

## **Appendix II: CODEBOOK**

‘Thank you for Smoking!’: a multi-level study on the policy impact of anti-tobacco movements, tobacco industry’s countermovements and political opportunity structure on tobacco control policies in 22 European countries

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**Johannes C. Kuijpers** ©

University of Twente.

Faculty of Management and Governance

**Drs. Ir. Tijs A. Van Den Broek**

Univeristy of Twente.

Faculty of Management and Governance

**Dr. Michel L. Ehrenhard**

University of Twente.

Faculty of Management and Governance

**Prof. Dr. Ariana Need**

University of Twente.

Faculty of Management and Governance

## VARIABLE LIST DATASET STRICTNESS TOBACCO CONTROL POLICIES EUROPEAN COUNTRIES

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## GENERAL POLITY INDICATORS

### 1.0 Nation

The following 22 nations are adopted within the dataset; United Kingdom; Ireland; The Netherlands; Belgium; Spain; Portugal; Germany; Poland; Hungary; Czech Republic; Italy; Croatia; Slovenia; Greece; Cyprus; Bulgaria; Romania; Ukraine; Sweden; Norway; Denmark and; Turkey.

### 1.1 NYEAR

Data is collected for the period 1980-2012. For some countries data, before the fall of the wall (1989-1990) is not available. These countries are; Germany; Poland; Hungary; Czech Republic; Croatia; Slovenia; Cyprus; Bulgaria; Romania and; Ukraine.

### 1.2 NAT\_ABR

Nation abbreviations according to table 1.1

**Table 1.1** Abbreviations nations

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UKG	United Kingdom
IRE	Ireland
NTH	The Netherlands
BEL	Belgium
SPN	Spain
POR	Portugal
DEU	Germany
POL	Poland
HUN	Hungary
CZR	Czech Republic
ITA	Italy
CRO	Croatia
SLV	Slovenia
GRC	Greece
CYP	Cyprus
BUL	Bulgaria
RUM	Romania
UKR	Ukraine
SWD	Sweden
NOR	Norway
DEN	Denmark
TUR	Turkey

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### 1.3 NAT\_WVS

EVS/ WVS coding nations according to table 1.2

**Table 1.2** Coding nations following EVS/WVS

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826	United Kingdom
372	Ireland
528	The Netherlands
56	Belgium
724	Spain
620	Portugal
276	Germany
616	Poland
348	Hungary
203	Czech Republic
380	Italy
191	Croatia
705	Slovenia
300	Greece
196	Cyprus
100	Bulgaria
642	Romania
804	Ukraine
752	Sweden
578	Norway
208	Denmark
792	Turkey

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## **POLITICAL OPPORTUNITY STRUCTURE (POS) VARIABLES**

### *2.0 GOV\_DEC*

The indicator GOV\_DEC intends to indicate both the vertical (fiscal) decentralization of the political system as well as the horizontal decentralization of the system. The indicator is constructed by simply multiplying the fiscal decentralization data with the horizontal decentralization data, per year and country. The resulting value is a proxy of the total decentralization of the political system in a particular country. The data is gathered as follows:

#### *2.0.1 Fiscal decentralization*

In this research the horizontal decentralization of a country is indicated by the Political Constraint Index (POLCON), as developed by (Henisz, 2000). The measure is an indicator of the number of veto players at the horizontal level; 1) number of independent branches, 2) heterogeneity of actors within these branches and 3) institutional fragmentation. The data is derived from: the Political Constraint Index Database (Henisz, 2013). The logic holds that a stronger fragmented political system multiplies access points to political actors, enabling coalition formation.

#### *2.0.2 Horizontal decentralization*

Analyzing territorial decentralization of a country should mirror the (vertical) multiplication of country actors and therewith the points of access to decision-making. Schneider (2003) developed a fiscal decentralization indicator which is widely used by researchers. The logic holds that money distribution of local and regional authorities is a measure of their decision power. The data comes from Democracy Time-series Data Base (see Norris, 2008). The logic holds that a stronger fragmented political system multiplies access points to political actors, enabling coalition formation.

