

Business Location 2020

Vienna in Figures



**City of
Vienna**

Economic Affairs,
Labour and Statistics



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Business Location 2020

Vienna in Figures

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For further data about Vienna as a business location, visit
wien.gv.at/statistik/wirtschaft.

Foreword

The lockdown of the Austrian economy caused by SARS-CoV-2 represents a caesura whose consequences cannot yet be assessed. Together with social partners, scientists, enterprises and the Vienna City Administration, we have managed to act quickly and unbureaucratically while at the same time advancing the necessary structural change in the digital field. However, the city's excellent infrastructure continues to make Vienna an outstanding location for entrepreneurial activities, also – and especially – in times of crisis. This is reflected in a number of rankings as well as in the facts and figures presented in this brochure: Every 55 minutes, a new company is set up in Vienna; our productivity is above average. Half of all foreign companies expanding to Austria settle in Vienna and, with 23 institutions of higher learning, the national capital is a location offering outstanding prerequisites in particular for knowledge-intensive sectors. With the Vienna Business Agency, the city moreover offers a time-tried central contact point for international enterprises.

To be able to start afresh after the pandemic, the City Administration co-operates closely with local social partners, enterprises and researchers in the context of the economic and innovation strategy "VIENNA 2030". Moreover, pioneers from the six defined areas of leadership were involved to lay the ground for the recovery process (see p. 39).

I invite you to consult this brochure to learn more about this and other economic developments and performance indicators.



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.

To continue to make the best possible use of these assets in Vienna, the City Council adopted the strategy “VIENNA 2030 – Economy & Innovation” to face such global challenges as the climate crisis, technological and demographic change, urbanisation and migration by drawing on Vienna’s expertise in solving complex problems.

Education and qualification result in highly trained workers for Vienna’s enterprises, foster productivity and empowerment and curb unemployment. 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.

The challenges currently faced by the economy are enormous. Hence, it is all the more decisive to formulate a future-oriented, active economic policy that is capable of creating the best possible framework conditions for Vienna’s enterprises and workers.

The present, revised brochure is to provide you with an overview of Vienna as a business location. We are looking forward to your feedback!



Klemens Himpele

Head of the City of Vienna’s Department for Economic Affairs, Labour and Statistics

At a glance: Vienna as a business location

1.91 million

persons live in Vienna,
the fifth-largest city of
the European union (as
per 1 January 2020).

41%

is the percentage by
which Vienna's labour
productivity exceeds
the EU average (2018).

1st place

According to the Mercer Quality of
Living Survey and The Economist,
Vienna is the world's most liveable
city (2019).

Concerning this edition

The data cited in this brochure always refer to the territorial status of the European Union as per 1 February 2020, after the exit of the United Kingdom.

25%

of Austria's gross domestic product for 2018 was generated in Vienna.

9,221

new enterprises were set up in Vienna in 2019.

3.6%

is the research quota in Vienna (2017).

18 minutes

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

1 Basic data

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For further data about Vienna as a business location, visit wien.gv.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)

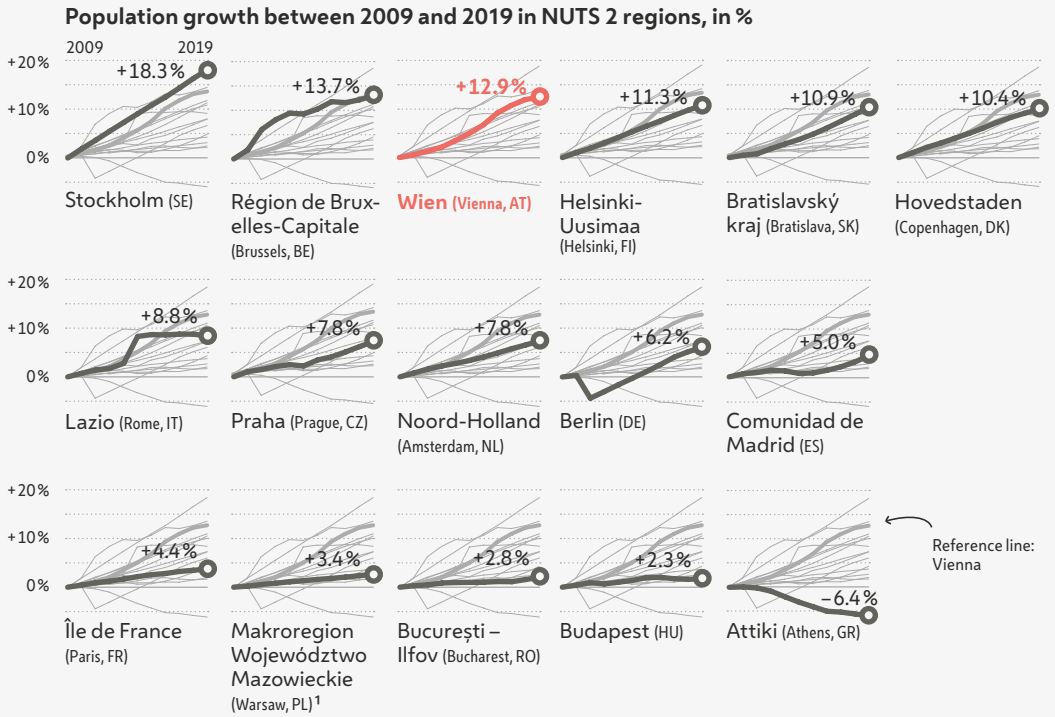
The gross regional product (GRP = regional GDP) corresponds to the total value of all finished goods and services produced in a region (e.g. a federal province) in the course of one year.

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, etc.) less subsidies on products (e.g. EU subsidies, provincial subsidies to hospitals, etc.), which balance is included in the GDP.

1.1 Population development across the EU

Selected cities/urban regions of the EU, 2009/2019



Source: Eurostat

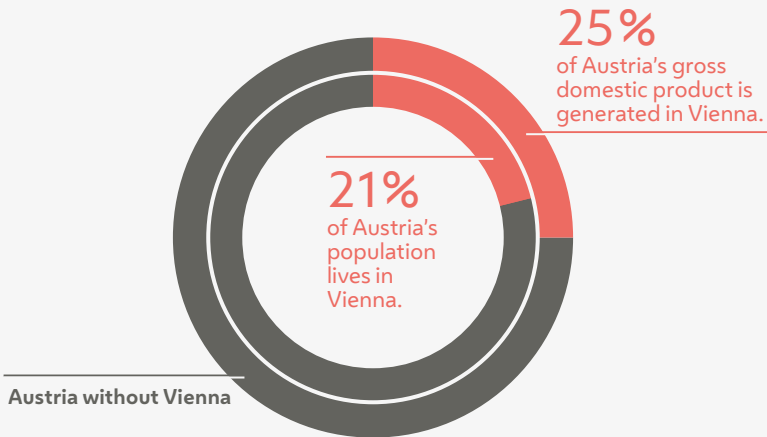
¹ NUTS 1

Vienna is growing! Between 2009 and 2020, the number of the city's inhabitants increased by approx. 12.9% from 1.68 million to 1.91 million. A comparison of selected EU-27 capital cities shows that only Stockholm and Brussels 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.

1.2 Economic performance

Vienna and Austria, 2018

Regional share in Austrian GDP / in Austrian population



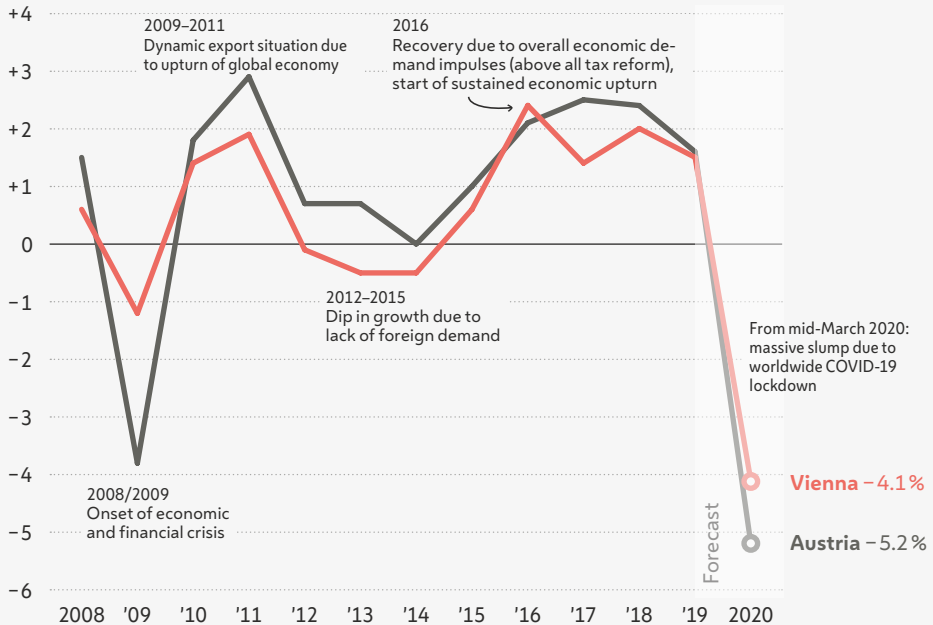
Source: Statistics Austria

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

1.3 Economic growth

Vienna and Austria, 2008 to 2020

Changes in gross regional product (real) and gross value added (forecast, real), in %



Sources: Statistics Austria and WIFO

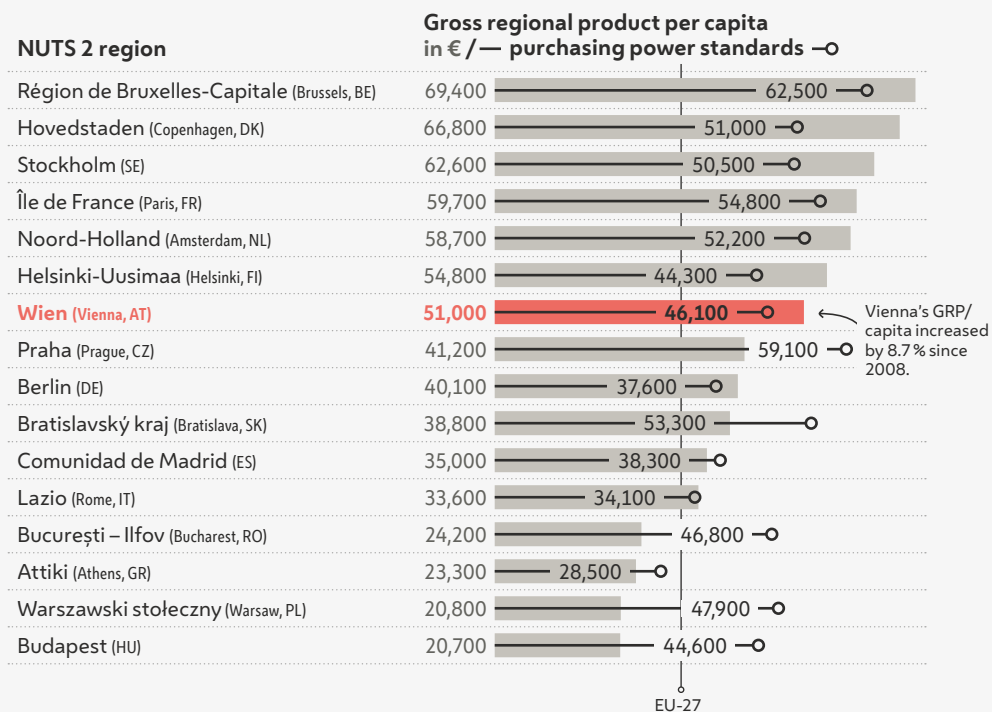
Vienna's economy is characterised by fundamentally high stability over time, which equals relatively subdued growth in economic boom phases, but also a somewhat lesser decline in growth during recession periods.

