

<p align="center"><b>27<sup>th</sup> Meeting of the Wiesbaden Group on Business Registers</b>  - Online International Roundtable on Statistical Business Registers Management  under the COVID-19 pandemic</p>
<p align="center"><b>Mexico, 20 – 24 September 2021</b>  <i>Sabrina Laufer, M.A., Mag. Florian Sternat</i>  STAT  Session No. 2</p> <p align="center">Name of session  Use of SBRs for business demography, business dynamics, and entrepreneurship</p>
<p align="center"><b>Use of the statistical and administrative business register to map registrations of  legal entities in Austria</b></p>

**Keywords:** business register, structural business statistics, business demography, registrations

## Abstract

Since May 2021, registrations of legal units for Austria have been calculated and published quarterly from the 2019 reporting year onwards. The statistical business register (SBR) is currently used in addition to the business register for administrative purposes (ABR). Further data sources are:

- (1) Commercial register,
- (2) Chamber of Commerce,
- (3) Main association of the Austrian Social Insurance Agencies,
- (4) Chambers of the Liberal Professions and
- (5) Basic tax data, advance sales tax returns and income tax data.

As there are no detailed specifications regarding a definition of registrations by Eurostat, Statistics Austria (STAT) uses currently the following definition: A registration is the inclusion of a legal unit in the ABR under certain premises. These ones are:

- (1) Registration in the Commercial register,
- (2) Registration with Chamber of Commerce,
- (3) Registration with Main association of the Austrian Social Insurance Agencies as an employer,
- (4) Registration with the Main association of the Austrian Social Insurance Agencies as self-employed person,
- (5) Registration with the Chambers of liberal professions as self-employed or
- (6) Registration with the tax and sales figures from the sales tax advance returns or income tax data are available.

The date of registration is determined based on the first sign of life in the sources, i.e. the first registration is counted.

Since the NACE code is not always available in the data sources at the time of registration, the Chamber of Commerce subject allocation is used – besides other sources – as the data source for an initial allocation of the NACE code. Missing NACE codes are estimated using a NACE distribution based on the new entries in the SBR. All market economy activities in sections B to S without section O and section S94 of NACE Rev. 2 are recorded. The registrations of associations are not counted.

Aims of the paper are to discuss the used definition of registrations, to present results and to examine the (future) use of the SBR.

Thus, the results at NACE two-digit level and in a year-to-year comparison are interesting because they show economic changes, for example caused by the COVID19 crisis. In addition, the international comparisons with the registration counts of Germany and Belgium, as well as the national comparison with the enterprise births and the counts of active members of the Chamber of Commerce in 2019 are interesting.

## 1 Introduction

Since May 2021, registrations of legal units for Austria are produced and published on a quarterly basis from the 2019 reporting year onwards by Statistics Austria (STAT). The statistical business register (SBR) is just one part of the underlying data base and cannot be used alone as the completeness for compiling registrations is not given. Therefore, in total about 40 percent of the cases are in the SBR. The remaining 60 percent are taken from the business register for administrative purposes (ABR).

Despite, one central question of this paper is: What is a registration? Eurostat does not provide quite a lot information on this question and even with information on how the statistic on registration should be compiled<sup>1</sup>. Nevertheless, on the website of Eurostat are some information about the meaning of this new statistic: "Registration is an early indicator to measure business intentions. In every country, administrative rules of registrations differ, so the quarterly data are presented as index series to improve comparability." (Eurostat 2020)

However, we offer one possible answer and define a registration as the inclusion of a legal unit in the ABR under certain premises. These premises, the used data sources and the applied method are presented in this paper.

One possibility this new statistic offers is to map economic changes over time quickly as the data transmission deadline to Eurostat is t+40 – so it's produced and published around 40 days after the reporting period which is the quarter. One example for the useful application of this statistic is to show economic changes caused by the corona crisis of 2020/2021. Especially the comparisons on NACE-two-digit-level are interesting and part of this paper.

Thus, this paper shows how the new statistic on registrations is made in Austria, which definition of registration is used and how the results are presented. In comparison to the annual business demography statistic about births, the statistic on registrations is fast enough to show economic changes quickly – this comparison is part of this paper as well.

## 2 Method

In this section the used method will be presented. Important to know is, that the SBR is used just in addition to the ABR to produce data on registrations. Further data sources are:

- (1) Commercial register,
- (2) Chamber of Commerce,
- (3) Main association of the Austrian Social Insurance Agencies,
- (4) Chambers of the Liberal Professions and
- (5) Basic tax data, advance sales tax returns and income tax data.

