



02<sup>nd</sup> January 2024  
BUSINESS AND CONSUMER SURVEYS  
December 2023

## CONSUMER CONFIDENCE AND ECONOMIC CLIMATE INDICATORS INCREASE

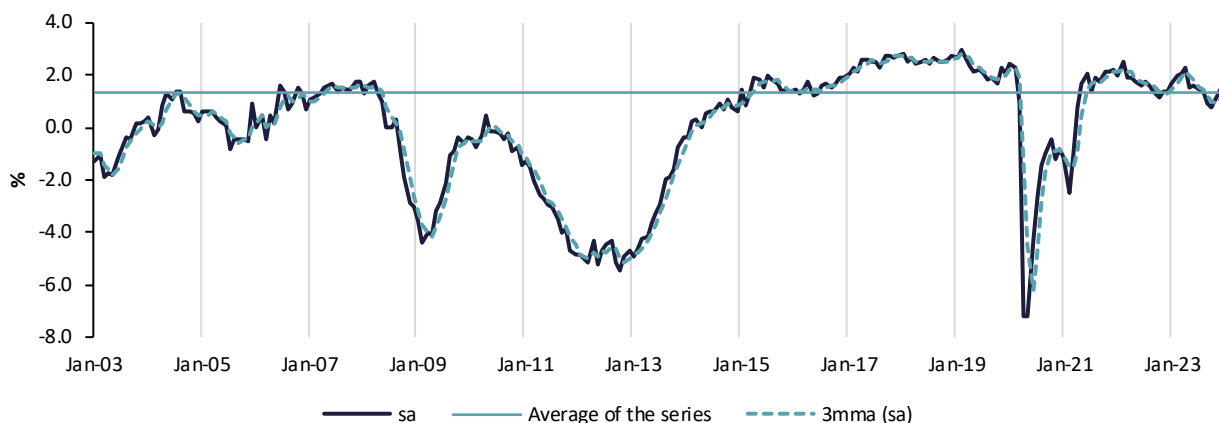
The Consumer confidence indicator increased in December<sup>1</sup>, after decreasing in the previous four months. The balance of Consumer opinions on the past evolution of prices declined in November and December, after the significant increase recorded in October having suspended the downward path observed in the previous five months.

The economic climate indicator<sup>2</sup> increased in November and December, after declining in September and October. Confidence indicators increased in Trade and in Services, having decreased in the Manufacturing Industry and in Construction and Public Works.

The entrepreneurs' expectations regarding the future evolution of selling prices increased in December in all sectors, after decreasing in the last two months in the Manufacturing Industry, in Trade and in Construction and Public Works.

On page 9 of this press release, a box is presented with information about the new monthly indicator, Labour Hoarding Indicator (LHI), which is now part of the qualitative survey program under the responsibility of the European Commission. This indicator is calculated from microdata at firm level aiming at measuring the accumulation of the labour factor and can be understood as the part of the labour factor that is not fully used by a firm during its production process at a given time, notably when economic activity declines.

Figure 1. Economic climate indicator  
- Manufacturing Industry, Construction and Public Works, Trade and Services-



<sup>1</sup> The collection period (see final notes) of the consumer survey occurred from 02 to 18 of December (working days), in the case of the consumer survey, and from 01 to 22 of December in the case of business surveys.

<sup>2</sup> The economic climate indicator summarizes the balances of business surveys' questions.



## Consumer Survey

The Consumer confidence indicator increased in December, after decreasing in the previous four months. The evolution of the indicator in December resulted from the positive contribution of all components: expectations on the future evolution of the country's economic situation and of households' financial situation, opinions on the past evolution of households' financial situation and expectations on the future evolution of major purchases by households.

The balance of perspectives regarding the future evolution of the country's economic situation increased significantly in December, following the decreases observed between July and November.

The balance of expectations about household's future financial situation also increased in the last month, after decreasing between August and November.

The balance of opinions on the past evolution of the price level decreased in November and December, following the significant increase registered in October and the decreases observed in the five months before. The balance of perspectives on future price developments decreased in December, after increasing between August and November.

Figure 2. Consumer confidence indicator

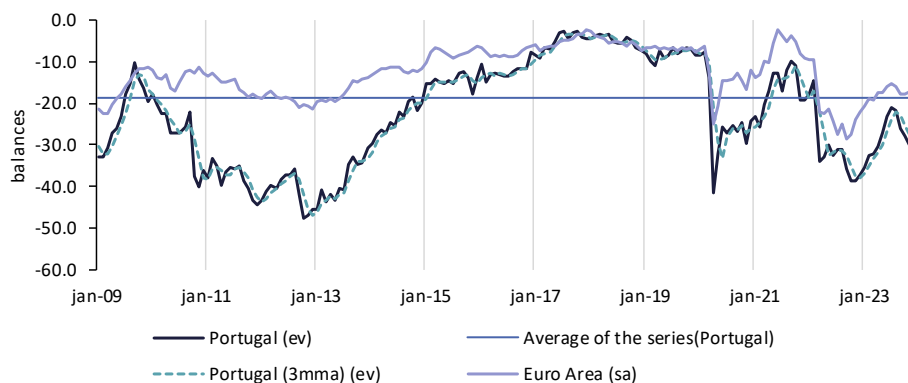
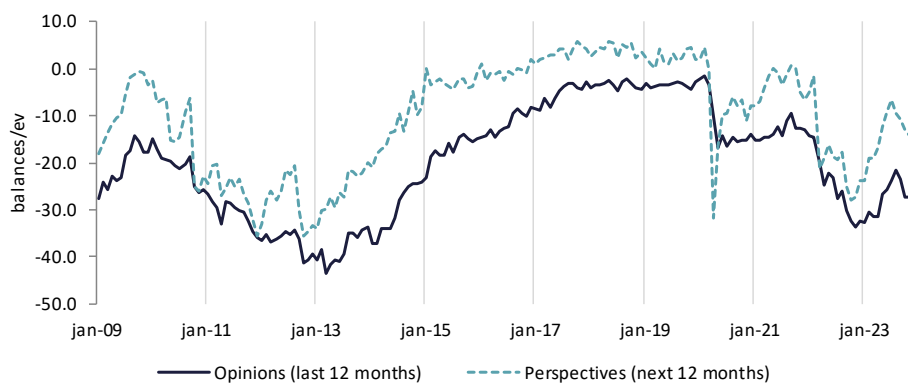


Figure 3. Opinions and expectations about household's financial situation





## Manufacturing Industry Survey

The Manufacturing Industry confidence indicator decreased in December, after having increased in the previous month. The behaviour of the indicator reflected the negative contributions of the opinions on the current stocks of finished products and the firm's production perspectives over the next three months, while the opinions on the evolution of the overall order books in the last three months contributed positively.

The indicator decreased in all the groups: Consumer Goods, Intermediate Goods and Investment Goods.

The balance of opinions on current overall order books increased in the last two months, after decreasing in October. Opinions regarding domestic order books deteriorated between October and December, contrary to the improvements observed in August and September. Opinions on export order books also worsened in December, after recovering in the previous month.

The balance of opinions on the evolution of sale prices increased in December, after having decreased in the two previous months. This balance increased in all the groups: Consumer Goods, Intermediate Goods and Investment Goods.