After a dip in growth due to the financial crisis, the last five years presented a stable phase of Vienna's economic growth over the past 20 years. In 2018, the real growth of Vienna's economy tallied at 2.0%. The positive labour market situation and the increase in real wages and salaries boosted the disposable income and hence private consumption, which further contributed to this period of overall prosperity. Moreover, the rise in demand resulted from a surge in exports due to expanding world trade; while a slowdown in world trade was in fact already discernible in 2019, it was offset in Vienna by the city's strong service sector. This phase of growth was abruptly cut short in spring 2020 by the crisis triggered by the COVID-19 pandemic. According to forecasts, a period of recession is to be expected in 2020 (also) for Vienna.

The real gross regional product is used for the period from 2008 to 2018 (Source: Statistics Austria). For 2019 and 2020, the forecast of the real gross value added, as calculated by WIFO, is used (as of May 2020).

1.4 Prosperity across the EU

Selected cities/urban regions of the EU, 2018



Source: Eurostat

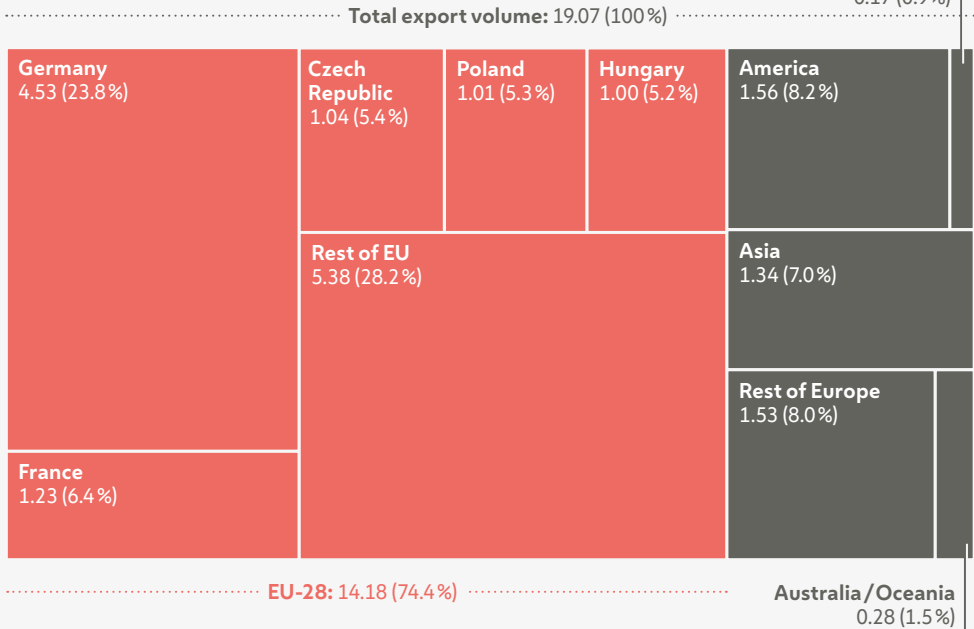
The gross regional product (GRP) per capita is considered an indicator of the level of economic development of a given region and is often regarded as a yardstick of prosperity. Measured by current prices, in 2018 Vienna (€ 51,000) held a midrange position among the cities included in this comparison that was also far above the EU-27 average. Better economic performances per capita were mainly put in by the 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 performs well above the EU-27 average. 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-27 average.

1.5 Foreign trade in goods — exports

Vienna, 2018

Exports in € billion and as shares of total volume in %



Source: Statistics Austria – Foreign Trade; calculation City of Vienna Economic Affairs, Labour and Statistics

Note: Exports exclude items to the value of € 13.1 million, not allocated for reasons of data privacy.

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

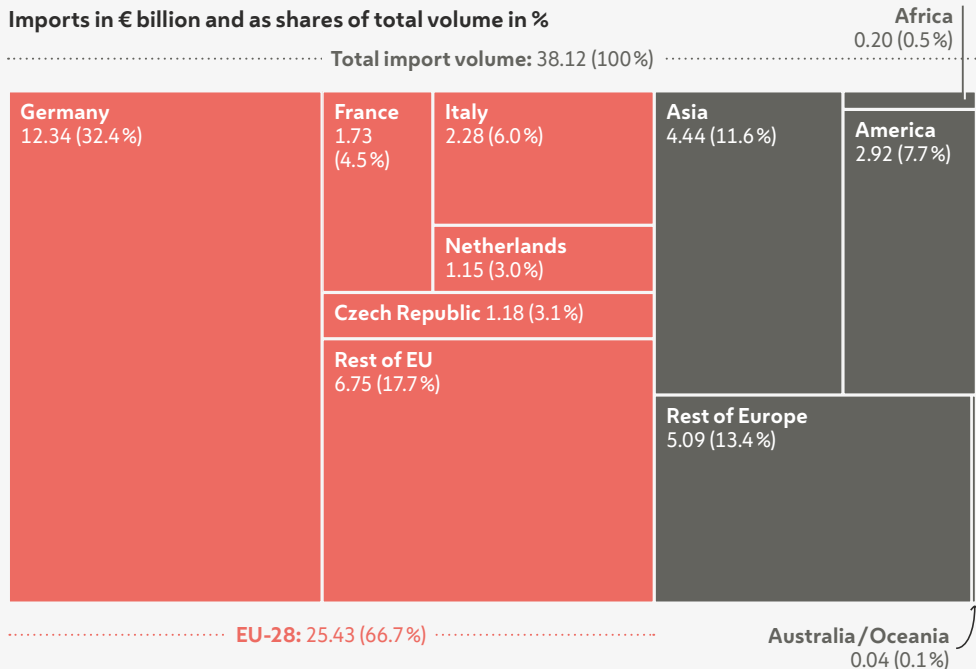
Around 13% of Austria’s exports come from Vienna, and nearly one fourth of all national imports is destined for Austria’s capital. In all, the trade partners involved in approx. 74% of all Viennese exports and 67% of all Viennese imports are domiciled in an EU Member State.

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, 2018

Imports in € billion and as shares of total volume in %



Source: Statistics Austria – Foreign Trade; calculation City of Vienna Economic Affairs, Labour and Statistics

Note: Imports exclude items to the value of € 0.09 million, not allocated for reasons of data privacy.

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

2 Economy and labour

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For further data about Vienna as a business location, visit wien.gv.at/statistik/wirtschaft.

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 comprised 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 newspaper “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).

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

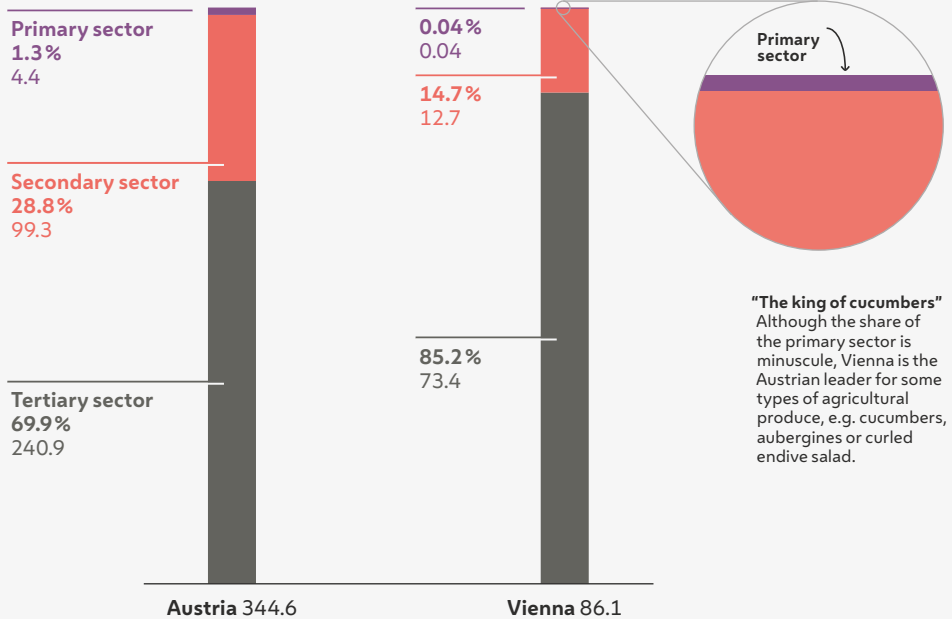
The unemployment rate calculated according to national methods and published by the Public Employment Service Austria (AMS) gives the share of registered unemployed persons in the total potential labour force (employed persons plus registered unemployed persons).

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 take up a job at short notice.

2.1 Economic sectors

Vienna and Austria, 2018 (provisional)

Gross value added (nominal) in € billion and as shares of total volume in %

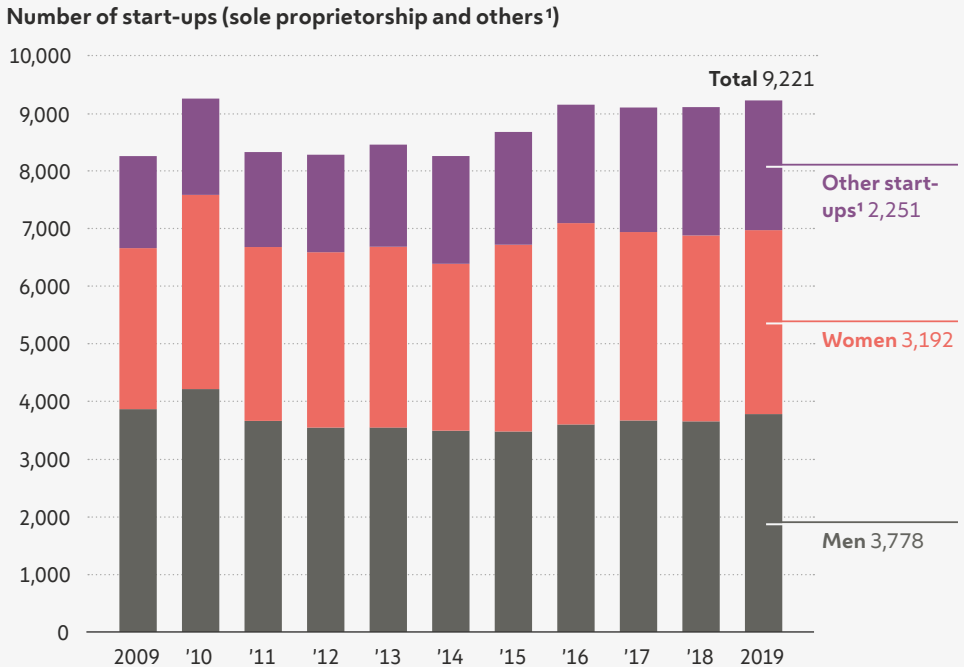


Source: Statistics Austria

Vienna's economy is mainly service-oriented. With a share of 85.2%, 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 (2018). Despite this, the share of trade and industry in Vienna amounts to 14.7% and hence is certainly not insignificant. In a manner typical of any metropolis, the primary sector (agriculture) is very small, accounting for less than 0.04% (or 0.4 per mil). In all, Vienna's GVA increased by 25.8% from 2008 to 2018, while this growth equalled 31.3% for Austria as a whole.

