

THE SANITARY EMERGENCY IMPACT ON THE COMPOSITION BETWEEN HOURS WORKED AND SHORT-TIME WORKING ALLOWANCE HOURS

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1. Introduction

Starting from 2020, due to the health emergency from Covid-19, there has been a reduction in the activities carried out by companies, both in the industrial (NACE Rev. 2 economic activity sections from B to F) and in the services sectors (NACE Rev. 2 economic activity sections from G to S). Hours worked decreased in all sectors while there was a large increase in the use of the Short-Time Working Allowance use (Cig in Italian). The recourse to the Cig by companies was made possible, also thanks to various support measures for businesses launched by the government (see Paragraph 2).

The quarterly survey on job vacancies and hours worked (Vela) and Large Business (GI) surveys, conducted by Istat, collect information on the hours worked in companies (Bellisai et al., 2013). The Cig hours collected include ordinary, extraordinary or derogating Cig hours and the solidarity contract hours. In 2020, they also include the solidarity fund hours.

In March 2021, Istat issued the focus entitled "The sanitary emergency impact on the Short-Time Working Allowance use" in the labour market press release. In the focus, an analysis is conducted on the evolution of Cig hours per employee used by companies both for the total economy (B-S) and for Industry and services separately. Furthermore, an analysis was carried out at the level of a single section of economic activity (Nace Rev.2 Classification). The purpose of this work is to resume that analysis, and update it with the annual reviews of the indicators produced within the Vela survey, which took place in June 2021. The analysis is also extended to the evolution of hours worked per employee and the series is extended to the first quarter of 2021. The contribution of the Cig hours per employee and the hours not worked but paid by the employer per employee to the total hours paid per employee will also be shown in the work (Paragraph 4).

The series analyzed in this work are from Q1 2016, as Istat published the series of hours worked for the total companies with employees, starting from the press release on the Market Labour of June 2019 (Chianella et al., 2020). Previously, the indicator was calculated only for companies with more than ten employees.

2. Government interventions

In order to limit the impact of the economic and labor crisis caused by COVID 19, the Government and Parliament have promptly adopted effective and coordinated measures (see Table 1). The volume of resources deployed amounts to over € 140 billion.

Table 1 – *Synoptic panel of the special government interventions. Year 2020.*

Decree	Time	Period	Social safety net
“Decreto Cura Italia” (DL 17.03 2020, n.18)	From 23 February to 31 August 2020	9 weeks	CIGO,CIGD, Solidarity contract hours (*)
“Decreto Rilancio” (DL 19.05.2020, n.34)	From 1st September to 31st October 2020	+ 9 weeks. 5 + 4	CIGO, CIGD (**), Solidarity contract hours
“Decreto Agosto” (DL 14.08. 2020, n. 104)	From 13 July to 31 December 2020	18 weeks. 9 + 9 (***)	CIGO,CIGD, Solidarity contract hours
“Decreto Ristori” (DL 28.10. 2020 n.137)	From November 16, 2020 to January 31, 2021	6 weeks (***)	CIGO,CIGD, Solidarity contract hours
Budget Law 2021 (L. 30.12. 2020, n.78)	From January 1st to March 31st 2021. From January 1st to June 30th 2021.	12 weeks	CIGO, CIGD Solidarity contract hours

(*) *Short-Time Working Allowance (Cig in Italian): ordinary (CIGO), extraordinary or derogating (CIGD).The Solidarity contract hours is also recognized to employees of workers who receive other Solidarity Funds (i.e. those for handicrafts and temporary workers and for the autonomous provinces of Trento and Bolzano), which employ from more than 5 to 15 employees.*

(**) *CIGD is granted to private sector employers who are not protected by the current provisions (referred to in Titles I and II of Legislative Decree 148/2015) regarding the working hours suspension or reduction.*

(***) *The employer is obliged to pay an additional contribution for the second nine weeks.*

The government's first action resulted in the “Cura Italia Decree”, which provided for urgent measures not only to protect the health of citizens but also to support the world of work.

The subsequent "Rilancio Decree", issued in May 2020, offers a further and important intervention aimed at prolonging and strengthening actions in favor of health and safety and initiatives in support of businesses, employment income, tourism and culture.

