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THREE ESSAYS ON CIGARETTE CONSUMPTION AND GOVERNMENT POLICY:

A COMPREHENSIVE ANALYSIS OF ECONOMICS AND POLITICAL ECONOMY

by

SongJune Kim, BA, MPA

DISSERTATION

Presented to the Faculty of

The University of Texas at Dallas

In Partial Fulfillment

of the Requirements

for the Degree of

DOCROT OF PHILOSOPHY IN POLITICAL ECONOMY

THE UNIVERSITY OF TEXAS AT DALLAS

August 2001

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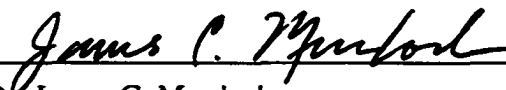APPROVED BY SUPERVISORY COMMITTEE:

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Dr. Barry J. Seldon, Chair

_____
Dr. Euel Elliott

_____
Dr. Irving Hoch

_____
Dr. James C. Murdoch

This dissertation is dedicated with love
to my parents and grandmothers

ACKNOWLEDGEMENTS

My foremost and deepest gratitude goes to Professor Barry J. Seldon, chairman of my dissertation committee, for his immeasurable support with both theoretical and methodological guidance throughout this dissertation. I am grateful to the other members of supervising faculty on my dissertation, Professor Euel Elliott, Professor Irving Hoch, and Professor James Murdoch for their support and advice with this dissertation. My appreciation also goes to Professor Brian J. Berry, Professor Lloyd J. Dumas, Professor Murray J. Leaf for their encouragement. I especially thank Professor Wim Vijberberg for his detailed and incisive comments in methodology development. They are all my invaluable lifetime mentors.

This dissertation would have been impossible without the aid of a series of talented and conscientious my friends at the University of Texas at Dallas: Dr. SungChul Hong and his wife HykRan Kwon, JongBin Lee, DaiHyun Paik, YunWoo Lee, to mention a few Koreans. I am especially indebted to my colleagues, Melissa Montgomery, Apichart Prasert and James Owen in Political Economy for their friendly, liberal with encouragement but critical

v

comments. My aunt, professor Heja Kim has been exceptionally helpful in countless discussions and on numerous drafts with suggestions, most helpful criticisms, and that intangible asset – enthusiasm and love. Thanks also to my benefactor Jongman Park, pastor Daniel Jang and JinSook Choi of Korean Association of Health and Smoking (KASH). I feel greatly indebted to them, and would like to record my appreciation here.

I also would like to acknowledge the thoughtful contributions of YunJeong Choi who played an important role in improving the content. There is nothing in my dissertation but her touch with unreserved love and effort. Last, but certainly not least, I would like to acknowledge the inspiration of my loving parents and grandmothers. I could not be grateful to them for the rest of my life.

August 2001

THREE ESSAYS ON GOVERNMENT POLICY AND CIGARETTE CONSUMPTION:

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Publication No._____

SongJune Kim, Ph.D.
The University of Texas at Dallas, 2001

Supervising Professor: Barry J. Seldon

These three papers focus on the Korean cigarette market and explore important issues

relating to cigarette policy with a perspective of economics and political economy. The

first paper examines the demand characteristics of cigarettes in Korea using time series data

for the 1960-1997 period. From the empirical evidence, the overall price elasticity of

cigarette demand for smokers suggests a 10% increase in the price of cigarettes induces a

2.7% reduction in the consumption of cigarettes. The effect of the health warning policy

that was adopted in 1976 is found to be statistically insignificant and the impact of income

on cigarette consumption is positive but not statistically significant owing to socio-cultural

traits involving smoking behavior in South Korea. The second paper explores the

structural features of the Korean political economy associated with cigarette consumption, and suggests some policy approaches adapted to the political context. It examines the Korean case by juxtaposing critical aspects of the Korean situation with the US, which has taken major initiatives over the past decades to reduce cigarette smoking. By comparing the political and policy dynamics of the Korean case with the US, it sheds more light on the prospects for policy change in Korea; and such comparisons will provide insights into the agenda-setting process in both countries. The final paper explores the current tobacco situation in Asia, focusing on the strategies of transnational tobacco corporations in the Asian tobacco market and on the role of government leadership. An approach is suggested that centers on regional coalitional efforts among the countries in Asia in cooperation with anti-tobacco groups in the United States. It argues that the current tobacco crisis of Asia cannot be unraveled by domestic policy alone. There needs to be clear government leadership and strong commitment to tobacco control in the Asian case, including organized support for tobacco research and public education and must be supplemented by regional and international coalitional efforts.

TABLE OF CONTENTS

PART ONE

ESTIMATING DEMAND FOR CIGARETTES IN SOUTH KOREA:

SEARCHING FOR AN EFFECTIVE GOVERNMENT POLICY

ON CIGARETTE CONSUMPTION

1

ABSTRACT

This paper examines the demand characteristics of cigarettes in South Korea using time series data for the 1960-1997 periods. The habit persistence (partial adjustment) model is applied to investigate the effect of price on the amount of cigarettes smoked by adults. From the empirical evidence, the overall price elasticity of cigarette demand for smokers is estimated at - 0.27 in the short run, implying a 10% increase in the price of cigarettes would lead to a 2.7% reduction in the demand for cigarettes, holding other factors constant. The effect of the health warning policy that was adopted in 1976 is found to be statistically insignificant. The impact of income on cigarette consumption is positive but not statistically significant owing to socio-cultural traits involving smoking behavior in South Korea. This study could contribute to developing plausible cigarette policy in other Asian countries with similar economic, political and cultural background to that of South Korea.

2

I. INTRODUCTION

The social cost of cigarette smoking provides justification for government intervention through policies such as tax increases and greater provision of information about the consequences of smoking hazard on health. Knowledge concerning the demand for cigarettes is essential for public policy because cigarettes are a factor in public health due to the adverse health effects of smoking, while, at the same time, they provide some governments with a major source of tax revenue.[1] For these reasons, demand for cigarettes and tobacco products has been widely investigated in many countries (Hamilton 1972, Baltagi and Levin 1986, Seldon and Boyd 1991 in the US; Galbraith and Kaiserman 1997, Lanoie and Leclair 1998 in Canada; McGuiness and Cowling 1975, Duffy 1995 in the UK; Johnson 1986, Pierce et al. 1990 in Australia, Stavrinos 1987 in Greece, Tansel 1993 in Turkey).

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[1] The popularity of smoking cigarettes has provided Korea government with abundant tax revenues. In 1995, the local tax was about 20% of all tax revenue. Tobacco consumption tax is 3.5% of national tax revenue, amounting 2.2 billion Won or about 17.7% in local tax revenue (Korea Ministry of Finance and Economy, 1996).

3

However, cigarette consumption in Korea[2] has not been studied in the literature even though Korea is the 5th largest nation in terms of per capita cigarette consumption in the world (WHO 1996). This paper estimates cigarette demand in Korea using aggregate yearly time-series data for the 1960-97 time periods. It also investigates the effects of the Korean health warning policy initiated in 1976 and suggests feasible policy options for the Korean government.

I. 1. The State Monopoly

The Korea Tobacco and Ginseng Corporation (KT&G), a state-run corporation, has undertaken the production and wholesale distribution of cigarettes and tobacco products as well as red ginseng for a century. KT&G has provided financial revenue for both the central and provincial governments. KT&G was transformed into a government-invested institution when the domestic cigarette market was liberalized and imports of cigarettes were allowed in 1987. Since then, imported brands (but not domestic brands) have been aggressively advertised in print media and public posters while no advertising is allowed on

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[2] There is not much difference between cigarette and tobacco consumption as a whole because 99.7% of tobacco was used as cigarettes and only 0.3% as pipe tobacco in Korea. Cigars and smokeless tobacco are insignificant. All cigarettes sold in Korea are filter-tipped. (World Bank, 1996).

radio or television. Since 1997, the legal status of KT&G was changed to a joint-stock company and KT&G has listed its stocks on the public market since 1999, in line with the government overall plan to privatize state-run corporations. Through privatization, KT&G has been forced to operate on the basis of free market competition.

I. 2. Trends in Cigarette Consumption

The consumption of cigarettes has increased gradually over the years. Figure 1 shows the trend in adult per capita cigarette consumption in Korea between 1960 and 1997. Total annual consumption of cigarettes was 20.8 billion in 1960, peaked at 98.3 billion in 1993 and declined slightly to 92.7 billion as of 1997. Per capita consumption by people over 18 years old was 80 packs of cigarettes (1 pack = 20 cigarettes) in 1960, peaked at 169 packs in 1993 and dropped to 157 cigarettes for 1997. It seems notable that since 1990 cigarette prices have decreased in real terms, with an average yearly change rate of −3.24%. But this trend was altered after 1994, when there was a dramatic increase in cigarette prices with a 14.41% price increase in 1994 compared to the previous year. With a few exceptions, per capita consumption of cigarettes has steadily increased since 1960. The chief exception is consumption between 1993 and 1997, which occurred coterminous with

the large 1994 increase in cigarettes noted above, although other economic factors probably

played a more critical role in the decline. The level of cigarette consumption was reduced

during 1997 mainly due to Korea's financial crisis. However it has risen since 1998,

according to the KT&G annual report (KT&G, 2000).
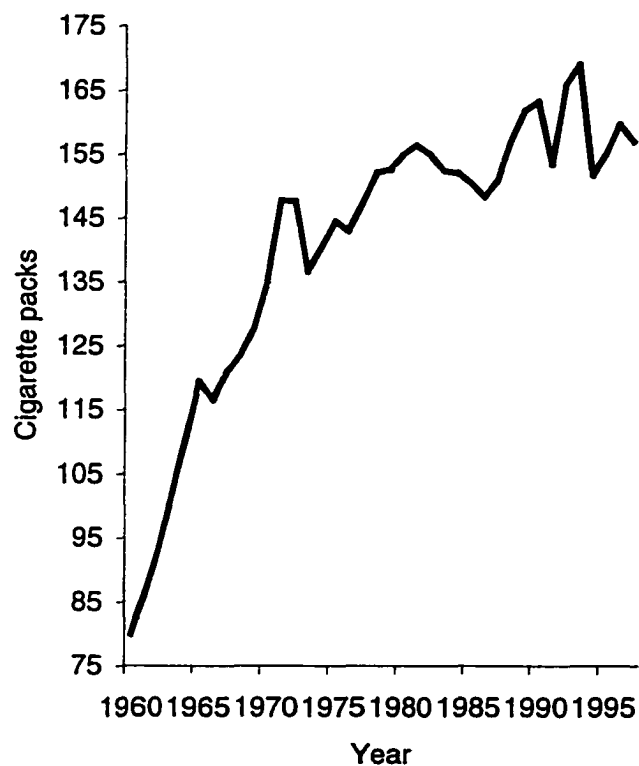
Figure 1. Per Capita Cigarette Consumption Over 18 Years
1960 - 1997

According to the Korea Institute of Health and Social Affairs (KIHASA, 1995), the percentage of smokers in the Korean population over 15 years old is 32.2%, which is higher than the world average of 30%. However, smoking has been a widespread habit among men of all socio-economic classes but has socially and traditionally been unacceptable among women. Table 1 shows the percentage of male and female smokers in selected countries. The percentage among Korean males, 65%, is the highest in the world, while among Korean females the rate is only 5.5%.

Table 1. Smoking Prevalence for Men

Country Year	Korea (1995)	Japan (1994)	Thailand (1995)	Mexico (1990)	Singapore (1995)	Canada (1991)	United States (1993)
Smoking Prevalence (Men)	64.8%	59.0%	49.0%	38%	31.9%	31%	27.7%
Smoking Prevalence (Women)	5.5%	14.8%	4.0%	14.4%	2.7%	29%	22.5%

Note: Smoking Prevalence (15 years old or older) is the percentage of the population aged 15 years old and older who smoke

Source: World Bank Tobacco Control Survey: Economics of Tobacco Control, 1999

Therefore, the overall per capita cigarette consumption of adults could be biased due to the disparate prevalence rate between women and men. We estimate smokers' cigarette consumption using conservative estimates, presuming the adult smoking population consists of 65% males and 5% females. Figure 2 shows a considerable gap between two different estimates, per capita cigarette consumption overall vis-à-vis smokers only. For example, per capita consumption by smokers over 18 years old was about 234 packs while that by overall adults were 80 packs in 1960. This peaked at 487 and 169 packs respectively in 1993 and was 452 and 157 packs for 1997. Hence, this paper focuses on the latter for the model to be more accurate.
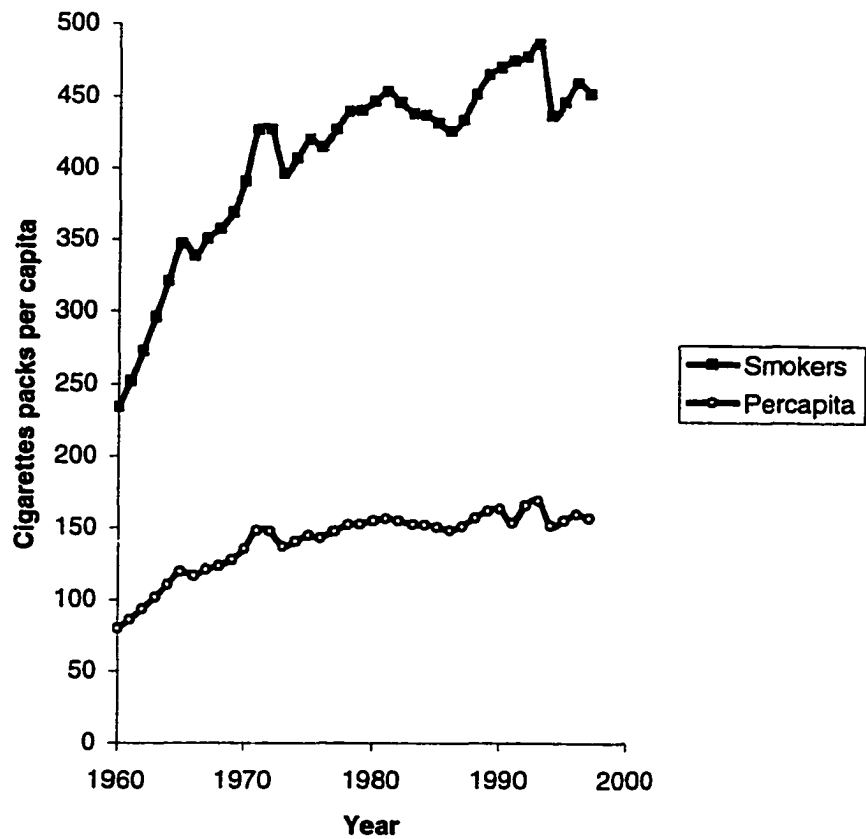
Figure 2. Overall Per Capita Cigarettes Consumption vs. Smokers Only over 18 Korea, 1960-97

Source: The Korea Tobacco and Ginseng Corps., 2000

II. DATA AND EMPIRICAL MODEL

II. 1. Data and Variables Considered

Table 2 presents the definitions, means, and standard deviations of the primary

variables in the data.