2.2 Start-ups

Vienna, 2009 to 2019



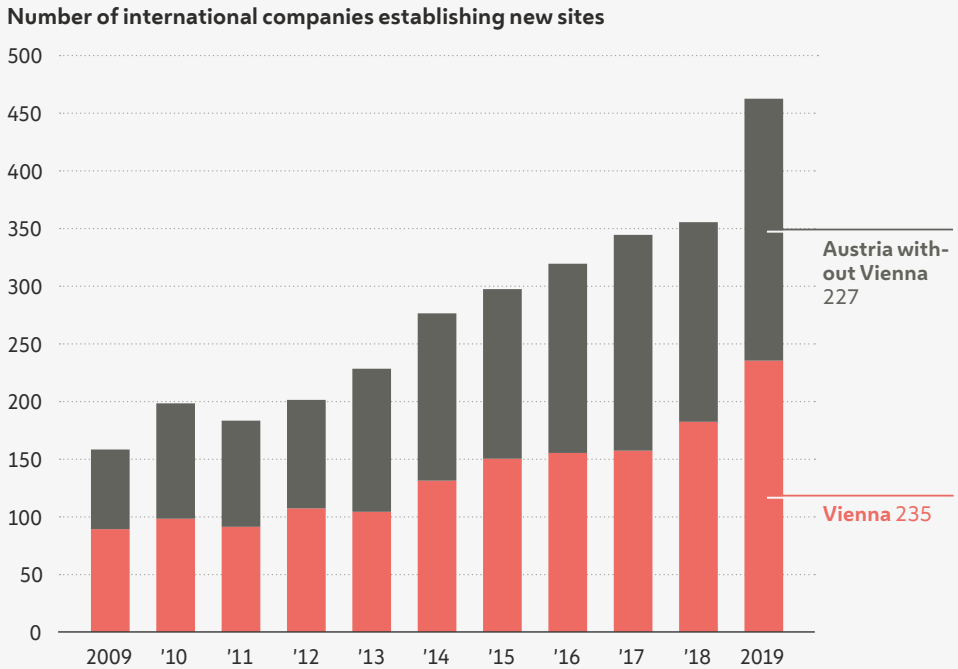
Source: Austrian Economic Chamber

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

In 2019, 9,221 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 re-organisations, suspensions of economic activity or branch establishments). Out of this total figure for 2019, 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 share of female entrepreneurs in 2018 equalled 46% and hence reflects an increase by approx. 4 percentage points over the last decade.

2.3 Business settlement of international companies Vienna and Austria, 2009 to 2019



Source: Vienna 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 2019 with 235 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 266. Thus the Austrian capital once more succeeded in further enhancing its attractiveness as an international business location.

2.4 Annual gross office rents across the EU

Selected EU capitals, 1st quarter of 2019

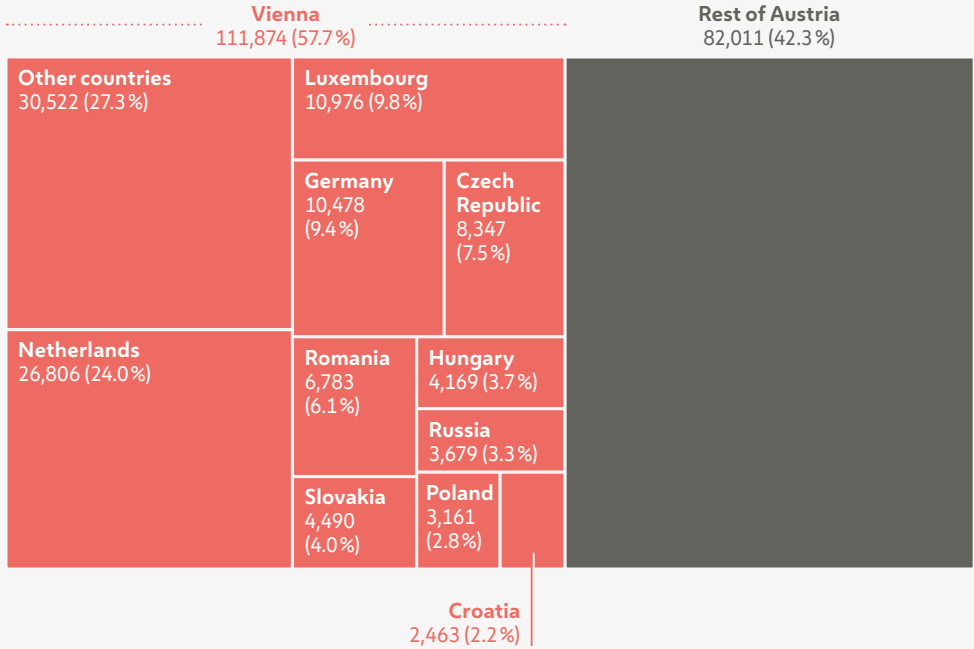
City	Gross office rents in € per sqm
Bratislava (SK)	276
Bucharest (RO)	287
Vienna (AT)	366
Copenhagen (DK)	372
Budapest (HU)	396
Warsaw (PL)	400
Prague (CZ)	412
Berlin (DE)	460
Brussels (BE)	479
Rome (IT)	505
Amsterdam (NL)	509
Madrid (ES)	565
Helsinki (FI)	594
Stockholm (SE)	896
Paris (Île de France) (FR)	1,055
Athens (GR)	n/s

Source: CBRE Research, 2019 Global Prime Office Occupancy Costs

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

2.5 Foreign direct investment — active Vienna, 2017

Direct investment in € million



Source: Oesterreichische Nationalbank

58% of all Austrian direct investment (active FDI) abroad originates in Vienna. By recipient country, Viennese enterprises invest most in the Netherlands, with Luxembourg and Germany in second and third place.

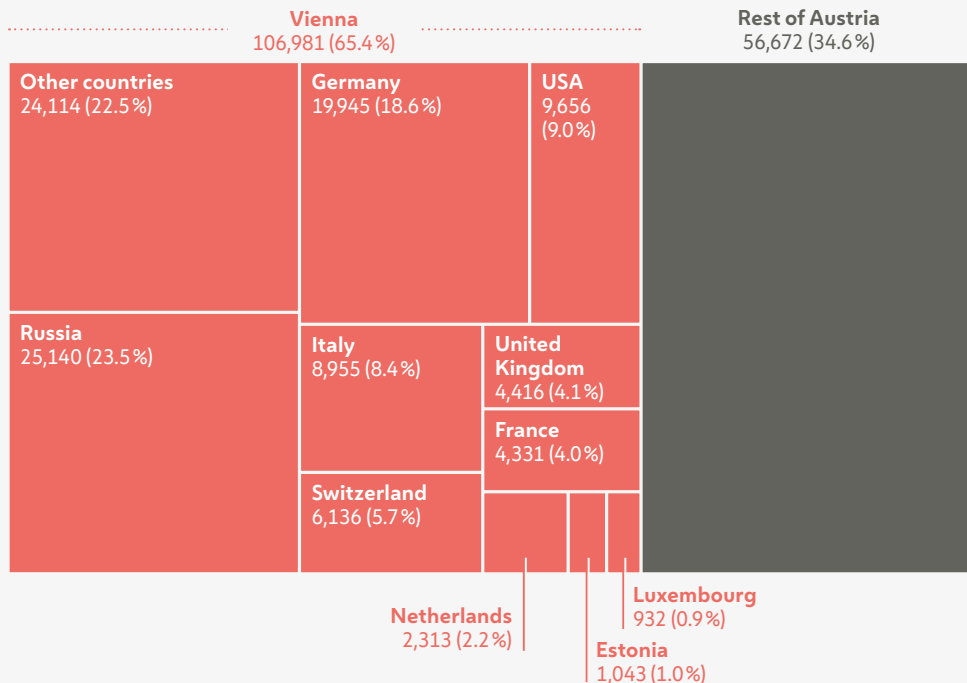
Around 65% of foreign direct investment (passive FDI) in Austria goes to Vienna.

A look at the countries of origin of these capital flows reveals that Russian participations are highest in Vienna, followed those from Germany and the United States.

Foreign direct investment — passive

Vienna, 2017

Direct investment in € million

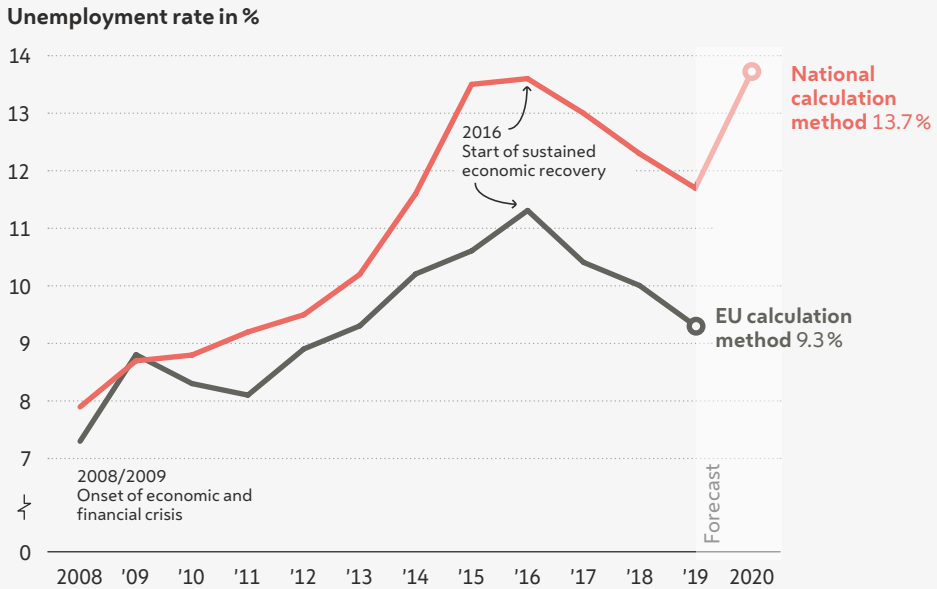


Source: Oesterreichische Nationalbank

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.

2.6 Unemployment rate

Vienna, 2009 to 2019



Sources: AMS, Statistics Austria, WIFO















Forecast: WIFO (May 2020)

In Vienna, the unemployment rate according to the national calculation method was 11.7% for 2019 and thus decreased by 0.6 percentage points compared to the previous year. Between 2009 and 2019, it rose by 3.0 percentage points. Due to differences in the underlying definitions, the EU rate determined on the basis of household surveys presents a lower value.

After a slump caused by the economic and financial crisis, Vienna's economy embarked on a course of recovery. This also had effects on Vienna's labour market and, combined with the highest employment growth of the past 26 years, led to a historic employment peak (see 2.7). In March 2020, this positive trend ended with the onset of the coronavirus crisis, which will have a substantial impact on the economy and the labour market.

