

Operating and Financial Review

The following discussion should be considered together with our unaudited financial information included with this review and the periodic reports we file with the Securities and Exchange Commission, including the section contained in our Annual Report on Form 20-F for the fiscal year ended December 31, 2022, “Item 5. Operating and Financial Review and Prospects.” Certain information and disclosures normally included in consolidated financial statements prepared in accordance with U.S. Generally Accepted Accounting Principles (“U.S. GAAP”) have been omitted from this review.

As used herein, references to “we,” “us,” the “company,” or “trivago,” or similar terms shall mean trivago N.V. and, as the context requires, its subsidiaries.

Overview

trivago is a global hotel and accommodation search platform. We are focused on reshaping the way travelers search for and compare different types of accommodations, such as hotels, vacation rentals and apartments, while enabling our advertisers to grow their businesses by providing them with access to a broad audience of travelers via our websites and apps. Our platform allows travelers to make informed decisions by personalizing their search for accommodations and providing them with access to a deep supply of relevant information and prices. As of June 30, 2023, we offered access to more than 5.0 million hotels and other types of accommodation in over 190 countries, including over 3.8 million units of alternative accommodation, such as vacation rentals and apartments.

Our search platform forms the core of our user experience and can be accessed globally via 53 localized websites and apps available in 31 languages. Our users initially search via a text-based search function, which supports searches across a broad range of criteria. This leads through to a listings page that displays search results and allows for further refinement based on more nuanced filters. Additionally, we enhance our users’ experience by giving them the option to display their search results in listing or map formats. Users can search our platform on desktop and mobile devices, and benefit from a familiar user interface, resulting in a consistent user experience.

Financial Summary & Operating Metrics (€ millions, unless otherwise stated)

	Three months ended June 30,			Six months ended June 30,		
	2023	2022	Δ Y/Y	2023	2022	Δ Y/Y
Total revenue	124.4	144.8	(14)%	235.5	246.4	(4)%
Referral Revenue	122.6	141.4	(13)%	231.9	239.9	(3)%
Return on Advertising Spend	144.6%	165.9%	(21.3) ppts	154.9%	172.8%	(17.9) ppts
Net income/(loss)	5.8	(59.8)	n.m.	15.7	(70.5)	n.m.
Adjusted EBITDA ⁽¹⁾	12.2	30.3	(60)%	30.7	51.4	(40)%

n.m. not meaningful

⁽¹⁾ “Adjusted EBITDA” is a non-GAAP measure. Please see “Definitions of Non-GAAP Measures” and “Tabular Reconciliations for Non-GAAP Measures” on pages 13 to 14 herein for explanations and reconciliations of non-GAAP measures used throughout this review.

Recent Trends

In the second quarter of 2023, total revenue decreased by €20.4 million, or by 14%, to €124.4 million compared to the same period in 2022, while our improved profitability was primarily driven by the non-recurrence of an impairment charge of €84.2 million recorded in the second quarter of 2022. We observed a seasonal pattern in bidding dynamics in line with periods prior to the COVID-19 pandemic, with the seasonal uptick in monetization in our auction having occurred later and having been of a lower magnitude than in the same period in 2022, but broadly similar to periods prior to 2020. Lower monetization, shorter length of users' booked stays and foreign exchange rate effects, all negatively impacted our financial performance, more than offsetting the positive impact of increased average booking values¹, mainly driven by higher average daily hotel rates and increased booking conversion. In addition, we observed increased volatility in the results of our performance marketing campaigns. As we continued to be disciplined with Return on Advertising Spend (ROAS) targets, we experienced significant declines in performance marketing traffic volumes coupled with decreases in profit contribution.

Despite these headwinds, we ramped up our brand marketing investments as planned. While these expenditures had a negative impact on our profitability in the second quarter of 2023, we believe they will have a long-term positive impact on the volume of direct traffic to our platform and our financial performance.

Revenue

Referral Revenue & Other Revenue

We match our users' searches with large numbers of hotel and other accommodation offers through our auction platform, which we call our marketplace. With our marketplace, we provide advertisers a competitive forum to access user traffic by facilitating a vast quantity of auctions on any particular day. Advertisers submit hotel room and other accommodation rates and participate in our marketplace primarily by making bids for each user click on an advertised rate for a hotel or other accommodation on a cost-per-click, or CPC, basis. We also offer the option for our advertisers to participate in our marketplace on a cost-per-acquisition, or CPA, basis.

