

The Development of the Outsourced Facility Service Market in the EU

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The Facility Service (FS) industry lacks comprehensive scientific reports due to its fragmented representation in the NACE industry classification system in the EU. This article addresses this gap by offering insights into the FS market's turnover, number of companies, and employees. The study examines the development of turnover, company count, and employee numbers in the outsourced FS sector in the EU and the five major European economies since 2008. The European norm EN 15221:4 defines FS activities, which were cross-referenced with Eurostat's economic data to identify relevant FS services. Extensive data quality checks were conducted to ensure accuracy. From 2008 to 2018, the FS sector's size in terms of turnover and companies was estimated and compared across countries. Findings reveal that the EU's FS sector reached a turnover of over 1142 billion in 2017, with nearly 2 million companies and over 15 million employees. Despite the 2008/2009 financial crisis, the FS sector in the EU demonstrated stability compared to the broader economy in the selected countries.

Keywords: facility services, facility management, turnover, market size, companies

INTRODUCTION

Facility Services (FS) are defined as “support provision to the primary activities of an organization, delivered by an internal or external provider” (British Standards 2007) by the European Norm EN 15221-1. “Facilities Management” (FM) is defined as the “integration of processes within an organization to maintain and develop the agreed services which support and improve the effectiveness of its primary activities” (British Standards 2007) FS can be organized by a company itself or they can be outsourced. This study only analyses the outsourced FS sector.

The understanding of what FM and FS actually is, was different from country to country and even from organization to organization. (British Standards 2007) To close this gap, in 2011, another part of the European Norm was added that lists all services and activities that can be considered FS. The standards were created to make benchmarking of FS possible in different countries. (British Standards 2012)

There are only a few reports about the market size, but they are national, not comparing the FS sector in different countries. One reason for the lack of reports is that the FS sector as a whole is not presented in the statistical classification of economic activities in the European Community (NACE Rev.2), which was created in 2008. NACE lists economic activities on a very detailed level, but FS are spread over different aggregated sectors. (European Commission/Eurostat 2008) As most reports and analyses are based on this

system, the FS sector is not shown separately. Scientific reports and analyses about the FS sector concentrated on value added and employment of the FS sector (Redlein, Stopajnik 2017 and 2021). Reports about the FS market size in terms of turnover and companies are missing. Therefore, the research question is:

How has the market size of the outsourced FS sector developed in terms of turnover and the number of companies and employees in the largest European economies and the EU since 2008?

The number of employees in FS is estimated again to provide current results for this market analysis. In order to answer the research question, reliable data from Eurostat was selected. Eurostat offers a database that includes structural business statistics with its annual detailed enterprise statistics. The annual detailed enterprise statistics are based on NACE. (European Commission/Eurostat 2021) They include many different ratios like turnover, employees, number of companies, production value, and many more. The data is available on the most detailed level of NACE, which is a hierarchical structure with very detailed industry sectors on the lowest level. All in all, there are several hundred sectors on the lowest level. The data that is shown in the database is collected by the national statistical offices of the EU member countries. They collect it mostly from enterprises and pass the data to Eurostat yearly. Structural business statistics include all sectors of the business economy. Agriculture and personal services are omitted. (European Commission/Eurostat 2019)

LITERATURE REVIEW

Studies based on the NACE system and data from Eurostat have already been published, but they concentrate on employment and value added:

A study showed that the FS sector in the EU employed slightly more than 14 million people in 2013 (Redlein, Stopajnik 2017). This means that in terms of employees, the FS sector is the third largest sector in the EU. Only wholesale and retail trade with more than 32 million employees and manufacturing with almost 30 million employees are larger. Value added at factor cost came up to more than 455 billion Euros in the EU in 2013. This is almost as much as in the construction sector (487 billion Euros) and the transportation sector (499 billion Euros). In comparison, the most significant sector, manufacturing, reached 1630 billion Euros and wholesale and retail trade reached 1147 billion Euros in 2013. (Redlein, Stopajnik 2017)