2.7 Development of employment across the EU

Selected cities/urban regions of the EU, 2009/2019

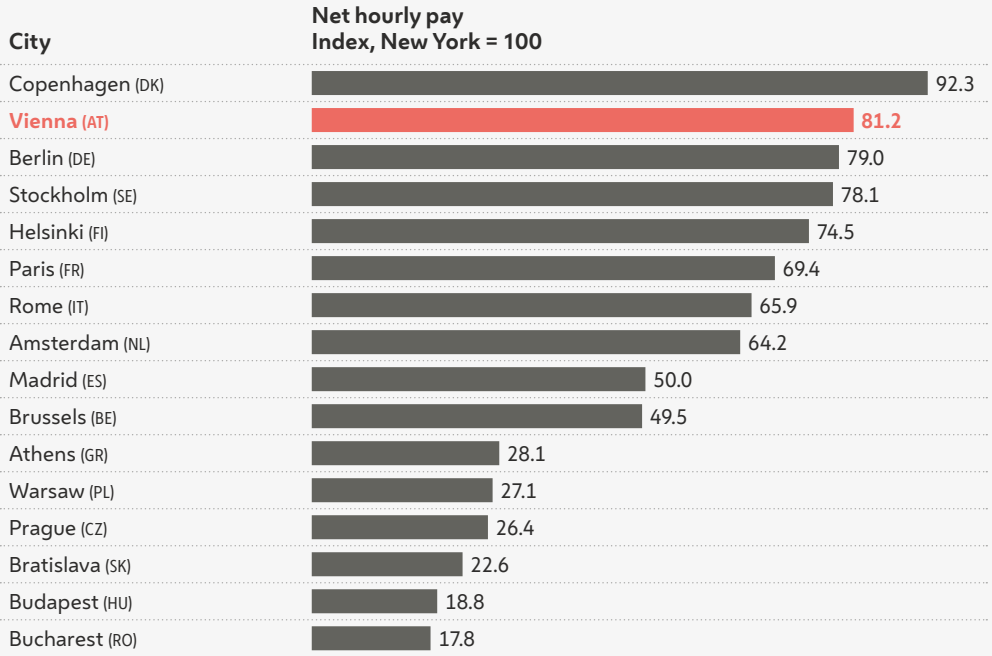
NUTS 2 region	Development of employment figures 2009–2019	Employed persons 2019	Population development 2009–2019
Stockholm (SE)	 +20.2%	1,231,600	 +18.3%
Berlin (DE)	 +18.7%	1,811,000	 +6.2%
Wien (Vienna, AT)	 +15.8%	862,700	 +12.9%
Région de Bruxelles-Capitale (Brussels, BE)	 +15.5%	461,800	 +13.7%
Prague (Praha, CZ)	 +6.6%	679,500	 +7.8%
Île de France (Paris, FR)	 +3.2%	5,374,100	 +4.4%
Bratislavský kraj (Bratislava, SK)	 +2.9%	336,000	 +10.9%

Source: Eurostat

Between 2009 and 2019, employment in Vienna grew by 15.8%. This increase was inter alia triggered by the economic upturn, but also by population growth in the eastern part of Austria as a whole.

2.8 Net hourly pay across the EU

Selected capital cities of the EU, 2018

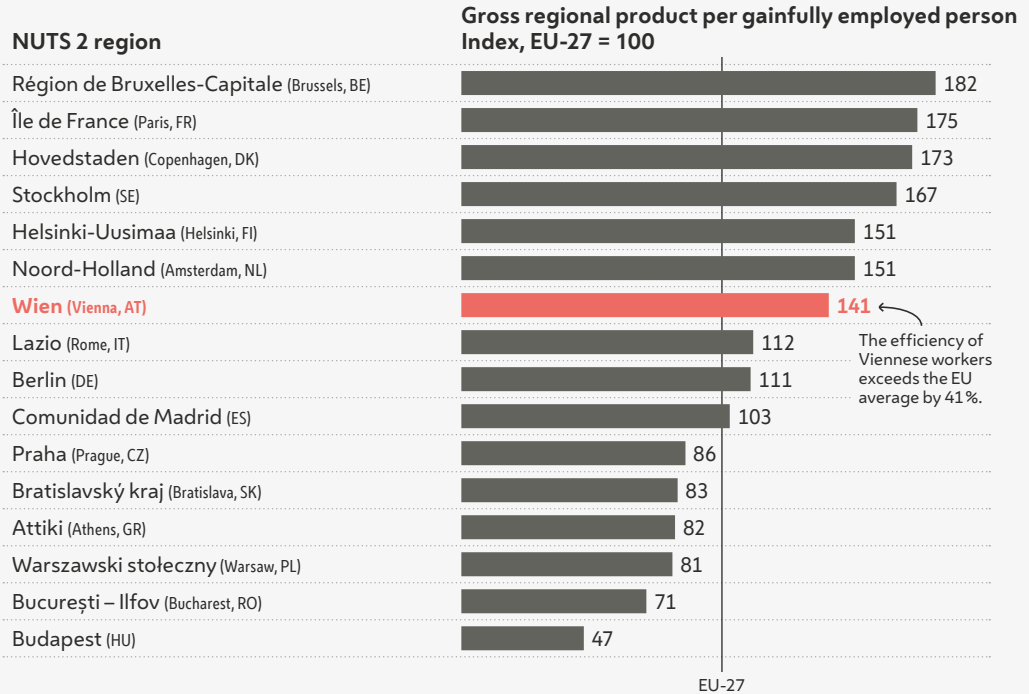


Source: UBS, Prices and Earnings, 2018 edition

Net hourly pay is compared on an index basis with that of New York as baseline (100). The chart is led by Northern European cities together with Vienna. Pay is 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 (see 2.9 – Labour productivity across the EU).

2.9 Labour productivity across the EU

Selected cities/urban regions of the EU, 2018

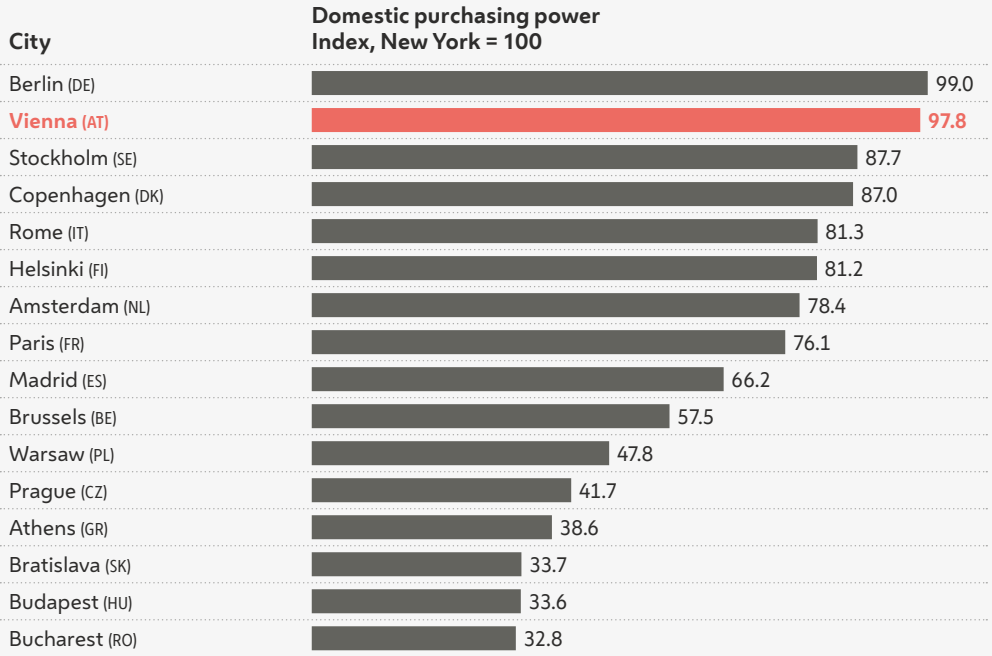


Source: Eurostat

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

2.10 Domestic purchasing power across the EU

Selected capital cities of the EU, 2018

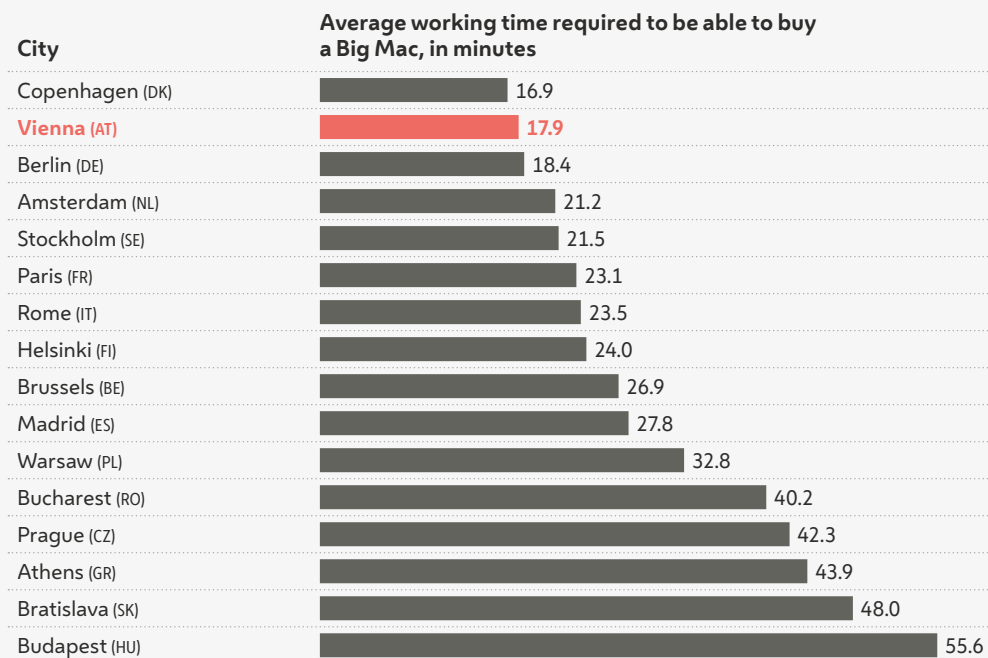


Source: UBS, Prices and Earnings, 2018 edition

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.

2.11 Big Mac index across the EU

Selected capital cities of the EU, 2018



Source: UBS, Prices and Earnings, 2018 edition

Due to the worldwide availability and uniformity of the Big Mac, this item is often used in 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 a 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, an average working time of 48 minutes (almost three times as long) is needed to be able to buy this product.

3 Education and research

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For further data about Vienna as a business location, visit wien.gv.at/statistik/wirtschaft.

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.

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 generating new applications of this knowledge.

The element of novelty and originality (new findings, new knowledge, new applications) is the 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. It describes the share of R&D spending in percent 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, public/government authorities and the private nonprofit sector (e.g. scientific societies and institutes operated by associations or religious communities). This brochure analyses research spending according to these implementing sectors (as opposed to financing sectors).

