capital) provided by this household with the sectoral activities.

Flexible *Exchange Rate with Fixed BOP Deficits*

Comparing the results of B1 and B2 suggests that trade liberalisation in the form of tariff reduction is also good for the economy, employment and welfare. Notice that in the deficit financing case (left unfinanced) the workers in the fully rigid market will be worse off as the expansion of the economy as a result of the tariff cuts will partially compensated by depreciation of real exchange rate making the economy hiring less labour than in the fixed exchange rate system.

VI. CONCLUSION AND POLICY IMPLICATION

This study has shown that trade liberalisationn can bring important changes to the structure and level of production of the domestic economy which, in turn, affects the welfare and household income, consumption and income distribution. The benefits can even be higher if the trade liberalisation is conducted in better ways, i.e. moving towards uniform or optimal tariff. A combination of tariff reduction and application of uniform or optimal tariff should produce bigger benefits to the economy and for the welfare of the household. How the effects are channelled to the domestic economy is, to some extent, influenced by the working of labour market. The different effects of

trade liberalisation scenarios on three different labour markets confirm this and it seems that more flexible factor market will make the domestic economy more able to adjust to any changes as a result of the trade liberalisation.

The result also indicates that the existing import tariff is not the optimal one as moving towards uniform and optimal tariff will always be welfare improving. In fact, reductions in tariff will bring benefits to the domestic economy for both the fixed and flexible exchange rate scenarios.

As there is always a trade off for any positive effects, the positive results of trade liberalisation in the form of tariff reduction should be put in the context of its associated costs that are not much discussed in the paper. The policy implication seems to call for appropriate accompanying policies to reduce the adverse effects of trade liberalisation.

Table 5: Effects of Trade Liberalisation for Different Scenarios and Labour Markets

A. Fixed Exchange Rate and Endogenuous BOP Deficits		Labour Market	GDP (%)	Employment (%)	EV-All (Million Rp)	EV-Farmer (Million Rp)	EV-Rural (Million Rp)	% of farmer	EV-Urban Million Rp	% of farmer
1	**20% Cuts-Left Unfinanced**	Fully Competitive	0.053		467.31	131.26	106.12	0.81	217.18	2.05
		Rigid	0.049	-0.008	414.34	118.15	89.74	0.76	194.03	2.16
		Fully Rigid	0.053	0.001	412.13	118.29	88.72	0.75	192.80	2.17
2	**20% Cuts-Revenue Neutral**	Fully Competitive	0.107		1057.93	292.34	291.12	1.00	467.98	1.61
		Rigid	0.346	0.475	1668.00	491.96	451.53	0.92	716.99	1.59
		Fully Rigid	0.461	0.752	1705.08	521.16	456.95	0.88	722.72	1.58
3	**Uniform Rate-Revenue Neutral**	Fully Competitive	0.001		50.31	55.51	20.57	0.37	-33.33	-1.62
		Rigid	0.114	0.225	432.67	170.41	126.34	0.74	127.25	1.01
		Fully Rigid	0.197	0.428	475.55	195.81	136.67	0.70	136.91	1.00
4	**Optimum Rate-Revenue Neutral**	Fully Competitive	0.014		244.17	34.21	73.32	2.14	132.39	1.81
		Rigid	0.011	0.028	84.66	37.97	17.51	0.46	28.13	1.61
		Fully Rigid	0.017	0.042	87.50	39.67	17.88	0.45	28.98	1.62

Table 6: Effects of Trade Liberalisation for Different Scenarios and Labour Markets

B. Flexible Exchange Rate and Fixed BOP Deficits	Labour Markets	GDP (%)	Employment (%)	EV-All Million Rp	EV-Farmer Million Rp	EV-Rural Million Rp	EV-Rural % of farmer	EV-Urban Million Rp	EV-Urban % of farmer
1 20% Cuts-Left Unfinanced	Fully Competitive	0.055		226.509	106.049	60.940	0.57	56.434	0.93
	Rigid	0.088	0.067	289.731	129.192	75.685	0.59	81.787	1.08
	Fully Rigid	0.055	-0.011	193.616	104.102	49.921	0.48	36.803	0.74
2 20% Cuts-Revenue Neutral	Fully Competitive	0.011		-60.391	-67.368	4.598	-0.07	-2.260	-0.49
	Rigid	0.584	1.137	1662.909	469.425	465.988	0.99	718.379	1.54
	Fully Rigid	0.992	2.105	2090.272	624.306	559.562	0.90	902.422	1.61
3 Uniform Rate-Revenue Neutral	Fully Competitive	0.001		12.068	57.465	15.344	0.27	-65.625	-4.28
	Rigid	0.049	0.095	199.575	112.004	67.767	0.61	14.271	0.21
	Fully Rigid	0.049	0.095	286.579	138.280	89.297	0.65	53.699	0.60
4 Optimum Rate-Revenue Neutral	Fully Competitive	0.007		390.907	-5.949	129.105	-21.70	257.922	2.00
	Rigid	0.083	0.199	293.102	186.934	56.542	0.30	47.203	0.83
	Fully Rigid	0.058	0.139	190.790	114.839	36.841	0.32	37.339	1.01

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