For the production of the statistic on registrations we are following the listed steps shown in table 1.

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<sup>1</sup> In the legal basis the used definition is: "The number of entered legal units in the registration register at any time during the reference quarter Q, according to the respective administrative or legal procedure." (EUR-LEX 2019).

**Table 1.** Method on compiling quarterly statistics on registrations

1	<b>Definition</b> of registrations
2	Definition of <b>Activity rules</b> / Registration ... ... in the <b>Commercial register</b> ... with the <b>Chamber of Commerce</b> ... with the <b>Main association of the Austrian social insurance agencies</b> as an employer ... with the <b>Main association of the Austrian social insurance agencies</b> as a self-employed person ... with the <b>Chambers of the Liberal Professions</b> as self-employed ... with the <b>tax and sales figures</b> from the sales tax advance returns or income tax data are available
3	Definition of <b>date</b> of registration: first sign of life in the used sources, i.e. the first registration of a legal unit is counted
4	Imputation of <b>NACE Rev. 2</b> code by Chamber of Commerce subject allocation – besides other sources – and estimation of the remaining once by using a NACE distribution based on the new entries into the SBR
5	Exclusion of registrations of <b>associations</b>

As there are no detailed specifications regarding a definition of registrations by Eurostat, STAT uses the following definition: A registration is the inclusion of a legal unit in the ABR under certain premises. These activity rules of registrations are:

- (1) Registration in the Commercial register,
- (2) Registration with the Chamber of Commerce,
- (3) Registration with the Main association of the Austrian social insurance agencies as an employer,
- (4) Registration with the Main association of the Austrian social insurance agencies as a self-employed person,
- (5) Registration with the Chambers of the Liberal Professions as self-employed or
- (6) Registration with tax and sales figures from the sales tax advance returns or income tax data are available.

In the next step of the compilation of the statistic the date of the registration is determined based on the first sign of life in the sources, i.e. the first registration of a legal unit is counted.

Since the NACE code is not always available in the data sources at the time of registration, the Chamber of Commerce subject allocation – next to the economic activity included in the tax and social insurance data – is used as the data source for an initial allocation of the NACE code. Missing NACE codes are estimated in another step using a NACE distribution based on the new entries in the SBR. All market economy activities in sections B to S without section O and section S94 of NACE 2008 are recorded.

Finally, the registrations of associations are excluded from the data base.

### 3 Results

In this section selected results are presented. Firstly, the registrations from first quarter 2019 to second quarter 2021 and the revisions by quarter in total counts will be presented. Secondly, the registrations from first quarter 2019 to second quarter 2021 by quarter and

economic activity in total counts are shown. Thirdly, the registrations of the first half of 2019 to the first half of 2021 by economic activity in change in percent are displayed. Fourthly, the registrations in comparison from 2019 to 2020 by selected NACE-two-digit-counts in percent are set out. Fifthly, the registrations in comparison with enterprise births 2019 by selected NACE-two-digit-counts in percent are viewed. Sixthly, the registrations 2019 in national and international comparison in total counts are conducted.

### 3.1 Registrations Q1/2019 to Q2/2021 and revisions by quarter (total counts)

In 2021, STAT has already published counts on registrations twice. The first time in May 2021 (first quarter 2019 to first quarter 2021) and the second time in August 2021 (second quarter 2020 to second quarter 2021). Due to the relatively late availability of the underlying administrative data sources the data on the registrations for the last four reporting quarters are shown as provisional and are revised when a new quarter is published. The registrations of the first quarter 2019 to the second quarter 2021 and the revisions by quarter are shown in the table two. The changes in percent are higher for younger reporting periods, e.g. fourth quarter 2020 and first quarter 2021. The quite high difference, especially in the younger reporting periods, are due to the deliveries of the certain data sources. This means that at one point there exists a registration with the registration time X. At the next data extraction there are more sources available and the time of registration could change.

