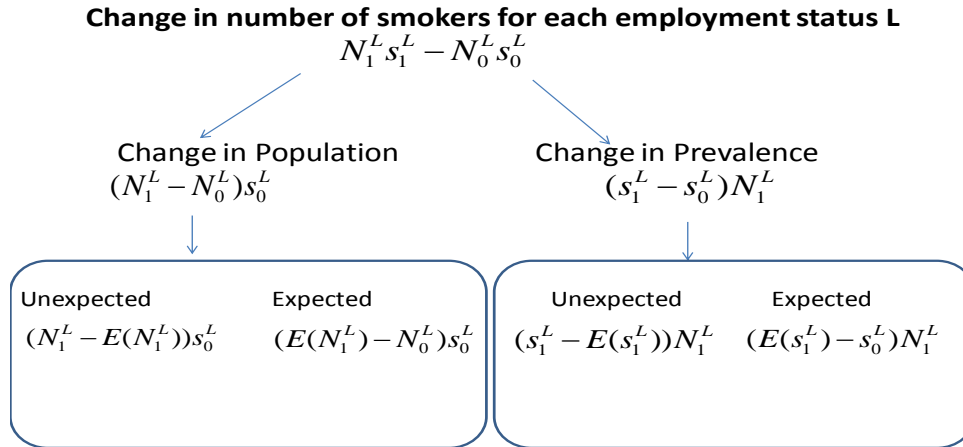


## ON-LINE APPENDIX: THE MODEL

To estimate a change in the number of smokers following the economic crisis, we propose a novel method. The general scheme applied is as follows:



where:

$N_0$  = population in the pre-crisis period

$N_1$  = population in the post-crisis period

$N_1^L$  = number of population in employment status L in the post-crisis period;

$s_1^L$  = smoking prevalence for employment status L in the post-crisis period;

$N_0^L$  = number of population in employment status L in the pre-crisis period;

$s_0^L$  = smoking prevalence for employment status L in the pre-crisis period

$E(N_1^L) = (N_0^L/N_0)N_1$

$E(s_1^L) = s_0^L$  decreased by the trend and adjusted by socioeconomic characteristics.