

The Researchers Report 2012

Country Profile: Latvia



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1. Key data

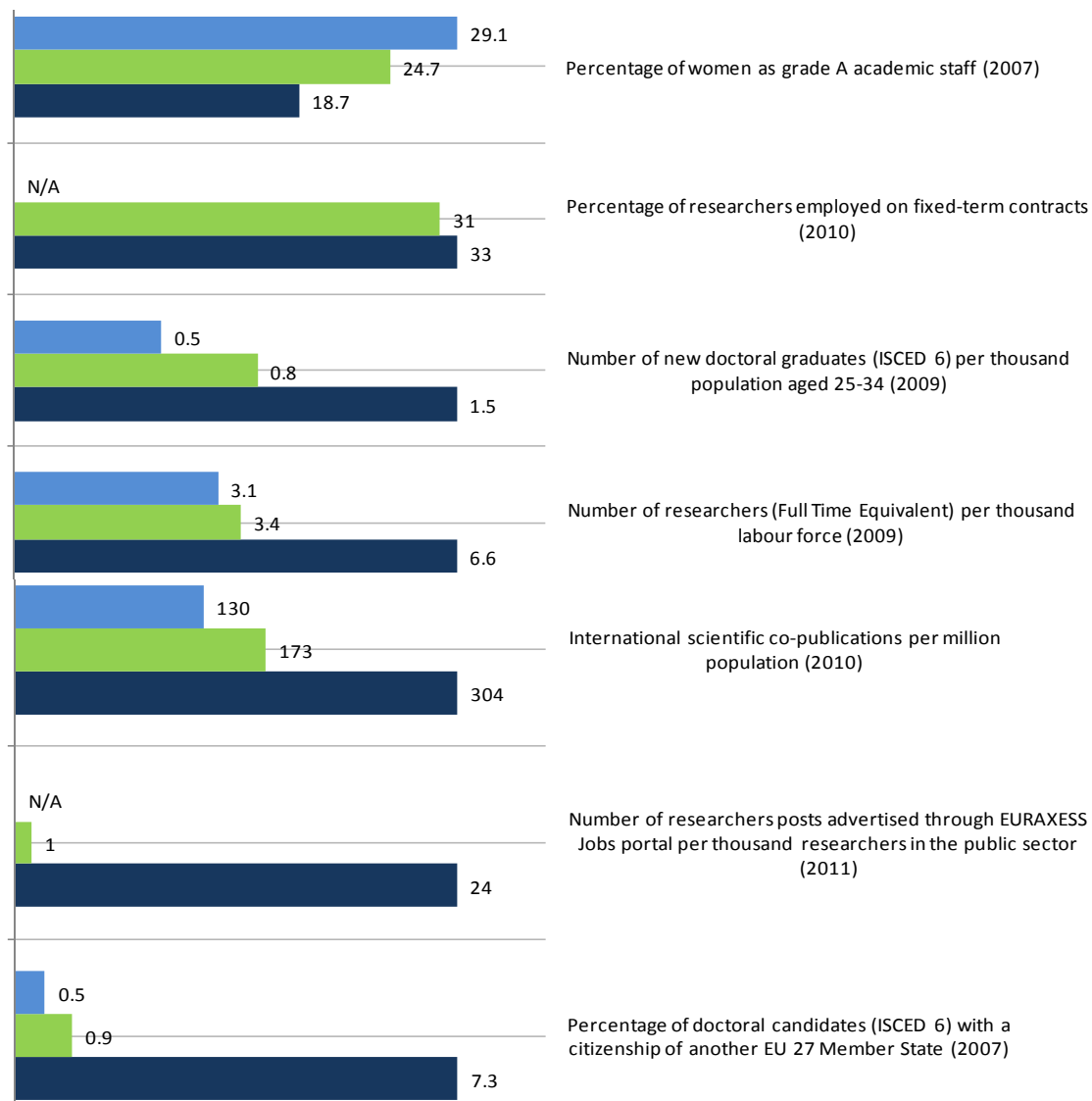
National R&D intensity target

“Latvia is aware that an effort in R&D is necessary to ensure a sustainable development of the country, which has badly suffered from the financial crisis. Latvia increased its R&D intensity during the 2000-08 period by an average annual growth rate of 4.1 %, passing from 0.44 % in the year 2000 to 0.61 % in 2008. This increase has been fuelled thanks to an increase in public R&D investment, which rose at an average annual growth rate of 7.1 % (from 0.26 % to 0.46 %). On the other hand, private R&D fell from 0.18 % to 0.15 %. However, with the deterioration of the economic situation in the country, the public and private sector investment in R&D decreased in 2009 (0.46 %) and again in 2010.”¹

