



27th February 2023
BUSINESS AND CONSUMER SURVEYS
February 2023

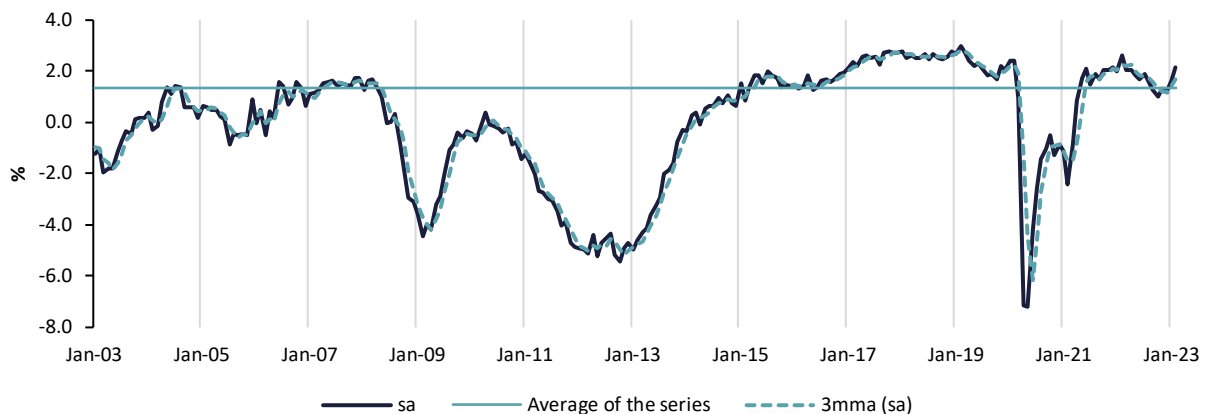
CONSUMER CONFIDENCE AND ECONOMIC CLIMATE INDICATORS INCREASE AGAIN

The Consumer confidence increased between December and February¹, interrupting the negative profile of the previous three months which resulted, in November, in the lowest value since April 2020 when the pandemic began. The balance of Consumer opinions on the past evolution of the price level decreased in February, remaining below the maximum value of the series recorded in October.

The economic climate indicator² increased in January and February, reversing the downward movement initiated in March. The confidence indicators increased in February, compared to the previous month, in Manufacturing Industry, Trade and Services, while in Construction and Public Works the indicator diminished.

The entrepreneurs' expectations regarding the future evolution of selling prices decreased significantly between November and February in the Manufacturing Industry, reaching the lowest value since January 2021. This balance also decreased in February in Services and in Construction and Public Works, having increased in Trade.

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



¹ The collection period (see final notes) of the consumer survey occurred from 01 to 13 of February (working days), in the case of the consumer survey, and from 01 to 20 of February in the case of business surveys.

² The economic climate indicator summarizes the balances of business surveys' questions.



Consumer Survey

The Consumer confidence indicator increased between December and February, interrupting the negative profile of the previous three months which resulted, in November, in the lowest value since April 2020 when the pandemic began. The evolution of the indicator in the last month resulted from the positive contributions of the expectations on the future evolution of the country's economic situation and of households' financial situation, as well as of opinions on the past evolution of households' financial situation. In the opposite direction, expectations on the future evolution of major purchases by households registered a negative contribution.

The balance of perspectives regarding the future evolution of the country's economic situation increased between November and February, significantly in the last month, reaching the highest value since February 2022.

The balance of expectations about household's future financial situation increased in the last four months, after the decreases of September and October, having registered in these two months the lowest values since the start of the pandemic in April 2020.

The balance of opinions on the past evolution of the price level decreased in February, remaining below the maximum value of the series registered in October, as a consequence of the significantly ascending trajectory initiated in March of 2021. The balance of expectations regarding the future evolution of the price level increased in February, interrupting the markedly descending trajectory observed since March of 2022, when the maximum value of the series was reached.

Figure 2. Consumer confidence indicator

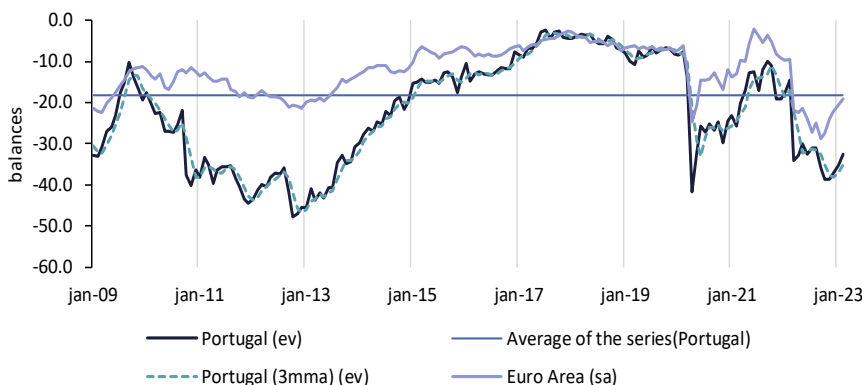
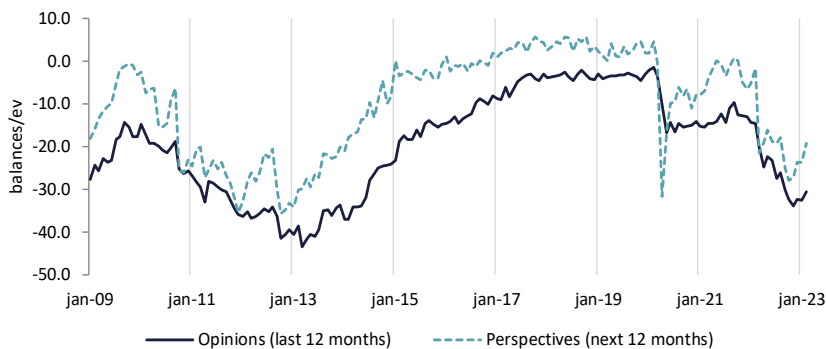


Figure 3. Opinions and expectations about household's financial situation





Manufacturing Industry Survey

The Manufacturing Industry confidence indicator increased between November and February, intensely in the reference month. The behaviour of the indicator reflected the positive contribution of all components, the firm's production perspectives over the next three months, opinions on the current stocks of finished products and opinions on the evolution of the overall order books in the last three months.

