

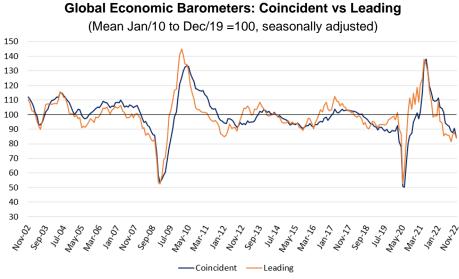


Press Release

Rio de Janeiro and Zurich, November 10, 2022, 10 am (local time) - 1 pm (UTC).

Global Barometers continue to signal a slowdown of the world economy for the coming months

The Global Barometers fall once again in November after a slight improvement in the previous month. With the results, the Coincident Barometer reaches its lowest level since August 2020 and the Leading Barometer is the second lowest since June 2020, beating only the level of last August.



Source: KOF ETH Zurich and FGV IBRE

The <u>Coincident</u> Global Economic Barometer falls 6.5 points and the <u>Leading</u> Global Economic Barometer 3.4 points in November. With this result, the two indicators are getting closer to each other, recording 84.1 points and 84.2 points, respectively. The drop in the indicators is fuelled mainly by the *Asia, Pacific & Africa* region. Only the Leading indicator for *Europe* records a slight improvement this month.

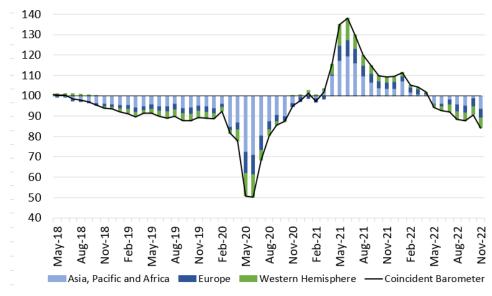
"The decline in both the coincident and leading indicators for the global economy this month shows that the trough of this cycle is still ahead of us. However, the fact that the two indicators have reached almost the same (low) level could also be taken as a sign that this trough is not far off and, fortunately, will probably not be as low as during the financial crisis or the first wave of the pandemic. Nevertheless, the world economy is in a recessionary phase, which, at least in Europe, is mainly caused by an energy crisis triggered by the war in Ukraine", evaluates KOF Director Jan-Egbert Sturm.

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Coincident Barometer - regions and sectors

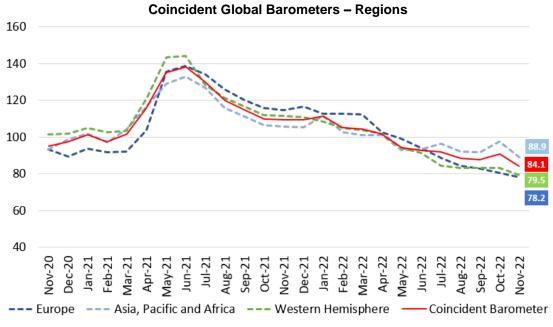
In November, the *Asia, Pacific & Africa* region contributes 5.2 points to the decrease in the Coincident indicator, while the *Western Hemisphere* and *Europe* regions contribute -0.9 points and -0.4 points, respectively. The regional indicator for *Europe* has now recorded a sequence of eleven consecutive decreases and is at the lowest level among the regions. The macroeconomic situation for 2022, with the war in Ukraine and its consequences, such as the energy supply crisis in European countries, continue to define the adverse framework of the region. The graph below illustrates the contribution of each region to the deviation of the Coincident Barometer from the historical mean of 100 points.