The "Agosto Decree" continues with the aim of ensuring the economic and social stability of Italy, extending the measures already adopted in support of workers. For the categories most affected by the crisis, the Government launches the "Ristori Decree" in October: the new measures are characterized by simple and immediate delivery methods.

At the end of 2020, the 2021 Budget Law offers a wide range of interventions in the field of work and business support and development.

The need to extend the restrictions following a new and significant increase in infections, in March 2021 the Government passed the "Sostegni Decree" to protect work and fight poverty.

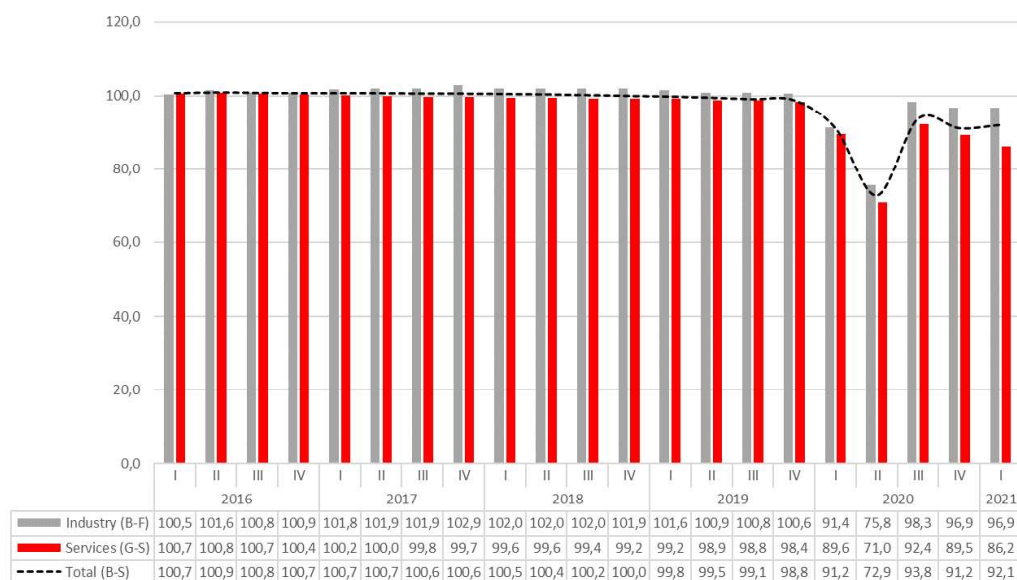
3. Dynamics of the short-time working allowance hours for the total economy, Industry and Services

Because of the COVID-19 health emergency, the year 2020 was characterized by an exceptional recourse to the Short-Time Working Allowance. It was due to the suspension or reduction of the enterprise working activity and supported by special government interventions. Figure 1 shows the seasonally adjusted series of indices of hours worked per employee. The collapse in hours worked per employee is evident starting from the 1st quarter of 2020. For the total economy (NACE Rev. 2 economic activity sections from B to S), in fact, it goes from an average index (over 2016-2019) of hours worked per employee of 100.3 to 87.3 in 2020. On the other hand, Figure 2 shows the series of Cig hours per employee, where the exceptional increase starting from the 1st quarter of 2020 is evident.

For the total economy (B-S), the hours of Cig per employee go from an average of 3.1 over the period 2016-2019 to an average of 45.2 in 2020. In the first quarter of 2020, the effects of the pandemic and the consequential lock-down mainly concerned the month of March and, therefore, had a more limited impact than that observed for the second quarter, when the total lock-down lasted for about two months.

As a result, per capita Cig hours – in industry and services (B-S) – rose from 27.2 in the first quarter to 93.0 in the second. In the third quarter of 2020, the improvement in the sanitary conditions and the consequential recovery of many economic activities led to a decrease in the use of the Cig, which fell to 28.8 per capita hours.

Figure 1 – Seasonally adjusted quarterly series of hours worked per employee for Total economy (B-S), Industry (B-F) and Services (G-S) – from Q1 2016 to Q1 2021.