We earn substantially all of our revenue when users of our websites and apps click on hotel and accommodation offers or advertisements in our search results and are referred to one of our advertisers. We call this our Referral Revenue.

Management has identified three reportable segments, which correspond to our three operating segments: Americas, Developed Europe and Rest of World (RoW). Our Americas segment is comprised of Argentina, Brazil, Canada, Chile, Colombia, Ecuador, Mexico, Peru, the United States and Uruguay. Our Developed Europe segment is comprised of Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom. Our RoW segment is comprised of all other countries. In the second quarter of 2023, the most significant countries by revenue in that segment were Japan, Turkey, Australia, Hong Kong and India.

We also earn revenue by offering our advertisers business-to-business (B2B) solutions, such as white label services, data product offerings and subscription fees earned from advertisers for the trivago Business Studio PRO Package. These revenues do not represent a significant portion of our total revenue.

¹ Average booking value is the average amount our advertisers obtain from referrals as a result of hotels and other accommodation booked on their sites. We estimate this amount from data voluntarily provided to us by certain advertisers.

Referral Revenue by Segment & Other Revenue (€ millions)

	Three months ended June 30,				Six months ended June 30,			
	2023	2022	Δ €	Δ %	2023	2022	Δ €	Δ % Y/Y
Americas	€ 42.9	€ 55.7	(12.8)	(23)%	€ 83.4	€ 99.4	(16.0)	(16)%
Developed Europe	56.7	66.8	(10.1)	(15)%	108.6	110.3	(1.7)	(2)%
Rest of World	22.9	19.0	3.9	21%	39.9	30.2	9.7	32%
Total Referral Revenue	€ 122.6	€ 141.4	(18.8)	(13)%	€ 231.9	€ 239.9	(8.0)	(3)%
Other revenue	1.9	3.3	(1.4)	(42)%	3.6	6.5	(2.9)	(45)%
Total revenue	€ 124.4	€ 144.8	(20.4)	(14)%	€ 235.5	€ 246.4	(10.9)	(4)%

Note: Some figures may not add up due to rounding.

In the second quarter of 2023, total revenue decreased by €20.4 million to €124.4 million, or by 14%, compared to the same period in 2022. In the six months ended June 30, 2022, total revenue decreased by €10.9 million, or by 4%, compared to the same period in 2022.

In the second quarter of 2023, Referral Revenue decreased to €42.9 million and €56.7 million or by 23% and 15% in Americas and Developed Europe, respectively, while it increased to €22.9 million or by 21% in RoW, compared to the same period in 2022. In the six months ended June 30, 2023, Referral Revenue decreased to €83.4 million and €108.6 million, or by 16% and 2% in Americas and Developed Europe, respectively, while it increased to €39.9 million or by 32% in RoW, respectively.

Americas

In the second quarter of 2023, Referral Revenue decreased by €12.8 million to €42.9 million, compared to the same period in 2022. The decrease was primarily driven by lower traffic volumes resulting from the impact of softer bidding dynamics, compared to the same period in 2022 when we benefited from a strong auction and from increased volatility in the results of our performance marketing campaigns. The decrease was further driven by lower booking conversion and a negative foreign exchange rate impact resulting from the weakening of the U.S. dollar against the euro, and was partly offset by higher average booking values, compared to the same period in 2022.

In the six months ended June 30, 2023, Referral Revenue decreased by €16.0 million to €83.4 million compared to the same period in 2022. The decrease was mainly driven by lower traffic volumes resulting from the impact of softer bidding dynamics and increased competition to acquire traffic in performance marketing channels, partly offset by higher average booking values compared to the same period in 2022.

Developed Europe

In the second quarter of 2023, Referral Revenue decreased by €10.1 million to €56.7 million compared to the same period in 2022. The decrease was primarily driven by lower traffic volumes resulting from the impact of softer bidding dynamics compared to the same period in 2022, where we benefited from a strong auction, and pent up travel demand from the first quarter of 2022. Additionally, we observed increased volatility in the results of our performance marketing campaigns compared to the same period in 2022. The decrease was further driven by a negative foreign exchange rate impact resulting from the weakening of the pound sterling against the euro, and was partly offset by better booking conversion and higher average booking values compared to the same period in 2022.

