



This fact sheet presents the latest UIS S&T data available as of October 2012.

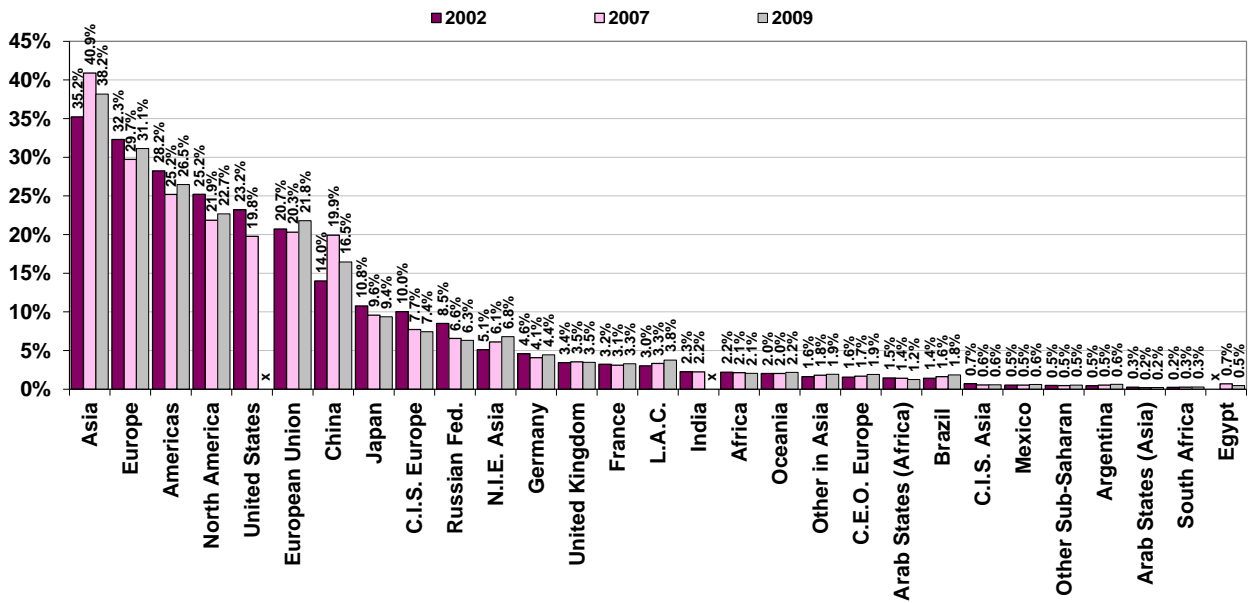
## REGIONAL DENSITY OF RESEARCHERS AND THEIR FIELD OF EMPLOYMENT

In the drive to strengthen knowledge-based societies, policymakers are looking to ensure that their countries have an adequate supply of researchers. The information below provides a global overview of countries with the highest concentration of researchers as well as a breakdown by region.

**Figure 1** presents the distribution of researchers in the world by main regions/countries in 2002, 2007 and 2009. Researchers are professionals engaged in the conception or creation of new knowledge, products, processes, methods and systems, as well as in the management of the projects concerned (*Frascati Manual*, 2002).

### FIGURE 1. WHERE ARE RESEARCHERS LOCATED?

SHARES OF WORLD RESEARCHERS BY PRINCIPAL REGIONS/COUNTRIES, 2002, 2007 AND 2009 (%)