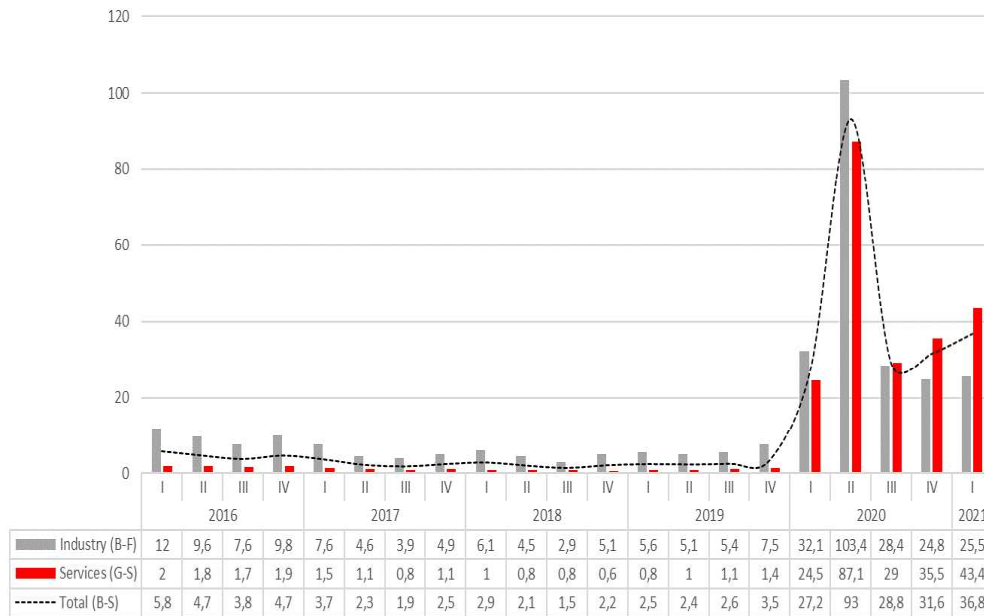
Source: Istat, processing on Vela and GI surveys.

In the fourth quarter of 2020, due to the second wave pandemic and the local lockdowns, the Cig per capita hours slightly increased (31.6 hours), mainly in the service sector.

Finally, in the first quarter of 2021 there is a further increase in Cig hours per employee (36.8 hours) following the increase in the number of positive cases at Covid-19 and the precautionary measures that have affected all Italian regions (yellow zone, orange and red).

The sectorial analysis shows that even if in the first two quarters of 2020 the Cig per capita hours were higher in industry than in the services' sector (32.1 to 24.5 in the first quarter, and 103.4 to 87.1 in the second quarter). In the third quarter, the two values are quite similar (28.4 and 29.0), while in the fourth quarter services exceed industry Cig hours (24.8 in Industry against 35.4 in Services). In the first quarter of 2021, the gap between industry and services in the use of the Cig increases. Compared to the 4th quarter of 2020, Cig hours in industry increased by 2.8% (reaching 25.5 hours of cig per employee) and by 22.3% in services (reaching 43.4 hours of cig per employee).

Figure 2 – Per capita Cig hours per employee for Total economy (B-S), Industry (B-F) and Services (G-S) – from I 2016 to I 2021.



Source: Istat, processing on Vela and GI surveys.

4. Contribution of the Cig hours and hours not worked but paid by the employer to the total of the paid hours

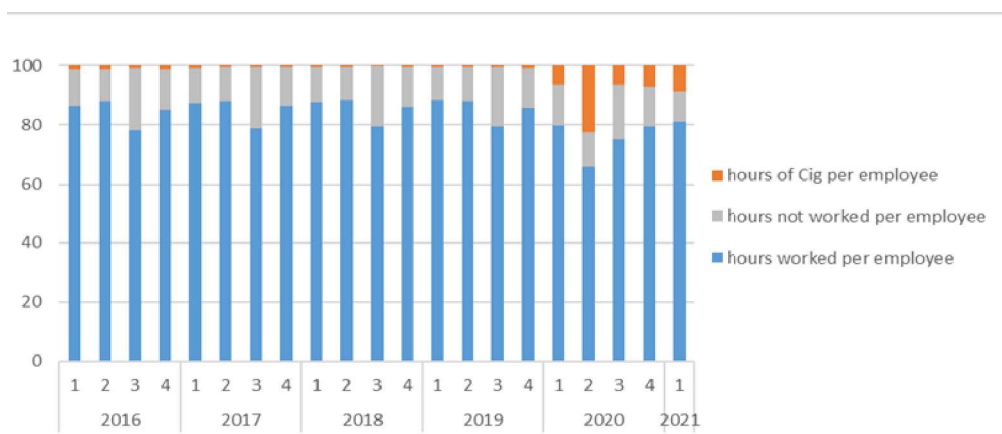
We consider the hours paid as the sum of three components: the hours actually worked and paid, the hours not worked but paid by the employer (such as holidays) and the hours of Cig.

