

**Key indicators**

|                             |          |
|-----------------------------|----------|
| Population (millions) ..... | 4.4      |
| GDP per capita, PPP\$ ..... | 18,338.5 |
| GDP (US\$ billions) .....   | 64.2     |

|  | Score (0–100)<br>or value (hard data) | Rank      |
|--|---------------------------------------|-----------|
| <b>Global Innovation Index 2012 (out of 141)</b> ..... | <b>40.7</b>                           | <b>42</b> |
| Innovation Output Sub-Index .....                      | 34.9                                  | 45        |
| Innovation Input Sub-Index .....                       | 46.4                                  | 44        |
| Innovation Efficiency Index .....                      | 0.8                                   | 63        |
| Global Innovation Index 2011 (out of 125) .....        |                                       | 44        |
| GII 2012 rank among GII 2011 economies (125) .....     |                                       | 41        |

|          |   |             |             |
|----------|---|-------------|-------------|
| <b>1</b> | <b>Institutions .....</b>                                       | <b>69.2</b> | <b>41</b>   |
| 1.1      | <b>Political environment .....</b>                              | <b>71.5</b> | <b>42</b>   |
| 1.1.1    | Political stability* .....                                      | 79.9        | 38          |
| 1.1.2    | Government effectiveness* .....                                 | 57.2        | 43          |
| 1.1.3    | Press freedom* .....  | 77.5        | 55          |
| 1.2      | <b>Regulatory environment .....</b>                             | <b>72.6</b> | <b>44</b>   |
| 1.2.1    | Regulatory quality* .....                                       | 66.0        | 46          |
| 1.2.2    | Rule of law* .....  | 52.7        | 52          |
| 1.2.3    | Cost of redundancy dismissal, salary weeks .....                | 15.1        | 69          |
| 1.3      | <b>Business environment .....</b>                               | <b>63.5</b> | <b>35</b>   |
| 1.3.1    | Ease of starting a business* .....                              | 68.3        | 45          |
| 1.3.2    | Ease of resolving insolvency* .....                             | 39.5        | 85          |
| 1.3.3    | Ease of paying taxes* .....                                     | 82.7        | 25 ●        |
| <b>2</b> | <b>Human capital &amp; research .....</b>                       | <b>41.9</b> | <b>51</b>   |
| 2.1      | <b>Education .....</b>  | <b>57.8</b> | <b>48</b>   |
| 2.1.1    | Current expenditure on education, % GNI .....                   | 3.9         | 80          |
| 2.1.2    | Public expenditure/pupil, % GDP/cap .....                       | 23.5        | 38          |
| 2.1.3    | School life expectancy, years .....                             | 13.9        | 52          |
| 2.1.4    | PISA scales in reading, maths, & science .....                  | 474.0       | 35          |
| 2.1.5    | Pupil-teacher ratio, secondary .....                            | 8.3         | 13 ●        |
| 2.2      | <b>Tertiary education .....</b>                                 | <b>37.7</b> | <b>55</b>   |
| 2.2.1    | Tertiary enrolment, % gross .....                               | 49.2        | 47          |
| 2.2.2    | Graduates in science & engineering, % .....                     | 24.4        | 29          |
| 2.2.3    | Tertiary inbound mobility, % .....                              | 0.5         | 89 ○        |
| 2.2.4    | Gross tertiary outbound enrolment, % .....                      | 2.4         | 35          |
| 2.3      | <b>Research &amp; development (R&amp;D) .....</b>               | <b>30.0</b> | <b>42</b>   |
| 2.3.1    | Researchers, headcounts/mn pop. .....                           | 2,696.7     | 33          |
| 2.3.2    | Gross expenditure on R&D, % GDP .....                           | 0.8         | 40          |
| 2.3.3    | Quality of scientific research institutions† .....              | 50.9        | 45          |
| <b>3</b> | <b>Infrastructure .....</b>                                     | <b>44.9</b> | <b>36</b>   |
| 3.1      | <b>Information &amp; communication technologies (ICT) .....</b> | <b>51.7</b> | <b>39</b>   |
| 3.1.1    | ICT access* .....   | 70.5        | 28 ●        |
| 3.1.2    | ICT use* .....  | 43.3        | 33          |
| 3.1.3    | Government's online service* .....                              | 64.1        | 40          |
| 3.1.4    | E-participation* .....  | 29.0        | 52          |
| 3.2      | <b>General infrastructure .....</b>                             | <b>32.9</b> | <b>89</b>   |
| 3.2.1    | Electricity output, kWh/cap .....                               | 2,865.7     | 61          |
| 3.2.2    | Electricity consumption, kWh/cap .....                          | 3,709.4     | 49          |
| 3.2.3    | Quality of trade & transport infrastructure* .....              | 34.0        | 86          |
| 3.2.4    | Gross capital formation, % GDP .....                            | 23.4        | 58          |
| 3.3      | <b>Ecological sustainability .....</b>                          | <b>50.0</b> | <b>19 ●</b> |
| 3.3.1    | GDP/unit of energy use, 2000 PPP\$/kg oil eq .....              | 7.3         | 33          |
| 3.3.2    | Environmental performance* .....                                | 64.2        | 20 ●        |
| 3.3.3    | ISO 14001 environmental certificates/bn PPP\$ GDP .....         | 5.7         | 20 ●        |
| <b>4</b> | <b>Market sophistication .....</b>                              | <b>36.8</b> | <b>77</b>   |
| 4.1      | <b>Credit .....</b>   | <b>24.4</b> | <b>86</b>   |
| 4.1.1    | Ease of getting credit* .....                                   | 50.4        | 62          |
| 4.1.2    | Domestic credit to private sector, % GDP .....                  | 70.1        | 48          |
| 4.1.3    | Microfinance gross loans, % GDP .....                           | 0.0         | 82 ○        |