Table 2. Descriptive Statistics for Smokers and Overall

	Smokers	Overall
Variable	Mean (Standard Deviation)	Mean (Standard Deviation)
C_t	406.88 (10.41)	140.54 (3.64)
C_{t-1}	405.66 (10.62)	142. 18(3.34)

Variable	Nominal	Real
P_t	271.59 (43.74)	3.89 (0.24)
Y_t	2703553(551610.5)	31652.7 (3585.1)
$D76_t$	0.58(0.07)	
$D89_t$	0.25 (0.07)	

Definitions of the variables:

C_t = Dependent variable: Per capita cigarette consumption of adult smokers in packs. Total quantity is divided by the smoking population over 18. The smoker population is calculated as 0.65 of men and 0.05 of women over 18 as conservative measures.[3]

C_{t-1} = Lagged variable of dependent variable C_t

P_t = Average retail cigarette price per pack including taxes in 1990 Wons. Total revenue from sales of cigarettes is divided by total quantity of individual cigarettes sold×20, since there are 20 cigarettes in a pack.

Y_t = Per capita disposable income in 1990 Wons

$D76_t$ = Dummy variable which captures the first cigarette warning label on packages of 1976: $D76_t$ = 1 for t = 1976-1997, 0 otherwise

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[3] This is treated as invariant over the period 1960-1997 because the data are not available for each year.

$D89_t$ = Dummy variable which captures the augmented warning label on packages of 1989:
 $D89_t$ = 1 for t = 1989-1997, 0 otherwise

Note: Won is the Korean currency ($\$1 = \pm 1,300$ Wons)

Annual time-series data for 1960 – 1997, obtained mostly from KT&G and Korea government sources, are used in estimating the demand model. We assume that per capita cigarette consumption in the data reflects the behavior of a representative adult smoker (Becker el al. 1994). In the specification of a demand function, per capita cigarettes consumed by smokers over 18 (Ct), is expressed as a function of the real price of cigarettes and real per capita disposable income deflated to 1990 Wons using the consumer price index (CPI) for all goods. All the variables are in natural logarithms so that the coefficients represent the relevant elasticities. Supposing cigarettes have no direct substitutes or complements, no other price variables are considered.[3]

There have been a series of government policies to reduce cigarette consumption in Korea. Health warnings have been issued on cigarette packages with a warning label, "Refrain from too much smoking for your health," from 1976 to 1989 and "Warning: Smoking may cause lung cancer and is hazardous especially for the pregnant and youth,"

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[3] Dee (1999) presented empirical evidence on the complementarity between teen cigarette and alcohol use by exploiting the relevant "cross-price" effects in empirical models for smoking and drinking participation, while only adults are considered in this paper.

since 1989. To capture the effect of the health warnings, the dummy variables $D76_t$ and

$D89_t$, defined in Table2 are used. Finally, we include a lag variable (C_{t-1}) among the

explanatory variables because smokers typically change their cigarette consumption slowly

as a result of the force of habit (inertia), cigarette (nicotine) addiction, imperfect knowledge

or institutional reasons (Gujarati 1995)[4].

II. 2. Cigarette Demand: Habit Persistence Model [5]

Using annual data from 1960-1997 for the empirical estimates, this paper considers

a double-log version of a standard model of cigarette demand with habit persistence to

examine the characteristics of the demand for cigarettes in Korea (McGuinness and

Cowling (1975), Fujii 1980, Baltagi and Levin 1986, Seldon and Boyd 1991). In the usual

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[4] For these reasons, lags play an important role in economics. This is clearly reflected in the short-run and long-run methodology of economics. The short-run price elasticity is generally smaller than the corresponding long-run elasticity for consumer nondurable goods.

[5] This model is also called a partial adjustment model and belongs to a "myopic model" in general. Two different frameworks for empirically modeling a cigarette consumption model (or broadly addictive behavior model) have been developed, myopic models and rational models (Pacula and Chaloupka 1999). Myopic models assume that although individuals recognize the dependence of current consumption on past consumption, they tend to ignore the impact of current and past choices on future consumption of the addictive goods.

double-log functional form[6], the natural log of C_t (ln C_t) is the dependent variable while the natural log of Y_t (ln Y_t), P_t (ln P_t), and C_{t-1} (ln C_{t-1}, lagged consumption) combined with the dummy variables D76$_t$ and D89$_t$ are the independent variables.

Let C_t be the actual per capita cigarette consumption variable in period t that is adjusted through time to some target or desired level C_t* which is assumed to be determined by some other observable economic variables such as average retail price (P_t), disposable income (Y_t), and dummy variables, D76$_t$ and D89$_t$. Assuming that an unobservable random disturbance term μ_t is normal independent distributed with (0, σ^2_μ), we have the following equation;

$$\ln C_t* = \alpha_0 + \alpha_1 \ln P_t + \alpha_2\ln Y_t + \alpha_3 D76_t + \alpha_4 D89_t + \mu_t. \tag{1}$$

The consumer approaches this desired level gradually via a partial adjustment process given by

$$\ln C_t - \ln C_{t-1} = \lambda (\ln C_t* - \ln C_{t-1}) \qquad 0 < \lambda < 1 \tag{2}$$

which states that in each period the actual change in consumption is a fraction of λ of the desired change.[7] Substituting ln C_t* from Equation (1) into Equation (2) and rearranging

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[6] The double-log form is the most common functional form that is nonlinear in the variables while still being linear in the coefficients.

terms leads to an equation in observable quantities with one period lagged value of

consumption among the explanatory variables;

$$\ln C_t = \lambda\alpha_0 + \lambda\alpha_1 \ln P_t + \lambda\alpha_2 \ln Y_t + \lambda\alpha_3 D76_t + \lambda\alpha_4 D89_t$$

$$+ (1-\lambda) \ln C_{t-1} + \lambda\mu_t . \tag{3}$$

To apply the usual least squares procedure to estimate the unknown parameters, let $\lambda\alpha_0 = \beta_0$,

$\lambda\alpha_1 = \beta_1$, $\lambda\alpha_2 = \beta_2$, $\lambda\alpha_3 = \beta_3$, $\lambda\alpha_4 = \beta_4$, $1-\lambda = \beta_5$, $\lambda\mu_t = \varepsilon_t$ and assume $\varepsilon_t \sim$ NID $(0, \sigma^2\mu)$. Now,

we obtain the statistically estimable form of the habit persistence model

$$\ln C_t = \beta_0 + \beta_1 \ln P_t + \beta_2 \ln Y_t + \beta_3 \ln D76_t + \beta_4 D89_t + \beta_5 \ln C_{t-1} + \varepsilon_t \tag{4}$$

where both current (C_t) and past per capita cigarette consumptions in packs (C_{t-1}) are

treated as endogenous variables. P_t is the real retail price of cigarettes per pack including

taxes. We can treat price as an exogenous variable because KT&G is not a price-taker and

price competition appears to be absent in the Korean cigarette market during the period, as

Seldon and Doroodian (1989) pointed out for the US market. Y_t is real per capita

---

[7] λ is known as the habit persistence (adjustment) coefficient. This equation postulates that the actual change in C in any given time period t is some fraction λ of the desired change for that period. If $\lambda = 1$, it means that the actual C is equal to the desired C; that is, actual C adjust to the desired C instantaneously (in the same time period). However, if $\lambda = 0$, it means that nothing changes since actual C at time t is the same as that observed in the previous time period. Typically, λ is expected to lie between these extremes (for instance, λ is around 0.3 in our case) since adjustment to the desired C is likely to be incomplete because of rigidity, inertia, contractual obligations, etc. (Nerlove, 1958)

disposable income. $D76_t$ and $D89_t$ are dummy variables to capture the effect of the health warnings of 1976 ($D76_t = 1$ for t =1976-1997, 0 otherwise) and 1989 ($D89_t = 1$ for t =1989-1997, 0 otherwise). The short-run price and income elasticities of demand are seen in this equation directly while the long-run elasticities can be derived by dividing the short-run estimates by the estimates of the adjustment coefficient λ. As Griliches (1967) indicates, the reduction procedure does not induce serial correlation in the disturbances (ε_t) if there was none to start with. A priori, it is expected that the coefficient of real price and dummy variables would be negative and those of disposable income and lagged consumption positive.[9]

Only the demand function for cigarettes is estimated and the supply model is ignored since KT&G has been a monopolist and there is no supply relation; no one-to-one correspondence between the quantity supplied and the price (Pindyck and Rubinfeld 1998). In effect, KT&G is actually a monopsonist-monopolist because while there are a large

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[9] Since advertising data are not available, the amount of advertising expenditures is not included as a predetermined variable. These data are lacking in other country studies such as UK, Greece, Spain and Turkey (Duffy, 1995; Stavrinos, 1987; Valdes, 1993; Tansel 1993). However, this is not unreasonable in the Korean case. In Korea, advertising expenditures have been negligible due to KT&G's monopoly in the market. There has hardly been any advertising of cigarettes, except a limited advertisement in print for a short period of time when a new brand is introduced.

number of small tobacco growers, it is the exclusive purchaser of tobacco crops and the

single domestic producer of manufactured cigarettes and tobacco products.

III. DEMAND ESTIMATION AND EMPIRICAL RESULTS

III. 1. Estimation

Since time series variables typically have an underlying trend and many of the

explanatory variables move together, we anticipate the presence of multicollinearity among

independent variables in the model. We run the original double-log regression model

(Equation 4), using instrumental lagged variable of consumption ($\hat{C}_{t-1}$), and test for

multicollinearity.

Table 3. Variance Inflation Factors of Variables

Variable	VIF		1/VIF
Ln P_t	22.81		0.043844
lnY_t	36.99		0.027032
ln C_{t-1} (proxy)	7.38		0.135566
D76$_t$	5.95		0.168026
D89$_t$	4.88		0.204998
Mean VIF		15.60	

Calculating variance inflation factors (VIF), we see strong evidence of collinearity

in the model because both the largest VIF is greater than 10 (or even the more conservative

30) with the VIF of lnY_t = 36.99, and the mean of all the VIFs is considerably larger than 1

17

(15.60). Further investigation reveals that the measurements on the $\ln P_t$, $\ln Y_t$ and $\ln C_{t-1}$

are highly correlated.[9]

Based on the detection of multicollinearity, we formulate the original model in

terms of first differences, using variables as changes from one time period to another, as

suggested by Gujarati (1995, p.342) when multicollinearity occurs in models with time

series data. For instance, rather than formulate the original cigarette consumption function

as equation (4)

$$\ln C_t = \beta_0 + \beta_1 \ln P_t + \beta_2 \ln Y_t + \beta_3 \ln D76_t + \beta_4 D89_t + \beta_5 \ln C_{t-1} + \varepsilon_t \quad (4)$$

where most of the explanatory variables are highly correlated, we could relate change in

consumption to change in price, income and dummies. We would thus have

$$\ln (C_t - C_{t-1}) = \beta_0 + \beta_1(\ln P_t - \ln P_{t-1}) + \beta_2 (\ln Y_t - \ln Y_{t-1}) + \beta_3 (D76_t - D76_{t-1})$$

$$+ \beta_4 (D89_t - D89_{t-1}) + \beta_5 (C_{t-1} - C_{t-2}) + u_t \quad (5)$$

---

[9] We found the pair-wise correlations among variable to be notably high among independent variables:

Pair-wise Correlation Among IVs

	$\ln P_t$	$\ln Y_t$	$\ln C_{t-1}$	$D76_t$	$D89_t$
$\ln P_t$	1.0000				
$\ln Y_t$	0.9449	1.0000			
$\ln C_{t-1}$	0.9135	0.8869	1.0000		
$D76_t$	0.8880	0.8671	0.7616	1.0000	
$D89_t$	0.5064	0.7127	0.4827	0.4606	1.0000

While equation (4) explains the level of consumption, equation (5) explains changes in consumption. The habit persistence model (partial adjustment model) assumes the disturbance terms as "white noise", which satisfies the OLS assumptions. Therefore the OLS procedure gives consistent and asymptotically efficient estimates of the parameters and their standard errors. Furthermore, tests of hypotheses are valid, provided the sample size is large enough (usually over 30 degree of freedom) (Ramanathan 1995). Thus, OLS estimation of the partial adjustment model will yield consistent estimates although the estimates tend to be biased in small samples.