Figure 4. Manufacturing industry confidence indicator

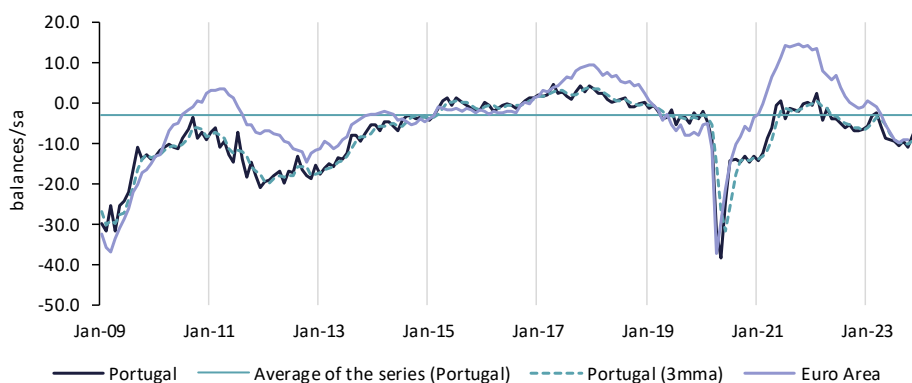
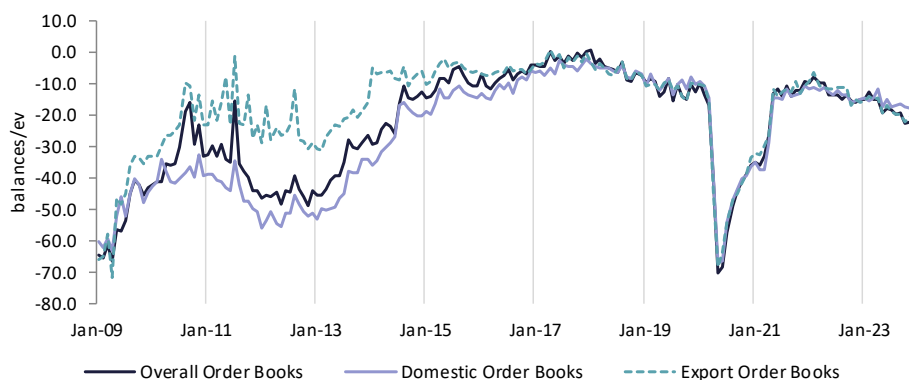


Figure 5. Opinions on current overall order books





## Construction and Public Works Survey

The confidence indicator of Construction and Public Works decreased between October and December, more significantly in the last month, after increasing in September. The decrease in December reflected the negative contribution of both components, balance of opinions on current order books and perspectives on employment, only slightly in the latter case.

The confidence indicator decreased in the divisions of Construction of Buildings, and Specialized Construction Activities, and increased in the division of Civil Engineering.

The balance of opinions on the firm's activity in the last three months decreased in December, after increasing in October and November.

The balance of perspectives regarding the selling prices charged by the firm in the next three months increased in December, after decreasing in October and in November, when it reached the minimum since April 2021.

Among the main factors limiting activity indicated by firms, the shortage of labour force continued to be the main obstacle to activity, with an increase in the percentage of firms that mentioned it, although it remained below the series maximum reached in August.

Figure 6. Construction and Public Works confidence indicator

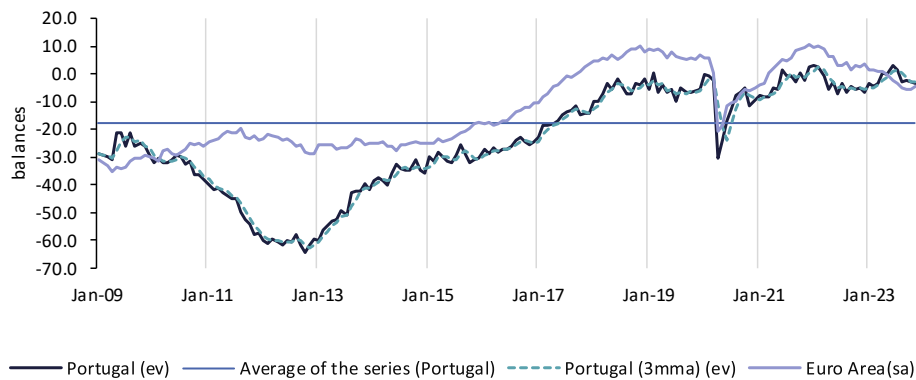
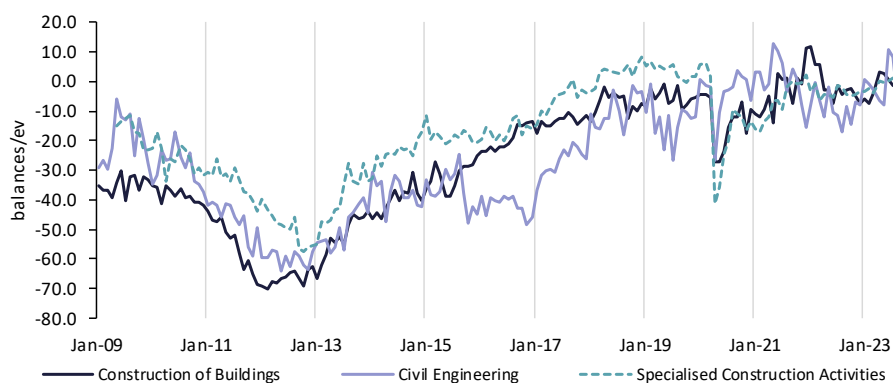


Figure 7. Construction and Public Works confidence indicators by NACE divisions





## Trade Survey

The trade confidence indicator increased between October and December, more significantly in the last month, after decreasing in the previous two months. The evolution of the indicator in December reflected the positive contribution of the three components, opinions on the volume of sales, expectations on the firm's activity over the next three months, and opinions on the current volume of stocks. In December, the confidence indicator increased in Wholesale Trade and in Retail Trade.

The perspectives for activity recovered between October and December, after deteriorating in September. Likewise, the balance of opinions on the volume of sales increased in November and, significantly, in December, after decreasing for four consecutive months.

The balance of opinions on selling prices evolution increased in December, interrupting the downward path started in September. The balance of price expectations over the next three months also increased, after decreasing in October and November.

Figure 8. Trade confidence indicator

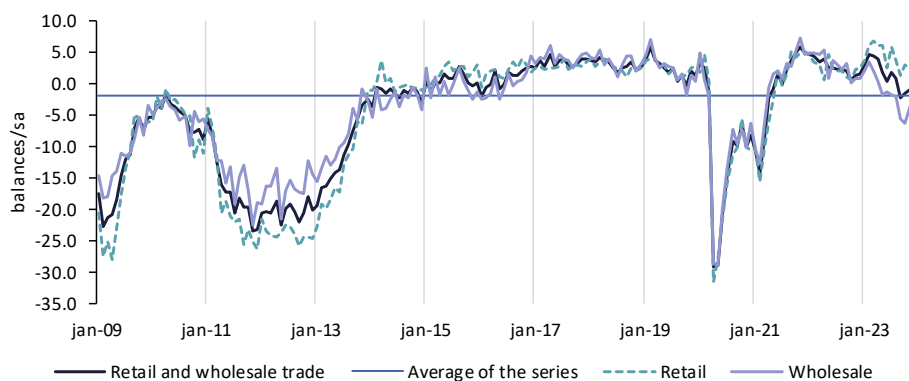
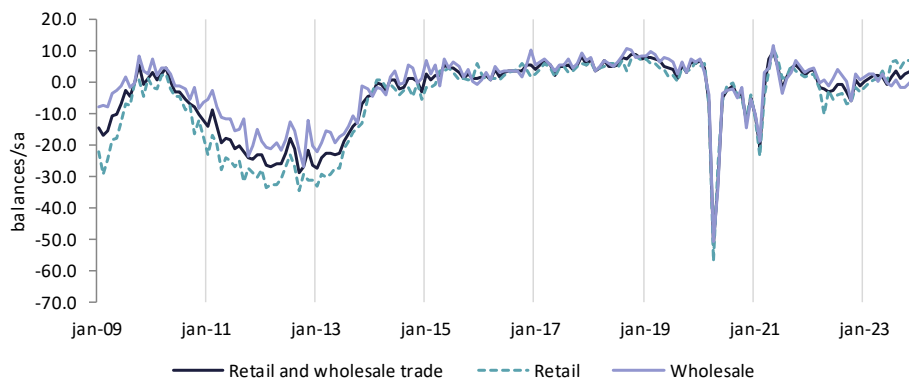


Figure 9. Perspectives on business activity (sales) over the next three months





## Services Survey

The Services' confidence indicator increased in November and December, interrupting the downward movement observed between July and October. The indicator's behaviour resulted from the positive contribution of the opinions on the evolution of the order books and the opinions on the evolution of the business situation, more significant in the first case, having the perspectives on the evolution of demand contributed negatively.

