

Excise Taxes and Smoking Participation in Poland

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Policy Development in Poland

- Making Smoking a Public Issue -

◆ 1990 – Poland Enters the Global Market

- ◆ Low cigarette prices; Non-existent tobacco taxing structure
- ◆ Aggressive cigarette advertising & marketing tactics

◆ 1993 – New Tax Structure/Health Campaigns

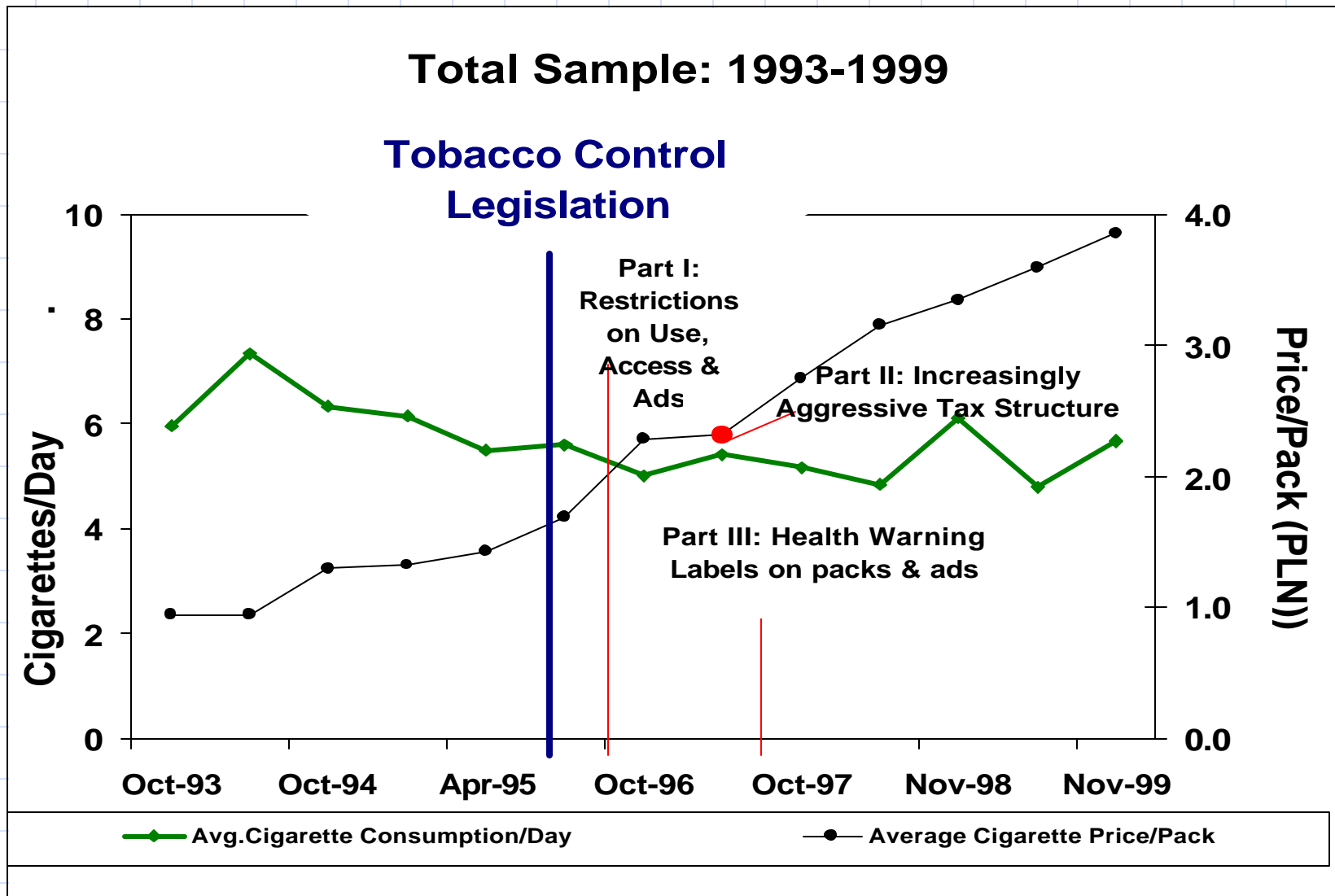
- ◆ Introduction of VAT and tobacco excise taxes
- ◆ Dissemination of Health Information; “Great Polish Smoke Out”

