Business Location 2022

Vienna in Figures



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Vienna in Figures 2022

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Available from December 2022.

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The cover illustration was created according to set rules for Conditional Design by the University of Arts Linz, Department of Visual Communication.

Business Location 2022

Vienna in Figures

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

Foreword

The coronavirus pandemic and the Russian attack on Ukraine represent turning points whose long-term 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 57 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. 37).

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, Labour, International Affairs and Vienna Public Utilities

plante

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 global warming, 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!

Puller

Peter Wieser

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

At a glance: Vienna as a business location

1.93 million

persons live in Vienna, the fifth-largest city of the European Union (as per 1 January 2022).

42%

is the percentage by which Vienna's labour productivity exceeds the EU average (2020).

1st place

According to The Economist (2022) and the Mercer Quality of Living Survey (2019), Vienna is the world's most liveable city.

26% of Austria's gross domestic product for 2020 was generated in Vienna.

9,063

new enterprises
were set up in
Vienna in 2021.

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.

3.65% is the research quota in Vienna (2019).

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.

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 2020, the number of representative index positions for Austria's basket comprised 770 goods and services.

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: County 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)

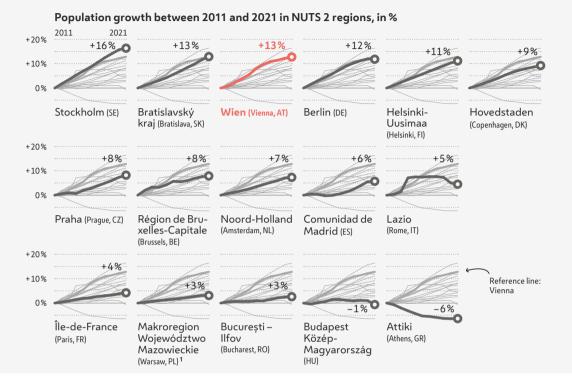
The gross regional product (GRP = regional GDP) corresponds to the total value of all finished goods and services produced in a region (e.g. a federal province) in the course of one year.

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, 2011/2021



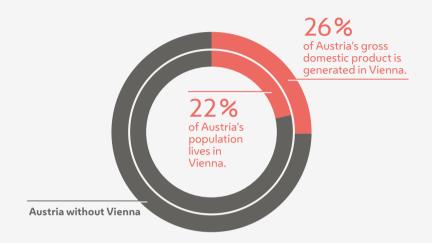
Source: Eurostat ¹ NUTS 1

Vienna is growing! Between 2011 and 2021, the number of the city's inhabitants increased by approx. 12.8% from 1.7 million to 1.9 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, 2020

Regional share in Austrian GDP / in Austrian population



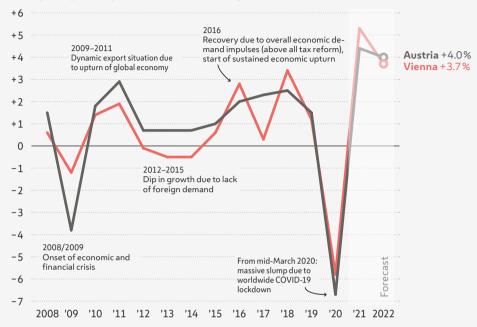
Source: Statistics Austria

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

1.3 Economic growth

Vienna and Austria, 2008 to 2022





Sources: Statistics Austria and WIFO

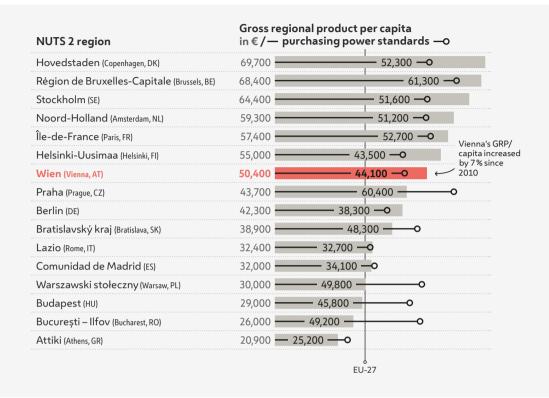
Vienna's economy is characterised by high stability regarding economic cycles over time: subdued growth in economic boom phases, but also a comparably lesser decline in growth during recession periods.