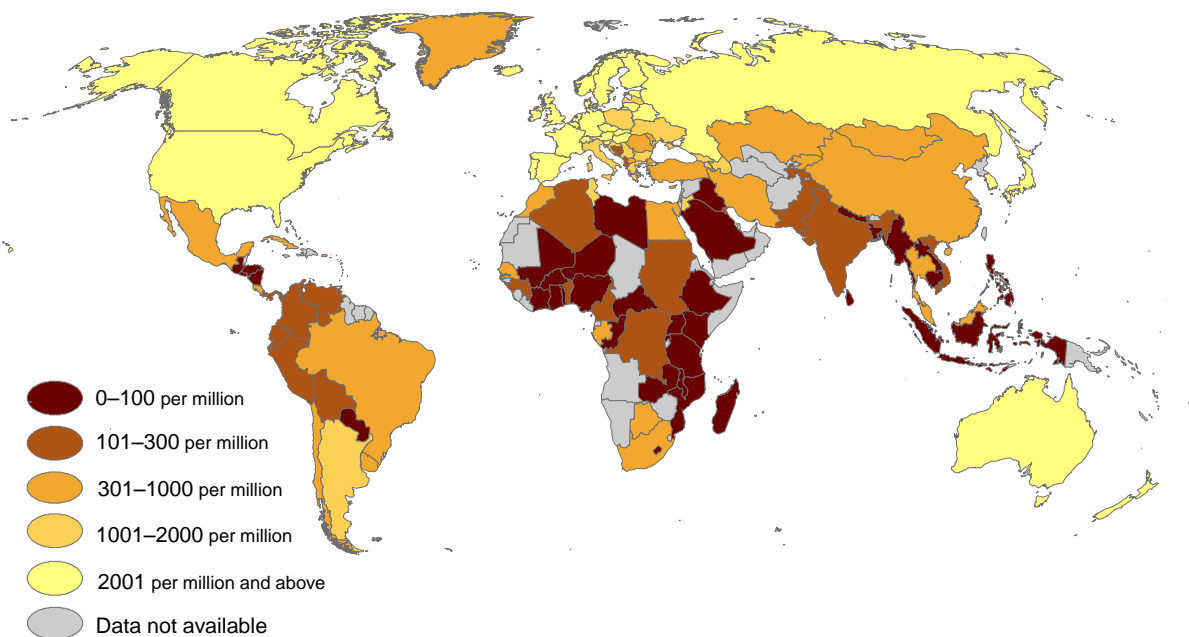


Note: x = Data not available (chart symbol).

Source: UNESCO Institute for Statistics estimates, December 2011.

**Figures 2 and 3** illustrate the distribution of researchers per 1 million inhabitants. The data are expressed in full-time equivalents (FTE), which are a measure of the actual volume of human resources devoted to research and development (R&D). It is important to note when interpreting the data that headcounts (HC) were used for countries where FTE figures were not available.

