

Vienna  
in Figures

# Business Location 2018

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the series

# Vienna in Figures

## **Vienna in Figures 2018**

A classic: This brochure offers an overview of the most important aspects of life in Vienna – with a dash of humour on the side.

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Available from December 2018 in German.

All publications are available as free of charge downloads at [www.statistik.wien.at](http://www.statistik.wien.at). The Statistisches Jahrbuch (Statistical Yearbook) can moreover be purchased in printed format on our website.

The cover illustration was executed according to the principles of "conditional design", based on a regulated process, by the University of Art and Design Linz, Department of Visual Communication.

# Business Location 2018

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# Foreword

Vienna is an outstanding business location. This is not only documented by numerous international rankings but by “hard” data as well: every 55 minutes, a new enterprise is set up in Vienna; our productivity is above average. At the same time, a forward-looking housing policy ensures that two out of three inhabitants of the city live in publicly financed or subsidised housing. Half of all foreign companies expanding to Austria settle in Vienna. With the Vienna Business Agency, the Austrian capital disposes of a time-tried central contact point for international enterprises.

Moreover, we have been finally able to leave the difficult years of economic and financial crisis behind: for the second year in a row, economic growth is markedly above 2%, and unemployment levels are decreasing. However, we have not yet arrived at the standard our population has a right to expect. A lot still remains to be done.

I want to invite you to consult this brochure to learn more about a business location that for years has been distinguished by quality of life, innovative spirit, an excellent municipal administration and a highly skilled workforce.



**Peter Hanke**  
Executive City Councillor of Finance, Business,  
Digital Innovation and International Affairs

# Editorial

A growing city that is part of the international competitive scene needs creativity, international orientation, initiative and love of innovation.

However, innovation is not limited to private enterprises. As a client and provider of products and services, the Vienna City Administration, too, harbours significant potential for innovation. For this reason, the City Council adopted the RTI strategy "Innovative Vienna 2020" to promote both private and public innovation.

In this context, the ever-rising demand for more highly qualified workers is one of the great challenges of the future. Enterprises can only succeed if their employees are able to keep pace with increasingly exacting standards. Targeted municipal support measures (such as the Vienna 2020 Qualification Plan, free kindergartens or education campuses) address this issue. With roughly 195,000 students, Vienna is moreover the biggest university city in the German-speaking region. It is not by chance that the Austrian capital's share of university graduates is almost twice as high as the percentage calculated for the country as a whole – this embodies enormous potential, especially for the economic sector.

The present, revised brochure is to provide you with an overview of these and other developments. We are looking forward to your feedback!



**Klemens Himpele**  
Head of Municipal Department 23 – Economic  
Affairs, Labour and Statistics

# At a glance: Business location Vienna

# 1.89 million

people live in Vienna, the sixth-largest city of the European Union (as per 1 January 2018).

# 35%

is the percentage by which Vienna's labour productivity exceeds the EU average (2016).

# 1<sup>st</sup> place

According to the Mercer Quality of Living Survey and The Economist, Vienna is the world's most liveable city (2018).

# 2.8%

= economic growth

predicted for Vienna in

2018

# 25.5%

of Austria's gross domestic product for 2016 was generated in Vienna.

# 9,098

new enterprises were set up in Vienna in 2017.

# 3.6%

= Vienna's research quota (2015)

# 18 minutes

is the average working time required in Vienna to be able to buy a Big Mac® (2018).

# 01 — Basic data

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For further data about Vienna as a business location, please visit [www.wien.at/statistik/wirtschaft](http://www.wien.at/statistik/wirtschaft).



### **Gross domestic product (GDP)**

The gross domestic product is an indicator of the economic activity of a national economy. It corresponds to the total value of all finished goods and services of a country produced in the course of one year (within this country's borders), minus the value of all goods and services input in advance during the production process. This means that it is calculated on the basis of the sum of the gross value added of all economic sectors plus the balance of taxes on products less subsidies on products (see also "Gross value added (GVA)"). The **nominal GDP** in the respective national currency corresponds to the conversion result at current market prices; the **real GDP** is adjusted for price development (inflation) and corresponds to the conversion result at constant prices.

### **Gross domestic product in purchasing power standards (PPS)**

The (€) purchasing power standard (PPS) is an artificial currency unit that is calculated by dividing the goods and services of a country in the national currency by the corresponding purchasing power parities (PPP). Purchasing power parities (PPP) indicate how many currency units are required in different countries to purchase a comparable fixed basket of goods and services. PPP may be regarded as a rate of exchange for converting PPS into € and vice versa. They eliminate exchange rate fluctuations and differences between local price levels. The GDP or GRP in PPS per capita allows a comparison of the actual levels

of economic activity or prosperity of different countries.

In brief: Country A and Country B produce the same goods. The products are sold at somewhat lower prices in Country A, but wages and salaries are lower here as well. As a result, citizens of Country A can afford as much in their home country for their pay as citizens of Country B can in theirs. Thus the level of prosperity in both countries is the same – however, the GDP of Country A, calculated in standard fashion, is lower due to the lower price level. This distortion is eliminated by the GDP in PPS (per capita): Country A and Country B therefore present the same value, which indicates a similar prosperity level.

### **Gross regional product (GRP)**

The gross regional product (GRP = regional GDP) corresponds to the total value of all finished goods and services produced in a region (e.g. a federal province) in the course of one year.

### **Gross value added (GVA)**

The gross value added is distinguished from the gross domestic product only by the balance of taxes on products (e.g. value added tax, mineral oil tax) less subsidies on products (e.g. EU subsidies, provincial subsidies to hospitals, etc.), which are included in the GDP.

## 01.01 Population development across the EU

### Selected cities/urban regions of the EU, 2007/2017

| NUTS 2 REGION                               | POPULATION GROWTH<br>BETWEEN 2007 AND 2017 IN % |
|---|---|
| Stockholm (SE)                              | 18.3%   |
| Région de Bruxelles-Capitale (Brussels, BE) | 16.3%   |
| London (UK) <sup>1</sup>                    | 16.0%   |
| <b>Wien (Vienna, AT)</b>                    | <b>12.4%</b>                                    |
| Lazio (Rome, IT)                            | 11.8%   |
| Helsinki-Uusimaa (FI)                       | 11.6%   |
| Hovedstaden (Copenhagen, DK)                | 10.4%   |
| Praha (Prague, CZ)                          | 9.1%  |
| Bratislavský kraj (Bratislava, SK)          | 8.4%  |
| Noord-Holland (Amsterdam, NL)               | 7.5%  |
| Comunidad de Madrid (ES)                    | 6.6%  |
| Île-de-France (Paris, FR)                   | 5.1%  |
| Berlin (DE)                                 | 5.0%  |
| Közép-Magyarország (Budapest, HU)           | 4.4%  |
| Mazowieckie (Warsaw, PL)                    | 3.3%  |
| București – Ilfov (Bucharest, RO)           | 2.5%  |
| Attiki (Athens, GR)                         | -5.2%   |

Source: Eurostat

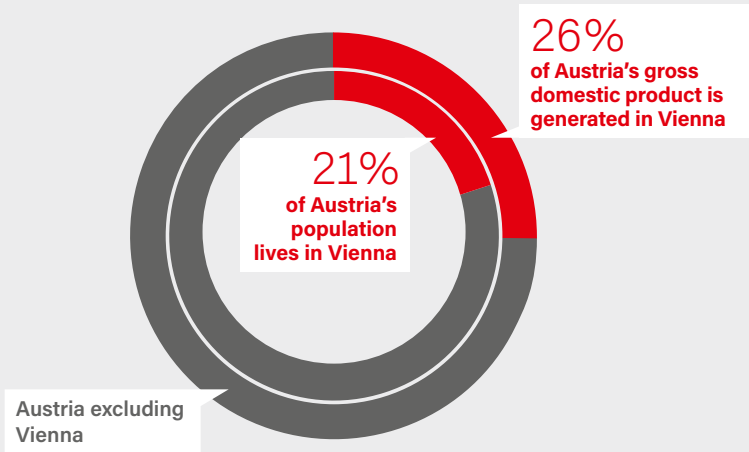
<sup>1</sup>London: NUTS 1 region, comprises the entire Greater London area.

Vienna is growing! Between 2007 and 2017, the number of the city's inhabitants increased by approx. 12.4% from 1.66 million to 1.87 million. A comparison of selected European capital cities shows that only Stockholm, Brussels and London are growing faster. Forecasts point towards further growth of Vienna's population, which since 2003 is no longer solely due to an influx of newcomers, but also to a birth surplus.

## 01.02 Economic performance

### Vienna and Austria, 2016

REGIONAL SHARE IN AUSTRIAN GDP / IN AUSTRIAN POPULATION

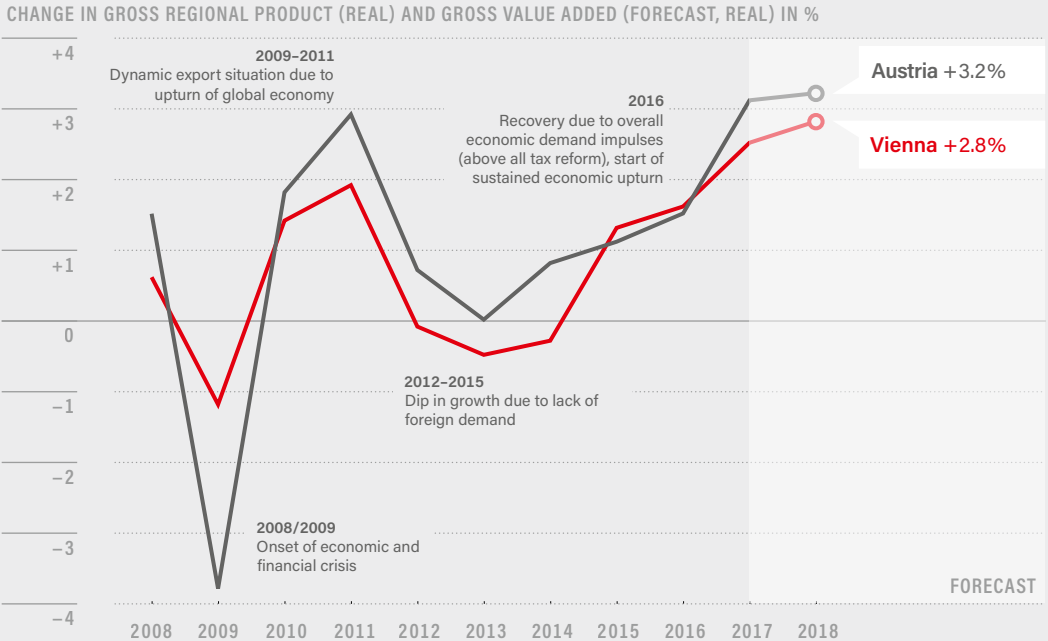


Source: Statistics Austria

One fifth of Austria's population generates one fourth of Austria's gross domestic product.

# 01.03 Economic growth

## Vienna and Austria, 2008 to 2018



Source: Statistics Austria, WIFO

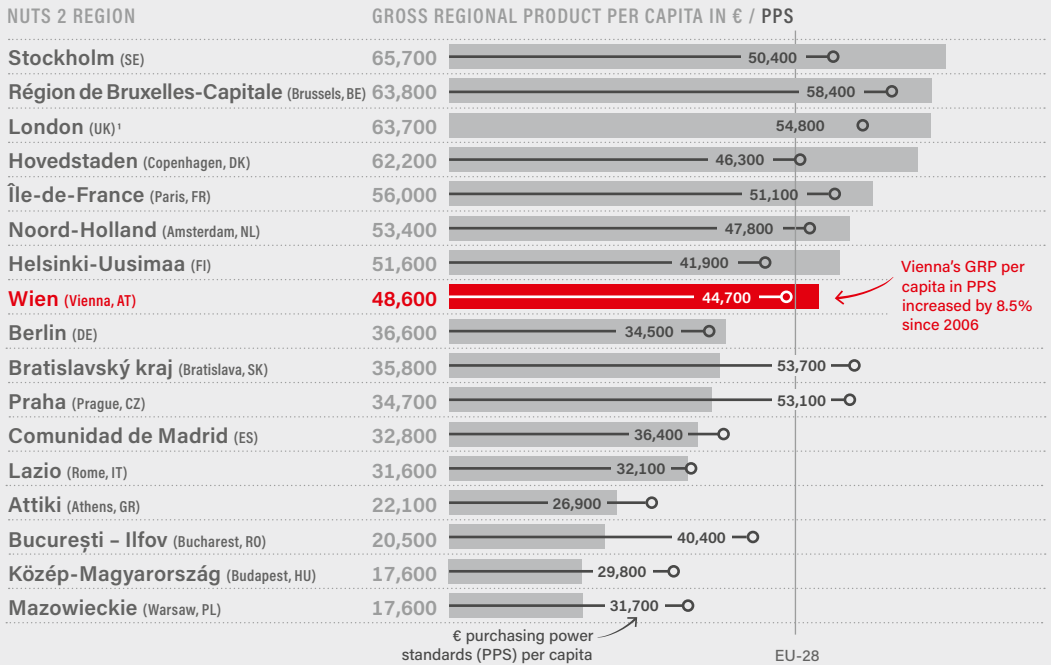
Vienna's economy is characterised by high stability over time, which equals relatively subdued growth in economic boom phases, but also a somewhat lesser decline in growth during times of recession.

After a dip in growth due to the crisis, Vienna's economy increased by 1.6% in real terms in 2016 – the beginning of a sustained recovery process. The increase in disposable income due to the 2016 tax reform inter alia boosted private consumption and contributed to endowing the economy with new momentum. Moreover, the rise in demand results from an increase in exports due to expanding global trade and the positive international economic climate.

The real gross regional product is used for the period from 2008 to 2016 (source: Statistics Austria). For 2017 and 2018, the forecast of the real gross value added, as calculated by WIFO, is used (as per May 2018).

## 01.04 Prosperity across the EU

### Selected cities/urban regions of the EU, 2016



Source: Eurostat

<sup>1</sup> London: NUTS 1 region, comprises the entire Greater London area.