|          |  |             |              |
|----------|--|-------------|--------------|
| 4.2      | <b>Investment .....</b>                              | <b>19.1</b> | <b>86</b>    |
| 4.2.1    | Ease of protecting investors* .....                  | 15.8        | 110 ○        |
| 4.2.2    | Market capitalization, % GDP .....                   | 40.9        | 52           |
| 4.2.3    | Total value of stocks traded, % GDP .....            | 1.7         | 65           |
| 4.2.4    | Venture capital deals/tr PPP\$ GDP .....             | 12.3        | 41           |
| 4.3      | <b>Trade &amp; competition .....</b>                 | <b>67.0</b> | <b>49</b>    |
| 4.3.1    | Applied tariff rate, weighted mean, % .....          | 1.2         | 9 ●          |
| 4.3.2    | Non-agricultural mkt access weighted tariff, % ..... | 0.3         | 41           |
| 4.3.3    | Imports of goods & services, % GDP .....             | 38.8        | 74           |
| 4.3.4    | Exports of goods & services, % GDP .....             | 38.3        | 69           |
| 4.3.5    | Intensity of local competition† .....                | 51.5        | 111 ○        |
| <b>5</b> | <b>Business sophistication .....</b>                 | <b>39.4</b> | <b>64</b>    |
| 5.1      | <b>Knowledge workers .....</b>                       | <b>48.0</b> | <b>63</b>    |
| 5.1.1    | Knowledge-intensive employment, % .....              | 30.1        | 42           |
| 5.1.2    | Firms offering formal training, % firms .....        | 28.0        | 68 ○         |
| 5.1.3    | R&D performed by business, % .....                   | 40.4        | 43           |
| 5.1.4    | R&D financed by business, % .....                    | 39.8        | 41           |
| 5.1.5    | GMAT mean score .....                                | 484.3       | 85           |
| 5.1.6    | GMAT test takers/mn pop. 20–34 .....                 | 113.7       | 46           |
| 5.2      | <b>Innovation linkages .....</b>                     | <b>28.2</b> | <b>107 ○</b> |
| 5.2.1    | University/industry research collaboration† .....    | 41.4        | 74           |
| 5.2.2    | State of cluster development† .....                  | 39.4        | 76           |
| 5.2.3    | R&D financed by abroad, % .....                      | 7.0         | 46           |
| 5.2.4    | JV–strategic alliance deals/tr PPP\$ GDP .....       | 19.8        | 67           |
| 5.2.5    | PCT patent filings with foreign inventor, % .....    | 26.7        | 69 ○         |
| 5.3      | <b>Knowledge absorption .....</b>                    | <b>41.9</b> | <b>44</b>    |
| 5.3.1    | Royalty & license fees payments/th GDP .....         | 3.7         | 28           |
| 5.3.2    | High-tech imports less re-imports, % .....           | 7.5         | 76           |
| 5.3.3    | Computer & comm. service imports, % .....            | 52.4        | 11 ●         |
| 5.3.4    | FDI net inflows, % GDP .....                         | 0.5         | 121 ○        |
| <b>6</b> | <b>Knowledge &amp; technology outputs .....</b>      | <b>34.0</b> | <b>45</b>    |