Key indicators measuring the country's research performance

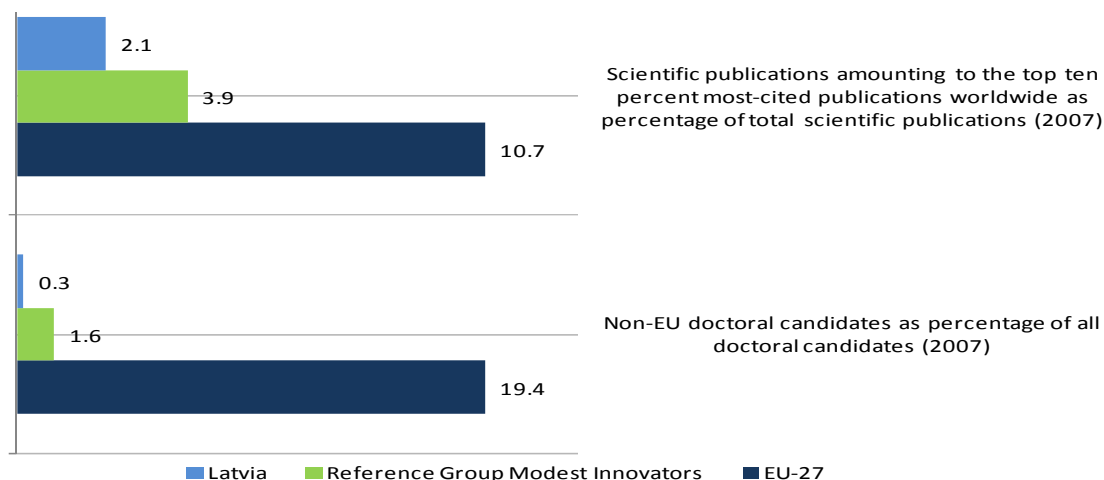
The figure below presents key indicators measuring Latvia's research performance against a reference group and the EU-27 average².

Figure 1: Key indicators – Latvia



¹ European Commission (2011), “Innovation Union Competitiveness Report 2011”.

² The values refer to 2011 or the latest year available.



Source: Deloitte

Data: Eurostat, SHE Figures, EURAXESS Jobs Portal, Science Metrix/Scopus (Elsevier), Innovation Union Scoreboard 2010

Notes: Based on their average innovation performance across 24 indicators Bulgaria, Latvia, Lithuania and Romania show a performance well below that of the EU-27. These countries are the Modest Innovators³.

Stock of researchers

The table below presents the stock of researchers by Head Count (HC) and Full Time Equivalent (FTE) and in relation to the active labour force.

Table 1: Human resources – Stock of researchers

| Indicator | Latvia | EU Average |
|---|--------|------------|
| Head Count per 1 000 active labour force (2008) | 6.13 | 9.45 |
| Head Count (2008) | 7 447 | - |
| FTE per 1 000 active labour force (2009) | 3.05 | 6.63 |
| Full time equivalent (FTE) (2009) | 3 621 | - |

Source: Deloitte

Data: Eurostat

2. National strategies

The European Social Fund (ESF) is one of the key instruments for the development of R&D in Latvia, including support for doctoral studies, post-doctoral research, development of human resources in R&D, partnerships between businesses and academia, and the development of research infrastructure. Better education and training is at the heart of Latvia's ESF Programme. Providing high-quality education for all, attracting more young people into graduate-level science and technology studies, and promoting the country's R&D and innovation system are part of a key national strategy to shift the economy to more hi-tech industrial sectors.