An analysis of the development of employment and value added at factor cost showed that the FS sector is very stable during and after the recession (Redlein, Stopajnik 2021). The reason is that services such as janitorial work and maintenance activities, waste and sewage management, etc., have to be kept running, even if there is a crisis like the economic crisis of 2008/09. The study showed that between 8% and 13% of employees in the business economy work in the FS sector in different European countries. This is much higher for value added at factor cost, where the FS sector is only between 6% to 8% of the business economy. (Redlein, Stopajnik 2021)

A detailed analysis of the FS sector in Germany and Austria between 2008 and 2016 was conducted. The measures of full-time equivalents, wages and salaries, personnel costs and profits, and working hours were analysed. The study showed that the FS sector increased immensely, especially in Germany, in terms of employment. This increase is partly due to decreasing weekly working hours in Germany, but only partly. Certain FS activities such as cleaning, janitorial, and building installations showed huge increases. The study also showed that employment is much more stable than profits. (Stopajnik, Redlein 2020)

On a national level also studies about the market size have been published. Cross-country comparisons are not possible as those studies use a variety of different methods and as it is not always clear which services are included for estimating the market.

Moss stated in 2008 that estimations for the FM market in the UK range from 4.5 to 187 billion pounds. The reason for those enormous differences is that different activities were defined as FS in the different reports. (Moss 2008)

Jensen estimated the size of the Danish FM market by conducting phone interviews with FM providers and customers. Included in the interviews were only companies with more than 50 employees. The size of the Danish market was estimated at 4.9 billion euros.

In the Nordic countries Sweden, Finland, Iceland, Denmark, and Norway, the market size was also estimated in 2004. Therefore, interviews were conducted with the FM department of 29 large companies that demand FS and seven large FS providers. Then building areas were split up into housing and office buildings, and the size of the market was calculated for office buildings. In total, the potential FS market for those five countries was estimated at 53 billion euros. It was assumed that the actual market was only 25% of the potential market. (Jensen 2010)

In Germany, in 2010, the size of the FM market was also estimated. Thomzik et al. used the gross fixed assets of relevant resident and non-resident buildings. This way, they came to the result that the FM industry is 5.03% of the gross domestic product. (Thomzik et al. 2010). It can be seen that the results due to the different methodologies and underlying data sources vary to a high degree.

METHOD

To use a validated and trustful database, this study is based on data from Eurostat and the European Norm EN 15221:

The EN 15221-4:2011 includes a list of all services that are regarded as FS. (British Standards 2012) This list was used to determine the FS sector. It was matched with the detailed activities of NACE, and so the services that can be considered FS were selected. The necessary and reliable data was found in the database from Eurostat. In this way, the relevant services which form the FS sector were identified. They were grouped into two groups: “Typical Facility Services” and “General Facility Services” for business and residential buildings. The first group, “Typical FS” includes very typical FS activities, e.g., cleaning, janitorial, and security services. Examples of “General FS” are sewerage, waste management, and water supply. Those groups together form FS in total.

Then suitable data was selected carefully. The database of Eurostat was examined, and the measures of turnover and number of companies were chosen. Additionally, the measure employees were selected. As a first step, it was used for plausibility checks. Then, it is displayed in the study because current data is necessary and this measure gives valuable insights into the market. The data was checked in detail for its completeness and plausibility. It turned out that the financial sector was incomplete, with many missing values. So, the financial sector was excluded to avoid considerable breaks in the development that would lead to misinterpretations.

Other missing values were handled carefully. The following procedure was used: If values were missing in specific years, the value from the year before or after was taken, and the percentage of total non-financial business economy was calculated. If the percentage of the missing value was estimated at being less than 0,3% of the total business economy, the data is shown. 0,3% as an upper limit was chosen because the breaks in the time series are tiny then.

