### INSTITUTIONS

| 1.1 Political environment                      | 43.2 | 97 |
| 1.1.1 Political and operational stability       | 66.7 | 74  ●
| 1.1.2 Government effectiveness                | 315   105 ●
| 1.2 Regulatory environment                     | 34.4 | 125 ○ ○
| 1.2.1 Regulatory quality*                      | 29.4   101 ●
| 1.2.2 Rule of law*                             | 37.7   81 ●
| 1.2.3 Cost of redundancy dismissal, salary weeks | 50.6  124 ○ ○
| 1.3 Business environment                       | 63.7 | 86  ○
| 1.3.1 Ease of starting a business*             | 85.1   78 ●
| 1.3.2 Ease of resolving insolvency*           | 42.4   87 ○

### HUMAN CAPITAL & RESEARCH

| 2.1 Education                                 | 0.0 | 129 |
| 2.1.1 Expenditure on education, % GDP         | 1.1  119 ○ ○
| 2.1.2 Government funding/pupil, secondary, % GDP/cap. | n/a | n/a |
| 2.1.3 School life expectancy, years           | n/a | n/a |
| 2.1.4 PISA scales in reading, maths, & science | n/a | n/a |
| 2.1.5 Pupil-teacher ratio, secondary          | n/a | n/a |
| 2.2 Tertiary education                        | 2.6  [123] |
| 2.2.1 Tertiary enrolment, % gross              | 4.0  121 ○
| 2.2.2 Graduates in science & engineering, %   | n/a | n/a |
| 2.2.3 Tertiary enrolment, %                    | n/a | n/a |
| 2.3 Research & development (R&D)              | 1.5  98 |
| 2.3.1 Researchers, FTE/million pop.           | 41.0  94 |
| 2.3.2 Gross expenditure on R&D, % GDP         | 0.3   81 ○
| 2.3.3 Global R&D companies, avg. exp. top 3, mn US$ | 0.0  43 ○ ○
| 2.3.4 GS university ranking, average score top 3 | 0.0  78 ○ ○

### INFRASTRUCTURE

| 3.1 Information & communication technologies (ICTs) | 35.8 | 114 ○
| 3.1.1 ICT access*                                 | 31.1  116 ○
| 3.1.2 ICT use*                                    | 24.5  101 ○
| 3.1.3 Government’s online service*                | 47.9   106 ○
| 3.1.4 E-patent*                                   | 39.9  110 ○
| 3.2 General infrastructure                       | 48.0 | 25 ○ ○
| 3.2.1 Electricity output, kWh/m pop.             | 704.5  101 ○
| 3.2.2 Logistics performance*                     | 21.6   103 ○
| 3.2.3 Gross capital formation, % GDP             | 44.4   3 ○ ○
| 3.3 Ecological sustainability                    | 25.9 | 113 ○
| 3.3.1 GDUp/num of energy use                     | 5.3  105 ○
| 3.3.2 Environmental performance*                 | 51.0   95 ○
| 3.3.3 ISO 14001 environmental certificates/bn PPP$ GDP | 0.4  95 ○

### MARKET SOPHISTICATION

| 4.1 Credit                                     | 32.7 | 79 ○
| 4.1.1 Ease of getting credit*                  | 95.0   3 ○ ○
| 4.1.2 Domestic credit to private sector, % GDP | 11.2  123 ○ ○
| 4.1.3 Microfinance gross loans, % GDP          | 0.0   63 ○
| 4.2 Investment                                | 26.8 | 126 ○ ○
| 4.2.1 Ease of protecting minority investors*   | 50.0   93 ○
| 4.2.2 Market capitalization, % GDP            | 13.6   65 ○
| 4.2.3 Venture capital deals/bn PPP$ GDP        | 0.0  49 ○
| 4.3 Trade, competition, & market scale         | 53.5 | 94 ○ ○
| 4.3.1 Applied tariff rate, weighted avg. % GDP | 6.2  36 ○
| 4.3.2 Intensity of local competition           | 66.4   75 ○
| 4.3.3 Domestic market scale, bn PPP$ GDP       | 73.2   90 ○ ○