◆ 1995 - Tobacco Control Legislation

- ◆ **Part I:** Restrictions on use, access & advertising; Ban ads in media
- ◆ **Part II:** Health warning labels on packs and advertisements
- ◆ **Part III:** Increasingly aggressive tobacco excise taxes
- ◆ **Part IV:** Total ban on cigarette advertising (Beginning 2001)

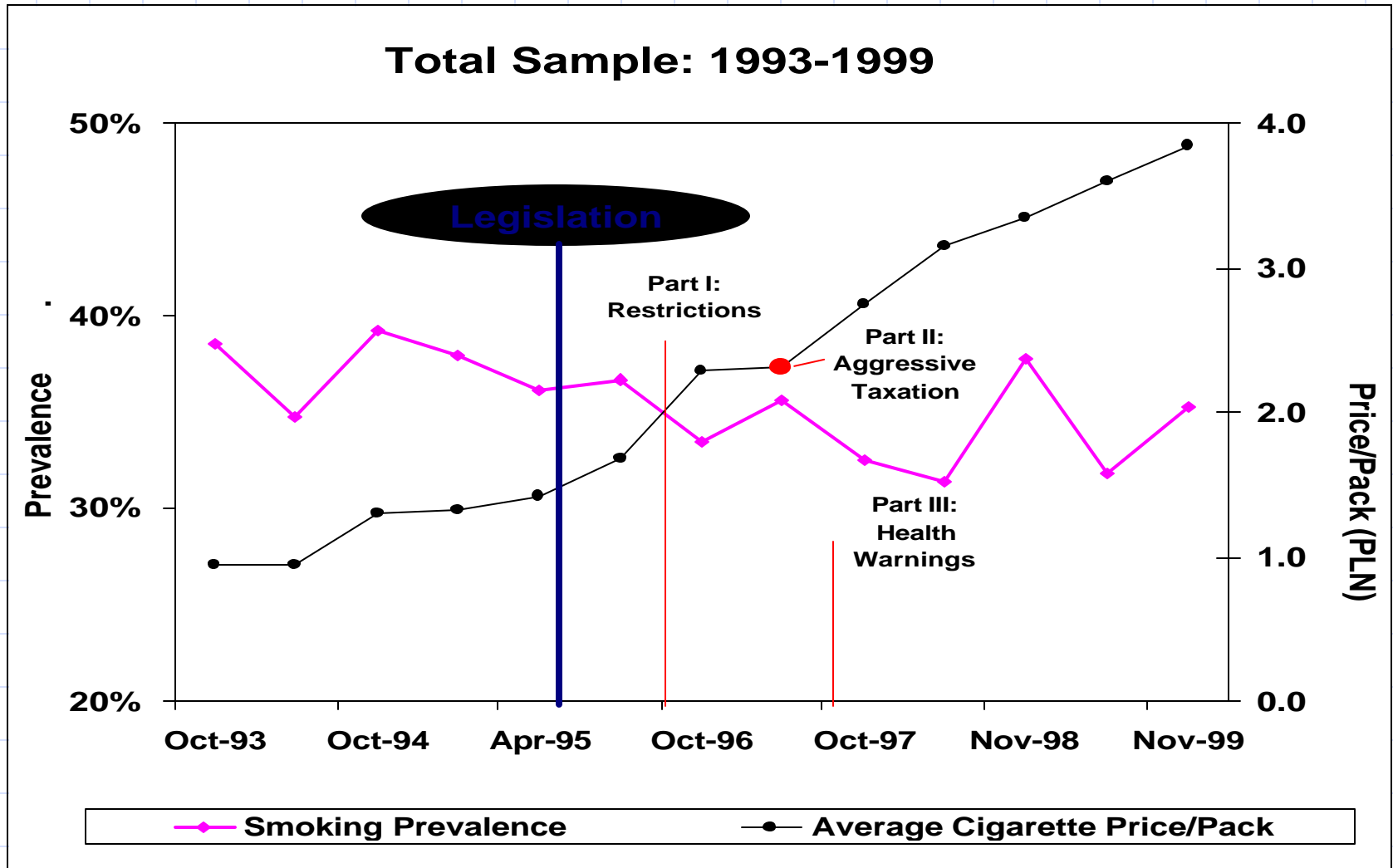
Policy Development in Poland

Trends in Average Daily Cigarette Consumption



Policy Development in Poland

Trends in Smoking Participation



The 1999 Excise Tax Reform