When testing serial correlation in the presence of lagged dependent variables, the Durbin-Watson test is not likely to be valid because the computed statistic will usually be biased toward a finding of no autocorrelation (toward 2) (Green, 1993). To check whether there is serial correlation in the error term appearing in our cigarette demand model, we use Durbin's h statistic (Durbin, 1970) as follows:

$$h = \hat{\rho} \sqrt{n/1 - n[Var(\hat{\alpha}_2)]}$$

Where n = sample size, $Var(\hat{\alpha}_2)$ = variance of the coefficient of the lagged C_{t-1}, and $\hat{\rho}$ = estimate of the first-order serial correlation ρ. For large sample sizes, Durbin has shown that if $\rho = 0$, the h statistic follows the standardized normal distribution with zero mean and

unit variance. Hence, statistical significance of an observed h can easily be determined form the standardized normal distribution table. In practice, there is no need to compute $\hat{\rho}$ because it can be approximated from the estimated d as follows: $\hat{\rho} = 1 - \frac{1}{2} d$ (d is DW statistic). This h is asymptotically normally distributed with zero mean and unit variance. Based on the calculated h (13.02), we reject the hypothesis that there is no serial correlation.

To correct for serial correlation, we estimate the model using the Prais-Winsten method (Prais and Winsten 1954)[10]. The Prais-Winsten estimator is a generalized least squares (GLS) estimator derived from the AR (1) model for the error term. This Prais-Winsten transformed regression method estimates a linear regression that is corrected for first-order serially correlation. Table 4 shows the estimated results, using smokers' per capita cigarette consumption.

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[10] Whereas the Cochrane-Orcutt method uses a lag definition and hence loses the first observation in the iterative method, the Prais-Winsten method preserves that first observation. In small samples, this can be a significant advantage (Stata Reference Manual 2001).

Table 4. Per Capita Cigarette Demand (Smokers), 1960-97

Prais-Winsten AR (1) Regression – Iterated Estimates (Correction of Autocorrelation)

Number of Observations	= 36
F (4, 31)	= 3.30
Prob > F	= 0.0231
R-squared	= 0.2986
Adj R-squared	= 0.2081
Root MSE	= 0.0366

ln C_t	*Coefficient*	*Standard Error*	*t*	*P > |t|*
ln P_t	-.2725425	.0839091	-3.25	0.003
ln Y_t	.0471307	.122251	0.39	0.702
D76$_t$	-.0239408	.038208	-0.63	0.536
ln C_{t-1}	.2524474	.1524174	1.66	0.108
Constant	.018981	.0108653	1.75	0.091
Rho	.0953748			

For comparison with Table 4 using smokers only, Table 5 demonstrates the estimated

results using overall adult per capita consumption.

Table 5. Per Capita Cigarette Demand (Overall Adults), 1960-97

Ordinary Least Square Regression

Number of Observations = 36
$F (4, 31)$ = 2.43
Prob > F = 0.0684
R-squared = 0.2388
Adj R-squared = 0.1406
Root MSE = 0.0402

$\ln C_t$	Coefficient	Standard Error	t	$P > |t|$
$\ln P_t$	-.2476147	.0914398	-2.71	0.011
$\ln Y_t$	.164031	.1338439	1.23	0.230
$D76_t$	-.0304047	.042197	-0.72	0.477
$\ln C_{t-1}$	.2600806	.1555939	1.67	0.105
Constant	.0102833	.011543	0.89	0.380

III. 2. Empirical Results

In the initial regressions, we included the dummy variable D89 too, but since the

coefficient has the wrong sign and was statistically least insignificant, we dropped it from

the equation. But we do not delete dummy variable D76 because the coefficient has the

correct sign and may belong in the demand model. To confirm whether this argument is

plausible, we take the F test approach to compare the full (with D89) and restricted model

without D89), and we have no evidence to prove the two models (with and without D89) are significantly different.[11]

The estimated equation using Prais-Winsten AR(1) iterated estimation regression is:

$$\ln C_t = 0.02 - 0.27 \ln P_t + 0.05 \ln Y_t - 0.02 \, D76_t + 0.25 \, C_{t-1}.$$

The coefficient estimate of lagged dependent variable (C_{t-1}) is 0.25, giving an idea about the habit persistent nature of smoking. It indicates that around 25% of additional current cigarette consumption is due to previous additional cigarette consumption. The coefficient associated with C_{t-1} is $1 - \lambda = 0.25$, so $\lambda = 0.75$. The short and long run price (P_t) elasticities are −0.27 and −0.27/0.75 = −0.36. These results are quite similar to previous works in other countries examining the price inelasticity of demand (Jah and Chaloupka 2000). The high price inelasticity of cigarette demand stems partly from the absence of direct substitutes or from the widespread prevalence of its use or its addictive nature (Tansel 1993). Previous estimates of income range widely, from −0.004 to 0.5 (Seldon and Boyd 1991). The estimated short and long run elasticities of income (Y_t) are 0.05 and 0.07, but the income coefficient is statistically insignificant in our model. The dummy variable ($D76_t$) associated with the health warning policy has a negative sign, as we would expect,

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[11] See the Appendix for the estimated results from the full model with D89 both for smokers only and overall adults.

but is statistically insignificant, demonstrating that the warning policy has not been effective in reducing cigarette consumption. Apparently, warning labels do not motivate decreased cigarette smoking in Korea.

IV. POLICY IMPLICATIONS

The analysis shows that past (lagged) consumption has a positive and significant effect on current cigarette consumption and supports the hypothesis that cigarettes are addictive in nature because past consumption leads to an increase in current consumption. The impact of excise taxation on cigarette prices has been one of the key policies which governments could take to reduce smoking (Jah and Chaloupka 2000). The estimate of the short-run price elasticity of cigarette demand is −0.27 in the model, implying that a 10% increase in the price of cigarettes would reduce the demand for cigarettes 2.7%, holding other variables constant. This study provides reassurance that consumers have reduced cigarette consumption in response to cigarette price increases. Therefore, we conclude that price increases through tax increases could reduce cigarette consumption (the long-run effect would be greater) and should have a high priority in the discussion of government policy.

However, the estimated income elasticities from the model do not support the hypothesis that increased income raises cigarette consumption at a statistically significant level. This is partly due to the relatively cheap price of cigarettes (the average price of

25

cigarettes per pack is about 1/3 that in the United States) and partly due to a quite different social and cultural milieu in Korea compared to Western countries' views of smoking. In particular, income could not steeply influence cigarette consumption because sharing cigarettes are quite ubiquitous and smokers are rather openhanded in sharing cigarettes with acquaintances or even strangers.[13] The dummy variable of the health warning policy ($D76_t$) yields a negative sign consistent with its hypothesis but is still statistically insignificant. This suggests that cigarette warnings have not been effective, probably due to the warnings themselves being not persuasive enough for the public to recognize the health hazard of smoking. Therefore, health warning policies should be accompanied by more intensive health education about the risks to health connected with smoking, especially for young people. In brief, this paper suggests that one of the most effective steps the Korean government could take to reduce cigarette consumption is to raise the price of cigarettes through its tax policies. A tax increase would also influence virtually every aspect of the cigarette industry and is a key to determining the market and consumer behavior. We also recommend a more comprehensive policy in terms of public education, legislative actions and legal enforcement, together with a realistically aggressive health warning policy.

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[13] The multicolinearity problem causes larger standard errors; and this could also explain why the t ratio for income is so low.

The full models are presented in Table 6 and Table 7

Table 6. Per Capita Cigarette Demand (Smokers), 1960-97

Prais-Winsten AR (1) Regression – Iterated Estimates (Correction of Autocorrelation)

Number of Observations = 36
F (5, 30) = 2.58
Prob > F = 0.0469
R-squared = 0.3006
Adj R-squared = 0.1840
Root MSE = 0.0372

ln Ct	Coefficient	Standard Error	t	P> ItI
ln Pt	-.2751932	.0853602	-3.22	0.003
ln Yt	.0504119	.1252347	0.40	0.690
D76t	-.0241733	.0386961	-0.62	0.537
D89t	.0143915	.037891	0.38	0.707
ln Ct-1	.2421032	.1552637	1.56	0.129
Constant	.0186695	.0112198	1.66	0.107
Rho	.105837			

27

Table 7. Per Capita Cigarette Demand (Overall), 1960-97

Ordinary Least Square Regression

Number of Observations	=	36
F (5, 30)	=	1.93
Prob > F	= 0.1188	
R-squared	= 0.2433	
Adj R-squared	= 0.1172	
Root MSE	= 0.0407	

ln Ct	Coefficient	Standard Error	t	P> |t|
ln Pt	-.2502192	.0928807	-2.69	0.011
ln Yt	.1711764	.1367032	1.25	0.220
D76t	-.0303053	.0427681	-0.71	0.484
D89t	.0176661	.0418085	0.42	0.676
ln Ct-1	.2560879	.1579801	1.62	0.115
Constant	.0094664	.0118577	0.80	0.431

APPENDIX II

Data on Cigarette Demand in Korea, 1960-1997

Year	Cs	Co	P	Y	CPI	RP	RY
1960	233.94	79.97	5.48	19579.96	3.3	1.66	5933.32
1961	251.96	86.20	5.93	23259.65	3.6	1.65	6461.01
1962	272.99	93.59	7.00	27052.40	3.8	1.84	7119.05
1963	296.42	101.80	7.94	36825.49	4.6	1.73	8005.54
1964	320.75	110.26	8.78	51117.92	6	1.46	8519.65
1965	346.97	119.35	10.91	56109.16	6.8	1.61	8251.35
1966	338.55	116.51	13.54	69655.28	7.6	1.78	9165.17
1967	350.49	120.87	15.97	83059.58	8.4	1.90	9888.04
1968	357.37	123.42	21.01	103357.14	9.3	2.26	11113.67
1969	368.96	127.57	25.81	130812.76	10.4	2.48	12578.15
1970	390.46	135.14	30.53	161135.26	12.1	2.52	13316.96
1971	426.67	147.65	32.77	191611.00	13.7	2.39	13986.20
1972	427.00	147.59	40.79	229626.46	15.3	2.67	15008.27
1973	396.03	136.68	55.65	283391.89	15.8	3.52	17936.20
1974	407.24	140.41	68.51	387492.46	19.7	3.48	19669.67
1975	420.02	144.42	95.51	501073.32	24.6	3.88	20368.83
1976	414.68	142.90	121.12	667758.18	28.4	4.26	23512.61
1977	426.86	147.40	139.05	825038.18	31.3	4.44	26359.05
1978	439.53	152.06	168.09	1086800.25	35.8	4.70	30357.55
1979	440.16	152.53	201.62	1329129.74	42.3	4.77	31421.51
1980	446.56	155.00	250.92	1539780.72	54.5	4.60	28252.86
1981	453.26	156.32	304.87	1837199.47	66.2	4.61	27752.26
1982	445.64	154.96	342.03	2056736.80	70.9	4.82	29008.98
1983	438.04	152.38	361.03	2331238.01	73.3	4.93	31804.07
1984	437.03	152.08	370.01	2587310.59	75	4.93	34-97.47
1985	431.68	150.35	380.04	2793582.26	76.8	4.95	36374.77
1986	425.87	148.22	388.93	3203167.16	78.9	4.93	40597.81
1987	433.62	150.82	408.31	3685634.31	81.3	5.02	45333.76
1988	451.94	157.11	459.91	4273040.58	87.1	5.28	49059.02
1989	465.77	161.83	507.51	4662033.09	92.1	5.51	50619.25
1990	470.10	163.30	530.83	5470489.35	100	5.31	54704.89
1991	474.95	153.50	552.77	5996121.99	109.3	5.06	54859.30
1992	477.78	165.94	567.95	7043294.88	116.1	4.89	60665.76
1993	486.70	169.03	587.69	7644537.45	121.7	4.83	62814.61
1994	436.86	151.71	714.40	8666882.37	129.3	5.53	67029.25
1995	446.61	155.09	750.57	9727129.57	135.1	5.56	71999.48
1996	459.79	159.67	840.88	11389136.23	141.7	5.93	80374.99
1997	452.16	157.02	925.89	11563795.87	148.1	6.25	78081.00

29

Cs = Smokers per capita cigarette consumption over 18 per pack (1 pack =20 cigarettes)

Co = Overall per capita cigarette consumption over 18 per pack

P = Average price per pack (Wons, $1 = ± 1,300 Wons)

Y = Per capita disposable income

CPI = Consumer price index (1990=100)

RP = Real price (P/CPI)

RY= Real income (Y/CPI)

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PART TWO

PUBLIC POLICY AND CIGARETTE CONSUMPTION:

THE DIMENSIONS OF GOVERNMENT INACTION AND SOLUTIONS

35

ABSTRACT

In contrast to the activist role governments have played in many Western countries, the governments of developing countries have very weak and limited policies designed to curb smoking. South Korea is one of those cases and is the focus of this paper. This paper explores the structural features of the Korean political economy associated with cigarette consumption, and suggests some policy approaches adapted to the Korean political context. We examine the Korean case by juxtaposing critical aspects of the Korean situation with the US, which has taken major initiatives over the past decades to reduce cigarette smoking. By comparing the political and policy dynamics of the Korean case with the US, we hope to shed more light on the prospects for policy change in Korea. We also try to explore the possible explanations for the relative success of the anti-smoking forces in the US compared to Korea. Such comparisons will provide insights into the agenda-setting process in both countries.

