



**Committee for the promotion of French-German-Polish Cooperation  
(« Weimar Triangle »)**

**Komitet Wspierania Współpracy Francusko-Niemiecko-Polskiej  
(« Trójkąt Weimarski »)**



**Adam Mickiewicz University, Poznań  
(AMU)**

**SECOND ANNUAL ADAM MICKIEWICZ LECTURE  
ON FRENCH-GERMAN-POLISH COOPERATION  
(‘WEIMAR TRIANGLE’)**

**WEDNESDAY, 16 OCTOBER 2013**

SENATE HALL, 1 H. WIENIAWSKI, COLLEGIUM MINUS, 61-712 POZNAŃ

Introductory remarks by

**Professor h.c. Dr. Drs.h.c. Klaus-Heinrich Standke**

Former Director for Science and Technology, United Nations, New York  
President, Committee for the French-German-Polish Cooperation,  
Berlin/Cabourg

***“The possible role of universities and the scientific  
community within the French-German-Polish Cooperation”***

Dear Rector magnificus Professor Marciniak,  
Dear President of the French-Germany University Professor Neau  
Dear ViceRector Professor Vitkos  
Ladies and Gentlemen  
And, last but not least, most important target group of this meeting:  
dear students.

This is the second of a hopefully long series of Adam Mickiewicz lectures at the Adam Mickiewicz University in Poznań within the French-German-Polish Cooperation, known as the “Weimar Triangle”.  
When the Foreign Ministers at that time, Hans-Dietrich Genscher, Roland Dumas and Krzysztof Skubiszewski, met in 1991 on the birthday of the great

German and European poet Johann Wolfgang von Goethe in Weimar, they have launched a “Joint Declaration on the Future of Europe”.

The three ministers underlined the responsibility of their three countries after the collapse of the Berlin Wall and after the collapse of the Iron curtain which has separated East and West Europe since World War II to join forces for building up a united Europe.

In the Weimar declaration from 1991 - among other issues, such as culture, media, science – the necessity of developing intensified exchange programmes among universities was already spelled out.

Our non-governmental committee aims to foster the cooperation of the civil society among France, Germany and Poland. In order to make this visible to a greater public, we are awarding since 2006 annually an “Adam Mickiewicz Prize” honouring merits in this trilateral cooperation.

When we met for the first time in spring 2012 in Berlin, Rector Marciniak and I agreed to launch in parallel to the Adam Mickiewicz Prize annually this lecture here at the Adam Mickiewicz University.

Last year, on 6 September 2012, the President of the Viadrina University, Dr. Gunter Pleuger, inaugurated this series with a programmatic lecture on: „Academic Impulses for the Weimar Triangle Cooperation“.

This year, in the same line of thought, the President of the French-German University Professor Fabrice Neau will speak to us on **“The Franco-German University, a contribution to the European space of higher education and research”**.

It is very fitting that this lecture will focus on the French-German University highlighting openings for the Polish Academia as well as to other countries, since this virtually operating university originated like our Weimar Triangle also in the town of Weimar. We shall learn more about this coincidence in a short while.

Before leaving the floor to our main speaker and guest of honour, I would like to situate the role of the universities within the European space of higher education and research. We shall reach some surprising conclusions:

The “European Union of the 28” (1 July 2013), has 504, 5 million inhabitants, out of which some 20 million are students.

Poland with a population of 38,5 mill. ranks with 7,6 % of the European population as number 6 – behind Germany No.1 (80,6 mill.), U.K. No.2 (64,2 mill.) France No.3 (63,8 mill.), Italy No. 4 and Spain No. 5.

Against this demographic ranking may come to a surprise to some that Poland, sixth largest European country by the number of its population ranks after Germany with 2,5 mill. Students and France 2,245 mill students on position number 3 with a student body of 2,149 mill students, almost equal with France.

Against this – positive - surprise may come to others that Poland with her massive investment into what is called ‘human capital’ is lagging far behind when we compare Poland’s position on Research and Development. With 0,74% of R&D expenditures of the GDP Poland ranks between Lithuania (0,79%) and Slovakia (0,63%) on the 4th lowest position of the EU.