The Effects of Price Changes on Consumption

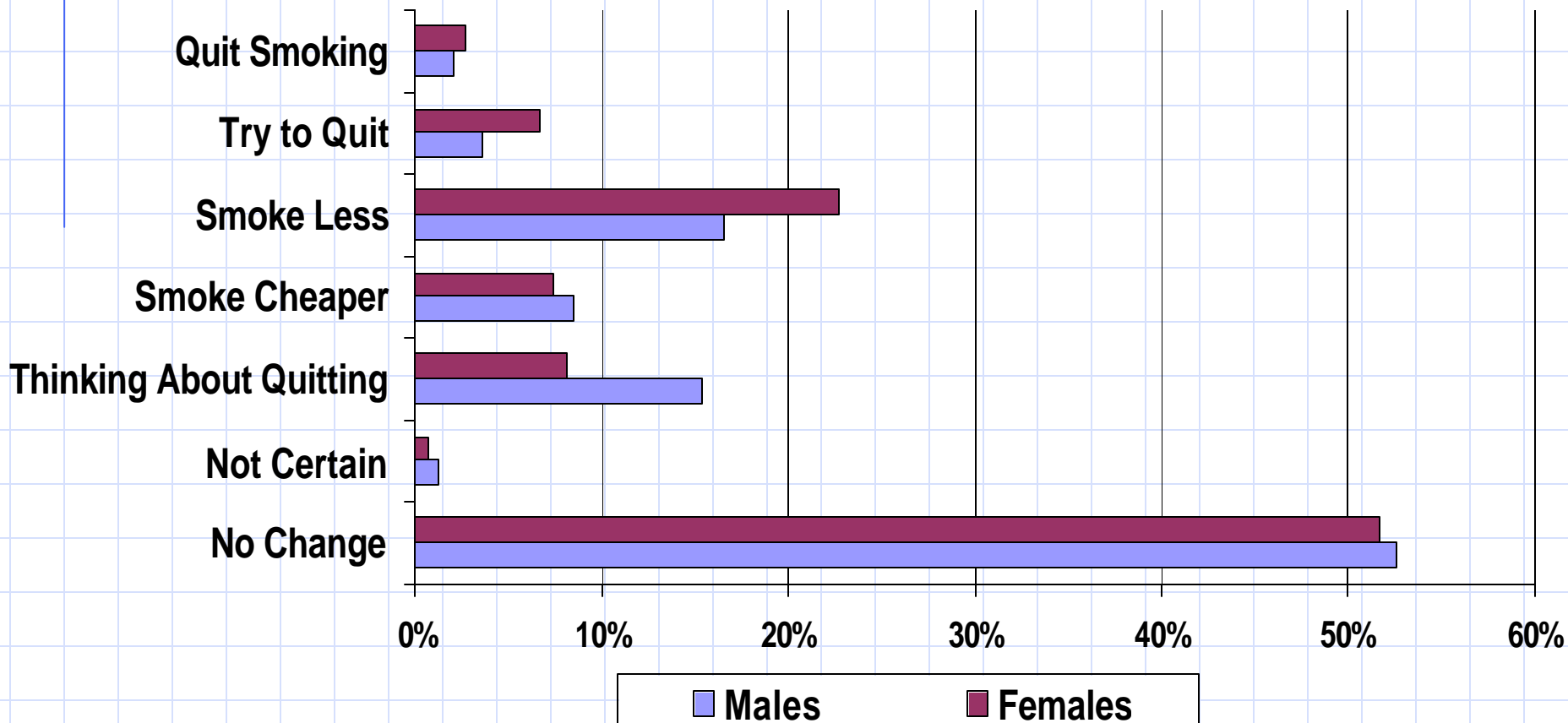
- ◆ **January, 1999 – Tobacco Excise taxes significantly increased to:**
 - More actively control tobacco consumption
 - Competitively increase retail cigarette prices to Poland's general rate of inflation
- ◆ **Overall REAL Excise Tax Hike of 27.5%:**
 - January, 1999: increase of 10%
 - March, June and September 1999: increase of 5%
- ◆ **1999 Tax Hikes provide a “Natural Experiment”**
Allow for quick & clear indication of the effects of rising cigarette prices on consumption