After the subdued growth related to the financial crisis in 2012–2015, 2016–2019 presented a stable phase of economic growth in Vienna (+1.2% in real terms in 2019). The positive labour market situation and the increase in real wages boosted private consumption, which further contributed to this period of overall prosperity. In spring 2020, this phase of growth was abruptly cut short by the coronavirus crisis. 2020 saw the deepest slump in Vienna's economic performance since World War II (-5.8%). In 2021, the regional economy was able to recover very strongly again (+5.3%), partly due to strong consumption ("V" curve). For 2022, forecasts assume continued positive but noticeably flatter growth (+3.7%) due to increased uncertainties (price increases, consequences of the Ukraine war).

The real gross regional product is used for the period from 2008 to 2020 (Source: Statistics Austria); for 2021 and 2022, the forecast of the real gross value added, as calculated by WIFO (as of May 2022).

1.4 Prosperity across the EU

Selected cities/urban regions of the EU, 2020



Source: Eurostat

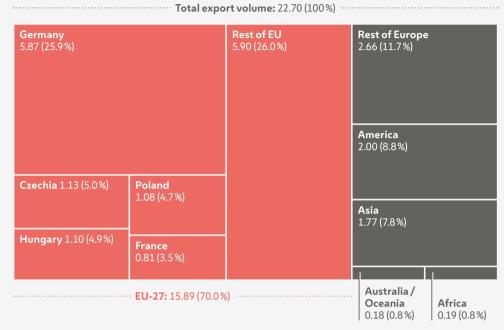
The gross regional product (GRP) per capita is considered an indicator of the level of economic development of a given region and is often regarded as a yardstick of prosperity. Measured by current prices, in 2020 Vienna (€ 50,400) held a midrange position among the cities included in this comparison 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, 2021





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

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

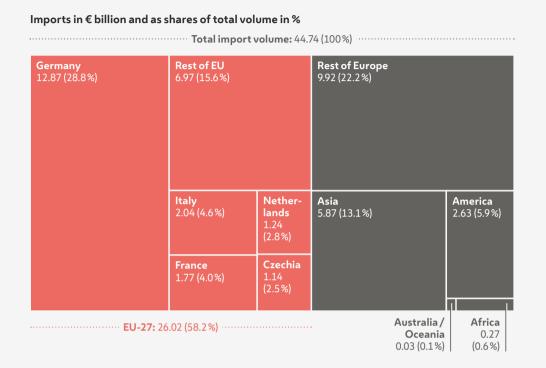
The foreign trade data clearly reflects close economic ties between Vienna and its trade partners worldwide, but especially with EU Member States. Overall, Vienna's imports roughly equal twice its export volume.

Around 14% of Austria's exports come from Vienna, and about one fourth of all national imports is destined for Austria's capital. In all, the trade partners involved in approx. 70% of all Viennese exports and 60% 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, 2021



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

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.

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

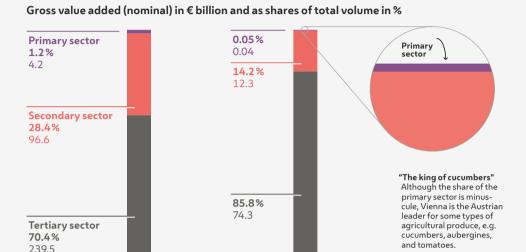
Labour productivity is an indicator of the efficiency of workers in the production process, measured as the ratio between overall economic output and labour input, i.e. GRP per employed person.

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 reqistered 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 or has already found a job and will start to work within the next three months, and can take up a job at short notice.

2.1 Economic sectors

Vienna and Austria, 2020 (provisional)



Vienna 86.6

Source: Statistics Austria

Vienna's economy is mainly service-oriented. With a share of around 86%, 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. Despite this, the share of trade and industry in Vienna amounts to around 14% and hence is certainly not insignificant. In a manner typical of any metropolis, the primary sector (agriculture) is very small, accounting for less than 0.05% (or 0.5 per mil). In all, Vienna's GVA increased by around 25% from 2010 to 2020, while this growth equalled around 29% for Austria as a whole.