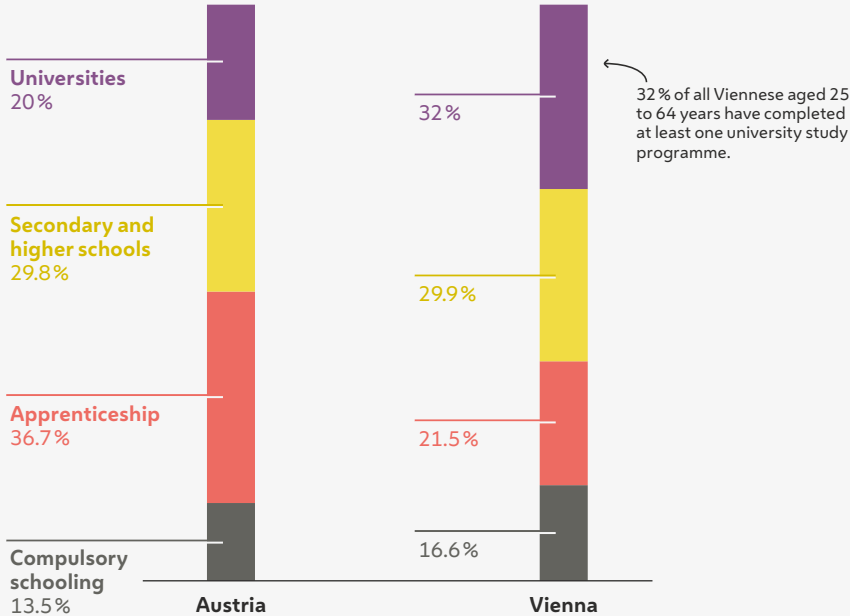
Secondary education level

An upper secondary education level according to ISCED 2011 (International Standard Classification of Education) as a minimum corresponds to secondary education level II (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 Middle School or the lower level at a Higher General Education School (AHS), i.e. school-leaving credentials of Polytechnic Schools, higher levels of AHS and Vocational Secondary and Higher Schools (with a school-leaving certificate entitling graduates to attend university) as well as apprenticeships and university studies.

3.1 Educational attainments

Vienna and Austria, 2019

Highest educational attainment as share of population aged 25 to 64 years, in %



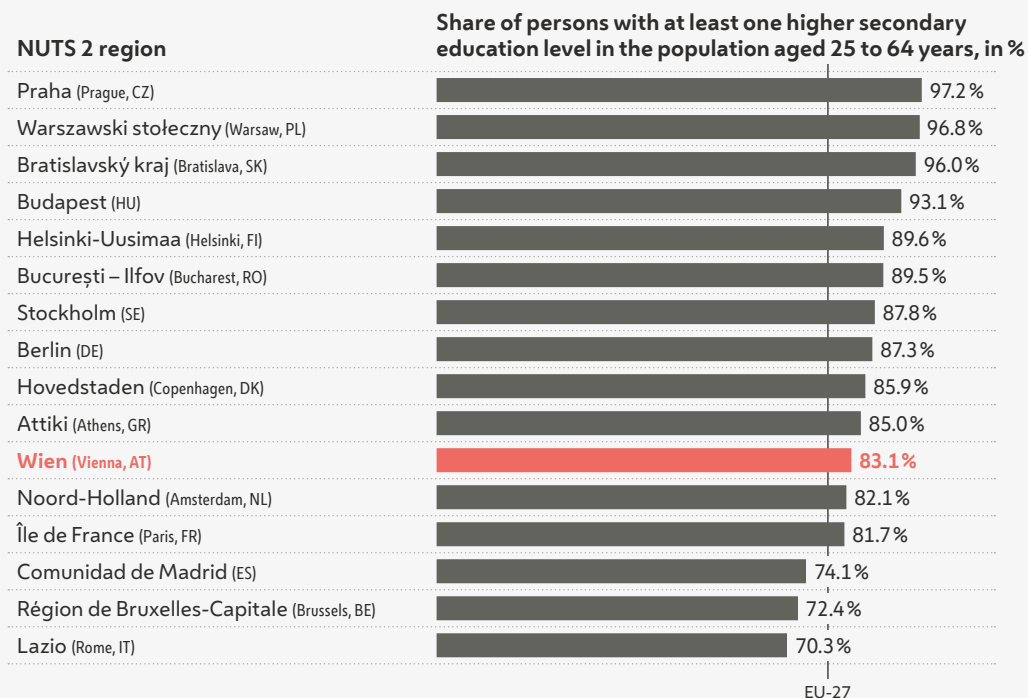
Source: Statistics Austria (microcensus)

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.

In all, about two thirds of all Viennese citizens aged 25 to 64 years have completed higher 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 32% and hence is markedly higher than anywhere else in Austria (national average 20%).

3.2 Educational attainments across the EU

Selected cities/urban regions of the EU, 2019

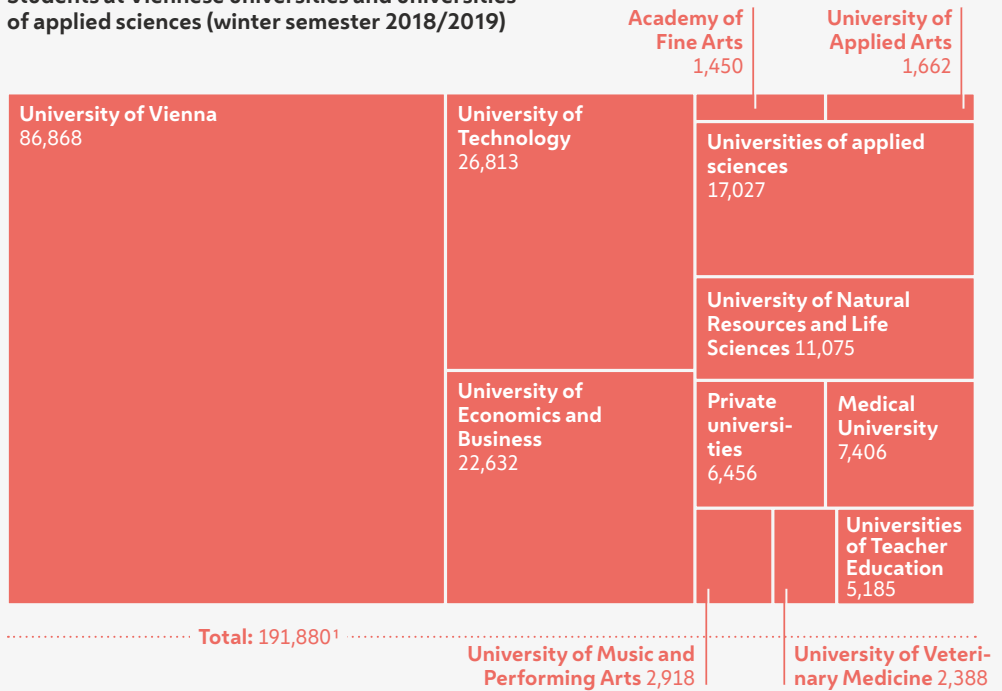


Source: Eurostat (based on ISCED 2011)

83.1% of Vienna's inhabitants aged 25 to 64 years have completed at least secondary education level II (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 (78.4%). In this respect, Vienna holds a position comparable to that of Berlin. Eastern European cities like Prague, Bratislava and Warsaw traditionally perform better in this regard.

3.3 Students — Viennese universities and universities of applied sciences, 2018/2019

Students at Viennese universities and universities of applied sciences (winter semester 2018/2019)



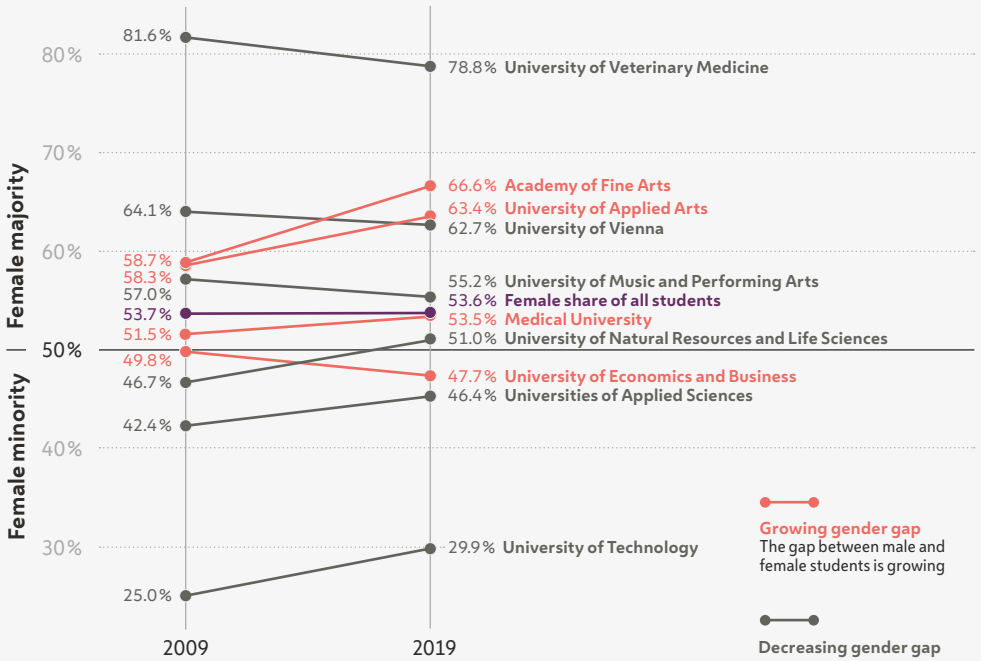
Source: Statistics Austria

¹ Students enrolled in multiple study programmes are counted multiple times.

In the 2018/2019 winter semester, approx. 190,000 students were enrolled at Vienna’s universities and universities of applied sciences. Slightly over half of these students (54.2%) were female. It is notable that men markedly continue to prefer technical, natural-scientific or economic curricula, while women tend to opt for studies in such fields as the humanities, social sciences, arts or veterinary medicine.

3.4 Development of share of female students — Viennese universities and universities of applied sciences, 2009/2019

Viennese universities and universities of applied sciences



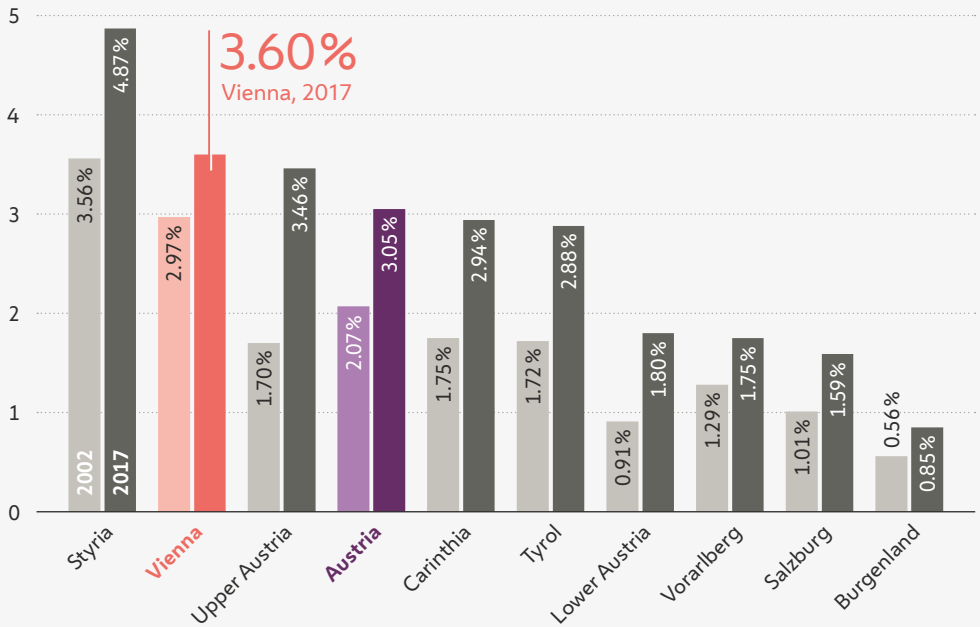
Source: unidata

More than half of all students in Vienna are women.

