

WELFARE IMPLICATION OF NON-AGRICULTURE MARKET ACCESS NEGOTIATION FOR PAKISTAN



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NAMA Negotiations



- The ongoing NAMA negotiations are based on the mandate that was given for the Doha Round at the 4th WTO Ministerial Conference. The aim of the negotiations is to reduce both tariffs and non-tariff barriers to trade that impede the market access to industrial products.
- The negotiations relate to all the goods not covered under the agreement on agriculture, including products such as natural resources including fisheries, forests, gems and minerals.
- The Doha mandate stresses the need for comprehensive product coverage, without full reciprocity
- It also stresses the need to address tariff peaks, tariff escalation and non-tariff barriers such as import quotas and technical standards.
- The first proposal for modalities on NAMA negotiations was prepared in 2003 by the Swiss chairman of the NAMA negotiating group. The key elements of the proposal were a 'Swiss formula' for tariff reduction (cutting higher tariff by a larger percentage than lower tariffs), a sectoral initiative for the full elimination of tariffs in seven sectors, and Special & Differential Treatment (S&DT) for developing countries.

Core Modality



- The Ministerial Conference agreed to adopt a Swiss formula because it is more supported. In this kind of formula, tariff cuts depend on the coefficients applied. If the coefficient is small there is a large tariff cut but if the coefficient is large then there is low reduction. Although there has been no agreement as to what the coefficient should be, it was agreed that coefficients should be at levels, which ensure reduction of tariff peaks, high tariffs and tariff escalations on products of export interest to developing countries. At the same time the coefficient should take into account the special needs and interest of developing countries.

Tariff Reduction Formula

- The proposals currently under way are as follows:
- Swiss formula with a single coefficient, but conditional flexibilities for developing countries to sue the provisions of paragraph 8 of the July Framework (EU)
- Swiss formula with conditional flexibility of applying two coefficients (Norway and the US) or four coefficients (Chile, Colombia and Mexico)
- Swiss-type formula with multiple coefficients based on tariff averages and with flexibilities (Argentina, Brazil and India); with addition of a credit system for developing Members (Antigua & Barbuda, Barbados, Jamaica Trinidad and Tobago).
- Pakistan's proposal to have two coefficients, one for developed countries, which should be 6, and another for developing countries, which should be 30, received strong support from all developing countries.

Most Supported Swiss Formula

- Formula Option 1: A Simple Swiss formula with two coefficients, one for developing and the other for developed Members:

$$t_1 = \frac{(a \text{ or } b) \times t_0}{(a \text{ or } b) + t_0}$$

where, t_1 = Final bound tariff ; t_0 = Base rate ; a = Coefficient for developed Members; b = Coefficient for developing Members subject to the formula.

- Or Option 2: ABI formula

$$t_1 = \frac{B \times t_a \times t_0}{B \times t_a + t_0}$$

- where, t_1 is the final rate, to be bound in *ad valorem* terms; t_0 is the bound base rate
- t_a is the average of the current bound rates B is a coefficient, its value(s) to be determined by the participants

Economic Implication of NAMA

- The most important sources of central government revenues.
- Tax revenue on international trade ranges from 50 billion in 1990-91 to 137 billion in 2005-06.
- The tariff revenue as a percentage of development expenditure is 71% in 1997-98, 73% in 2000-2001 and 51% in 2005-06.
- The Action Aid (2006) conducted a simulation exercise to evaluate the impact of this formula on tariffs of Pakistan. The results showed that with unit value of coefficient taken arbitrarily, Pakistan's base rate averages would fall drastically. For Pakistan, the bound average falls from 39 percent to 18 percent that is a reduction of about 54 percent.
- The 54 percent of average tariff reduction will negatively affect the revenue earned by the government, which is projected for 2006-2007 is Rs. 137 billion rupees. A possible reduction of average 54 percent tariff, the average revenue implications for Pakistan will not be less than 50-60 billion rupees

Economic Implication of NAMA

- Any reduction on tariff will directly affect the revenue collection of the government that could have a detrimental impact on development policies.
- The import surges which will have been experienced as a consequence of liberalization (28 billion dollars only 2006) will pose the challenges to the trade balance of the country as this year 2005-06 only the trade deficit is all times high around 12.1 billion dollars and the country like Pakistan is unable to sustain this level of trade deficit. As a result the present financing of trade balance from exchange reserves and privatization proceeds is hardly sustainable.
- industries will come under pressure from external competition, specially, the textile, footwear, leather, electronics etc, when those imports are to be used as inputs for domestic production

Economic Implication of NAMA

- A large numbers are unable to survive exposure to such unequal competition especially footwear and garment industry of Pakistan leading to close down and more unemployment.
- The threat of de-industrialization brings with it a risk of increased poverty, especially in countries like Pakistan which do not enjoy strong social safety nets.
- It was implicitly assumed that whenever NAMA regime enhance trade and leads to higher growth benefit of growth would automatically trickle down to the poor.