Austria 340.3

2.2 Start-ups

Vienna, 2009 to 2021





Source: Austrian Economic Chamber

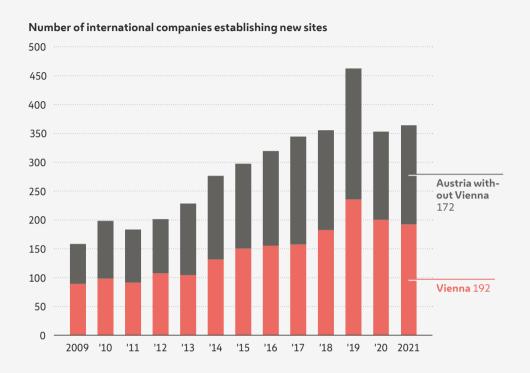
In 2021, 9,063 enterprises were set up in Vienna; thus nearly one forth of all Austrian start-ups are domiciled in the country's capital. These figures only comprise members of the Economic Chamber and only true start-ups (no reorganisations, suspensions of economic activity or branch establishments). Out of this total figure for 2021, approx. 6,800 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, the share of female entrepreneurs among sole proprietorship start-ups remained stable at 45% between 2011 and 2021.

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

2.3 Business settlement of international companies

Vienna and Austria, 2009 to 2021

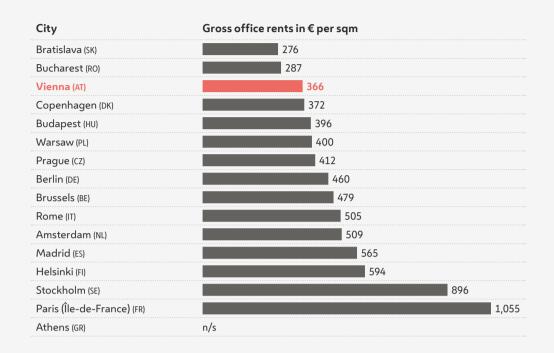


Source: Vienna Business Agency

In the past ten years, close to half of all international companies making their first move to Austria settled in Vienna. In 2021, 192 enterprises settled 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 225. 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*



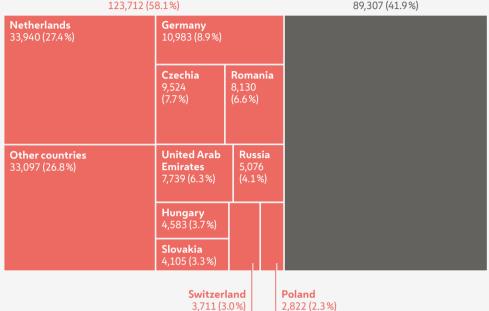
Source: CBRE Research, 2019 Global Prime Office Occupancy Costs

* Most recent data available.

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

2.5 Foreign direct investment — active Vienna, 2019





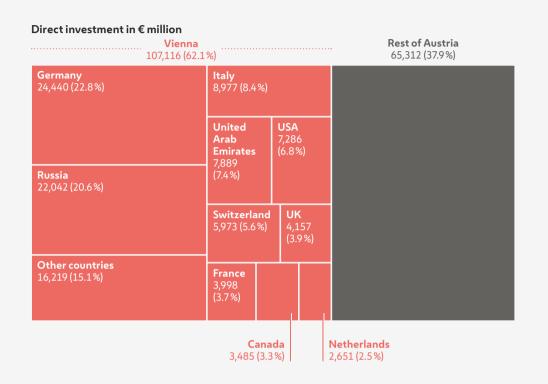
Source: Oesterreichische Nationalbank

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

Around 62% of foreign direct investment (passive FDI) in Austria goes to Vienna. A look at the countries of origin of these capital flows reveals that German participations are highest in Vienna, followed by those from Russia, Italy and the United Arab Emirates.

Foreign direct investment — passive

Vienna, 2019

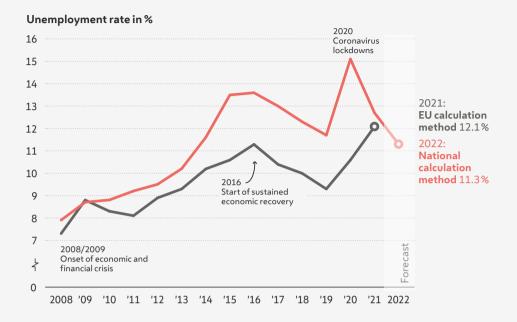


Source: Oesterreichische Nationalbank

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, 2008 to 2022



Sources: AMS, Statistics Austria, WIFO

Forecast: WIFO (May 2022)

In Vienna, the unemployment rate according to the national calculation method was 12.7% for 2021 and thus decreased by 2.4 percentage points compared to the previous year. 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. Since 2021, the trend on the labour market appears more promising again.