**FIGURE 2. HOW MANY RESEARCHERS ARE THERE?**  
RESEARCHERS PER MILLION INHABITANTS, 2010 OR LATEST AVAILABLE YEAR

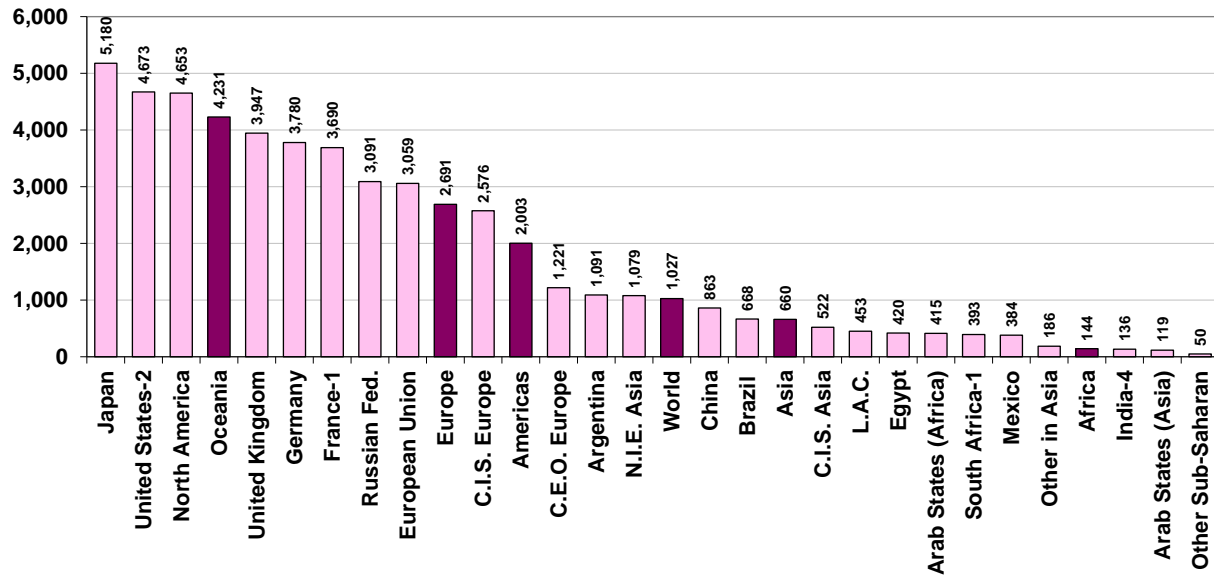


**Notes:** The data presented in this map are based on FTE. However, headcounts (HC) are used for the following countries as FTE numbers were not available: Armenia, Azerbaijan, Bangladesh, Belarus, Benin, Botswana, Cameroon, Central African Republic, Cuba, the Democratic Republic of the Congo, El Salvador, Gabon, Gambia, Georgia, Guinea, Honduras, Jordan, Kazakhstan, Kyrgyzstan, Libyan Arab Jamahiriya, Mauritius, Mongolia, Montenegro, Nauru, Nicaragua, Peru, Saint Lucia, Saint Vincent and the Grenadines, Saudi Arabia, Sudan, Tajikistan, Tanzania, Trinidad and Tobago, Uganda and US Virgin Islands. This should be taken into consideration when interpreting the data.

**Source:** *UNESCO Institute for Statistics, October 2012.*

**FIGURE 3. HOW MANY RESEARCHERS ARE THERE?**

RESEARCHERS PER MILLION INHABITANTS BY PRINCIPAL REGIONS/COUNTRIES, 2009 OR LATEST YEAR AVAILABLE

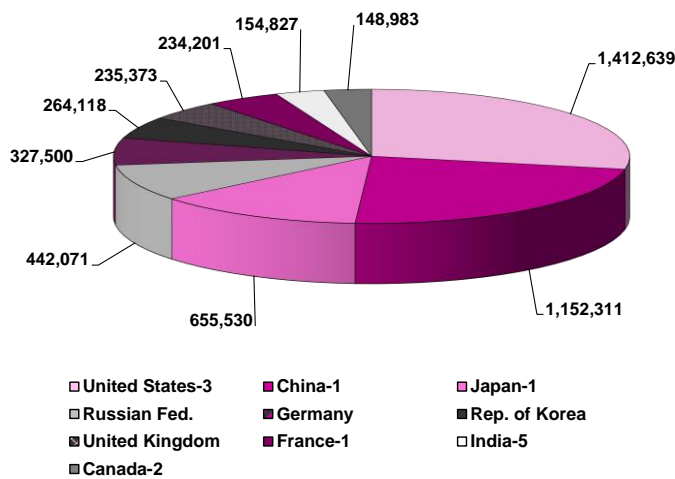


Notes: -1 = 2008, -2 = 2007, -4 = 2005.

Source: UNESCO Institute for Statistics estimates, December 2011.

Figure 4 shows the world's leading countries (top 10) in terms of the number of researchers on their territory.

**FIGURE 4. WHICH COUNTRIES HOST THE GREATEST NUMBER OF RESEARCHERS?**  
NUMBER OF RESEARCHERS, 2010 OR LATEST AVAILABLE YEAR