3. Women in the research profession

Measures supporting women researchers in top-level positions

In 2007, the percentage of women grade A academic staff was 29.1% in Latvia compared with 24.7% among the Innovation Union reference group and an EU average of 18.7%⁴. The proportion of women working in the science sector is among the highest in the EU-27. In 2009, the percentage of women scientists was 53.8% in Latvia compared with 54.6% in Lithuania, 51.2% in Bulgaria, 49.6% in Croatia and 45.7% in Romania⁵. However, male scientists dominate in leadership positions in Latvia. As of 2011, the Latvian Government had not introduced any new measures aimed at supporting women in top-level positions.

³ European Commission (2011), "Innovation Union Scoreboard 2010".

⁴ See Figure 1 "Key indicators – Latvia".

⁵ Ministry of Education and Science (2011), "Development of Science and Technology in Latvia".

The ESF co-funded activities (see chapter 2 “National strategies”) aim at promoting gender equality in the research profession. For example, promotion of gender equality is one of the criteria for the evaluation of grant proposals in the context of the ESF activities within the field of higher education and science.

Quotas to ensure a representative gender balance

The Latvian government has not introduced any measures aimed at ensuring a representative gender balance in the researcher profession. In fact, the proportion of women working in science is among the highest in the European Union (see above).

4. Open, transparent and merit-based recruitment

Recruitment system

Vacancies for academic positions and top-level positions (e.g. directors) in publicly-funded scientific institutions and publicly-funded higher education institutions are advertised in the official newspaper *Latvijas Vestnesis* (Latvian Herald) (paper and online versions). The EURAXESS Jobs portal provides a link to the official newspaper. Institutions can take additional measures in order to advertise job vacancies.

Open recruitment in institutions

The table below presents information on open recruitment in higher education and public research institutions.

Table 2: Open recruitment in higher education and public research institutions

| Do institutions in the country currently have policies to ...? | Yes/No | Description |
|---|--------|---|
| – publish job vacancies on relevant national online platforms | - | - |
| – publish job vacancies on relevant Europe-wide online platforms (e.g. EURAXESS) | No | It is up to the autonomous institutions. |
| – publish job vacancies in English | No | It is up to the autonomous institutions. |
| – systematically establish selection panels | Yes | The establishment of selection panels is regulated by “Law On Institutions of Higher Education” (1995) and “Law on Scientific Activity” (2005). |
| – establish clear rules for the composition of selection panels (e.g. number and role of members, inclusion of foreign experts, gender balance, etc.) | Yes | The composition of selection panels is regulated by “Law On Institutions of Higher Education” (1995) and “Law on Scientific Activity” (2005). |
| – publish the composition of a selection panel (obliging the recruiting institution) | Yes | - |
| – publish the selection criteria together with job advert | Yes | The job advert is published together with the selection criteria (or with a link or notice to these criteria). |
| – regulate a minimum time period between vacancy publication and the deadline for applying | Yes | The minimum time periods are regulated by “Law On Institutions of Higher Education” (1995) and “Law on Scientific Activity”(2005) |
| – place the burden of proof on the employer to prove that the recruitment procedure was open and transparent | No | - |
| – offer applicants the right to receive adequate feedback | No | - |
| – offer applicants the right to appeal | Yes | Such rights are granted by “Law On Institutions of Higher Education” (1995) and the common regulation in “Administrative Procedure Law” (2001). |

Source: Deloitte

EURAXESS Services Network

The EURAXESS Latvia Service Centre provides information on entry conditions, transfer of social security and pension contributions, finding accommodation, administrative assistance, etc.

5. Education and training

Measures to attract and train people to become researchers

The Latvian education system performs relatively well in relation to European quantitative benchmarks. However, there is a general challenge in improving the quality at all levels of education, increase participation in life-long learning and improve the currently very low of mathematics, technology, computing and science graduates⁶.

The ESF Programmes (see chapter 2 “National strategies”) play an important role in Latvia’s structural reforms of the education sector. Their aim is to modernise the universities and retain academic staff, and to attract more Masters and PhD students, especially in science, technology and engineering.

Despite the availability of the EU’s Structural Funds for Master’s and doctoral studies in recent years, the number of staff employed in the science sector is insufficient to ensure full implementation of the country’s economic strategy and sustainable growth. Fluctuations in R&D funding, an unstable economic situation, low pay levels and limited career opportunities have a negative impact on attracting young people into the researcher profession⁷.