2.7 **Development of employment across the EU**Selected cities/urban regions of the EU, 2011/2021

NUTS 2 region	Development of employment figures 2011–2021	Employed persons 2021	Population development 2011–2021
Berlin (DE)	+19%	1,786,600	+12%
Stockholm (SE)	+17%	1,233,200	+16%
Région de Bruxelles-Capitale (Brussels, BE)	+16%	472,400	+8%
Wien (Vienna, AT)	+13%	860,400	+13%
Bratislavský kraj (Bratislava, SK)	+11%	341,800	+13%
Prague (Praha, CZ)	+9%	675,500	+8%
Île-de-France (Paris, FR)	+7%	5,525,300	+4%

Source: Eurostat

Between 2011 and 2021, employment in Vienna grew by 13%. 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 Available income across the EU

Selected cities/urban regions of the EU, 2019

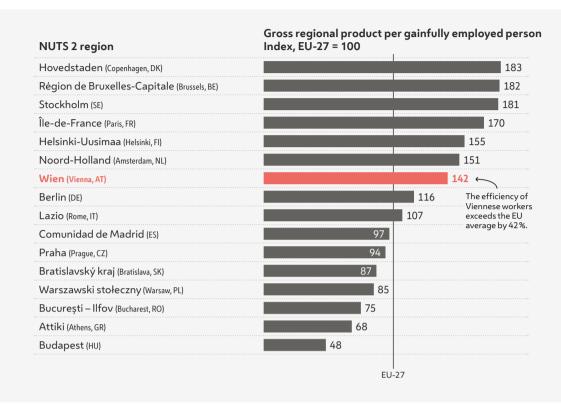
NUTS 2 region	Disposable income in € and — in € purchasing power standard —o	
Stockholm (SE)	25,100	20,300 —
Hovedstaden (Copenhagen, DK)	24,900	17,600 —
Helsinki-Uusimaa (Helsinki, FI)	24,600	19,500 —o
Île-de-France (Paris, FR)	23,800	21,000 —o
Wien (Vienna, AT)	22,600	20,000 —
Noord-Holland (Amsterdam, NL)	22,500	19,300 —
Berlin (DE)	20,600	19,200 —
Région de Bruxelles-Capitale (Brussels, BE)	20,200	17,500 —o
Comunidad de Madrid (ES)	19,500	20,300 —
Lazio (Rome, IT)	19,000	18,600 —o
Bratislavský kraj (Bratislava, SK)	15,200	17,500
Praha (Prague, CZ)	14,000	18,600
București – Ilfov (Bucharest, RO)	12,600	22,600 —
Budapest (HU)	11,900	17,600 − 0
Attiki (Athens, GR)	11,700	13,500 •
Warszawski stołeczny (Warsaw, PL)	10,900	18,200 —o

Source: Eurostat; provisional data for the Île-de-France region and Praha

Disposable income is the total amount available to households for spending and saving after deducting income taxes and pension contributions.

2.9 Labour productivity across the EU

Selected cities/urban regions of the EU, 2020



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.

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 head-count, i.e. as the number of persons active in a specific area, or as full-time equivalents (FTE), which is a standard-ised 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).

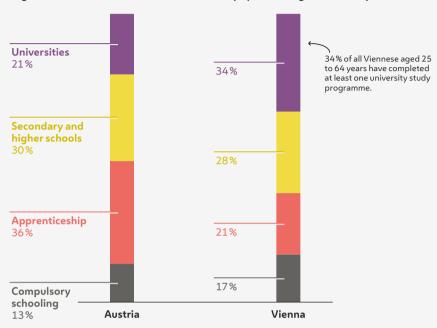
Secondary education level

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), postsecondary, 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, 2021



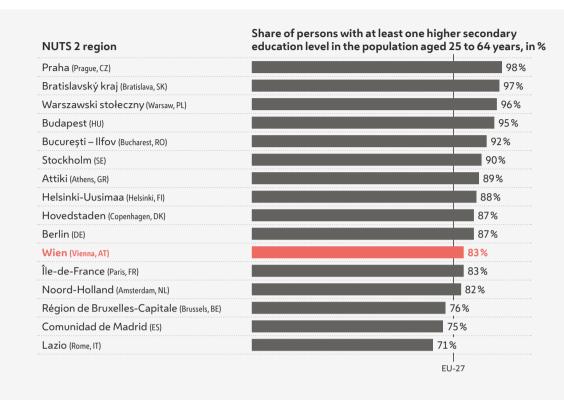


Source: Statistics Austria (microcensus)

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 34% and hence is markedly higher than anywhere else in Austria (national average 21%).