The 1999 Excise Tax Reform

The Effects of Price Changes on Consumption

Rising Excise Taxes & Smoking Behavior

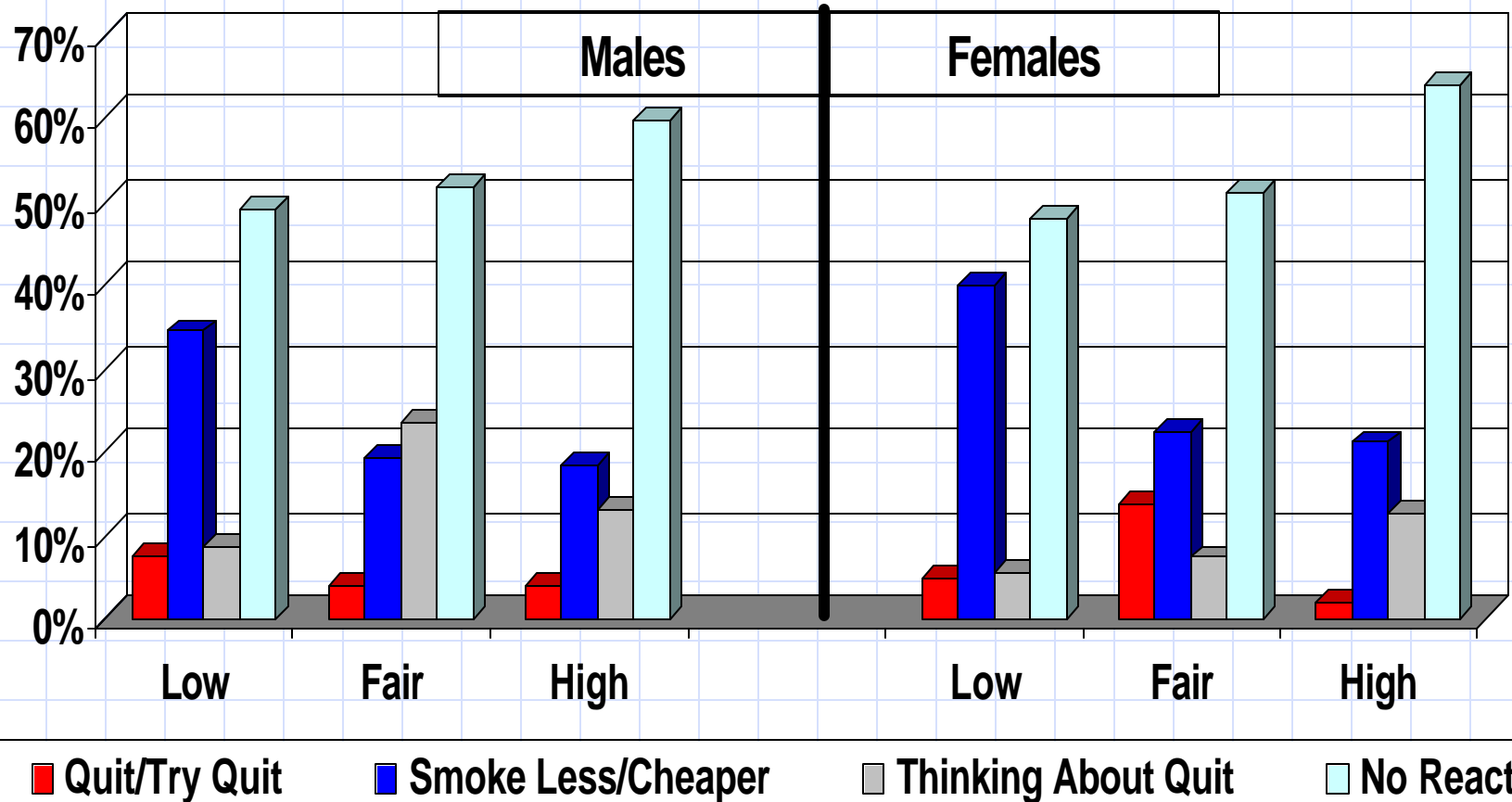
By Gender, April 1999



The 1999 Excise Tax Reform

The Effects of Price Changes on Consumption

Rising Excise Taxes & Smoking Behavior
By Gender and Standard of Living, April 1999 Survey



Poland & Its Recently Created Econometric Database

◆ Poland's Valuable Individual Level Data:

- **1993 to the Present:** Over 13 nationally representative surveys containing over 15,000 observations on Polish adults of ages 18 and over.
- **Characteristics of Smoking Behavior:** prevalence, daily consumption, smoking duration, smoking initiation/cessation
- **Individual Socio-Demographic Descriptives:** age, gender, education, socio-occupational status, marital status, standard of living, area of residence, religious participation and religiosity

Poland & Its Recently Created Econometric Database

◆ Never-Before Tested Price & Policy Data for A Post-Communist Country:

- Tobacco excise tax information sourced from Poland's Ministry of Finance for 4 categories of cigarettes.
- Bi-monthly retail cigarette price data provided by a private data organizations for four brands of cigarettes
- Policy variables are discrete indicators (1 for policy intact; 0 for inexistent policy) representing the four unique waves of tobacco law implementation in Poland between the 1995 legislation and the present

Price Sensitivity in Poland

How Responsive are Poles to Changes in Cigarette Price?

