



Air Cargo Market Analysis

June 2023

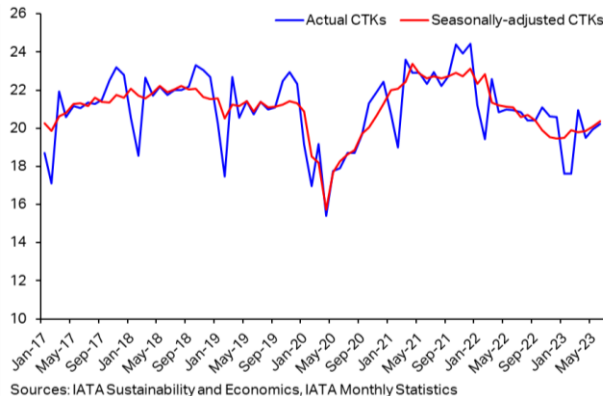
Air cargo records the smallest contraction since Feb 2022

- Global air cargo demand fell by 3.4% year-on-year in June, the smallest decline since February 2022. Year-to-date cargo tonne-kilometers (CTKs) were 8.1% below last year's level.
- Air cargo capacity, measured in available cargo tonne-kilometers (ACTKs), saw a slower annual growth of 9.7% in June, compared to double-digit growth between March and May. Year-to-date ACTKs exceeded 2022 levels by 9.9%.
- Leading indicators of air cargo demand, including global goods trade, manufacturing PMIs, and inventory-to-sales ratio, continued to point to contractions. However, improvements in inflation in major economies could provide a tailwind to the global economy and air cargo demand.
- Major trade lanes including Europe-North America and Asia-North America experienced smaller annual contractions in international air cargo demand in June, improving by 2.1 percentage points compared to May.

June recorded the smallest annual decline in global CTKs since February 2022

Industry air cargo demand, measured by cargo tonne-kilometers (CTKs), registered 20.2 billion in June and was 3.4% lower than the same month in 2022. This was the smallest annual decline since February 2022 (**Chart 1**). In comparison to June 2019 levels, industry CTKs contracted by 2.4%, which is a 4.4 percentage point (ppt) improvement from the May level. Seasonally adjusted (SA) CTKs also recorded a 3.4% annual decline in June, improving by 1.6 ppts compared to the previous month.

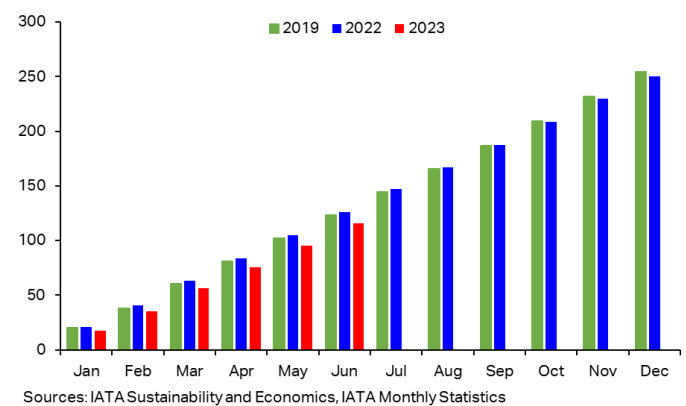
Chart 1 – Global CTKs (billions per month)



The year-on-year (YoY) contractions of global CTKs have been continuously improving over the past six months. As a result, the year-to-date (YTD) CTKs reached 115.8 billion in June, and the gap with the

2022 YTD CTK levels narrowed from -16.8% in January to -8.1% this month (**Chart 2**).

Chart 2 – Year-to-date monthly industry CTKs, billions



Air cargo capacity growth slowed in June

Industry-wide available cargo tonne-kilometers (ACTKs) stood at 46.8 billion this month, exceeding the 2022 level by 9.7% and growing 3.7% above the same month in 2019. Although air cargo capacity continued to increase in June, the annual growth rate slowed to 9.7% this month compared to the double-digit growth observed between March and May. This slowdown reflects the strategic capacity adjustments airlines are making amid a weakened demand environment. SA ACTKs grew by 10.4% YoY and were also 3.9% above the 2019 levels (**Chart 3**).