The indicator increased in February in all groups, Consumer Goods, Intermediate Goods and Investment Goods.

The balance of opinions on current overall order books increased in February, interrupting the downward movement started in May. Opinions regarding domestic order books, considering firms with production oriented to the domestic market, worsened in February, after having recovered between November and January. Opinions on export order books, considering firms with production oriented to the foreign market, recovered in January and February.

The balance of opinions on the evolution of sale prices decreased significantly in the last four months, after increasing in September and October, reaching the lowest value since January 2021. This balance decreased in all groups: Intermediate Goods, Consumer Goods and Investment Goods.

Figure 4. Manufacturing industry confidence indicator

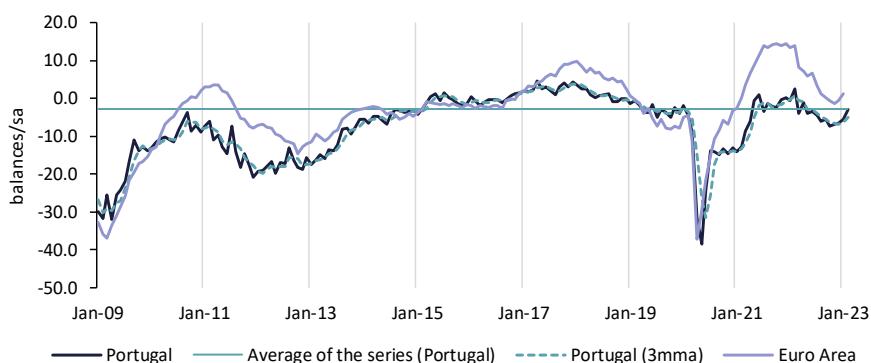
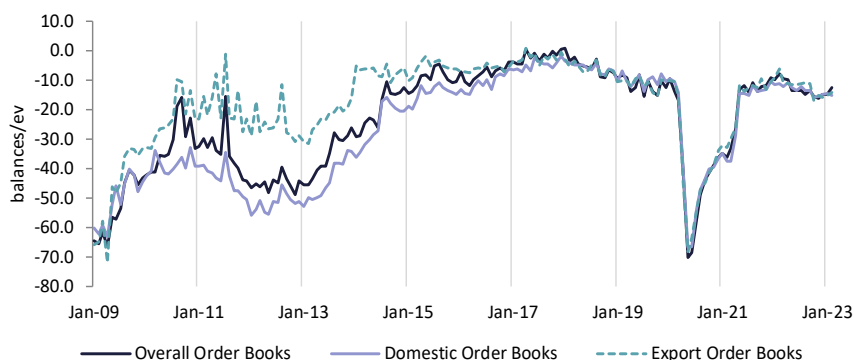


Figure 5. Opinions on current overall order books





Construction and Public Works Survey

The confidence indicator of Construction and Public Works decreased in February, after increasing in January. The decrease in the last month reflected the negative contribution of the balance of opinions on current order books, since the perspectives on employment component have increased.

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

The balance of opinions on the firm's activity in the last three months decreased in February, after increasing in December and, more significantly, in January.

The balance of perspectives regarding the selling prices charged by the firm in the next three months decreased in February, resuming the downward path started in July.