In December, the confidence indicator increased in four of the eight sections of Services, with emphasis on the sections of Accommodation and food service activities and Transport and storage activities.

The balance of perspectives on the evolution of demand decreased in December, after having increased in the last three months.

The balance of expectations for prices of services increased in the last two months, after decreasing in October, extending the upward trajectory started in July.

Figure 10. Services confidence indicator

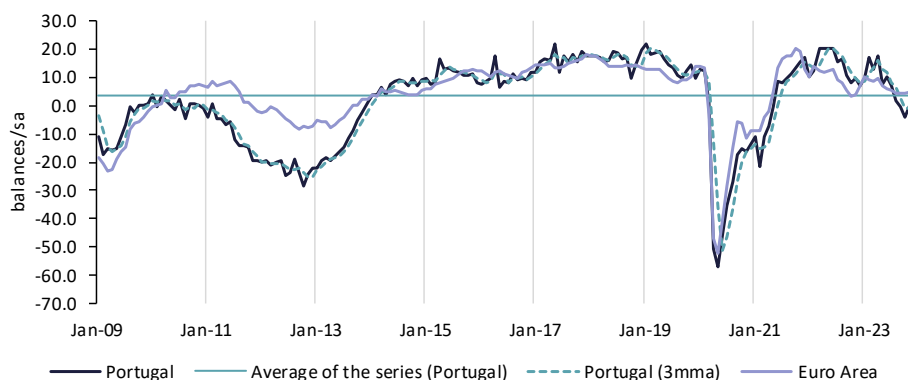
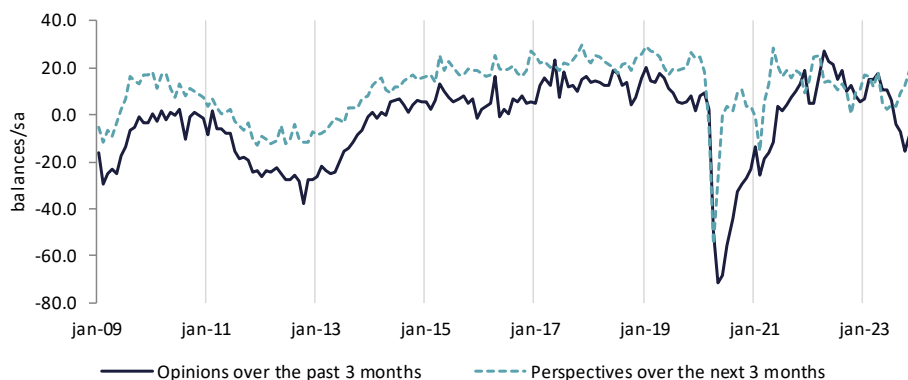


Figure 11. Opinions and perspectives on the evolution of demand (order books)





Monthly series of Consumer and Business Surveys

Table 1. Confidence and climate economic indicators

	Unit	Minimum		Maximum		2022	2023											
		Value	Date	Value	Date	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Confidence indicator</b>																		
Consumers	bal/ev	-47.8	Oct-12	-0.1	Sep-97	-37.1	-35.4	-32.5	-32.3	-30.2	-27.0	-23.2	-20.9	-21.6	-26.1	-27.7	-30.8	-26.0
Manufacturing industry	bal/sa	-38.5	May-20	19.4	Mar-87	-6.4	-5.5	-3.0	-2.4	-5.6	-8.5	-9.0	-9.3	-10.5	-9.4	-10.8	-7.2	-9.7
Construction and public works	bal/ev	-64.5	Oct-12	25.6	Sep-97	-6.4	-3.6	-4.5	-3.6	0.4	-0.5	2.9	1.4	-2.8	-2.5	-2.9	-3.3	-4.7
Trade	bal/sa	-29.3	Apr-20	11.7	Jun-98	1.6	3.1	4.8	4.5	4.0	1.8	0.3	1.7	0.9	-2.3	-1.6	-0.8	2.8
Services	bal/sa	-57.2	May-20	29.5	Jun-01	7.0	9.5	17.2	13.1	17.5	7.5	10.1	6.9	1.9	-0.3	-4.0	1.3	6.1
<b>Economic climate indicator</b>	%/sa	-7.2	May-20	5.5	Apr-98	1.4	1.7	2.0	2.1	2.3	1.5	1.6	1.4	1.4	0.9	0.7	1.2	1.5

Table 2. Monthly series of Consumer Survey

	Uní.	Mínimo		Máximo		2022	2023											
		Valor	Data	Valor	Data	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Indicador de confiança (a+b+c+d)/4</b>	sre/ve	-47.8	Oct-12	-0.1	Sep-97	-37.1	-35.4	-32.5	-32.3	-30.2	-27.0	-23.2	-20.9	-21.6	-26.1	-27.7	-30.8	-26.0
Situação económica do país nos próximos 12 meses (c)	sre/ve	-72.7	Apr-20	16.6	Jun-17	-52.4	-50.3	-41.8	-45.1	-38.0	-31.6	-24.3	-24.4	-25.3	-32.2	-35.2	-42.6	-33.7
Situação financeira do agregado familiar nos últimos 12 meses (a)	sre/ve	-43.5	Mar-13	0.5	Aug-99	-32.3	-32.6	-30.6	-31.5	-31.3	-26.8	-25.6	-23.9	-21.6	-23.5	-27.3	-27.4	-23.5
Situação financeira do agregado familiar nos próximos 12 meses (b)	sre/ve	-35.6	Oct-12	8.6	Feb-99	-23.8	-23.7	-19.1	-19.2	-16.8	-12.5	-9.1	-6.5	-9.6	-10.7	-13.0	-14.4	-9.9
Realização de compras importantes nos próximos 12 meses (d)	sre/ve	-51.6	Apr-20	-6.4	Sep-97	-39.8	-34.8	-38.3	-33.7	-34.6	-36.9	-34.0	-28.8	-30.1	-37.9	-35.2	-38.6	-37.1
<b>Situação económica do país nos últimos 12 meses</b>	sre/vcs	-77.1	Oct-12	20.1	Oct-17	-73.5	-75.1	-69.0	-71.6	-67.5	-60.5	-51.9	-50.2	-53.6	-58.3	-64.3	-63.6	-60.8
<b>Realização de compras importantes nos últimos 12 meses</b>	sre/vcs	-88.1	Dec-08	-14.5	Sep-97	-80.7	-80.7	-81.0	-79.6	-79.2	-81.6	-78.1	-77.2	-76.8	-79.6	-80.7	-78.8	-77.5
<b>Poupança no momento atual</b>	sre/ve	-55.1	Nov-22	-0.2	Sep-97	-54.4	-51.9	-52.9	-54.1	-53.9	-52.5	-47.4	-49.0	-48.8	-50.0	-52.1	-53.2	-51.8
<b>Poupança nos próximos 12 meses</b>	sre/ve	-43.4	Nov-22	0.9	Oct-97	-42.6	-34.8	-38.3	-39.6	-39.6	-37.8	-35.5	-31.9	-33.4	-33.5	-34.3	-37.7	-33.5
<b>Desemprego próximos 12 meses</b>	sre/ve	-20.0	Jun-17	85.5	Feb-09	38.0	36.1	33.1	31.5	26.2	24.6	16.9	17.1	23.0	30.8	30.1	36.5	36.7
<b>Preços nos últimos 12 meses</b>	sre/ve	-14.6	Sep-09	87.0	Oct-22	83.9	85.3	83.4	83.9	84.3	73.5	68.0	66.3	64.0	60.1	69.9	67.9	63.9
<b>Preços próximos 12 meses</b>	sre/vcs	-7.6	Dec-15	81.3	Mar-22	33.3	27.2	27.9	22.6	12.5	13.4	7.3	7.0	14.7	16.4	20.2	23.6	16.9