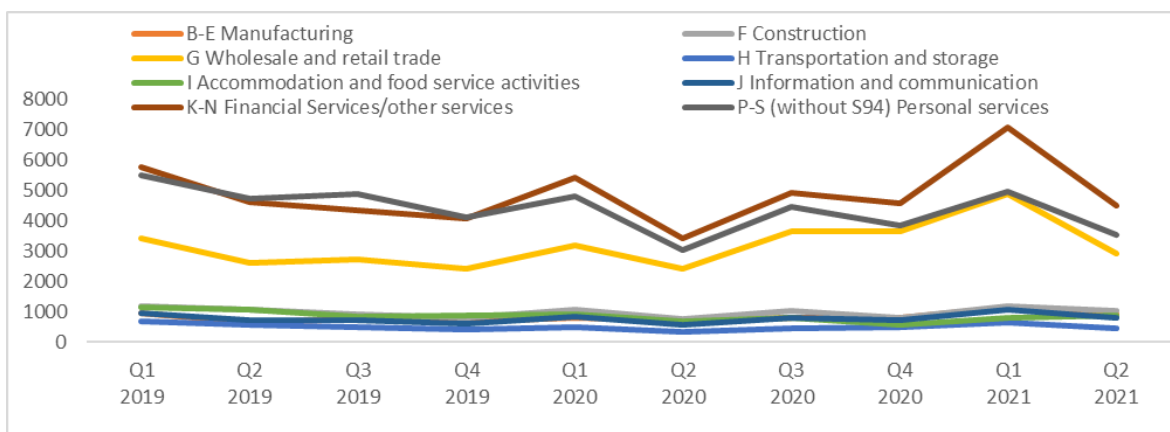
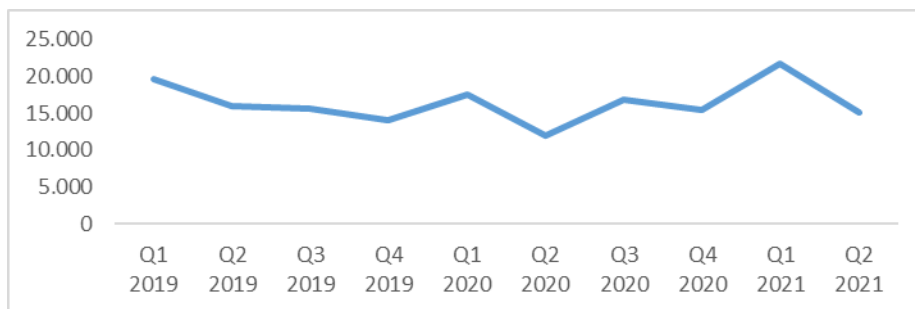
**Table 2.** Registrations Q1/2019 to Q2/2021 and revisions by quarter (total counts and change in %)

	Data status: May 2021	Data status: August 2021	Change in %
<b>Q1 2019</b>	19.679	19.885	1,0
<b>Q2 2019</b>	16.047	16.182	0,8
<b>Q3 2019</b>	15.738	15.817	0,5
<b>Q4 2019</b>	14.026	14.132	0,8
<b>Q1 2020</b>	17.564	17.841	1,6
<b>Q2 2020</b>	11.808	12.042	2,0
<b>Q3 2020</b>	16.731	16.922	1,1
<b>Q4 2020</b>	15.130	15.479	2,3
<b>Q1 2021</b>	19.195	21.783	13,5
<b>Q2 2021</b>		15.073	

### 3.2 Registrations Q1/2019 to Q2/2021 by quarter and economic activity (total counts)

In the first quarter of 2019, 19 679 legal units have been registered in Austria.<sup>2</sup> For first quarter 2021 the highest number of registrations were counted. In this quarter, 21 783 legal units have been registered. Figure one shows the total counts from first quarter 2019 to second quarter 2021. Highest number of registrations were recorded in the economic activities K-N (Financial Services/other services), P-S (without S94) (Personal services) and G (Wholesale and retail trade) (see figure 1).

<sup>2</sup> The registrations are published on our website (STAT 2021a).



**Figure 1.** Registrations Q1/2019 to Q2/2021 by quarter and economic activity (total counts)

### 3.3 Registrations 1st half of 2019 to 1st half of 2021 by economic activity (change in %)

The registration statistic offers the opportunity to compare economic relevant time periods like the pre-corona time period and the corona time period. Especially the comparison and change in percent of the first half of 2019 with the first half of 2020, of the first half of 2020 with the first half of 2021 and of the first half of 2019 with the first half of 2021 are interesting. The results shown in the table 3 demonstrate these changes. Very high changes are for (1) first half of 2019 with the first half of 2020 in the economic activity H Transportation and storage (-32,8%), for (2) first half of 2020 with the first half of 2021 in the economic activity G Wholesale and retail trade (+38,8%) and for (3) the first half of 2019 with the first half of 2021 in the economic activity G Wholesale and retail trade (+29,0%) and I Accommodation and food service (-24,6%).