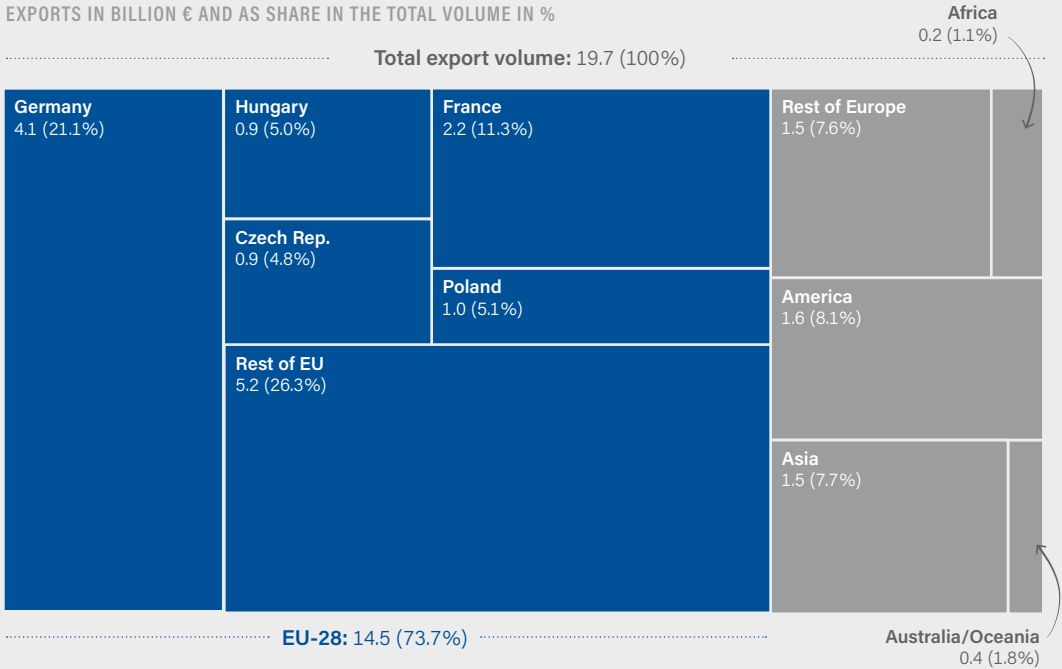
The gross regional product (GRP) per capita is considered an indicator of the level of economic development of a given region and is often regarded as a yardstick of prosperity. Measured by current prices (€), Vienna held a midrange position among the cities included in this comparison and attained 18<sup>th</sup> place among the 276 EU regions in 2016. Better economic performances per capita were mainly achieved by Northern European cities, while Southern and Eastern European capital regions tended to present weaker track records.

In visualising prosperity in € purchasing power standards (PPS), national price level differences are taken account of. Here, too, Vienna holds a midrange position among the cities drawn upon for comparison and likewise attains 18<sup>th</sup> place among all EU regions. This chart shows a comparatively high GRP/capita for capital regions in Southern and Eastern Europe, since the same basket of goods, due to lower local price levels, costs less in these regions than for the EU-28 average.

# 01.05 Foreign trade in goods – exports

## Vienna, 2017 (preliminary)

EXPORTS IN BILLION € AND AS SHARE IN THE TOTAL VOLUME IN %



Source: Statistics Austria

Exports exclude items to the value of €16.5 million, not allocated for reasons of data privacy.

The foreign trade data clearly reflect close economic ties between Vienna and its trade partners worldwide, and especially with EU Member States. Overall, Vienna's imports roughly equal twice its export volume.

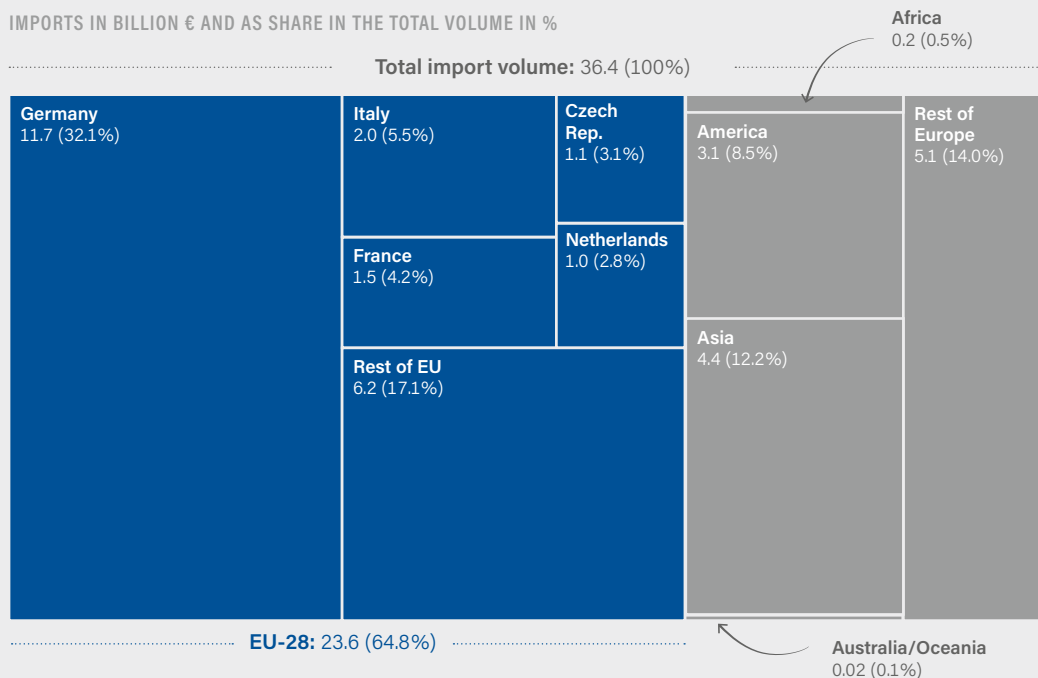
Around 14% of Austria's exports come from Vienna, and nearly one fourth of all national imports is destined for Austria's capital. In all, the trade partners of approx. 74% of all Viennese exports and 65% of all Viennese imports are domiciled in another EU Member State.

Germany is the most important trade partner of Vienna's enterprises with regard to both imports and exports. By comparison, the neighbouring countries to the east take on greater significance for exports from Vienna than for the rest of Austria.

# Foreign trade in goods – imports

## Vienna, 2017 (preliminary)

IMPORTS IN BILLION € AND AS SHARE IN THE TOTAL VOLUME IN %



Source: Statistics Austria

Imports exclude items to the value of €64,000, not allocated for reasons of data privacy.

The EU Member States are Vienna's most important trade partners.

# 02 — Economy and labour

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**Basket of goods and services**

The prices of a set of defined, fixed goods and services, referred to as the “basket”, are assessed on an ongoing basis and weighted according to the average household expenditure profile in order to determine the consumer price index, and hence the inflation rate. The selection of goods and services (index positions) of a basket is constantly aligned with the current consumption behaviour of the population. In 2018, the number of representative index positions for Austria’s basket comprises 770 goods and services.

**Big Mac® index**

The Big Mac® index compares the purchasing power of currencies in different countries on the basis of the price paid for a Big Mac®. The British weekly “The Economist” invented this index in 1986 with the aim of explaining the overvaluation and undervaluation of individual currencies in a clearcut, easy to understand manner.

**Economic sectors**

The production structure of a national economy according to the national accounts is made up of three major economic sectors, i.e. the primary (agriculture and forestry, fisheries), secondary (mining industry, manufacturing of goods, energy supply, water supply, waste disposal, construction industry) and tertiary (services) sectors.

**Foreign direct investment**

The term “foreign direct investment (FDI)” describes cross border participations in companies abroad (with a minimum hold of 10% of the voting capital).

They can take the form of active direct investment (investment of Viennese enterprises abroad) and passive direct investment (foreign investment in Viennese enterprises).

**Individual entrepreneur**

An individual entrepreneur is a natural person who takes sole responsibility for raising capital, assumes full risk for any losses and is personally liable for any debts with his or her personal assets.

**Labour productivity**

Labour productivity is an indicator of the efficiency of workers in the production process, measured as the ratio between overall economic output and labour input, i.e. GRP per employed person.

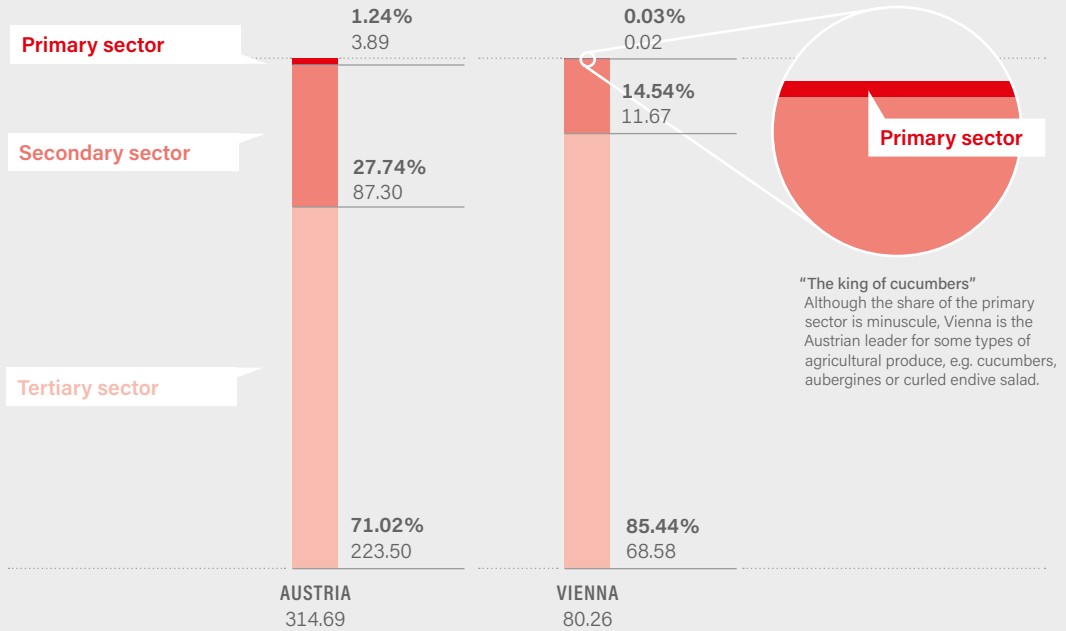
**Unemployment rate**

The unemployment rate calculated according to national methods and published by the Public Employment Service Austria (AMS) gives the share of registered unemployed persons in the total potential labour force (employed persons plus registered unemployed persons). The EU rate is based on the international definition of unemployment according to the labour force concept (LFC or ILO concept). Different from the AMS register data, Statistics Austria (and, consequently, also Eurostat) draws on survey data culled from the microcensus. Accordingly, a person is considered economically active if he or she has worked at least one hour in the reference week. A person is defined as unemployed if he or she is not economically engaged in this sense, takes active steps to find work and can accept a job at short notice.

## 02.01 Economic sectors

### Vienna and Austria, 2016

GROSS VALUE ADDED (NOMINAL) IN BILLION € AND AS SHARE OF TOTAL VOLUME IN %



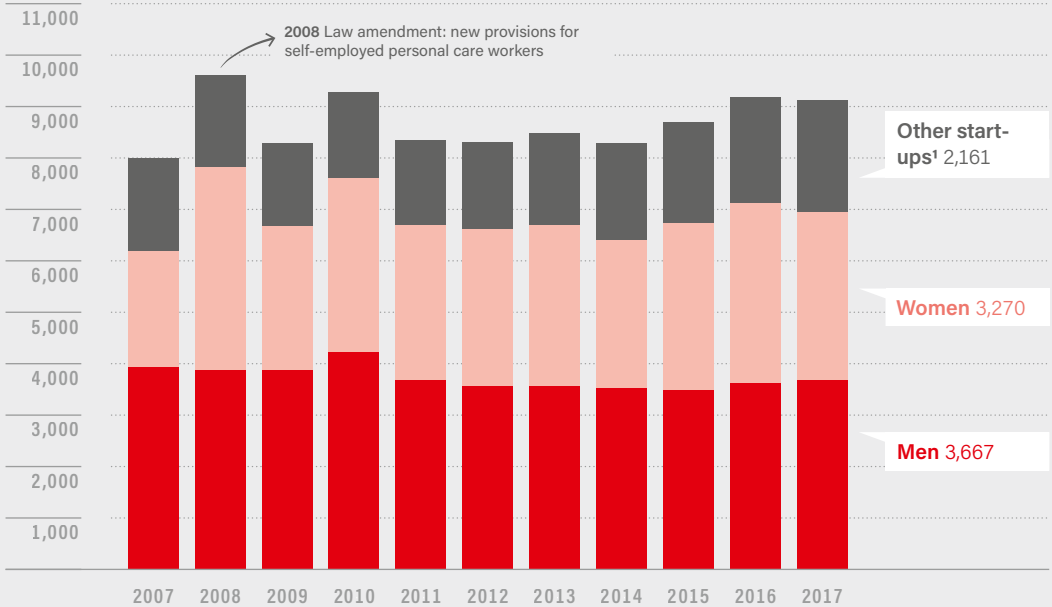
Source: Statistics Austria

Vienna's economy is mainly service-oriented. With a share of 85.4%, the tertiary sector plays a bigger role in generating total gross value added (GVA) in Vienna than it does in Austria as a whole, although services occupy a dominant position at the national level and in other federal provinces as well (2016). Despite this, the share of trade and industry in Vienna amounts to 14.5% and hence is certainly not insignificant. In a manner typical of any metropolis, the primary sector (agriculture) is very small, accounting for less than 0.5 per mil. In all, Vienna's GVA increased by 26.6% from 2006 to 2016, while this growth equalled 31.6% for Austria as a whole.