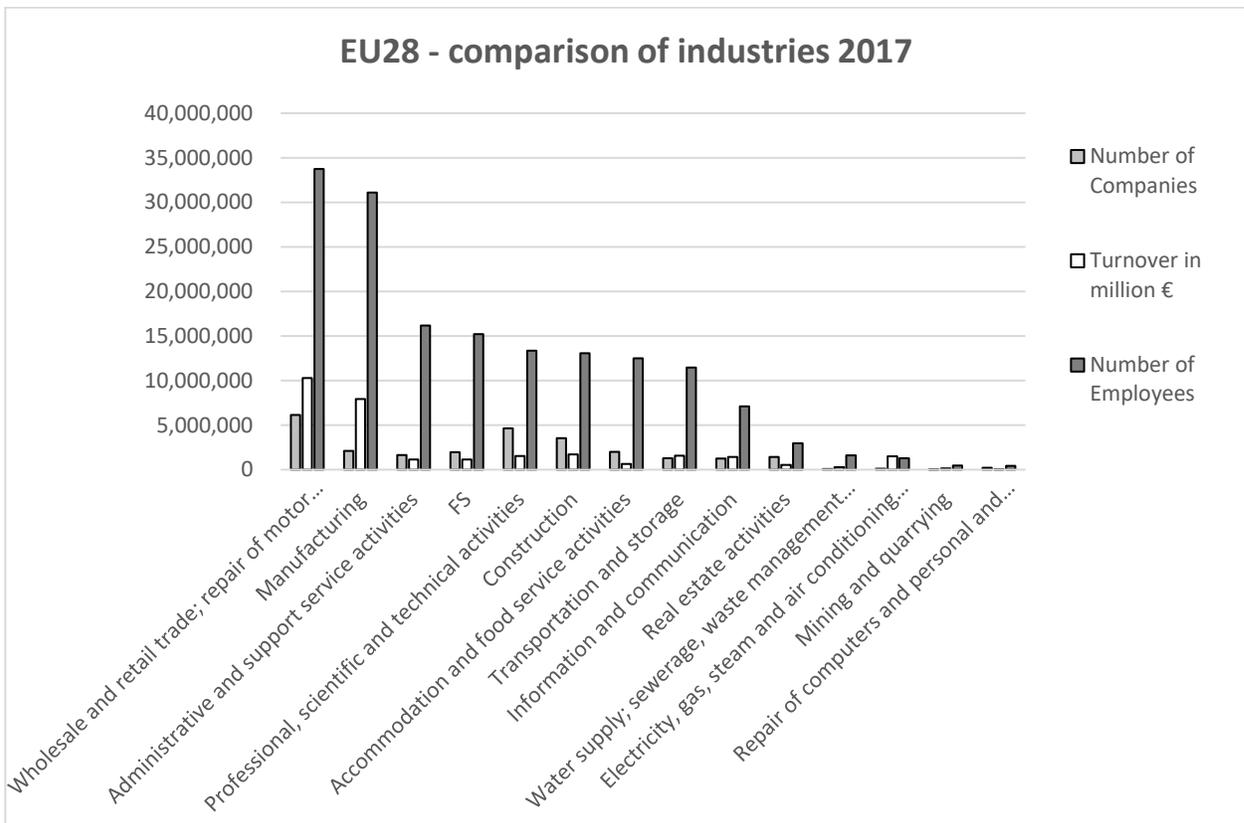
As plausibility checks, the ratios of turnover per company and employees per company were calculated. Outliers and sudden breaks in the time series were analysed. Only the number of companies in Germany in 2018 in the energy sector D seemed implausible as it increased from 2000 to almost 70000 within one year. So, it is excluded and not shown in the graphic.

For the study, the five largest countries in the European Union measured by GDP and the EU were selected. (Statista 2021) The UK is included as it was a member of the EU until 31st of January, 2020. The sum of the turnover of the five largest countries is more than two-thirds of the turnover in the EU. To make comparisons possible, the total-nonfinancial business economy was determined as a relation. The data is shown in percentage of total non-financial business economy and also in absolute numbers.

RESULTS

Figure one shows the turnover in a million €, the number of companies and employees of different industry sectors, including the FS sector in the EU 28 in 2017. The year 2017 was chosen as to this point, it is the most current year with a sufficient reliable database. For 2018 there is still more data missing. The figure shows that although the FS sector is not the sector with the highest revenue, it is still very important, generating more than 1142 billion in turnover in 2017. The number of FS companies is relatively high, with almost 2 million. In terms of employment, the FS sector ranges in place 4. In 2017 there were already more than 15 million employees in FS in the EU. The average turnover per company is around 580 000 Euros. This is not very high but even higher than in the construction sector where turnover per company is around 490 000 Euros.