Air cargo market overview - June 2023

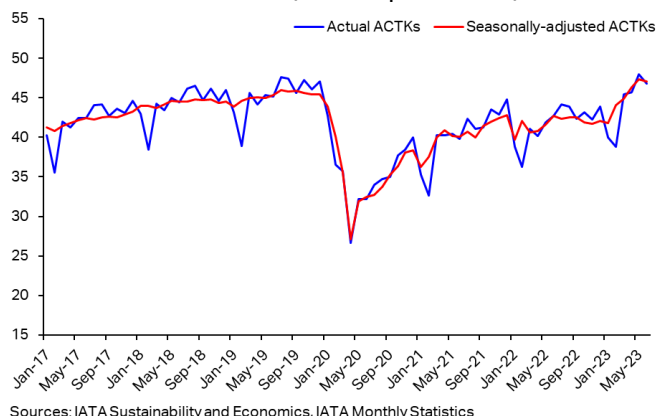
	World share ¹	June 2023 (% year-on-year)				June 2023 (% ch vs the same month in 2019)			
		CTK	ACTK	CLF (%-pt) ²	CLF (level) ³	CTK	ACTK	CLF (%-pt) ²	CLF (level) ³
TOTAL MARKET	100.0%	-3.4%	9.7%	-5.8%	43.2%	-2.4%	3.7%	-5.7%	43.2%
International	86.9%	-3.7%	7.7%	-5.8%	48.6%	-3.2%	0.9%	-4.5%	48.6%

¹% of industry CTKs in 2022

²Change in load factor

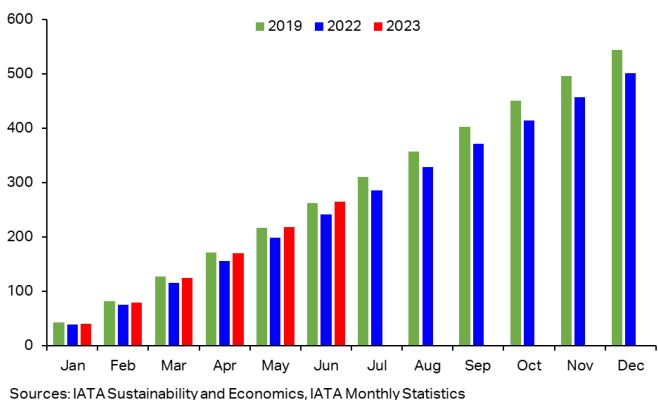
³Load factor level

Chart 3 – Global ACTKs (billions per month)



Despite the slower growth in capacity this month, YTD ACTKs through June have already surpassed their 2022 levels by 9.9%, reaching 264.7 billion. This level of YTD capacity was also slightly (0.9%) above the pre-pandemic levels in 2019 (**Chart 4**). Given the current softening of air cargo demand, it is expected that the growth of YTD air cargo capacity will continue to slow down in the coming months.

Chart 4 – Year-to-date monthly industry ACTKs, billions



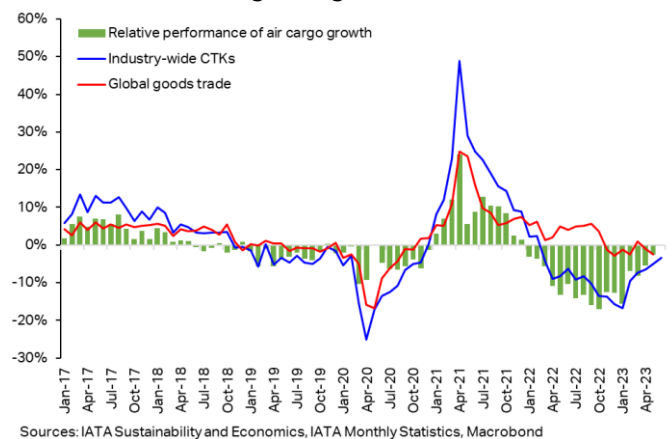
Relative performance of air cargo growth improved while global goods trade softened

Global cross-border trade continued to decline by 2.4% in May, reflecting the cooling demand environment and challenging macroeconomic conditions. The relative performance of air cargo growth, measured by the difference between the growth in global goods trade and industry CTKs, narrowed to -2.6 ppts in May, the smallest gap since January 2022. However, this gap still indicates that air cargo is being more affected by the slowdown in global trade compared to container cargo (**Chart 5**).