Table 3. Monthly series of Manufacturing Industry Survey

	Unit	Minimum		Maximum		2022	2023											
		Value	Date	Value	Date	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Confidence Indicator (a+b-c)/3</b>	bal/sa	-38.5	May-20	19.4	Mar-87	-6.4	-5.5	-3.0	-2.4	-5.6	-8.5	-9.0	-9.3	-10.5	-9.4	-10.8	-7.2	-9.7
Consumer goods	bal/sa	-27.2	Apr-20	12.6	Jan-99	-6.3	-5.2	-3.2	-4.5	-4.3	-6.6	-7.7	-6.6	-9.1	-5.9	-9.9	-8.6	-10.0
Investment goods	bal/ev	-36.0	Apr-20	24.3	Feb-07	-2.2	-2.5	1.2	-1.2	-2.9	-0.9	-1.7	-1.9	-0.1	-10.8	0.8	-3.9	-4.7
Intermediate goods	bal/sa	-50.6	May-20	17.6	Jan-95	-9.6	-6.7	-5.3	-0.9	-8.3	-11.7	-11.8	-13.7	-14.7	-11.9	-17.8	-9.2	-12.4
<b>Current overall order books (a)</b>																		
Consumer goods	bal/ev	-70.2	May-20	14.6	Mar-98	-14.8	-15.0	-12.3	-14.7	-14.7	-19.3	-17.7	-18.3	-19.5	-19.2	-22.7	-21.9	-21.0
Investment goods	bal/ev	-60.9	May-20	6.1	Dec-17	-7.7	-15.3	-11.8	-12.9	-14.5	-18.1	-14.4	-15.1	-18.5	-17.3	-21.9	-22.6	-19.6
Intermediate goods	bal/ev	-84.0	May-20	33.8	Jan-08	-8.2	-10.0	-7.4	-12.8	-11.8	-9.1	-11.1	-9.3	-8.2	-10.5	-10.8	-7.0	-9.6
	bal/ev	-72.4	Jun-20	33.8	Mar-98	-23.1	-17.0	-15.0	-17.0	-16.2	-24.5	-22.9	-24.4	-25.1	-24.2	-28.4	-27.7	-26.9
<b>Production over next 3 months (b)</b>																		
Consumer goods	bal/sa	-52.7	Apr-20	34.8	Feb-87	0.4	2.5	4.7	12.4	3.3	0.7	-1.9	-4.1	-3.1	-2.6	-2.5	8.3	1.4
Investment goods	bal/ev	-48.5	Apr-20	39.5	Aug-98	-5.3	3.3	1.6	6.1	8.2	4.7	0.2	1.2	-2.7	4.2	-0.4	4.1	-1.6
Intermediate goods	bal/sa	-44.9	Feb-09	50.6	Aug-00	4.6	5.4	7.8	6.8	3.0	8.2	8.4	1.3	11.1	-19.1	15.1	-4.3	-0.4
	bal/sa	-59.8	Apr-20	32.6	Jan-97	-0.4	1.9	4.4	21.3	-1.6	-1.2	-3.7	-8.1	-5.4	-2.4	-15.6	11.6	1.9
<b>Current stock finished products (c)</b>																		
Consumer goods	bal/ev	-17.6	Jan-08	22.5	Jun-93	5.0	4.1	1.5	4.8	5.4	6.8	7.5	5.4	9.0	6.3	7.2	8.0	9.5
Investment goods	bal/ev	-11.5	Jan-10	22.3	Aug-07	5.8	3.5	-0.6	6.6	6.6	6.5	8.8	5.8	6.0	4.7	7.4	7.3	8.9
Intermediate goods	bal/ev	-37.9	Jan-09	22.4	Jun-10	2.9	2.9	-3.3	-2.5	-0.2	1.8	2.4	-2.2	3.2	2.6	1.8	0.5	4.0
	bal/ev	-30.8	Jan-08	36.5	May-20	5.4	5.1	5.4	7.0	7.2	9.3	8.7	8.4	13.5	9.0	9.3	11.7	12.2
<b>Firm's employment next 3 months</b>	bal/ev	-28.4	Apr-20	13.0	Sep-17	11.2	4.9	5.1	6.3	5.5	2.7	3.9	2.3	3.4	1.2	1.0	6.4	6.2
<b>Selling prices next 3 months</b>	bal/sa	-24.7	Apr-20	44.5	Apr-22	18.2	13.8	10.2	6.5	4.1	-2.3	-3.0	-3.3	1.5	5.7	2.7	0.9	3.2





Table 4. Monthly series of Construction and Public Works Survey

	Unit	Minimum		Maximum		2022	2023											
		Value	Date	Value	Date	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Confidence Indicator (a+b)/2</b>	bal/ev	-64.5	Oct-12	25.6	Sep-97	-6.4	-3.6	-4.5	-3.6	0.4	-0.5	2.9	1.4	-2.8	-2.5	-2.9	-3.3	-4.7
Construction of buildings	bal/ev	-70.2	Feb-12	26.4	Sep-97	-7.5	-5.8	-7.5	-3.8	3.4	2.7	0.9	-1.3	-2.1	-2.0	-4.6	-4.2	-5.9
Civil engineering	bal/ev	-64.3	May-12	16.7	Jul-97	-8.1	0.8	-0.8	-2.7	-6.3	-8.0	10.9	8.1	-6.3	-8.2	-2.4	-9.0	-8.0
Specialised construction activities	bal/ev	-57.7	Oct-12	8.2	Dec-18	-3.4	-3.1	-2.1	-4.1	0.4	-0.5	0.4	1.4	-1.5	1.1	-0.1	2.8	0.0
<b>Current overall order books (a)</b>	bal/ev	-77.5	Oct-12	23.3	Sep-97	-14.1	-9.6	-14.6	-13.1	-10.2	-8.7	-3.7	-5.7	-8.7	-7.8	-9.8	-8.3	-11.0
Construction of buildings	bal/ev	-85.6	Oct-12	22.1	Sep-97	-13.6	-10.0	-17.5	-10.8	-5.2	-4.3	-4.3	-7.8	-8.1	-6.2	-7.0	-8.4	-12.1
Civil engineering	bal/ev	-71.5	Jul-12	12.1	Jul-01	-21.5	-12.0	-11.4	-16.2	-23.9	-21.1	4.4	-3.7	-14.3	-23.5	-27.0	-21.1	-24.1
Specialised construction activities	bal/ev	-73.3	Oct-12	2.1	Jul-19	-9.3	-7.1	-12.3	-14.7	-8.1	-7.6	-8.6	-3.4	-5.4	1.0	-2.1	1.4	0.7
<b>Employment next 3 months (b)</b>	bal/ev	-51.8	Jan-12	35.9	Jun-97	1.2	2.4	5.7	5.8	11.0	7.8	9.4	8.5	3.1	2.8	4.0	1.8	1.6
Construction of buildings	bal/ev	-59.0	Jan-12	37.6	Jun-97	-1.4	-1.7	2.6	3.2	12.1	9.6	6.1	5.1	4.0	2.1	-2.3	-0.1	0.3
Civil engineering	bal/ev	-61.7	May-12	31.2	Jul-01	5.3	13.6	9.7	10.7	11.3	5.0	17.4	19.8	1.6	7.0	22.2	3.1	8.1
Specialised construction activities	bal/ev	-43.6	Dec-12	16.3	Dec-18	2.4	0.9	8.0	6.6	8.9	6.7	9.4	6.1	2.5	1.1	1.8	4.2	-0.8
<b>Activity past 3 months</b>	bal/ev	-65.5	Apr-12	26.7	May-98	-0.1	4.8	4.1	0.3	3.6	1.9	1.8	9.9	6.4	3.9	5.5	6.4	2.7
<b>Selling prices next 3 months</b>	bal/ev	-29.3	Aug-12	43.0	Jun-22	31.3	33.5	30.2	29.1	26.7	16.6	14.2	14.2	14.5	15.6	14.1	13.9	16.4