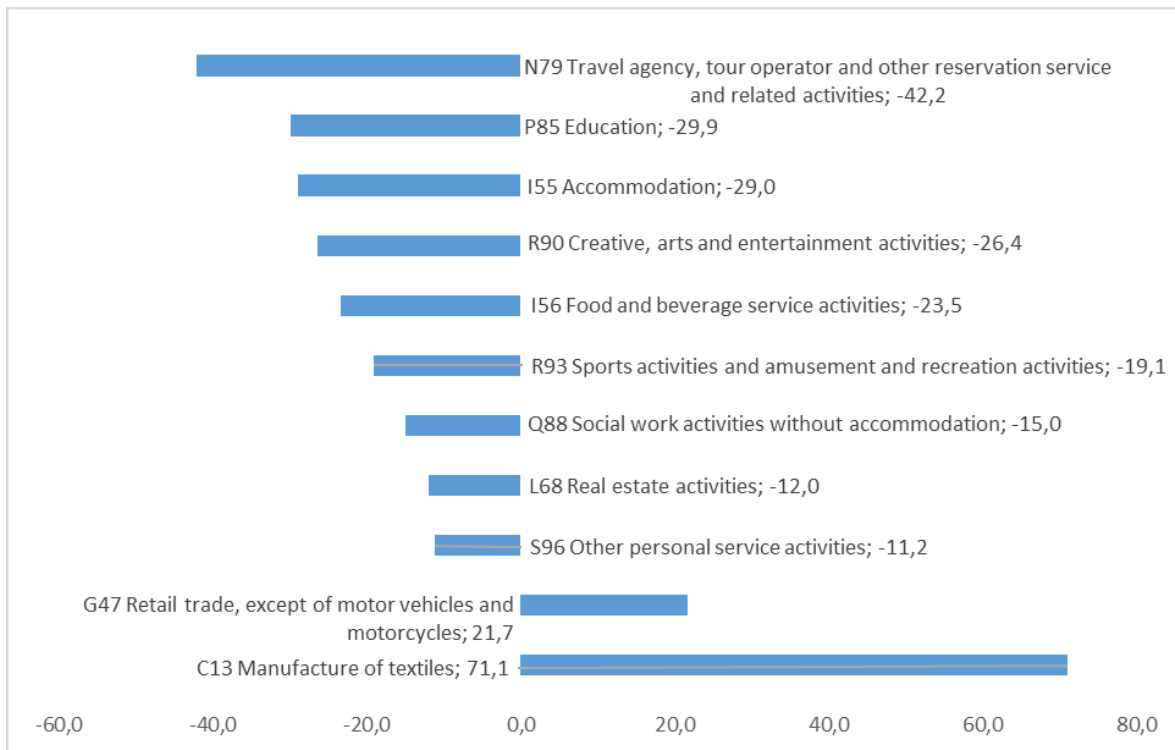
**Table 3.** Registrations 1st half of 2019 to 1st half of 2021 by economic activity (change in %)

ÖNACE 2008		2019/1.HJ	2020/1.HJ	2021/1.HJ	Change in % 1.HJ/2019- 1.HJ/2020	Change in % 1.HJ/2020- 1.HJ/2021	Change in % 1.HJ/2019- 1.HJ/2021
B-E	Manufacturing	1.620	1.522	2.081	-6,0	36,7	28,5
F	Construction	2.281	1.869	2.249	-18,1	20,3	-1,4
G	Wholesale and retail trade	6.038	5.614	7.792	-7,0	38,8	29,0
H	Transportation and storage	1.251	841	1.098	-32,8	30,6	-12,2
I	Accommodation and food service	2.204	1.630	1.661	-26,0	1,9	-24,6
J	Information and communication	1.687	1.415	1.875	-16,1	32,5	11,1
K-N	Financial Services/other services	10.405	8.872	11.592	-14,7	30,7	11,4
P-S (ohne S94)	Personal services	10.240	7.843	8.508	-23,4	8,5	-16,9
<b>TOTAL</b>		<b>35.726</b>	<b>29.606</b>	<b>36.856</b>	<b>-17,1</b>	<b>24,5</b>	<b>3,2</b>

### 3.4 Registrations comparison with enterprise births 2019 by selected NACE-2digit-counts (in %)

The registration statistic is a valuable statistic. One example for a useful application of this statistic is the analysis of economic developments, e.g. caused by the corona crisis of 2020/2021. Especially the comparisons on NACE-two-digit-level are interesting and are part of this paper.