Missing data: Cyprus (CYP); Ukraine (UKR)

### *2.1 GOV\_RIGHT*

The GOV\_RIGHT is an indicator derived from ‘The Comparative Data Set 1960-2012’ which composes a variety of indicators assembled for the research projects; “Die Handlungsspielräume des Nationalstaates” and “Critical Junctures” directed by Klaus Armingeon. This research adopts the GOV\_RIGHT indicators since it represents the ideological composition of a political system. Schmidt (1992) originally developed the political composition indicator (Schmidt- Index) and is further elaborated by Armingeon and colleagues. The Schmidt-index is composed of multiple variables (see for elaboration e.g.: Armingeon, Weisstanner, Engler, & Knöpfler, 2014a) Note; the indicator name is adjusted to GOV\_RIGHT in ‘The Comparative Data Set 1960-2012’ the indicators is named GOV\_PARTY. The indicator is coded as follows;

**Table 2.1** Five-coded scale Composition of Cabinet (Armingeon et al., 2014a)

1	<b>Left Hegemony</b>	Hegemony of social-democratic and other left parties
2	<b>Left Dominance</b>	Dominance of social- democratic and other left parties
3	<b>Balance</b>	Balance of power between left and right
4	<b>Right Dominance</b>	Dominance of right- wing (and centre) parties
5	<b>Right Hegemony</b>	Hegemony of right- wing (and centre) parties

Consequently, GOV\_RIGHT is an important POS-level variable and specifically its political ally- dimension. In addition to the previous constructs indicating the likeliness of non-political actor's influence on government, the ideological composition of the executive branch strengthens assumptions on the possibility of country- tobacco industry coalitions. The data for most European countries is retrieved from the Comparative Political Data Set I (Armingeon et al., 2014a). The data for post- communist European countries is retrieved from the Comparative Political Data Set II (Armingeon, Weisstanner, Engler, & Knöpfler, 2014b).

Missing data: Croatia (CRO) period 1991-1999; Slovenia (SLV) period 1991-1992; Ukraine (UKR) period 1991-2012; Turkey (TUR) period 1980-2012.

## 2.2 *YWHO*

Year a country applied to the World Health Organization Framework Convention on Tobacco Control (WHO FCTC) , coded "1". The WHO FCTC is developed to control the use of tobacco since people have the right to the highest standard of health (WHO, 2015c). The WHO FCTC, dated 2003, covers strategies to control tobacco demand and supply and provided nations with support in e.g. tobacco control policies. A country's ratification of WHO FCTC commits the country to the tobacco control provision within the treaty. As such WHO FCTC could give international legislative pressure on domestic policymaking.

Missing data: X

## CORPORATE COUNTERMOVEMENT VARIABLES

### 3.0 TOB\_EXP

The tobacco export value is in this study considered as indicator of the political presence of the tobacco industry in a certain nation. This study assumes that a high tobacco export value is a proxy of the tobacco industry's resources enabling corporate political actions (CPA). The data is collected from the United Nations (UN) Comtrade Database (Comtrade, 2011). The database reports export data per nation after the years 1989- 1992 using the Harmonized Commodity Description and Coding Systems (HS) referring to the tobacco industry with commodity code: 24. Tobacco and manufactured tobacco substitutes. Before the years 1989-1992 the export data is reported referring to the Standard International Trade Classification (SITC) system; referring to the tobacco industry with commodity code: 12. Tobacco and tobacco manufactures. According to the [conversion and correlation tables](#), provided by the UN, the conversion of reporting systems did not involve changes in the composition of tobacco industry's export numbers. Tobacco export is divided by a country's population to allow cross- national comparison. Finally a log transformation is performed.

Missing data: Belgium (BEL) missing export data period 1980-1998, Germany (DEU) 1990, Hungary (HUN) 1991; Czech Republic (CZR) period 1991-1992 and 1997; Croatia (CRO) 1991; Slovenia (SLV) period 1991-1993; Greece (GRC) 1991; Bulgaria (BUL) period 1990-1995; Romania (ROM) 1990, Ukraine (UKR) period 1991- 1995; Sweden (SWD) period 1986-1989.