In the six months ended June 30, 2023, Referral Revenue decreased by €1.7 million to €108.6 million, compared to the same period in 2022. The decrease was mainly driven by lower traffic volumes resulting from the impact of softer bidding dynamics and increased competition to acquire traffic in performance marketing channels. It was further driven by unfavorable foreign exchange rates from the weakening of the pound sterling against the euro, and was partly offset by better booking conversion and higher average booking values compared to the same period in 2022.

Rest of World

In the second quarter of 2023, Referral Revenue increased by €3.9 million to €22.9 million, compared to the same period in 2022. The increase was driven by higher average booking values, better booking conversion and increased traffic volumes, particularly in Japan and Hong Kong, due to the continued recovery in travel demand. The increase in Referral Revenue was partly offset by continued lower traffic volumes in Central Eastern Europe.

In the six months ended June 30, 2023, Referral Revenue increased by €9.7 million to €39.9 million, compared to the same period in 2022. The increase was driven by higher average booking values, better booking conversion and an increase in traffic volumes, particularly in Japan and Hong Kong, and was partly offset by a decrease in traffic volumes in Central Eastern Europe, compared to the same period in 2022.

Other Revenue

Other revenue decreased by €1.4 million, or 42%, during the second quarter of 2023, and by €2.9 million or 45%, during the six months ended June 30, 2023, mainly due to our decision in the second quarter of 2022 to discontinue some of our B2B products such as display ads.

Advertiser Concentration

We generate the majority of our Referral Revenue from online travel agencies, or OTAs. For brands affiliated with Expedia Group, including Brand Expedia, Hotels.com, Orbitz, Travelocity, Hotwire, Wotif, Vrbo and ebookers, the share of our Referral Revenue was 40% and 38% in the second quarter of 2023 and in the six months ended June 30, 2023, respectively, compared to 29% and 31% in the same periods in 2022. For brands affiliated with Booking Holdings, including Booking.com, Agoda and priceline.com, the share of our Referral Revenue was 40% and 41% in the second quarter of 2023 and for the six months ended June 30, 2023, respectively, compared to 52% and 49% in the same periods in 2022.

Return on Advertising Spend (ROAS)

We track the ratio of our Referral Revenue to our Advertising Spend, or ROAS. We believe that ROAS is an indicator of the efficiency of our advertising and it is our primary operating metric. The following table sets forth the ROAS for our reportable segments:

ROAS by Segment (in %)

	Three months ended June 30,			Six months ended June 30,		
	2023	2022	Δ ppts	2023	2022	Δ ppts
ROAS						
Americas	142.1%	166.8%	(24.7) ppts	157.1%	174.2%	(17.1) ppts
Developed Europe	139.9%	157.1%	(17.2) ppts	148.8%	164.3%	(15.5) ppts
Rest of World	163.7%	202.1%	(38.4) ppts	168.6%	206.9%	(38.3) ppts
Consolidated ROAS	144.6%	165.9%	(21.3) ppts	154.9%	172.8%	(17.9) ppts

In the second quarter of 2023, consolidated ROAS decreased by 21.3 pts to 144.6%, compared to the same period in 2022. The decrease in ROAS was driven by a decrease of 24.7 pts, 17.2 pts and 38.4 pts in Americas, Developed Europe and RoW, respectively, compared to the same period in 2022. In the six months ended June 30, 2023, consolidated ROAS decreased by 17.9 pts to 154.9%, which was driven by a decrease of 17.1 pts, 15.5 pts and 38.3 pts in Americas, Developed Europe and RoW, respectively, compared to the same period in 2022.

Americas

In the second quarter of 2023, ROAS decreased to 142.1%, as the relative decrease in Referral Revenue was greater than the relative decrease in Advertising Spend, compared to the same period in 2022. Advertising Spend decreased by €3.2 million to €30.2 million in the second quarter of 2023, compared to the same period in 2022, mainly due to our continued focus on profitability, resulting in adjustments to our performance marketing activities. Contribution was €12.7 million in the second quarter of 2023, €9.6 million lower than in the same period in 2022.

In the six months ended June 30, 2023, ROAS decreased to 157.1%, as the relative decrease in Referral Revenue was greater than the relative decrease in Advertising Spend, compared to the same period in 2022. Advertising Spend decreased by €4.0 million to €53.1 million in the six months ended June 30, 2023, compared to the same period in 2022, mainly due to our continued focus on profitability, resulting in adjustments to our performance marketing activities. Contribution was €30.3 million in the six months ended June 30, 2023, €12.0 million lower than in the same period in 2022.

