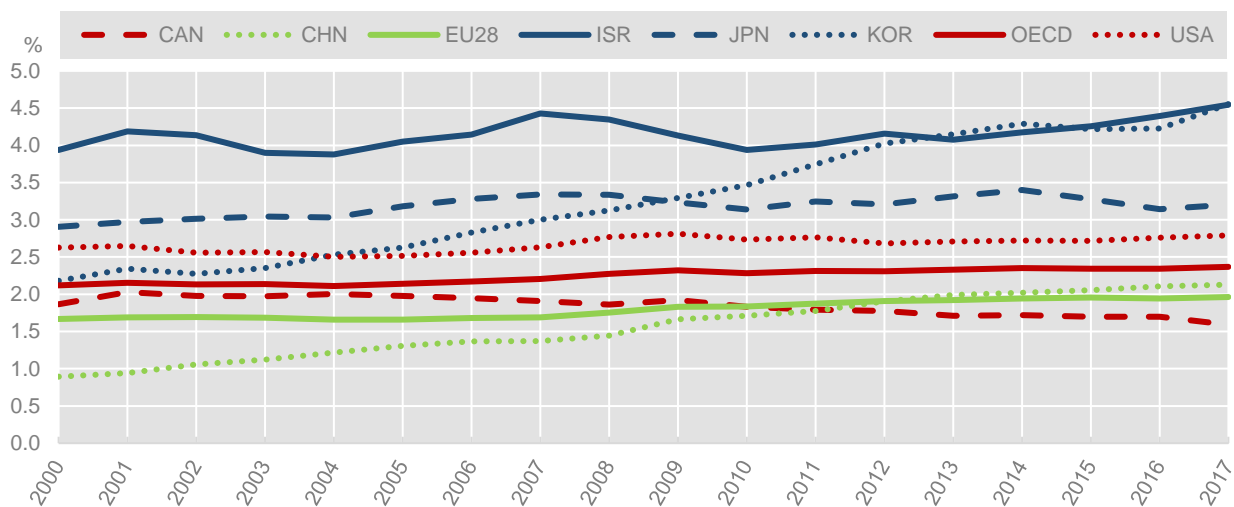


## OECD Main Science and Technology Indicators, 2019 data release

### Modest increase in R&D intensity in OECD countries in 2017

The latest available data on expenditure on Research and Development (R&D) for OECD countries and other major economies published in the [OECD Main Science and Technology Indicators](#) shows that R&D intensity (expenditure on R&D as a percentage of Gross Domestic Product, GDP) in the OECD area rose slightly from 2.34% in 2016 to 2.37% in 2017. This was largely driven by growth in the United States, Japan, Germany and Korea, offsetting a decline in Canada and several other European economies such as France, Italy and the United Kingdom. In 2017, Korea and Israel continued to be the countries with the highest R&D intensity, at 4.55% and 4.54% of GDP, respectively.