Figure 6. Construction and Public Works confidence indicator

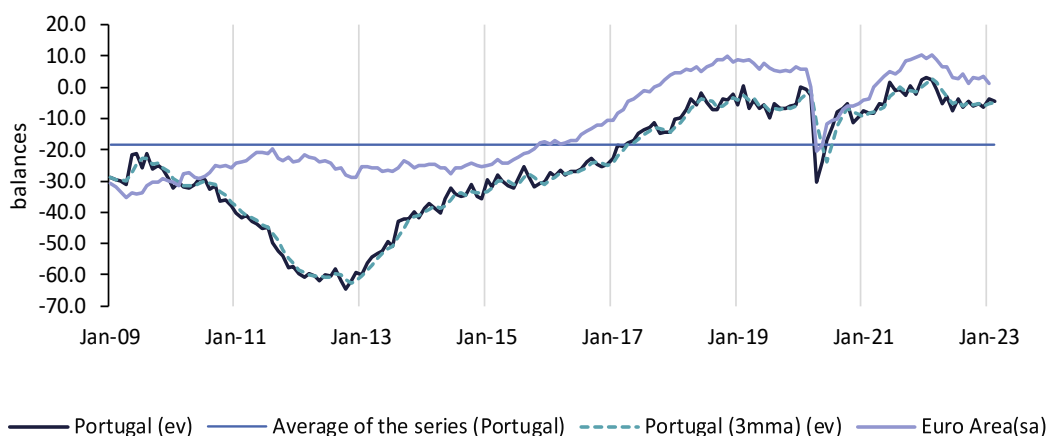
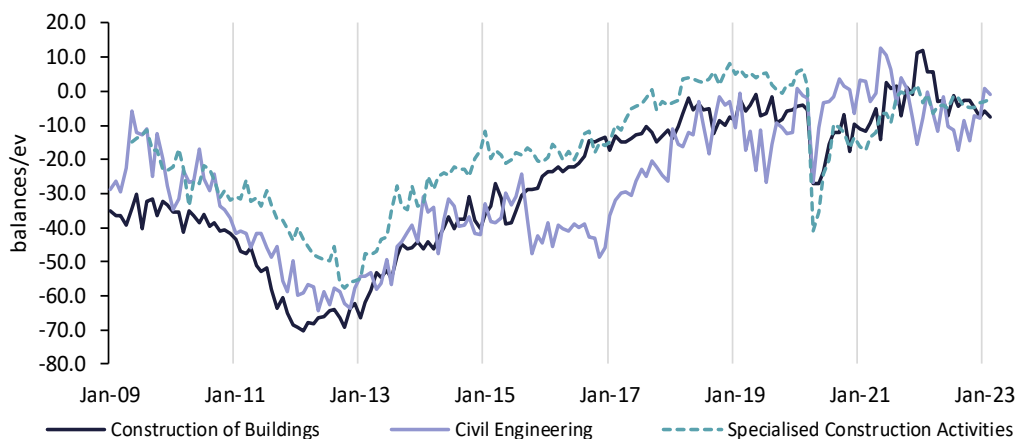


Figure 7. Construction and Public Works confidence indicators by NACE divisions





Trade Survey

The trade confidence indicator increased between November and February, reversing the downward movement observed between July and October. The evolution of the last month reflected the positive contribution of all components, opinions on the volume of sales, opinions on the current volume of stocks and expectations on the firm's activity over the next three months. In February, the confidence indicator increased in Retail Trade and Wholesale Trade.

The balance of opinions on the volume of sales increased sharply in December and February, after decreasing considerably in November. In turn, the perspectives of the firm's activity recovered in January and February, after having deteriorated in December.

The balance of opinions on selling prices evolution compared to the previous month declined between November and February, moving away from the series maximums reached in April. In turn, the balance of prices expectations over the next three months increased in February, after decreasing between November and January.

Figure 8. Trade confidence indicator

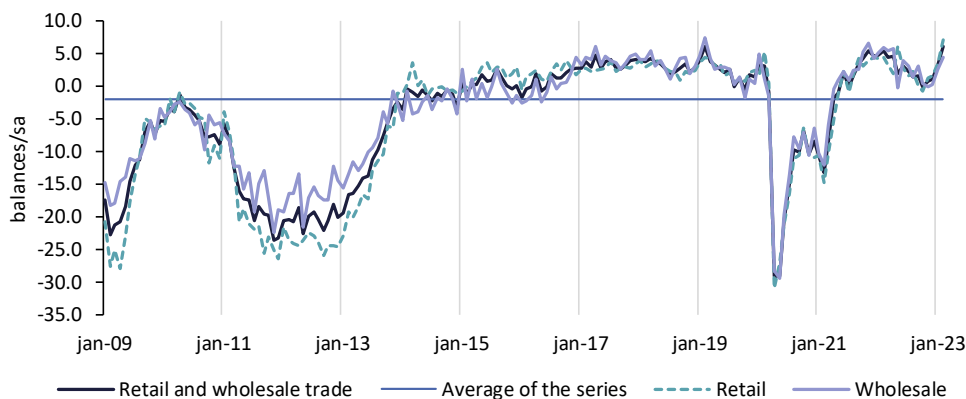
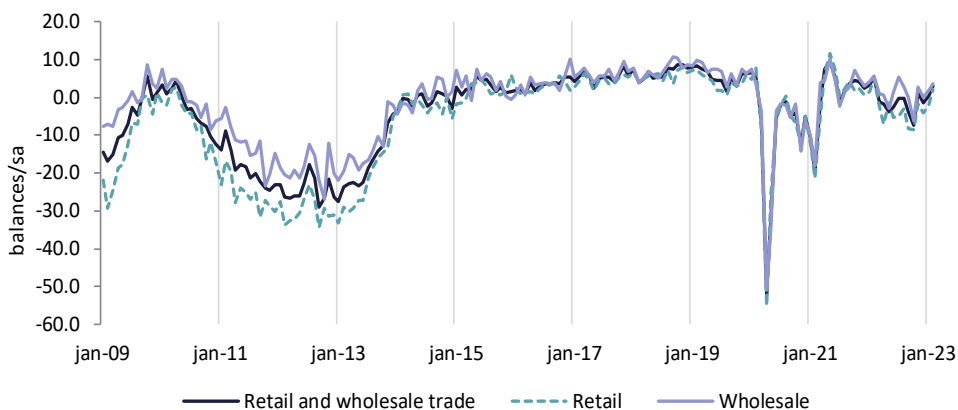


Figure 9. Perspectives on business activity (sales) over the next three months





Services Survey

The Services' confidence indicator increased in January and, significantly, in February, resuming to a level above that observed in July. The indicator's behaviour resulted from the positive contributions of all components, the opinions on the evolution of the order books, the opinions on the evolution of the business and the perspectives on the evolution of demand, significantly in the former two cases.

In February, the confidence indicator increased in six of the eight sections of Services, with emphasis on the sections of Transport and storage activities and Information and communication activities.