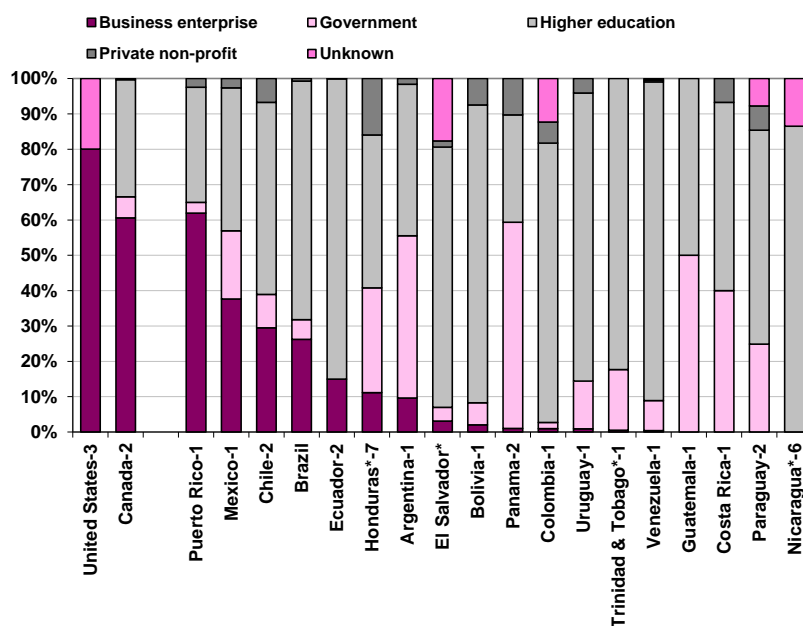


Notes: -1 = 2009, -2 = 2008, -3 = 2007, -5 = 2005. Data are based on FTE.

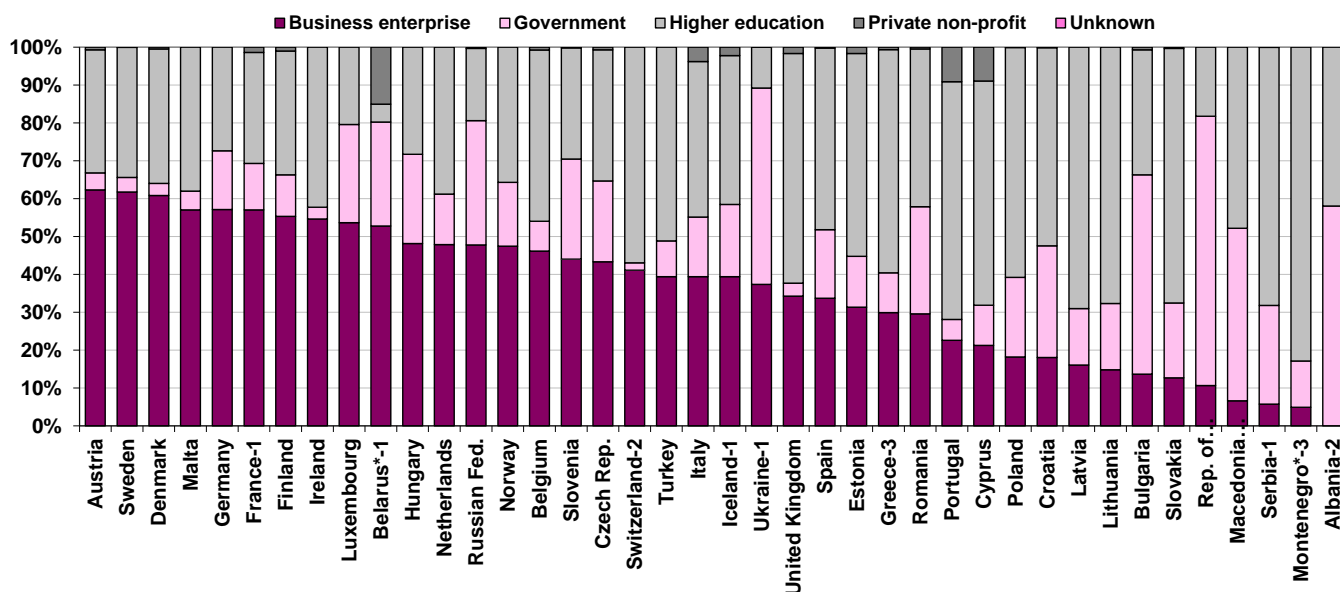
Source: UNESCO Institute for Statistics, October 2012.

Figures 5, 6 and 7 illustrate the percentage of researchers by sector of employment expressed in full-time equivalents (FTE) (or headcounts where FTE were unavailable). One full-time equivalent may be thought of as one person-year. Thus, a person who normally spends 30% of their time on R&D and the rest on other activities (such as teaching, university administration and student counseling) would be denoted as a 0.3 FTE. Similarly, if a full-time R&D worker is employed at an R&D unit for only six months, this results in an FTE of 0.5.