Doctoral graduates by gender

The Guidelines for the Development of Science and Technology for 2009-2013⁸ state that the number of PhDs awarded annually should be increased from 230 in 2010 to at least 425 by 2013. The number of doctoral candidates has, in fact, increased in the last couple of years, with a 7.5% average annual growth percentage in the number of new doctoral graduates (ISCED 6) in the last five years per 1 000 inhabitants aged 25-34. This can be considered a good average achievement relative to the other EU-27 Member States. However, given the ratio of new doctoral graduates per 1 000 in the population cohort, as reflected in the table below, there is still some way to go even, though funding for scientific work in Latvia has gradually been increasing since 2005 when doctoral students had the opportunity of receiving scholarships within the context of EU structural funding⁹.

The table below shows doctoral graduates in Latvia by gender as a ratio of the total population.

Table 3: Doctoral graduates by gender

| Indicator | Latvia | EU average |
|---|--------|------------|
| New doctoral graduates (ISCED 6) per 1 000 population aged 25-34 (total) (2009) | 0.5 | 1.5 |
| Female Graduates (ISCED 6) per 1 000 of the female population aged 25-34 (2009) | 0.6 | 1.4 |
| Male Graduates (ISCED 6) per 1 000 of the male population aged 25-34 (2009) | 0.4 | 1.6 |

Source: Deloitte

Data: Eurostat

Funding of doctoral candidates

The ESF co-funded activity “Support for the implementation of doctoral study programmes (2007-2013)” offers doctoral studies free of charge on a competitive basis. There is no formal bar on foreign students applying for state-funded PhDs in Latvia; in practice, language barriers are a disincentive.

Measures to increase the quality of doctoral training

In 2009/2010, the University of Latvia and the Riga Technical University set up their doctoral schools. The ESF-supported activities (see chapter 2 “National strategies”) also aim to increase the quality of doctoral training.

Skills agenda for researchers

The report “Development of Science and Technology in Latvia, 2011”¹⁰ calls for measures to improve researchers’ employment skills and competencies.

⁶ European Commission (2011), “European Social Fund, Latvia”, available at: <http://ec.europa.eu/esf/main.jsp?catId=389&langId=en>

⁷ Ministry of Education and Science (2010), “Development of Science and Technology in Latvia, 2011”

⁸ Available at: http://erawatch.jrc.ec.europa.eu/erawatch/opencms/information/country_pages/lv/policydocument/policydoc_mig_0004

⁹ Ministry of Education and Science (2010), “Development of Science and Technology in Latvia, 2011”

¹⁰ Ministry of Education and Science (2010), “Development of Science and Technology in Latvia, 2011”, available at: http://izm.izm.gov.lv/upload_file/Zinatne/zinatnes-un-tehnologiju-attistiba-Latvija-2011.pdf

6. Working conditions

Remuneration

The programmes implemented under the European Social Fund (ESF) and the European Regional Development Fund (ERDF) set researchers' maximum pay levels. Universities and research institutions can fix researchers' salary brackets based on the levels defined by the ESF/ERDF programmes. They enjoy a high degree of flexibility in defining the salary levels for their academic staff. The researchers' income can vary considerably depending on the research project and the source of funding.

Researchers' Statute

The Law on Scientific Activity¹¹ and the Law on Institutions of Higher Education¹² defines the statute of scientists, other research and scholars staff.

'European Charter for Researchers' & 'Code of Conduct for the Recruitment of Researchers'

The implementation of the 'European Charter for Researchers' and the 'Code of Conduct for the Recruitment of Researchers' is not directly promoted at national level. In 2011, the Riga University - as the first institution in Latvia - signed the 'Charter & Code'.

Autonomy of institutions

The Law on Scientific Activity and the Law on Institutions of Higher Education grant autonomy to Higher Education Institutions (HEI). As autonomous institutions of education and science with the right to self-governance, HEIs can decide on the overall administrative structure and develop their own academic profiles.

Career development

A number of Latvian universities have implemented dedicated study programmes (Master and doctoral studies) aimed at promoting researchers' skills sets and career prospects, including inter-sectoral cooperation and mobility.