Pakistan's Proposal

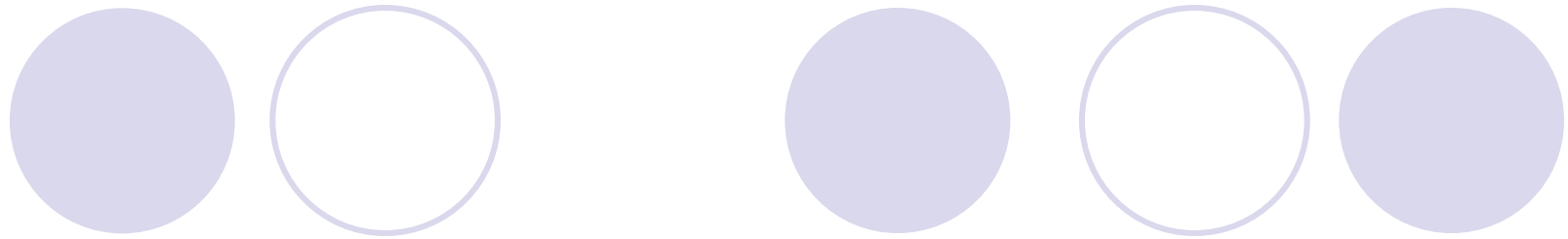


- Pakistan's proposal to have two coefficients, one for developed countries, which should be 6, and another for developing countries, which should be 30, received strong support from all developing countries. If such coefficients are eventually agreed it would mean that tariffs on textile and clothing in the EU and US markets would be cut by more than 50%. In fact, they would be cut to less than 6% as against 12 -30% prevailing at present. This would considerably reduce discriminatory tariffs which our exporters face vis-à-vis our competitors many of which enjoy duty free access because of their LDC status or because they have FTA with major trading economies. It was also agreed that flexibilities should be an essential part of negotiations for any final outcome.



Revenue Loss based on Pakistan Proposal

- the Action Aid (2006) has calculated revenue losses by applying non-linear Swiss Formula on all imports. For example from the list of Pakistan's major imports, the major items of high tariffs are machinery and transport equipment. These two items constitute almost 25 percent of our major imports. The tariff rate on these two items is very high as compared to other major imports. When the coefficient of 30 would be employed on non-linear Swiss formula, the percentage reduction of tariff is calculated as 35 percent for machinery and around 61 percent on transport equipment



- In order to provide negotiating platform, Pakistan communicated binding on almost 98.5% of imported items with the exception of Auto sector and some other items on health, moral and socio-economic grounds.
- The bound rates were 50% point above the current applied rates.
- The modalities for reduction are under discussion at Geneva and it was agreed in Hong Kong Ministerial (2005) to finalize modalities by end of April 2006. The same however could not be finalized because of inflexibility of DCs approach and NAMA conditionalities



objective

- Pakistan's objective in these negotiations is achieve enhanced market access opportunities in other developed and developing countries for products of our exports interest; in addition it may ensure a certain level of protection for some sectors according to structure and potential of our economy.
- In order to develop a realistic negotiation stance aiming to achieve these objectives, the proposals for reduction formulae should be examined. The objective of this study is to examine welfare impact of these formulae in case of Pakistan if they are multilaterally agreed and applied

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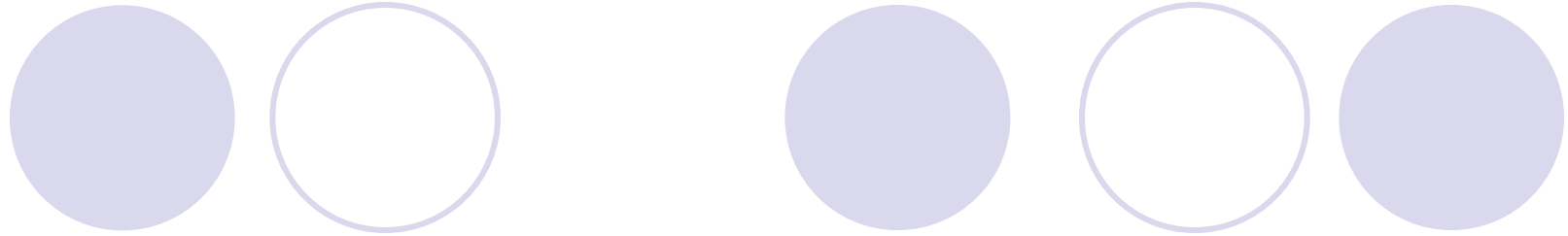
Methodology

NAMA and Poverty

The empirical specification of the following linear relationships.