Developed Europe

In the second quarter of 2023, ROAS decreased to 139.9%, as the relative decrease in Referral Revenue was greater than the relative decrease in Advertising Spend compared to the same period in 2022. Advertising Spend decreased by €1.9 million to €40.6 million, compared to the same period in 2022, mainly due to adjustments to our performance marketing activities, which was partly offset by increased brand investments. Contribution was €16.2 million in the second quarter of 2023, €8.1 million lower than in the same period in 2022.

In the six months ended June 30, 2023, ROAS decreased to 148.8%, as Advertising Spend increased and Referral Revenue decreased slightly, compared to the same period in 2022. Advertising Spend increased by €5.9 million to €73.0 million in the six months ended June 30, 2023, compared to the same period in 2022, mainly due to a significant increase in brand investments relating to increased travel demand, considering that the first quarter of 2022 had been impacted by COVID-19 measures. This was partly offset by adjustments to our performance marketing activities. Contribution was €35.6 million in the six months ended June 30, 2023, €7.5 million lower than in the same period in 2022.

Rest of World

In the second quarter of 2023, ROAS decreased to 163.7%, as the relative increase in Advertising Spend was greater than the relative increase in Referral Revenue compared to the same period in 2022. Advertising Spend increased by €4.6 million to €14.0 million in the second quarter of 2023, compared to the same period in 2022. The increase in marketing activities, particularly in Japan and Turkey, was mainly driven by the recovery in travel demand in these markets. Contribution was €8.9 million in the second quarter of 2023, €0.7 million lower than in the same period in 2022.

In the six months ended June 30, 2023, ROAS decreased to 168.6%, as the relative increase in Advertising Spend was greater than the relative increase in Referral Revenue, compared to the same period in 2022. Advertising Spend increased by €9.0 million to €23.6 million in the six months ended June 30, 2023, compared to the same period in 2022, mainly driven by a significant increase in marketing activities due to the recovery of travel demand, particularly in Japan. Contribution was €16.2 million in the six months ended June 30, 2023, €0.6 million higher than in the same period in 2022.

Expenses

Expenses by cost category (€ millions)

	Costs and expenses			As a % of revenue		
	Three months ended June 30,			Three months ended June 30,		
	2023	2022	Δ %	2023	2022	Δ in pts
Cost of revenue	€ 3.0	€ 3.0	— %	2 %	2 %	— %
<i>of which share-based compensation</i>	0.0	0.1	(100)%			
Selling and marketing	90.2	92.4	(2)%	73 %	64 %	9 %
<i>of which share-based compensation</i>	0.1	0.2	(50)%			
Technology and content	12.4	15.5	(20)%	10 %	11 %	(1)%
<i>of which share-based compensation</i>	0.5	1.0	(50)%			
General and administrative	10.3	9.5	8 %	8 %	7 %	1 %
<i>of which share-based compensation</i>	1.9	2.4	(21)%			
Amortization of intangible assets	0.0	0.0	— %	0 %	0 %	— %
Impairment of intangible assets and goodwill	—	84.2	(100)%	0 %	58 %	(58)%
Total costs and expenses	€ 115.9	€ 204.5	(43)%	93%	141 %	(48)%

Note: Some figures may not add up due to rounding.

	Costs and Expenses			As a % of Revenue		
	Six months ended June 30,			Six months ended June 30,		
	2023	2022	Δ % Y/Y	2023	2022	Δ in pts
Cost of revenue	€ 6.1	€ 6.0	2%	3 %	2 %	1 %
<i>of which share-based compensation</i>	0.1	0.1	—%			
Selling and marketing	160.2	151.7	6%	68 %	62 %	6 %
<i>of which share-based compensation</i>	0.2	0.4	(50)%			
Technology and content	24.9	29.0	(14)%	11 %	12 %	(1)%
<i>of which share-based compensation</i>	0.8	1.6	(50)%			
General and administrative	20.8	40.1	(48)%	9 %	16 %	(7)%
<i>of which share-based compensation</i>	4.1	4.6	(11)%			
Amortization of intangible assets	0.1	0.1	—%	0 %	0 %	— %
Impairment of intangible assets and goodwill	—	84.2	100%	—%	34 %	(34)%
Total costs and expenses	€ 212.1	€ 311.0	(32)%	90%	126 %	(36)%

Note: Some figures may not add up due to rounding.

