

This is a repository copy of *Is Foreign Direct Investment Good for Health in Low and Middle Income Countries?:An Instrumental Variable Approach*.

White Rose Research Online URL for this paper:

<https://eprints.whiterose.ac.uk/114510/>

---

**Article:**

Burns, Darren, Jones, AP, Goryakin, Yevgeniy et al. (1 more author) (2017) Is Foreign Direct Investment Good for Health in Low and Middle Income Countries?:An Instrumental Variable Approach. Social science and medicine. pp. 74-82. ISSN 1873-5347

<https://doi.org/10.1016/j.socscimed.2017.03.054>

---

**Reuse**

This article is distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs (CC BY-NC-ND) licence. This licence only allows you to download this work and share it with others as long as you credit the authors, but you can't change the article in any way or use it commercially. More information and the full terms of the licence here: <https://creativecommons.org/licenses/>

**Takedown**

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing [eprints@whiterose.ac.uk](mailto:eprints@whiterose.ac.uk) including the URL of the record and the reason for the withdrawal request.

## Appendix

**Appendix Table 1** *List of Countries Included in the Primary Analysis*

|                             |                    |                  |                      |
|-----------------------------|--------------------|------------------|----------------------|
| Afghanistan                 | Ghana              | Mongolia         | Thailand             |
| Albania                     | Gambia, The        | Mozambique       | Tajikistan           |
| Armenia                     | Guatemala          | Mauritania       | Tonga                |
| Burundi                     | Honduras           | Mauritius        | Tunisia              |
| Benin                       | Haiti              | Malawi           | Turkey               |
| Bangladesh                  | Indonesia          | Malaysia         | Tanzania             |
| Bulgaria                    | India              | Namibia          | Uganda               |
| Belize                      | Iran, Islamic Rep. | Niger            | Ukraine              |
| Bolivia                     | Iraq               | Nepal            | Vietnam              |
| Brazil                      | Jamaica            | Pakistan         | Yemen, Rep.          |
| Botswana                    | Jordan             | Panama           | South Africa         |
| Central African<br>Republic | Kazakhstan         | Peru             | Zambia               |
| China                       | Kenya              | Philippines      | Syrian Arab Republic |
| Cote d'Ivoire               | Kyrgyz Republic    | Papua New Guinea | Zimbabwe             |
| Cameroon                    | Cambodia           | Paraguay         |                      |
| Congo, Rep.                 | Lao PDR            | Romania          |                      |
| Colombia                    | Liberia            | Rwanda           |                      |
| Costa Rica                  | Sri Lanka          | Sudan            |                      |
| Dominican Republic          | Lesotho            | Senegal          |                      |
| Algeria                     | Morocco            | Sierra Leone     |                      |
| Ecuador                     | Moldova            | El Salvador      |                      |
| Egypt, Arab Rep.            | Maldives           | Serbia           |                      |
| Fiji                        | Mexico             | Swaziland        |                      |
| Gabon                       | Mali               | Togo             |                      |

**Appendix Table 2** *List of Countries Included in Sectoral Analysis*

---

|                    |                  |
|--------------------|------------------|
| Bolivia            | Mozambique       |
| Costa Rica         | Nicaragua        |
| China              | Nepal            |
| Dominican Republic | Pakistan         |
| Ecuador            | Peru             |
| Egypt, Arab Rep.   | Philippines      |
| Guyana             | Papua New Guinea |
| Honduras           | Paraguay         |
| Iran, Islamic Rep. | El Salvador      |
| Jamaica            | Thailand         |
| Jordan             | Tunisia          |
| Kenya              | Turkey           |
| Sri Lanka          | Tanzania         |
| Morocco            | Uganda           |
| Mexico             | Vietnam          |
| Mongolia           | Zambia           |