The balance of perspectives on the evolution of demand increased in the last four months, more expressively in January, extending the upward trajectory started in August 2022.

The balance of expectations for prices of services decreased in February, interrupting the upward profile observed between November and January in which approached the maximum of the series registered in April.

Figure 10. Services confidence indicator

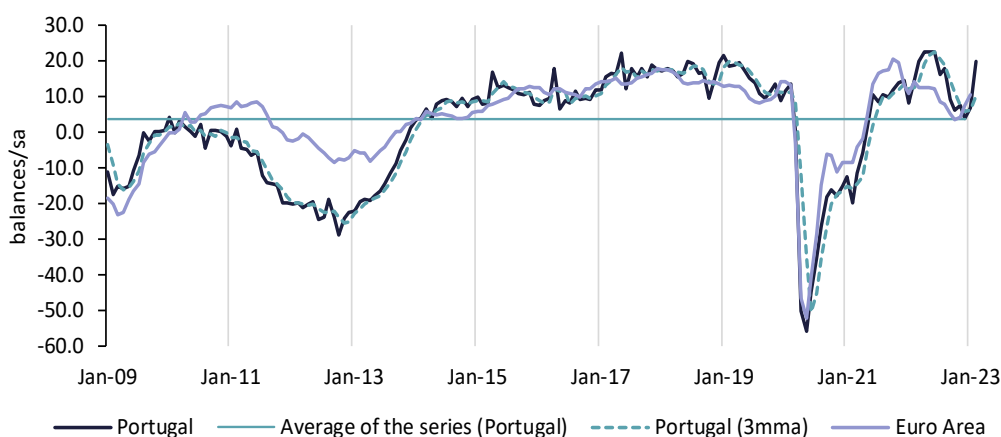
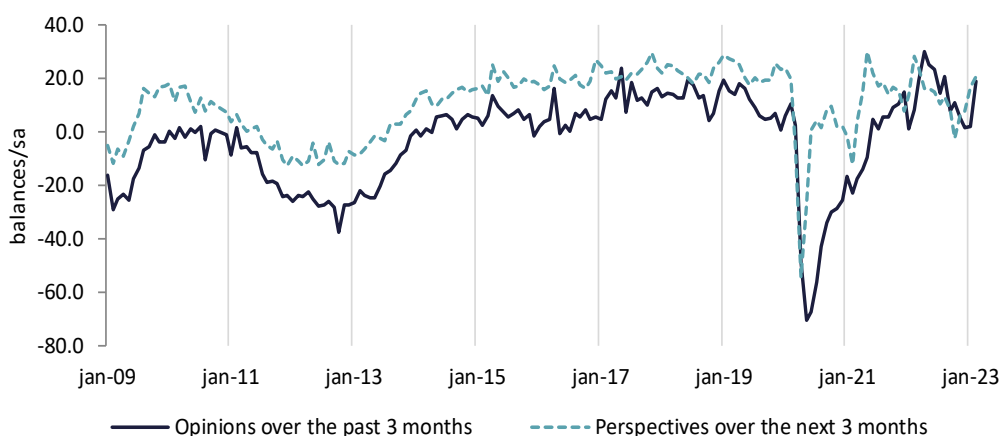


Figure 11. Opinions and perspectives on the evolution of demand (order books)





Monthly series of Consumer and Business Surveys

Figure 12. Confidence and climate economic indicators

	Unit	Minimum		Maximum		2022												2023	
		Value	Date	Value	Date	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	
Confidence indicator																			
Consumers	bal/ev	-47.8	Oct-12	-0.1	Sep-97	-14.5	-34.1	-32.9	-30.1	-32.5	-31.1	-31.1	-35.8	-38.6	-38.7	-37.1	-35.4	-32.5	
Manufacturing industry	bal/sa	-38.6	May-20	19.4	Mar-87	2.5	-3.9	-1.1	-4.1	-3.6	-4.5	-6.1	-5.6	-7.3	-6.9	-6.6	-5.5	-3.0	
Construction and public works	bal/ev	-64.5	Oct-12	25.6	Sep-97	2.4	-0.5	-5.4	-2.9	-7.4	-3.5	-6.5	-4.4	-5.8	-5.3	-6.4	-3.6	-4.5	
Trade	bal/sa	-29.1	Apr-20	11.7	Jun-98	5.5	4.4	4.6	2.0	3.1	2.3	1.4	1.7	0.0	0.8	1.2	3.2	6.0	
Services	bal/sa	-56.0	May-20	29.5	Jun-01	14.7	19.8	22.7	22.6	22.7	16.1	18.0	9.2	6.1	7.4	3.9	7.0	19.9	
Economic climate indicator	%/sa	-7.2	May-20	5.5	Apr-98	2.6	2.0	2.1	1.9	1.7	1.9	1.6	1.3	1.0	1.3	1.3	1.6	2.2	

