Supporting information: File S1.
Supplementary material, including Tables S1, S2, S3, and S4 and Figures S1 and S2.

Table S1. Female. Set B. Decreasing smoking rates. Club composition and log-t test for convergence.

| Club | Countries                                                                 | Log(t) Coeff | T-stat |
|------|---------------------------------------------------------------------------|--------------|--------|
| Club 1: 9 countries | Bulgaria, Chile, Croatia, France, Greece, Latvia, Malta, Montenegro, and Nauru. | 0.240        | 2.234  |
| Club 2: 21 countries | American Samoa, Andorra, Argentina, Austria, Belgium, Bolivia (Plurinational State of), Cyprus, Czechia, Denmark, Estonia, Germany, Hungary, Ireland, Italy, Luxembourg, Netherlands, Poland, Slovakia, Spain, Switzerland, and Uruguay. | 0.068        | 0.828  |
| Club 3: 9 countries | Fiji, Finland, Palau, Papua New Guinea, Samoa, Tonga, Trinidad and Tobago, Ukraine, and United Kingdom. | 0.141        | 2.796  |
| Club 4: 26 countries | Australia, Bahrain, Botswana, Canada, Colombia, Cuba, Dominica, Dominican Republic, Iceland, Israel, Japan, Maldives, Mauritania, Mauritius, Mexico, Namibia, Nepal, New Zealand, Norway, Rwanda, Seychelles, South Africa, Suriname, Sweden, United States of America, and Venezuela (the Bolivarian Republic of). | 0.064        | 1.251  |
| Club 5: 26 countries | Barbados, Bhutan, Brazil, Brunei Darussalam, Burundi, Cambodia, Costa Rica, Ecuador, Guatemala, Guyana, Honduras, Jamaica, Kuwait, Mozambique, Myanmar, Nicaragua, Paraguay, Philippines, Republic of Korea, Saint Lucia, Sierra Leone, Singapore, Syrian Arab Republic, Timor-Leste, Vanuatu, and Zambia. | 0.583        | 5.338  |
| Club 6: 26 countries | Angola, Armenia, Bahamas, Cabo Verde, China, Comoros, Côte d’Ivoire, Eswatini, India, Iraq, Liberia, Malawi, Malaysia, Oman, Pakistan, Panama, Peru, Saint Kitts and Nevis, Somalia, South Sudan, Thailand, Tunisia, Turkmenistan, Uganda, United Republic of Tanzania, and Zimbabwe. | 0.146        | 1.899  |
| Club 7: 14 countries | Bangladesh, Benin, Chad, the Democratic Republic of the Congo, Ethiopia, Guinea, Haiti, Kenya, Libya, Madagascar, Sri Lanka, Sudan, Togo, and Viet Nam. | 0.118        | 1.039  |
| Club 8: 5 countries | Algeria, Burkina Faso, Cameroon, Central African Republic, and Senegal. | 1.176        | 4.328  |
| Club 9: 2 countries | Eritrea and Morocco. | 4.683        | 6.673  |
| Not convergent group: 3 countries | Gambia, Nigeria, and Tajikistan. | -2.386       | -8.601 |
Figure S1. Final clubs (Female. Set A - Countries with increasing smoking rates, 1990-2019).

Note: Countries in light grey are included in the sample with decreasing smoking rates or are countries with no data.

Table S2. Female. Set A. Increasing smoking rates. Club composition and log-t test for convergence

| Club 1: 14 countries | Albania, Belarus, Bosnia and Herzegovina, Kiribati, Lebanon, Lithuania, Micronesia (the Federated States of), North Macedonia, Portugal, Romania, Serbia, Slovenia, Solomon Islands, and Tuvalu. | Log(t) Coeff: 0.191 T-stat: 5.406 |
|---------------------|-------------------------------------------------------------------------------------------------|-----------------------------------|
| Club 2: 15 countries | Afghanistan, Antigua and Barbuda, Djibouti, El Salvador, Georgia, Jordan, Kazakhstan, Kyrgyzstan, Lao People's Democratic Republic, Marshall Islands, Mongolia, Republic of Moldova, Russian Federation, Turkey, and Yemen. | Log(t) Coeff: -0.005 T-stat: -0.263 |
| Club 3: 5 countries | Belize, Democratic People’s Republic of Korea, Gabon, Grenada, and Iran (the Islamic Republic of). | Log(t) Coeff: 0.277 T-stat: 4.556 |
| Club 4: 12 countries | Azerbaijan, Congo, Equatorial Guinea, Ghana, Guinea-Bissau, Indonesia, Mali, Qatar, Saint Vincent and the Grenadines, Saudi Arabia, United Arab Emirates, and Uzbekistan. | Log(t) Coeff: -0.019 T-stat: -1.181 |
| Club 5: 2 countries | Niger, and Sao Tome and Principe. | Log(t) Coeff: 1.172 T-stat: 1.282 |
| Not convergent group: 2 countries | Egypt, and Lesotho. | Log(t) Coeff: -1.893 T-stat: -9.996 |
Table S3. Male. Results of 1) the log-t test, and 2) the ordered logit model.