Figure two views the comparison of the registration counts of 2019 and 2020 by selected NACE-two-digits in percent. High positive differences do have the divisions C13 Manufacture of textiles (+71,1%) and G47 Retail trade, except of motor vehicles and motorcycles (+21,7%). That means that the registrations have increased in this period and that the corona crises favoured those economic branches. Nonetheless, there are a lot of divisions with negative differences in this period (sorted from lowest to highest): (1) S96 Other personal service activities (-11,2%), L68 Real estate activities (-12,0%), Q88 Social work activities without accommodation (-15,0%), R93 Sports activities and amusement and recreation activities (-19,1%), I56 Food and beverage service activities (-23,5%), R90 Creative, arts and entertainment activities (-26,4%), I55 Accommodation (-29,0%), P85 Education (-29,9%) and last but no least the economic branch with the highest negative growth in this period N79 Travel agency, tour operator and other reservation service and related activities (-42,2%).



**Figure 2.** Registrations comparison with enterprise births 2019 by selected NACE-2digit-counts (in %)

### *3.5 Registrations comparison with enterprise births 2019 by selected NACE-2digits (in %)*

Eurostat publishes on the website that registrations cannot be compared directly to enterprise births. Furthermore, Eurostat says that the registration of a legal entity can be seen as a declaration of intent, but does not necessarily mean that it will actually start an economic activity.

Therefore, the difference is that legal unit registrations are part of administrative procedures, while annual enterprise births data are related to turnover and/or employment. The administrative procedures of registrations include, for example, registration in the commercial register as practiced in Austria to compile the registration statistic. However, registrations in the commercial register alone do not constitute the total of the registrations. The detailed methodological compiling process of the registration statistic is shown in the section method within this paper.

Another fundamental contrast between an enterprise birth and a registration is that the registration data is not based on enterprise demography characteristics like the first sign of turnover and/or employment but rather on the date of registration that is not necessarily the same.

Main difference between registration and birth is the statistical unit. In annual business demography statistics on births the statistical unit is the enterprise while quarterly data on registrations refer to legal units (several legal units can constitute one enterprise, a registration of a new legal unit therefore does not necessarily mean the birth of a new enterprise).

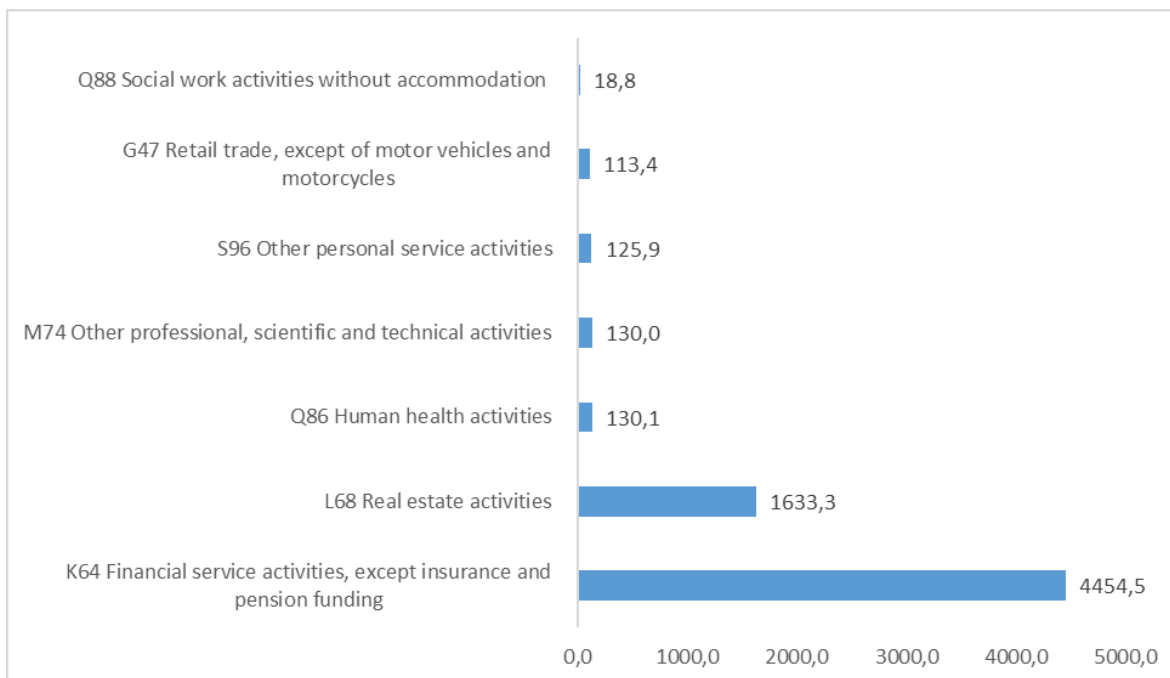
Due to these methodological differences, there is no direct comparison with the annual business demography statistic for enterprise birth possible. Registrations of businesses are part of administrative procedures and cannot be compared with enterprise birth (Eurostat 2020).