Table 5. Monthly series of Trade Survey

	Unit	Minimum		Maximum		2022	2023											
		Value	Date	Value	Date	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Confidence indicator (a+b-c)/3</b>	bal/sa	-29.3	Apr-20	11.7	Jun-98	1.6	3.1	4.8	4.5	4.0	1.8	0.3	1.7	0.9	-2.3	-1.6	-0.8	2.8
Wholesale	bal/sa	-29.0	May-20	13.1	Apr-98	0.8	2.1	3.4	2.1	0.4	-1.7	-1.2	-1.6	-1.9	-5.6	-6.3	-3.3	0.5
Retail	bal/sa	-31.6	Apr-20	13.1	Jul-98	2.4	3.8	6.1	6.9	6.1	6.1	2.7	5.9	3.8	1.3	3.1	2.3	5.4
<b>Business activity past 3 months (a)</b>	bal/sa	-56.4	Jun-20	16.4	Feb-89	6.2	10.4	12.8	12.4	12.3	7.5	7.8	7.6	3.8	-2.8	-5.0	-1.4	7.3
Wholesale	bal/sa	-58.0	Jun-20	19.3	Feb-89	6.8	11.2	12.0	8.9	7.6	0.1	6.2	3.8	0.6	-7.3	-12.8	-3.8	2.4
Retail	bal/sa	-58.5	Aug-12	19.2	Apr-99	5.1	9.6	13.6	16.3	16.3	14.3	10.5	11.4	6.8	2.4	2.7	2.9	12.2
<b>Business activity next 3 months (b)</b>	bal/sa	-51.9	Apr-20	40.2	Oct-89	-1.3	0.4	1.5	2.3	2.4	2.0	-0.6	1.5	3.6	1.2	2.8	3.7	5.4
Wholesale	bal/sa	-50.9	Apr-20	49.6	Oct-89	0.7	1.8	2.8	2.8	0.3	2.5	-0.4	-1.3	0.6	-1.8	-1.5	0.3	4.3
Retail	bal/sa	-56.7	Apr-20	40.8	Jul-94	-3.0	-1.4	-0.1	1.0	1.1	3.8	0.3	6.6	7.1	4.4	7.0	6.9	7.1
<b>Current volume of stocks (c)</b>	bal/ev	-14.9	Feb-13	26.4	Jul-90	0.0	1.7	-0.1	1.1	2.8	3.9	6.3	3.9	4.8	5.4	2.7	4.7	4.3
Wholesale	bal/ev	-15.3	Oct-12	28.2	Jul-90	5.2	6.7	4.6	5.6	6.5	7.8	9.6	7.5	7.0	7.6	4.7	6.3	5.3
Retail	bal/ev	-17.5	Feb-13	32.6	Jul-89	-5.2	-3.3	-4.8	-3.5	-0.9	-0.3	2.8	0.2	2.5	3.1	0.6	2.9	3.1
<b>Orders next 3 months</b>	bal/sa	-45.2	Apr-20	20.4	Aug-98	-3.4	-2.8	-3.5	-0.9	-1.0	-3.4	-4.5	-5.3	-2.5	-5.7	-4.9	-3.5	-1.9
<b>Employment next 3 months</b>	bal/ev	-29.2	Oct-12	22.8	Sep-97	0.7	0.1	0.1	3.1	1.4	4.8	4.1	4.4	0.8	0.8	0.0	-0.4	-0.6
<b>Selling prices past month</b>	bal/sa	-11.7	Apr-09	41.5	Apr-22	26.5	23.8	23.1	20.4	18.1	4.4	8.0	4.5	11.1	7.4	6.4	6.1	7.1
<b>Selling prices next 3 months</b>	bal/sa	-11.8	Jul-03	41.6	Mar-22	27.8	26.0	25.1	20.5	17.3	10.1	7.5	7.1	10.0	10.2	7.6	5.2	11.9

Table 6. Monthly series of Services Survey

	Unit	Minimum		Maximum		2022	2023											
		Value	Date	Value	Date	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Confidence indicator (a+b+c)/3</b>	bal/sa	-57.2	May-20	29.5	Jun-01	7.0	9.5	17.2	13.1	17.5	7.5	10.1	6.9	1.9	-0.3	-4.0	1.3	6.1
<b>Business activity past 3 months (a)</b>	bal/sa	-72.4	May-20	33.4	Jun-01	4.8	4.9	20.4	12.6	16.3	6.7	16.8	10.4	6.2	-2.9	-9.0	-10.0	0.9
<b>Demand next 3 months (b)</b>	bal/sa	-55.2	Apr-20	34.6	Jan-02	10.3	17.1	16.1	11.7	18.3	5.0	2.5	4.2	3.7	9.5	12.5	20.5	17.6
<b>Demand past 3 months (c)</b>	bal/sa	-71.7	May-20	29.1	Apr-01	5.8	6.5	15.2	15.1	17.8	10.9	10.9	6.2	-4.3	-7.4	-15.5	-6.7	-0.1
<b>Employment next 3 months</b>	bal/sa	-29.7	Apr-20	19.4	Aug-19	2.2	9.0	7.3	5.7	7.5	3.8	-1.2	-0.8	9.0	3.7	6.5	4.8	0.9
<b>Selling prices next 3 months</b>	bal/sa	-23.5	Apr-20	24.4	Mar-22	19.5	19.6	18.7	18.5	16.8	8.5	5.3	6.0	8.0	10.9	10.3	11.6	15.1





## Box – Labour Hoarding Indicator

In the context of the European Programme of Production of Qualitative Surveys, the European Commission (EC) developed a new indicator, Labour Hoarding Indicator (LHI) which became part of the Programme<sup>1</sup> from May 2023 onwards.

This indicator aims to measure the accumulation of the labour factor, in order to monitor this labour market phenomenon across the economic cycle. The accumulation of the labour factor can be defined as “that part of labour input which is not fully used by a company during its production process at any given point in time”<sup>2</sup>. The accumulation of labour generally occurs during periods of reduced economic activity, and can be considered an indicator of a cyclical nature, reflecting the combination of different factors like the perception of firms that this reduction may be, in part, temporary, the difficulty in rapidly adjust the work force due to legal issues, or the existence of government support measures to maintain the workforce as it was the case during the COVID-19 pandemic with the simplified layoff regime.

The LHI is a monthly indicator calculated from the available microdata at firm level, combining entrepreneurs' responses to two questions of the Business Surveys (Manufacturing Industry<sup>3</sup>, Construction and Public Works<sup>4</sup>, Services<sup>5</sup> and Trade<sup>6</sup>), namely expectations regarding future employment and production developments.

The formulation of the employment question is identical across business surveys: “How do you expect your firm’s total employment to change over the next 3 months? It will: 1. Increase; 2. Remain unchanged; 3. Decrease”.

Concerning production perspectives, the questions differ slightly across the business surveys, referring to production expectations in the Industry Survey, to demand (turnover) in the Services Survey and to business activity (sales) in the Trade Survey<sup>7</sup>. The answer options are basically the same for all three questions: 1. increase; 2. remain unchanged; 3. decrease. In the Construction survey, the question refers to opinions on current overall order books, with the following answer options: 1. Above normal; 2. Normal for the season; 3. Below normal.

The construction of the indicator is based on the idea that labour hoarding occurs when firms expect their production to decrease while employment remains stable or even increases.

Therefore, as a first step, LHI for each survey results of the categorization of firms’ answers and is equal to 1 (labour hoarding) whenever with a prospect of a decrease in production/sales, employment is expected to increase or stabilize. For the remaining answer combinations, the indicator is equal to 0. The resulting binary data are then aggregated for each of the four sectors, thus obtaining a weighted percentage of firms with labour hoarding.

<sup>1</sup> The EC will also start releasing the indicator from January 2024 onwards.

<sup>2</sup> For further information, please see the article published by the EC in July 2023: [European Business Cycle Indicators – A new survey-based labour hoarding indicator](#).