|                      | Coeff. | SE   | T-stat | N. of countries | N. of years |
|----------------------|--------|------|--------|-----------------|-------------|
| **Log-t test**        |        |      |        |                 |             |
| **Set A: Increasing MSP** | -0.540 | 0.003 | -170.166 | 39              | 30          |
| **Set B: Decreasing MSP** | -0.940 | 0.005 | -201.434 | 152             | 30          |

**Ordered logit**

|                      | Coeff. | Robust SE | P>|z| | Prob > chi2 | N. of obs. |
|----------------------|--------|-----------|------|-------------|------------|
| **Set A: Increasing MSP** |        |           |      |             |            |
| Cigarette affordability | 0.010  | 0.031     | 0.750 | 0.750       | 136        |
| Odds ratio            | 1.010  | 0.031     | 0.750 | 0.750       |            |
| **Set B: Decreasing MSP** |        |           |      |             |            |
| Cigarette affordability | 0.024  | 0.006     | 0.000 | 0.000       | 676        |
| Odds ratio            | 1.024  | 0.006     | 0.000 | 0.000       |            |

Note: MSP, male smoking prevalence. Affordability: the percentage of per capita GDP required to buy 100 packs of cigarettes.

Figure S2. Final clubs (Male. Set B - Countries with decreasing smoking rates, 1990-2019).
### Table S4. Male. Set B. Decreasing smoking rates. Club composition and log-t test for convergence.

| Club   | Countries                                                                 | Log(t) Coef | T-stat |
|--------|---------------------------------------------------------------------------|-------------|--------|
| 1      | Algeria, American Samoa, Armenia, Azerbaijan, Bahrain, Bangladesh, Belarus, Bolivia (Plurinational State of), Botswana, Bulgaria, Cambodia, Chile, China, Croatia, Cyprus, Democratic People's Republic of Korea, Ecuador, Fiji, France, Greece, Iraq, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Malaysia, Maldives, Mauritius, Montenegro, Myanmar, Nauru, North Macedonia, Papua New Guinea, Philippines, Republic of Korea, Russian Federation, Samoa, Serbia, Seychelles, Slovenia, South Africa, Syrian Arab Republic, Thailand, Tonga, Trinidad and Tobago, Tunisia, Turkey, Ukraine, Vanuatu, Viet Nam, and Yemen. | 0.135       | 1.692  |
| 2      | Andorra, Angola, Argentina, Austria, Brunei Darussalam, Cuba, Czechia, the Democratic Republic of the Congo, Estonia, Germany, Guinea, Hungary, Italy, Japan, Kuwait, Madagascar, Malawi, Malta, Mauritania, Mozambique, Nepal, Nicaragua, Oman, Palau, Poland, Portugal, Qatar, Romania, Rwanda, Saint Vincent and the Grenadines, Sierra Leone, Slovakia, Spain, Sri Lanka, Suriname, Switzerland, and Uruguay. | 0.234       | 2.304  |
| 3      | Australia, Bahamas, Barbados, Belgium, Bhutan, Burkina Faso, Burundi, Cameroon, Canada, Central African Republic, Chad, Comoros, Denmark, Dominica, Dominican Republic, Eritrea, Eswatini, Ethiopia, Finland, Gambia, Ghana, Guatemala, Honduras, India, Ireland, Israel, Jamaica, Kenya, Liberia, Luxembourg, Mexico, Morocco, Namibia, Netherlands, New Zealand, Norway, Pakistan, Paraguay, Saint Lucia, Singapore, Somalia, South Sudan, Sudan, Tajikistan, Turkmenistan, United Arab Emirates, United Kingdom, United Republic of Tanzania, United States of America, and Venezuela (the Bolivarian Republic of). | -0.010      | -0.192 |
| 4      | Colombia, Costa Rica, Iceland, Panama, Senegal, Sweden, Togo, and Uganda. | 0.454       | 2.877  |
| 5      | Benin, Brazil, Cabo Verde, Haiti, Nigeria, and Peru.                      | 0.465       | 4.178  |

Note: *Club 3 is a ‘weak club’.