Though, the comparison between registrations and enterprise births is interesting. In 2019 in total 65 490 legal units have been registered in Austria. Around 40 percent more than enterprise births in the same reporting year. The count for the enterprise births in 2019 is 37 356<sup>3</sup>. Huge differences on NACE-two-digit-level are in K64 Financial service activities, except insurance and pension funding (4454,5 %), L68 Real estate activities (1633,3%), Q86 Human health activities (130,1%), M74 Other professional, scientific and technical activities (130,0%), S96 Other personal service activities (125,9%), G47 Retail trade, except of motor vehicles and motorcycles (113,4%) and Q88 Social work activities without accommodation (18,8%). These differences are mainly caused through the different data sources, compiling method, coverage areas (e.g. K64 enterprise births: Without groups 64.2 "Activities of holding companies" and 64.3 "Trusts and funds") or reference times for the analysis or the assignment of the units to economic branches according to NACE Rev. 2. The following figure three shows the comparison of registrations and enterprise births 2019 by selected NACE-codes.

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<sup>3</sup> The enterprise births are published on our website (STAT 2021b).





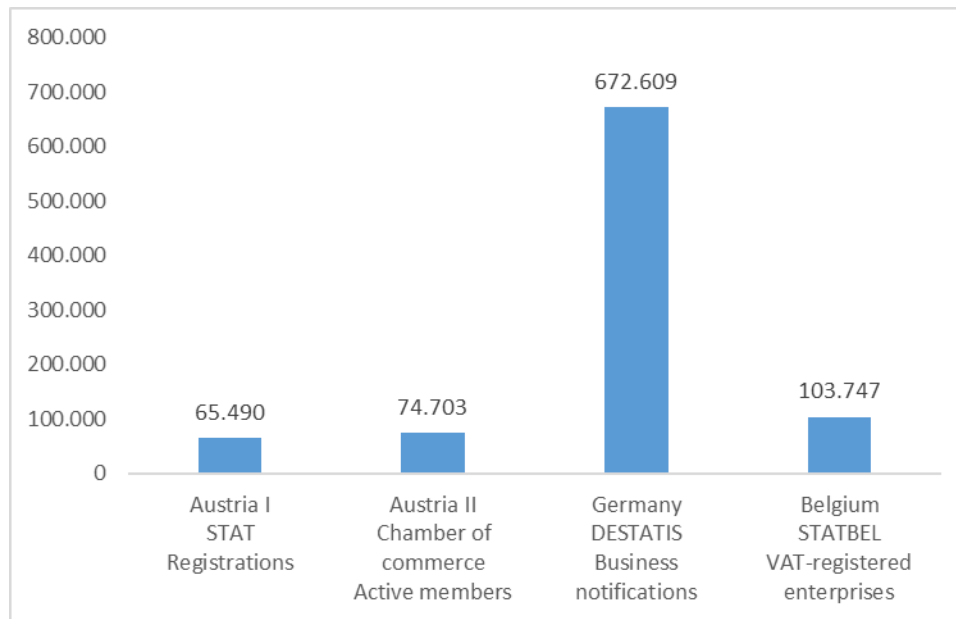
**Figure 3.** Registrations - comparison enterprise births 2019 by selected NACE-2digit-counts (in %)

### 3.6 Registrations 2019 national and international comparison (total counts)

National and international comparisons of the registration counts higher the quality of the data and are a good opportunity to classify the data. Hence, in this paper section the focus is on the national comparison between the registration counts of STAT and the counts of active members of the Chamber of Commerce in 2019 as well as the international comparisons of the registration counts of STAT, Germany and Belgium also in 2019.