FIGURE 1
TURNOVER EXPRESSED IN MILLIONS OF €, NUMBER OF EMPLOYEES AND NUMBER OF COMPANIES IN THE EU 28 IN FS AND THE OTHER INDUSTRY SECTORS



Source: Own calculation on the base of annual detailed enterprise statistics (European Commission/Eurostat 2021/2022)

Figure two shows the turnover of the FS industry as a percentage of the total non-financial business economy. It is between 3,5% and 4,8%. This is a very small range, showing similarities between the countries. Compared to the other published studies about employees and valued added, which were mentioned in the literature review, the percentage is rather low.

It is also visible that there is a slight peak in 2009 and 2016 in Germany, the UK, and Italy. While the FS sector in Italy seems to decrease compared to the business economy around 2014, this is not the case

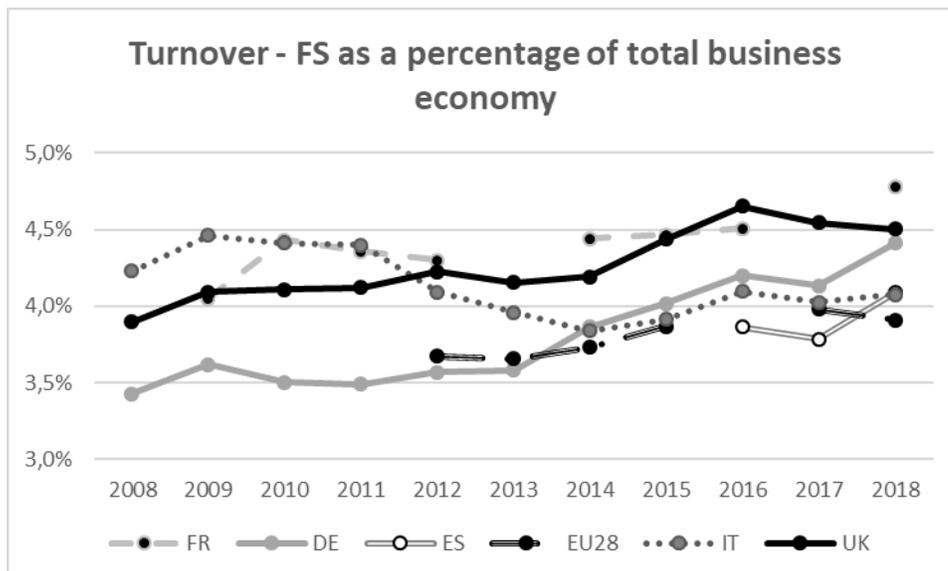
for the UK and Germany. In Spain, the share of the FS sector in the non-financial business economy showed a substantial increase between 2017 and 2018.

The time series of the EU is very stable. Due to missing values, the time series is lower by 0,1% to 0,2% in specific years.

Figure three shows the turnover in Facility Services and non-financial business economy in absolute numbers. It is visible that in 2009 during the economic crisis business economy declined in all countries, and the FS sector also declined in all countries except for Germany. Therefore, the peaks in Figure two were provoked by the fact that the FS sector didn't decrease as much and as quickly as the rest of the economy.