Cost of revenue

In the second quarter of 2023, cost of revenue remained stable at €3.0 million, and in the six months ended June 30, 2023, increased by €0.1 million to €6.1 million, or 2%, period-over-period.

In the second quarter of 2023, higher personnel costs, driven by an increase in compensation costs compared to the same period in 2022, were offset by lower data center-related service provider costs.

The increase in the six months ended June 30, 2023 was due to higher personnel costs driven by an increase in compensation costs compared to the same period in 2022.

Selling and marketing

In the second quarter of 2023, selling and marketing expense decreased by €2.2 million, or by 2%, period-over-period, to €90.2 million, of which €84.7 million, or 94%, was Advertising Spend. In the six months ended June 30, 2023, selling and marketing expense increased by €8.5 million, or by 6% period-over-period to €160.2 million, of which €149.7 million, or 93%, was Advertising Spend.

Advertising Spend

In the second quarter of 2023, Advertising Spend decreased by €3.2 million and €1.9 million to €30.2 million and €40.6 million in Americas and Developed Europe, respectively, while it increased by €4.6 million to €14.0 million in Rest of World, compared to the same period in 2022. The overall decrease in Advertising Spend was driven by lower performance marketing spend partly offset by higher brand investments during the quarter. For a more detailed discussion of changes in Advertising Spend by segment, see "*Return on Advertising Spend (ROAS)*" above.

In the six months ended June 30, 2023, Advertising Spend increased by €9.0 million and €5.9 million to €23.6 million and €73.0 million in Rest of World and Developed Europe, respectively, while it decreased by €4.0 million to €53.1 million in Americas, compared to the same period in 2022. The overall increase in Advertising Spend was driven by higher brand investments partly offset by lower performance marketing spend in the second quarter of 2023. For a more detailed discussion of changes in Advertising Spend by segment, see "*Return on Advertising Spend (ROAS)*" above.

Other selling and marketing expense

In the second quarter of 2023, other selling and marketing expense decreased by €1.6 million to €5.5 million, or 23%, period-over-period, and in the six months ended June 30, 2023, decreased by €2.4 million to €10.5 million, or 18.6%.

The decrease in the second quarter of 2023 was mainly due to lower personnel costs from a lower headcount following the discontinuation of some B2B products and projects in the prior year and as a result of an internal reorganization of existing teams to achieve efficiencies in 2022, together with lower severance payments. Lower television advertisement production costs and lower expenses incurred to acquire traffic further contributed to the decrease in other selling and marketing expense.

The decrease in the six months ended June 30, 2023 was mainly due to lower personnel costs from a lower headcount and lower severance payments, lower expenses incurred to acquire traffic and lower television advertisement production costs.

Technology and content

In the second quarter of 2023, technology and content expense decreased by €3.1 million to €12.4 million, or 20%, period-over-period, and in the six months ended June 30, 2023, decreased by €4.1 million to €24.9 million, or 14%, period-over-period.

The decrease in the second quarter of 2023 was mainly due to lower personnel costs from a lower headcount following an internal reorganization of existing teams to achieve efficiencies through attrition, headcount reductions as a result of the discontinuation of some B2B products and projects in 2022 and lower severance payments. The decrease was further driven by the impairment of capitalized software assets recognized in the prior year attributable to the discontinued products and projects, lower share-based compensation and lower depreciation expense. These were partly offset by higher cloud-related service provider costs.

The decrease in the six months ended June 30, 2023 was primarily due to lower personnel costs from a lower headcount and lower severance payments, compared to the same period in 2022. It was further driven by the impairment of capitalized software assets belonging to discontinued products and projects

recognized in the prior year, lower share-based compensation and lower depreciation expense. These were partly offset by higher cloud-related service provider costs and continuous investments to improve our platform.

General and administrative

In the second quarter of 2023, general and administrative expense increased by €0.8 million to €10.3 million, or by 8%, period-over-period, and in the six months ended June 30, 2023, decreased by €19.3 million to €20.8 million, or 48%, period-over-period.

The increase in the second quarter of 2023 was primarily due to higher personnel expenses as a result of higher compensation costs compared to the same period in 2022. This was partly offset by lower share-based compensation expense.

The decrease in the six months ended June 30, 2023, was mainly driven by the non-recurrence of the incremental expense of €20.7 million during 2022, in relation to the proceeding brought by the Australian Competition and Consumer Commission (ACCC) against us. This was partly offset by higher personnel expenses due to an increase in compensation costs and higher expected credit losses on trade receivables, compared to the same period in 2022.