36

I. INTRODUCTION

According to the World Health Organization (WHO), about 1.1 billion people worldwide smoke and the number is expected to rise to more than 1.6 billion by 2025. Nonetheless, cigarette consumption has been declining in many countries, particularly in North America and Western Europe, while increasing in many others, especially in Asia. For example, in the early 1970s, cigarette consumption was highest in Canada, Switzerland, Australia and the United Kingdom, while by the 1990s it was highest in Poland, Greece, Hungary, Japan, and Korea (WHO, 1997).

Declines in cigarette smoking in many countries have almost certainly been due to a variety of government measures aimed at either providing information to consumers that would discourage smoking, restricting advertising that promotes smoking, restricting the access of individuals, particularly teenagers, to cigarette products, or making cigarette products more expensive. However, in contrast to the activist role that governments have played in many Western countries, the governments of developing countries have adopted a relatively "laissez faire" or "hands off" approach to cigarette consumption, or,

37

alternatively have adapted very weak and limited policies and programs designed to curb

smoking. Korea is one of those cases and is the focus of this paper.

This paper explores some of the structural features of the Korean political

economy associated with cigarette consumption, and suggests some policy approaches

adapted to the Korean political context. We examine the Korean case by juxtaposing

critical aspects of the Korean situation with the United States, which, unlike Korea, has

taken major initiatives over the past four decades to reduce cigarette smoking. By

comparing the political and policy dynamics of the Korean case with the US, we hope to

shed more light on the prospects for policy change in Korea. More generally, we try to

explore the possible explanations for the relative success of the anti-tobacco forces in the

US compared to Korea. Such comparisons will provide insights into the agenda-setting

process in both countries.

I. 1. Trends in Korean and US Cigarette Consumption

Figure 1 shows the noticeably different trend in cigarette consumption between

Korea and US during 1961 through 1997. Total annual consumption of cigarettes in Korea

was 22.9 billion in 1961, peaking at 98.3 billion in 1993 and was 92.7 billion for 1997. Per

capita consumption over 18 years old was 1724 cigarettes in 1961, peaked at 3381 cigarettes in 1993 and was 3141 cigarettes for 1997. With a few exceptions, per capita consumption has steadily increased since 1961. On the contrary, per capita cigarette consumption in the US has steadily decreased since the 1964 Surgeon General Report on the dangers of cigarette smoking.
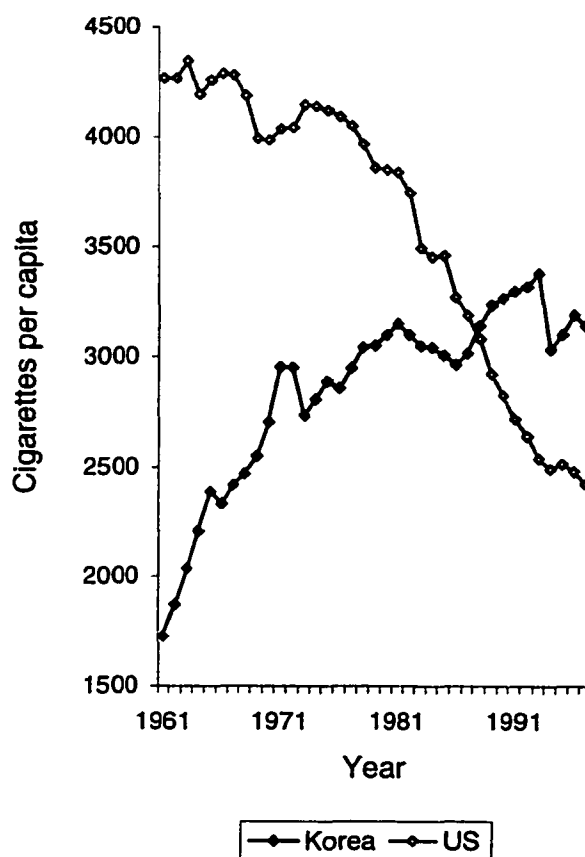
**Figure 1. Per Capita Cigarette Consumption in Korea and the US
1961-1997**

According to the Korea Institute of Health and Social Affairs (KIHASA, 1995),

the smoking rate of the population over 15 years old is 32.2%, while the world average is

slightly lower, 30%. In Korea, smoking has been a widespread habit among men of all

socio-economic classes but has been socially unacceptable among women. In 1997 Korea's

male population ranked as the world most cigarette loving (Table.1). Sixty-eight percent of

Korean men aged 15 years or older smoke cigarettes and the WHO- recognized ranking

shows the volume of cigarette consumption in Korea has changed little in spite of the

economic crisis.

Table 1. Smoking Prevalence Among Men

Country Year	Korea 1997	Japan 1994	Poland 1993	Thailand 1995	Greece 1994	Canada 1991	US 1993
Smoking Prevalence	68%	59%	51%	49%	46%	31%	28%

Note: Smoking Prevalence (15 years old or older) is the percentage of the population aged
15 years old and older who smoke.
Source: World Bank. 1999. Economics of Tobacco Control, Country Data

In spite of the aforementioned situation, successive Korean governments have done

relatively little in controlling or discouraging cigarette consumption. In some respects,

public health might be an ambiguous goal that is hard to measure and even harder for

governments to provide. Nevertheless, as seen in the United States and other Western

countries, the increasing attentiveness by public officials and medical authorities to the

relationship between cigarette smoking and health has led these governments to intervene in

the smoking-health controversy by attempting to modify smoker behavior.

I. 2. Korea and US Smoking Policy

Korean Case

The Korean government has adapted several policies involving cigarette smoking. For instance, smoking in most public areas such as theaters, department stores, and museums and in public transportation has been restricted since 1989, and all domestic commercial flights and schools since 1993. In addition, Korea passed laws banning tobacco advertising on television, radio, and in the print media in 1988. The Health Warning Packaging Restrictions, adapted in 1976, required that all tobacco advertisements include the warning: "Smoking is hazardous to your health" and sales to children have been forbidden.

Manufacturers of all tobacco products along with alcoholic beverages have been required, by the Commission of Youth Protection, an advisory body under the Prime Minister's Office, since 1999 to put labels that specify the ban of sales to minors under the age of 19 on their products. Under the new regulation, manufacturers who fail to meet the labeling requirement will face a prison term of up to two years or a fine of 10 million Won ($8,300). Cigarettes bear a square label with the message "The sale of this product to

adolescents under the age of 19 is banned" on the back of each pack. It is to take up one-fifth of the pack's back and be printed in a noticeable color.

The US Case

There have been a series of government policies on smoking in the US. Among them, health warning labels on cigarette packages and in advertising are required. For example, the Federal Cigarette Labeling and Advertising Act of 1965 required a package warning label – "Caution: Cigarette Smoking May be Hazardous to Your Health" and the Public Health Cigarette Smoking Act of 1969 required a package warning label- "Warning: The Surgeon General Has Determined that Cigarette Smoking Is Dangerous to Your Health". According to the 1967 Fairness Doctrine (1968–1970), the Federal Communications Commission (FCC) ruled that the Fairness Doctrine applied to cigarette advertising, thus requiring stations broadcasting cigarette commercials to donate airtime for antismoking messages. In 1971, the Fairness Doctrine antismoking messages ended when cigarette advertising on radio and television was banned.

In terms of education, the government institutes four rotating health-warning labels (all listed as Surgeon General's Warnings) on cigarette packages and advertisements

through the Comprehensive Smoking Education Act of 1984. The US government requires nonsmoking sections in airports and interstate buses; and most states restrict smoking in public places. For instance, the government banned smoking on domestic airline flights scheduled for 2 hours or less with the Public Law 100-202 (1987). In 1987, the Department of Health and Human Services established a smoke-free environment in its facilities.

In 1996, President Clinton announced the nation's first comprehensive program to discourage children and adolescents from smoking cigarettes or using smokeless tobacco and beginning a lifetime of nicotine addiction. In the same year, the FDA issued regulations to limit the accessibility and appeal of tobacco products to young people (ALA "fact sheet"), although FDA authority over cigarettes was later rejected by the US Supreme Court. Finally, in 1998 the tobacco industry agreed to a 46-state Masters Settlement Agreement (the largest settlement in history, nearly $206 billion).

II. THE DIMENSIONS OF THE TOBACCO ISSUE IN KOREA

We investigate those factors focused on agriculture, the government trade balance, taxation and political pressure, among others. We then compare the Korean situation with the US case in an effort to give a greater understanding to the policy dynamics between the two countries, and provide greater insight into the different policy environments facing decision makers in the two countries.

II. 1. Agricultural Aspects

A major concern of policy makers is job loss in the farm sector that would result from a falling demand for tobacco. The total farm population of Korea is about 4.5 million, representing about 10% of the total population in 1997. The agricultural share of the Gross Domestic Product (GDP) was around 6%, or approximately 24,056 billion Won (416,018 billion Won is the total GDP) and the share in employment is 11% of the workforce in the same year (Korea Ministry of Agriculture and Forest, 1998). Even though the share of tobacco-based agricultures has been declining in Korea, it should be noted that agriculture has a particular meaning in the Korean culture and economy, which is not reflected in these

45

economic indicators. Agriculture still plays a major role in national security, social stability and economic development.

While agriculture has been a critical component of the US economy, with the US possessing the most efficient agricultural sector (and hence heavily export driven) in the world, its overall importance within the US political economy has diminished greatly during the twentieth century. Today, persons employed in the agricultural sector are only 2.4 % (3,305,000) of the total number of employed (135,208,000) and the agricultural share of GDP is just 1.7% (129.8 billion dollars). In short, the economic, and hence political clout, of tobacco has been declining for many years in the US.

II. 2. Government Trade Balance and Tobacco Tax and Government Revenue

Trade in tobacco has been important in a number of respects in effecting a governmental response. Tobacco and tobacco product exports help a nation's balance of payments. A state-run corporation named Korea Tobacco & Ginseng Corporation (KT&G) exported increased amount of cigarettes in the midst of an overall slump in the global tobacco industry due to excessive supply of leaf tobacco and a decline in demand for tobacco products in 1998. In the same year, KT&G recorded 305.6 billion Won in

revenues, up 35.3 percent from the previous year, on sales of 4.83 trillion Won. Despite the difficult economic period, tobacco sales, which account for the large share of the corporation's income, jumped to 4.71 trillion Won in 1998 from 4.13 trillion Won in 1997.

Table 2. Cigarette Exports of KT&G

Year	1994	1995	1996	1997	1998
Export Quantity (million pieces)	708	816	1,903	2,029	2,254

Source: KT&G 1999 Annual Report

KT&G reportedly exported a total of 2,254 million manufactured cigarettes worth $9.2 million, up 11 percent from 1997, setting a new record since it began exporting tobacco products in 1965 (Table 2). In addition, the export figure for leaf tobacco was 7,654 metric tons worth $32.8 million. Encouraged by the achievements, the state-affiliated tobacco company KT&G is planning to secure an important position in the global markets as the world's seventh largest tobacco maker and targets $50 million in export by 2000 (The Korea Herald, 1999).

The Korean tax system comprises both national and local taxes. National taxes are divided into internal taxes, customs duties, educational taxes and special taxes for rural

development. The tobacco consumption tax is under the local tax in the tax system. The popularity of smoking cigarettes has provided the Korean government with abundant tax revenues. In 1995, the local tax was about 20% of all tax revenue. The tobacco consumption tax is 3.5% of all tax revenue, amounting to 2.2 billion won or about 17.7% in Local tax revenue (Korea Ministry of Finance and Economy, 1996).

As with Korea, US political jurisdictions have obtained substantial revenues from the sale of tobacco products, and most especially from the sale of cigarettes. Over the last decade, it is important to note that cigarette taxes have increased dramatically (16 cents from 1991 to 20 cents in 1992, to 24 cents in 1993), even though cigarette consumption has declined. The gross cigarette taxes for all taxing states are 6.2 billion dollars in 1993 and taxes as a percentage of average retail prices are about 25% in the same year (Tobacco Institute, 1998).

A major difference between the United States and Korea, however, is that tobacco has been granted a privileged monopoly in the latter case. Revenues generated from cigarette sales goes directly to the monopoly. Thus, it is arguably the case that such a monopoly creates political conditions more antithetical to the kind of concerted anti-cigarette actions seen in the US since the 1960s. Given what we know about the

bureaucratic inertia that can prevail once some vested interest has established a foothold in government, policy change can be painfully slow.