Perhaps Rector Marciniak may wish to choose this phenomenon, i.e. over proportional high ratio of Poland on Higher Education on one side and surprisingly low level of investment in Research and Development, respectively Science and Technology, on the other side as main topic of the Adam Mickiewicz lecture 2014.

The international competitiveness of Poland – and thus of Europe as a whole - needs, of course both in order to safeguard and to ensure high employment as well as positive international trade and patent balances.

The international mobility of university professors and students is the centre piece of the European space of higher education and research. The French-German University can be a model to achieve this target.

For further reading:

Standke, Klaus-Heinrich, Rola szkół wyższych w Trójkącie Weimarskim

Standke, Klaus-Heinrich, Trójkąt Weimarski – współpraca naukowa i techniczna

Kosmider, Tomasz, Polish-German-French Cooperation in Science and Technology

Renault. Jean-François, Réflexions sur la coopération franco-germano-polonaise en formation, recherche et développement et transfert de l'innovation

In: Standke, Klaus-Heinrich (dir.), Trójkąt Weimarski w Europie: Współpraca polsko-niemiecko-francuska. Powstanie – Potencjał- Perspektywy. Wydawnictwo Adam Marszałek, Toruń 2010, ISBN 978-83-7611-574-0

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### Statistical Annexes

**A.) Students in tertiary education in the EU-27**

**B.) Gross domestic expenditure on R&D, 2000-2010 (% share of GDP)**

**C.) Patent applications to the European Patent Office and patents granted by the US Patent and Trademark Office, 2001-2010**

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## A.) Students in tertiary education in the EU-27 (Eurostat)

