

Table 2 Original model for estimating the effect on government revenue

| Government revenue | Coefficient | t value | P value | Penalized coefficient by ridge regression |
|---------------------------|--------------------|----------------|----------------|--|
| Intercept | -83920 | -2.310 | 0.082 | 78 072.647 |
| GDP growth (annual %) | 1099.164 | 0.354 | 0.741 | 1060.929 |
| Tobacco inflation rate | 761.475 | 2.280 | 0.085 | 8094.874 |
| Per capita income | 2.32 | 3.483 | 0.025 | 17 674.923 |
| Excise duty | -107.482 | -0.135 | 0.899 | 283.058 |

Source: Pakistan Bureau of Statistics (Pakistan Social and Living Standard Measurement Survey, Household Integrated Economic Survey), Federal Board of Revenue.