



**Austria is a Strong Innovator.** Over time, performance has increased by 8.9% relative to that of the EU in 2010.

### Innovation system

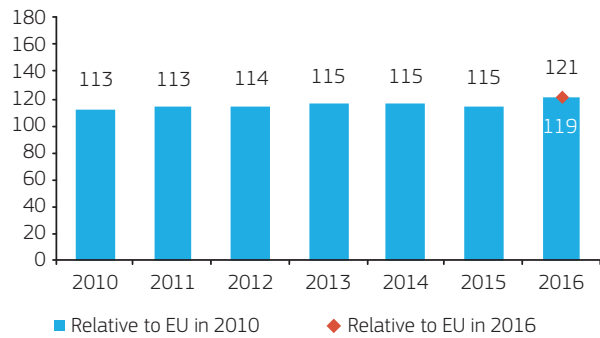
Relative strengths of the innovation system are in Firm investments, Attractive research systems, and Intellectual assets. Relative weaknesses are in Employment impacts, Sales impacts, and Finance and support.

### Structural differences

Notable differences are a larger share of SMEs in turnover, a lower share of large enterprises in turnover, a higher number of Top R&D spending enterprises but a lower average R&D spending of these enterprises, higher GDP per capita, and higher population density.

|   | AT     | EU     |
|---|--------|--------|
| <b>Structure of the economy</b>                   |        |        |
| Composition of employment, average 2011-15        |        |        |
| - Agriculture & Mining (NACE A-B) (%)             | 4.7    | 5.1    |
| - Manufacturing (NACE C) (%)                      | 15.8   | 15.6   |
| of which High and Medium high-tech (%)            | 36.8   | 36.4   |
| - Utilities and Construction (NACE D-F) (%)       | 9.9    | 8.6    |
| - Services (NACE G-N) (%)                         | 62.7   | 63.6   |
| of which Knowledge-intensive services (%)         | 54.4   | 58.0   |
| - Public administration, etc. (NACE O-U) (%)      | 6.8    | 7.1    |
| <b>Business indicators</b>                        |        |        |
| Composition of turnover, average 2011-2014        |        |        |
| - Micro enterprises (0-9 employees) (%)           | 17.1   | 17.3   |
| - SMEs (10-249 employees) (%)                     | 48.8   | 38.0   |
| - Large enterprises (250+ employees) (%)          | 34.1   | 44.1   |
| Share of foreign controlled enterprises, 2014 (%) | 3.16   | 1.18   |
| Top R&D spending enterprises                      |        |        |
| - average number per 10 mln population, 2011-15   | 49.7   | 29.9   |
| - average R&D spending, mln Euros, 2011-15        | 35.7   | 165.8  |
| Enterprise births (10+ empl.) (%), avg 2012-14    | 1.5    | 1.5    |
| Buyer sophistication 1-7 (best), 2013-14          | 3.7    | 3.6    |
| Ease of starting a business, Doing Business 2017  | 78.9   | 76.5   |
| <b>Socio-demographic indicators</b>               |        |        |
| GDP per capita, PPS, avg 2011-13                  | 32,900 | 25,400 |
| Change in GDP between 2010 and 2015, (%)          | 5.4    | 5.4    |
| Population size, avg 2011-15 (millions)           | 8.5    | 505.5  |
| Change in population between 2010 and 2015 (%)    | 2.7    | 1.1    |
| Population aged 15-64, avg 2011-2015 (%)          | 67.5   | 66.1   |
| Population density, average 2011-15               | 103.1  | 116.4  |
| Degree of urbanisation, average 2011-15 (%)       | 63.8   | 74.4   |

Values in green show performance above 120% of EU, values in red show performance below 80% of EU.