The weaker performance in global air cargo demand compared to maritime shipping in part reflects the trends in the relative pricing between the two modes. Container yields in May declined by 82.5% YoY and were only 13.3% higher than their 2019 levels. In comparison, air cargo yields declined by 38.3% YoY

over the same period and remained 39.5% higher than their 2019 levels.

Chart 5 – Growth in global goods trade and CTKs (YoY)

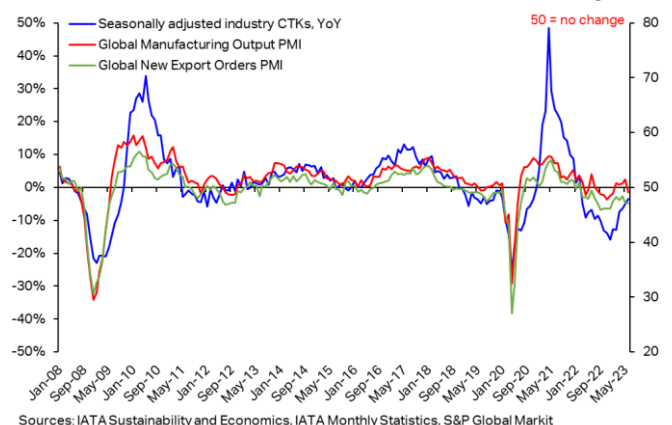


Both manufacturing output and new export orders experienced contractions in June

The manufacturing Purchasing Managers Index (PMI) has historically served as a useful indicator of growth in global air cargo demand. Therefore, we have been closely monitoring the manufacturing PMIs at a global level (**Chart 6**) and for major economies (**Chart 7**).

In June, both manufacturing output PMI (49.2) and new export orders PMI (47.1) were below the critical threshold represented by the 50 mark, indicating a decline in global manufacturing production and exports (**Chart 6**). Notably, the manufacturing output PMI saw a 2.3 ppt decline compared to May, as companies reduced production due to limited global demand.

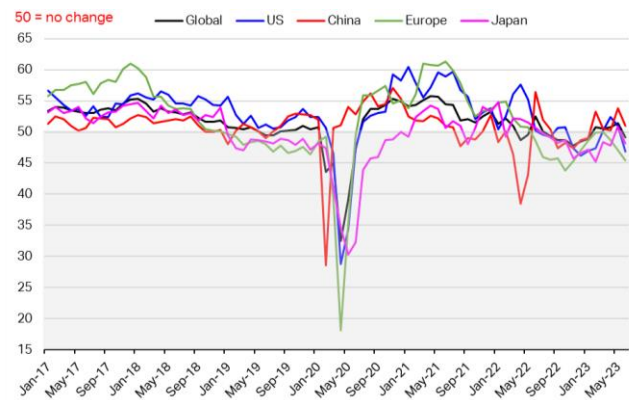
Chart 6 – CTK (SA) growth and global manufacturing output and new export order PMIs (50 = no change)



The sharp contraction of global manufacturing output PMIs was also reflected by the downward trends observed in major economies (**Chart 7**). In June, China was the only major economy that kept the manufacturing output PMI above the 50 mark, at 51.0. However, this was still 2.9 ppts lower than its May level. In contrast, the US and Japan both saw their manufacturing output PMIs change from an expansion

in May to a deterioration in June, down to 46.9 and 48.1, respectively. The contraction of manufacturing output in Europe worsened in June, with the region's PMI dropping to 45.4, from 47.0 in May. The declines in manufacturing output and export orders in large part explain the current weak demand for air cargo.

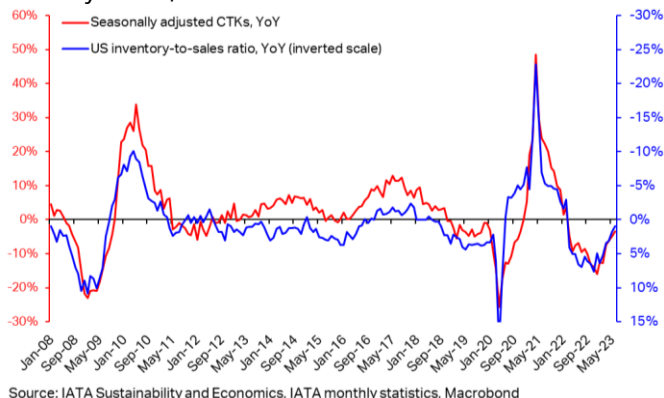
Chart 7 – Global manufacturing output, component of the manufacturing PMI (50 = no change)