II. 3. A Fragmented Bureaucracy and Subsystem Politics[1]

A related critical problem the Korean government faces is to decide which government bodies are responsible for formulating cigarette policy. For instance, the Ministry of Finance and Economy collects revenues, the Ministry of Agriculture and Forests has sought to maintain and increase employment, income, and productivity especially in farm households, while health interests including the Ministry of Health and Welfare have attempted to reduce disease and suffering from smoking. Each has tried to maximize its own limited goals and interests rather than examine these in light of broader implications. Lack of clear lines of responsibility and consideration for limited aspects of the problem as well as competing and the limited goals of different administrative departments have inhibited a uniform governmental response.   The governmental

[1] The coalition of small segments of Congress, the bureaucracy, and the interest group community is referred to in social science literature as a subsystem. A subsystem describes a structure dependent upon a larger political entity but one that functions with a high degree of autonomy. However, the tobacco subsystem is a more encompassing policy system which cuts across institutional lines and includes within it all groups and individuals who are making and influencing government decisions concerning cigarettes and tobacco (Fritschler 1989).

inconsistency. incongruity and conflict of actions by separate branches of government had confused the public and may have reduced the impact of those governmental actions and anti-smoking movements that have been taken to affect the behavior of cigarette smokers.

The United States has historically exhibited highly fragmented bureaucratic arrangements characterized by bureaucratic and subsystem politics. Public policy toward tobacco reveals similar fragmentation. Tobacco farmers have received favorable assistance in the form of price supports from the Department of Agriculture along with assistance in producing for export markets from various government entities including Department of Commerce. At the same time, policy related to tobacco usage has been dispersed among the Federal Trade Commission, Office of the Surgeon General and the National Institutes of Health.

Traditionally, tobacco politics in the United States has also been characterized by subsystem politics that primarily included key subcommittees and legislative committees (the appropriations subcommittees and agriculture committees in each House); elements of the agricultural department; cigarette manufacturers; marketing organizations; and congressmen from the tobacco-growing areas (Fritschlers, 1989). At some point after 1971, this dominant stable subsystem was drastically reduced in influence, being replaced by an

equally powerful countervailing subsystem consisting of anti-smoking congressmen, health organizations such as the American Lung Association and American Cancer Society, state politicians and activist state attorneys general as well as trial lawyers. The formerly dominant subsystem, which had managed to suppress substantial agenda change on the issue through the 1950s and 1960s, found itself by the 1980s and 1990s very clearly on the defensive and fighting on guard political action. The Korean political system, of course, has yet to see the emergence of such influential elements as noted above to challenge the status quo. The Korean policy dynamic in many ways resembles the United States prior to the 1970s. In other words, tightly woven networks of interests consisting of the Korean tobacco monopoly, agricultural interests, and legislators have managed for the most part to contain any pressures for policy change.

II. 4. Partisan Competition and Interest Group Mobilization

The smoking-health nexus does not resonate as a partisan political issue in Korea. The Korean government is inhibited by its own awareness and sensitivity to the social consequences and political impact of its actions. All parties try to avoid alienating cigarette smokers while also postponing the political repercussions of having to find alternatives to

cigarette taxes and avoiding the resentment of those individuals and groups economically harmed by a government anti-smoking legislation and program. Attempting to carry out this delicate balancing act has produced, at least in the case of South Korea, near-paralysis is formulating even a mildly activist health-oriented cigarette policy.

The US provides a stark contrast with Korea on this dimension. Whereas tobacco and cigarette usage in Korea has drawn very little attention of either political party, and whereas cigarette smoking has been an issue with very little salience, such was the condition of the cigarette issue four decades ago in the United States. Indeed, as recently as 1960 cigarette smoking could be described as a "non-issue". Neither the Democrats nor Republicans devoted substantial attention to the cigarette-health linkage, and the Democrats, at the time completely dominant in the South including the key tobacco states of Kentucky, Maryland, Virginia and North and South Carolina were far more dependent on tobacco interests than the Republicans, whose presence in the South was politically nearly nonexistent.

A change in partisan positions occurred during the 1970s, 1980s and 1990s as the Democrats adopted increasingly strong anti-smoking stances while the Republicans were left, at least initially, to more or less defend the status quo. With the political position of

Southern Democrats from tobacco growing states becoming increasingly tenuous, and as the Democratic Party moved "left" and adopted increasingly harsh anti-tobacco positions, Republicans gained increasing electoral strength in the South including the tobacco states.

This change in position among Democrats can be at least partially attributed to the importance of various health activist organizations working within and influencing Democrats policy positions. The change in the respective stances of the Democratic and Republican parties was reflected in the campaign contributions made by the tobacco companies, which shifted heavily in the 1990s toward Republican political candidates. This represented a dramatic change from prior years when "tobacco money" tended to be dispersed with relative equality between the parties.

II. 5. Cultural and Legal System

Taken as a whole, the recognition of a smoking hazard is neglected among the majority of Korean people. It is also a relatively strong Korean sentiment that the smoking hazard is an issue of personal responsibility. This essentially libertarian view is quite similar to the perspective that prevailed in the US until the 1960s, and which still resonates with conservatives and those who resent government intrusion – or the perception of such

intrusion – into individuals daily lives. Given the dominance of this view in Korea, political action is discouraged and the larger the proportion of people affected economically by cigarette consumption, the less likely the parties and government are to act to reduce cigarette consumption.

The US has undergone profound cultural changes over the past decades that have witnessed parallel transformations in the legal system and legal doctrine. Even casual observers are struck by the decline in the principle of individual responsibility that is embodied at one level in the traditional doctrine of *caveat emptor*.[2] The notion of the individual as repository of accountability regarding the consequences of their actions has been replaced at least to a significant extent by a belief in group rights and external sources of accountability. Such changes in US culture are reflected in the legal system with the explosion of class action lawsuits and the tort doctrine of strict liability, giving plaintiffs critically important new weapons against corporate defendants. The emergence of class action lawsuits beginning in the 1960s was a major development that created an increasingly tenuous legal environment for corporate defendants.

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[2] This means "let the buyer beware", referring to the principle that the seller of a product cannot be held responsible for its quality unless it is guaranteed in a warranty.

In short, changing legal doctrines beginning in the 1960s in the US led to the possibility of massive damage awards being won by plaintiffs in cases involving claims of health damage, typically lung cancer, from cigarette smoking. The settlements reached between the cigarette companies and states attorney general to settle claims that cigarettes had significantly increased state medicine and medical costs helps illustrate the weakened positions of the companies. This settlement required the tobacco companies to pay some 240 billion dollars in compensation to the states over 25 years. The settlement itself, however, onerous, was viewed as preferable by the tobacco companies to having to litigate more than three large separate cases in state courts in which a single adverse finding could produce a serious verdict (Master Settlement Agreement, 1996).

Policy change is almost always determined by a complex array of factors. Our discussion has limited itself to a relative handful of variables in which a plausible case can be made concerning their role and influence. In formulating a very basic model of policy change, we suggest the US model to look something like the following:
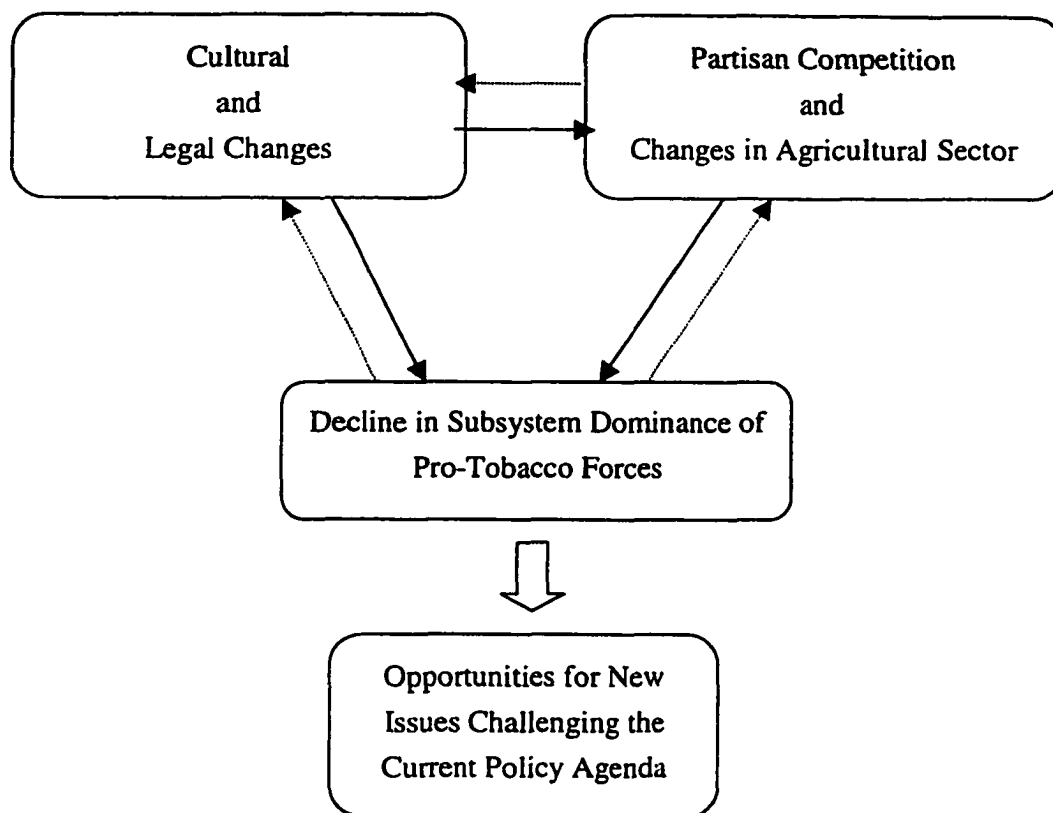
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┌─────────────────────┐          ┌─────────────────────────┐
│      Cultural       │ ◄──────  │   Partisan Competition  │
│        and          │          │           and           │
│   Legal Changes     │ ──────►  │ Changes in Agricultural │
│                     │          │         Sector          │
└─────────────────────┘          └─────────────────────────┘
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        ┌──────────────────────────────────┐
        │  Decline in Subsystem Dominance of│
        │        Pro-Tobacco Forces         │
        └──────────────────────────────────┘
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              ┌──────────────────────┐
              │  Opportunities for New│
              │  Issues Challenging the│
              │  Current Policy Agenda│
              └──────────────────────┘
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Figure 2. The Dimensions of the Tobacco Issue

Here, cultural and legal changes over time help shape the environment in which party

competition occurs. Changes in the cultural and legal milieu and the nature of party

competition regarding the issue, in turn, shape changes in subsystem political dynamics and

ultimately, changes in the political agenda. The dramatic shift in partisan allegiances

played a major role in reshaping creates an environment in which the existing policy agenda

could be challenged and new issues promoted. As Kingdon (1995) has suggested for new issues to achieve success on the political agenda requires the confluence of policy, problem and political streams. By the mid to late 1970s in the US, the final piece of the puzzle – the "political stream" was in place to effect dramatic agenda change. This process still has some way to go in the Korean context.

III. POLICY DILEMMAS

Whether policy changes in the Korean context will follow the same path, or perhaps take a quite different track, is unknown. First of all, there are philosophical challenges to the possible government actions on smoking. The ability of government to provide for certain kinds of public goods is finite. This is especially true when the goal of public actions conflicts with individual freedom. How far can or should the government go to protect an individual's health? Should the government regulate an individual's food consumption or physical activity to protect him against disease or injury? Should and can government act to protect the individual from self-injury?

The agricultural community is one of the politically most powerful in Korea despite the fact that the number of farmers has declined continuously. Notwithstanding the shrinking of the agrarian population, farmers have been consistent in their political loyalties for the regional politician as well as government. In return, the parties resisted reforms that would dilute agriculture's influence by eliminating their over-representation in the congress. The government has also protected agriculture's economic interests by, for instance, price support programs as well as a variety of trade barriers. Regulated by the

58

government for so long and organized with the government's help, the tobacco farmers may resist the antismoking movements. This price support program works against strong government actions to reduce cigarette consumption and protect the public interest. Once started, programs and benefits are difficult to give up.

In the near future, cigarette taxation probably will reflect the cigarette-health-related dilemma, the growing anti-smoking sentiment and the increasing revenue needs of governments. The reliance on cigarette tax revenues and the difficulty of replacing lost tax revenues make sharp changes in cigarette tax rates unlikely. In addition, there are benefits for both KT&G and the government such as from the stock dividend, and any decline in the cigarette consumption would reduce their economic returns. For instance, the government is interested in protecting its investment (about 18% stock in KT&G currently), and inaction to maintain the status quo will help protect this investment. The price support program and export subsidies are also conflict directly with the government's anti-smoking and health program. The difficulty in immediately replacing lost tobacco revenues seems enormous. In addition, while the burden of change generally rests on the government, there is little incentive to tamper with a system that raises so much revenue so easily with so few

adverse political impacts. Lastly, tobacco use has been culturally accepted as honorable

and tolerated through the past years.