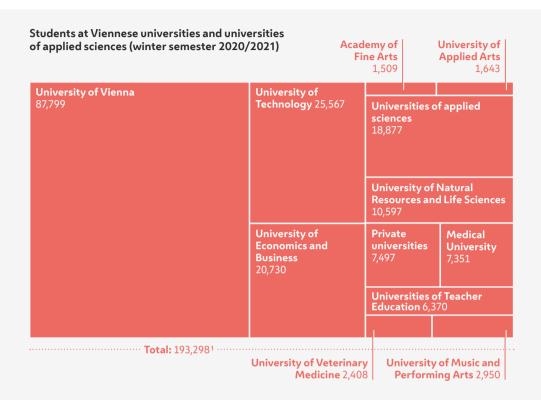
3.2 **Educational attainments across the EU**Selected cities/urban regions of the EU, 2021



Source: Eurostat (based on ISCED 2011)

Around 83% 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 (79%). 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, 2020/2021

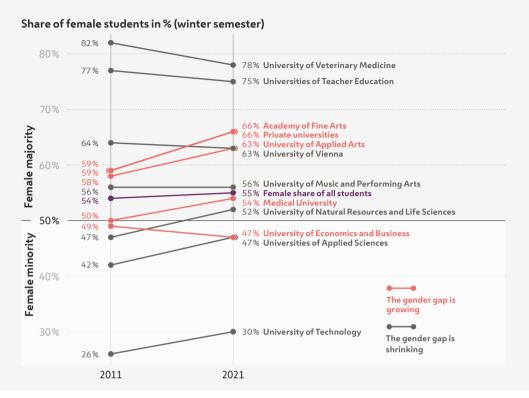


Source: Statistics Austria, unidata

In the 2020/2021 winter semester, approx. 193,000 students were enrolled at Vienna's universities and universities of applied sciences. Slightly over half of these students (around 55%) 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.

Students enrolled in multiple study programmes are counted multiple times.

3.4 **Development of share of female students** — Viennese universities and universities of applied sciences, 2011/2021

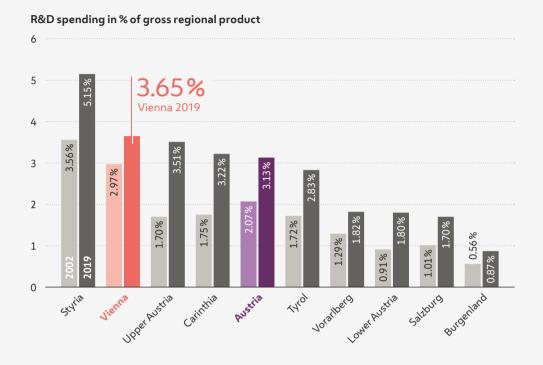


Source: Statistics Austria, unidata

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 2019



Source: Statistics Austria

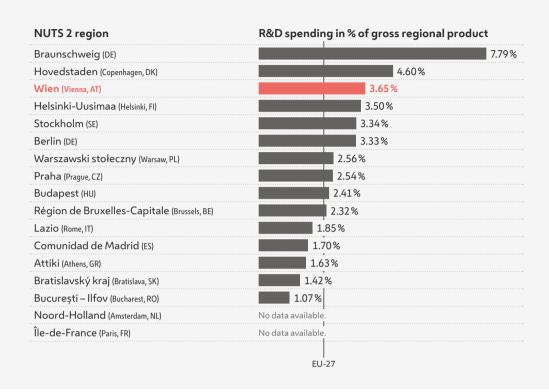
The R&D quotas of all federal provinces as well as of Austria as a whole have been rising steadily over the past few years. Despite marked growth in some other federal provinces, Vienna continues to hold second place.

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 2019, the federal capital invested \leq 3.9 billion in R&D (top rank), trailed by Styria (2^{nd} place) at \leq 2.4 billion.