3.5 R&D quotas across Austria's federal provinces

Austria federal provinces, 2002 and 2017

R&D spending in % of gross regional product



Source: Statistics Austria

The R&D quotas of all federal provinces as well as of Austria as a whole have been rising steadily over the past few years. Despite marked growth in some other federal provinces, Vienna continues to hold second place.

For years, Styria has been the undisputed national leader in this field. This is partly due to the fact that Styria is traditionally an industrial region with numerous highly research-intensive enterprises. 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, though, 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 2017, the federal capital invested €3.3 billion in R&D (top rank), trailed by Styria (2nd place) at €2.3 billion.

3.6 R&D quotas across the EU

Selected cities/urban regions of the EU, 2017

NUTS 2 region	R&D spending in % of gross regional product
Braunschweig (DE)	8.52%
Hovedstaden (Copenhagen, DK)	4.76%
Stockholm (SE)	3.75%
Wien (Vienna, AT)¹	3.60%
Helsinki-Uusimaa (Helsinki, FI)	3.48%
Berlin (DE)	3.41%
Praha (Prague, CZ)	2.50%
Budapest (HU)	2.25%
Warszawski stołeczny (Warsaw, PL)	2.22%
Région de Bruxelles-Capitale (Brussels, BE)	2.04%
Noord-Holland (Amsterdam, NL)	1.73%
Lazio (Rome, IT)	1.68%
Comunidad de Madrid (ES)	1.67%
Bratislavský kraj (Bratislava, SK)	1.58%
Attiki (Athens, GR)	1.45%
București – Ilfov (Bucharest, RO)	1.20%

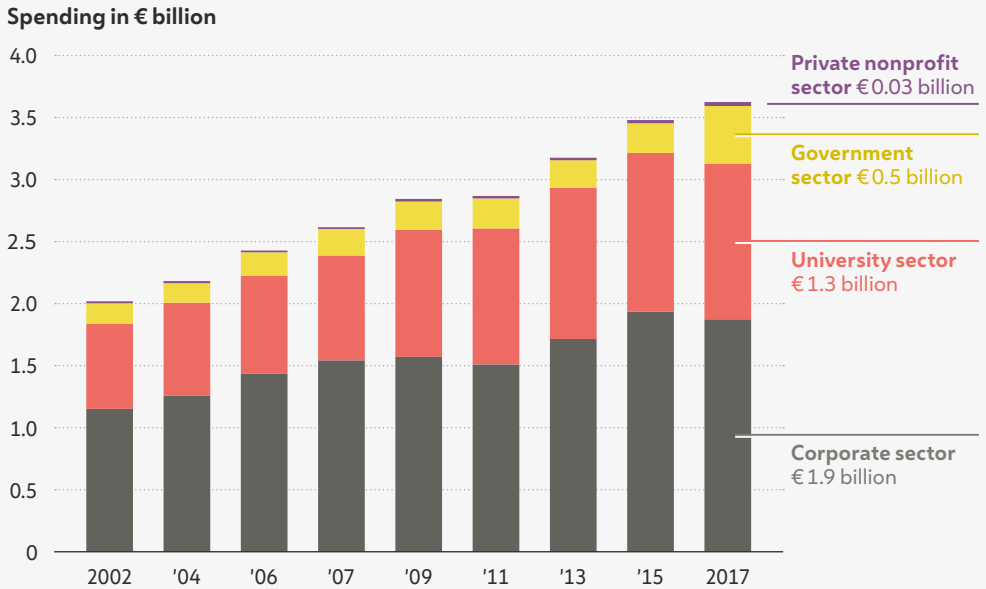
Source: Eurostat

The Île-de-France region (Paris, FR) has submitted no data since 2013.

A comparison with all EU cities and regions places Vienna in a satisfactory position, in particular among EU capitals – 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.

3.7 R&D spending by sectors

Vienna, 2002 to 2017



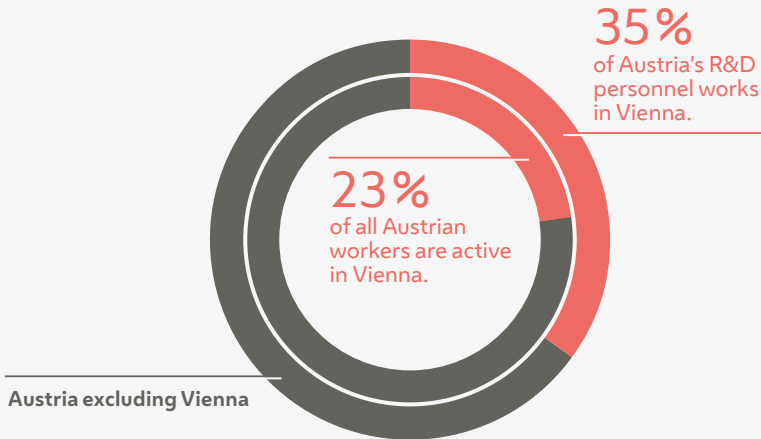
Source: Statistics Austria

The biggest R&D investments were made by the corporate and university sectors. The chart shows the effects of the new survey method (new Frascati Manual): Due to these changes, the figures for the corporate and university sectors decreased slightly for 2017 and, as a consequence, increased for public/government sector – a statistical artefact.

3.8 R&D personnel

Vienna and Austria, 2017

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. As already mentioned, this increase is mainly due to the university and corporate sectors.

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

3.9 Share of R&D personnel across the EU

Top 10 cities/urban regions across the EU, 2017

NUTS 2 region	Share in total workforce (headcount) in %
1. Hovedstaden (Copenhagen, DK)	5.4%
2. Praha (Prague, CZ)	5.4%
3. Wien (Vienna, AT)	5.3%
4. Warszawski stołeczny (Warsaw, PL)	5.2%
5. Braunschweig (DE)	5.1%
6. Région de Bruxelles-Capitale (Brussels, BE)	4.8%
7. Steiermark (Styria, AT)	4.6%
8. Bratislavský kraj (Bratislava, SK)	4.4%
9. Stuttgart (DE)	4.4%
10. Helsinki-Uusimaa (Helsinki, FI)	4.1%

Source: Eurostat

An international comparison reveals an excellent position for Vienna, as the Austrian capital holds third place among all 241 EU regions with regard to the share of R&D personnel.

VIENNA 2030

Economy & Innovation

The strategy “VIENNA 2030 – Economy & Innovation” builds on fields that already today constitute strengths of Vienna as a business location and are able to yield answers to the big challenges of coming years. The goal lies in generating prosperity and quality of life to benefit all inhabitants of Vienna, in particular by providing high-quality workplaces and outstanding infrastructure.

In addition to ten areas of action that ensure a basic structure for all economic and innovative activities to further evolve the city’s location qualities, VIENNA 2030 defines six fields that will be developed into internationally competitive and highly visible areas of leadership by 2030:

- Smart solutions for life in the 21st-century city
- Vienna as a metropolis of health
- Digitalisation, Vienna-style
- Smart production in the big city
- A place of international encounter
- Vienna – a metropolis of culture and creativity

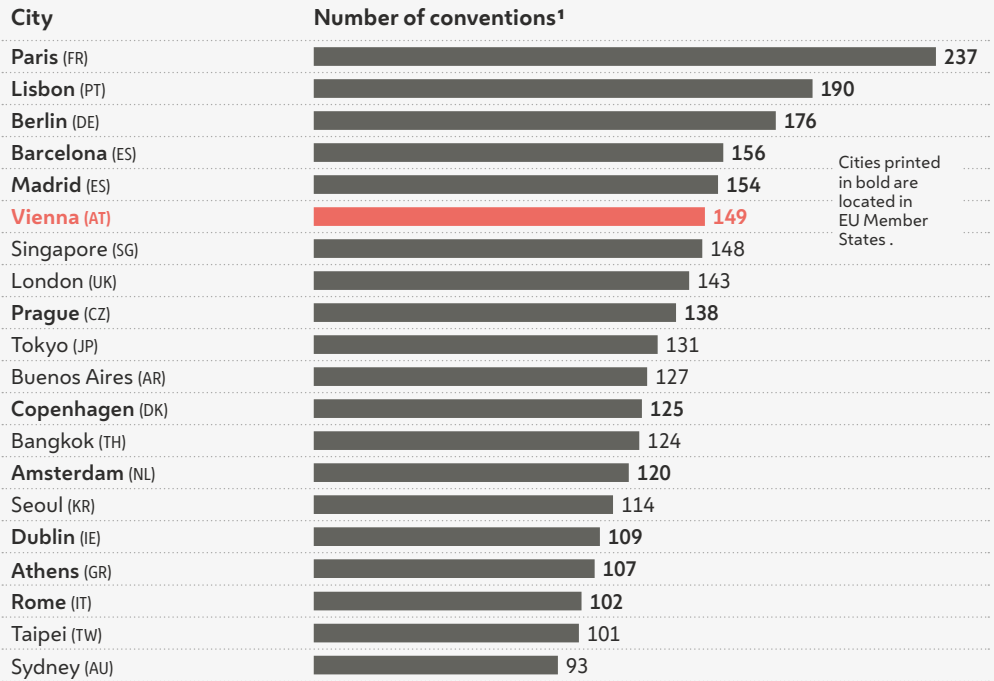
4 International Vienna

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For further data about Vienna as a business location, visit wien.gv.at/statistik/wirtschaft.

4.1 International congresses and conventions worldwide

Selected cities, 2019

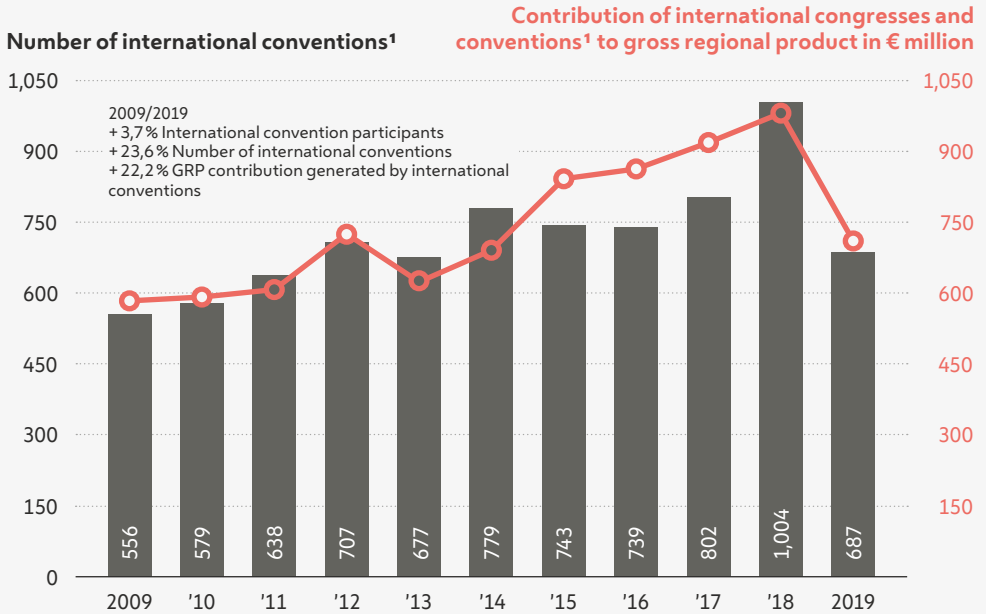


Source: International Congress and Convention Association (ICCA)

¹ Regularly organised conventions with at least 50 participants that are held on a rotating basis in at least three different countries

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 (ICCA), the Austrian capital occupies the 6th place worldwide with a total of 149 conventions. Out of the 20 cities ranked in the top positions for this chart, 13 are situated in Europe.