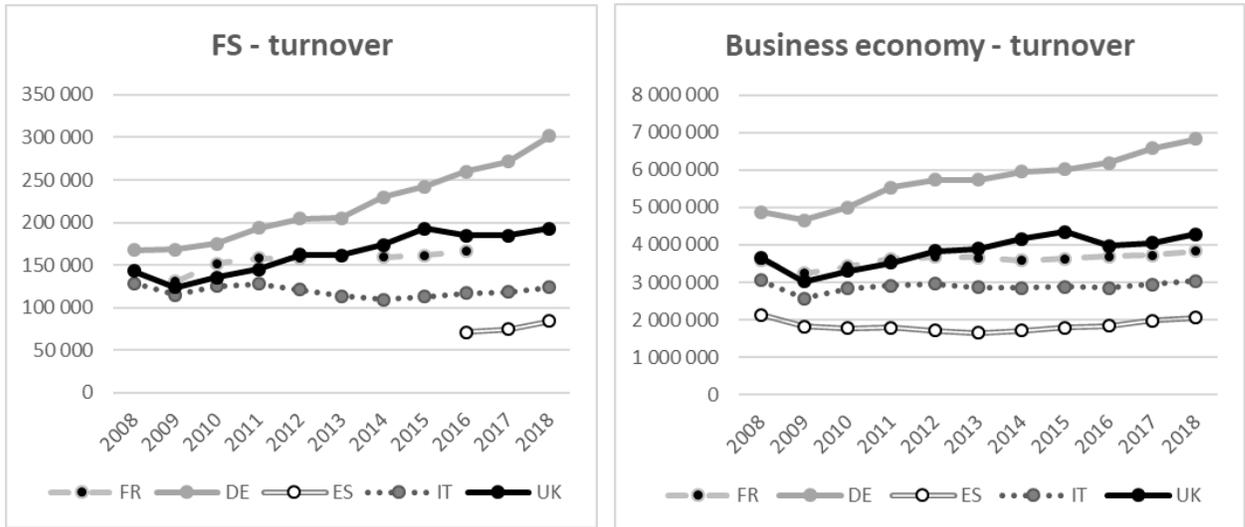
Figure three also shows that turnover in FS and in the business economy was very stable in Italy until 2016. In Italy and Spain, a slight upwards trend is visible after that. France is also rather steady. In Germany and the UK, FS and the business economy have constantly been increasing since 2009. Only in the UK in 2016, the year of the Brexit referendum, the trend is broken.

FIGURE 2
TURNOVER AS A PERCENTAGE OF NON-FINANCIAL BUSINESS ECONOMY (NACE B-N, S95, EXCL. K) EXPRESSED IN MILLIONS OF €



Source: Own calculation on the base of annual detailed enterprise statistics (European Commission/Eurostat 2021)

FIGURE 3
LEFT: TURNOVER - FS IN TOTAL | RIGHT: TURNOVER IN THE TOTAL NON-FINANCIAL BUSINESS ECONOMY (B-N, S95 EXCL.K)



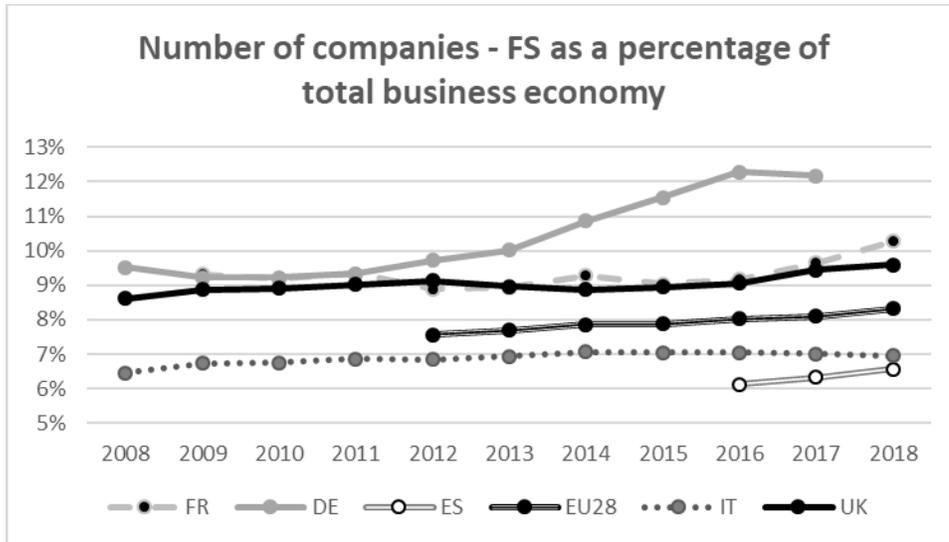
Source: Own calculation on the base of annual detailed enterprise statistics (European Commission/Eurostat 2021) expressed in millions of €

Figure four shows the number of companies in FS as a percentage of the total non-financial business economy. In all countries, the number of companies is very stable only Germany has shown an enormous increase since 2013. The percentage of companies in the business economy that are FS companies varies between 6% and 12,3%.