|                  | Total number (1 000) | of which, studying (%) |                                 |                            |                               |                       |                  |          |
|------------------|----------------------|------------------------|---------------------------------|----------------------------|-------------------------------|-----------------------|------------------|----------|
|                  |                      | Humanities & arts      | Social sciences, business & law | Science, math. & computing | Engin., manuf. & construction | Agricul. & veterinary | Health & welfare | Services |
| <b>EU-27</b>     | 19 847               | 12.2                   | 34.0                            | 10.1                       | 14.4                          | 1.8                   | 13.6             | 4.0      |
| Belgium          | 445                  | 10.0                   | 29.4                            | 5.8                        | 10.7                          | 2.6                   | 21.4             | 1.6      |
| Bulgaria         | 287                  | 7.7                    | 42.8                            | 5.1                        | 18.7                          | 2.4                   | 6.9              | 8.3      |
| Czech Republic   | 437                  | 8.9                    | 33.4                            | 11.0                       | 14.2                          | 3.7                   | 10.4             | 5.2      |
| Denmark          | 241                  | 14.1                   | 31.9                            | 8.6                        | 10.0                          | 1.5                   | 21.1             | 2.3      |
| Germany (2)      | 2 556                | 13.7                   | 26.2                            | 14.2                       | 16.4                          | 1.4                   | 17.9             | 2.8      |
| Estonia          | 69                   | 13.6                   | 36.4                            | 10.4                       | 13.4                          | 2.2                   | 9.1              | 8.0      |
| Ireland          | 194                  | 16.3                   | 26.4                            | 14.0                       | 12.5                          | 1.5                   | 15.3             | 3.9      |
| Greece           | 642                  | 12.4                   | 32.2                            | 13.4                       | 17.9                          | 4.8                   | 7.8              | 2.6      |
| Spain            | 1 879                | 10.6                   | 31.4                            | 9.1                        | 17.3                          | 1.7                   | 12.6             | 5.8      |
| France           | 2 245                | 14.2                   | 37.2                            | 12.3                       | 13.2                          | 1.2                   | 15.9             | 3.4      |
| Italy            | 1 980                | 14.5                   | 33.8                            | 7.7                        | 15.7                          | 2.1                   | 11.6             | 2.8      |
| Cyprus           | 32                   | 10.1                   | 51.7                            | 8.5                        | 9.8                           | 0.3                   | 7.1              | 4.3      |
| Latvia           | 113                  | 8.4                    | 49.9                            | 5.5                        | 12.6                          | 1.1                   | 8.1              | 6.1      |
| Lithuania        | 201                  | 7.3                    | 46.5                            | 5.1                        | 17.1                          | 1.9                   | 8.8              | 2.9      |
| Luxembourg       | 5                    | 12.0                   | 47.2                            | 11.2                       | 8.1                           | 0.0                   | 4.5              | 0.0      |
| Hungary          | 389                  | 9.6                    | 40.4                            | 7.1                        | 14.0                          | 2.4                   | 9.3              | 10.5     |
| Malta            | 11                   | 18.1                   | 33.2                            | 16.4                       | 9.4                           | 0.2                   | 11.6             | 1.2      |
| Netherlands      | 651                  | 8.3                    | 38.2                            | 6.2                        | 8.0                           | 1.0                   | 16.9             | 6.3      |
| Austria          | 350                  | 13.4                   | 37.1                            | 11.0                       | 14.7                          | 1.3                   | 7.9              | 2.4      |
| Poland           | 2 149                | 9.2                    | 39.7                            | 8.1                        | 13.2                          | 1.9                   | 7.7              | 6.7      |
| Portugal         | 384                  | 8.9                    | 31.8                            | 7.3                        | 22.1                          | 1.8                   | 16.3             | 6.4      |
| Romania          | 1 000                | 7.8                    | 55.0                            | 4.9                        | 17.9                          | 2.1                   | 7.5              | 3.3      |
| Slovenia         | 115                  | 8.3                    | 37.5                            | 6.7                        | 18.9                          | 3.2                   | 8.7              | 9.3      |
| Slovakia         | 235                  | 6.9                    | 30.7                            | 8.4                        | 15.0                          | 2.1                   | 18.2             | 6.2      |
| Finland          | 304                  | 14.3                   | 22.8                            | 10.2                       | 24.9                          | 2.2                   | 15.6             | 5.1      |
| Sweden           | 455                  | 13.6                   | 27.2                            | 8.6                        | 16.7                          | 1.0                   | 17.2             | 2.5      |
| United Kingdom   | 2 479                | 16.1                   | 27.6                            | 13.3                       | 8.5                           | 1.0                   | 17.7             | 1.7      |
| Iceland          | 18                   | 14.6                   | 36.9                            | 8.1                        | 9.3                           | 0.6                   | 13.2             | 1.7      |
| Liechtenstein    | 1                    | 0.0                    | 70.1                            | 0.0                        | 24.7                          | 0.0                   | 5.2              | 0.0      |
| Norway           | 225                  | 10.7                   | 31.6                            | 8.2                        | 8.0                           | 0.7                   | 20.1             | 5.2      |
| Switzerland      | 249                  | 12.0                   | 36.5                            | 9.7                        | 13.1                          | 1.1                   | 13.1             | 4.8      |
| Croatia          | 150                  | 9.5                    | 42.2                            | 6.8                        | 15.3                          | 4.2                   | 8.4              | 8.8      |
| FYR of Macedonia | 62                   | 12.2                   | 38.6                            | 11.7                       | 12.5                          | 2.9                   | 9.5              | 6.3      |
| Turkey           | 3 529                | 7.8                    | 53.8                            | 6.5                        | 10.9                          | 3.6                   | 5.9              | 3.2      |
| Japan            | 3 836                | 15.7                   | 29.1                            | 2.9                        | 15.3                          | 2.4                   | 13.2             | 5.2      |
| United States    | 20 428               | 15.1                   | 27.7                            | 8.6                        | 7.2                           | 0.7                   | 14.8             | 6.2      |

(1) Refer to the internet metadata file ([http://epp.eurostat.ec.europa.eu/cache/ITY\\_SDDS/en/educ\\_esms.htm](http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/educ_esms.htm)).

(2) Excludes students enrolled at ISCED 6.

Source: Eurostat (online data codes: tps00062 and educ\_enr15)