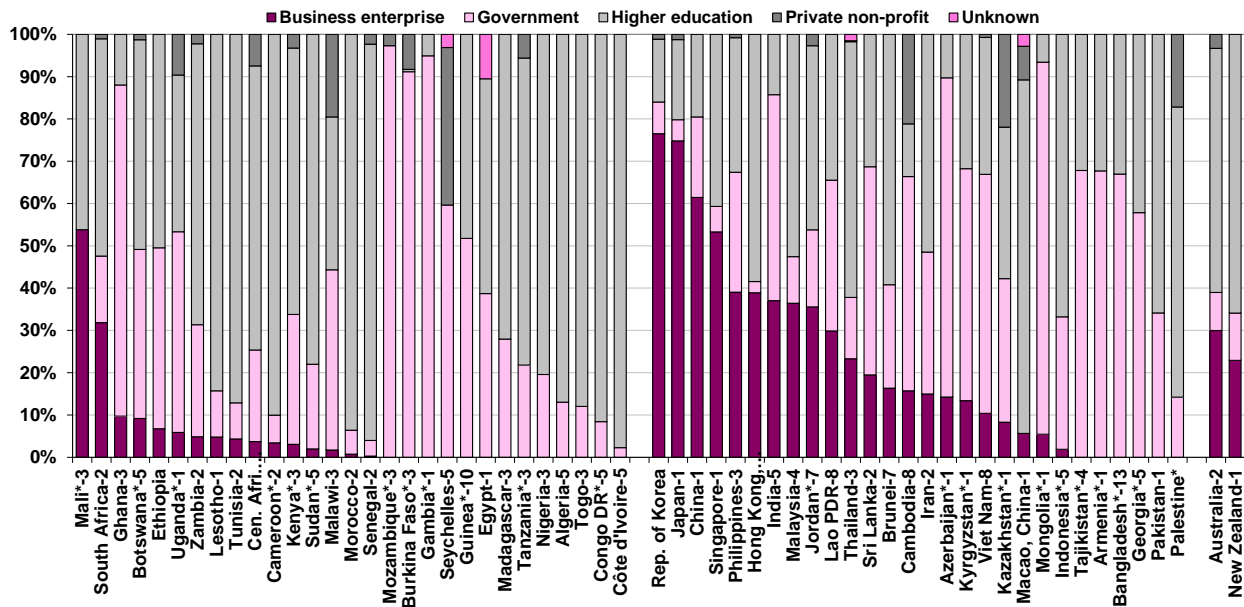
**FIGURE 5. A BREAKDOWN OF RESEARCHERS IN THE AMERICAS**  
PERCENTAGE OF RESEARCHERS BY SECTOR OF EMPLOYMENT, 2010 OR LATEST YEAR AVAILABLE



**FIGURE 6. A BREAKDOWN OF RESEARCHERS IN EUROPE**  
PERCENTAGE OF RESEARCHERS BY SECTOR OF EMPLOYMENT (FTE), 2010 OR LATEST YEAR AVAILABLE



**FIGURE 7. A BREAKDOWN OF RESEARCHERS IN AFRICA, ASIA AND THE PACIFIC**  
PERCENTAGE OF RESEARCHERS BY SECTOR OF EMPLOYMENT (FTE), 2010 OR LATEST YEAR AVAILABLE



**Notes:** -1 = 2009, -2 = 2008, -3 = 2007, -4 = 2006, -5 = 2005, -6 = 2004, -7 = 2003, -8 = 2002, -10 = 2000, -13 = 1997.

\* = based on HC data.

Source: UNESCO Institute for Statistics, October 2012.

#### Abbreviations:

CIS Asia	Commonwealth of Independent States in Asia
CIS Europe	Commonwealth of Independent States in Europe
CEO Europe	Central, Eastern and Other in Europe
LAC	Latin America and the Caribbean
NIE Asia	Newly Industrialized Economies in Asia including Hong Kong, Indonesia, Malaysia, Philippines, Republic of Korea, Singapore
Other Asia	This excludes Japan, China, India and Israel
Other SSA	Other Sub-Saharan Africa; this excludes South Africa
FTE	Full-time equivalents
HC	Headcounts

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