| Austria                                      | Performance relative to EU 2010 in |              | Change 2010-2016 |
|--|------------------------------------|--------------|------------------|
|  | 2010                               | 2016         |                  |
| <b>SUMMARY INNOVATION INDEX</b>              | <b>112.5</b>                       | <b>121.5</b> | <b>8.9</b>       |
| <b>Human resources</b>                       | <b>97.5</b>                        | <b>138.6</b> | <b>41.1</b>      |
| New doctorate graduates                      | 146.2                              | 130.7        | -15.5            |
| Population with tertiary education           | 171                                | 142.1        | 125.0            |
| Lifelong learning                            | 132.6                              | 144.2        | 11.6             |
| <b>Attractive research systems</b>           | <b>137.1</b>                       | <b>157.6</b> | <b>20.5</b>      |
| International scientific co-publications     | 290.0                              | 442.7        | 152.7            |
| Most cited publications                      | 113.3                              | 116.9        | 3.6              |
| Foreign doctorate students                   | 116.9                              | 114.9        | -2.1             |
| <b>Innovation-friendly environment</b>       | <b>161.2</b>                       | <b>110.5</b> | <b>-50.7</b>     |
| Broadband penetration                        | 133.3                              | 133.3        | 0.0              |
| Opportunity-driven entrepreneurship          | 180.9                              | 94.4         | -86.5            |
| <b>Finance and support</b>                   | <b>84.6</b>                        | <b>95.9</b>  | <b>11.2</b>      |
| R&D expenditure in the public sector         | 117.8                              | 130.7        | 12.4             |
| Venture capital expenditures                 | 42.8                               | 52.5         | 9.7              |
| <b>Firm investments</b>                      | <b>132.4</b>                       | <b>165.1</b> | <b>32.7</b>      |
| R&D expenditure in the business sector       | 150.7                              | 185.0        | 34.3             |
| Non-R&D innovation expenditures              | 61.0                               | 61.5         | 0.5              |
| Enterprises providing ICT training           | 171.4                              | 228.6        | 57.1             |
| <b>Innovators</b>                            | <b>115.9</b>                       | <b>122.3</b> | <b>6.4</b>       |
| SMEs product/process innovations             | 119.0                              | 124.0        | 5.0              |
| SMEs marketing/organizational innovations    | 109.9                              | 121.3        | 11.4             |
| SMEs innovating in-house                     | 118.9                              | 121.6        | 2.7              |
| <b>Linkages</b>                              | <b>113.9</b>                       | <b>129.8</b> | <b>16.0</b>      |
| Innovative SMEs collaborating with others    | 135.4                              | 135.3        | 57.9             |
| Public-private co-publications               | 130.1                              | 127.8        | -2.2             |
| Private co-funding of public R&D exp.        | 82.3                               | 79.5         | -2.8             |
| <b>Intellectual assets</b>                   | <b>146.6</b>                       | <b>139.7</b> | <b>-6.8</b>      |
| PCT patent applications                      | 109.4                              | 115.5        | 6.0              |
| Trademark applications                       | 170.4                              | 163.4        | -7.0             |
| Design applications                          | 178.3                              | 154.3        | -24.0            |
| <b>Employment impacts</b>                    | <b>77.3</b>                        | <b>78.5</b>  | <b>1.2</b>       |
| Employment in knowledge-intensive activities | 111.5                              | 114.1        | 2.6              |
| Employment fast-growing enterprises          | 52.3                               | 52.5         | 0.2              |
| <b>Sales impacts</b>                         | <b>77.8</b>                        | <b>82.7</b>  | <b>4.9</b>       |
| Medium and high tech product exports         | 97.5                               | 106.6        | 9.0              |
| Knowledge-intensive services exports         | 55.6                               | 54.1         | -1.5             |
| Sales of new-to-market/firm innovations      | 80.1                               | 87.3         | 7.2              |

Dark green: normalised performance above 120% of EU; light green: normalised performance between 90% and 120% of EU; yellow: normalised performance between 50% and 90% of EU; orange: normalised performance below 50% of EU. Normalised performance uses the data after a possible imputation of missing data and transformation of the data.

Change highlighted in green is positive; change highlighted in light red is negative.