## B.) Gross domestic expenditure on R&D, 2000-2010 (% share of GDP) (Eurostat)

|                  | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|------------------|------|------|------|------|------|------|------|------|------|------|------|
| <b>EU-27</b>     | 1.86 | 1.87 | 1.88 | 1.87 | 1.83 | 1.83 | 1.85 | 1.85 | 1.92 | 2.01 | 2.00 |
| <b>Euro area</b> | 1.84 | 1.86 | 1.88 | 1.87 | 1.85 | 1.84 | 1.87 | 1.88 | 1.96 | 2.06 | 2.06 |
| Belgium          | 1.97 | 2.07 | 1.94 | 1.87 | 1.86 | 1.83 | 1.86 | 1.89 | 1.97 | 2.03 | 1.99 |
| Bulgaria         | 0.51 | 0.46 | 0.48 | 0.48 | 0.49 | 0.46 | 0.46 | 0.45 | 0.47 | 0.53 | 0.60 |
| Czech Republic   | 1.17 | 1.16 | 1.15 | 1.20 | 1.20 | 1.35 | 1.49 | 1.46 | 1.41 | 1.48 | 1.56 |
| Denmark (1)      | 2.24 | 2.39 | 2.51 | 2.58 | 2.48 | 2.46 | 2.48 | 2.58 | 2.85 | 3.06 | 3.06 |
| Germany          | 2.47 | 2.47 | 2.50 | 2.54 | 2.50 | 2.51 | 2.54 | 2.53 | 2.69 | 2.82 | 2.82 |
| Estonia          | 0.60 | 0.70 | 0.72 | 0.77 | 0.85 | 0.93 | 1.13 | 1.08 | 1.28 | 1.43 | 1.62 |
| Ireland          | 1.11 | 1.09 | 1.09 | 1.16 | 1.22 | 1.24 | 1.24 | 1.28 | 1.45 | 1.74 | 1.79 |
| Greece           | -    | 0.58 | -    | 0.57 | 0.55 | 0.60 | 0.59 | 0.60 | -    | -    | -    |
| Spain            | 0.91 | 0.92 | 0.99 | 1.05 | 1.06 | 1.12 | 1.20 | 1.27 | 1.35 | 1.39 | 1.39 |
| France (2)       | 2.15 | 2.20 | 2.24 | 2.18 | 2.16 | 2.11 | 2.11 | 2.08 | 2.12 | 2.26 | 2.26 |
| Italy            | 1.04 | 1.08 | 1.12 | 1.10 | 1.09 | 1.09 | 1.13 | 1.17 | 1.21 | 1.26 | 1.26 |
| Cyprus           | 0.25 | 0.26 | 0.30 | 0.35 | 0.37 | 0.41 | 0.43 | 0.44 | 0.43 | 0.49 | 0.50 |
| Latvia           | 0.45 | 0.41 | 0.42 | 0.38 | 0.42 | 0.56 | 0.70 | 0.60 | 0.62 | 0.46 | 0.60 |
| Lithuania        | 0.59 | 0.67 | 0.66 | 0.67 | 0.75 | 0.75 | 0.79 | 0.81 | 0.79 | 0.83 | 0.79 |
| Luxembourg       | 1.65 | -    | -    | 1.65 | 1.63 | 1.56 | 1.66 | 1.58 | 1.57 | 1.66 | 1.63 |