## 02.02 Start-ups

### Vienna, 2007 to 2017

NUMBER OF START-UPS (SOLE PROPRIETORSHIP AND OTHERS<sup>1</sup>)



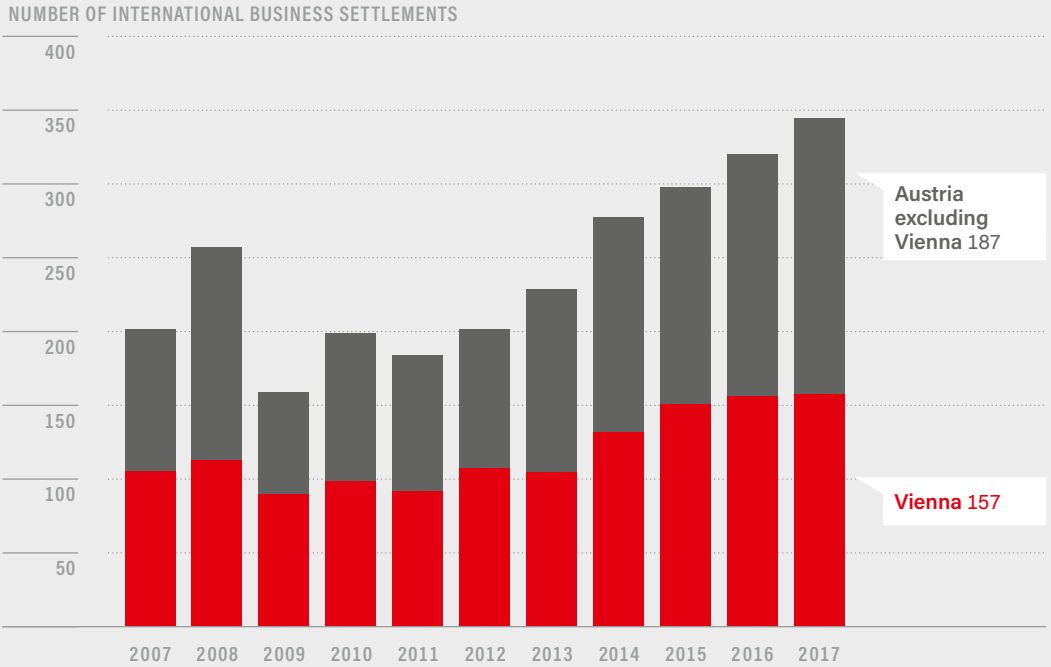
Source: Austrian Economic Chamber

<sup>1</sup> Limited liability companies, limited partnerships, general commercial partnerships, associations, stock companies, other legal forms of businesses

In 2017, slightly over 9,000 enterprises were set up in Vienna; thus close to one fourth of all Austrian start-ups are domiciled in the country's capital. These figures only comprise members of the Economic Chamber and only true start-ups (no reorganisations, suspensions of economic activity or branch establishments). Out of this total figure for 2017, approx. 7,000 start-ups were new sole proprietorships; accounting for three fourths of all start-ups, this legal form thus continues to represent the biggest percentage of new businesses.

Viewed over time, it becomes evident that women are quickly catching up: the female share of entrepreneurs in 2017 equalled 47% and hence reflects an increase by more than 10 percentage points over the last decade. Moreover, the 2008 change in the legal regulations for self-employed personal care workers led to a massive rise in the number of newly founded companies, mainly among women.

## 02.03 Business settlement of international companies Vienna and Austria, 2007 to 2017



Source: Austrian Business Agency

In the past ten years, close to half of all international companies making their first move to Austria settled in Vienna. An all-time high was achieved in 2017 with 157 enterprises settling in the Austrian capital. If business settlement ventures assisted by the Vienna Business Agency are included, the number of new international enterprises even rose to 191. Thus the Austrian capital once more succeeded in further enhancing its attractiveness as an international business location.

## 02.04 Annual gross office rents across the EU

Selected capital cities of the EU, 1<sup>st</sup> quarter of 2018

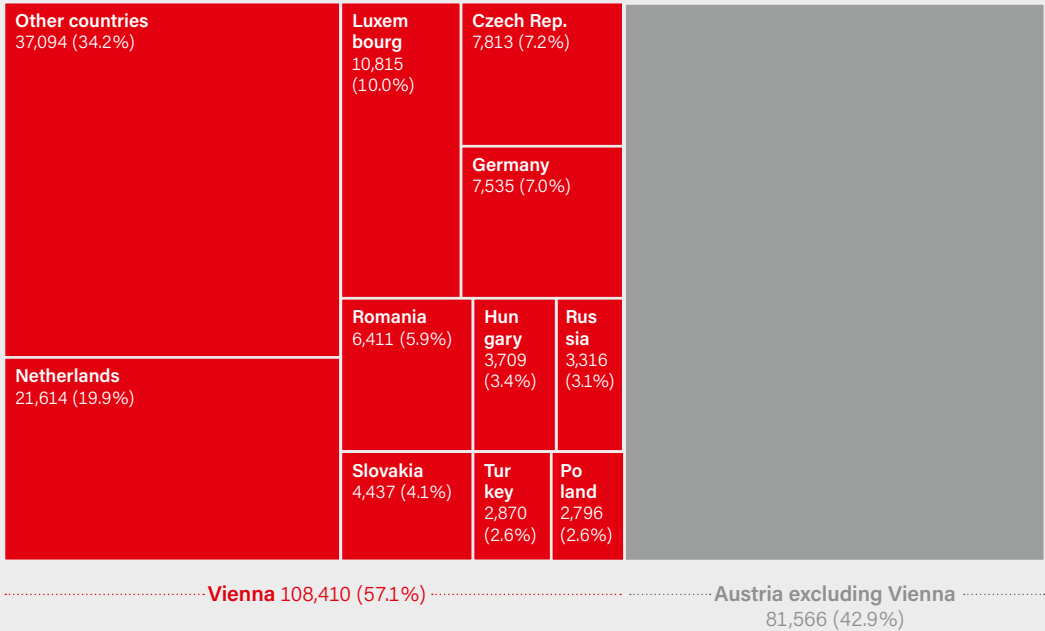
| CITY                       | GROSS OFFICE RENTS IN € PER SQ M |
|----------------------------|----------------------------------|
| Bratislava (SK)            | 276                              |
| Bucharest (RO)             | 287                              |
| Budapest (HU)              | 343                              |
| Copenhagen (DK)            | 364                              |
| <b>Vienna (AT)</b>         | <b>366</b>                       |
| Prague (CZ)                | 385                              |
| Warsaw (PL)                | 387                              |
| Berlin (DE)                | 418                              |
| Brussels (BE)              | 479                              |
| Amsterdam (NL)             | 481                              |
| Rome (IT)                  | 506                              |
| Madrid (ES)                | 519                              |
| Helsinki (FI)              | 594                              |
| Stockholm (SE)             | 849                              |
| Paris (Île-de-France) (FR) | 1,055                            |
| London (City) (UK)         | 1,266                            |
| Athens (GR)                | n / s                            |

Source: CB Richard Ellis

Office rents in Vienna are among the most attractive in Western Europe.

## 02.05 Foreign direct investment – active Vienna, 2016

DIRECT INVESTMENT IN MILLION €



Source: Oesterreichische Nationalbank

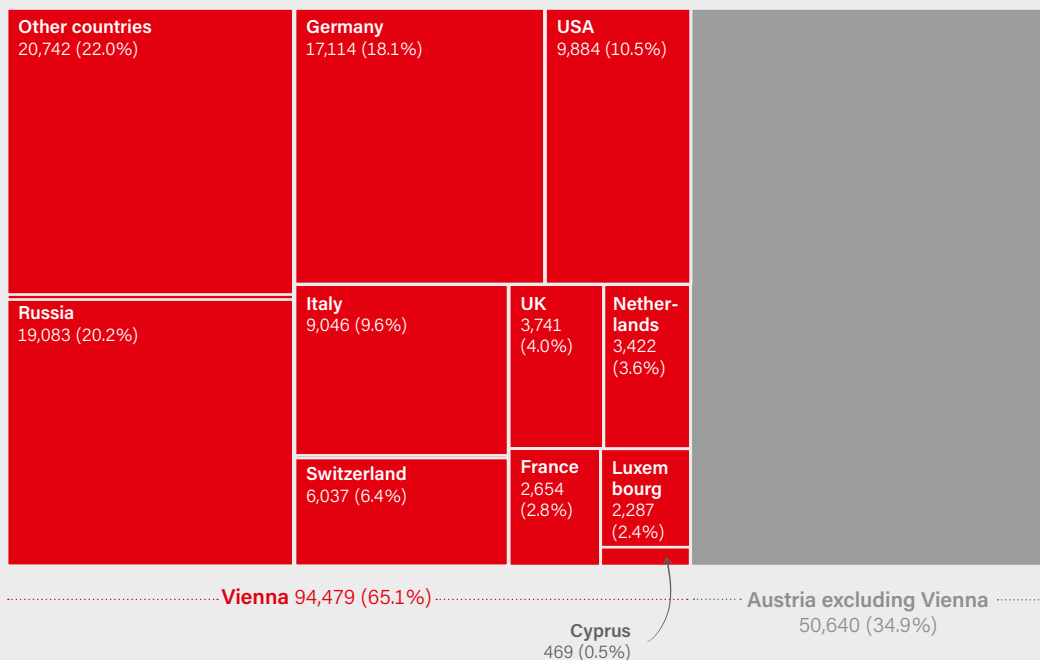
57% of all Austrian direct investment abroad (active FDI) originates in Vienna. Ranked by target country, Viennese enterprises invest most intensively in the Netherlands, trailed by Luxembourg and the Czech Republic.

Around 65% of all foreign direct investment in Austria (passive FDI) focuses on Vienna. Ranked by country of origin, it becomes clear that investments from Russia account for the biggest share in Vienna, followed by Germany and the United States.

# Foreign direct investment – passive

## Vienna, 2016

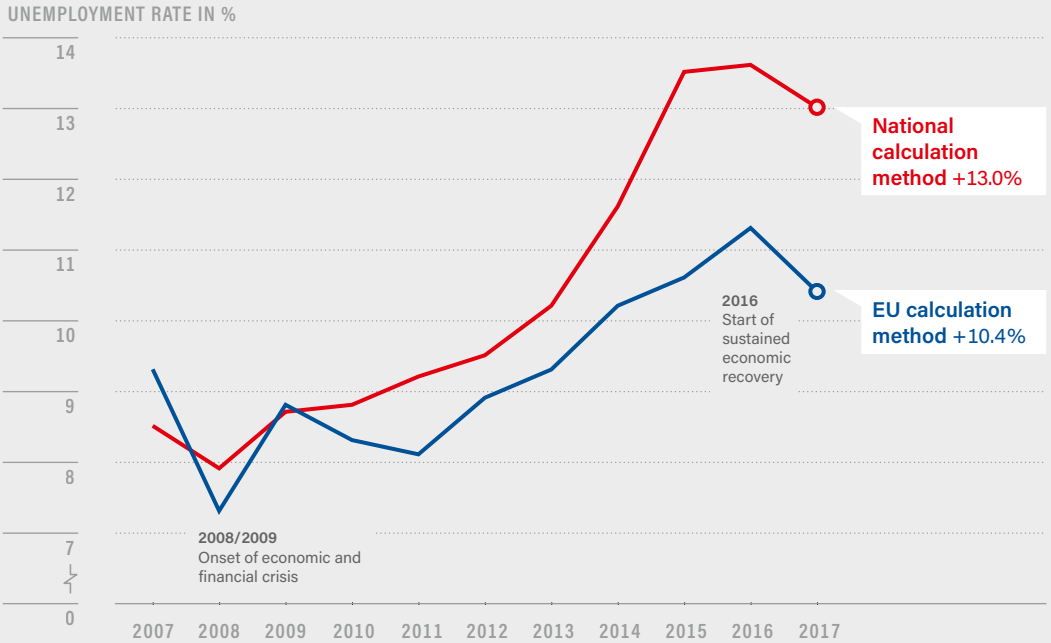
DIRECT INVESTMENT IN MILLION €



Source: Oesterreichische Nationalbank

More than half of all foreign direct investment from/to Austria originates in/goes to Vienna. Vienna's economic performance equals one fourth of Austria's.

## 02.06 Unemployment rate Vienna, 2007 to 2017



Source: Public Employment Service Austria (AMS), Statistics Austria















In Vienna, the unemployment rate according to the national calculation method was 13.0% for 2017 and thus decreased by 0.6 percentage points compared to the previous year. Between 2007 and 2017, it rose by 4.5 percentage points. Due to differences in the underlying definitions, the EU rate determined on the basis of household surveys presents a lower value.

The general economic upswing also has effects on Vienna's labour market. After the slump caused by the economic and financial crisis, Vienna's economy has embarked on a recovery process that began about two years ago. For 25 years, employment rates have not been increasing as markedly as in this recent period; as a result, new historic record levels of employment are attained (see chart 02.07).



## 02.07 Development of employment across the EU

### Selected cities/urban regions of the EU, 2007/2017

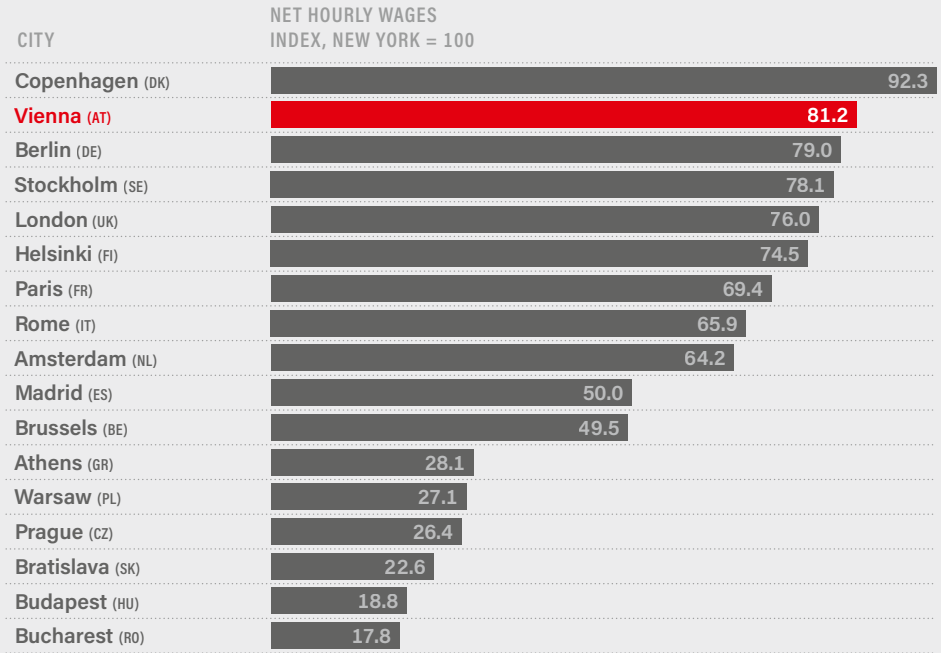
| NUTS 2 REGION                               | DEVELOPMENT OF EMPLOYMENT FIGURES 2007-2017  | EMPLOYED PERSONS 2017 | DEVELOPMENT OF POPULATION 2007-2017   |
|---|--|-----------------------|---|
| Stockholm (SE)                              |  +19.5% | 1,186,800             |  +18.3% |
| Berlin (DE)                                 |  +18.4% | 1,744,800             |  +5.0%  |
| Région de Bruxelles-Capitale (Brussels, BE) |  +18.0% | 447,100               |  +16.3% |
| <b>Wien (Vienna, AT)</b>                    |  +13.4% | <b>829,300</b>        |  +12.4% |
| Mazowieckie (Warsaw, PL)                    |  +7.3%  | 2,418,800             |  +3.3%  |
| Île-de-France (Paris, FR)                   |  +2.3%  | 5,294,700             |  +5.1%  |
| Bratislavský kraj (Bratislava, SK)          |  +2.2%  | 327,600               |  +8.4%  |

Source: Eurostat

Between 2007 and 2017, employment in Vienna grew by 13.4%. This increase was inter alia triggered by the economic upturn, but also by population growth in the eastern part of Austria as a whole.