Figure 3 shows the trend of the percentage contribution of the hours worked, hours not worked but paid by the employer and the hours of Cig, to the total of the paid hours, from the first quarter of 2016 to the first quarter 2020, for Industry and Services (B-S).

Starting from 2020, the series of hours paid per employee has been fairly preserved thanks to the increase in the share of the hours of Cig. Moreover, the contribution of hours not worked but paid by the employer, such as vacation days, show a high increase year-on-year, in the first quarter of 2020 (from approximately 11.0% in the first quarter 2019 to approximately 13.7% in the first quarter 2020). It is also evident,

from the Figure 3, that the greatest contribution of Cig hours to the total of paid hours took place in the second quarter of 2020, coinciding with the period in which there was the greatest number of days in lock-down.

Figure 3 – Series of the percentage composition of paid hours, for Industry and Services (B-S). Q1 2016 - Q1 2021.

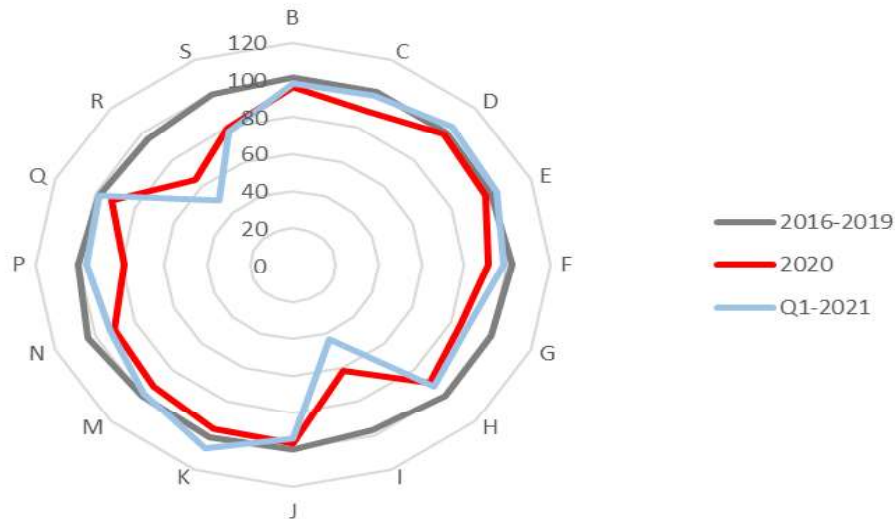


Source: Istat, processing on Vela and GI surveys.

5. Analysis of the Cig hours by Section (Nace Rev.2 Classification)

The radar chart in Figure 4 shows the evolution in the index numbers of hours worked per employee by section (Nace Rev.2 Classification). During 2020, the hours worked per employee decrease for all sections. In particular, for Accommodation and food services (I) the index number (base 2015=100) goes from an average value for the years 2016-2019 of 97.1 to 62.0 for the 2020 average (-36.1%); for Arts, entertainment and recreation activities (R) it goes from 96.0 to 64.8 (-32.5%) and for Education (P) from 100.4 to 78.9 (-21.4%). As we will see later, these sectors appear to be those with the highest number of Cig hours per employee, in support of paid hours per employee. In the first quarter of 2021, compared to 2020, the indices of hours worked per capita increase in almost all sections. The only sections in which they decreases are Accommodation and food service (I) from an average of 62.0 in 2020 to 43.6 (-29.7%); Arts, entertainment and recreation (R), which goes from 64.8 to 49.2 (-24.1%); Other service activities (S) from 79.8 in 2020 to 77.8 (-2.5%) and Information and communication (J) which passes from 97.1 to 94.5 (-2.7%).

Figure 4 – Hours worked per employee (raw index number, base 2015=100) by economic activity section. Years 2016-2020 and Q1 2021.