| Hungary (3)      | 0.81 | 0.93 | 1.00 | 0.94 | 0.88 | 0.94 | 1.01 | 0.98 | 1.00 | 1.17 | 1.16 |
| Malta (3)        | -    | -    | 0.26 | 0.25 | 0.53 | 0.57 | 0.62 | 0.58 | 0.56 | 0.54 | 0.63 |
| Netherlands      | 1.94 | 1.93 | 1.88 | 1.92 | 1.93 | 1.90 | 1.88 | 1.81 | 1.77 | 1.82 | 1.83 |
| Austria          | 1.93 | 2.05 | 2.12 | 2.24 | 2.24 | 2.46 | 2.44 | 2.51 | 2.67 | 2.72 | 2.76 |
| Poland           | 0.64 | 0.62 | 0.56 | 0.54 | 0.56 | 0.57 | 0.56 | 0.57 | 0.60 | 0.68 | 0.74 |
| Portugal         | 0.73 | 0.77 | 0.73 | 0.71 | 0.75 | 0.78 | 0.99 | 1.17 | 1.50 | 1.64 | 1.59 |
| Romania          | 0.37 | 0.39 | 0.38 | 0.39 | 0.39 | 0.41 | 0.45 | 0.52 | 0.58 | 0.47 | 0.47 |
| Slovenia (4)     | 1.38 | 1.49 | 1.47 | 1.27 | 1.39 | 1.44 | 1.56 | 1.45 | 1.65 | 1.86 | 2.11 |
| Slovakia         | 0.65 | 0.63 | 0.57 | 0.57 | 0.51 | 0.51 | 0.49 | 0.46 | 0.47 | 0.48 | 0.63 |
| Finland          | 3.35 | 3.32 | 3.36 | 3.44 | 3.45 | 3.48 | 3.48 | 3.47 | 3.70 | 3.92 | 3.87 |
| Sweden (5)       | -    | 4.13 | -    | 3.80 | 3.58 | 3.56 | 3.68 | 3.40 | 3.70 | 3.61 | 3.42 |
| United Kingdom   | 1.81 | 1.79 | 1.79 | 1.75 | 1.68 | 1.73 | 1.75 | 1.78 | 1.79 | 1.86 | 1.77 |
| Iceland          | 2.67 | 2.95 | 2.95 | 2.82 | -    | 2.77 | 2.99 | 2.68 | 2.64 | 3.11 | -    |
| Norway           | -    | 1.59 | 1.66 | 1.71 | 1.58 | 1.52 | 1.49 | 1.62 | 1.61 | 1.60 | 1.71 |
| Switzerland      | 2.53 | -    | -    | -    | 2.90 | -    | -    | -    | 2.99 | -    | -    |
| Croatia          | -    | -    | 0.96 | 0.96 | 1.05 | 0.87 | 0.75 | 0.80 | 0.89 | 0.83 | 0.73 |
| Turkey           | 0.46 | 0.51 | 0.51 | 0.47 | 0.51 | 0.58 | 0.57 | 0.71 | 0.73 | 0.85 | -    |
| Japan (4)        | 3.04 | 3.12 | 3.17 | 3.20 | 3.17 | 3.32 | 3.40 | 3.44 | 3.45 | -    | -    |
| United States    | 2.69 | 2.71 | 2.60 | 2.60 | 2.53 | 2.56 | 2.60 | 2.66 | 2.79 | -    | -    |