Figure 13. Monthly series of Consumer Survey

	Uni.	Mínimo		Máximo		2022												2023	
		Valor	Data	Valor	Data	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	
Indicador de confiança (a+b+c+d)/4	sre/ve	-47.8	Oct-12	-0.1	Sep-97	-14.5	-34.1	-32.9	-30.1	-32.5	-31.1	-31.1	-35.8	-38.6	-38.7	-37.1	-35.4	-32.5	
Situação económica do país nos próximos 12 meses (c)	sre/ve	-72.7	Apr-20	16.6	Jun-17	-12.0	-60.1	-53.1	-45.6	-50.2	-49.1	-47.9	-51.9	-60.2	-59.4	-52.4	-50.3	-41.8	
Situação financeira do agregado familiar nos últimos 12 meses (a)	sre/ve	-43.5	Mar-13	0.5	Aug-99	-14.6	-20.0	-24.7	-22.2	-23.3	-27.5	-26.0	-30.2	-32.2	-33.8	-32.3	-32.6	-30.6	
Situação financeira do agregado familiar nos próximos 12 meses (b)	sre/ve	-35.6	Oct-12	8.6	Feb-99	-1.7	-21.4	-19.0	-16.0	-18.8	-19.3	-17.9	-25.0	-28.0	-27.2	-23.8	-23.7	-19.1	
Realização de compras importantes nos próximos 12 meses (d)	sre/ve	-51.6	Apr-20	-6.4	Sep-97	-29.6	-35.1	-34.8	-36.5	-37.6	-28.4	-32.6	-36.1	-34.0	-34.2	-39.8	-34.8	-38.3	
Situação económica do país nos últimos 12 meses	sre/vcs	-77.1	Oct-12	20.1	Oct-17	-41.4	-53.2	-60.9	-61.3	-62.8	-65.5	-65.4	-71.8	-76.1	-76.5	-73.5	-75.1	-69.0	
Realização de compras importantes nos últimos 12 meses	sre/vcs	-88.1	Dec-08	-14.5	Sep-97	-57.0	-69.0	-72.5	-72.6	-75.8	-72.6	-75.9	-79.6	-80.5	-78.2	-80.7	-80.7	-81.0	
Poupança no momento atual	sre/ve	-55.1	Nov-22	-0.2	Sep-97	-31.8	-42.3	-47.0	-46.0	-45.8	-45.7	-46.6	-50.9	-49.8	-55.1	-54.4	-51.9	-52.9	
Poupança nos próximos 12 meses	sre/ve	-43.4	Nov-22	0.9	Oct-97	-22.2	-33.2	-34.5	-36.0	-33.9	-35.4	-31.7	-39.1	-41.0	-43.4	-42.6	-34.8	-38.3	
Desemprego próximos 12 meses	sre/ve	-20.0	Jun-17	85.5	Feb-09	4.6	26.7	30.4	24.0	24.0	21.4	22.9	28.3	34.6	42.8	38.0	36.1	33.1	
Preços nos últimos 12 meses	sre/ve	-14.6	Sep-09	87.0	Oct-22	59.9	61.8	74.7	76.8	79.2	83.1	83.1	83.2	87.0	86.2	83.9	85.3	83.4	
Preços próximos 12 meses	sre/vcs	-7.6	Dec-15	81.3	Mar-22	43.0	81.3	67.2	58.0	59.4	48.9	44.5	45.2	51.7	41.7	33.3	27.2	27.9	

Figure 14. Monthly series of Manufacturing Industry Survey

	Unit	Minimum		Maximum		2022												2023	
		Value	Date	Value	Date	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	
Confidence Indicator (a+b-c)/3	bal/sa	-38.6	May-20	19.4	Mar-87	2.5	-3.9	-1.1	-4.1	-3.6	-4.5	-6.1	-5.6	-7.3	-6.9	-6.6	-5.5	-3.0	
Consumer goods	bal/sa	-27.0	Apr-20	12.6	Jan-99	1.9	-3.0	-0.9	-0.6	-0.8	-1.0	-5.1	-4.1	-3.0	-5.1	-7.1	-5.3	-3.8	
Investment goods	bal/ev	-36.0	Apr-20	24.3	Feb-07	1.6	-8.2	-7.0	-8.1	-6.0	-6.1	0.7	-2.7	-3.5	-3.5	-2.2	-2.5	1.2	
Intermediate goods	bal/sa	-50.3	May-20	17.6	Jan-95	2.5	-1.5	1.8	-1.9	-3.7	-5.9	-8.5	-9.1	-13.6	-12.2	-9.7	-7.0	-5.2	
Current overall order books (a)	bal/ev	-70.2	May-20	14.6	Mar-98	-7.9	-9.6	-9.6	-13.4	-13.4	-13.4	-14.8	-13.3	-15.5	-16.0	-14.8	-15.0	-12.3	
Consumer goods	bal/ev	-60.9	May-20	6.1	Dec-17	-8.4	-8.8	-10.9	-10.3	-9.4	-8.7	-11.4	-8.3	-9.7	-10.8	-7.7	-15.3	-11.8	
Investment goods	bal/ev	-84.0	May-20	33.8	Jan-08	-13.5	-15.3	-18.1	-25.2	-19.8	-22.3	-9.6	-14.4	-11.8	-8.4	-8.2	-10.0	-7.4	
Intermediate goods	bal/ev	-72.4	Jun-20	33.8	Mar-98	-4.9	-7.5	-4.7	-10.1	-13.4	-12.7	-19.8	-16.5	-23.4	-23.1	-17.0	-15.0		
Production over next 3 months (b)	bal/sa	-52.3	Apr-20	34.8	Feb-87	13.5	-1.5	6.3	0.6	3.3	3.5	0.4	-1.1	-3.0	-0.3	-0.1	2.5	4.9	
Consumer goods	bal/sa	-47.8	Apr-20	39.5	Aug-98	13.6	0.6	8.8	10.2	7.5	8.0	0.8	-4.3	0.9	-1.2	-7.9	3.0	-0.2	
Investment goods	bal/ev	-44.9	Feb-09	50.6	Aug-00	17.3	-6.5	0.5	-0.1	3.9	7.0	12.7	9.3	3.4	-0.7	4.6	5.4	7.8	
Intermediate goods	bal/sa	-58.6	Apr-20	32.6	Jan-97	9.1	2.5	7.9	1.9	2.3	-0.4	-0.8	-6.7	-12.9	-6.5	-0.7	1.2	4.7	
Current stock finished products (c)	bal/ev	-17.6	Jan-08	22.5	Jun-93	-1.8	0.7	0.0	-0.6	0.6	3.5	3.9	2.4	3.4	4.4	5.0	4.1	1.5	
Consumer goods	bal/ev	-11.5	Jan-10	22.3	Aug-07	-0.4	0.9	0.7	1.9	0.6	2.3	4.7	-0.3	0.1	3.2	5.8	3.5	-0.6	
Investment goods	bal/ev	-37.9	Jan-09	22.4	Jun-10	-0.9	2.8	3.5	-0.9	1.9	2.9	0.9	2.8	2.2	1.5	2.9	2.9	-3.3	
Intermediate goods	bal/ev	-30.8	Jan-08	36.5	May-20	-3.4	-0.5	-2.3	-2.3	-0.1	4.7	4.7	4.2	6.4	6.6	5.4	5.1	5.4	
Firm's employment next 3 months	bal/ev	-28.4	Apr-20	13.0	Sep-17	8.8	6.7	6.2	6.8	4.8	5.9	6.4	3.3	2.1	11.6	11.2	4.9	5.1	
Selling prices next 3 months	bal/sa	-25.4	Apr-20	42.5	Apr-22	26.4	39.5	42.5	34.2	29.7	24.1	22.8	28.0	30.6	25.1	20.7	16.0	9.6	