First, we are looking on the national comparison. In total 65 490 legal units have been registered in Austria in 2019. In contrast to these counts of STAT, the Chamber of Commerce has 74 703 new active members in 2019. It should be noted that the number of active members is slightly higher in 2019 than the registration counts. (WKO 2021)

Second, the international comparison shows that the business notifications in Germany published by the Federal Statistical Office of Germany are ten times higher than the registration counts of Austria. 672 609 businesses are reported for 2019 (DESTATIS 2021). The count for VAT-registered enterprises in Belgium is 103 747. Subsequently, one third more than in Austria. This result is interesting as the unit in Belgium for VAT-registered enterprises is also the legal unit (STATBEL 2019). Even so, the total counts of enterprises differ. In 2019 Austria registered 694 829 enterprises (STAT 2021c) and Belgium 1 010 635 enterprises (VAT-registered). Thus, Belgium has one third more enterprises. Nevertheless, such comparisons have to made carefully as the circumstances differ a lot between countries. The following figure four shows the national and international comparison between the registration counts.



**Figure 4.** Registrations 2019 - national and international comparison (total counts)

## 4 Discussion

Since May 2021 it is obligatory to produce quarterly data on registrations. STAT delivers the data to Eurostat and publishes the data national. The compilation of the registration statistic is nearly free of decision by the member states and the data sources differ a lot as shown in the international comparison of Austria, Germany and Belgium. Austria compiled the data by using the statistical and administrative business register as well as selected activity rules. This method seems in the case of Austria the only way for compiling this data. The SBR cannot and will not be the one and only data source. Currently, further work on the compilation of one frame for all statistics based on the SBR and ABR is carried out. Even so, the question on what a registration is, is still relevant as the results for the member states differ quite a lot.

## References

- [1] DESTATIS (2021). Erläuterungen zur Gewerbeanzeigenstatistik. online access 20.08.21: <https://www.destatis.de/DE/Themen/Branchen-Unternehmen/Unternehmen/Gewerbemeldungen-Insolvenzen/Methoden/Erlaeuterungen/erlaeuterungen-gewerbeanzeigen.html>.
- [2] EUR-LEX (2019). Regulation (EU) 2019/2152 of the European Parliament and of the Council of 27 November 2019 on European business statistics, repealing 10 legal acts in the field of business statistics. online access 20.08.21: <https://eur-lex.europa.eu/legal-content/DE/TXT/?uri=CELEX%3A32019R2152>.
- [3] Eurostat (2020). Methodological notes on quarterly registrations and bankruptcies. online access 20.08.21: [https://ec.europa.eu/eurostat/documents/7894008/11336992/Methodological\\_note.pdf](https://ec.europa.eu/eurostat/documents/7894008/11336992/Methodological_note.pdf).
- [4] STAT (2021a). Statistic on registrations. online access 20.08.21: [http://www.statistik.at/web\\_en/statistics/Economy/enterprises/business\\_demography\\_since\\_2015/registrations/index.html](http://www.statistik.at/web_en/statistics/Economy/enterprises/business_demography_since_2015/registrations/index.html).
- [5] STAT (2021b). Business Demography Statistics. online access 20.08.21: [http://www.statistik.at/web\\_en/statistics/Economy/enterprises/business\\_demography\\_since\\_2015/enterprise\\_births\\_since\\_2015/index.html](http://www.statistik.at/web_en/statistics/Economy/enterprises/business_demography_since_2015/enterprise_births_since_2015/index.html).

- [6] STAT (2021c). Census of Local Units of Employment. online access 20.08.21: [http://www.statistik.at/web\\_en/statistics/Economy/enterprises/enterprises\\_from\\_census\\_2011/index.html](http://www.statistik.at/web_en/statistics/Economy/enterprises/enterprises_from_census_2011/index.html)
- [7] STATBEL (2019). Jahresentwicklung der mehrwertsteuerpflichtigen Unternehmen. online access 20.08.21: <https://statbel.fgov.be/de/themen/unternehmen/umsatzsteuerpflichtige-unternehmen/monatliche-entwicklung-der#documents>.
- [8] WKO (2021). Mitgliederstatistik. online access 20.08.21: <https://www.wko.at/service/zahlen-daten-fakten/daten-mitglieder.html>.