<sup>3</sup> [Questions A0500 e A0700](#).

<sup>4</sup> [Questions A0200 e A0300](#).

<sup>5</sup> [Questions A0600 e A0300](#).

<sup>6</sup> [Questions A0600 e A0700](#).

<sup>7</sup> It should be noted that the Trade survey granted with the EC only covers divisions 45 - Wholesale and retail trade and repair of motor vehicles and motorcycles and 47 - Retail trade, except of motor vehicles and motorcycles. At national level, Trade survey also covers division 46 – Wholesale trade, except of motor vehicles and motorcycles.

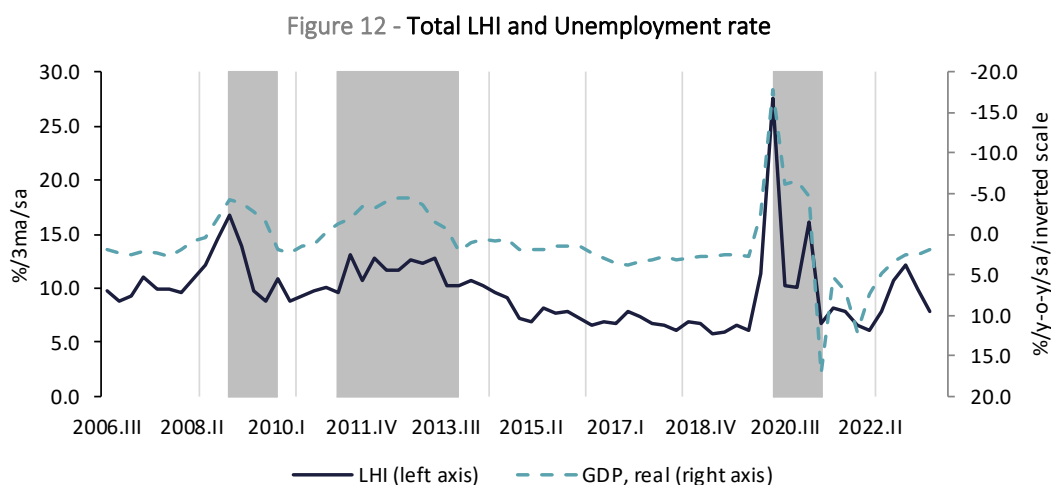


The weighting scheme used in the calculation of the indicator is based on the turnover variable. Until April 2023, the weight of each responding firm, in each month, reflected the weight of its turnover on the total turnover of responding firms. For that period, time series are only available for sector totals. From May 2023 onwards, results are also available at the NACE division level as well as Main Industrial Groups in the case of the Industry Survey. As the results are now calculated at the NACE division level, the calculation process is carried out at stratum level, similarly to the remaining survey questions, as detailed in the respective methodological documents<sup>8</sup>.

The LHI was compiled using the microdata available from April 2001 in the case of Services, February 2003 in Construction, May 2006 in Trade, and July 2006 in Industry.

From the sectoral indicators, an aggregated indicator for the sectors' total is obtained from July 2006 onwards, weighted using employees by industry<sup>9</sup> (number of persons) in each sector in total employment of the four sectors. It should be noted that this weighting scheme is also used in the construction of the EC's Employment Expectations Indicator.

The total LHI has a cyclical nature, reaching peaks in each of the three recessions illustrated in the figure 12, and after each peak it tends to return to the pre-crisis level. The magnitude of the peak is much higher in the recession caused by the COVID-19 pandemic than in the previous two recessions. In fact, GDP recorded a historic decrease in 2020, reflecting the markedly adverse effects of the pandemic on economic activity, with a significant proportion of firms resorting to the simplified layoff regime and other public measures to maintain employment contracts. In previous recessions, particularly in the 2011-2012 period, there was mainly an increase in the unemployment rate.



<sup>8</sup> Available at <https://smi.ine.pt/>; Methodological documents - [Industry Survey](#); [Construction Survey](#); [Trade survey](#) and [Services Survey](#).

<sup>9</sup> Employment data in the optic of Annual National Accounts (Benchmark year 2016).



The following figures present LHI<sup>10</sup> for each of the sectors.

Figure C.2 - Industry

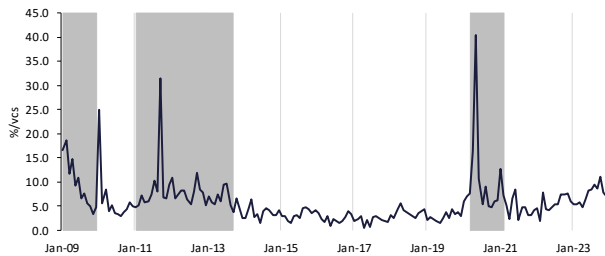


Figure C.3 - Construction

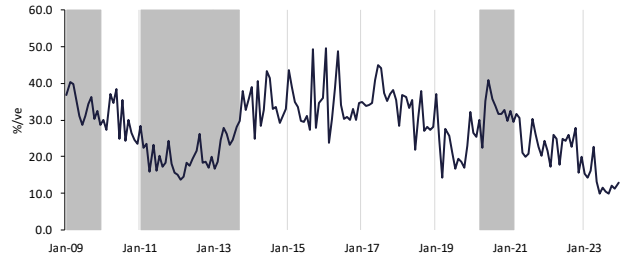


Figure C.4 - Services

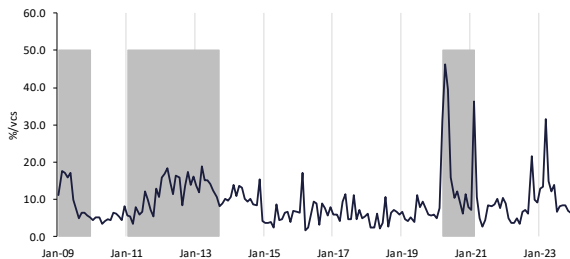
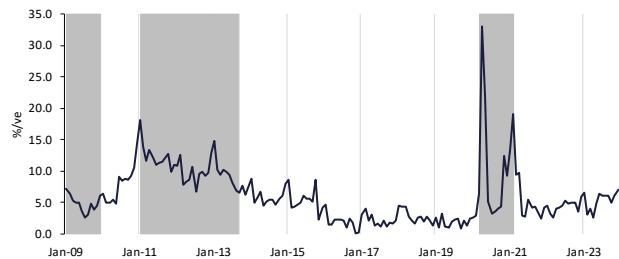


Figure C.5 - Trade



At a sectoral level, there are dynamics common to the four sectors (increased accumulation of the labour factor in the pandemic crisis, much less intense in the case of Construction and Public Works), although there are specific sectoral characteristics. In manufacturing industry, there is a peak in labour hoarding in January 2010, which is determined by one of the largest companies in the sector in terms of business volume, which reports labour hoarding in that same month. It should be noted that until April 2023, the weight of each responding firm in each month corresponds to its respective turnover in the total turnover of responding firms in that month, making the indicator more sensitive to changes in company responses. The LHI of the manufacturing industry shows a faster decline after the pandemic, contrasting with sectors where working from home is more viable or intensive in personal contact.

Figure 17<sup>11</sup> shows the evolutions of the LHI for the total sectors (obtained from three month moving averages - 3mma) and of the quarterly GDP in volume<sup>12</sup> (year-on-year rate of change, inverted scale). LHI is inversely related to the evolution of GDP, with a correlation coefficient of -0.76, highlighting its cyclical nature.