Shift from core to project-based funding

The majority of ESF/ERDF funding programmes are project-based (short-term). Hence, there is no measurable impact on researchers' working conditions resulting from a shift from core to project-based funding.

Social security benefits (sickness, unemployment, old-age)

Generally, researchers employed under permanent or temporary contracts receive a salary, pay mandatory social security contributions, and are entitled to social security benefits (including sickness, unemployment and old-age benefits).

7. Collaboration between academia and industry

The table below summarises key programmes designed to boost collaboration between academia and industry, and to foster doctoral training in cooperation with industry.

Table 4: Collaboration between academia and industry

| Measure | Description |
|--|--|
| Indicative activity 1.3.1.9. Attraction of highly qualified employees (ESF) (2009-2010) | This activity aimed to strengthen businesses' competitiveness and promote research activities in enterprises by attracting qualified employees – both doctorate students and graduates, research personnel of academic institutions and institutes, as well as highly qualified specialists from abroad - for the development of specific technologies and new products. Three projects were realized between 2000 and 2010. |
| Indicative Activity 2.1.1.1. Support to science and research (ERDF) (2009-2013) | This activity facilitates the integration of science and industry in areas such as agrobiotechnology, informatics, biomedicine, pharmaceuticals, energy, material science, forest science, medical science and environmental science. It ensures public access to the research results. 122 projects are currently in progress. |
| Indicative Activity 2.1.2.1. | This activity aims to boost the commercialisation of science and transfer of |

¹¹ Law on Scientific Activity (with amending laws up to 21 June 2007), available at: http://www.vvc.gov.lv/export/sites/default/docs/LRTA/Likumi/Law_on_Scientific_Activity.doc

¹² Law on Institutions of Higher Education (with amending laws up to 2 March 2006), available at: http://www.vvc.gov.lv/export/sites/default/docs/LRTA/Likumi/Law_On_Institutions_of_Higher_Education.doc

| Measure | Description |
|---|---|
| Commercialisation of science and transfer of technologies (ERDF) (2010-2013) | technologies by promoting cooperation between research and industry in the implementation of projects of industrial research (applied research) and the development of new products and technologies. |

Source: Deloitte

8. Mobility and international attractiveness

Measures aimed at attracting and retaining 'leading' national, EU and third country researchers

In 2007, doctoral candidates (ISCED 6) who were citizens of another EU-27 Member State constituted 0.5% of the total in Latvia compared with 0.9% among the Innovation Union reference group and an EU average of 7.3%¹³. In the same year, non-EU doctoral candidates were 0.3% of all doctoral candidates in Latvia compared with 1.6% among the Innovation Union reference group and an EU average of 19.4%.

The Law on Immigration and Research Activity regulates the employment of foreign researchers in Latvia. In addition, the Law on Research Activity (2010) and the Cabinet Regulations (2008)¹⁴ include legal norms for admitting third-country researchers for the purposes of scientific research. Scientific institutions are entitled to recruit third-country nationals to participate in scientific research projects.

Foreign job seekers, irrespective of the duration of their stay, are required to have a temporary residence permit. EU researchers and third-country nationals with a permanent residence permit and/or the status of a long-term EU resident may apply for any research position in Latvia. The recruitment of non-national applicants is limited in practice, however, by the requirements on knowledge of the Latvian language contained in the Official Language Law (1999) and the related regulations¹⁵.

Inward mobility (funding)

The ESF co-funded activities (see chapter 2 "National strategies") promote the return of Latvian researchers and involvement of foreign researchers (incoming mobility). For example, the involvement of mobile researchers is one of the criteria for the evaluation of grant proposals in the context of the ESF activities within the field of higher education and science.

Portability of national grants

While research grants are portable to another national research institution, the current law does not regulate the portability of grants to another country.

Measures encouraging inter-sectoral mobility

The Competence Centres (see chapter 7 "Collaboration between academia and industry") encourage inter-sectoral mobility. Researchers do not change their employer when taking up a work placement with another employer.

¹³ See Figure 1 "Key indicators – Latvia".

¹⁴ Regulations of the Cabinet of Ministers of 21.07.2008 No. 568 on the procedure to be followed by scientific institutions at signing and ending employment contracts with foreign researchers.

¹⁵ European Commission (2010), "Erawatch Country Reports 2010: Latvia".