Figure 15. Monthly series of Construction and Public Works Survey

	Unit	Minimum		Maximum		2022												2023	
		Value	Date	Value	Date	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	
Confidence Indicator (a+b)/2	bal/ev	-64.5	Oct-12	25.6	Sep-97	2.4	-0.5	-5.4	-2.9	-7.4	-3.5	-6.5	-4.4	-5.8	-5.3	-6.4	-3.6	-4.5	
Construction of buildings	bal/ev	-70.2	Feb-12	26.4	Sep-97	5.6	5.8	-3.1	-2.7	-7.3	-1.3	-4.3	-2.6	-2.6	-4.8	-7.5	-5.8	-7.5	
Civil engineering	bal/ev	-64.3	May-12	16.7	Jul-97	-0.2	-6.5	-11.8	-1.6	-10.4	-11.4	-17.1	-8.7	-14.4	-7.1	-8.1	0.8	-0.8	
Specialised construction activities	bal/ev	-57.7	Oct-12	8.2	Dec-18	-1.0	-6.5	-4.3	-4.2	-5.2	-1.2	-2.1	-4.2	-4.7	-4.6	-3.4	-3.1	-2.1	
Current overall order books (a)	bal/ev	-77.5	Oct-12	23.3	Sep-97	-9.3	-13.0	-16.7	-13.3	-16.6	-13.7	-14.7	-12.9	-13.5	-11.2	-14.1	-9.6	-14.6	
Construction of buildings	bal/ev	-85.6	Oct-12	22.1	Sep-97	-5.0	-6.5	-11.9	-10.0	-11.8	-10.3	-11.6	-8.5	-7.8	-10.1	-13.6	-10.0	-17.5	
Civil engineering	bal/ev	-71.5	Jul-12	12.1	Jul-97	-10.6	-21.6	-27.8	-17.4	-28.8	-30.1	-33.4	-26.0	-31.8	-13.2	-21.5	-12.0	-11.4	
Specialised construction activities	bal/ev	-73.3	Oct-12	2.1	Jul-19	-15.4	-17.3	-16.2	-15.7	-15.3	-6.9	-5.3	-10.2	-9.1	-11.5	-9.3	-7.1	-12.3	
Employment next 3 months (b)	bal/ev	-51.8	Jan-12	35.9	Jun-97	14.0	12.0	5.9	7.6	1.8	6.7	1.6	4.0	1.8	0.7	1.2	2.4	5.7	
Construction of buildings	bal/ev	-59.0	Jan-12	37.6	Jun-97	16.1	18.0	5.7	4.7	-2.8	7.8	3.0	3.2	2.6	0.5	-1.4	-1.7	2.6	
Civil engineering	bal/ev	-61.7	May-12	12.1	Jul-97	10.1	8.6	4.2	14.1	8.1	7.3	-0.9	8.7	3.0	-1.0	5.3	13.6	9.7	
Specialised construction activities	bal/ev	-43.6	Dec-12	16.3	Dec-18	13.4	4.3	7.6	7.4	4.8	4.4	1.2	1.7	-0.3	2.3	2.4	0.9	8.0	
Activity past 3 months	bal/ev	-65.5	Apr-12	26.7	May-98	4.5	3.8	3.2	2.8	-0.7	3.6	6.9	3.8	4.3	-0.3	-0.1	4.8	4.1	
Selling prices next 3 months	bal/ev	-29.3	Aug-12	43.0	Jun-22	35.4	42.4	41.9	40.0	43.0	39.2	39.2	40.0	39.8	39.7	31.3	33.5	30.2	