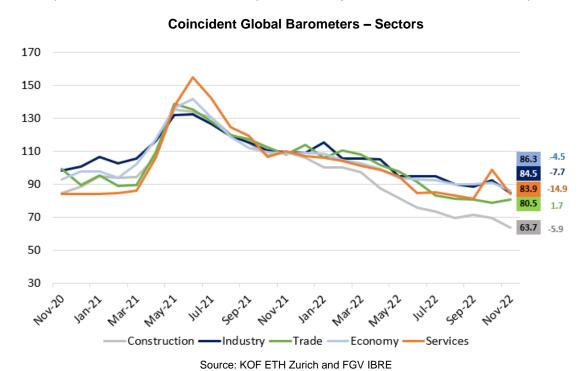
Source: KOF ETH Zurich and FGV IBRE

Regional Contributions to Changes in the Coincident Barometer					
	Contr	ibutions per Re	Monthly Variation		
Period	Asia, Pacific and Africa	Europe	Western Hemisphere	Coincident Barometer	
Worst pandemic moment: Cum. Contrib. Mar/20-May/20	-23.8	-8.4	-9.3	-41.5	
Cum. Contrib. Jun/20-Nov/21	31.3	13.2	13.9	58.4	
Dec-21	-0.1	0.4	-0.2	0.2	
Jan-22	3.7	-0.9	-0.7	2.1	
Feb-22	-5.5	0.0	-0.8	-6.3	
Mar-22	-0.7	-0.1	-0.2	-1.0	
Apr-22	-0.1	-1.9	-0.5	-2.5	
May-22	-4.8	-0.8	-1.8	-7.4	
Jun-22	0.0	-0.9	-0.7	-1.6	
Jul-22	2.0	-1.2	-1.6	-0.8	
Aug-22	-2.5	-0.8	-0.3	-3.6	
Sep-22	-0.4	-0.3	0.0	-0.7	
Oct-22	3.6	-0.5	-0.1	3.0	
Nov-22	-5.2	-0.4	-0.9	-6.5	
Cum. Contrib. Last 12 months	-10.0	-7.4	-7.8	-25.1	
Cum. Contrib. Mar/20-Nov/22	-2.5	-2.6	-3.2	-8.2	



Source: KOF ETH Zurich and FGV IBRE

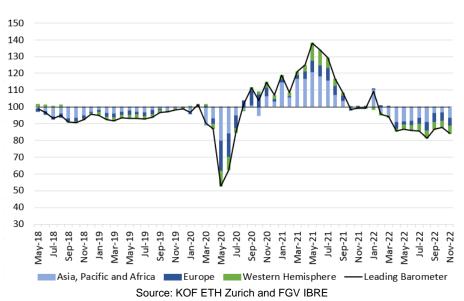
Among the <u>coincident sector indicators</u>, only *Trade* increases this month. The *Services* indicator drops almost 15 points and *Industry* almost 8.0 points. With this result, the indicator for the general state of the *Economy* (aggregated business and consumer evaluations), *Industry*, *Services*, and *Trade* are in the 80-90-point band, while *Construction* drops further away from the historic mean of 100 points.



Leading Barometer – regions and sectors

The Leading Global Barometer leads the world economic growth rate cycle by three to six months on average. In November, the *Asia, Pacific & Africa* region and the *Western Hemisphere* contribute negatively to the fall in the indicator, with -3.1 points and -0.8 points, respectively, while *Europe* contributes to a movement in the opposite direction with 0.5 points. The indicators portray a scenario that remains pessimistic for these economies for the coming months, fluctuating in the 80-90-point band since April of this year.



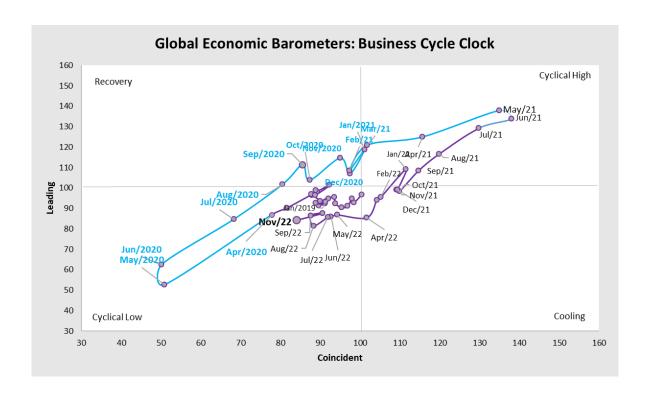


Regional Contributions to Changes in the Leading Barometer				
	Contributions per Regions			Monthly Variation
Period	Asia, Pacific and Africa	Europe	Western Hemisphere	Leading Barometer
Worst pandemic moment: Cum. Contrib. Mar/20-May/20	-20.6	-18.7	-9.5	-48.8
Cum. Contrib. Jun/20-Nov/21	20.0	18.0	8.5	46.5
Dec-21	0.2	0.1	-0.4	-0.1
Jan-22	10.7	0.2	-0.8	10.1
Feb-22	-14.0	0.3	0.1	-13.7
Mar-22	-1.8	-0.1	0.4	-1.4
Apr-22	-3.8	-4.8	-0.2	-8.7
May-22	0.3	2.2	-1.1	1.4
Jun-22	0.4	-0.6	-0.6	-0.9
Jul-22	1.5	-0.9	-0.7	-0.2
Aug-22	-2.2	-1.8	-0.3	-4.3
Sep-22	5.1	0.1	-0.2	5.1
Oct-22	0.5	0.0	0.6	1.1
Nov-22	-3.1	0.5	-0.8	-3.4
Cum. Contrib. Last 12 months	-6.2	-4.8	-4.0	-15.0
Cum. Contrib. Mar/20-Nov/22	-6.8	-5.5	-5.0	-17.3



Among the <u>Leading indicator sectors</u>, only the general state of the Economy (aggregated business and consumer evaluations) does not fall in November. The *Trade* indicator remains at the lowest level among the sectors and *Construction* at the highest.