#### R&D intensity: Gross Domestic Expenditure on R&D as a percentage of GDP, 2000-2017

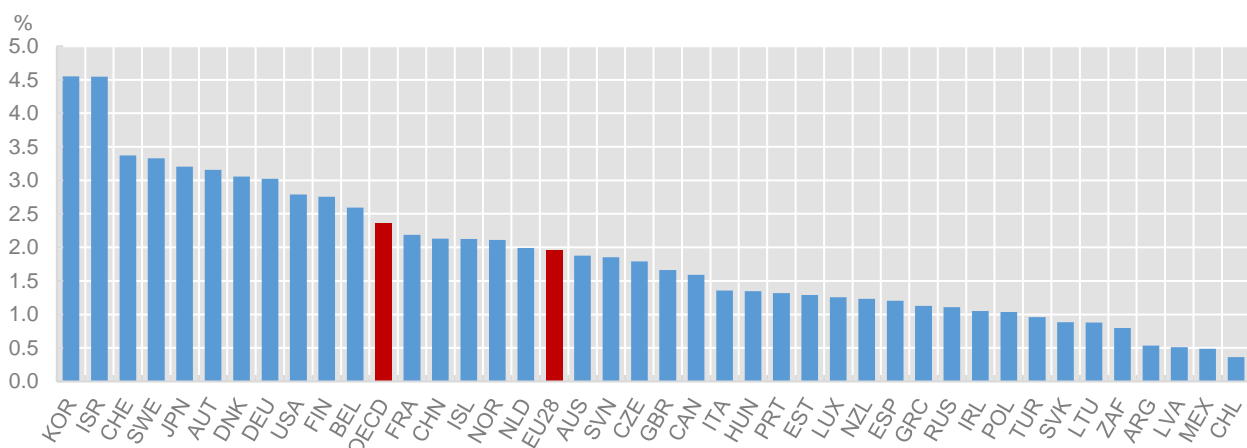


Source: OECD Main Science and Technology Indicators Database, February 2019. <http://oe.cd/msti>

### Marked deceleration in China's investment in R&D

Although real R&D expenditure grew in China by an impressive 7.9 % in 2017, this is the lowest reported annual rate of growth since 1995, suggesting a marked slowdown in R&D investment. As GDP growth rates also declined over the period, R&D intensity increased from 2.11 to 2.13, i.e. by the same margin as the OECD area. On these latest trends, China would no longer be converging in R&D intensity with the OECD average within the next decade. However, China already surpassed the combined EU28 area in 2013 and it still appears to be about to catch up with France on this relative measure of R&D investment.

#### R&D intensity in OECD countries and selected economies, 2017

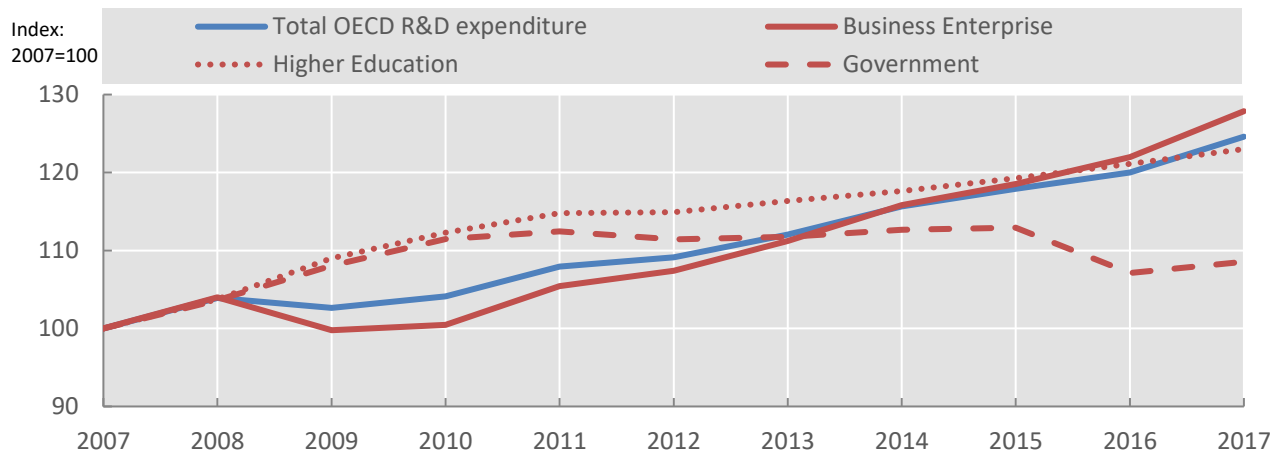


Source: OECD Main Science and Technology Indicators Database, February 2019. <http://oe.cd/msti>

## Business R&D continues to be the main global driver of R&D growth

Real expenditure on R&D in the OECD area grew by 3.8% in 2017. Business enterprises accounted for the first time in 2017 for more than 70% of all the R&D performed in OECD countries, after growing by 4.8% in that year. In contrast, R&D carried out in the Higher Education (HE) sector grew by 1.6%, while R&D performed in government institutions increased by 1.3%. Ten years after the onset of the global financial crisis, business R&D is now 28% higher than 2007 despite a marked drop in 2009, while HE and Government sectors are 23% and 9% higher, respectively. Businesses are also the main driver of R&D growth in China, where government R&D trends do not lag the growth in HE.