Figure 16. Monthly series of Trade Survey

	Unit	Minimum		Maximum		2022												2023	
		Value	Date	Value	Date	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	
Confidence indicator (a+b-c)/3	bal/sa	-29.1	Apr-20	11.7	Jun-98	5.5	4.4	4.6	2.0	3.1	2.3	1.4	1.7	0.0	0.8	1.2	3.2	6.0	
Wholesale	bal/sa	-29.5	May-20	13.1	Apr-98	5.9	5.5	5.8	-0.2	3.9	3.0	1.5	3.2	0.4	-0.1	0.3	2.6	4.5	
Retail	bal/sa	-31.0	Apr-20	13.1	Jul-98	4.5	3.3	1.9	6.1	2.8	1.7	2.4	0.1	-0.7	1.2	1.6	3.5	7.2	
Business activity past 3 months (a)	bal/sa	-55.3	Jun-20	16.4	Feb-89	6.7	8.9	12.1	4.8	8.1	4.1	-0.4	4.7	5.7	-0.3	5.1	10.9	15.0	
Wholesale	bal/sa	-57.5	Jun-20	19.3	Feb-89	11.8	14.6	16.7	2.4	11.2	6.8	0.9	11.9	12.0	1.5	5.9	12.6	14.3	
Retail	bal/sa	-58.5	Aug-12	19.2	Apr-99	0.1	2.4	5.7	9.4	5.3	1.3	0.7	-2.0	-1.4	-2.3	3.8	9.4	14.5	
Business activity next 3 months (b)	bal/sa	-52.1	Apr-20	40.2	Oct-89	5.4	-1.2	-1.8	-3.9	-2.6	-0.2	-0.4	-3.9	-7.3	1.1	-1.6	0.4	3.0	
Wholesale	bal/sa	-51.0	Apr-20	49.6	Oct-89	5.7	1.1	0.7	-2.9	1.1	5.3	2.6	-0.1	-6.3	2.8	0.1	1.7	3.7	
Retail	bal/sa	-55.1	Apr-20	40.8	Jul-94	5.2	-2.4	-7.0	-1.5	-5.2	-4.9	-2.8	-8.3	-8.5	-1.8	-4.2	-2.1	2.2	
Current volume of stocks (c)	bal/ev	-14.9	Feb-13	26.4	Jul-90	-4.2	-5.4	-3.5	-5.2	-3.8	-2.8	-5.0	-4.2	-1.6	-1.5	0.0	1.7	-0.1	
Wholesale	bal/ev	-15.3	Oct-12	28.2	Jul-90	-0.3	-0.9	0.1	0.0	0.6	3.0	-1.0	2.3	4.5	4.5	5.2	6.7	4.6	
Retail	bal/ev	-17.5	Feb-13	32.6	Jul-89	-8.2	-9.9	-7.0	-10.3	-8.3	-8.7	-9.1	-10.6	-7.8	-7.6	-5.2	-3.3	-4.8	
Orders next 3 months	bal/sa	-45.2	Apr-20	20.4	Aug-98	1.5	-0.5	-4.3	-2.3	-7.2	-2.4	-5.6	-5.8	-6.8	-3.3	-3.7	-2.9	-4.0	
Employment next 3 months	bal/ev	-29.2	Oct-12	22.8	Sep-97	3.5	0.1	1.6	3.2	1.8	4.0	0.8	0.4	0.8	0.1	0.7	0.1	0.1	
Selling prices past month	bal/sa	-11.7	Apr-09	41.0	Apr-22	28.0	39.1	41.0	35.1	38.4	31.0	25.4	33.6	39.1	32.6	26.1	23.2	22.9	
Selling prices next 3 months	bal/sa	-11.8	Jul-03	41.2	Mar-22	27.7	41.2	38.8	34.2	37.1	29.8	25.0	34.0	39.3	35.0	27.7	25.4	26.4	

Figure 17. Monthly series of Services Survey

	Unit	Minimum		Maximum		2022												2023	
		Value	Date	Value	Date	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	
Confidence indicator (a+b+c)/3	bal/sa	-56.0	May-20	29.5	Jun-01	14.7	19.8	22.7	22.6	22.7	16.1	18.0	9.2	6.1	7.4	3.9	7.0	19.9	
Business activity past 3 months (a)	bal/sa	-70.8	May-20	33.4	Jun-01	7.3	16.3	21.6	26.4	29.7	23.2	19.9	11.5	9.4	10.6	2.2	2.2	20.1	
Demand next 3 months (b)	bal/sa	-54.3	Apr-20	34.6	Jan-02	28.4	23.9	16.2	16.2	15.1	10.7	13.1	8.4	-2.3	6.5	7.9	16.6	20.6	
Demand past 3 months (c)	bal/sa	-70.3	May-20	30.3	Apr-22	8.4	19.3	30.3	25.1	23.2	14.5	20.9	7.9	11.1	5.1	1.6	2.0	18.9	
Employment next 3 months	bal/sa	-29.4	Apr-20	19.8	Aug-19	13.2	14.2	12.7	11.8	14.3	7.4	9.9	8.3	5.4	7.5	0.7	9.3	7.5	
Selling prices next 3 months	bal/sa	-23.4	Apr-20	25.0	Apr-22	18.5	24.2	25.0	19.8	23.8	20.4	13.4	15.8	14.3	16.8	20.0	23.0	19.9	



METHODOLOGICAL NOTE

The Business and Consumer Qualitative Surveys published by Statistics Portugal are developed in the framework of the harmonized EU 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

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 Balance = %answer(+) - %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 Balance = [%answer (++)*1+ %answer (+)*0.5] - [%answer (--)*1 +%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.