IV. POLICY IMPLICATIONS AND CONCLUDING REMARKS

The health benefits of reducing or stopping smoking are huge for both individuals and society. Government interventions that reduce cigarette smoking could reduce the burden of diseases such as heart, pulmonary and respiratory diseases and various types of cancer. The Ministry of Health and Welfare announced the 35,000 Koreans die of lung cancer and other respiratory and circulatory diseases resulting form cigarette smoking annually and financial losses attributed to smoking amount to 6 trillion won or $ 5 billion a year (Ministry of Health and Welfare, 1999). In addition, individuals who quit smoking gain substantial savings through unbought cigarettes and lowered health care costs. A Korean smoker can save $285 annually if cigarettes are no longer bought, while they will have an extra 39 hours worth of wages available for other purposes (New England Journal of Medicine, Oct 1998).

We suggest that the Korean government tc take measures to better cope with this crisis. In agricultural policy, the government need to find ways to encourage tobacco growers to produce other substitute crops and should encourage KT&G to achieve a gradual reduction in the manufacture of cigarettes. Crop substitution or agricultural diversification

61

may be a useful scheme to assist tobacco farmers in mitigating the impact of reduced cigarette consumption with an appropriate transition program. The highly inelastic demand for cigarettes has been used as an economic rationale and an excuse for high taxes in cigarette taxation. Theoretically and empirically, high taxation and high prices have contributed to a reduction of cigarette consumption in US and many other countries (Seldon and Doroodian, 1989; Jah and Chaloupka, 2000). From the empirical evidence, the overall price elasticity of cigarettes demand for Korean smokers is estimated at - 0.27 in the short run, implying that a 10% increase in the price of cigarettes would lead to a 2.7% reduction in the demand for cigarettes, holding other factors constant (Kim 2001). Younger individuals in particular are found to behave more myopically than older individuals (Becker et al., 1988; Chaloupka, 1991). One of the concerns about an increase in cigarette taxes is the possibility of huge increases in smuggling, thereby keeping cigarette consumption high but reducing government revenues (Baltagi and Levin, 1986). However, unlike the US, there may be little possibility of cigarette smuggling (interstate sales between high and low tax states) in Korea, which has a relatively uniform tax system throughout a relatively small geographic area

Within the governmental structure, the agency in charge and responsible for achievement needs to be more clearly defined. This agency could then act effectively in responding to a public problem with more effective policies. In the smoking-health case, more vigorous governmental efforts should be undertaken especially when agencies and levels of governmental are in conflict because of their various responsibilities.

After peer pressure, TV probably serves as the second most powerful influence that gets young children hooked on smoking in Korea. Every adult figure in TV dramas smokes to express sorrow, joy or just about any change of mood. They also throw burning butts everywhere, though they must know young people imitate the behavior of these idols. Considering the strong impact that TV has on the thinking and styles of the younger generation, the government need to take an action on mass media as a whole.[3]

Cigarette sales to minor is illegal, but there is probably no law that is less heeded as few are prosecuted for violating the prohibition while millions of young children are buying a cigarette easily. Schools are serving as the center of disseminating cigarettes

[3] However, the role of the media in tobacco control is also a powerful source of information, which can be an agent of change in support of tobacco control. According to the WHO (2000), communication with the media is a key to success in tobacco control throughout the world. In addition, media carry the message that although smoking is an individual choice it is heavily affected by social, environmental and economic factors. The message must, therefore, allow the audience to become aware of the forces influencing its habits and perceive the benefit of resisting such pressure (WHO, 2000).

while they are neglecting efforts to discourage smoking without substantial anti-smoking educational programs.

Regarding health educational programs, more intensive health education is expected to be a major means of achieving reduced cigarette consumption especially for young people. First, it can inform the public about the risks to health connected with cigarette smoking more intensively through, say, the professional social agents such as physicians and nurses. Second, it can encourage smokers to discontinue the smoking habit and dissuade non-smokers from acquiring the habit through intensifying legislative actions. For example, Chaloupka (1995) found that relatively strong restrictions on public smoking significantly reduce smoking participation rates as well as average consumption among smokers. The Government also should have measures to protect the health and rights of children and adults by preventing involuntary exposure to secondary or environmental tobacco smoke.

Currently, the government has decided to privatize the tobacco monopoly and is considering selling off the business to foreigners as well as domestic buyers. When this privatization proceeds and the domestic cigarette market opens to the transnational tobacco industry, Korea will face a steep increase of tobacco consumption in the near future. The

Korean government needs tighter legislation and public education by the media and government authorities to meet this growing threat to our present and future health.

The Korean government should keep in mind that a comprehensive package which includes all of these government policies will be much more effective than isolated action and that the effectiveness of smoking policies has a time lag after implementation. According to several medical studies, most of the tobacco-related deaths that are projected to occur in the next 50 years will be among today's existing smokers. The Korean government does not have enough time to think twice to conduct their resolution. Changing individuals' habits is a truly massive undertaking, and so immediate, overnight change is unlikely to occur. However, with relatively modest efforts that respect the individual liberties while at the same time recognizing the need for, and legitimacy of, government action in the policy area, significant benefits can be obtained.

APPENDIX

Korea Tobacco & Ginseng Corporations (KT&G): A Brief History

The first time tobacco came to Korea was during the Yi-dynasty (in 1618) from Japan or from some other sources via China. KT&G began as a small tobacco and ginseng company under the control of King Kojong in August 1899. It began to produce cigarettes in 1921 when the country was under Japanese colonial rule, and in 1946, a year after the nation became independent, it produced around 103 million packs of cigarettes. During the century of its existence, KT&G has provided financial revenue for both the central and provincial governments, while also contributing to the worldwide reputation of Korean ginseng. KT&G was transformed into a government-invested institution when the domestic cigarette market was liberalized in 1987.

In April 1989, it was inaugurated as a state-owned enterprise under its present name. In 1997, the legal status of KT&G was changed to a joint-stock company and KT&G listed its stock on the public market beginning 1999, in line with the government overall plan to privatize state-run corporations. The government currently holds a 35 percent stake in KT&G. The state-owned tobacco manufacturer produced a total of 123 different brands

66

since 1921, when KT&G first began cigarette production and to this day the brand names represent the national sentiment of the era.[4] KT&G produced approximately 567 million packs of cigarettes in 1998. In 1998, over 95 of 100 Korean smokers chose KT&G products instead of world famous foreign brands, such as Marlboro of the US and Mild Seven of Japan. As much as this figure reflects the anti-import sentiment among Korean consumers, it is a clear reflection of KT&G's strong competitiveness in the local market.

KT&G has as many as 159 distribution branches nationwide, which construct a unified marketing and distribution network, an unbeatable advantage of the corporation compared with foreign competitors. In particular, to meet the diversified demand of the consumers, KT&G composed a new product portfolio by marketing new products continuously. KT&G currently has 18 different brands, but the number is small compared with foreign tobacco makers, which place 50 brands in the domestic market.

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[4] For example, one of the current new brand named "Hanmaum (which can be translated into "one-heart")" shows the strategy of KT&G to represent the national sentiment of this era.

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PART THREE

GOVERNMENT LEADERSHIP AND COALITION EFFORTS AGAINST

TRANSNATIONAL TOBACCO CORPORATIONS IN ASIA

71

ABSTRACT

This paper examines the current tobacco situation in Asia, focusing on the strategies of transnational tobacco corporations in the Asian tobacco market and on the role of government leadership. An approach is suggested that centers on regional coalitional efforts among the countries in Asia in corporation with anti-tobacco groups in the United States. For the most part, previous studies of public policy on tobacco consumption have focused on the role of domestic macro policy such as tax policy, regulation and health warnings, mainly in developed countries. In contrast to previous work, we argue the current tobacco crisis of Asia cannot be unraveled by domestic policy alone. There needs to be clear government leadership and strong commitment to tobacco control in the Asian case, for we believe that includes organized support for tobacco research and public education that other tobacco policy can not be implemented effectively without them. It must be supplemented by regional and international coalitional efforts. Tobacco control policy at the national level would be far more effective if government leaders and private organizations use their resources to change the public sentiment on smoking and thereby reduce tobacco use and its accompanying social and economic costs.

72

I. INTRODUCTION

I. 1. Problem Statement

Approximately 1.1 billion people 15 years old and older smoke nowadays in the

world. By 2025, the number of people worldwide who die each year from tobacco-related

disease is expected to rise from the current 3.5 million to 10 million (WHO 1999). Around

72 percent of those smokers live in less developed countries (LDCs), a rate expected to rise

to 85 percent by the year 2025 (US DHHS 1992). At the same time, death and disability

due to tobacco use will increase from three percent to nine percent of the global total. A

majority of these deaths will occur in the Third World and Eastern Europe. Given these

projections, more than 100 million people will die from tobacco-related illness over the

next 30 years, exceeding the toll from AIDS, tuberculosis, automobile accidents, maternal

mortality, homicide and suicide combined (Peto et al., 1992).

The economic costs of tobacco use are remarkable. The cost to the international

community in terms of death and disability is massively greater than the economic gain

from the production and sale of tobacco products (World Bank, 1992). In Korea, for

example, the Korea National Cancer Institute estimates that tobacco-related illnesses cost

73

about 1.3% of GDP, worth of 6 trillion Won ($1 = 1,300± Won) in 1997. In addition, the

loss of productivity from smoking is estimated to be 336 to 430 billion Won (Moon, 1996).

Smoking is not just a direct economic cost to smokers and nonsmokers. It indirectly

imposes the burden of the health care cost associated with the tobacco epidemic through

rising health insurance premiums.

I. 2. Purpose of Study

For the most part, previous studies have focused on the role of economic policy, tax

policy, regulation and health warnings, mainly in developed countries (Hamilton 1972,

Baltagi and Levin 1986, Seldon and Boyd 1991 in the US, Galbraith and Kaiserman 1997,

Lanoie and Leclair 1998 in Canada, McGuiness and Cowling 1975, Duffy 1995 in the

United Kingdom, Johnson 1986, Pierce et al. 1990 in Australia, Stavrinos 1987 in Greece,

Tansel 1993 in Turkey). Recently, policy makers in LDCs have recognized the importance

of tobacco control, however, and they are now attempting to implement those policies

successfully implemented in more developed countries, such as the United States and

Canada. What is becoming clear, though, is that a tobacco control policy that can be

utilized successfully while minimizing social resistance requires somewhat different approaches than in the West.

This paper examines the current tobacco situation in Asia, focusing on the strategies of transnational tobacco corporations (TTCs) in the Asian tobacco market and on the role of government leadership. An approach is suggested that centers on regional coalitional efforts among the countries in Asia in corporation with anti-tobacco groups (NGOs and NPOs[1]) in the US.

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[1] Here, Non-Governmental Organization (NGO) or Non-Profit Organization (NPO) refers to any organizations not directly related to governments or private corporations. For the latest list of NGOs and NPOs in the US, see the Appendix.

II. TOBACCO SITUATION IN ASIA

II. 1. Tobacco Consumption in Asia

In recent years, tobacco use has been declining in much of the West, but increasing in many developing counties, particularly in Asia. According to the UK-based Action on Smoking and Health (1999), between 1970 and 1990 per capita cigarette consumption fell by 10 percent in First World countries while rising 67 percent in Third World nations. By 2030, smoking-related deaths in the Third World will have risen a staggering 600 percent – from one million to seven million deaths per year.

The WHO (1996) reports that 48% of men smoke, as do 7% of women, in developing countries, while in developed countries, 42% of men and 24% of women smoke. Table 1 presents the tobacco situation in selected Asian countries and compares it with the United States.

Table 1. Tobacco Situation in Selected Asian Countries and the US

Country Year	Korea 1995	Japan 1994	China 1984	Thailand 1995	India 1980	Singapore 1995	Malaysia 1986	Philippines 1987	US 1993
Smoking Prevalence for Men	64.8%	59.0%	61.0%	49.0%	40.0%	31.9%	41.0%	43.0%	27.7%
Smoking Prevalence for Women	5.5%	14.8%	7.0%	4.0%	3.0%	2.7%	4.0%	8.0%	22.5%
Cigarette Consumption Per Capita	2709	3018	1865	1134	145	1470	1339	1435	2296
Consumption Per Smoker	3816	4126	2469	2140	429	4250	3714	3329	4938
Total Health Expenditure as % of GDP (1990-98)	5.6%	7.1%	4.5%	6.2%	5.2%	3.2%	2.4%	3.7%	13.9%
Public Sector	2.5%	5.9%	2.0%	1.7%	0.6%	1.1%	1.3%	1.7%	6.5%
Private Sector	3.0%	1.4%	2.6%	4.5%	4.1%	2.0%	1.0%	0.1%	7.5%

Note: 1. Smoking Prevalence (15 years old or older) is the percentage of the population aged 15 years old and older who smoke. 2. Cigarette Consumption Per Capita is calculated by dividing total cigarette consumption by the total population 15 years old and older. 3. Total Health Expenditure is estimate of the sum of public and private health expenditures. It covers the provision of health services (preventive and curative), family planning activities, nutrition activities, and emergency aid designated for health but does not include provision of water and sanitation. Total health expenditures are divided by GDP and adjusted for purchasing power parity.