## 02.08 Net hourly wages accross the EU

### Selected capital cities of the EU, 2018

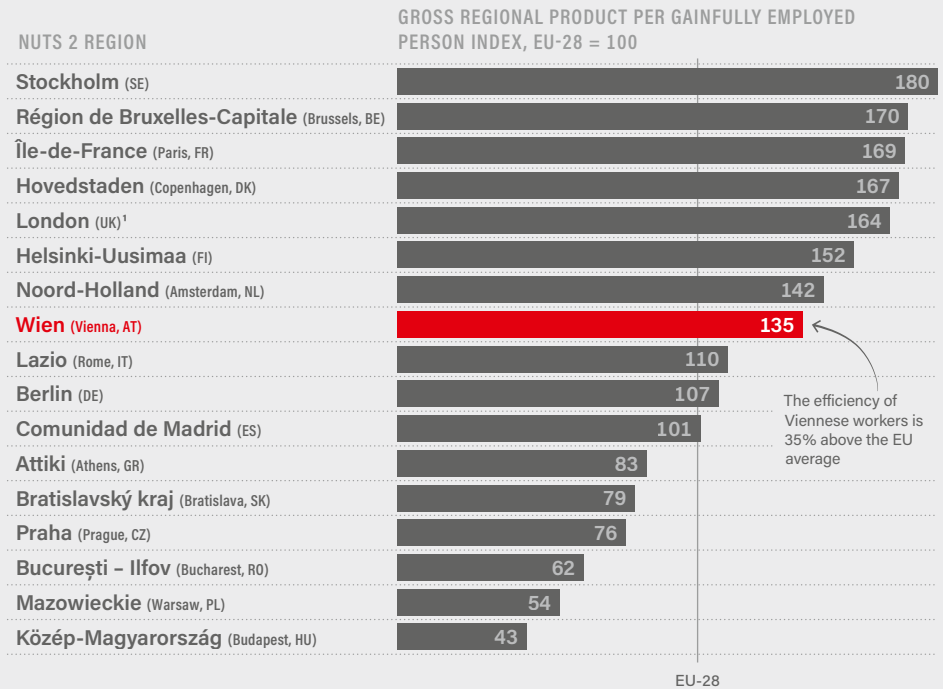


Source: UBS

Net hourly wages are compared on an index basis with those of New York as baseline (100). The chart is led by Northern European cities together with Vienna. Conversely, wages are lower in Eastern European capitals, not least because of equally lower local price levels. The average work input for one working hour is not taken account of (Labour productivity, see 02.09).

## 02.09 Labour productivity across the EU

### Selected cities/urban regions of the EU, 2016



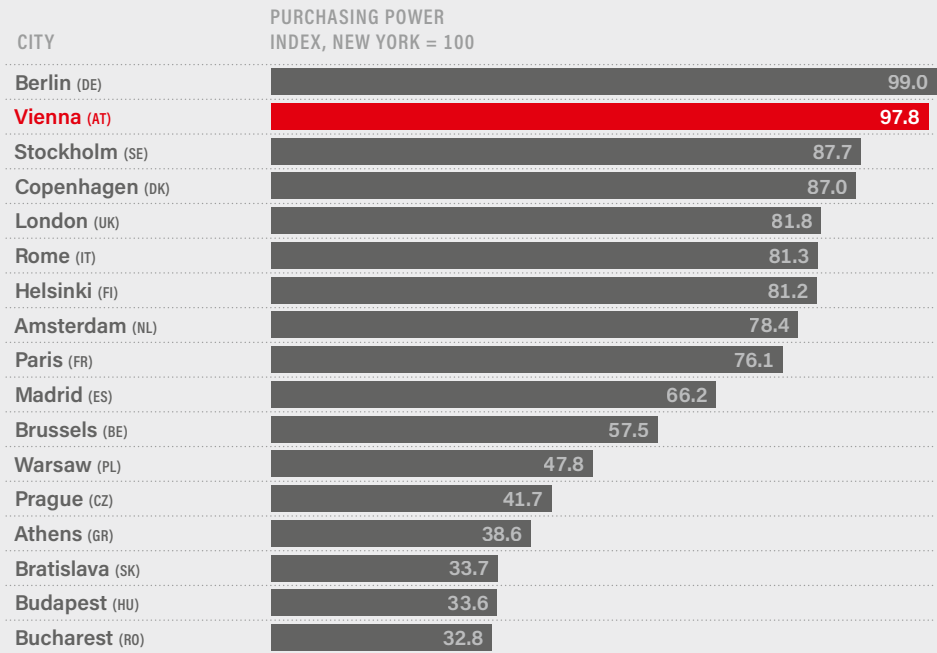
Source: Eurostat

<sup>1</sup>London: NUTS 1 region, comprises the entire Greater London area.

Due to above-average productivity, Vienna is highly attractive as a business location on an international scale despite comparatively higher nominal labour costs.

## 02.10 Purchasing power across the EU

### Selected capital cities of the EU, 2018

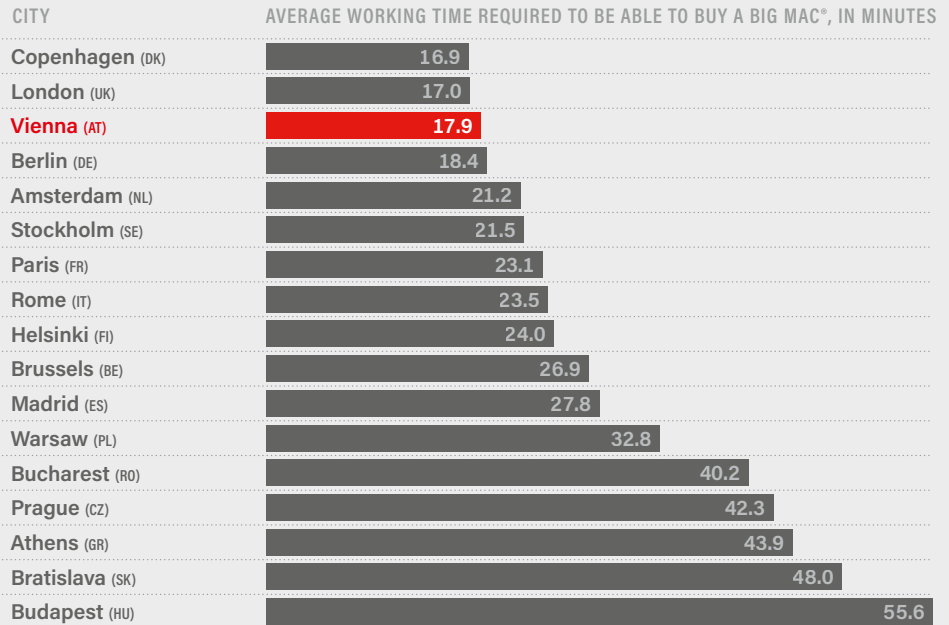


Source: UBS

Purchasing power is measured in net hourly pay, divided by the cost of a national basket of goods. The chart shows that workers in Vienna boast the second-highest purchasing power among the European capital cities listed in this chart. New York provides the baseline (100) of this ranking – thus Berlin and Vienna present almost the same purchasing power as the U.S. metropolis. Eastern European capitals and Athens trail far behind with regard to the purchasing power of workers: compared to Western Europe, the pay level is even lower than the price level.

## 02.11 Big Mac® index across the EU

### Selected capital cities of the EU, 2018



Source: UBS

Due to the worldwide availability and uniformity of the Big Mac®, this item is often used for international comparisons of purchasing power. For this, the average national net pay is juxtaposed with the local price of one burger, thus permitting a calculation of how long a person needs to work in order to buy one Big Mac®.

Among the selected European capital cities, Vienna holds a top position with approx. 18 minutes. In Bratislava, which is only 55 kilometres to the east, 48 minutes of working time (almost triple this length) are needed to be able to buy a Big Mac®.

## 03 — Education and research

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For further data about Vienna as a business location, please visit [www.wien.at/statistik/wirtschaft](http://www.wien.at/statistik/wirtschaft).

### **Research and development (R&D)**

Research and experimental development (R&D) is defined as a creative activity that utilises scientific methods and is systematically conducted with the objective of augmenting the state of knowledge as well as of developing new applications of this knowledge.

The element of novelty and originality (new findings, new knowledge, new applications) is a key criterion that distinguishes R&D from other scientific and technological activities.

### **R&D quota**

The R&D quota (research quota) is the most frequently used indicator in statistics relating to research and development.

The quota describes the share of R&D spending in % of the gross domestic product/gross regional product of a territorial unit. For this reason, the R&D quota is also useful for international comparisons and the formulation of targets.

### **R&D sectors**

R&D spending involves different sectors, such as universities, enterprises, the government and the private non-profit sector (e.g. scientific societies and institutes operated by associations or religious communities). In this brochure, research spending is analysed according to these implementing sectors (as opposed to financing sectors).

### **Headcount vs. full-time equivalents**

Research and development personnel is rendered in two ways – either by headcount, i.e. as the number of persons active in a specific area, or as full-time equivalents (FTE), which is a standardised comparative benchmark that reflects the actual time input (resource costs) for R&D. The type of employment (full-time, part-time) as well as the extent of R&D activities must be considered in this context.

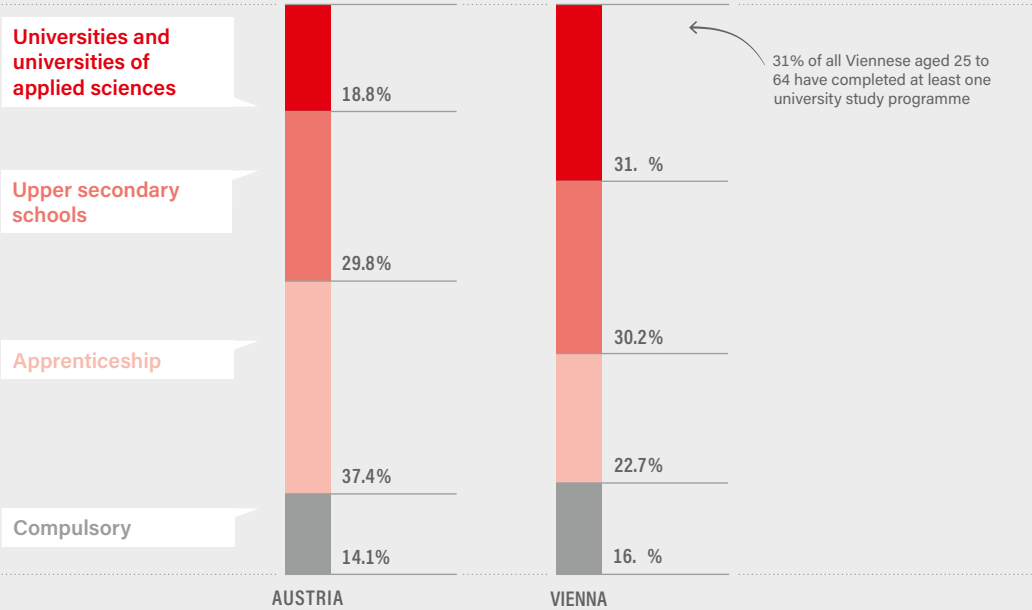
### **Secondary education**

An upper secondary education level according to ISCED 2011 (International Standard Classification of Education) as a minimum corresponds to the Austrian upper secondary education level (stage 3), post-secondary, non-tertiary education level (stage 4) and tertiary education level (stages 5–8). It comprises all forms of education after completing four years at a New Secondary School or the lower cycle at an Academic Secondary School (AHS), i.e. school leaving credentials of Pre-vocational Schools, AHS upper cycle and schools for Intermediate or Higher Vocational Education (with a school leaving certificate entitling graduates to attend university) as well as apprenticeships and university studies.