| 6.1      | <b>Knowledge creation .....</b>                      | <b>35.1</b> | <b>39</b>    |
| 6.1.1    | Domestic resident patent ap/bn PPP\$ GDP .....       | 3.5         | 41           |
| 6.1.2    | PCT resident patent ap/bn PPP\$ GDP .....            | 0.6         | 33           |
| 6.1.3    | Domestic res utility model ap/bn PPP\$ GDP .....     | 1.2         | 27           |
| 6.1.4    | Scientific & technical articles/bn PPP\$ GDP .....   | 14.8        | 29           |
| 6.2      | <b>Knowledge impact .....</b>                        | <b>44.9</b> | <b>33</b>    |
| 6.2.1    | Growth rate of PPP\$ GDP/worker, % .....             | 3.0         | 51           |
| 6.2.2    | New businesses/th pop. 15–64 .....                   | 2.6         | 39           |
| 6.2.3    | Computer software spending, % GDP .....              | n/a         | n/a          |
| 6.2.4    | ISO 9001 quality certificates/bn PPP\$ GDP .....     | 26.7        | 18 ●         |
| 6.3      | <b>Knowledge diffusion .....</b>                     | <b>22.1</b> | <b>91 ○</b>  |
| 6.3.1    | Royalty & license fees receipts/th GDP .....         | 0.5         | 42           |
| 6.3.2    | High-tech exports less re-exports, % .....           | 5.8         | 38           |
| 6.3.3    | Computer & comm. service exports, % .....            | 14.7        | 105 ○        |
| 6.3.4    | FDI net outflows, % GDP .....                        | -0.2        | 110 ○        |
| <b>7</b> | <b>Creative outputs .....</b>                        | <b>35.8</b> | <b>50</b>    |
| 7.1      | <b>Creative intangibles .....</b>                    | <b>34.9</b> | <b>93 ○</b>  |
| 7.1.1    | Domestic res trademark reg/bn PPP\$ GDP .....        | 43.4        | 40           |
| 7.1.2    | Madrid resident trademark reg/bn PPP\$ GDP .....     | 1.6         | 12 ●         |
| 7.1.3    | ICT & business model creation† .....                 | 49.2        | 75           |
| 7.1.4    | ICT & organizational model creation† .....           | 36.5        | 108 ○        |
| 7.2      | <b>Creative goods &amp; services .....</b>           | <b>34.8</b> | <b>34</b>    |
| 7.2.1    | Recreation & culture consumption, % .....            | 7.6         | 28           |
| 7.2.2    | National feature films/mn pop. 15–69 .....           | 2.5         | 42           |
| 7.2.3    | Paid-for dailies, circulation/th pop. 15–69 .....    | 167.8       | 30           |
| 7.2.4    | Creative goods exports, % .....                      | 2.8         | 27 ●         |
| 7.2.5    | Creative services exports, % .....                   | 6.9         | 30           |
| 7.3      | <b>Online creativity .....</b>                       | <b>38.7</b> | <b>37</b>    |
| 7.3.1    | Generic top-level domains (TLDs)/th pop. 15–69 ..... | 14.5        | 40           |
| 7.3.2    | Country-code TLDs/th pop. 15–69 .....                | 46.6        | 41           |
| 7.3.3    | Wikipedia monthly edits/mn pop. 15–69 .....          | 5,650.9     | 28           |
| 7.3.4    | Video uploads on YouTube/pop. 15–69 .....            | 65.0        | 38           |