---

Appendix Table 3: World Investment Directory Industrial Disaggregation of FDI

| World Investment Directory Category                     | ISIC V4 Code   |
|---|----------------|
| <i>Primary</i>  |                |
| Agriculture, hunting, forestry and fishing              | 01, 02, 05     |
| Mining, quarrying and petroleum                         | 10,11,12,13,14 |
| <i>Secondary</i>  |                |
| Food, beverages and tobacco                             | 15,16          |
| Textiles, clothing and leather                          | 17,18,19       |
| Wood and wood products                                  | 20,21          |
| Publishing, printing and reproduction of recorded media | 22             |
| Coke, petroleum products and nuclear fuel               | 23             |
| Chemicals and chemical products                         | 24             |
| Rubber and plastic products                             | 25             |
| Non-metallic mineral products                           | 26             |
| Metal and metal products                                | 27,28          |
| Machinery and equipment                                 | 29             |
| Electrical and electronic equipment                     | 30,31,32       |
| Precision instruments                                   | 33             |
| Motor vehicles and other transport equipment            | 34,35          |
| Other manufacturing                                     | 36             |
| Recycling   | 37             |
| <i>Tertiary</i>   |                |
| Electricity, gas and water                              | 40,41          |
| Construction  | 45             |
| Trade   | 50,51,52       |
| Hotels and restaurants                                  | 55             |
| Transport, storage and communications                   | 60,61,62,63,64 |
| Finance   | 65,66,67       |
| Business activities                                     | 70,71,72,73,74 |
| Public administration and defense                       | 75             |
| Education   | 80             |
| Health and social services                              | 85             |
| Community, social and personal service activities       | 90,91,92       |
| Other services  | 1120,93,95,99  |
| <i>Unspecified</i>                                      | N/A            |

**Appendix Table 4** *IVFE Models of FDI and Life Expectancy Using Alternative Measures of Education and Institutional Quality*

| Model number                                      | (A1)             |         | (A2)                    |         | (A3)                 |         | (A4)                            |         |
|---|------------------|---------|-------------------------|---------|----------------------|---------|---------------------------------|---------|
| Robustness check                                  | political rights |         | HF overall policy score |         | Age-dependency ratio |         | Alternative educational measure |         |
| Dependant Variable                                | Coef.            | pval    | Coef.                   | pval    | Coef.                | pval    | Coef.                           | pval    |
| FDI inflow (% GDP)                                | 1.038*           | (0.058) | -0.012                  | (0.910) | 1.025*               | (0.057) | 1.113*                          | (0.053) |
| Years of schooling                                | 2.895**          | (0.015) | 2.278***                | (0.001) | 2.836**              | (0.017) | -                               | -       |
| Years of schooling, squared                       | -0.202***        | (0.002) | -0.145***               | (0.000) | -0.200***            | (0.002) | -                               | -       |
| Enrolment in secondary education                  | -                | -       | -                       | -       | -                    | -       | 0.617**                         | (0.018) |
| Civil Liberties Index, lagged                     | -                | -       | -                       | -       | 0.199                | (0.406) | 0.147                           | (0.535) |
| Political rights Index, lagged                    | -0.014           | (0.943) | -                       | -       | -                    | -       | -                               | -       |
| Heritage Foundation overall freedom score, lagged | -                | -       | 0.016                   | (0.703) | -                    | -       | -                               | -       |
| ln(GDPPC in 2010 USD), lagged                     | 0.205*           | (0.097) | 0.393                   | (0.212) | 0.201                | (0.101) | 0.174                           | (0.145) |
| Urban population (% population)                   | 0.016            | (0.848) | 0.032                   | (0.588) | 0.020                | (0.815) | 0.034                           | (0.736) |
| Age-dependancy ratio                              | -                | -       | -                       | -       | -0.007               | (0.879) | -                               | -       |
| Observations                                      | 2,556            |         | 1,262                   |         | 2,556                |         | 2,340                           |         |
| Number of countries                               | 85               |         | 83                      |         | 85                   |         | 105                             |         |
| F-test  | 12.98            |         | 14.75                   |         | 13.13                |         | 14.02                           |         |
| F-test: 1st stage                                 | 5.048            |         | 6.093                   |         | 5.527                |         | 5.930                           |         |
| J-statistic                                       | 0.645            |         | 1.503                   |         | 0.630                |         | 0.546                           |         |
| (J-stat) Prob > P                                 | 0.422            |         | 0.220                   |         | 0.427                |         | 0.460                           |         |