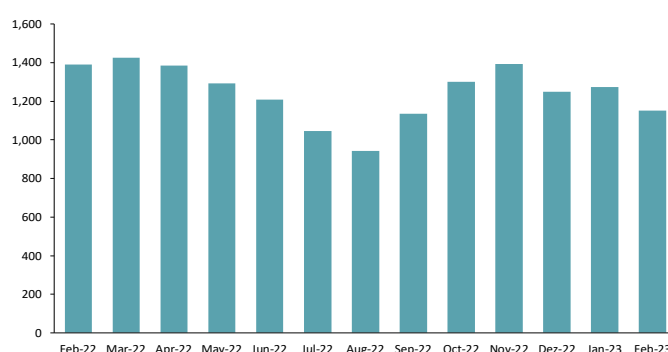


INFORMATION ON DATA COLLECTION

In the results obtained from business and consumer surveys for the collection of February 2023, the data collecting period occurred from 01 to 13 in the case of the consumer survey, with 1151 responses obtained (telephone interviews) and from 01 to 20 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 18. Consumer Survey - Number of responses by data collection's months



The response and weighted response rates for business surveys were:

Figure 19. Response and weighted response rates

Business Surveys	Response Rate				Weighted Response Rate ⁽²⁾			
	2022 ⁽¹⁾	December 2022	January 2023	February 2023	2022 ⁽¹⁾	December 2022	January 2023	February 2023
Manufacturing Industry	79.0%	79.2%	79.5%	76.4%	92.3%	92.3%	91.6%	88.3%
Construction and Public Works	71.7%	72.5%	72.4%	69.2%	87.8%	90.5%	89.2%	84.7%
Trade	76.6%	78.8%	77.3%	76.6%	93.5%	95.0%	92.0%	91.4%
Services	76.8%	77.1%	77.1%	75.4%	91.8%	95.3%	93.6%	94.4%

⁽¹⁾ Annual average.

⁽²⁾ 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 20. Manufacturing Industry Survey - Number of responses by data collection's months

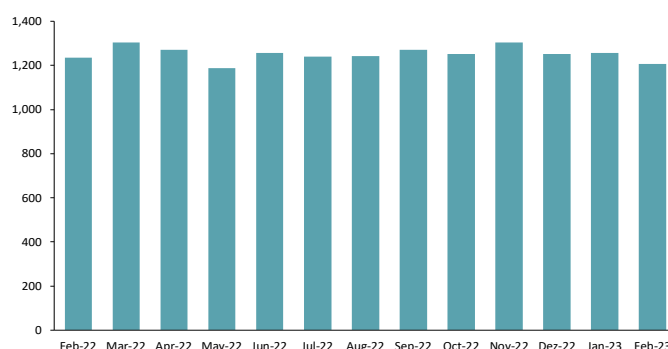




Figure 21. Construction and Public Works - Number of responses by data collection's months

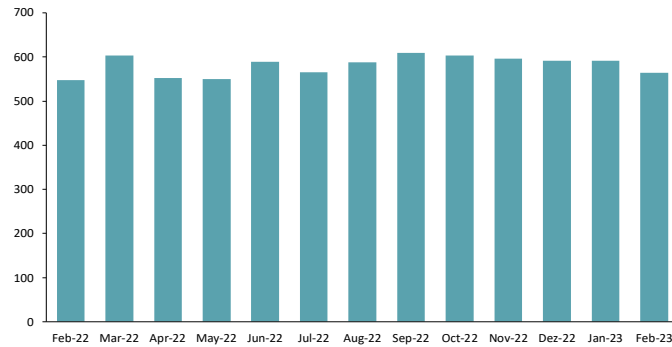


Figure 22. Trade Survey - Number of responses by data collection's months

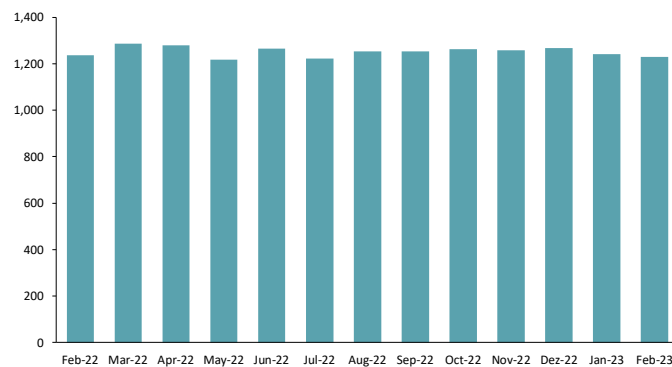
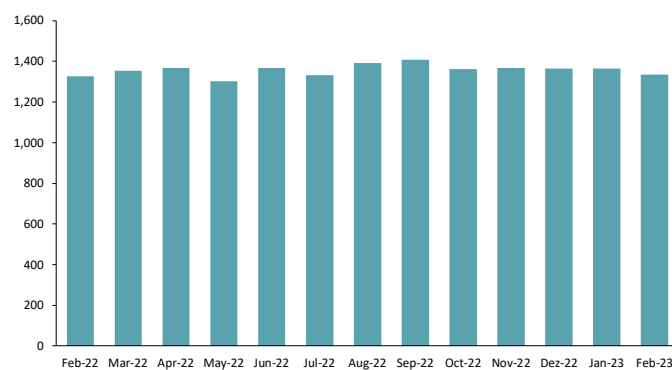


Figure 23. Services Survey - Number of responses by data collection's months





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:

Figure 24. 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	
	2019	2020
Manufacturing Industry	13.7%	13.8%
Construction and Public Works	4.4%	4.7%
Trade	13.3%	13.1%
Services	38.1%	35.8%

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

Next monthly press release – March 30th, 2023