Amortization of intangible assets

Amortization of intangible assets was €34 thousand in both the second quarter of 2023 and 2022, and was €0.1 million in both the six months ended June 30, 2023 and 2022, as we amortize intangible assets acquired through the weekengo GmbH acquisition.

Impairment of intangible assets and goodwill

No impairment charges were recorded in the three or six months ended June 30, 2023. In the second quarter of 2022, we recorded an impairment charge of €27.2 million on our indefinite-lived intangible assets and a goodwill impairment charge of €57.0 million on our Developed Europe reporting unit.

Income taxes, net income/(loss) and Adjusted EBITDA⁽¹⁾ (€ millions)

	Three months ended June 30,			Six months ended June 30,		
	2023	2022	Δ €	2023	2022	Δ €
Operating income/(loss)	€ 8.6	€ (59.8)	68.4	€ 23.3	€ (64.6)	87.9
Other income/(expense)						
Interest expense	(0.0)	(0.0)	—	(0.0)	(0.0)	—
Interest income	1.3	0.0	1.3	2.3	0.1	2.2
Other, net	(0.1)	0.3	(0.4)	(0.2)	0.4	(0.6)
Total other income/(expense), net	€ 1.3	€ 0.2	1.1	€ 2.1	€ 0.5	1.6
Income/(loss) before income taxes	9.8	(59.5)	69.3	25.4	(64.2)	89.6
Expense for income taxes	4.1	0.2	3.9	9.6	6.3	3.3
Income/(loss) before equity method investment	€ 5.8	€ (59.8)	65.6	€ 15.8	€ (70.4)	86.2
Gain/(loss) from equity method investment	0.0	(0.1)	0.1	(0.1)	(0.1)	—
Net income/(loss)	€ 5.8	€ (59.8)	65.6	€ 15.7	€ (70.5)	86.2
Adjusted EBITDA⁽¹⁾	€ 12.2	€ 30.3	(18.1)	€ 30.7	€ 51.4	(20.7)

Note: Some figures may not add up due to rounding.

⁽¹⁾ "Adjusted EBITDA" is a non-GAAP measure. Please see "Definitions of Non-GAAP Measures" and "Tabular Reconciliations for Non-GAAP Measures" on pages 13 to 14 herein for explanations and reconciliations of non-GAAP measures used throughout this review.

Income taxes

Income tax expense was €4.1 million in the second quarter of 2023, compared to €0.2 million in the same period in 2022. The total weighted average tax rate was 31.3%, which was mainly driven by the German statutory tax rate of approximately 31.2%. Our effective tax rate for the second quarter of 2023 was 41.6%, compared to (0.4)% in the same period in 2022. The difference in effective tax rate in the quarter ended June 30, 2023 compared to the same period in 2022 is primarily attributable to the goodwill impairment charge recognized in the prior year, which is non-deductible for tax purposes.

The difference between the weighted average tax rate of 31.3% and the effective tax rate of 41.6% in the second quarter of 2023 is primarily attributable to share-based compensation expense, which is non-deductible for tax purposes.

Income tax expense was €9.6 million in the six months ended June 30, 2023, compared to €6.3 million in the six months ended June 30, 2022. Our effective tax rate for the six months ended June 30, 2023 was 37.9%, compared to (9.8)% in the same period in 2022.

The difference between the weighted average tax rate and the effective tax rate for the six months ended June 30, 2023 is primarily attributable to share-based compensation expense, which is non-deductible for tax purposes.

An uncertain tax position in connection with unrecognized tax benefits relating to the deductibility of expenses amounted to €9.3 million as of June 30, 2023. A liability of €8.5 million for these tax benefits is presented under other long-term liabilities and €0.8 million is presented within other current liabilities in the unaudited condensed consolidated financial statements.

Net Income/(loss) and Adjusted EBITDA

Net income in the second quarter of 2023 was €5.8 million compared to a net loss of €59.8 million in the same period in 2022, and in the six months ended June 30, 2023 was €15.7 million compared to a net loss of €70.5 million in the same period in 2022.

The increase in the second quarter of 2023 was mainly driven by an impairment of indefinite-lived intangible asset and goodwill of €84.2 million recorded in 2022. The increase was partly offset by lower revenues compared to the same period in 2022, driven mostly by decreases in traffic volumes.