Sectoral Leading Indicators					
Period	Construction	Economy	Industry	Trade	Services
Feb-20	97.6	102.2	100.5	104.5	105.7
Mar-20	104.3	80.0	90.6	106.9	102.6
Apr-20	91.7	84.7	91.2	73.2	79.6
May-20	62.8	65.3	53.2	54.5	25.7
Worst pandemic moment: Cum. Variation. Mar/20-May/20	-34.8	-36.9	-47.3	-50.1	-80.1
Cum. Variation Jun/20-Nov/21	38.6	30.3	43.5	54.3	90.5
Dec-21	107.5	94.2	97.3	112.5	110.0
Jan-22	98.4	91.8	120.7	99.1	106.6
Feb-22	97.4	98.1	92.0	101.8	104.1
Mar-22	93.6	91.8	94.7	91.3	102.6
Apr-22	91.7	82.9	84.3	100.6	91.8
May-22	98.3	77.9	87.4	96.1	101.2
Jun-22	88.8	85.1	86.6	87.3	87.4
Jul-22	80.3	87.3	87.8	76.7	85.3
Aug-22	76.7	84.5	82.6	85.5	75.6
Sep-22	82.2	90.8	87.1	85.2	81.4
Oct-22	92.4	83.8	91.8	80.1	82.5
Nov-22	89.2	84.5	85.9	78.5	80.4
Cum. Variation Last 12 months	-12.2	-11.1	-10.8	-30.3	-35.8
Cum. Variation Mar/20-Nov/22	-8.4	-17.7	-14.6	-26.0	-25.3



	Global Coincident Barometer Vintages		Global Leading Barometer Vintages		
Period	November 2022	October 2022	November 2022	October 2022	
Nov-21	109.2	109.1	99.2	99.1	
Dec-21	109.4	109.0	99.1	99.3	
Jan-22	111.5	111.2	109.2	109.7	
Feb-22	105.2	105.2	95.5	95.6	
Mar-22	104.2	104.0	94.1	94.6	
Apr-22	101.7	101.6	85.4	85.8	
May-22	94.3	94.3	86.8	86.6	
Jun-22	92.7	92.8	85.9	86.0	
Jul-22	91.9	92.0	85.7	86.0	
Aug-22	88.3	87.9	81.4	79.6	
Sep-22	87.6	87.3	86.5	84.5	
Oct-22	90.6	90.3	87.6	86.0	
Nov-22	84.1		84.2		

^{*}The Global Barometer series are revised monthly to reflect updates in the component series and revision of the seasonal adjustment.

The Global Economic Barometers

The Global Economic Barometers are a system of indicators enabling timely analysis of global economic development. They represent a collaboration between the KOF Swiss Economic Institute of the ETH Zurich in Switzerland and Fundação Getulio Vargas (FGV), based in Rio de Janeiro, Brazil. The system consists of two composite indicators, the Coincident Barometer and the Leading Barometer. The Coincident Barometer reflects the current state of economic activity, while the Leading Barometer provides a cyclical signal roughly six months ahead of current economic developments.

The two Barometers comprise the results of economic tendency surveys conducted in more than 50 countries with the aim of achieving the broadest possible global coverage. The advantages of economic tendency surveys are that their results are usually readily available and are not substantially revised after first publication.

The Coincident Barometer includes more than 1,000 different time series, while the Leading Barometer consists of over 600 time series. Cross-correlation analysis is used to decide which individual time series are included in the barometers. This involves correlating the individual time series with a reference series. The reference series used is the year-on-year growth rate of global gross domestic product (GDP), in which individual national GDPs are aggregated at purchasing power parity to form global GDP. A time series is only included in a Barometer if it shows a sufficiently high correlation and a suitable synchronization or lead with the reference series.

The series of the two Barometers are revised each month at publication and are standardized to have a mean of 100 and a standard deviation of 10 for the 10-year period previous to the most recent observations. The coefficients of the component series of the Global Barometers have remained stable since the April 2020 edition.

More information on the Global Economic Barometers is available on the KOF website:

https://kof.ethz.ch/prognosen-indikatoren/indikatoren/kof-globalbaro.html >

The Global Barometers methodology is described in Klaus Abberger, Michael Graff, Aloisio Campelo Jr, Anna Carolina Lemos Gouveia, Oliver Müller and Jan-Egbert Sturm (2020), The Global Economic Barometers: Composite indicators for the world economy. KOF Working Papers, vol. 471, Zurich: KOF Swiss Economic Institute, ETH Zurich, 2020.

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