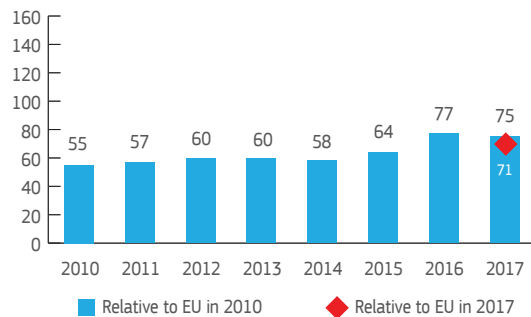




Lithuania is a **Moderate Innovator**. Over time, performance has increased relative to that of the EU in 2010.



Innovation-friendly environment and Linkages are the strongest innovation dimensions. Attractive research systems and Sales impacts are the weakest innovation dimensions.

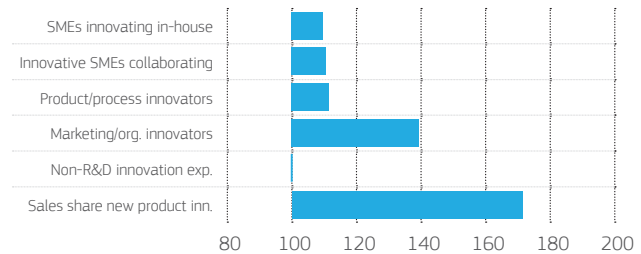
| Lithuania | Performance relative to EU 2010 in | | Relative to EU 2017 in |
|--|------------------------------------|--------------|------------------------|
| | 2010 | 2017 | 2017 |
| SUMMARY INNOVATION INDEX | 55.1 | 75.3 | 71.1 |
| Human resources | 106.9 | 115.5 | 96.8 |
| New doctorate graduates | 61.5 | 51.1 | 36.7 |
| Population with tertiary education | 214.9 | 237.3 | 209.2 |
| Lifelong learning | 34.4 | 50.0 | 49.0 |
| Attractive research systems | 32.0 | 39.5 | 34.8 |
| International scientific co-publications | 48.2 | 159.6 | 85.8 |
| Most cited publications | 47.9 | 29.8 | 28.7 |
| Foreign doctorate students | 3.8 | 18.8 | 17.0 |
| Innovation-friendly environment | 103.3 | 164.5 | 123.0 |
| Broadband penetration | 177.8 | 311.1 | 175.0 |
| Opportunity-driven entrepreneurship | 59.2 | 77.6 | 72.1 |
| Finance and support | 47.8 | 64.0 | 59.4 |
| R&D expenditure in the public sector | 82.5 | 69.9 | 72.5 |
| Venture capital expenditures | 3.5 | 56.4 | 46.2 |
| Firm investments | 48.9 | 104.2 | 93.2 |
| R&D expenditure in the business sector | 13.5 | 22.2 | 20.0 |
| Non-R&D innovation expenditures | 109.1 | 280.8 | 256.8 |
| Enterprises providing ICT training | 35.7 | 42.9 | 37.5 |
| Innovators | 43.5 | 79.7 | 92.6 |
| SMEs product/process innovations | 43.2 | 93.8 | 114.7 |
| SMEs marketing/organisational innovations | 37.0 | 45.9 | 55.4 |
| SMEs innovating in-house | 50.5 | 100.7 | 107.9 |
| Linkages | 83.4 | 103.0 | 102.0 |
| Innovative SMEs collaborating with others | 68.5 | 140.3 | 139.6 |
| Public-private co-publications | 46.3 | 31.0 | 30.7 |
| Private co-funding of public R&D exp. | 139.2 | 144.0 | 142.0 |
| Intellectual assets | 25.7 | 51.5 | 51.0 |
| PCT patent applications | 14.8 | 21.8 | 22.8 |
| Trademark applications | 56.1 | 107.5 | 95.1 |
| Design applications | 13.0 | 37.2 | 38.5 |
| Employment impacts | 62.2 | 39.6 | 39.3 |
| Employment in knowledge-intensive activities | 51.2 | 51.9 | 47.1 |
| Employment fast-growing enterprises | 84.4 | 30.7 | 32.8 |
| Sales impacts | 31.9 | 36.6 | 35.1 |
| Medium and high tech product exports | 36.0 | 49.6 | 46.8 |
| Knowledge-intensive services exports | 0.3 | 8.7 | 8.3 |
| Sales of new-to-market/firm innovations | 63.7 | 53.7 | 53.1 |

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.

Data in red show a decline in performance compared to 2010.

Provisional CIS 2016 data show improved performance for five indicators and slightly reduced performance for one indicator.

Provisional CIS 2016 vs CIS 2014 (=100)



Structural differences with the EU are shown in the table below. The turnover share of SMEs is well above the EU average. GDP per capita, the employment share in high and medium high-tech manufacturing, the employment share in knowledge-intensive services, and the turnover share of large enterprises are well below the EU average.

| | LT | EU |
|--|--------|--------|
| Performance and structure of the economy | | |
| GDP per capita (PPS) | 21,500 | 28,600 |
| Average annual GDP growth (%) | 3.1 | 2.2 |
| Employment share Manufacturing (NACE C) (%) | 15.3 | 15.5 |
| of which High and Medium high-tech (%) | 13.3 | 37.2 |
| Employment share Services (NACE G-N) (%) | 39.5 | 41.6 |
| of which Knowledge-intensive services (%) | 23.7 | 35.0 |
| Turnover share SMEs (%) | 48.7 | 38.0 |
| Turnover share large enterprises (%) | 33.3 | 44.4 |
| Foreign-controlled enterprises – share of value added (%) | 11.9 | 12.5 |
| Business and entrepreneurship | | |
| Enterprise births (10+ employees) (%) | 2.3 | 1.5 |
| Total Entrepreneurial Activity (TEA) (%) | n/a | 6.6 |
| FDI net inflows (% GDP) | 1.9 | 3.6 |
| Top R&D spending enterprises per 10 mln population | 0.0 | 19.7 |
| Buyer sophistication (1 to 7 best) | 3.2 | 3.7 |
| Governance and policy framework | | |
| Ease of starting a business (0 to 100 best) | 78.3 | 76.9 |
| Basic-school entrepren. education and training (1 to 5 best) | n/a | 1.9 |
| Govt. procurement of advanced tech products (1 to 7 best) | 3.0 | 3.5 |
| Rule of law (-2.5 to 2.5 best) | 1.0 | 1.2 |
| Demography | | |
| Population size (millions) | 2.9 | 510.1 |
| Average annual population growth (%) | -1.3 | 0.3 |
| Population density (inhabitants/km ²) | 46.3 | 117.1 |

EU targets for 2020

| Indicator | 2013 | Latest | Target ¹ |
|--|------|--------|---------------------|
| Gross domestic expenditure on R&D (% of GDP) | 0.95 | 0.85 | 1.90 |
| Tertiary educational attainment (% of population aged 30-34) | 51.3 | 58.2 | 48.7 |

¹ Sources are provided in the introduction to the country profiles.

RIO country report:

<https://rio.jrc.ec.europa.eu/en/country-analysis/Lithuania>

European Semester country report:

<https://ec.europa.eu/info/sites/info/files/2018-european-semester-country-report-lithuania-en.pdf>