4.2 International congresses and conventions in Vienna: Number and value added — Vienna, 2009 to 2019



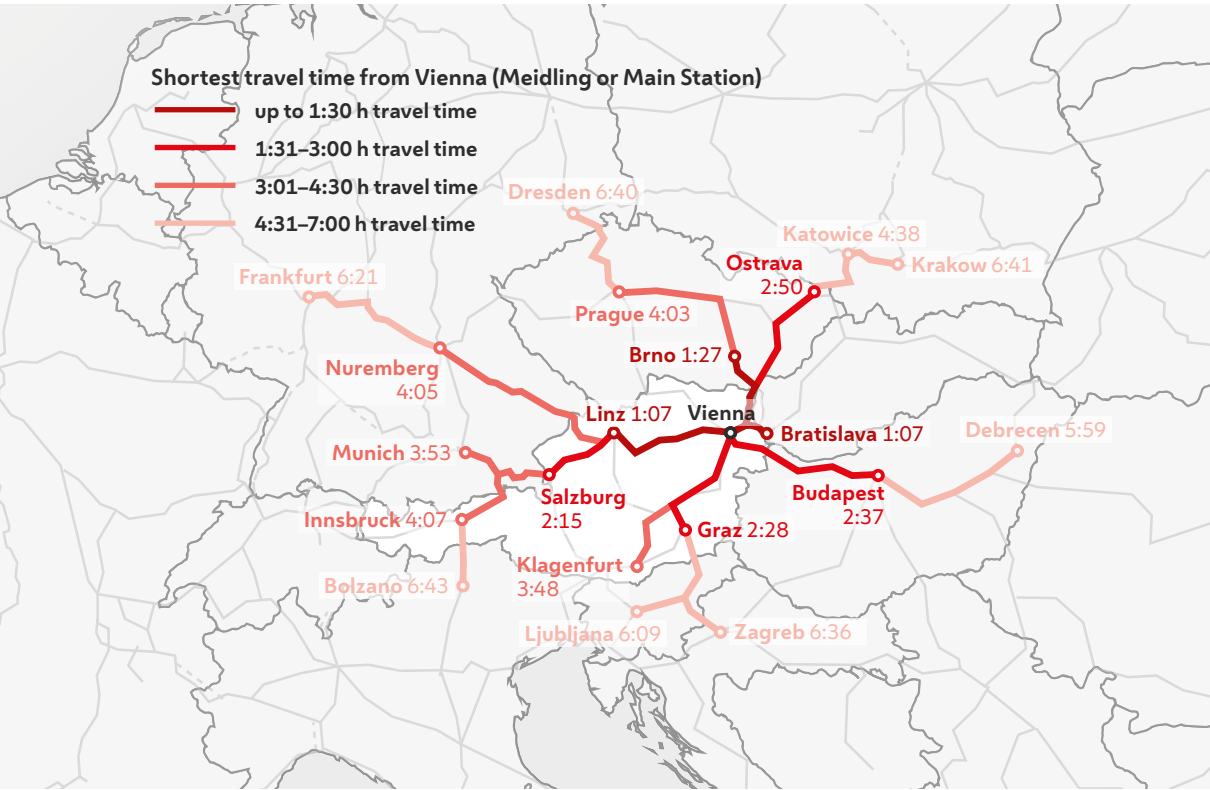
Source: Vienna Tourist Board, Vienna convention industry statistics 2019

The number of congresses and conventions is a good indicator of the fast growth of Vienna's convention industry over the past decade. In 2019, 687 international conventions took place in the Austrian capital, i.e. nearly 24% more than ten years ago (2009). With approx. € 710 million in 2019, these events account for around 1% of the value added generated in Vienna.

Moreover, convention participants are regarded as an important factor for the economy, since they tend to spend almost twice as much per day as the average tourist. In 2019, roughly 4% more convention participants visited Vienna as compared to ten years ago. This aspect likewise reflects the steady growth of the tourism industry.

¹ Unlike chart 4.1, this chart includes all conventions defined as international by the Vienna Convention Bureau (VCB), i.e. international conventions with at least 50% of participants arriving from abroad.

4.3 Direct train connections from Vienna with less than 7 hours of travel time to selected metropolises



Source: Austrian Federal Railways, 2020

Vienna is not only an important aviation hub, but also well connected to other European countries by train. Travel times of seven hours at most take passengers to all neighbouring countries of Austria as well as to Poland and Croatia.

4.4 Airline passenger volumes across the EU

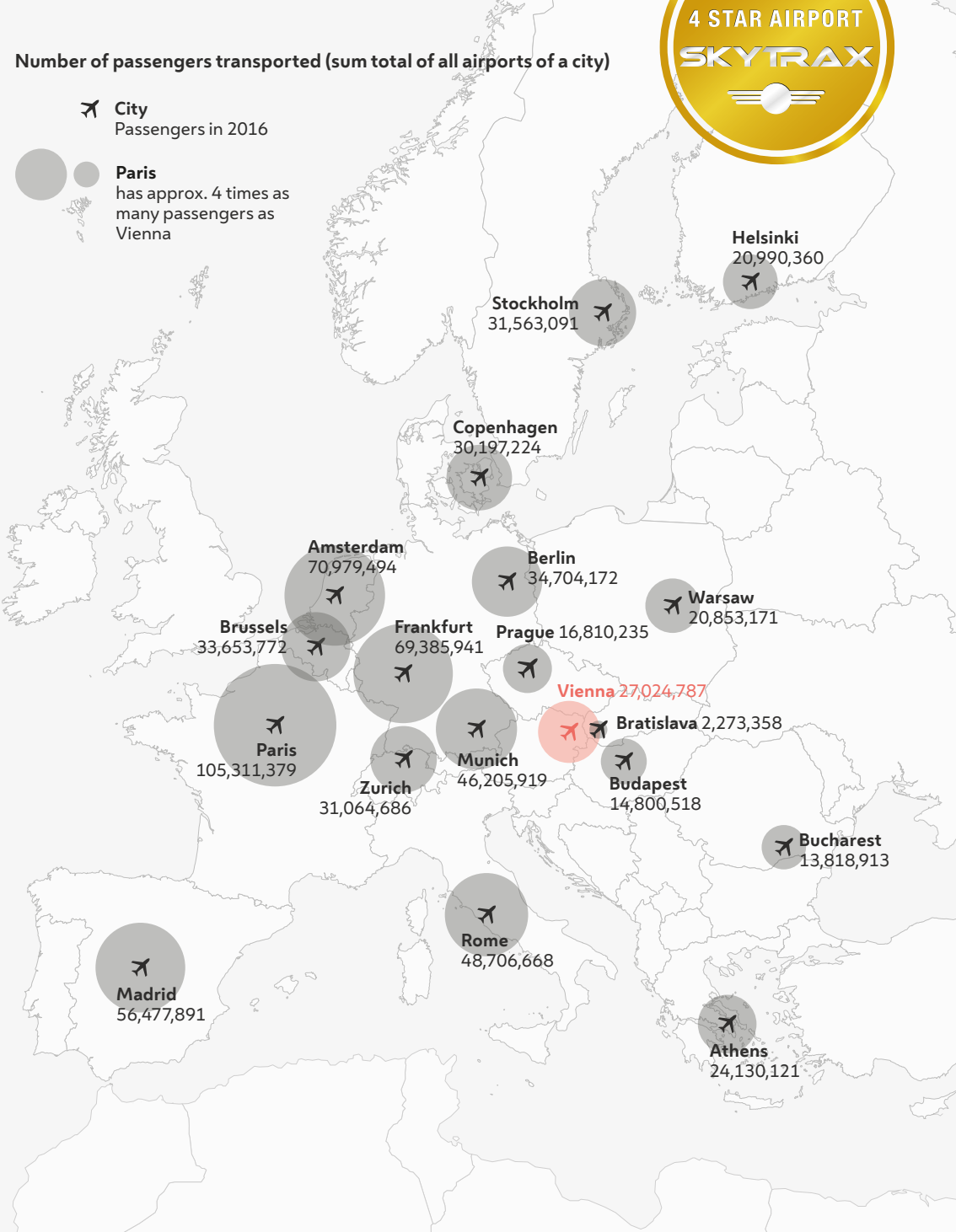
Selected capital cities, 2018



Number of passengers transported (sum total of all airports of a city)

City
Passengers in 2016

Paris
has approx. 4 times as
many passengers as
Vienna



Source: Eurostat

4.5 Tourist overnight stays across the EU

Selected cities/urban regions of the EU, 2018

NUTS 2 region	Number of overnight stays in million
Île de France (Paris, FR)	86.0
Lazio (Rome, IT)	36.7
Berlin (DE)	32.7
Comunidad de Madrid (ES)	27.6
Praha (Prague, CZ)	18.2
Wien (Vienna, AT)	15.8
Noord-Holland (Amsterdam, NL)	14.9
Stockholm (SE)	14.5
Hovedstaden (Copenhagen, DK)	11.8
Budapest (HU) ¹	10.4
Attiki (Athens, GR)	9.9
Warszawski stołeczny (Warsaw, PL)	8.0
Région de Bruxelles-Capitale (Brussels, BE)	7.0
Helsinki-Uusimaa (Helsinki, FI)	6.5
București – Ilfov (Bucharest, RO)	3.7
Bratislavský kraj (Bratislava, SK)	3.1

Source: Eurostat

¹ NUTS 2 in 2013

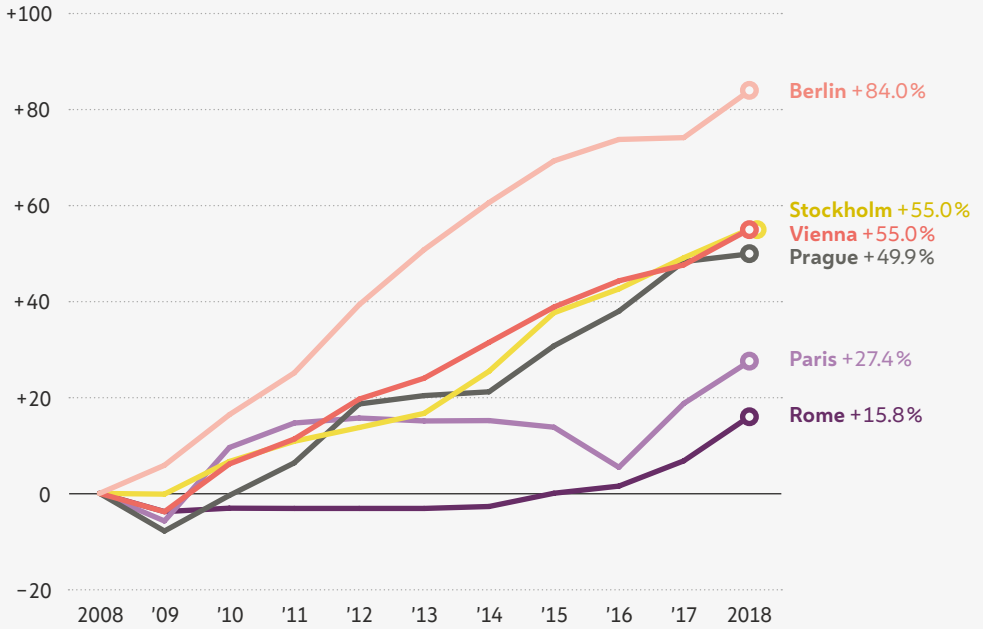
In 2018, Vienna set a new record of 15.8 million overnight stays, which places it in the upper middle range among the cities included in this chart. The absolute tourism magnets are Paris (with roughly five times as many overnight stays), Rome, Berlin and Madrid (with approx. twice as many overnight 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 approx. 55%. The most notable increases were recorded for Eastern European cities and Berlin.