3.6 R&D quotas across the EU

Selected cities/urban regions of the EU, 2019

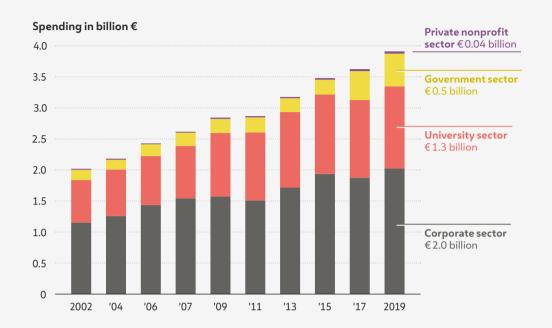


Source: Eurostat (partly OECD)

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 2019



Source: Statistics Austria

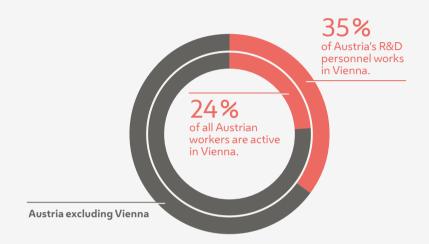
Since 2017: new Frascati Manual

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, 2019

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, 2019



Source: Eurostat

An international comparison reveals an excellent position for Vienna, as the Austrian capital holds third place among all 242 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 Top 10 cities, 2021

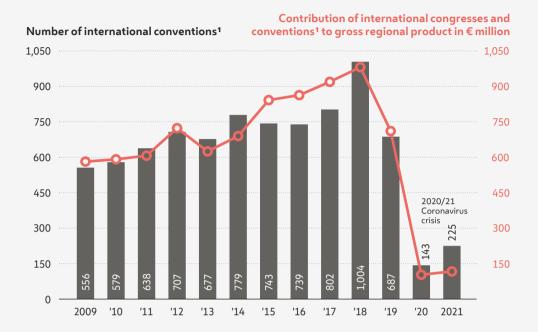


Source: International Congress and Convention Association (ICCA)

In the ranking of globally held international association congress venues in 2021 published by the ICCA, Vienna took 1st place worldwide in the overall ranking, ahead of Lisbon and Athens. Of a total of 113 planned congresses in Vienna in 2021, 92 congresses were held, nine of them in presence (without restrictions), 22 hybrid and 61 virtual.

The ranking is based for the first time on the so-called Destination Performance Index (DPI), which allows for a direct comparison of destinations. In addition to the number of congresses held, postponed, or relocated events as well as hybrid or virtual forms are now also considered. The exact DPI scores for the individual cities were not published.

4.2 International congresses and conventions in Vienna: Number and value added — Vienna, 2009 to 2021

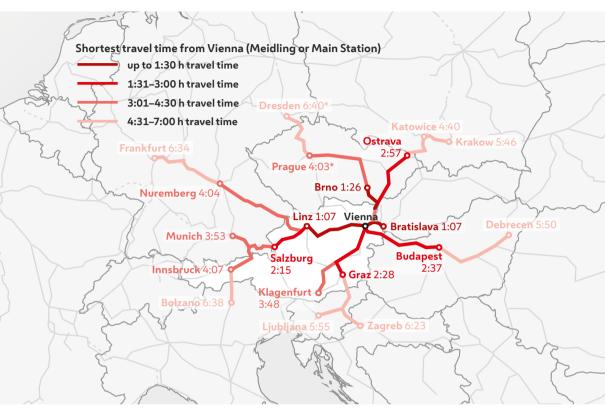


Source: Vienna Tourist Board, Vienna convention industry statistics 2019

As a congress venue, Vienna has adapted well to the new situation during the coronavirus crisis. Vienna was able to hold a large part of the planned congresses by converting many to digital formats.

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, 2022 and 2020

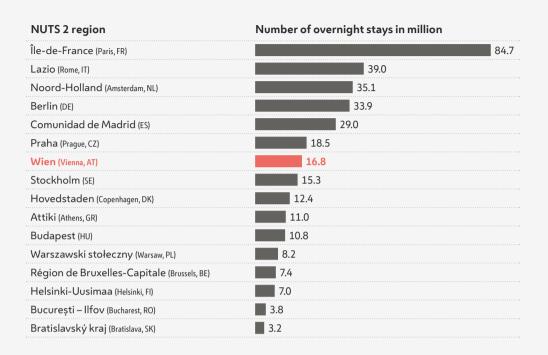
Vienna is not only an important aviation hub, but also well connected to other European countries by train. Travel times of seven hours at most take passengers to all neighbouring countries of Austria (except Liechtenstein) as well as to Poland and Croatia.

* Travel time from 2020 (At the time of going to press in 2022, the railway line was partly closed due to construction works.)