## SOCIAL POLITICAL MOBILIZATION (RM) VARIABLES

Variable **4.0 SOC\_PA** and **4.1 SOC\_LIB** data is derived from the European Value Study (EVS) initiated by the European Value Systems Study Group (EVSSG) in the late 1970s, aiming to explore moral and social values underlying European social and political institutions and governing conduct. Additional data is derived from the World Value Survey (WVS) aiming at comparable goals as EVS. EVS is carried out in four waves; wave 1 in 1980; wave 2 in 1990; wave 3 in 1999 and; wave 4 in 2008. WVS is carries out in six waves; wave 1 in 1981; wave 2 in 1990; wave 3 in 1995; wave 4 in 1999; wave 5 in 2005 and; wave 6 in 2010. Consequently EVS and WVS enable the creation of a longitudinal dataset covering 1980-2012. The integrative dataset is composed of the EVS dataset (EVS, 2011) and WVS dataset (WVS, 2015).

### 4.0 SOC\_PA

The variable is intended to indicate the likeliness of citizens in a nation to initiate or support political actions. The indicator is constructed out of the results of five EVS/WVS questions; e025- e029. Respondents were asked about their attitude toward the following political actions; signing a petition (e025); joining in boycotts (e026); attending lawful demonstrations (e027); joining unofficial strikes (e028) and; occupying buildings or factories (e029). Respondents are asked to indicate whether they 1 *have done*; 2 *might do* or 3 *would never do*, the particular political action brought forward. The variable *SOC\_PA* is constructed by calculating the mean of the separate answer means (e025-e029). In some nations, and certain waves, question e028 and e029 (joining unofficial strikes and; occupying building or factories) are not asked. For these nations the variable *SOC\_PA* is calculated as the mean of the mean answer e025-e027. When questions e028-e029 per nation in some waves are studied but in other waves not, the *SOC\_PA* is calculated out of the mean answer e025-e027, consistently over the period under study (1980-2012). This is the case for the following nations: Slovenia (SLV); Greece (GRC);

Cyprus (CYP); Bulgaria (BUL); Croatia (CRO) and; Italy (ITA). To create a longitudinal dataset, the data between surveys is estimated through linear interpolation techniques. The logic holds that the more citizens indicate willing to employ political actions; the stronger citizens voice in policy processes. Note that in the dataset the indicator is reversed coded and adjusted to a 0-2 scale. Whereby the likeliness of political action increases when values reach closer to 2.

Missing data: X

#### 4.1 SOC\_ASSN

The indicator *SOC\_ASSN* is adopted to indicate whether citizens are restricted by political systems to assemble and to associate around issues into social movements, such as the anti-tobacco movement. As citizens are restricted it is less likely that anti-tobacco movements are formed, supported and have the ability to participate in tobacco control policy processes. ASSN or ‘freedom of assembly and association’ is captured from the CIRI Human Right Dataset, established to collect data on internationally- recognized human right for 202 countries around the globe and covers the period 1981-2011. The CIRI researchers (Cingranelli, Richards, & Clay, 2014) refer to ASSN as follows;

*“It is an internationally recognized right of citizens to assemble freely and to associate with other persons in political parties, trade unions, cultural organizations, or other special-interest groups. This variable indicates the extent to which the freedoms of assembly and association are subject to actual governmental limitations or restrictions (as opposed to strictly legal protections). A score of 0 indicates that citizens’ rights to freedom of assembly or association were severely restricted or denied completely to all citizens; a score of 1 indicates that these rights were limited for all citizens or severely restricted or denied for select groups; and a score of 2 indicates that these rights were virtually unrestricted and freely enjoyed by practically all citizens in a given year.”*

The data for the years 1980 and 2012 (not covered) within the CIRI- dataset, is assumed as identical to respectively the following year (1980) and previous year (2012) per nation.

Missing data: Poland (POL) period 2005-2012 and; Czech Republic (CZR) period 1991-1992.