Figure five shows that the absolute number of companies is not as stable as assumed from the first graph, at least not in all countries. In France and Germany, there are quite visible breaks in the time series. While many companies in France dissolved in 2015, Germany showed enormous growth from 2014 onwards, especially in the FS sector. This increase goes hand in hand with the increased turnover. In Italy, the time series is very stable.

It is visible that during crises such as the economic crisis of 2008/09 or Brexit in the UK in 2016, the number of companies seemed quite stable; rather, turnover sank.

FIGURE 4
NUMBER OF COMPANIES AS A PERCENTAGE OF NON-FINANCIAL BUSINESS ECONOMY (NACE B-N, S95, EXCL. K)



Source: Own calculation on the base of annual detailed enterprise statistics (European Commission/Eurostat 2021)

FIGURE 5
LEFT: NUMBER OF COMPANIES - FS IN TOTAL | RIGHT: NUMBER OF COMPANIES IN THE TOTAL NON-FINANCIAL BUSINESS ECONOMY (B-N, S95 EXCL. K)



Source: Own calculation on the base of annual detailed enterprise statistics (European Commission/Eurostat 2021)

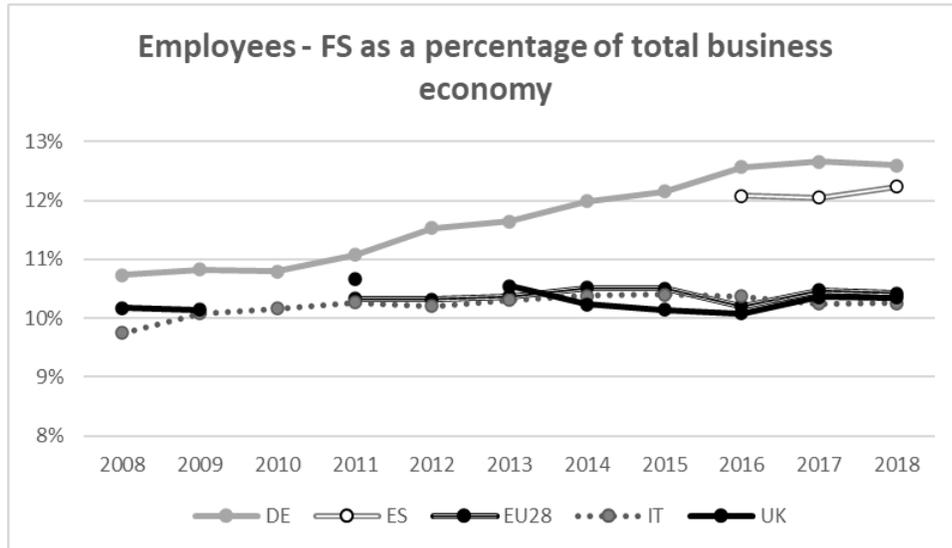
Figure six shows the number of employees in FS as a share of all employees in the non-financial business economy. As the study mentioned in the literature review, the graphic shows that the share of FS-employees in the business economy was quite high in 2013. In Spain and Germany, more than 12% of employees work in FS. In the EU, the UK, and Italy, there are approximately 10% of employees working in FS.

France is not shown as there are too many missing values for FS.