Inventory-to-sales ratio also pointed to weak global demand

The inventory-to-sales ratio (inverted) is historically strongly correlated with industry CTK growth rates and can provide more perspective on the weak demand for air cargo (Chart 8). A higher inventory-to-sales ratio indicates either excess stock due to supply chain challenges or insufficient product demand. On the other hand, when the ratio declines, it suggests an impending upturn in demand, and shippers may need to rely on air transportation to expedite the refill of inventory to avoid shortages.

Chart 8 – Growth in inventory-to-sales ratio and industry CTKs, YoY



In March and April 2020, the inventory-to-sales ratio surged by almost 20% due to the Covid-19 lockdowns and supply chain congestion. Subsequently, the ratio dropped significantly in 2021, resulting in a boost in air cargo demand to historically high levels. Starting from March 2022, inventories have been elevated again. However, unlike the lockdown period, there is sufficient air

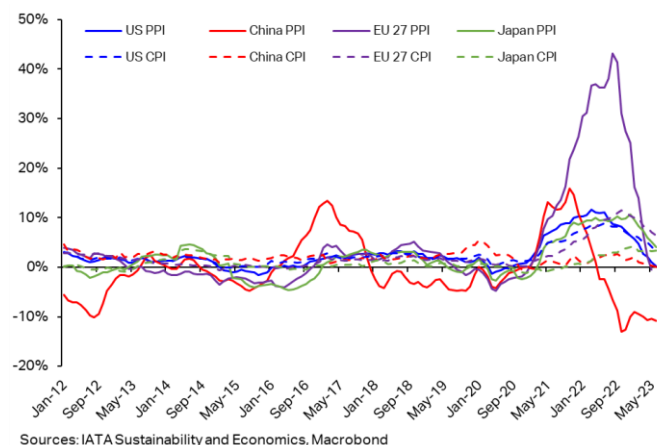
cargo capacity this time. Thus, the high inventory-to-sales ratio likely reflects the weakened demand for products and a lower level of sales. The growth of the ratio, however, has been continuously slowing down since February 2023.

Inflation continued to ease in major economies

Major economies experienced decelerating inflation rates in June. The YoY change in the headline Consumer Price Index (CPI) stood at 3.1% in the US, 0.1% in China, 3.3% in Japan and in 6.4% the EU 27 countries (Chart 9). Compared with the previous month, the CPI increased by 0.1 pts in Japan, while it declined by 1.0 ppt in the US, 0.2 pts in China and 0.7 pts in the EU 27 countries. The slowdown in inflation can be attributed to the tightened monetary policies implemented by central banks and the recent declines in both food and non-food commodity prices. While inflation in the US is approaching pre-pandemic rates, the EU 27 countries still suffer from relatively high inflation rates compared to other major economies.

Changes in producer prices in June, as measured by the Producer Price Index (PPI), were recorded at 0.2% in the US, 4.1% in Japan, and -10.8% in China. June PPI data for EU 27 countries has not been released yet, but it was -0.5% in May and 2.1% in April. China's PPI remained in negative territory, partially due to a higher base in 2022 when global commodity prices surged following the war in Ukraine. However, it also reflects the challenge for China to revive demand following the zero-Covid restrictions.

Chart 9 – Headline CPI and PPI inflation (YoY) in major economies



International air cargo demand improved on major trade lanes

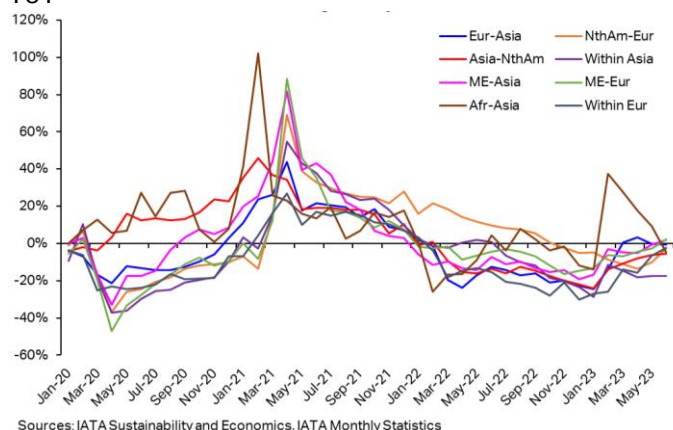
In June, there were several positive developments in international air cargo demand on major trade lanes (Chart 10). Route areas connecting Middle East-Asia and Middle East-Europe saw YoY growths, with their CTKs increasing by 1.8% and 2.1%, respectively. Moreover, annual contractions of international CTKs in Europe-North America and Asia-North America