4.6 Development of tourist overnight stays

Selected cities/urban regions of the EU, 2008 to 2018

Development of overnight stays since 2008 in %



Source: Eurostat

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

5 Living in Vienna

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For further data about Vienna as a business location, visit wien.gv.at/statistik/wirtschaft.

5.1 Vienna in international rankings

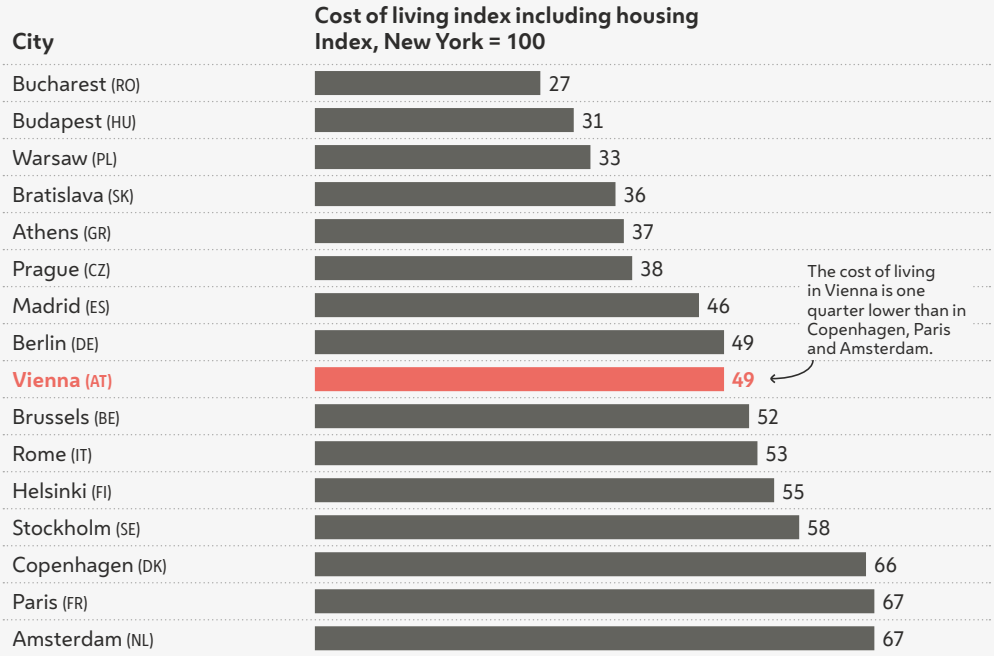
Highest quality of life worldwide

Place	Quality of Living Survey 2019 (Mercer)	Global Liveability Ranking 2019 (Economist Intelligence Unit)	Smart City Strategy Index 2019 (Roland Berger)	The World's Most Reputable Cities 2018 (Reputation Institute)
1	Vienna	Vienna	Vienna	Tokyo
2	Zurich	Melbourne	London	Sydney
3	Vancouver	Sydney	St. Albert	Copenhagen
4	Munich	Osaka	Singapore	Vienna
5	Auckland	Calgary	Chicago	Stockholm
6	Düsseldorf	Vancouver	Shanghai	Venice
7	Frankfurt	Toronto	Birmingham	Rome
8	Copenhagen	Tokyo	Chongqing	Zurich
9	Geneva	Copenhagen	Shenzhen	Munich
10	Basel	Adelaide	Paris	Montreal
Cities, total	231	140	87	56

In numerous rankings, Vienna continues to achieve top scores year after year – not only in Europe, but also on a worldwide scale. Most recently, it was voted “the world’s greenest city” in May 2020. While the outstanding marks assigned for the city’s high quality of life merit special mention, Vienna also enjoys international prominence as an innovative centre of business and science.

5.2 Cost of living across the EU

Selected capital cities of the EU, 2020



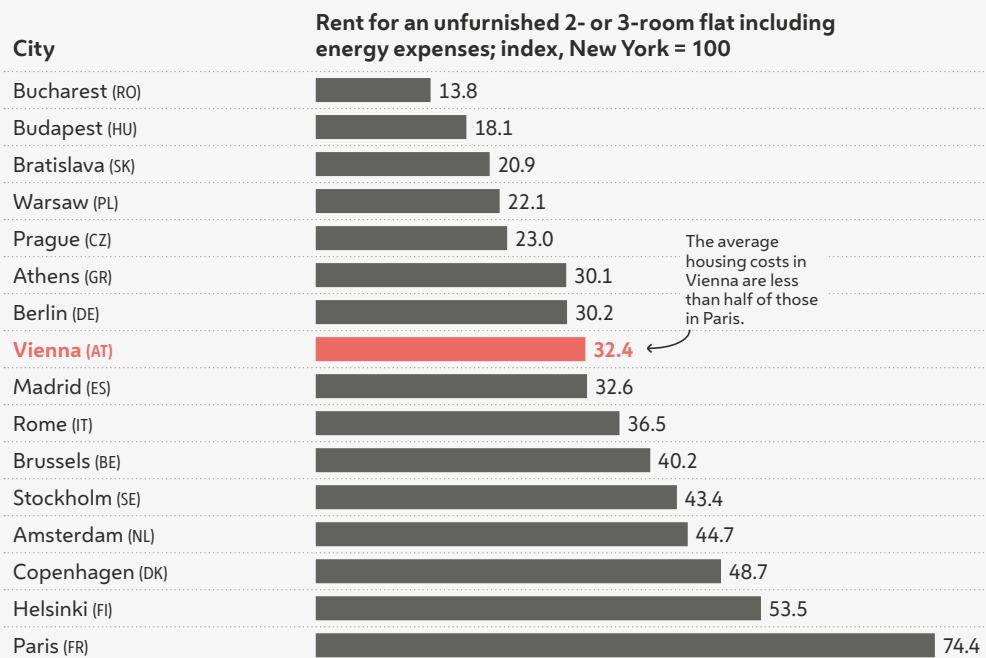
Source: Numbeo

Index of consumer goods prices (food, restaurants, transportation, utilities) including rents

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 Copenhagen, Paris and Amsterdam.

5.3 Housing costs across the EU

Selected capital cities of the EU, 2018



Source: UBS, Prices and Earnings, April 2018

Note: only European cities taken from ranking

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 Paris.

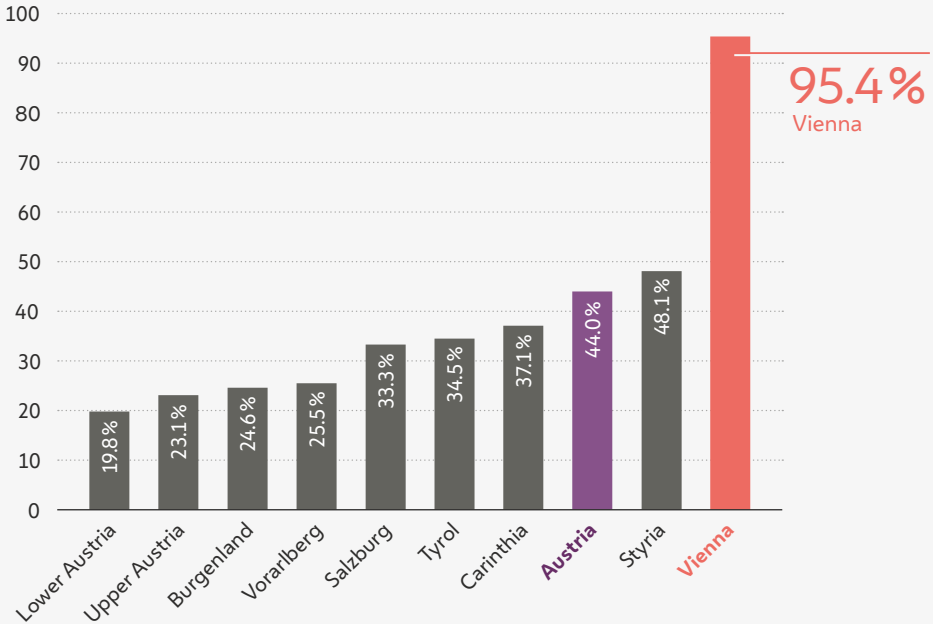
One special characteristic of Vienna lies in the significant share of publicly funded or subsidised housing construction: The City of Vienna and other developers provide one fourth of all dwellings in the Austrian capital; another third receives public subsidies. This not only curbs price increases,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

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

5.4 Comparison of childcare in Vienna and Austria

Federal provinces of Austria, 2018/19

Share of children aged 5 in childcare facilities whose opening hours are compatible with full-time work of parents, among all five-year-old attending kindergarten, in % (VIF criteria¹)



Source: Statistics Austria Kindertagesheimstatistik 2018/19

¹ Opening hours: at least 47 weeks/year, 45 hours/week, on working days (Mondays to Fridays), 9.5 hours/day on four days/week; lunch served

In 2018/2019, 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 childcare (“free kindergarten”).

Glossary

Selection of cities used for comparison in this brochure

In this brochure, Vienna is compared with 15 other EU capital cities. In addition to the eight most densely populated capitals (Paris, Berlin, Madrid, Rome, Bucharest, Warsaw, Budapest, Prague – Vienna holds 6th place in this list), another seven major 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 comprised 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 newspaper “The Economist” invented this index in 1986 with the aim of explaining the overvaluation and undervaluation of individual currencies in a clear-cut, 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.

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, etc.) less subsidies on products (e.g. EU subsidies, provincial subsidies to hospitals, etc.), which balance is included in the GDP.

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.

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.

NUTS

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").

This brochure uses NUTS 2 regions, which in Austria correspond to the federal provinces and, at the European level, to most metropolises. In 2018, there existed 281 regions at NUTS 2 level across the EU (NUTS 2016). 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 as the lowest level of this hierarchy.

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 generating new applications of this knowledge.

The element of novelty and originality (new findings, new knowledge, new applications) is the 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.

It describes the share of R&D spending in percent 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, public/government authorities and the private nonprofit sector (e.g. scientific societies and institutes operated by associations or religious communities). This brochure analyses research spending according to these implementing sectors (as opposed to financing sectors).

Secondary education level

An upper secondary education level according to ISCED 2011 (International Standard Classification of Education) as a minimum corresponds to secondary education level II (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 Middle School or the lower level at a Higher General Education School (AHS), i.e. school-leaving credentials of Polytechnic Schools, higher levels of AHS and Vocational Secondary and Higher Schools (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 take up a job at short notice.

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**City of
Vienna**

Economic Affairs,
Labour and Statistics

Meiereistraße 7, Sektor B
1020 Vienna

Phone: +43 1 4000 83059
post@ma23.wien.gv.at

Responsible for the contents:
Klemens Himpele

Editorial team

Daniel Jost, Maximilian Mayerhofer,
Alina Pohl, Philipp Tzaferis

Concept development, design & typesetting

University of Art and Design Linz,
Visual Communication: Tina Frank,
Hanna Priemetzhofer, Clemens
Schrammel

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Translation

Sigrid Szabó

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