4.4 Airline passenger volumes across Europe Selected capital cities, 2019 4 STAR AIRPORT Number of passengers transported (sum total of all airports of a city) **City** Passengers in 2019 has approx. 4 times as many passengers as Stockholm Helsinki 30,289,117 22,049,170 Copenhagen 30,126,849 Amsterdam 71,689,636 London Berlin 178,901,522 35,627,286 X Warsaw 21,971,781 Frankfurt Brussels **3**4,483,884 70,435,867 Prague 17,839,064 Vienna 31,634,898 Bratislava 2,284,735 X Paris Munich X 107,990,491 47,891,776 Zurich Budapest 31,472,879 16,099,519 Bucharest 14,694,182 49,249,663 Madrid 59,747,242 25,572,131 Note: This chart shows data from the year before the coronavirus crisis started in order to highlight the potential of Europe's airport infrastructure and Source: Eurostat allow for comparisons. 42-43

4.5 Tourist overnight stays across the EU

Selected cities/urban regions of the EU, 2019

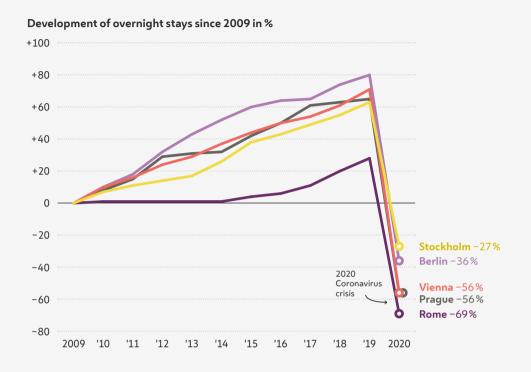


Source: Eurostat

In 2019, Vienna set a new record of nearly 17 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).

4.6 Development of tourist overnight stays

Selected cities/urban regions of the EU, 2009 to 2020



Source: Eurostat

The coronavirus crisis, with extensive restrictions on international travel, has caused tourism to plummet; however, a strong recovery is already in the offing for the summer of 2022.

5 Living in Vienna

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

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.

5.1 Vienna in international rankings

Highest quality of life worldwide

Place	Quality of Living Survey 2019 (Mercer)	Global Liveability Ranking 2022 (Economist Intelligence Unit)	Smart City Strategy Index 2019 (Roland Berger)	World Greenest Cities 2020 (Resonance Consultancy Ltd.)
1	Vienna	Vienna	Vienna	Vienna
2	Zurich	Copenhagen	London	Berlin
3	Vancouver	Zurich	St. Albert	Madrid
4	Munich	Osaka	Singapore	Curitiba
5	Auckland	Vancouver	Chicago	Amsterdam
6	Düsseldorf	Geneva	Shanghai	Singapore
7	Frankfurt	Frankfurt	Birmingham	Stockholm
8	Copenhagen	Toronto	Chongqing	Copenhagen
9	Geneva	Amsterdam	Shenzhen	London
10	Basel	Osaka	Paris	Canberra
Cities, total	231	172	87	50

In numerous rankings, Vienna continues to achieve top scores year after year – not only in Europe, but also on a worldwide scale. Most recently, Vienna 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 **Satisfaction of urban residents across the EU**Selected capital cities of the EU, 2019

Share of respondents replying "very satisfied" or "rather satisfied", in %

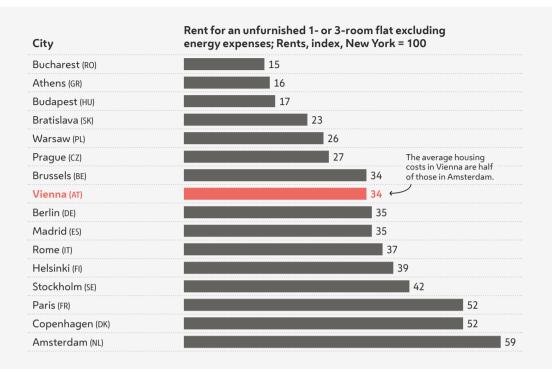
Public transport	Cultural facilities	Cleanliness	Health care services	Green spaces
95% Vienna	95% Vienna	87% Vienna	89% Amsterdam	91% Stockholm
88% Helsinki	88% Stockholm	80% Helsinki	86% Prague	91% Helsinki
87% Prague	87% Amsterdam	71% Stockholm	85% Vienna	90% Copenhagen
82% Berlin	86% Prague	71% Copenhagen	85% Brussels	89% Vienna
81% Stockholm	86% Paris	66% Warsaw	83% Berlin	88% Amsterdam
81% Amsterdam	85% Helsinki	63% Amsterdam	80% Paris	87% Berlin
77% Copenhagen	85% Copenhagen	57% Prague	79% Stockholm	84% Brussels
76% Warsaw	85% Warsaw	48% Berlin	79% Copenhagen	84% Warsaw
74% Paris	84% Berlin	44% Budapest	74% Helsinki	83% Paris
73% Madrid	81% Brussels	43% Paris	64% Madrid	78% Prague
70% Athens	80% Budapest	42% Lisbon	61% Lisbon	69% Budapest
69% Brussels	78% Bratislava	40% Brussels	49% Rome	68% Madrid
68% Budapest	69% Bucharest	38% Madrid	45% Bratislava	67% Lisbon
57% Bratislava	69% Rome	37% Bucharest	42% Bucharest	62% Bucharest
54% Lisbon	68% Lisbon	31% Bratislava	40% Budapest	59% Rome
48% Bucharest	63% Athens	30% Athens	38% Warsaw	54% Bratislava
25% Rome	62% Madrid	8% Rome	34% Athens	29% Athens