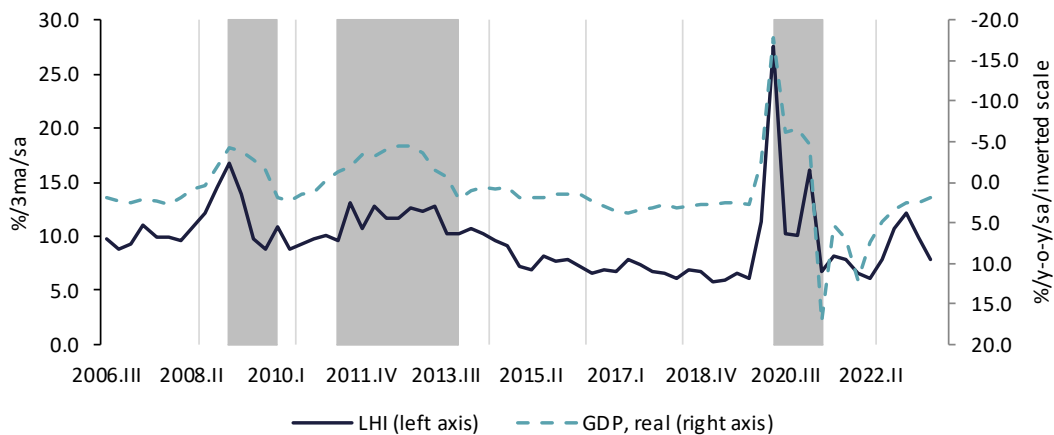
<sup>10</sup> For Industry and Services, the LHI was seasonally adjusted. Total seasonally adjusted LHI results from the aggregation of the seasonally adjusted indicators for Industry and Trade and of the raw indicators for Construction and Trade..

<sup>11</sup> Recession periods are represented by the shaded grey areas.

<sup>12</sup> Quarterly National Accounts (Benchmark year 2016)



Figure C.6 - Total LHI and Gross Domestic Product (GDP)





## METHODOLOGICAL NOTE

The Business and Consumer Qualitative Surveys published by Statistics Portugal are developed in the framework of the harmonized Business and Consumer Surveys Programme of the European Commission (EC) DG-ECFIN (Directorate-General for Economic and Financial Affairs) and are financially supported in the framework of the agreement signed between these two institutions. The questionnaires are harmonized among the European countries, as well as the respective confidence indicators' methodology. The surveys' results are sent to the EC in effective values, and, therefore, the seasonally adjusted values published by the EC are computed by this entity. The seasonal adjustment method used by the EC is available on the user guide, accessible in:

[https://ec.europa.eu/info/files/user-guide-joint-harmonised-eu-programme-business-and-consumer-surveys\\_en](https://ec.europa.eu/info/files/user-guide-joint-harmonised-eu-programme-business-and-consumer-surveys_en)

The seasonal adjustment uses the X13-Arima method (combination of moving averages process and auto-regressive integrated moving average models) developed in the JDemetra+, software provided by Eurostat. This application relies on the use of probabilistic models to correct seasonal effects from the original series. The seasonal treatment is updated for monthly and quarterly series in January, for consumer survey, and in May, for business surveys, which might result on a revision of the series previously published.

The use of moving averages smoothes out the series by removing the irregular movements, allowing the detection of the short-term trends. Since the average is not centered (the information is used to analyze the evolution of the last month) there is a small lag compared with the trend that is supposed to detect. In order to compare the difference between original and moving average series, the graphical representation of the confidence indicators presents both types of series.

The balances of the questions are the difference between the positive and negative answers, that is  $\text{Balance} = \% \text{answer}(+) - \% \text{answer}(-)$ . In the Consumer Survey, there are questions with more than one option of positive/negative answer. In these cases, to the most positive/negative answers is given the weight 1 and to the others the weight 0.5, that is  $\text{Balance} = [\% \text{answer}(++) * 1 + \% \text{answer}(+) * 0.5] - [\% \text{answer}(--) * 1 + \% \text{answer}(-) * 0.5]$ . The percentage of answers that correspond to "equal" is not considered.

The analysis of this press release is based on monthly series of effective values (raw or seasonally adjusted data), which allows for a clearer identification of very short-term movements, particularly relevant in the context of worsening impacts of the COVID-19 pandemic. The monthly series in three-months moving average (3mma) and the quarterly series in two-quarters moving averages (2qma) are available in the excel file that supports this press release.

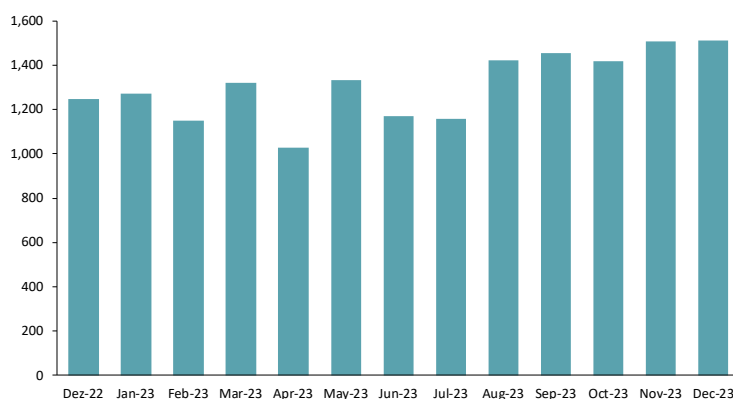


## INFORMATION ON DATA COLLECTION

In the results obtained from business and consumer surveys for the collection of December 2023, the data collecting period occurred from 02 to 18 in the case of the consumer survey, with 1513 responses obtained (telephone interviews) and from 01 to 22 for business surveys ([Webing](#)).

The distribution of the number of responses by data collection's months to the consumer is presented in the next figure.

Figure 13. Consumer Survey - Number of responses by data collection's months



The response and weighted response rates for business surveys were:

Table 7. Response and weighted response rates

Business Surveys	Response Rate				Weighted Response Rate <sup>(2)</sup>			
	2023 <sup>(1)</sup>	October 2023	November 2023	December 2023	2023 <sup>(1)</sup>	October 2023	November 2023	December 2023
Manufacturing Industry	78.8%	80.3%	80.9%	78.8%	91.2%	91.1%	92.7%	90.7%
Construction and Public Works	73.6%	77.1%	76.9%	75.8%	87.7%	89.1%	89.0%	88.0%
Trade	78.8%	81.3%	80.3%	80.0%	93.0%	93.7%	94.4%	94.0%
Services	78.1%	79.8%	80.2%	77.1%	91.8%	94.8%	92.4%	91.5%

<sup>(1)</sup> Annual average.

<sup>(2)</sup> Corresponds to the ratio between the turnover of the firms that answered to the survey and the turnover of all the firms in the sample.

The following graphs show the distribution of the number of responses by data collection's months to the business surveys.





Figure 14. Manufacturing Industry Survey - Number of responses by data collection's months

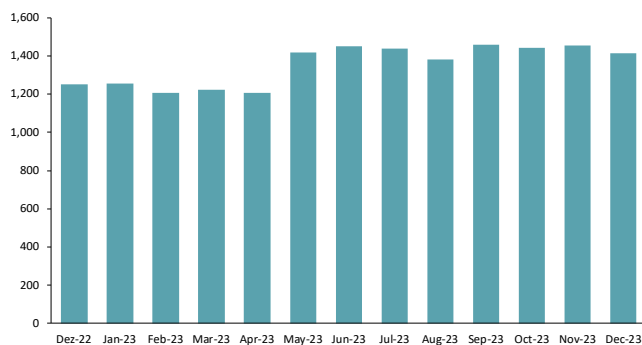


Figure 15. Construction and Public Works - Number of responses by data collection's months