markets both improved. Specifically, **Europe-North America** CTKs only contracted by 2.7% in June, a significant improvement compared to the double-digit declines seen in the previous three months. The **Asia-North America** trade lane also continued to see smaller annual declines, with a contraction of 5.4% in June, showing improvement from the sharp 24.2% decline seen in January.

Within Europe, trade lanes registered a 2.2% decline in June, which is the smallest annual contraction for this market in three years. In contrast, the **within Asia** market remained weak this month, with an annual decline of 17.4%, similar to the drop in May.

The international CTKs on the **Africa-Asia** trade lane contracted by 4.9% YoY, which contrasts sharply with the strong growth of 18%-37% observed between February and April, albeit from a relatively low base in 2022.

Chart 10 –International CTK growth by route area, YoY



International CTKs by Latin America and Middle East airlines grew, while demand also improved in North America and Europe

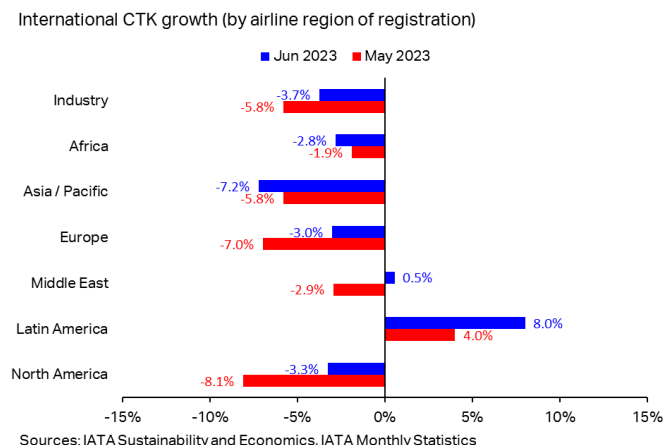
In June, international CTKs contracted by 3.7% YoY globally. However, this marked an improvement of 2.1 ppts from the decline seen in May. The smaller annual decline was driven by the CTK growth achieved by airlines in **Latin America** (8.0% in June vs. 4.0% in May) and **Middle East** (0.5% in June vs. -2.9% in May), along with improved performance by airlines based in **North America** and **Europe** (**Chart 11**).

The positive development in air cargo demand on the **Europe-North America** trade lane (**Chart 10**) had an impact on **North America** airlines, which experienced a 3.3% annual decline in June, much smaller than the 8.1% contraction in May. **European** airlines also benefited from this trend, seeing a 3.0% decline in June compared to a 7.0% annual drop in the previous month.

In contrast, the performance of international cargo demand for **Asia Pacific** and **Africa** airlines continued

to deteriorate in June. **Asia Pacific** carriers registered the largest annual decline among the regions at 7.2% YoY in June, compared to the 5.8% annual contraction in May. This decline was mainly due to the weak demand of the **within Asia** market. International CTKs for **African** airlines also declined further, from -1.9% YoY in May to -2.8% in June, largely affected by the worsening situation on the **Africa-Asia** trade lane.