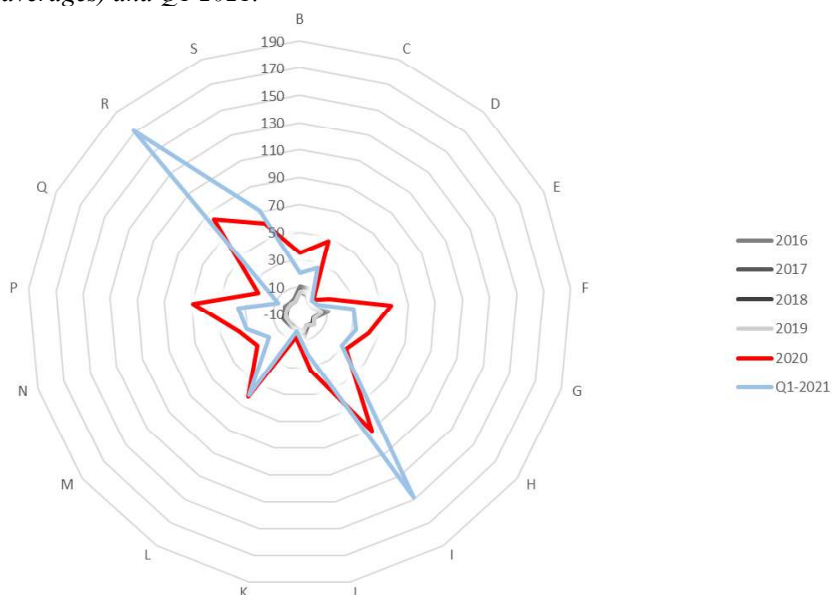
Source: Istat, processing on Vela and GI surveys.

Figure 5 shows the increase in per capita Cig hours in 2020 by economic activity sections, making a comparison between the annual averages in 2020 and in the years before the COVID-19 emergency (2016-2019).

In the past years, the economic activity sections that made the Cig's greater use were Construction (section F), Mining and quarrying activities (section B) and Manufacturing (section C) – showing average per capita Cig hours, in 2016-2019, equal to 8.1, 7.8 and 6.4, respectively –. In 2020, per capita Cig hours were about seven times higher than in the past years in sections F (57.3 hours) and C (47.5 hours), and about five times higher in section B (34.7 hours).

Furthermore, sections with the highest number of per capita Cig hours in 2020 were: Accommodation and food services (I), which from an average of 0.4 per capita Cig hours in the 2016-2019, rose to 91.0 in 2020; Arts, entertainment and recreation activities (R), from 0.4 to 83.9; Education (P) from 0.3 to 68.9. As mentioned above, these sectors have had the greatest decrease in hours worked per employee. On the other hand, the sector with the lowest use of the Cig was Electricity, gas and steam (D), which stood at an average of 4.4 hours per employee (0.4 in 2016-2019).

Figure 5 – Hours of Cig per employee by economic activity section. 2016-2020 (annual averages) and Q1 2021.



Source: Istat, processing on Vela and GI surveys.

In the first quarter of 2021, the hours of Cig per employee compared to the 2020 average, decreased in almost all sectors. The only exceptions concern: Arts, entertainment and recreation (R) where the hours of Cig went from 83.9 to 171.3; Accommodation and food service (I) which from an average of 91.0 per capita Cig hours rose to 148.4; Other service activities (S) which goes from an average of 60.9 in 2020 to 71.1 in the first quarter of 2021. As mentioned before, these 3 sectors correspond to those that have had a decrease in hours worked in the 1st quarter of 2021 compared to the average of 2020.

The index numbers of the hours worked per capita and the Cig hours per capita for the periods 2016-2019 and 2020 are shown in Table 2. The sectors highlighted in red are those just described for which there was a greater decrease in hours worked per capita and which have a greater number of Cig hours per capita.

Table 2 – Hours worked per employee (index numbers, base 2015=100) and hours of CIG. Average values (2016-2019 and 2020).