Figure seven shows the number of employees in FS and in the business economy. Germany constantly shows enormous increases in employees in FS and in the business economy. Employment in the other

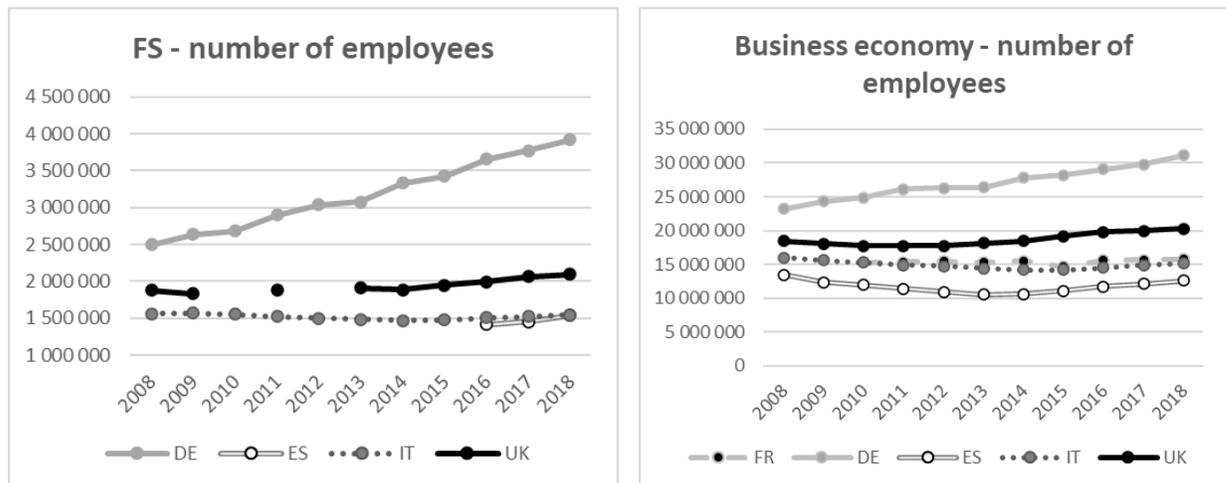
countries decreased after the financial crises, but employment started to recover around 2015. Similar to the number of companies, employment seems quite stable during crises such as the recession in 2008/09 or after the Brexit referendum.

FIGURE 6
NUMBER OF EMPLOYEES IN FS AS A PERCENTAGE OF NON-FINANCIAL BUSINESS ECONOMY (NACE B-N, S95, EXCL. K)



Source: Own calculation on the base of annual detailed enterprise statistics (European Commission/Eurostat 2022)

FIGURE 7
LEFT: NUMBER OF EMPLOYEES - FS IN TOTAL | RIGHT: NUMBER OF EMPLOYEES IN THE TOTAL NON-FINANCIAL BUSINESS ECONOMY (B-N, S95 EXCL. K)



Source: Own calculation on the base of annual detailed enterprise statistics (European Commission/Eurostat 2022)

CONCLUSION

Results show that the FS sector in the EU generated more than 1142 billion turnover in 2017. The number of FS companies is high, with almost 2 million. In 2017 there were already more than 15 million

employees in FS. The average turnover per company is around 580 000 Euros. This is not very high but even higher than in the construction sector where turnover per company is around 490 000 Euros.

The FS industry's turnover represents only between 3,5% and 4,8% of the total non-financial business economy in the EU and the selected countries. This is a minimal range, showing similarities between the countries. The time series of the EU is very stable. The financial crises of 2008/2009 did not hit the FS sector as hard and fast as the rest of the economy.

Turnover in FS and the business economy was very stable in Italy until 2016. In Germany and the UK, FS and business economy are constantly increasing. The trend was only broken in the UK in 2016, the Brexit year.

The number of companies in FS as a percentage of the total non-financial business economy is very steady in all countries. Only Germany has shown an enormous increase since 2013. The percentage of companies in the business economy that are FS companies varies between 6% and 12,3%, a pretty wide range. The share of employees working in FS is relatively high, ranging between 9% and 13%.

The development of the number of companies shows that while in some countries, namely Italy, the time series is very stable, in other countries there are some dips or increases: In France and Germany, there are visible breaks in the time series. The enormous growth in Germany in the number of companies and employees, especially in the FS sector, goes hand in hand with the increased turnover.

During a crisis such as the economic crisis of 2008/09 or Brexit in the UK in 2016, the number of companies and employees seemed quite stable. Turnover rather sank.