Chart 11 – Growth in international CTKs by airline region of registration (YoY)



Sources: IATA Sustainability and Economics, IATA Monthly Statistics

Air cargo market in detail - June 2023

	World share ¹	June 2023 (% year-on-year)				June 2023 (% ch vs the same month in 2019)			
		CTK	ACTK	CLF (%-pt) ²	CLF (level) ³	CTK	ACTK	CLF (%-pt) ²	CLF (level) ³
TOTAL MARKET	100.0%	-3.4%	9.7%	-5.8%	43.2%	-2.4%	3.7%	-2.7%	43.2%
Africa	2.0%	-2.8%	-3.7%	0.4%	44.6%	5.3%	-20.3%	10.8%	44.6%
Asia Pacific	32.4%	-3.6%	24.4%	-13.6%	46.8%	-6.1%	5.5%	-5.8%	46.8%
Europe	21.8%	-2.8%	4.4%	-3.5%	47.6%	-12.9%	-8.7%	-2.3%	47.6%
Latin America	2.7%	7.3%	15.4%	-2.5%	33.7%	3.8%	12.7%	-2.9%	33.7%
Middle East	13.0%	0.5%	11.1%	-4.7%	44.6%	5.2%	6.6%	-0.6%	44.6%
North America	28.1%	-6.5%	0.7%	-2.9%	37.4%	8.1%	10.5%	-0.8%	37.4%
International	86.9%	-3.7%	7.7%	-5.8%	48.6%	-3.2%	0.9%	-2.1%	48.6%
Africa	2.0%	-2.8%	-3.6%	0.4%	45.4%	6.5%	-19.1%	10.9%	45.4%
Asia Pacific	29.7%	-7.2%	12.8%	-11.6%	54.0%	-6.8%	1.3%	-4.7%	54.0%
Europe	21.5%	-3.0%	4.5%	-3.9%	50.0%	-13.2%	-9.9%	-1.9%	50.0%
Latin America	2.3%	8.0%	19.5%	-4.0%	37.9%	6.7%	23.5%	-6.0%	37.9%
Middle East	13.0%	0.5%	11.2%	-4.8%	44.9%	5.2%	6.7%	-0.6%	44.9%
North America	18.4%	-3.3%	2.1%	-2.5%	44.6%	9.4%	9.0%	0.1%	44.6%

Air cargo market in detail - June 2023 Year-to-date

	World share ¹	Year-to-date (% ch vs the same period in 2022)				Year-to-date (% ch vs the same period in 2019)			
		CTK	ACTK	CLF (%-pt) ²	CLF (level) ³	CTK	ACTK	CLF (%-pt) ²	CLF (level) ³
TOTAL MARKET	100.0%	-8.1%	9.9%	-8.5%	43.8%	-5.9%	0.9%	-3.2%	43.8%
Africa	2.0%	-4.4%	1.6%	-2.9%	45.9%	10.0%	-11.4%	8.9%	45.9%
Asia Pacific	32.4%	-6.5%	27.0%	-16.2%	45.1%	-9.7%	3.3%	-6.5%	45.1%
Europe	21.8%	-10.2%	2.5%	-7.4%	52.3%	-14.2%	-14.8%	0.4%	52.3%
Latin America	2.7%	0.9%	18.0%	-5.9%	34.7%	-1.9%	-2.2%	0.1%	34.7%
Middle East	13.0%	-5.6%	11.2%	-7.7%	43.3%	-3.8%	3.8%	-3.4%	43.3%
North America	28.1%	-10.5%	-0.7%	-4.2%	38.5%	4.7%	10.3%	-2.1%	38.5%
International	86.9%	-8.7%	7.4%	-8.8%	50.1%	-6.3%	3.0%	-1.7%	50.1%
Africa	2.0%	-4.6%	1.0%	-2.7%	47.0%	11.1%	-10.4%	9.1%	47.0%
Asia Pacific	29.7%	-8.8%	14.2%	-13.8%	54.8%	-8.1%	-2.7%	-3.2%	54.8%
Europe	21.5%	-10.5%	2.1%	-7.6%	54.3%	-14.6%	-15.6%	0.6%	54.3%
Latin America	2.3%	1.3%	22.9%	-8.5%	39.8%	-0.1%	5.5%	-2.2%	39.8%
Middle East	13.0%	-5.5%	11.3%	-7.8%	43.6%	-3.7%	4.3%	-3.6%	43.6%
North America	18.4%	-10.1%	0.2%	-5.3%	46.3%	4.4%	6.3%	-0.8%	46.3%

¹% of industry CTKs in 2022

²Change in load factor

³Load factor level

Note: the total industry and regional growth rates are based on a constant sample of airlines combining reported data and estimates for missing observations. Airline traffic is allocated according to the region in which the carrier is registered; it should not be considered as regional traffic. Historical statistics are subject to revision.

IATA Sustainability & Economics

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