The increase in the six months ended June 30, 2023 was primarily driven by the impairment charge recorded in the second quarter of 2022 and the non-recurrence of the incremental expense of €20.7 million recorded in prior year in relation to the proceeding brought by the ACCC against us. The increase was partly offset by higher Advertising Spend, particularly in brand marketing activities, and lower revenues mainly due to lower traffic volumes compared to the same period in 2022.

Adjusted EBITDA decreased by €18.1 million to €12.2 million in the second quarter of 2023, compared to the same period in 2022, driven by the decrease in revenues of €20.4 million.

In the six months ended June 30, 2023, Adjusted EBITDA decreased by €20.7 million to €30.7 million compared to the same period in 2022, driven by the increase in Advertising Spend of €10.9 million and lower revenues of €10.9 million.

The decision of the Australian Federal Court in the prior year had a significant negative impact of €20.7 million on our operating expenses for the six months ended June 30, 2022. Due to the size and unusual nature of the accrual relating to the judgement of the Australian Federal Court and its distorting effect on the understanding of our underlying business developments, it was excluded when calculating Adjusted EBITDA in 2022.

Balance sheet and cash flows

Total cash, cash equivalents and restricted cash were €273.0 million as of June 30, 2023, compared to €248.9 million as of December 31, 2022. The increase of €24.1 million during the six months ended June 30, 2023, was mainly driven by cash provided by investing activities of €18.3 million and cash provided by operating activities of €7.7 million.

Cash provided by investing activities during the six months ended June 30, 2023, was primarily driven by proceeds from sales and maturities of investments of €20.0 million, partly offset by €1.7 million in capital expenditures, including internal-use software and website development.

Cash provided by operating activities for the six months ended June 30, 2023, was primarily driven by net income of €15.7 million and by non-cash adjusting items totaling €8.7 million. Non-cash items included in net income consisted mainly of share-based compensation of €5.1 million and depreciation of €2.2 million.

Positive effects from net income were offset by negative changes in operating assets and liabilities of €16.6 million. Changes in operating assets and liabilities were primarily due to an increase in accounts receivable of €16.5 million mostly from higher revenues in the second quarter of 2023 compared to the fourth quarter of 2022, a decrease in taxes payable of €9.8 million and an increase in prepaid expenses and other assets of €6.9 million primarily from our long-term marketing sponsorship agreement. These were partly offset by increases in accounts payable of €12.6 million, payroll liabilities of €2.5 million and accrued expenses and other liabilities of €1.7 million.

Our current ratio decreased from 7.1 as of December 31, 2022 to 6.6 as of June 30, 2023, as the relative increase in our current liabilities was higher than the relative increase in our current assets compared to December 31, 2022.

trivago N.V. Key Metrics

- The following metrics are intended as a supplement to the financial information found in this review and the financial statements included in our filings with the Securities and Exchange Commission ("SEC"). In the event of discrepancies between amounts in these tables and our historical financial statements, readers should rely on our filings with the SEC and our most recent financial statements filed with the SEC.
- We intend to periodically review and refine the definition, methodology and appropriateness of each of our supplemental metrics. As a result, metrics are subject to removal and/or change, and such changes could be material.
- These metrics do not include adjustments for one-time items, acquisitions, foreign exchange or other adjustments.
- Some numbers may not add up due to rounding.

	Three months ended June 30,		Six months ended June 30,	
	2023	2022	2023	2022
ROAS by segment				
Americas	142.1%	166.8%	157.1%	174.2%
Developed Europe	139.9%	157.1%	148.8%	164.3%
Rest of World	163.7%	202.1%	168.6%	206.9%
Consolidated ROAS	144.6%	165.9%	154.9%	172.8%

Notes & Definitions:

Current Ratio: The current ratio is used to measure the company's ability to pay off its short-term liabilities with its current assets and is an important measure of liquidity. The current ratio is calculated by dividing the company's total current assets by the company's total current liabilities.

Referral Revenue: We use the term "referral" to describe each time a visitor to one of our websites or apps clicks on a hotel offer or advertisement in our search results and is referred to one of our advertisers. We charge our advertisers for each referral on a cost-per-click (CPC) or cost-per-acquisition (CPA) basis.