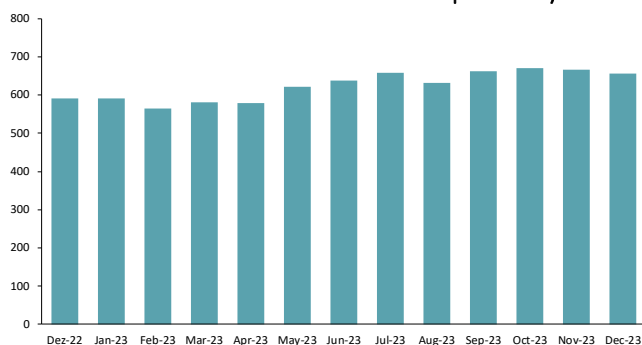


Figure 16. Trade Survey - Number of responses by data collection's months

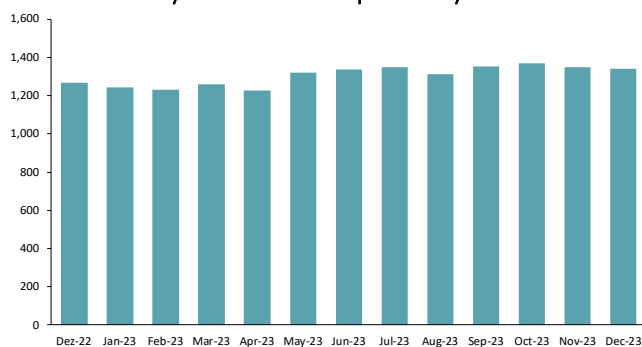
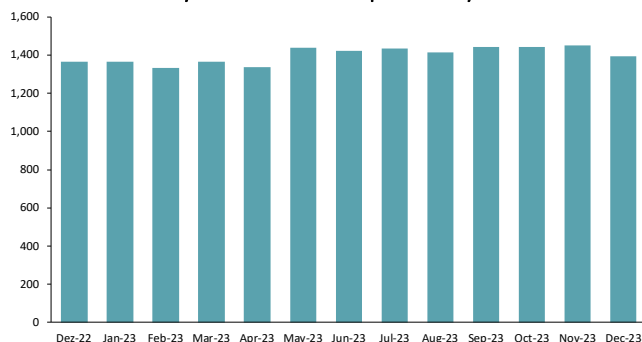


Figure 17. Services Survey - Number of responses by data collection's months





It should also be noted that the representativeness of the branches of activity covered by Business Surveys, considering the Gross Added Value (GVA) at current prices (Final Annual National Accounts) as the economic variable, is as follows:

**Table 8. Weight of the GVA of the branches**

Qualitative Business Surveys	Weight of the GVA of the branches of each survey in the total GVA of the economy
	2021
Manufacturing Industry	14.3%
Construction and Public Works	4.6%
Trade	12.7%
Services	36.7%

## ECONOMIC CLIMATE INDICATOR

Synthetic Indicator estimated using balances of questions from the Manufacturing Industry, Trade, Construction and Public Works and Services Surveys. The method for this indicator uses the factor analysis and the estimated series (the common component) is calibrated using the GDP change rates. The questions that integrate the indicator are:

### Qualitative Manufacturing Industry survey

- How has your production developed over the past 3 months? It has... 1. + increased; 2. = remained unchanged; 3. - decreased.
- Do you consider your current overall order books to be...? 1. + more than sufficient (above normal); 2. = sufficient (normal for the season); 3. - not sufficient (below normal).
- Do you consider your current export order books to be...? 1. + more than sufficient (above normal); 2. = sufficient (normal for the season); 3. - not sufficient (below normal).
- How do you expect your production to develop over the next 3 months? It will... 1. + increase; 2. = remain unchanged; 3. - decrease. (seasonally adjusted)

### Qualitative Trade survey

- How has (have) your business activity (sales) developed over the past 3 months? It has... (They have...) 1. + improved (increased); 2. = remained unchanged; 3. - deteriorated (decreased). (seasonally adjusted)
- How do you expect your orders placed with suppliers to change over the next 3 months? They will... 1. + increase; 2. = remain unchanged; 3. - decrease. (seasonally adjusted)
- Your business activity is currently...: 1. + more than sufficient; 2. = sufficient; 3. - not sufficient.
- How do you expect your business activity (sales) to change over the next 3 months? It (They) will... 1. + improve (increase); 2. = remain unchanged 3. - deteriorate (decrease). (seasonally adjusted)

### Qualitative Construction and Public Works survey

- How has your building activity developed over the past 3 months? It has...; 1. + increased; 2. = remained unchanged; 3. - decreased.
- Do you consider your current overall order books to be...?: 1. + more than sufficient (above normal); 2. = sufficient (normal for the season); 3. - not sufficient (below normal).
- How do you expect your firm's total employment to change over the next 3 months? It will...; 1. + increase; 2. = remain unchanged; 3. - decrease.



### Qualitative Services survey

- How has your business situation developed over the past 3 months? It has... 1. + improved; 2. = remained unchanged; 3. - deteriorated. (seasonally adjusted)
- How has demand (turnover) for your company's services changed over the past 3 months? It has... 1. + increased; 2. = remained unchanged; 3. - decreased. (seasonally adjusted)
- How do you expect the demand (turnover) for your company's services to change over the next 3 months? It will... 1. + increase; 2. = remain unchanged; 3. - decrease. (seasonally adjusted)

### SECTORIAL CONFIDENCE INDICATORS

The confidence indicators (CI) are the result of the arithmetic average of balance of the following questions:

#### Manufacturing Industry confidence indicator

- Do you consider your current overall order books to be...? 1. + more than sufficient (above normal); 2. = sufficient (normal for the season); 3. - not sufficient (below normal).
- How do you expect your production to develop over the next 3 months? It will... 1. + increase; 2. = remain unchanged; 3. - decrease.
- [Inverted Sign] Do you consider your current stock of finished products to be...? 1. + too large (above normal); 2. = adequate (normal for the season); 3. - too small (below normal).

#### Trade confidence indicator

- How has (have) your business activity (sales) developed over the past 3 months? It has... (They have...) 1. + improved (increased); 2. = remained unchanged; 3. - deteriorated (decreased).
- How do you expect your business activity (sales) to change over the next 3 months? It (They) will... 1. + improve (increase); 2. = remain unchanged; 3. - deteriorate (decrease).
- [Inverted Sign] Do you consider the volume of stock you currently hold to be...? 1. + too large (above normal); 2. = adequate (normal for the season); 3. - too small (below normal).

#### Construction and Public Works confidence indicator

- Do you consider your current overall order books to be...?: 1. + more than sufficient (above normal); 2. = sufficient (normal for the season); 3. - not sufficient (below normal).
- How do you expect your firm's total employment to change over the next 3 months? It will...; 1. + increase; 2. = remain unchanged; 3. - decrease.

#### Services confidence indicator

- How has your business situation developed over the past 3 months? It has... 1. + improved; 2. = remained unchanged; 3. - deteriorated.
- How has demand (turnover) for your company's services changed over the past 3 months? It has... 1. + increased; 2. = remained unchanged; 3. - decreased.
- How do you expect the demand (turnover) for your company's services to change over the next 3 months? It will... 1. + increase; 2. = remain unchanged; 3. - decrease.



## CONSUMER CONFIDENCE INDICATOR

The consumer confidence indicator results of the arithmetic average of the balances of the following questions:

- How has the financial situation of your household changed over the last 12 months? It has...1. ++ got a lot better; 2. + got a little better; 3.= stayed the same; 4.– got a little worse; 5. – – got a lot worse; 6. N don't know.
- How do you expect the financial position of your household to change over the next 12 months? It will...1. ++ get a lot better; 2. + get a little better; 3.= stay the same; 4.– get a little worse; 5. – – get a lot worse; 6. N don't know.
- How do you expect the general economic situation in this country to develop over the next 12 months? It will... 1. ++ get a lot better; 2. + get a little better; 3.= stay the same; 4.– get a little worse; 5. – – get a lot worse; 6. N don't know.
- Compared to the past 12 months. do you expect to spend more or less money on major purchases (furniture. electrical/electronic devices. etc.) over the next 12 months? I will spend...1. ++much more; 2. + a little more; 3.– a little less; 4. – – much less; 5. N don't know.

## ABBREVIATIONS

**Bal:** Balances correspond to weighted difference between the percentages of positive and negative responses.

**EV:** Effective Values.

**SA:** Seasonally Adjusted values.

**3MMA:** Three-Months Moving Average.

**2QMA:** Two-Quarters Moving Average

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Next monthly press release – January 30<sup>th</sup> 2024

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