- $PS = HC(IG + (1 - IG))GZ \quad (1)$

- $PS/PS = HC/HC(IG/IG + (1 - (IG/IG))GZ / GZ$



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- $HC / HC = a_0 + a_1 R_t + \sum a_3 E_t + u$

•

- $IG/IG = b_0 + b_1 R_t + \sum b_3 E_t + v$

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- $(1-IG/IG) = c_0 + c_1 R_t + \sum c_3 E_t + w$

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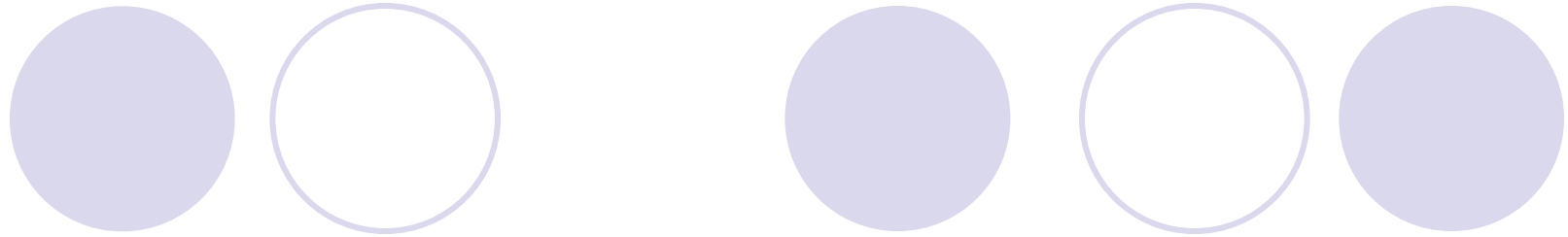
- $GZ /GZ = d_0 + d_1 R_{jt} + \sum d_3 E_t + z$

NAMA and Welfare

- The empirical specification of the following linear relationships.
- $W_t = Y_t + (1 - G_t)$
- $\dot{W}/W = \dot{Y}/Y + (1 - (G/G))$
- $\dot{Y}/Y = a_0 + a_1 R_t + \sum a_3 E_t + u_t$
- $\dot{1 - G/G} = b_0 + b_1 R_t + \sum b_3 E_t + v_t$

DATA

The annual data of macroeconomic variables: GDP, inflation, expenditure on education, expenditure on health, government reserves and government revenue are obtained from Economic Survey of Pakistan. The simulated revenues with coefficient 30 and 6 are taken from the study of Action Aid (2006). The data source for Head count , income gap, Gini and Intellectual Property Right rate is the World Bank



ESTIMATION TECHNIQUE

The equations are estimated by system using GMM as estimation technique and lag macro variables are instrument variables.

- **The Effect Tariff Reduction on welfare**

Variable	Actual revenue	Revenue Loss with Coefficient 30	Revenue Loss with Coefficient 6
Intercept	6.59 (7.31)	1.23 (1.20)	0.02 (2.36)
GDP Growth	0.21 (7.08)	0.03 (0.56)	0.02 (0.38)
1-Gini coefficient	(1.37 (3.75)	0.82 (1.91)	-0.09 (-2.04)

The Effect Tariff Reduction on output

Variable	Actual revenue	Revenue Loss with Coefficient 30	Revenue Loss with Coefficient 6
Intercept	-10.89 (-3.06)	27.92 (2.17)	32.29 (2.38)
Revenue	0.70 (1.98)	-1.15 (-0.50)	-1.28 (-2.68)
Literacy	5.77 (2.78)	4.11 (1.84)	4.92 (2.09)
Inflation	0.52 (4.03)	0.40 (3.38)	0.38 (3.35)

The Effect Tariff Reduction on income distribution

Variable	Actual revenue	Revenue Loss with Coefficient 30	Revenue Loss with Coefficient 6
Intercept	-0.46 (-0.94)	0.07 -0.05	-0.12 (-0.07)
Revenue	0.19 (0.85)	0.07 (1.27)	-0.06 (-1.04)
Literacy	1.25 (4.75)	0.49 (1.83)	-0.46 (-1.55)
Inflation	-0.05 (-2.28)	-0.04 (-.4.04)	-0.04 (-4.11)
R²	0.80	0.63	0.57