Economic activity section (Nace Rev.2 Classification)	Hours worked per employee (index number and variation %)			Hours of Cig per employee	
	average	average	variation	average	average
	2016-2019	2020	%	2016-2019	2020
B Mining and quarrying	101,4	95,8	-5,5	7,8	34,7
C Manufacturing	101,4	89,7	-11,5	6,4	47,5
D Electricity, gas, steam	101,3	99,7	-1,6	0,4	4,4
E Water supply; sewerage and waste	100,2	97,5	-2,7	0,7	14,4
F Construction	102,1	91,3	-10,5	8,1	57,3
G Wholesale and retail trade	99,9	84,9	-15,0	0,8	42,7
H Transportation and storage	100,5	90,1	-10,3	2,1	32,8
I Accommodation and food service	97,1	62	-36,1	0,4	91,0
J Information and communication	100,1	97,1	-3,0	4,8	32,7
K Financial and insurance activities	101,3	96,6	-4,6	1,3	7,4
M Professional, scientific, technical activities	99,8	92,4	-7,4	0,6	29,1
N Administrative and support service activities	103,5	90,6	-12,4	1,6	36,7
P Education	100,4	78,9	-21,4	0,3	68,9
Q Human health and social work activities	98,3	91,4	-7,0	0,5	24,3
R Arts, entertainment and recreation	96,0	64,8	-32,5	0,4	83,9
S Other service activities	99,4	79,8	-19,7	0,7	60,9

Source: Istat, processing on Vela and GI surveys.

6. Conclusion

We have seen that the government issued several decrees during 2020 to allow companies in all sectors to take advantage of the Cig hours, to manage the crisis due to the Covid-19 health emergency. During 2020, due to the health emergency due to Covid-19, companies experienced a decrease in hours worked per employee and an exceptional increase in Cig hours, both in the industrial (B-F, according to Nace Rev.2 classification) and service sectors (G-S). While in the first two quarters of 2020, it was

the industry sector to have the highest number of Cig hours per employee, starting from Q3 2020 it was the services sector. This is due to the second wave pandemic and the local lock-downs, which has had negative repercussions, in particular for Accommodation and food services (I), for Arts, entertainment and recreation activities (R) and for Education (P).

In the first quarter of 2021, the hours of Cig per employee compared to the 2020 average, decreased in almost all sectors. The only exceptions concern: Arts, entertainment and recreation (R); Accommodation and food service (I) and Other service activities (S).

References

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SUMMARY

The sanitary emergency impact on the composition between hours actually worked and short-time working allowance hours

This work aims at analyzing the effect of the special government interventions, carried out to face the COVID-19 health emergency, on the composition between hours actually worked and short-time working allowance hours (Cig in Italian). Furthermore, the impact of the government measures on different types of enterprise activities has been taken into account (at NACE Rev.2 economic activity section level).

The analysis carried out in this work have been based on the variables available from the Istat quarterly survey on job vacancies and hours worked (Vela) and the monthly Large Business Survey (GI). These sources of information, in addition to the hours worked – broken-down by ordinary, overtime and paid but not worked (such as holidays, festivity, etc.) hours –

quarterly collect data on the effectively used Cig hours, which include ordinary, extraordinary or derogating Cig hours and the solidarity contract hours. The information used in this work is in terms of the per capita quarterly hours, that are defined as the total amount of hours over a quarter (actually worked, Cig, paid but not worked hours) divided by the average number of employees. Changes in the composition have been focused by means of year-over-year changes and a comparison between the annual averages in 2020 and in the years before the COVID-19 emergency (2016-2019).

The analysis has showed that quarterly dynamics of both the hours actually worked and the Cig hours follow the effect and the length of the government interventions, highlighted the exceptional recourse to the Cig with respect to the past years.

In particular, in the first quarter of 2020, the effects of the pandemic and the consequential first lock-down mainly concerned the month of March and, therefore, had a more limited impact than that observed for the second quarter 2020, when the total lock-down lasted for about two months. As a result, per capita Cig hours – in industry and services (NACE Rev. 2 economic activity sections from B to S) – rose from 25.6 in the first quarter to 91.7 in the second; while per capita hours actually worked in the quarter fell from 339 to 278.

In the third quarter of 2020, the improvement in the sanitary conditions and the consequential recovery of many economic activities led to a decrease in the use of the Cig, which fell to 28.5 per capita hours, and to an increase of the hours actually worked in the quarter, up to 330 per capita hours. In the fourth quarter of 2020, due to the second wave pandemic and the local lock-downs, the Cig per capita hours slightly increased (32 hours) while the actually worked ones slightly decreased (346).

The work also analyzed the composition of the Cig per capita hours at the level of economic activity section (NACE Rev.2) and the changes compared to past years were highlighted.

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