(1) Break in series, 2007.

(2) Break in series, 2000 and 2004.

(3) Break in series, 2004.

(4) Break in series, 2008.

(5) Break in series, 2005.

Source: Eurostat (online data code: t2020\_20), OECD

Patent applications to the European Patent Office and patents granted by the US Patent and Trademark Office, 2001-2010 (Eurostat)

|                  | Patent applications to the EPO  |          |                      | High technology patent applications to the EPO |          |                      | Patents granted by the US Patent & Trademark Office |        |                      |
|------------------|---------------------------------|----------|----------------------|--|----------|----------------------|---|--------|----------------------|
|                  | (number of patent applications) |          | (per million inhab.) | (number of patent applications)                |          | (per million inhab.) | (number of patents granted)                         |        | (per million inhab.) |
|                  | 2005                            | 2010 (1) | 2010 (2)             | 2004   | 2009 (3) | 2009 (4)             | 2001  | 2006   | 2006                 |
| <b>EU-27</b>     | 56 620                          | 54 414   | 108.6                | 10 792   | 4 765    | 9.5                  | 32 603  | 19 520 | 39.6                 |
| Belgium          | 1 492                           | 1 415    | 130.5                | 340  | 199      | 18.5                 | 817   | 432    | 41.1                 |
| Bulgaria         | 24                              | 12       | 1.6                  | 2  | 2        | 0.3                  | 7   | 21     | 2.8                  |
| Czech Republic   | 109                             | 269      | 25.5                 | 15   | 8        | 0.7                  | 53  | 58     | 5.7                  |
| Denmark          | 1 167                           | 1 338    | 241.7                | 270  | 86       | 15.7                 | 622   | 369    | 67.9                 |
| Germany          | 23 862                          | 21 724   | 265.6                | 3 637  | 1 598    | 19.5                 | 13 228  | 7 638  | 92.7                 |
| Estonia          | 6                               | 51       | 38.1                 | 2  | 2        | 1.5                  | 5   | 9      | 7.0                  |
| Ireland          | 274                             | 354      | 79.1                 | 61   | 32       | 7.1                  | 262   | 170    | 40.4                 |
| Greece           | 111                             | 76       | 6.7                  | 15   | 7        | 0.6                  | 23  | 31     | 2.8                  |
| Spain            | 1 353                           | 1 454    | 31.6                 | 147  | 113      | 2.5                  | 495   | 346    | 7.9                  |
| France           | 8 346                           | 8 741    | 135.1                | 1 884  | 1 137    | 17.7                 | 4 467   | 2 875  | 45.5                 |
| Italy            | 4 890                           | 4 424    | 73.3                 | 488  | 259      | 4.3                  | 2 228   | 1 508  | 25.7                 |
| Cyprus           | 17                              | 10       | 13.0                 | .  | 1        | 0.6                  | 1   | 3      | 4.3                  |
| Latvia           | 19                              | 24       | 10.7                 | .  | 3        | 1.3                  | 1   | 5      | 2.1                  |
| Lithuania        | 9                               | 22       | 6.5                  | 2  | 2        | 0.6                  | 5   | 5      | 1.5                  |
| Luxembourg       | 98                              | 83       | 165.9                | 11   | 1        | 2.0                  | 77  | 52     | 109.9                |
| Hungary          | 135                             | 203      | 20.2                 | 29   | 8        | 0.7                  | 73  | 39     | 3.9                  |
| Malta            | 11                              | 6        | 13.5                 | .  | 2        | 4.9                  | 3   | 1      | 2.5                  |
| Netherlands      | 3 477                           | 3 206    | 193.4                | 1 064  | 309      | 18.7                 | 1 770   | 1 180  | 72.3                 |
| Austria          | 1 516                           | 1 577    | 188.3                | 197  | 115      | 13.7                 | 727   | 502    | 60.8                 |
| Poland           | 124                             | 305      | 8.0                  | 21   | 26       | 0.7                  | 57  | 43     | 1.1                  |
| Portugal         | 124                             | 109      | 10.2                 | 9  | 8        | 0.8                  | 25  | 11     | 1.1                  |
| Romania          | 29                              | 40       | 1.9                  | 3  | 6        | 0.3                  | 11  | 17     | 0.8                  |
| Slovenia         | 109                             | 167      | 81.7                 | 3  | 8        | 3.7                  | 21  | 10     | 5.0                  |
| Slovakia         | 31                              | 33       | 6.0                  | 3  | 1        | 0.1                  | 5   | 8      | 1.4                  |
| Finland          | 1 313                           | 1 165    | 217.7                | 653  | 105      | 19.7                 | 1 120   | 569    | 108.2                |
| Sweden           | 2 396                           | 2 865    | 306.7                | 522  | 205      | 22.2                 | 1 660   | 953    | 105.3                |
| United Kingdom   | 5 581                           | 4 745    | 76.5                 | 1 412  | 528      | 8.6                  | 4 840   | 2 666  | 44.1                 |
| Iceland          | 31                              | 17       | 52.5                 | 4  | 1        | 2.7                  | 20  | 11     | 37.2                 |
| Liechtenstein    | 25                              | 46       | 1 280.2              | 1  | 1        | 32.9                 | 19  | 13     | 367.3                |
| Norway           | 488                             | 407      | 83.8                 | 72   | 18       | 3.8                  | 301   | 204    | 44.0                 |
| Switzerland      | 3 188                           | 2 952    | 379.1                | 429  | 187      | 24.3                 | 1 637   | 1 150  | 154.1                |
| Croatia          | 33                              | 25       | 5.7                  | 1  | 1        | 0.2                  | 19  | 12     | 2.6                  |
| FYR of Macedonia | .                               | .        | .                    | 2  | 1        | 0.2                  | .   | .      | .                    |
| Turkey           | 165                             | 323      | 4.5                  | 7  | 21       | 0.3                  | 31  | 26     | 0.4                  |
| Japan            | 21 645                          | 16 653   | 147.1                | 7 635  | 2 712    | 42.7                 | 42 181  | 31 112 | 243.5                |
| United States    | 36 155                          | 24 641   | 95.6                 | 11 178   | 2 505    | 26.2                 | 116 734   | 84 645 | 283.3                |

(1) Latvia and Malta, 2009.

(2) Latvia and Malta, 2009; Japan and the United States, 2008.

(3) Latvia, Malta and the FYR of Macedonia, 2008.

(4) Latvia, Malta, the FYR of Macedonia, Japan and the United States, 2008.

Source: Eurostat (online data codes: pat\_ep\_ntot, pat\_ep\_ntec and pat\_us\_ntot)