## 03.01 Educational attainments

### Vienna and Austria, 2017

HIGHEST EDUCATIONAL ATTAINMENT AS SHARE OF POPULATION AGED 25 TO 64 IN %



Source: Statistics Austria

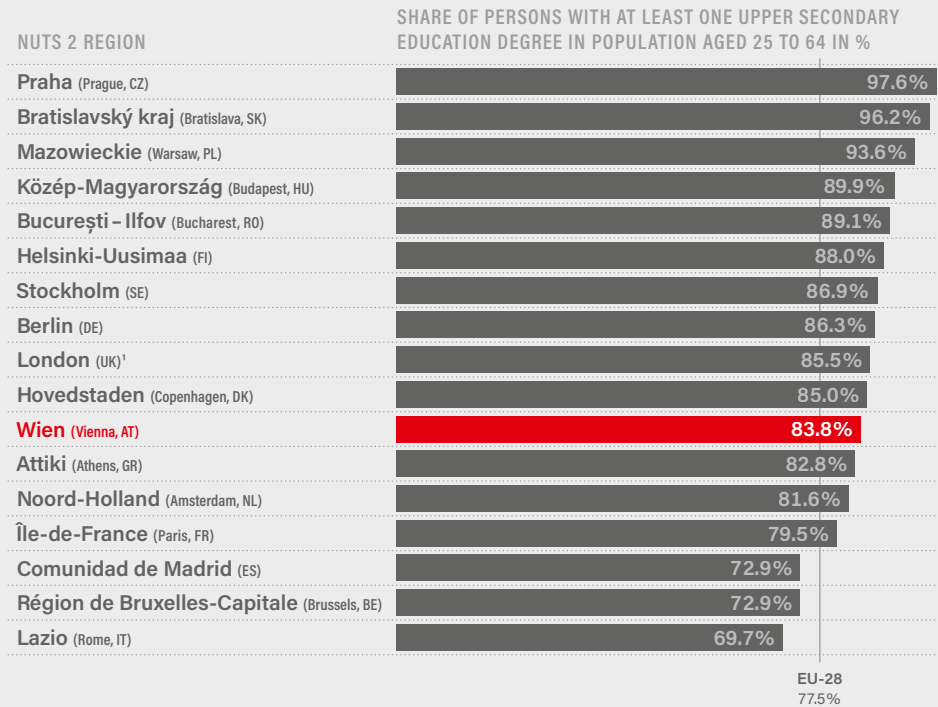
The educational attainments of the population constitute an important locational factor for a region. Vienna benefits from the availability of a large number of highly qualified workers and also boasts a large share of university graduates.

About two thirds of all Viennese citizens aged 25 to 64 years have completed upper secondary (e.g. school-leaving certificate entitling graduates to attend university) or tertiary education (university study programme). The share of university graduates in Vienna equals approx. 31% and hence is markedly higher than anywhere else in Austria (national average approx. 19%).



## 03.02 Educational attainments across the EU

### Selected cities/urban regions of the EU, 2017



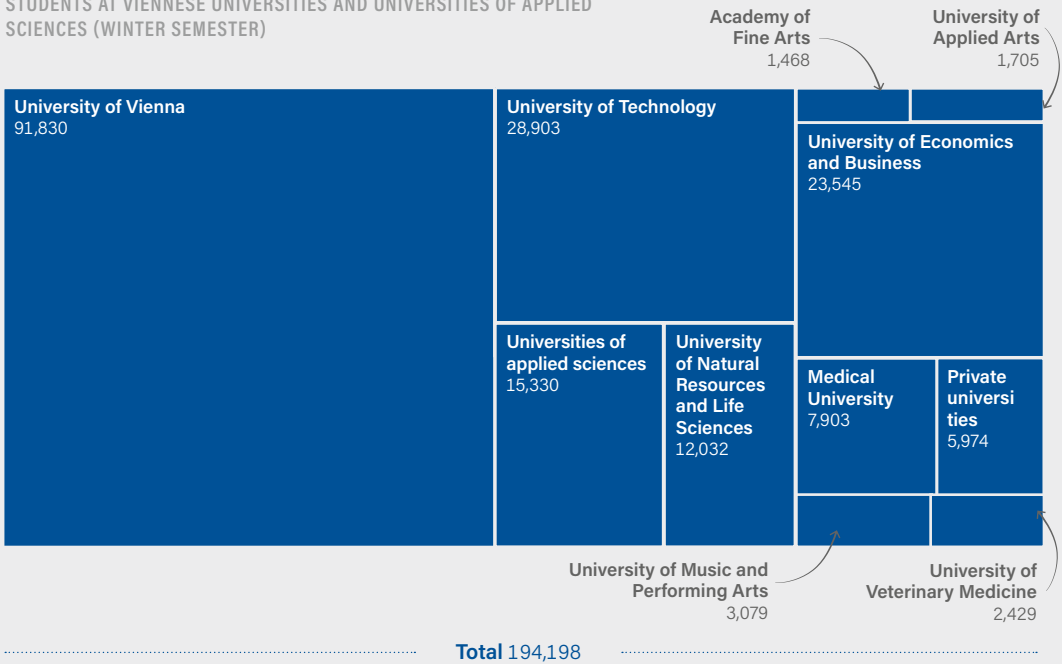
Source: Eurostat

<sup>1</sup>London: NUTS 1 region, comprises the entire Greater London area.

83.3% of Vienna's inhabitants aged 25 to 64 years have completed at least upper secondary education level (e.g. an apprenticeship or a school-leaving certificate enabling graduates to attend university). The educational level of the population thus exceeds the EU average (77.5%). In this respect, Vienna holds a position comparable to that of cities like Copenhagen, London or Berlin. Traditionally, Eastern European cities like Prague, Bratislava and Warsaw perform somewhat better in this area.

### 03.03 Students — Viennese universities and universities of applied sciences, 2017

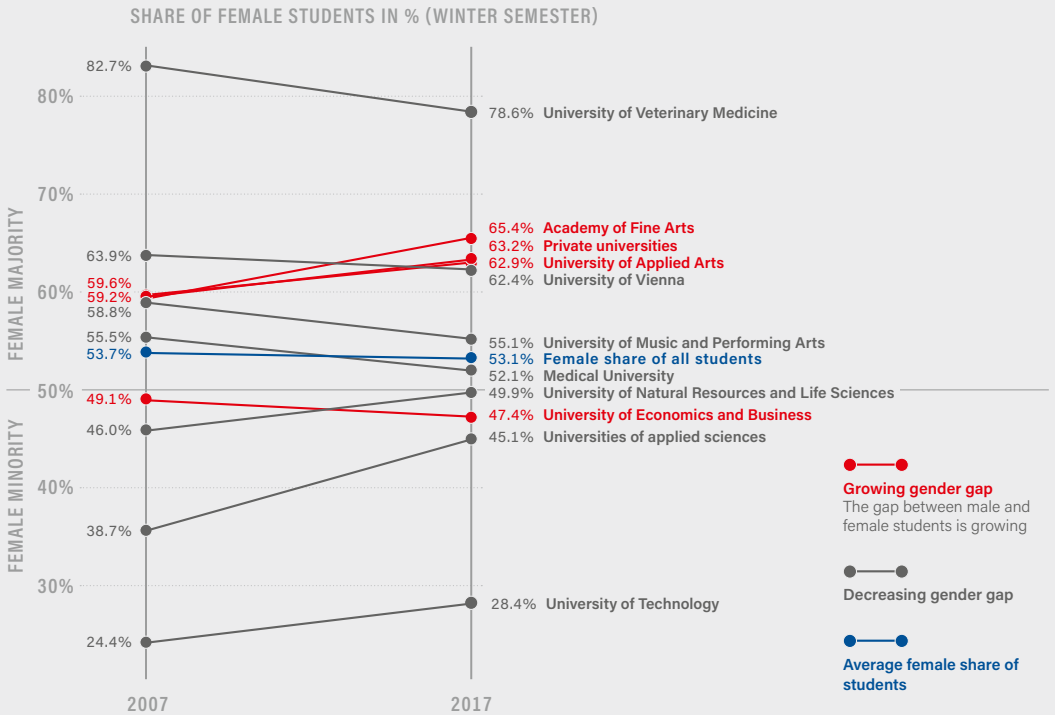
STUDENTS AT VIENNESE UNIVERSITIES AND UNIVERSITIES OF APPLIED SCIENCES (WINTER SEMESTER)



Source: unidata

In the 2017/2018 winter semester, approx. 200,000 students were enrolled at the universities and universities of applied sciences of Vienna, the biggest university city in the German-speaking region. Slightly over half of these students (53.1%) are female. It is notable that men continue to prefer technical, natural-scientific or economic curricula, while women tend to opt for studies in the fields of the humanities, social sciences, arts or veterinary medicine.

## 03.04 Share of female students — Viennese universities and universities of applied sciences, 2007/2017



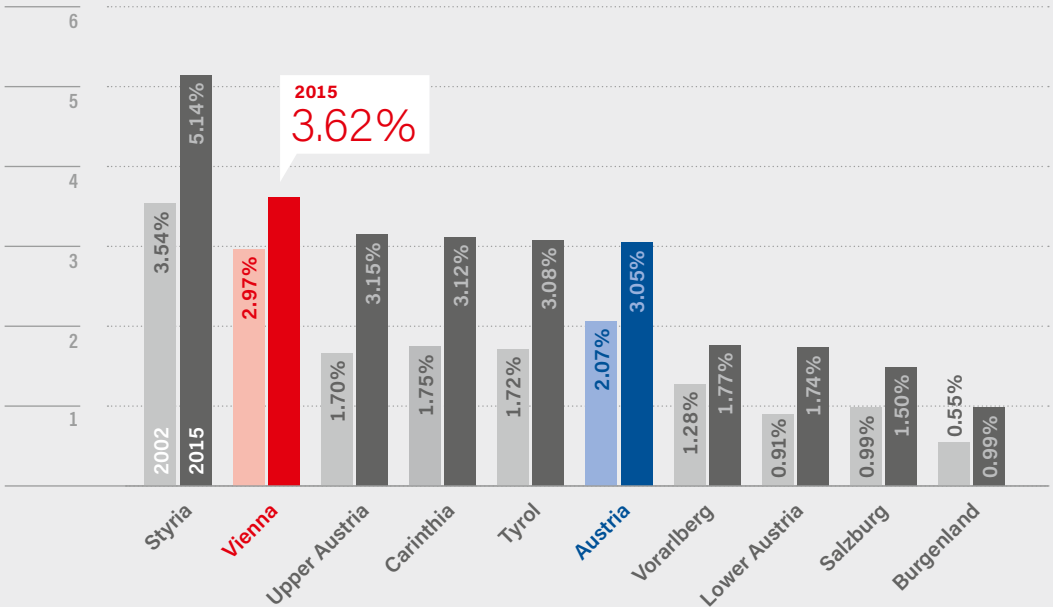
Source: unidata

More than half of all students in Vienna are women.

## 03.05 R&D quotas across federal provinces

### Federal provinces of Austria, 2002 and 2015

R&D SPENDING IN % OF GROSS REGIONAL PRODUCT



Source: Statistics Austria

The R&D quotas of all Austrian federal provinces are steadily rising. Despite strong increases in some other provinces, Vienna remains in second place in Austria.

For years, Styria has been the undisputed national leader in this respect. This is partly due to the fact that Styria is traditionally an industrial region with numerous research-intensive enterprises. In addition to its five universities and JOANNEUM RESEARCH Forschungsgesellschaft mbH, Styria also boasts a great number of centres of excellence.

At the same time, the gross regional product, by which the absolute expenditure must be divided to calculate the research quota, is almost twice as high for Vienna as for Styria.

In absolute figures, however, Vienna accounts for close to one third of all national R&D spending, hence acting as the heavyweight and backbone among Austrian research locations: In 2015, the Austrian capital invested €3.2 billion in R&D (top rank), trailed by Styria (2<sup>nd</sup> place) at €2.2 billion.

## 03.06 R&D quotas across the EU

### Selected cities/urban regions of the EU, 2015

| NUTS 2 REGION                               | R&D SPENDING IN % OF GROSS REGIONAL PRODUCT |
|---|---|
| Braunschweig (DE)                           | 9.50%                                       |
| Hovedstaden (Copenhagen, DK)                | 4.59%                                       |
| Stockholm (SE)                              | 3.81%                                       |
| <b>Wien (Vienna, AT)<sup>1</sup></b>        | <b>3.66%</b>                                |
| Helsinki-Uusimaa (FI)                       | 3.61%                                       |
| Berlin (DE)                                 | 3.53%                                       |
| Praha (Prague, CZ)                          | 2.97%                                       |
| Île-de-France (Paris, FR) <sup>2</sup>      | 2.90%                                       |
| Közép-Magyarország (Budapest, HU)           | 1.88%                                       |
| Bratislavský kraj (Bratislava, SK)          | 1.84%                                       |
| Région de Bruxelles-Capitale (Brussels, BE) | 1.79%                                       |
| Mazowieckie (Warsaw, PL)                    | 1.74%                                       |
| Noord-Holland (Amsterdam, NL)               | 1.72%                                       |
| Comunidad de Madrid (ES)                    | 1.72%                                       |
| Lazio (Rome, IT)                            | 1.60%                                       |
| Attiki (Athens, GR)                         | 1.15%                                       |
| London (UK) <sup>3</sup>                    | 1.08%                                       |
| București - Ilfov (Bucharest, RO)           | 0.92%                                       |

Source: Eurostat

A comparison with all EU cities and regions places Vienna in a satisfactory position; in particular among EU capitals and capital regions, it performs very well, also with a view to Austria's neighbouring countries. Braunschweig was included in this chart because it is the urban region with the highest research quota throughout the entire European Union, mainly due to its high density of supra-regional or international research institutions, such as the Helmholtz Centre for Infection Research, the Physikalisch-Technische Bundesanstalt (PTB, national metrology institute), the German Aerospace Center (DLR, second-largest European research airport), Salzgitter Mannesmann Forschung GmbH, the Volkswagen corporate research division and other institutions.