The Effect Tariff Reduction on poverty

Variable	Actual revenue	Revenue Loss with Coefficient 30	Revenue Loss with Coefficient 6
Intercept	-0.42	-0.42	-0.42
	(-4.25)	(-4.22)	(-4.22)
Head Count	1.01	1.01	1.11
	(2.50)	(3.49)	(3.74)
Poor from Poverty Line	1.10	1.11	1.11
	(4.69)	(5.91)	(6.32)
1-Gini coefficient	1.04	1.10	1.12
	6.22	7.91	6.02

The Effect Tariff Reduction on headcount

Variable	Actual revenue	Revenue Loss with Coefficient 30	Revenue Loss with Coefficient 6
Intercept	4.65	5.09	5.08
	(-4.10)	(-2.29)	(-2.37)
Revenue	-0.1	-0.09	-0.10
	(-1.00)	(-2.42)	(-4.34)
Literacy	-0.08	-0.22	-0.22
	(-4.71)	(-4.39)	(-4.51)
Inflation	-0.22	-0.004	-0.01
	(-0.71)	(-0.27)	(-0.36)

The Effect Tariff Reduction on people below poverty line

Variable	Actual revenue	Revenue Loss with Coefficient 30	Revenue Loss with Coefficient 6
Intercept	-2.98	-2.92	-2.9
	(-5.95)	(-6.34)	(-6.34)
Revenue	0.06	0.06	0.06
	(1.35)	(1.45)	(1.41)
Literacy	-0.37	-0.37	-0.36
	(-3.37)	(-3.48)	(-3.45)
Inflation	-0.04	-0.04	-0.04
	(-1.29)	(-1.31)	(-1.29)

The Effect Tariff Reduction on gini coefficient

Variable	Actual revenue	Revenue Loss with Coefficient 30	Revenue Loss with Coefficient 6
Intercept	4.38	4.24	4.24
	-5.98	-6.45	-6.52
Revenue	-0.10	-0.11	-0.11
	(-1.71)	(-1.89)	(-1.97)
Literacy	-0.43	-0.43	-0.43
	(-2.85)	(-2.84)	(-2.87)
Inflation	-0.03	-0.02	-0.03
	(-0.54)	(-0.53)	(-0.56)
R²	0.77	0.63	0.61

Empirical Findings on NAMA and Welfare

- There is positive and significant relationship between welfare and output as well as with Gini with actual revenue. The Gini remains significant and output becomes insignificant but positive when less revenue loss is added REV_{30} (less revenue cut tariff reduction with coefficient 30) as explanatory variable. The distributional effect turns out to be negative and output remains positive both insignificant when more revenue loss is added REV_6 as explanatory variable (tariff reduction with coefficient 6). These findings are supporting our hypothesis that revenue cut reduces growth as well as distribution becomes more inequitable
- These results indicate that the literacy rate has positive and some significant impact on growth and welfare. However it turns out to be insignificant when added with more revenue cut. This result conforms our hypothesis that in Pakistan which relies on tariff as major source of revenue; revenue cut leads to less expenditure under the head of education and health and thus hurting output growth and distribution.
- The inflation has a positive and significant role in output growth but it has opposite effect on income distribution. The welfare theory also suggests that that the burden of high prices fall more heavily on poor.

Empirical Finding on NAMA and Poverty

- The effect of actual revenues has no significant effect on head count, but less revenue loss (with coefficient 30) has significant negative impact on head count. As revenue loss increase (with coefficient 6) this negative impact becomes more negative and more significant. The actual revenues has positive but insignificant impact on the growth of income gap, This relationship remains positive but significance level marginally improves.
- Same is the case with distributional impact of poverty which is negative with actual revenue and worsen as revenue loss increases. Inflation has no significant role in determining head count, growth rate of poverty and distributional aspects. The literacy rate has negative effect. When we look at the overall impact of all these components on poverty captured by Sen index of poverty , head count, growth of income gap and Gini coefficient all are contributing positively and significantly to it. The reason is that less share of revenues is spending on eradication of poverty so further revenue loss remains meaningless



CONCLUSION:

- **The results based on different set of revenue reveal importance of industrial revenue on the welfare**
- **Whenever there is tariff cut the country like Pakistan which is relying on this source of revenue has a set back. So there is need to have other revenue sources to implement development polices and increase expenditure for the improving income distribution and **GDP** growth rate of the economy.**



CONCLUSION:

- **when country is facing inflation and its tariff also decreases, it leads to crowding out of productive public expenditure and effect income growth rate negatively at the same time worsen income distribution.**
- **In Pakistan there is no productive literacy and it has no role to boost out put growth. When out put level is low the investment is also at low level and major problem of unemployment cannot be solved unless we has productive labor force and therefore, income distribution remains worse.**
- **Pakistan in particular, need to diversify away from a reliance on primary and semi finished commodities to more value-added products and services.**