Source: World Bank Tobacco Control Survey: Economics of Tobacco – Database (1 and 2)
World Health Organization's (WHO) World Health Report 2000 (2)

III. THE NEXT FÊTE FOR TOBACCO

## III. 1. Tobacco Industry: The Goose that Lays the Golden Eggs

Globally, the tobacco industry is colossal, worth US $400 billion. The US tobacco industry has an aggressive corporate record: This is an industry which has refused (or still refuses) to acknowledge the incontrovertible scientific fact that their products cause disease, including cancer, heart disease and emphysema. Philip Morris and RJR Nabisco had revenues in 1996 that far exceeded the Gross Domestic Product (GDP) of many countries; RJR Nabisco's revenues of $17 billion exceeded the 1994 GDP of Costa Rica, Croatia, Cuba, Lebanon, and Jamaica. Philip Morris, with $55 billion in revenues in 1996, is larger than Ecuador, Kuwait, Malaysia, or Peru. Philip Morris's size is roughly equivalent to the economies of Ireland, Singapore, or Hungary (INFACT 1998).

The success of transnational tobacco corporations in marketing and promoting their deadly product has generated massive profits at the expense of the health and lives of millions of people around the world. Their profits have enabled the US-based TTCs to exert pressure on public policy and the social and cultural climate in the US and around the world, but faced with problems at home, they now are aggressively attempting to increase

78

their Asian markets. The overall revenues of Philip Morris are increasingly dependent on international tobacco sales. PM, ranked #6 among US-based corporations in profits, derived 61 percent of its tobacco sales from the international market in 1993, and this figure rose to 66 percent by 1996 (Philip Morris 1996 Annual Report).

III. 2. Dwindling Established Market

Because they are confronted by an increasingly hostile climate in their domestic markets, Philip Morris and the other big US-based TTCs have been challenged in terms of adverse litigation and lawsuits, regulation and consumer pressure. Tobacco consumption in the US has declined substantially since 1964 (Figure1).
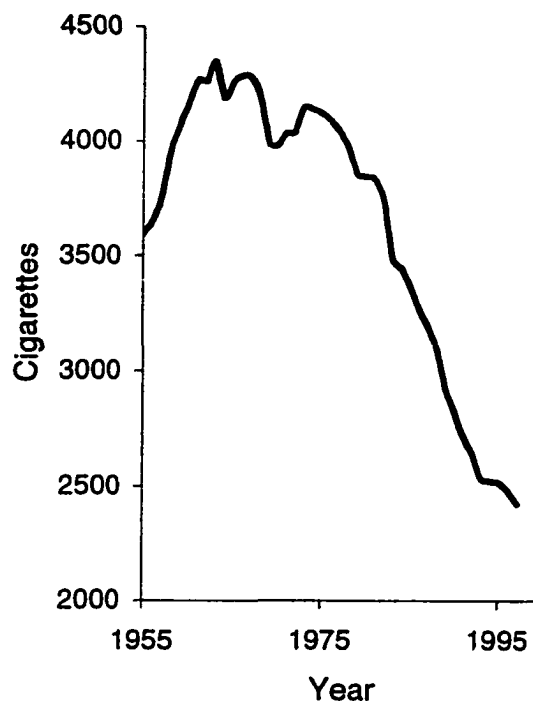
Figure 1. Per Capita Cigarette Consumption Over 18 Years in US

1955 – 1997

The per capita cigarette consumption of Americans over 18 years old was 3579 cigarettes in

1955, peaked at 4345 cigarettes in 1963 and had fallen to 2423 cigarettes by 1997. With a

few exceptions, per capita consumption has decreased since the 1964 Surgeon General's

Report on the dangers of cigarette smoking. This is due to an aggressive anti-tobacco

movement, supported by government policy. There have been incremental price increases

through taxes, repeated health warnings, restrictions on advertising, forceful regulation and

the prospect of expensive lawsuits. Under this pressure, TTCs have turned toward developing counties, especially in Asia.

III. 3. The Next Fête – Asia

Asia has nearly 60 percent of the world's population and is considered to be a premium market for new tobacco consumers. China is the world's major consumer of cigarettes as well as the world's most populous country. The estimated per capita consumption of cigarettes has increased dramatically between the early 1970s and the early 1990s – by 260% – and there now are about 300 million smokers, which is about the same number as in all the developed countries combined (WHO 1996).

Throughout Asia, attempts to increase public recognition of the smoking hazard have been minimal. As a result, public awareness of the harmfulness of smoking is relatively low or nonexistent. There is also a relatively strong sentiment in Asia that the smoking hazard is a problem of the smoker's own personal responsibility. People choose to smoke and are willing to risk the serious health consequences associated with smoking.

This attitude is compounded by a "cultural tolerance" that allows, even expects, men to smoke in society (male smoking prevalence is 68% and female 7% in Korea, 1997)[2].

Asia has fewer regulations and less enforcement on cigarette smoking than the West. Even when they exist, regulations are not strictly enforced. Consequently, the TTCs have practiced an aggressive marketing campaign that includes the targeting of children via use of such promotional tools as the support of pop star concerts or offering T-shirts free of charge to young children. Davis et al. (1991) argues that the roots of lack of regulation and control over the manufacture, distribution, sale, labeling and advertising of tobacco products are historical, economic, and political.

Tobacco brings revenue to governments in the form of taxes (Table 2). The percentage of government revenues from tobacco taxes is higher in the developing countries than in countries like the US and Canada, and this causes governments to think twice about regulation, given the dependence of government on revenue.

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[2] The US has undergone profound cultural changes over the past decades that have witnessed parallel transformations in the legal system and legal doctrine. Even casual observers are struck by the decline in the principle of individual responsibility that is embodied at one level in the doctrine of caveat emptor. The notion of the individual as a repository of accountability has been replaced at least to some extent by a belief in group rights and external sources of accountability.

Table 2. Tobacco Revenues in Selected Asian Countries, 1994 – 95

Country	Cigarette excise as a percentage of price	Tobacco tax revenue as a percentage of	
		Total tax revenue	Excise revenue
Korea	60	3.46	27.54
Indonesia	30	3.38	68.57
China	40	2.79	15.22
India	75	2.43	6.53
US	30	0.44	12.50

Source: World Bank Tobacco Control Survey: Economics of Tobacco – Database and Jha and Chaloupka, 2000, "Tobacco control in developing countries"

There is also a marked absence of leadership. Anti-smoking messages lose credibility when there is a high smoking rate among the upper classes and elites in society, especially when the smokers include politicians, educators, even doctors. Cunningham (1996) argues that high rates of smoking among politicians in many LDCs reduce support for anti-tobacco legislation. Tobacco's "life-style advertising" has made smoking a status symbol for those who can afford the high-priced foreign brands.

III. 4. Advertising and Promotional Strategies in Asia

Tobacco advertising and promotion either increase the tobacco market itself or induce brand switching (Bishop and Yoo 1985, Seldon and Doroodian 1989, Goel and Morey 1995). In the 1920s, advertising was the motivating factor that persuaded women to

start smoking in the United States. Today, advertising is being used to induce children to smoke. Bailey (1996) argues that children smoke the most heavily advertised brands, such as Marlboro, Camel, and Newport, which have a higher teen market share for each advertising dollar spent than other brands. Similarly, advertising and promotion are now encouraging Asians to begin to smoke and to continue to use their products by imaging elegant western life-styles. The TTCs insist that they be allowed to advertise and promote their products to women and children, even though such advertising is banned in their own countries. Figure 2 shows the smoking rate for foreign cigarettes among high school students in Korea between 1988 and 1999, immediately after the TTCs forced the opening of the cigarette market in Korea.
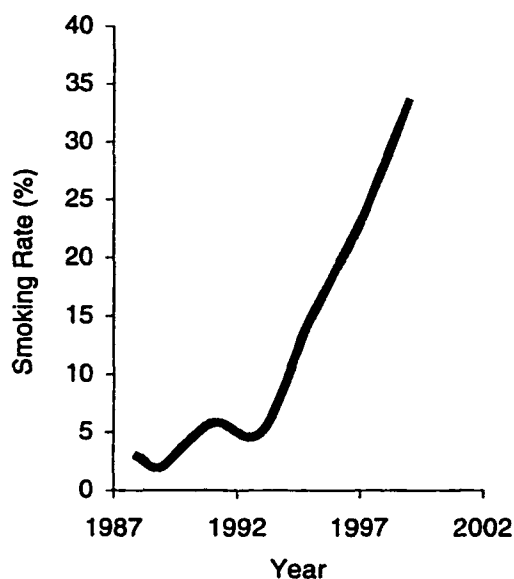
**Figure 2. Smoking Rate of High School Students (male) for Foreign Cigarettes
1988 – 1999**

The use of foreign brand cigarettes by male high school students has increased markedly

since the opening of the cigarette market to foreign corporations, from 2.9% in 1988 to

33.4% in 1999 (KAHS 1999). This dramatic rise in teen smoking is at least partially

attributable to the huge amount of advertising and promotion by the TTCs.

The TTCs have invested billions of dollars to associate their products with free

markets and individual freedom. They advocate a free market with the support of their own

government, whose trade representative has worked to open and expand tobacco markets in

Asia. In the 1980s, under the pressure from the US Cigarette Export Association (a trade group comprised of US-based TTCs), the US Trade Representative (USTR) helped to force open tobacco markets in Asia including Japan, Korea, Taiwan and Thailand, using Section 301 of the 1974 Trade Act (US GAO 1990). They also interfere in the development of national and local public health policies. They even violate the spirit of sovereignty to change the tax system. For example, in opening its tobacco market, Korea was forced to amend its cigarette tax system from an ad valorem to a specific tax system, based on the trade agreement with the US.[3]

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[3] Excise taxes are taxes imposed on specific commodities and can be divided into specific taxes that apply based on quantity and ad valorem taxes based on value. There is no tariff on imported tobacco products and even these manufactured tobacco products are treated as agricultural products according to this agreement.

IV. TOWARD A TOBACCO-FREE ASIA

There are few challenges to global health that are as great as that posed by increasing tobacco use. The importance of tobacco control can hardly be overstated. The rising trend in tobacco consumption in Asia has already made it a major health hazard. The crafting of an effective countervailing policy requires, at a minimum, effective government leadership in support of tobacco research and public education, together with both regional and international coalitional efforts for tobacco control.

87

Figure 4 outlines the shape of domestic, regional and international coalition efforts against

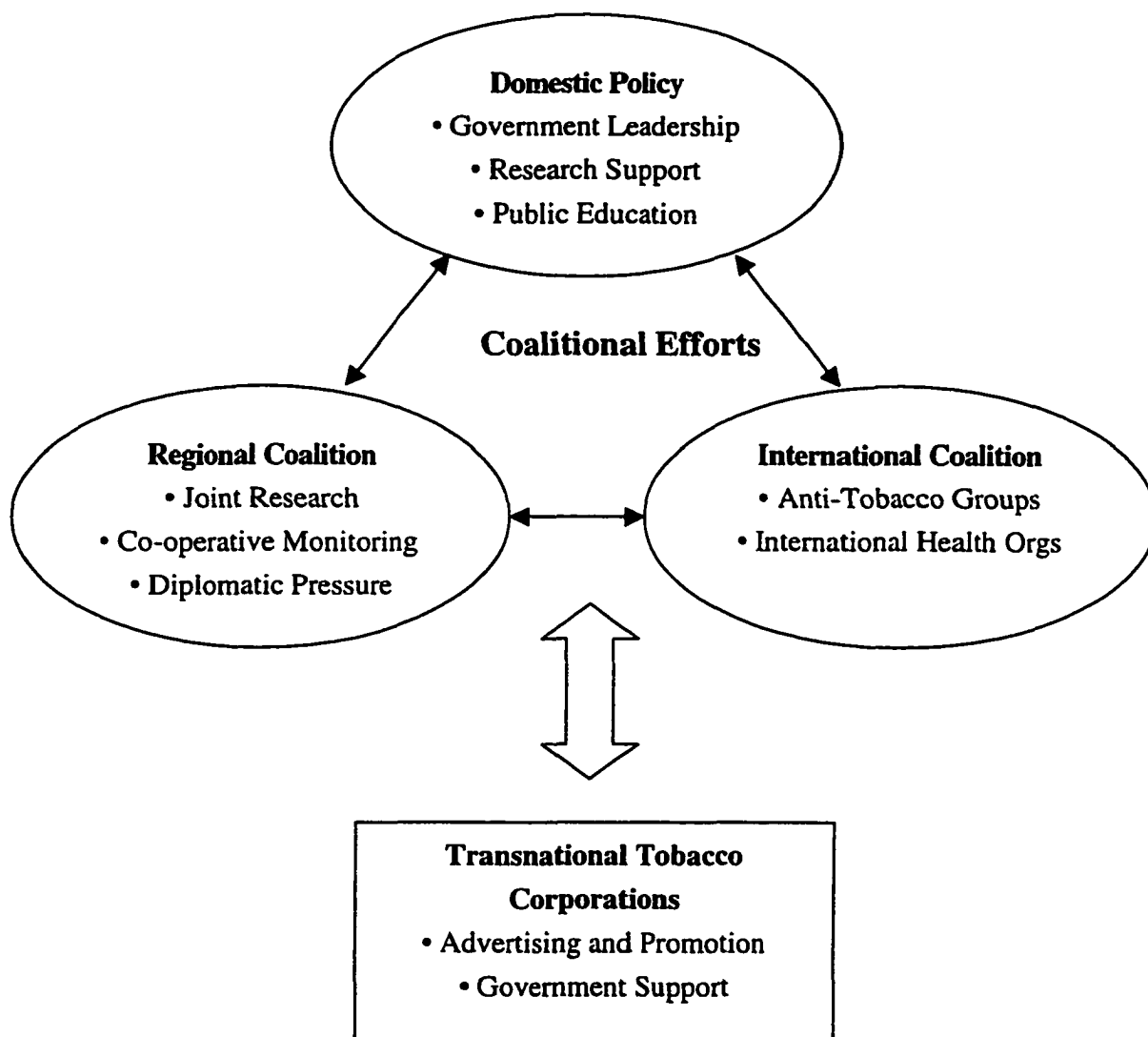TTCs that needs to evolve if counter-TTCs strategy is to be effective.