◆ It's an Economic Fact !

- ✓ As the retail price of cigarettes rises, the quantity consumed of cigarettes falls.
- ✓ Thus, governments can use excise taxes to raise the price of cigarettes while increasing a country's budget revenues and saving lives by discouraging cigarette use!
- ✓ **The "Price Elasticity of Demand"**
Measures the percent change in consumption which results from a given change in price

Price Sensitivity in Poland

How Responsive are Poles to Changes in Cigarette Price?

- ◆ **Economists** define people's sensitivity to rising cigarette prices as "The Price Elasticity of Demand for Cigarettes".
- ◆ **The "Price Elasticity of Demand"**
Measures the percent change in consumption which results from a given change in price

Price Sensitivity in Poland

How Responsive are Poles to Changes in Cigarette Price?

- ◆ **“Price Elasticities”** reflect a consumer’s reaction to higher prices as well as the consumer’s decision:
 - To continue smoking or quit?
 - If continue to smoke, then how many cigarettes per day continue to be consumed? (A consumer may choose to smoke less, smoke the same amount or smoke cheaper brands)

Price Sensitivity in Poland

How Responsive are Poles to Changes in Cigarette Price?

◆ Results:

From among all the transitional economies of the former communist command economies, Poland has the first estimated cigarette price elasticities

- **Elasticity on Prevalence/Smoking Participation: -1.07**
- **Elasticity on the Conditional Demand for Cigarettes: -2.09**