Source: Eurostat (Eurobarometer)

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

5.3 Housing costs across the EU

Selected capital cities of the EU, 2021



Source: Numbeo

Note: only European cities taken from ranking

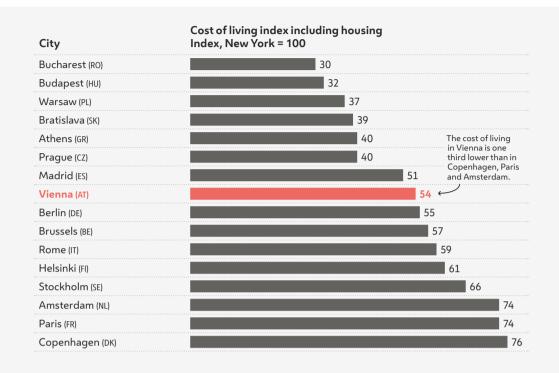
The comparison of cities shows a wide variation of rent prices across Europe. Vienna's moderate housing costs amount to around half of those in Amsterdam.

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 one- and threeroom flats including energy expenses, with the average housing costs in New York taken as baseline.

5.4 Cost of living across the EU

Selected capital cities of the EU, 2021



Source: Numbeo

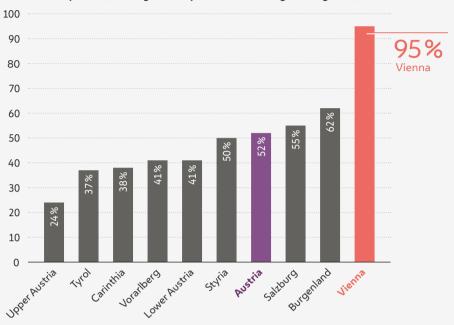
Among Western European metropolises, Vienna is considered an affordable city in terms of cost of living, which is only half that of New York and clearly lower than in Copenhagen, Paris and Amsterdam.

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

5.5 Comparison of childcare in Vienna and Austria

Federal provinces of Austria, 2020/21

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)



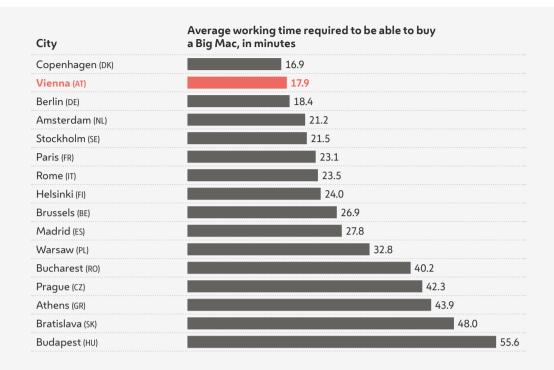
Source: Statistics Austria Kindertagesheimstatistik 2020/21

In 2020/2021, 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").

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

5.6 Big Mac index across the EU

Selected capital cities of the EU, 2018*



Source: UBS, Prices and Earnings, 2018 edition

* Most recent data available.

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.

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 5th 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 2020, 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 or has already found a job and will start to work within the next three months, and can take up a job at short notice.

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Media owner and publisher



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The cover illustration of this brochure was developed by students of the University of Arts Linz, Department of Visual Communication, in the context of a Conditional Design workshop: Sara Koniarek, Hannah Shong, Marthe Manyi.

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Printed by

Wograndl Druck GmbH 7210 Mattersburg

Disclosure

Statistical analyses focusing on the City of Vienna.

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ISBN 978-3-901945-42-7

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



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Vienna, August 2022