In the next step, the enlargement of analyses into the 1990ies would be of interest as there were a lot of large European companies like Lufthansa, and Siemens that outsourced their FS provision. It would be of interest how large this impact was in total of the non-financial business economy. Also, the analysis of the impact of COVID19 on this industry is of interest. There the main question is if this industry also was quite stable or if it even grew during this crisis because of the demand for new and more services like disinfection and sanitisation.

DATA AVAILABILITY STATEMENT

The datasets analysed during the current study are available in the database of Eurostat by the European Commission:

“Annual detailed enterprise statistics – industry and construction (sbs_na_ind)”,
„Annual detailed enterprise statistics – trade”, „Annual detailed enterprise statistics – services” in „structural business statistics (sbs)”,

available at: < <https://ec.europa.eu/eurostat/web/structural-business-statistics/data/database> > (accessed 5. July 2021, 7. February 2022 and 22. August 2022)

REFERENCES

- British Standards. (2007). *BS EN 15221-1:2006: Facility management—Part 1: Terms and definitions*. London, UK.
- British Standards. (2012). *BS EN 15221-4:2011: Facility management—Part 4: Taxonomy, classification and structures in facility management*. London, UK.
- European Commission/Eurostat. (2021, 2022). *Detaillierte jährliche Unternehmensstatistiken für das Baugewerbe* (NACE Rev. 2, F), *Detaillierte jährliche Unternehmensstatistik für den Handel* (NACE Rev. 2, G), *Detaillierte jährliche Unternehmensstatistik für Dienstleistungen* (NACE Rev. 2, H-N und S95), *Detaillierte jährliche Unternehmensstatistiken für die Industrie* (NACE Rev. 2, B-E), in structural business statistics (sbs). Retrieved July 5, 2021, February 7, 2022, and August 22, 2022, from https://ec.europa.eu/eurostat/web/main/data/database?p_p_id=NavTreeportletprod_WAR_NavTreeportletprod_INSTANCE_nPqeVbPXRmWQ&p_p_lifecycle=0&p_p_state=normal&p_p_mode=view
- European Commission/Eurostat. (2019). *Structural business statistics (sbs) - Reference Metadata in Euro SDMX Metadata Structure (ESMS)*. Retrieved September 10, 2019, from https://ec.europa.eu/eurostat/cache/metadata/en/sbs_esms.htm
- European Commission/Eurostat. (2008). *NACE Rev. 2 – Statistical classification of economic activities in the European Community*. Luxembourg. Retrieved April 2, 2019, from <https://ec.europa.eu/eurostat/documents/3859598/5902521/KS-RA-07-015-EN.PDF>
- Jensen, P.A. (2010). The facilities management market in Denmark. *Facilities*, 28(7/8), 383–394.
- Moss, Q.Z. (2008). FM market research review: Do we really have the “intelligence”? *Facilities*, 26(11/12), 454–462.
- Redlein, A., & Stopajnik, E. (2017). The facility service industry in Europe. In *22nd EBES Conference - Rome, Program and Abstract Book* (p.180). EBES Publications. ISBN: 978-605-84468-9-2.
- Redlein, A., & Stopajnik, E. (2021). Facility services: An underestimated sector? In M.H. Bilgin et al. (Eds.), *Eurasian business and economics perspectives* (Vol. 18, Chapter 13). Eurasian Studies in Business and Economics. Springer. ISBN: 978-3-030-71868-8
- Statista. (2021). *Gross domestic product at current market prices of selected European countries in 2020*.
- Stopajnik, E., & Redlein, A. (2020). The upwards trend of the outsourced facility service industry in Germany and Austria. In *Journal für Facility Management*, 20, 2415-1858 (pp. 66–76). IFM TU Wien.
- Thomzik, M., Striewe, F., & Knickmeier, A. (2010). *FM-Branchenreport 2010: Die volkswirtschaftliche Bedeutung der Facility Management-Branche*. Bochum, Deutschland: Institut für angewandte Innovationsforschung (IAI) e.V. an der Ruhr-Universität Bochum, Deutscher Verband für Facility Management (GEFMA) e.V., Bonn.