#### 4.2 SOC\_LIB

The variable is intended to be a proxy of the liberal opinion of citizens within a nation. The more liberal citizens are, thus holding individual freedom perceptions, the less likely to initiate or support anti-tobacco movements and influence tobacco control policy processes. The variable is derived from EVS/WVS question e032, asking respondents to indicate whether they consider individual freedom more important than equality. By responding to the applicability of the following statement to resemble their personal opinion; *a) I find that both freedom and quality are important. But if I were to make up my mind for/ to choose one or the other, I would consider personal freedom more important, that is, everyone can live in freedom and develop without hindrance; b) Certainly both freedom and equality are important. But if I were to make up my mind for/ to choose one of the two, I would consider equality more important, that is that nobody is underprivileged and that social class differences are not so strong.* The response categories are; 1) agree with statement A; 2) agree with statement B



and; 3) neither. The closer means to value 1 the more citizens within nations are assumed as holding liberal viewpoints. To create a longitudinal dataset, the data between surveys is estimated through linear interpolation techniques. Note in the dataset the indicators is reversed coded and adjusted to a 0-1 interval scale. As values reach closer to 1 the more liberal inhabitants in a country.

Missing data: X

## TOBACCO CONTROL LEGISLATIVE VARIABLES

### 5.1 LG\_TC

The variable indicates the sum of legislative bans for the (sub)categories; Direct Advertisement (LG\_DA); Indirect Advertisement (LG\_IDA); Distribution (LG\_DS); Public accessible Places (LG\_PP). A longitudinal dataset is created by cumulative conversion, adding the sum of legislative bans in year (t-1) to the sum of legislative bans in year (t), per nation. Note that for the United Kingdom the *act of parliament* as provided by the British Parliament in London are categorized and not the laws by the National Assembly for Wales. Moreover for Germany, categories are only coded '1' whenever the specific ban applies to all 22 countries.

### 5.2 LG\_DA

The variable indicates the sum of legislative bans within the category 'direct advertisement' covering the following subcategories; a) National TV and Radio; b) Local magazines and newspapers; c) Billboards and other forms of Outdoor Advertising and Promotion; d) Point of Sale and; e) Publications intended exclusively for professionals in the tobacco trade. The data is gathered from the Tobacco Control Database (WHO, 2015a) provided by the World Health Organization and the Tobacco Control Laws database (2015). Only total bans regarding the specific subcategory are coded '1'. Restrictions per subcategory, whether far-reaching or not, are not coded. The subcategory items are operationalized as illustrated in table 5.1.

**Table 5.1** Operationalization subcategories within category 'direct advertisement'

Subcategory	Operationalization
#National TV and Radio	All kind of tobacco advertisement on national television and radio broadcasts
#Local magazines and newspapers	All kind of tobacco advertisement on national (local) magazines, newspapers and other printed media
#Billboards and other forms of Outdoor Advertising and Promotion	All kind of tobacco advertisement on billboards or other outdoor advertising and promotion
#Point of Sale	All kind of tobacco advertisement around the point of sale, where trade of tobacco takes place (including e.g. the outside façade of the point of sale).
#Publications intended exclusively for professionals in the tobacco trade	All kind of tobacco advertisement, regardless of form, intended only for professional in the tobacco trade

### 5.3 *LG\_IDA*

The variable indicates the sum of legislative bans within the category ‘indirect advertisement’ covering the following subcategories; a) promotional discounts; b) brand sharing; c) product placement; d) national sponsored events and; e) display and visibility of tobacco products at point of sale. The data is gathered from the Tobacco Control Database (WHO, 2015a) provided by the World Health Organization and the Tobacco Control Laws database (2015). Only total bans regarding the specific subcategory are coded ‘1’. Restrictions per subcategory, whether far-reaching or not, are not coded. The subcategory items are operationalized as illustrated in table 5.2.

**Table 5.2** Operationalization subcategories within category ‘indirect advertisement’

<b>Subcategory</b>	<b>Operationalization</b>
# Promotional discounts	Discounting tobacco products to promote directly or indirectly tobacco products.
# Brand sharing	Brand- names of non- tobacco products used in association with tobacco products
# Product placement	The appearance of tobacco brands in TV and/or films
# National sponsored events	The sponsoring of national events by the tobacco industry
# Display and visibility of tobacco products at point of sale	The display and visibility of tobacco products at point of sale.