### R&D expenditure trends in OECD countries, 2007-2017

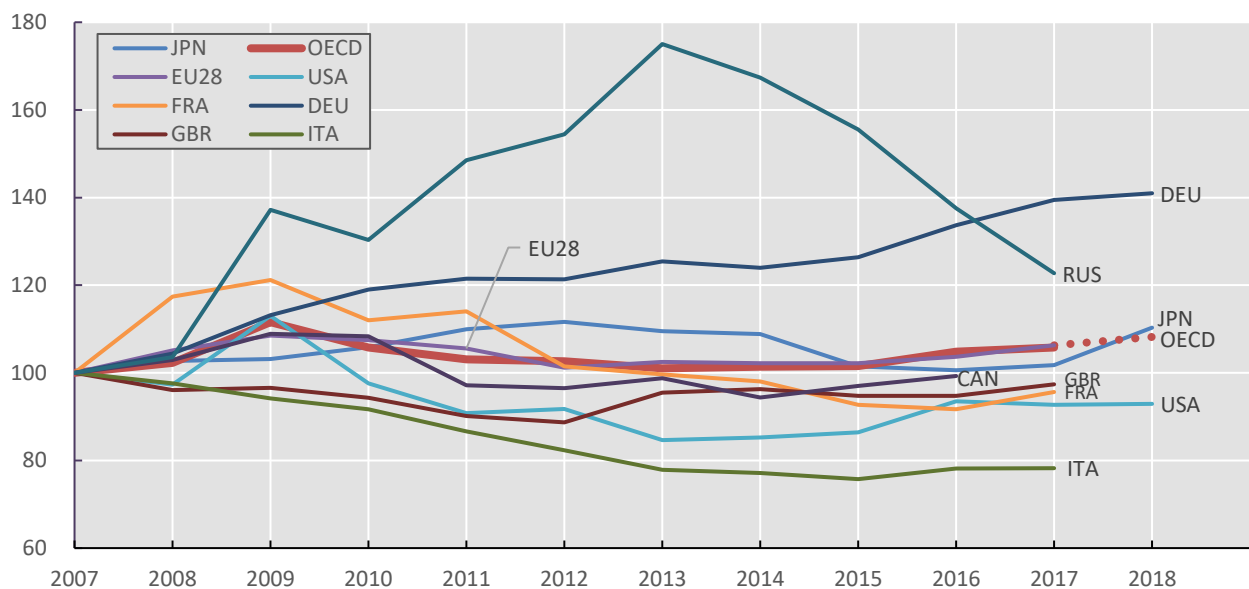


Source: OECD Main Science and Technology Indicators (MSTI) Database, February 2019. <http://oe.cd/msti>

### Slowdown in government R&D budget growth in 2017 and 2018

The latest government budget data for the OECD area, which present the amounts allocated by governments for R&D rather than actual expenditure reported by R&D performers, show an increase of 0.9% in real terms in 2017, less than the 3.3% growth reported in 2016. Preliminary estimates also suggest a bigger increase of 1.8% for 2018, apparently boosted by a recovery in defence-related R&D funding. Indirect tax-based support measures, which are not part of R&D budget estimates, have been increasing in importance in recent years, often crowding out direct government support (see <http://oe.cd/rdtax>). R&D budgets were down in the United States in 2017 compared to 2016, offset by strong growth in Germany, France and Japan on that year. R&D budgets in Canada, France, the United Kingdom, Italy, and the United States are below 2007 pre-crisis levels. Comparable R&D budget data are not available for China.

### R&D budget trends, selected economies, 2007-2018



Source: OECD Main Science and Technology Indicators (MSTI) Database, February 2019 <http://oe.cd/msti>

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