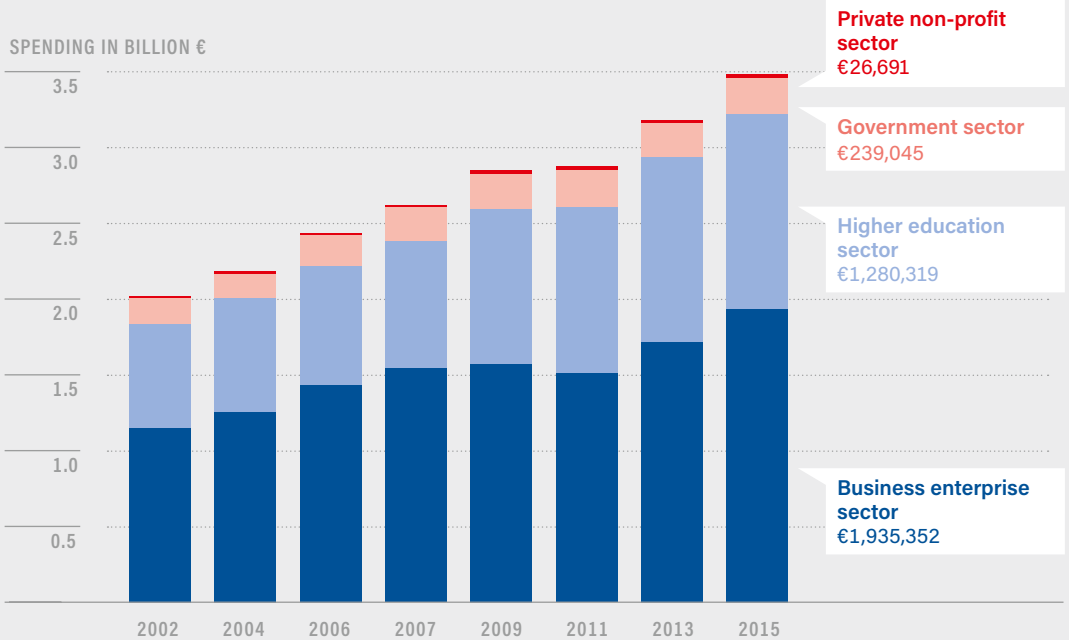
<sup>1</sup> Vienna's above research quota of 3.66% deviates slightly from the current quota determined by Statistics Austria, since Eurostat still shows the non-revised figure.

<sup>2</sup> 2013 figure

<sup>3</sup> NUTS 1 region, comprises Greater London

## 03.07 R&D spending by sectors

### Vienna, 2002 to 2015



Source: Statistics Austria

Since 2002, these data are collected and published every other year. Due to an EU-wide changeover in 2006/2007, the data are now collected in odd years.

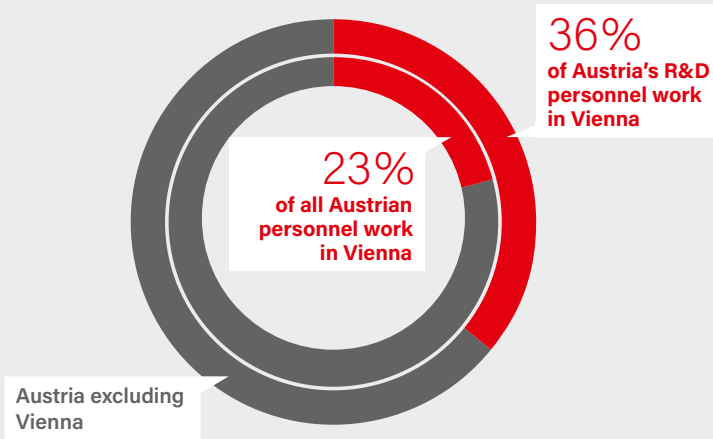
Two developments observed around 2009/2011 are remarkable in this context: While enterprises reduced their R&D spending, the public sector continued to invest during the crisis, thereby stabilising the level of research spending.

In the long term, though, more and more enterprises in Vienna are engaging in research and, above all, development. R&D is acquiring growing importance in the service sector, whose position in Vienna is traditionally strong. In 2015, R&D spending was particularly massive for the fields of biotechnology, electrical equipment, natural, engineering and agricultural sciences, medicine, motor vehicles and IT.

In the private sector, the concentration of key players is high: 77 enterprises account for close to 40% of all Viennese R&D spending.

## 03.08 R&D personnel Vienna and Austria, 2015

REGIONAL SHARE AMONG ALL AUSTRIAN (R&D) PERSONNEL



Source: Statistics Austria

For many years, the number of research and development workers has been on a continuous rise in both Austria and, specifically, Vienna. This increase is mainly due to the higher education and business enterprise sectors.

Over one third of all Austrian R&D personnel work in Vienna.

## 03.09 Share of R&D personnel across the EU

### Top 10 NUTS 2 regions of the EU, 2015

| NUTS 2 REGION                                    | SHARE IN TOTAL WORKFORCE (HEADCOUNT) IN % |
|--|---|
| 1. Inner London – West (UK) <sup>1</sup>         | 11.10%                                    |
| 2. Brabant wallon (BE)                           | 5.50%                                     |
| 3. Wien (Vienna, AT)                             | 5.42%                                     |
| 4. Hovedstaden (Copenhagen, DK)                  | 5.33%                                     |
| 5. Praha (Prague, CZ)                            | 5.32%                                     |
| 6. Braunschweig (DE)                             | 4.91%                                     |
| 7. Steiermark (Styria, AT)                       | 4.57%                                     |
| 8. Berkshire, Buckinghamshire & Oxfordshire (UK) | 4.46%                                     |
| 9. Région de Bruxelles-Capitale (Brussels, BE)   | 4.45%                                     |
| 10. Helsinki-Uusimaa (FI)                        | 4.36%                                     |

Source: Eurostat

<sup>1</sup>The NUTS 2 region “Inner London – West” only comprises some parts of London. The share of R&D workers was 2.38% in Greater London.

An international comparison reveals an excellent position for Vienna, as the Austrian capital holds 3<sup>rd</sup> place among all 276 EU regions with regard to the share of R&D personnel.



With “Innovative Vienna 2020” adopted in 2015, the City Council formulated a strategy to further boost Vienna’s role as a central hub of science, research, creativity and innovation.

Vienna set itself the goal of not only creating optimum preconditions for the innovation potential to develop in the metropolitan region as well as for an innovative climate, but as an innovative municipal administration is also committed to the role of the City Administration in shaping, buying and using innovations. This is to preserve Vienna’s position in the international competitive arena and prepare the city for upcoming developments and the challenges of the future.

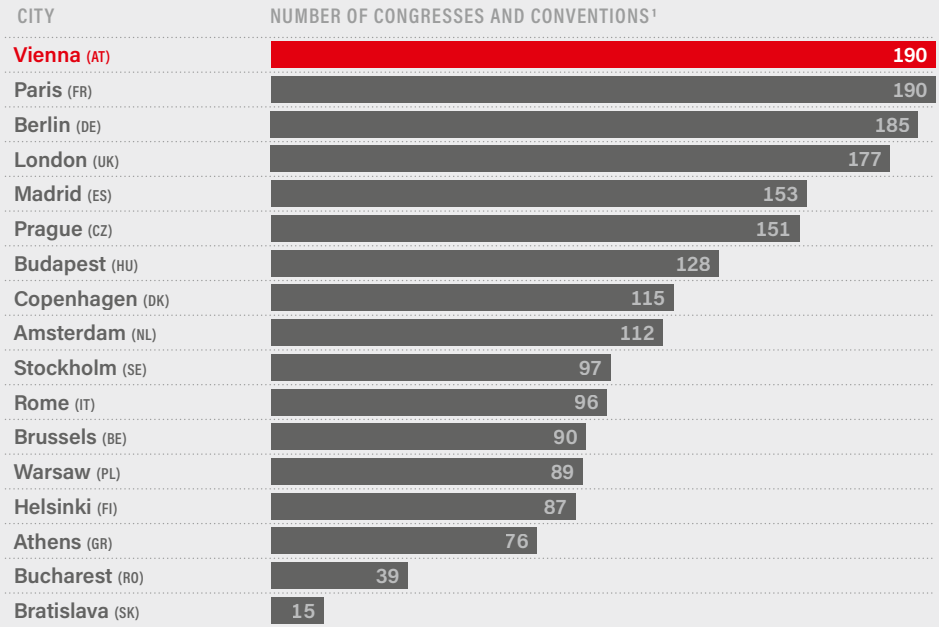
# 04 — International Vienna

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| 04.01 | <b>International congresses and conventions across the EU</b>                         | 42 |
| 04.02 | <b>International congresses and conventions in Vienna:<br/>number and value added</b> | 43 |
| 04.03 | <b>Airline passenger volumes across the EU</b>  | 44 |
| 04.04 | <b>Tourist overnight stays across the EU</b>  | 46 |
| 04.05 | <b>Development of tourist overnight stays</b>   | 47 |

For further data about Vienna as a business location, please visit [www.wien.at/statistik/wirtschaft](http://www.wien.at/statistik/wirtschaft).



## 04.01 International congresses and conventions across the EU – Selected capital cities of the EU, 2017

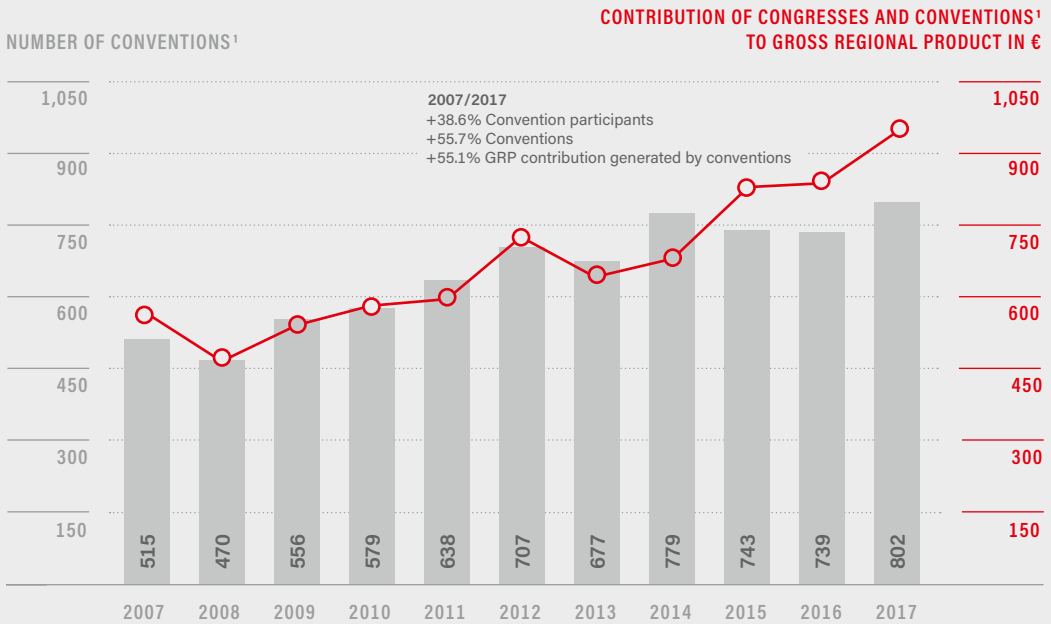


Source: International Congress and Convention Association (ICCA)

Despite increasingly tough competition, Vienna continues to defend its position in the convention market with success. In a recently published worldwide ranking by the International Congress and Convention Association, the Austrian capital occupies an excellent second place with a total of 190 conventions in 2017, trailing only Barcelona (195), on a par with Paris and ahead of Berlin. In all, 658 cities all over the world were analysed for this chart.

<sup>1</sup> Regularly organised conventions with at least 50 participants that are held on a rotating basis in at least 3 different countries (contrary to chart 04.02).

## 04.02 International congresses and conventions in Vienna: number and value added – Vienna, 2007 to 2017



Source: Vienna Convention Bureau

The number of congresses and conventions is a good indicator of the fast growth of Vienna's convention industry over the past decade. In 2017, 802 international conventions took place in the Austrian capital, i.e. over one-and-a-half times more than as recently as in 2007 (+55.7%). With approx. €920 million in 2017, these events account for a significant share of value added for Vienna, with figures expected to increase even further.

Moreover, convention participants are regarded as an important economic factor, since they tend to spend about twice as much per day as the average tourist. In 2017, roughly 40% more convention participants visited Vienna than just ten years ago. This aspect likewise reflects the strong growth of the tourism industry.

<sup>1</sup> According to the definition of the Vienna Convention Bureau, conventions are regarded as international (contrary to chart 04.01) if at least 50% of participants come from abroad.

## 04.03 Airline passenger volumes across the EU

### Selected capital cities of the EU, 2016

Vienna Airport is Austria's biggest airport. 74 airlines connect the Austrian capital regularly with 195 destinations in 70 countries. In 2016, they transported approx. 23.3 million passengers from and to Vienna, an increase by 2.5% as compared to the previous year. London and Paris – the metropolises with the highest passenger volumes – record seven and, respectively, four times as many airline customers. Thus Vienna's airport takes a midrange position among the cities included in this overview but, due to its ideal geographic location, serves as an important hub for flights to Eastern Europe, the Near and Middle East as well as Asia. It is one of ten European airports with the 4-star quality rating awarded by the renowned market research institute Skytrax.