### 5.4 *LG\_DS*

The variable indicates the sum of legislative bans within the category ‘indirect advertisement’ covering the following subcategories; a) vending machines; b) internet sales and; c) free distribution. The data is gathered from the Tobacco Control Database (WHO, 2015a) provided by the World Health Organization and the Tobacco Control Laws database (2015). Only total bans regarding the specific subcategory are coded ‘1’. Restrictions per subcategory, whether far-reaching or not, are not coded. The subcategory items are operationalized as illustrated in table 5.3.

**Table 5.3** Operationalization subcategories within category ‘distribution’

<b>Subcategory</b>	<b>Operationalization</b>
#Vending machines	The distribution of tobacco products through automatic vending machines.
#Internet Sales	The sale of tobacco products via internet (information services)
#Free distribution	The distribution of tobacco intended to promote directly or indirectly tobacco products in event or activities.

### 5.5 *LG\_PP*

The variable indicates the sum of legislative bans within the category ‘indirect advertisement’ covering the following subcategories; a) healthcare facilities; b) educational facilities; c) universities; d) government facilities; e) indoor office and private workplace; f) catering facilities; g) drinking facilities and h) public transport. The data is gathered from the Tobacco Control Database (WHO, 2015a) provided by the World Health

Organization and the Tobacco Control Laws database (2015). Only total bans regarding the specific subcategory are coded ‘1’. Restrictions per subcategory, whether far-reaching or not, are not coded. Note that a designated smoking area *within* the facility or on the area *outside* the facility, is regarded as restriction and not a total ban (thus coded ‘0’). The subcategory items are operationalized as illustrated in table 5.4.

**Table 5.4** Operationalization subcategories within category ‘public accessible places’

<b>Subcategory</b>	<b>Operationalization</b>
# Healthcare facilities	All forms of healthcare facilities including old people’s homes and other places where care services are provided
# Educational facilities	All form of educational facilities excluding universities, including daycare facilities
# Universities	Universities
# Government facilities	All places under direct control of government (e.g. ministry building, municipality facilities)
# Indoor office and private workplace	Workplaces and offices other than those within governmental facility category
# Catering facilities	All facilities where catering services are provided including outdoor areas (e.g. restaurants).
# Drinking facilities	All facilities where drinks are provided (e.g. cafes, pubs and bars)
# Public Transport	All forms of public transport (e.g. airplanes, trains)

## **CONTROL VARIABLES**

### *6.0 CON\_SM%*

The percentage of adult smoker > 15 years, is adopted as control variable to this research. Hypothetically, a higher percentage smokers within a nation could influence tobacco control policies in two- ways. On the one hand, more smokers could result in stronger pro- tobacco industry support enhancing industry’s ability to counter policy changes. On the other hand, a higher percentage of smokers could provoke tobacco control policy changes from political health responsibilities and considerations. The data is collected from the main sources 1) country profile reports provided by the WHO (WHO, 2015b) 2) the Non- Medical Determinants of Health Database provided by the OECD (OECD, 2015) and single reports. To create a longitudinal dataset, missing data between known values are estimated through linear interpolation techniques. For former USSR nations, data is not accessible. This research uses the average smoking percentage of USSR nations in 1989;  $\pm 50\%$  as target number to enable estimations of smoking percentage for the following years through linear interpolation. Note that, whenever data was available for former USSR nations, this research always used that data in the dataset.

Missing data: X

### *6.1 CON\_LEXP*

The life expectancy per nation is adopted as control variable within the research and is captured from the World Development Database provided by the World Bank (WorldBank, 2015). This variable is adopted as proxy of a nation’s health care system, lagging behind or leading the way in comparison to other nations et cetera.

Missing data: X

## 6.2 *CON\_LRP*

The final control variable analyzed within this research is the left/ right placement of citizens within a nation. Logically political ideological opinions influence a person's attitude toward policy changes such as the direction of those changes, and possibly the interference in policy processes. For instance when cabinet is predominantly left as well as majority of that nation's citizens, it is more likely that policies are adopted faster as policy processes are less likely to be impeded by counteractive forces. The data is extracted from the EVS/ WVS question e033, asking respondents to indicate their political views on a left- to right, 1-10 scale. To create a longitudinal dataset, the data between surveys is estimated through linear interpolation techniques.

Missing data: X

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