### BUSINESS SOPHISTICATION

| 5.1 Knowledge workers                          | 12.9 | 121  ●
| 5.1.1 Knowledge-intensive employment, %        | 2.0  115 ○ ○
| 5.1.2 Firms offering formal training, % firms  | 28.2  55 ○ ○
| 5.1.3 GERD performed by business, % GDP        | 0.0  85 ○ ○
| 5.1.4 GERD financed by business, %             | 3.2  86 ○ ○
| 5.1.5 Females employed at advanced degrees, %  | 5.8  86 ○ ○
| 5.2 Innovation linkages                       | 17.4 | 111 ○ ○
| 5.2.1 University-industry research collaboration | 31.1  102 ○ ○
| 5.2.2 State of cluster development*            | 42.1  85 ○ ○
| 5.2.3 GERD financed by abroad, %               | 1.6  81 ○ ○
| 5.2.4 JV-strategic alliance deals/bn PPP$ GDP  | n/a | n/a |
| 5.2.5 Patent families 2+ offices/bn PPP$ GDP   | 0.9  93 ○ ○

### KNOWLEDGE & TECHNOLOGY OUTPUTS

| 6.1 Knowledge creation                         | 3.9  107 ○
| 6.1.1 Patents by origin/bn PPP$ GDP            | 0.2  102 ○
| 6.1.2 PCT patents by origin/bn PPP$ GDP        | 0.0  86 ○ ○
| 6.1.3 Utility models by origin/bn PPP$ GDP     | n/a | n/a |
| 6.1.4 Scientific & technical articles/bn PPP$ GDP | 2.7   107 ○ ○
| 6.2 Knowledge impact                          | 23.6 | 108 ○ ○
| 6.2.1 Growth rate of PPP$/worker, %            | 0.0  88 ○ ○
| 6.2.2 New businesses/th pop. 15-64             | 1.1  68 ○ ○
| 6.2.3 Computer software spending, % GDP       | 0.0  112 ○ ○
| 6.2.4 ISO 9001 quality certificates/bn PPP$ GDP | 0.6  118 ○ ○
| 6.2.5 High- & medium-high-tech manufactures, % | 0.1  78 ○ ○
| 6.3 Knowledge diffusion                       | 8.8  110 ○ ○
| 6.3.1 Intellectual property receipts, % total trade | n/a | n/a |
| 6.3.2 High-tech imports, % total trade         | 0.4  85 ○ ○
| 6.3.3 ICT services exports, % total trade      | 0.4  104 ○ ○
| 6.3.4 FDI net inflows, % GDP                   | -0.2  120 ○ ○

### CREATIVE OUTPUTS

| 7.1 Intangible assets                          | 25.4 | 120 ○ ○
| 7.1.1 Trademarks by origin/bn PPP$ GDP         | 15.6  94 ○ ○
| 7.1.2 Industrial designs by origin/bn PPP$ GDP | 0.4  88 ○ ○
| 7.1.3 ICTs & business model creation*          | 45.2  115 ○ ○
| 7.1.4 ICTs & organizational model creation*    | 37.3  118 ○ ○
| 7.2 Creative goods & services                 | 25.0  [113] ○ ○
| 7.2.1 Cultural & creative services exports, % total trade | 0.3  63 ○ ○
| 7.2.2 National feature films/mn pop. 15-69     | n/a | n/a |
| 7.2.3 Entertainment & Media market/th pop. 15-69 | n/a | n/a |
| 7.2.4 Printing & other media, % manufacturing  | n/a | n/a |
| 7.2.5 Creative goods exports, % total trade     | 0.0  196 ○ ○
| 7.3 Online creativity                          | 0.1  125 ○ ○
| 7.3.1 Generic top-level domains (TLDs)th pop. 15-69 | 0.1  123 ○ ○
| 7.3.2 Country-code TLDs/th pop. 15-69          | 0.1  115 ○ ○
| 7.3.3 Wikipedia edits/mn pop. 15-69            | n/a | n/a |
| 7.3.4 Mobile app creation/bn PPP$ GDP          | n/a | n/a |

### NOTES
- A score/Value indicates a strength; ○ a weakness; ● an income group strength; ○ an income group weakness; * an index; † a survey question. ○ indicates that the economy’s data are older than the base year; see Appendix II for details, including the year of the data, at http://globalinnovationindex.org. Square brackets [ ] indicate that the data minimum coverage (DMC) requirements were not met at the sub-pillar or pillar level.