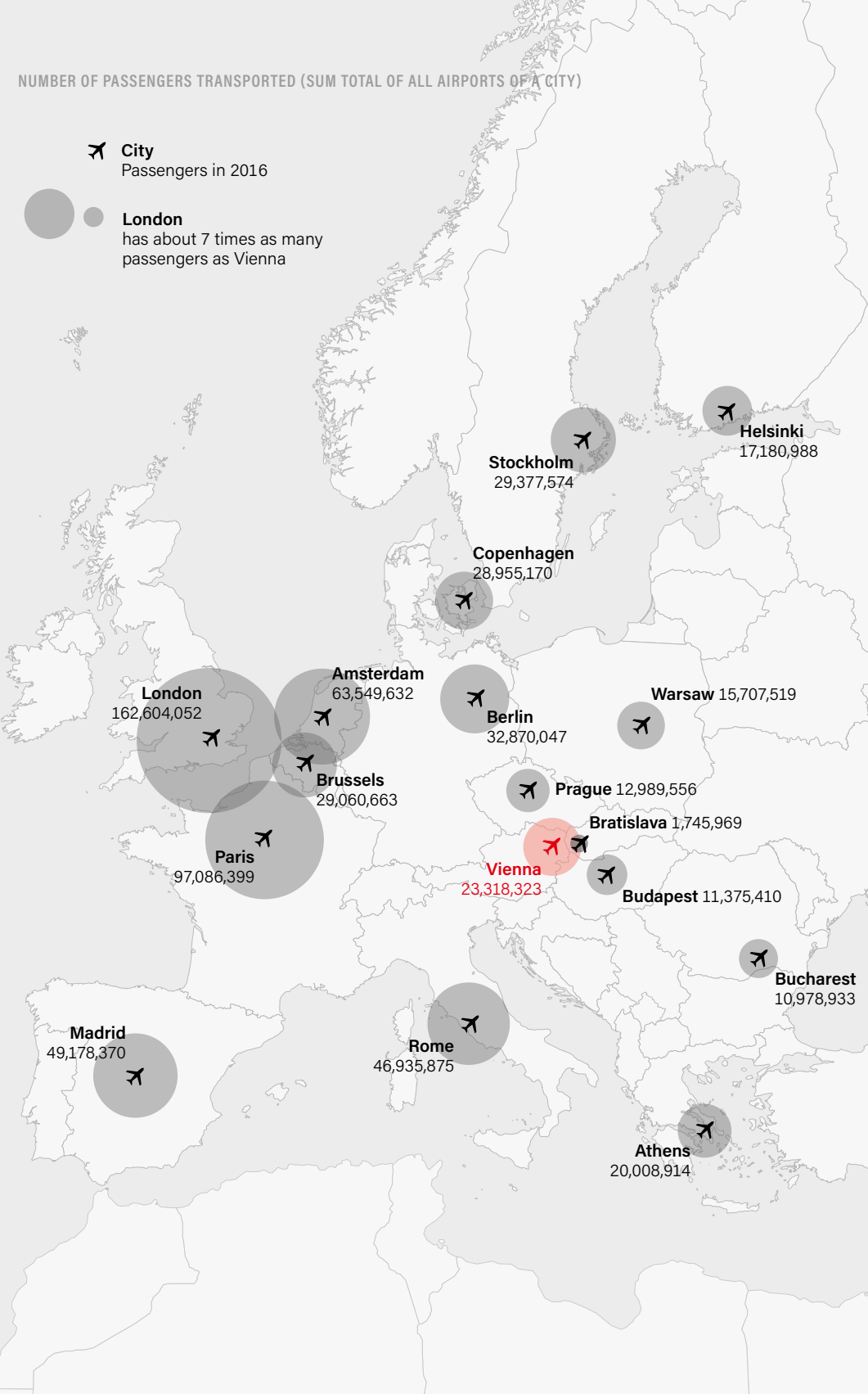
74 airlines regularly connect  
Vienna Airport with 195  
destinations.



NUMBER OF PASSENGERS TRANSPORTED (SUM TOTAL OF ALL AIRPORTS OF A CITY)

✈ City  
Passengers in 2016

London  
has about 7 times as many  
passengers as Vienna



## 04.04 Tourist overnight stays across the EU

### Selected cities/urban regions of the EU, 2016

| NUTS 2 REGION                               | NUMBER OF OVERNIGHT STAYS IN MILLION |
|---|--------------------------------------|
| Île-de-France (Paris, FR)                   | 71.2                                 |
| Lazio (Rome, IT)                            | 32.1                                 |
| Berlin (DE)                                 | 30.9                                 |
| Noord-Holland (Amsterdam, NL)               | 27.4                                 |
| Comunidad de Madrid (ES)                    | 25.1                                 |
| Praha (Prague, CZ)                          | 16.8                                 |
| <b>Wien (Vienna, AT)</b>                    | <b>14.8</b>                          |
| Stockholm (SE)                              | 13.4                                 |
| Hovedstaden (Copenhagen, DK)                | 10.7                                 |
| Közép-Magyarország (Budapest, HU)           | 10.6                                 |
| Attiki (Athens, GR)                         | 8.5                                  |
| Mazowieckie (Warsaw, PL)                    | 8.1                                  |
| Helsinki-Uusimaa (FI)                       | 5.5                                  |
| Région de Bruxelles-Capitale (Brussels, BE) | 5.2                                  |
| București – Ilfov (Bucharest, RO)           | 3.2                                  |
| Bratislavský kraj (Bratislava, SK)          | 3.0                                  |
| London (UK) <sup>1</sup>                    | n / s                                |

Source: Eurostat

<sup>1</sup>London: NUTS 1 region, comprises the entire Greater London area.

In 2016, Vienna set a new record of 14.8 million overnight stays, which places it midrange among the cities included in this chart. The absolute tourism magnets are Paris (with roughly five times as many overnight stays), Rome, Berlin and Amsterdam (with approx. twice as many overnight stays each).

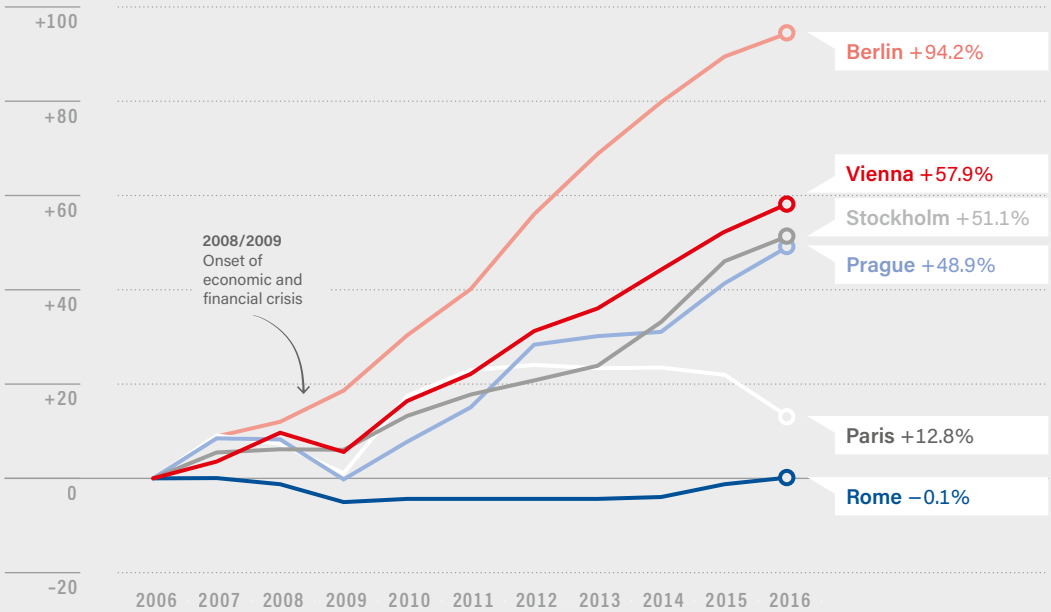
All cities analysed for this purpose were able to increase the number of overnight stays in the past ten years – for Vienna, this amounts to a plus of 58%. The most notable increases were recorded for Eastern European cities.



## 04.05 Development of tourist overnight stays

### Selected cities/urban regions of the EU, 2006 to 2016

DEVELOPMENT OF OVERNIGHT STAYS SINCE 2006 IN %



Source: Eurostat

Vienna's popularity as a destination for city trips has been steadily increasing over the years.

# 05 — Living in Vienna

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| 05.01 | <b>Vienna in international rankings</b>                 | 50 |
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For further data about Vienna as a business location, please visit [www.wien.at/statistik/wirtschaft](http://www.wien.at/statistik/wirtschaft).



## 05.01 Vienna in international rankings

### Highest quality of life worldwide

| RANK   | QUALITY OF LIVING SURVEY 2018 (MERCER) | GLOBAL LIVEABILITY RANKING 2018 (ECONOMIST INTELLIGENCE UNIT) | SMART CITY INDEX 2017 (ROLAND BERGER) | THE WORLD'S MOST REPUTABLE CITIES 2018 (REPUTATION INSTITUTE) |
|--------|--|---|---------------------------------------|---|
| 1      | <b>Vienna</b>                          | <b>Vienna</b>   | <b>Vienna</b>                         | Tokyo   |
| 2      | Zurich                                 | Melbourne   | Chicago                               | Sydney  |
| 3      | Auckland                               | Osaka   | Singapore                             | Copenhagen  |
| 4      | Munich                                 | Calgary   | London                                | <b>Vienna</b>   |
| 5      | Vancouver                              | Sydney  | Santander                             | Stockholm   |
| 6      | Düsseldorf                             | Vancouver   | New York                              | Venice  |
| 7      | Frankfurt                              | Toronto   | Parramatta                            | Rome  |
| 8      | Geneva                                 | Tokyo   | Seoul                                 | Zurich  |
| 9      | Copenhagen                             | Copenhagen  | Barcelona                             | Munich  |
| 10     | Sydney & Basel                         | Adelaide  | Denver                                | Montreal  |
| Cities | 231                                    | 140   | 87                                    | 56  |

In numerous rankings, Vienna continues to achieve top scores year after year – not only in Europe, but on a worldwide scale. While special attention should be paid to the outstanding marks assigned for the city's high quality of life, Vienna also enjoys international prominence as a city of innovation.

## 05.02 Satisfaction of urban residents across the EU 2015

SHARE OF RESPONDENTS REPLYING "VERY SATISFIED" OR "RATHER SATISFIED", IN %

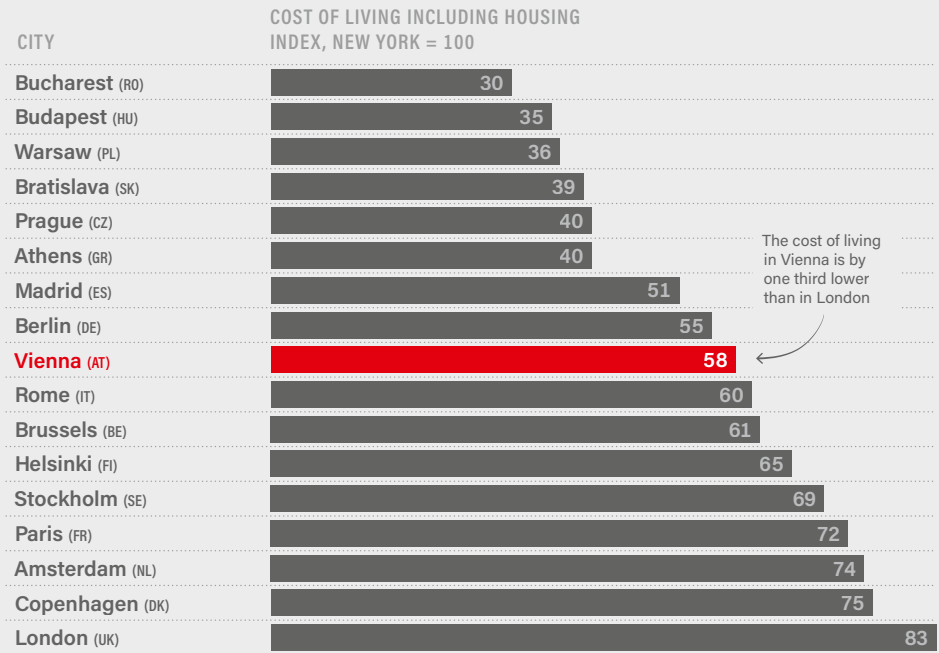
| PUBLIC TRANSPORT      | CULTURAL FACILITIES   | GREEN SPACES          | SAFETY                | HEALTH CARE SERVICES  |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 95% <b>Vienna</b>     | 97% <b>Vienna</b>     | 93% <b>Vienna</b>     | 95% <b>Copenhagen</b> | 91% <b>Amsterdam</b>  |
| 93% <b>Helsinki</b>   | 94% <b>Helsinki</b>   | 93% <b>Stockholm</b>  | 94% <b>Stockholm</b>  | 89% <b>Brussels</b>   |
| 86% <b>Prague</b>     | 90% <b>Stockholm</b>  | 91% <b>London</b>     | 93% <b>Helsinki</b>   | 88% <b>Vienna</b>     |
| 86% <b>London</b>     | 90% <b>Prague</b>     | 91% <b>Helsinki</b>   | 88% <b>Amsterdam</b>  | 84% <b>Prague</b>     |
| 84% <b>Berlin</b>     | 90% <b>Paris</b>      | 90% <b>Copenhagen</b> | 86% <b>Vienna</b>     | 83% <b>Paris</b>      |
| 82% <b>Amsterdam</b>  | 89% <b>Copenhagen</b> | 88% <b>Amsterdam</b>  | 83% <b>Warsaw</b>     | 80% <b>Berlin</b>     |
| 79% <b>Paris</b>      | 88% <b>Amsterdam</b>  | 87% <b>Warsaw</b>     | 81% <b>London</b>     | 79% <b>Stockholm</b>  |
| 79% <b>Stockholm</b>  | 87% <b>Berlin</b>     | 85% <b>Brussels</b>   | 74% <b>Madrid</b>     | 78% <b>Copenhagen</b> |
| 76% <b>Warsaw</b>     | 84% <b>Warsaw</b>     | 85% <b>Berlin</b>     | 74% <b>Paris</b>      | 72% <b>London</b>     |
| 75% <b>Copenhagen</b> | 83% <b>Brussels</b>   | 83% <b>Paris</b>      | 71% <b>Bratislava</b> | 72% <b>Helsinki</b>   |
| 72% <b>Athens</b>     | 82% <b>Budapest</b>   | 80% <b>Prague</b>     | 71% <b>Berlin</b>     | 61% <b>Madrid</b>     |
| 72% <b>Madrid</b>     | 77% <b>London</b>     | 70% <b>Budapest</b>   | 67% <b>Prague</b>     | 47% <b>Rome</b>       |
| 71% <b>Brussels</b>   | 76% <b>Bratislava</b> | 69% <b>Madrid</b>     | 66% <b>Budapest</b>   | 46% <b>Bratislava</b> |
| 67% <b>Budapest</b>   | 65% <b>Rome</b>       | 62% <b>Rome</b>       | 59% <b>Brussels</b>   | 38% <b>Budapest</b>   |
| 54% <b>Bratislava</b> | 65% <b>Athens</b>     | 53% <b>Bratislava</b> | 46% <b>Rome</b>       | 34% <b>Warsaw</b>     |
| 30% <b>Rome</b>       | 64% <b>Madrid</b>     | 30% <b>Athens</b>     | 38% <b>Athens</b>     | 33% <b>Athens</b>     |

Source: Eurostat (Eurobarometer)

Vienna is one of the cities with the highest quality of life worldwide.