Figure 4. Tobacco Coalition Model

Let us examine the three components of this model.

IV. 1. Domestic Policy

The role of Asian governments should be to block the tobacco industry from baiting new customers, especially children and young Asians, and to prevent TTCs from manipulating public policy. Government leadership also requires an unequivocal commitment to tobacco control, and specifically to a youth-centered tobacco control policy that is acknowledged and vigorously pursued by all government agencies. The majority of governments in Asia have failed to exercise such leadership. The lack of government leadership and a coherent tobacco policy has held back tobacco control efforts.

Support for Tobacco Research

In the United States, it is the federal government, with a variety of other sponsors (i.e. Robert Wood Johnson Foundation) that has carried the major responsibility for funding and implementing tobacco-related research. Federal agencies coordinate their efforts to ensure that support is available for all aspects of tobacco-related research. Similar research is needed in Asia, but needs to be complemented by investigation of culture and institutional differences. In particular, Asian governments need to invest more in policy

research on tobacco control. Theoretical and empirical policy research must be conducted to generate information useful in making and implementing policy choices in populations divided by age, gender, and socio-economic status. Policy research also needs to include studies of how excise taxes decrease consumption, how community organization affects the effectiveness of tobacco control measures, how enforcement of youth access laws can reduce tobacco sales, and so on.

Governments need to give special attention to research on the efficacy of policies aiming to prevent initiation of tobacco use at all levels, but especially by young people. The budget for this tobacco research will not be considerable if it is compared to the direct and indirect social costs of tobacco use. More academic institutes and centers need to participate in tobacco policy analysis.

Public Education

Successful tobacco control has come from government leadership that has provided public information on the consequences of tobacco use. In the United States, the Surgeon General has provided the most consistent and authoritative voice on health tobacco control since 1964. The Surgeon General's Annual Reports on smoking and health have

documented the health consequences of tobacco use and have publicized new research

findings to public and scientific audiences. Hence, substantial progress in reducing

smoking has been achieved over the past three decades. The Surgeon General's Report was

the federal government's first comprehensive report on the health hazards caused by

smoking.

Asian governments need to similarly inform their publics of the risks to health

connected with tobacco use (especially cigarette smoking). This can only come with robust

leadership. It is also desirable that voluntary health organizations, professional

associations, and advocacy groups share in this government leadership.

IV. 2. International Coalitions

Three product features serve to characterize the modern international cigarettes:

first, it is manufactured from types of tobacco leaf whose species and method of curing both

originated in the United States; second, it is packaged and sold as a branded product using

marketing methods whose earlier exponents were American firms; third, it is a standardized

product made using methods of mass production that were invented by an American

entrepreneur. In a word, the modern international cigarette is an American invention (Cox 2000).

Operationally, most of the major giant tobacco corporations today are US-based. A variety of NGOs and NPOs in the United States are in a position to help stop the global tobacco epidemic by prioritizing health standards over trade policy and applying the same standards as in the US to the operations of the US-based TTCs in countries where standards are lower or nonexistent. They can also help to ensure that international agencies have the necessary tools to hold the TTCs accountable for their activities at home and abroad.

In the United States, tobacco control policy has grown from the bottom up. Private organizations have been crucial to the policy successes that have been achieved. Many corporations, religious organizations,[4] and other groups have taken steps on their own to discourage tobacco use. Their actions have served as models for other organizations. Health organizations such as the American Cancer Society (ACS), the American Heart Association (AHA), and the American Lung Association (ALA) – united as the Coalition

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[4] Religious groups have made an immeasurable contribution to education, partnership and collaboration involving public health, providing ethical and moral grounds for action against addictive behavior such as drinking and smoking. Yach (1999) has underlined the importance of religious groups in tobacco control and the potential for them to contribute to preventing tobacco-related diseases at global, country, community and individual levels in "Tobacco Free Initiative: Meeting on Tobacco and Religion" May 3, 1999, Geneva, Switzerland.

on Smoking OR Health – have played critical roles in making public the health information on smoking hazards. They also played a significant role to support for the anti-tobacco legislation, as seen in the development of Proposition 99 in California. For instance, at the stage of initiative, the ALA set the standard of commitment by providing $50,000 to support the tobacco tax effort. This financial commitment showed the ALA's dedication to the effort and forced other potentially interested agencies to be ready to follow suit. The informal leadership for the tax effort in the early states came from the ALA and the ACS (Traynor and Glantz 1996). In addition, anti-tobacco groups such as Action on Smoking and Health (ASH), Groups Against Smoking Pollution (GASP), and Stop Teenage Abuse of Tobacco (STAT) have made repeated appeals for more antismoking regulations and legislation.

Making use of coalitions with organizations of this kind, Asian governments should attempt to change public opinion so that it supports efforts to ban marketing and promotion that appeals to children and young people, to block spreading tobacco addiction, to limit the influence of TTCs on public policy, and to inform the public of the dangers of tobacco use. Coalitions could play a significant role in coordinating and supplementing public education

and in encouraging both governmental and non-governmental pressure within and outside nations.

Anti-smoking groups have taken their efforts to every branch of government in the United States. Their activities include initiating legislative proposals on both the federal and state levels, including bans on all cigarette advertising (federal), bans on smoking in the workplace and government offices (primarily state) and increases in the excise taxes on cigarettes (federal and state), calling for the executive branch to sponsor additional efforts to discourage smoking, and filing numerous liability suits against cigarette manufacturers (McGowan 1995). Such initiatives should be encouraged in Asia.

IV. 3. Regional Coalitions

Another promising approach is to foster the development of regional coalitions. This might require different sets of skills and outlooks. Along with a coalition with anti-tobacco groups of the US, it would be a good idea to pool resources with a special cadre of well-trained diplomatic mediators and dispute resolution specialists.

Increasing regional coalitional efforts on tobacco control among Asian countries could lead to increased strength of regional economic, political and diplomatic pressures on

the TTCs. The efforts could yield a flow of monitoring aimed at bringing an end to the

marketing and promotional efforts that appeal to children and adolescents. What is

especially important is that there emerges a collective vision for a tobacco-related public

health agenda, together with encouragement of co-operative tobacco researches.

V. DISCUSSION AND CONCLUSION

There is a rapidly developing tobacco crisis in Asia. How might it be dealt with? Declining tobacco use in the West has been due to a variety of government measures, including provision of health information to the public and the development of a comprehensive domestic tobacco policy. In contrast, the governments of Asian countries have adopted a relatively "hands off" approach to cigarette consumption, or, alternatively have enacted very weak and limited policies and programs designed to curb tobacco use. These efforts have been insufficient. There needs to be clear government leadership and strong commitment to tobacco control in the Asian case, for we believe that includes organized support for tobacco research and public education; and that other tobacco policy can not be implemented effectively without them. In contrast to previous work, we argue the current tobacco crisis of Asia cannot be unraveled by domestic policy alone. It must be supplemented by regional and international coalitional efforts. Tobacco control policy at the national level would be far more effective if government leaders and private organizations use their resources to change the public sentiment on smoking and thereby reduce tobacco use and its accompanying social and economic costs.

96

APPENDIX

Anti-Tobacco Organizations to Contact (US)

Action on Smoking and Health: 2013 H St. NW, Washington, DC 20006, (202) 659-4310,

Web site: http://www.setinc.com/ash

American Council on Science and Health (ACSH): 1995 Broadway, 2nd Fl., New York,

NY 10023-5860, (212) 362-4919

American Cancer Society: Tower Place, 3340 Peachtree Rd. NE, Atlanta, GA 30026, (404)

320-3333, (800) ACS-2345, Web site: http://www.cancer.org

American Heart Association (AHA): 7272 Greenville Ave., Dallas, TX 75231-4596, (800)

242-8721, Web site: http://www.amhrt.org

American Lung Association (ALA): 1740 Broadway, New York, NY 10019-4374, (212)

315-8700, (800) LUNG-USA, Fax: (212) 265-5642

Web site: http://www.lungusa.org

American Medical Association (AMA): 515 N. State St., Chicago, IL 60610, (312) 464-

5000

97

Americans for Non-Smokers' Rights: 2530 San Pablo Ave., Avenue J, Berkeley, CA

94702, (510) 841-3071, Fax: (510) 841-3071, E-mail: anr@no-smoke.org Web site:

http://www.no-smoke.org

Citizens for a Tobacco-Free Society (CATS): 8660 Lynnehaven Dr., Cincinnati, OH 45236,

(513) 677-6666

Coalition for Accountability: 1225 I Street NW, Suite 350, Washington, DC 20005, Fax:

202-789-1116, Web site: http://www.savelives.org

Coalition on Smoking OR Health: 1150 Connection Ave. NW, Suite 820, Washington, DC

20036, (202) 452-1184, Fax: (202) 452-1417

Competitive Enterprise Institute (CEI): 1001 Connecticut Ave. NW, Suite 1250,

Washington, DC 20036, (202) 331-1010

Corporate Watch: Web site: http://www.corpwatch.org

Essential Action: Web site: http://www.essential.org/action

Foundation for Economic Education: 30 S. Broadway, Irvington-on-Hudson, NY 10533,

(914) 591-7230

Friend of Tobacco: 403-B East New Bern Rd., Kinston, NC 28501, (919) 522-GROW,

Web site: http://www.fujipub.com.fot

Global Link- International Union Against Cancer: Web site: http://www.uicc.ch

Group Against Smokers' Pollution (GASP): PO Box 632, College Park, MD 20741-0632,

(301) 459-4791

Hezelden: 15251 Pleasant Valley Road, PO Box 176, Center City, MN 55012- 0176, 800-

328-9000

National Cancer Institute: Publication Ordering Service, 900 Rockville Pike, Bethesda,

MD 20892, 800-4-CANCER

National Center for Tobacco-Free Kids: 1707 L Street NW, Suite 800, Washington, DC

20036, (202) 296-5469

National Restaurant Association: Dept. of Technical Service, 1200 17th St. NW,

Washington, DC 20036, (800) 424-5156, ext. 5375

Nicotine Anonymous World Services: 2118 Greenwich Street, San Francisco, CA94123

Operation S.C.A.T., Inc.: Student Coalition Against Tobacco, 475 H Street NW

Washington, DC 20001

Reason Foundation: 3415 S. Sepulveda Blvd., Suite 400, Los Angeles, CA 90034 (310)

391-2245

Smoke Free Educational Services, Inc.: 375 South End Ave., Suite 32F, New York, NY

10280, (212) 912-0960

Smoking Policy Institute: 218 Broadway, Seattle, WA 98102, (206) 324-4444

Stop Tobacco Access to Minors Project (STAMP): 55 Maria Drive, Suite 837, Petaluma,

CA 94954, (707) 762-4591

Stop Teenage Addiction to Tobacco (STAT): 121 Lyman Street, Suite 210, Springfield,

MA 01103-9922, (413) 732-STAT, 408-247-7828 (in San Jose, CA)

The Health Connection: 55 West Oak Ridge Drive, Hagerstown, MD 21740, 800-548-8700

Tobacco Products Liability Project (TPLP), Tobacco Control Resource Center:

Northeastern University School of Law, 400 Huntiongton Ave., Boston, MA 02115-

5098, (617) 373-2026, Web site: http://www.tobacco.neu.org

Women and Girls Against Tobacco (WAGAT): 2001 Addison Street, Suite 200, Berkeley,

CA 94704-1103, 5100-841-6434

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101

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VITA

Song-June Kim was born March 18, 1968, in Seoul, Korea as the eldest son of Tae-Young

Seok and Dong-Chan Kim. He graduated from Han-Sung High School as a Student

President and entered Korea University in Seoul, Korea. He majored in Economics and

graduated with a Bachelor of Arts in 1992. He began his graduate program in Master of

Public Affairs at the University of Texas at Dallas (UTD) in 1992 and received a Master of

Public Affairs in 1994. He continued to pursue his doctoral degree in Political Economy.

For the period of 1996-1998 he served as an interpreter and translator for Korean Army

joint with 2nd Infantry Division of US Army. Back to UTD, he presented a paper, "Public

Policy and Cigarette Consumption: The Dimensions of Government Inaction and Solutions

– Korean Case" (coauthored with Euel Elliott), at the 2001 Annual Conference of

Southwestern Economic Association associated with Southwestern Social Science

Association at Fort Worth, TX. He was awarded $20,000 for the project funded by the

Korean Institute for Health and Social Affairs (KIHASA), *Program on Public Health*

Improvement 2001. His paper, "Government Leadership and Coalition Efforts Against

Transnational Tobacco Corporations in Asia" (with Brian J. Berry), has been already

accepted in the *International Review of Public Administration* and he also submitted a

paper, "Estimating Demand for Cigarettes in South Korea: Searching for An Effective

Government Policy on Cigarette Consumption" (with Barry J. Seldon), in *Applied*

Economics. While at UTD, he taught an intermediate microeconomics class.