## 05.03 Cost of living across the EU

### Selected capital cities of the EU, 2018

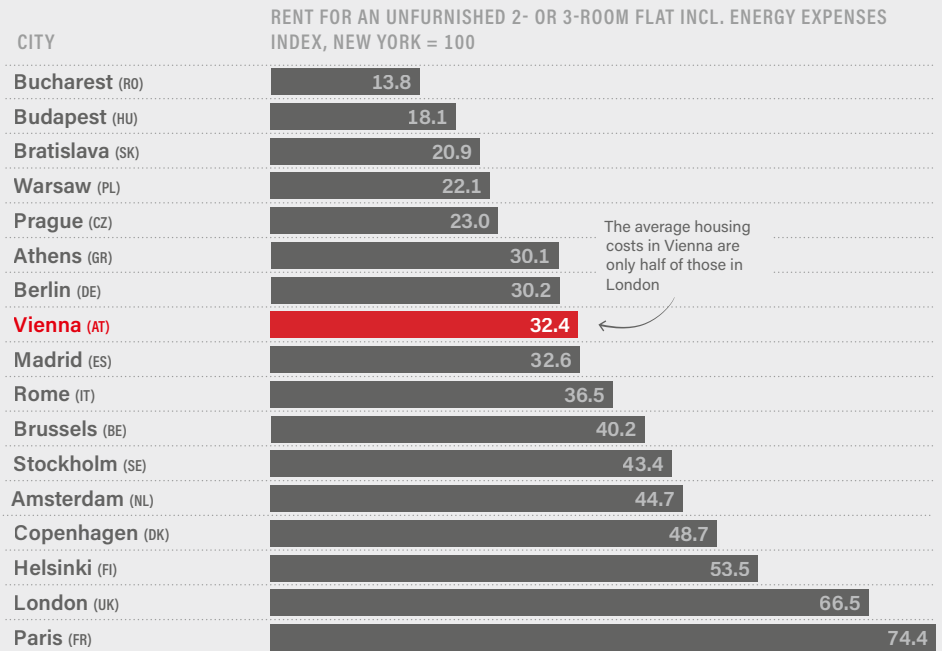


Source: Numbeo

Among Western European metropolises, Vienna is considered an affordable city in terms of cost of living, which is only half that of New York and clearly lower than in Paris, London and Copenhagen. The index used includes consumer prices (for food, restaurants, transportation, utilities) as well as rents.

## 05.04 Housing costs across the EU

### Selected capital cities of the EU, 2018



Source: UBS

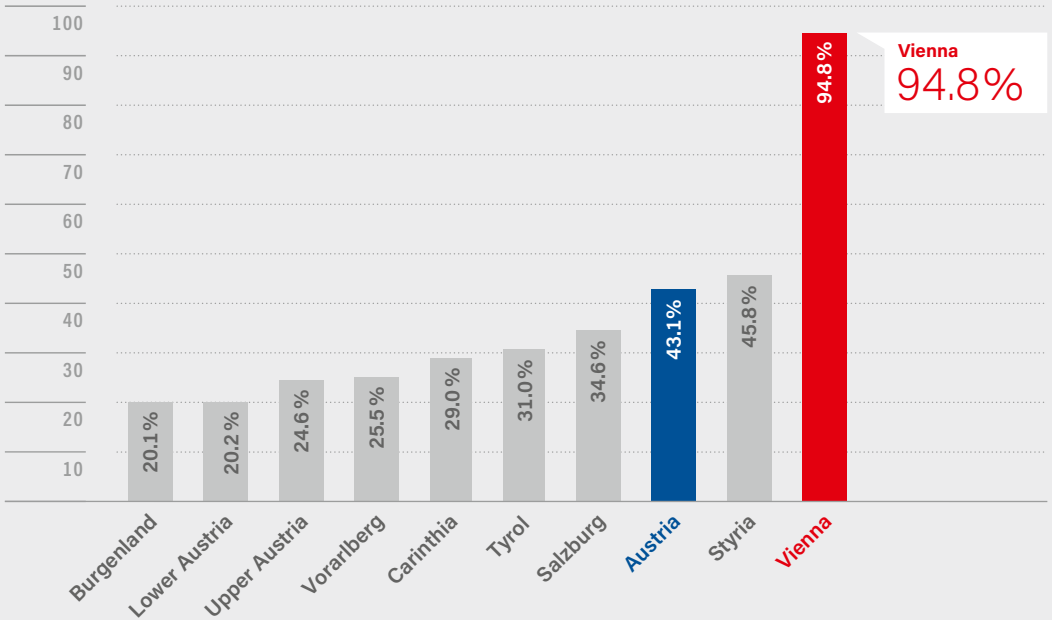
The comparison of cities shows a wide variation of rent prices across Europe. Vienna's moderate housing costs amount to less than half of those in London or Paris.

One special characteristic of Vienna lies in the significant share of publicly funded or subsidised housing construction: the City of Vienna and other developers provide one fourth of all flats in the Austrian capital; another third receives public subsidies. This not only curbs price increases, but also ensures a balanced social mix of residents.

The index is based on the price of two- and three-room flats including energy expenses worldwide, with the average housing costs in New York taken as baseline.

## 05.05 Comparison of childcare across federal provinces Federal provinces of Austria, 2017/18

SHARE OF CHILDREN AGED 5 IN CHILDCARE FACILITIES WHOSE OPENING HOURS ARE COMPATIBLE WITH FULL-TIME WORK OF PARENTS, AMONG ALL 5-YEAR-OLDS ATTENDING KINDERGARTEN, IN % (VIF CRITERIA)<sup>1</sup>



Source: Statistics Austria

In 2017/18, about 95% of all five-year-old children attending kindergarten were cared for in facilities whose opening hours are compatible with full-time work of the parents. Thus Vienna is by far Austria's national leader in this respect – and the only federal province where parents do not have to contribute financially to the cost of all-day daycare ("free kindergarten").

<sup>1</sup>VIF = indicator of compatibility of family and work; opening hours: at least 47 weeks per year, 45 hours per week, on working days (Monday to Friday); 9.5 hours per day on four days per week; lunch served.



# Glossary

## **Selection of cities used for comparison in this brochure**

In this brochure, Vienna is compared with 16 other EU capital cities. In addition to the nine most densely populated capitals (London, Paris, Berlin, Madrid, Rome, Bucharest, Warsaw, Budapest, Prague – Vienna holds 6th place in this list), another seven big capital cities were selected (Copenhagen, Stockholm, Helsinki, Bratislava, Brussels, Amsterdam, Athens). Special attention was given to providing a balanced spatial distribution while also taking account of cities that are of particular importance for Vienna for geographic and/or economic reasons.

## **Basket of goods and services**

The prices of a set of defined, fixed goods and services, referred to as the “basket”, are assessed on an ongoing basis and weighted according to the average household expenditure profile in order to determine the consumer price index, and hence the inflation rate. The selection of goods and services (index positions) of a basket is constantly aligned with the current consumption behaviour of the population. In 2018, the number of representative index positions for Austria’s basket comprises 770 goods and services.

## **Big Mac® index**

The Big Mac® index compares the purchasing power of currencies in different countries on the basis of the price paid for a Big Mac®. The British weekly “The Economist” invented this index in 1986 with the aim of explaining the overvaluation and undervaluation of individual currencies in a clearcut, easy-to-understand manner.

## **Economic sectors**

The production structure of a national economy according to the national accounts is made up of three major economic sectors, i.e. the primary (agriculture and forestry, fisheries), secondary (mining industry, manufacturing of goods, energy supply, water supply, waste disposal, construction industry) and tertiary (services) sectors.

## **Foreign direct investment**

The term “foreign direct investment (FDI)” describes cross-border participations in companies abroad (with a minimum holding of 10% of the voting capital). They can take the form of active direct investment (investment of Viennese enterprises abroad) and passive direct investment (foreign investment in Viennese enterprises).

**Gross domestic product (GDP)**

The gross domestic product is an indicator of the economic activity of a national economy. It corresponds to the total value of all finished goods and services of a country produced in the course of one year (within this country's borders), minus the value of all goods and services input in advance during the production process. This means that it is calculated on the basis of the sum of the gross value added of all economic sectors plus the balance of taxes on products less subsidies on products (see also "Gross value added (GVA)").

The nominal GDP in the respective national currency corresponds to the conversion result at current market prices; the real GDP is adjusted for price development (inflation) and corresponds to the conversion result at constant prices.

**Gross domestic product in purchasing power standards (PPS)**

The (€) purchasing power standard (PPS) is an artificial currency unit that is calculated by dividing the goods and services of a country in the national currency by the corresponding purchasing power parities (PPP).

Purchasing power parities (PPP) indicate how many currency units are required in different countries to purchase a comparable fixed basket of goods and services. PPP may be regarded as a rate of exchange for converting PPS into € and vice versa. They eliminate exchange rate fluctuations and differences between local price levels.

The GDP or GRP in PPS per capita allows a comparison of the actual levels of economic activity or prosperity of different countries.

In brief: Country A and Country B produce the same goods. The products are sold at somewhat lower prices in Country A, but wages and salaries are lower here as well. As a result, citizens of Country A can afford as much in their home country for their pay as citizens of Country B can in theirs. Thus the level of prosperity in both countries is the same – however, the GDP of Country A, calculated in standard fashion, is lower due to the lower price level. This distortion is eliminated by the GDP in PPS (per capita): Country A and Country B therefore present the same value, which indicates a similar prosperity level.

**Gross regional product (GRP)**

The gross regional product (GRP = regional GDP) corresponds to the total value of all finished goods and services produced in a region (e.g. a federal province) in the course of one year.

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| <b>Gross value added (GVA)</b>             | The gross value added is distinguished from the gross domestic product only by the balance of taxes on products (e.g. value-added tax, mineral oil tax) less subsidies on products (e.g. EU subsidies, provincial subsidies to hospitals, etc.), which are included in the GDP.  |
| <b>Headcount vs. full-time equivalents</b> | Research and development personnel is rendered in two ways – either by headcount, i.e. as the number of persons active in a specific area, or as full-time equivalents (FTE), which is a standardised comparative benchmark that reflects the actual time input (resource costs) for R&D. The type of employment (full-time, part-time) as well as the extent of R&D activities must be considered in this context.  |
| <b>Individual entrepreneur</b>             | An individual entrepreneur is a natural person who takes sole responsibility for raising capital, assumes full risk for any losses and is personally liable for any debts with his or her personal assets.   |
| <b>Labour productivity</b>                 | Labour productivity is an indicator of the efficiency of workers in the production process, measured as the ratio between overall economic output and labour input, i.e. GRP per employed person.  |
| <b>NUTS</b>                                | NUTS is the hierarchical system for structuring Europe's regions and stands for "Nomenclature of Territorial Units for Statistics" (Nomenclature des unités territoriales statistiques). The NUTS 0 level represents national states, while NUTS 1 refers to (often purely statistical) large regions (e.g. "Western Austria").<br>This brochure uses NUTS 2 regions, which in Austria correspond to the federal provinces and, at the European level, to most metropolises (with the exception of London). In 2015 and 2016, there existed 276 regions at NUTS 2 level across the EU (NUTS 2013). The capital city regions listed often include peri-urban areas (e.g. Comunidad de Madrid or Lazio). In addition, there also exist NUTS 3 regions; these serve as the lowest level of this hierarchy. Contrary to the other European capitals mentioned in this brochure, whose (extended) urban areas are (largely) covered at NUTS 2 level, the urban area of London (political boundaries of Greater London) corresponds to a NUTS 1 region. At NUTS 2 level, London is structured into five parts; for this reason, this brochure largely relies on the NUTS 1 region level for its statistical coverage of the UK capital (this only concerns Eurostat data). |

**Research and development (R&D)**

Research and experimental development (R&D) is defined as a creative activity that utilises scientific methods and is systematically conducted with the objective of augmenting the state of knowledge as well as of developing new applications of this knowledge.

The element of novelty and originality (new findings, new knowledge, new applications) is a key criterion that distinguishes R&D from other scientific and technological activities.

**R&D quota**

The R&D quota (research quota) is the most frequently used indicator in statistics relating to research and development.

The quota describes the share of R&D spending in % of the gross domestic product/gross regional product of a territorial unit. For this reason, the R&D quota is also useful for international comparisons and the formulation of targets.

**R&D sectors**

R&D spending involves different sectors, such as universities, enterprises, the government and the private non-profit sector (e.g. scientific societies and institutes operated by associations or religious communities). In this brochure, research spending is analysed according to these implementing sectors (as opposed to financing sectors).

**Secondary education**

An upper secondary education level according to ISCED 2011 (International Standard Classification of Education) as a minimum corresponds to the Austrian upper secondary education level (stage 3), post-secondary, non-tertiary education level (stage 4) and tertiary education level (stages 5–8). It comprises all forms of education after completing four years at a New Secondary School or the lower cycle at an Academic Secondary School (AHS), i.e. school-leaving credentials of Pre-vocational Schools, AHS upper cycle and schools for Intermediate or Higher Vocational Education (with a school-leaving certificate entitling graduates to attend university) as well as apprenticeships and university studies.

**Unemployment rate**

The unemployment rate calculated according to national methods and published by the Public Employment Service Austria (AMS) gives the share of registered unemployed persons in the total potential labour force (employed persons plus registered unemployed persons).

The EU rate is based on the international definition of unemployment according to the labour force concept (LFC or ILO concept). Different from the AMS register data, Statistics Austria (and, consequently, also Eurostat) draws on survey data culled from the microcensus. Accordingly, a person is considered economically active if he or she has worked at least one hour in the reference week. A person is defined as unemployed if he or she is not economically engaged in this sense, takes active steps to find work and can accept a job at short notice.

# Impressum

## Media owner and publisher

Vienna City Administration  
Municipal Department 23 –  
Economic Affairs, Labour and Statistics  
Meiereistraße 7, Sektor B  
1020 Wien, Austria  
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University of Art and Design Linz,  
Visual Communication: Tina Frank,  
Katharina Mayrhofer, Hanna  
Priemetzhofer, Clemens Schrammel

The cover illustration was executed according to the principles of "conditional design".

## Translation

Sigrid Szabó

## Printed by

Wograndl Druck GmbH  
7210 Mattersburg, Austria

## Disclosure

Statistical analyses focusing on the city of Vienna.

## Legal statement

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ISBN: 978-3-901945-29-8

Printed in Austria on eco-friendly paper according to ÖkoKauf Wien criteria.  
PEFC certified.



This brochure is available in German and English from [www.statistik.wien.at](http://www.statistik.wien.at) for free downloading.

Vienna, November 2018