ROAS: The ratio of our Referral Revenue to our Advertising Spend in a given period, or **Return On Advertising Spend**. We invest in multiple marketing channels, such as: TV; out-of-home advertising; search engine marketing; display advertising campaigns on advertising networks, affiliate websites, social networking sites and email marketing; online video; mobile app marketing and content marketing; sponsorship and endorsement.

Definitions of Non-GAAP Measures

Adjusted EBITDA:

We define Adjusted EBITDA as net income/(loss) adjusted for:

- income/(loss) from equity method investment,
- expense/(benefit) for income taxes,
- total other (income)/expense, net,
- depreciation of property and equipment and amortization of intangible assets,
- impairment of, and gains and losses on disposals of, property and equipment,
- impairment of intangible assets and goodwill,
- share-based compensation, and
- certain other items, including restructuring, significant legal settlements and court-ordered penalties, such as the penalty imposed by the Australian Federal Court in the proceeding brought by the ACCC against us.

From time to time, we may exclude from Adjusted EBITDA the impact of certain events, gains, losses or other charges (such as restructuring charges, significant legal settlements and court-ordered penalties) that affect the period-to-period comparability of our operating performance.

Adjusted EBITDA is a non-GAAP financial measure. A "non-GAAP financial measure" refers to a numerical measure of a company's historical or future financial performance, financial position, or cash flows that excludes (or includes) amounts that are included in (or excluded from) the most directly comparable measure calculated and presented in accordance with U.S. GAAP in such company's financial statements. We present this non-GAAP financial measure because it is used by management to evaluate our operating performance, formulate business plans, and make strategic decisions on capital allocation. We also believe that this non-GAAP financial measure provides useful information to investors and others in understanding and evaluating our operating performance and consolidated results of operations in the same manner as our management, and the exclusion of certain expenses in calculating Adjusted EBITDA can provide a useful measure in comparing financial results between periods as these costs may vary independent of core business performance. Our use of Adjusted EBITDA has limitations as an analytical tool, and you should not consider it in isolation or as a substitute for analysis of our results reported in accordance with U.S. GAAP, including net income/loss. Some of these limitations are:

- Adjusted EBITDA does not reflect our cash expenditures or future requirements for capital expenditures or contractual commitments;

- Adjusted EBITDA does not reflect changes in, or cash requirements for, our working capital needs;
- Adjusted EBITDA does not reflect expenses, such as restructuring and other related reorganization costs;
- Although depreciation, amortization and impairments are non-cash charges, the assets being depreciated, amortized or impaired may have to be replaced in the future, and Adjusted EBITDA does not reflect cash capital expenditure requirements for such replacements or for new capital expenditure requirements; and
- Other companies, including companies in our own industry, may calculate Adjusted EBITDA differently than we do, limiting its usefulness as a comparative measure.

Tabular Reconciliations for Non-GAAP Measures

Adjusted EBITDA (€ millions)

	Three months ended June 30,		Six months ended June 30,	
	2023	2022	2023	2022
Net income/(loss)	€ 5.8	€ (59.8)	€ 15.7	€ (70.5)
Gain/(loss) from equity method investment	0.0	(0.1)	(0.1)	(0.1)
Income/(loss) before equity method investment	€ 5.8	€ (59.8)	€ 15.8	€ (70.4)
Expense for income taxes	4.1	0.2	9.6	6.3
Income/(loss) before income taxes	€ 9.8	€ (59.5)	€ 25.4	€ (64.2)
Add/(less):				
Interest expense	0.0	0.0	0.0	0.0
Interest income	(1.3)	0.0	(2.3)	(0.1)
Other, net	0.1	(0.3)	0.2	(0.4)
Operating income/(loss)	€ 8.6	€ (59.8)	€ 23.3	€ (64.6)
Depreciation of property and equipment and amortization of intangible assets	1.1	1.7	2.3	3.4
Impairment of, and gains and losses on disposals of, property and equipment	0.0	0.9	0.0	0.9
Impairment of intangible assets and goodwill	—	84.2	—	84.2
Share-based compensation	2.5	3.7	5.1	6.8
Certain other items, including restructuring, significant legal settlements and court-ordered penalties	0.0	(0.4)	0.0	20.7
Adjusted EBITDA	€ 12.2	€ 30.3	€ 30.7	€ 51.4

Note: Some figures may not add up due to rounding.

Safe Harbor Statement Under the Private Securities Litigation Reform Act of 1995

This review contains “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. These statements are not guarantees of future performance. These forward-looking statements are based on management’s expectations as of the date of this review and assumptions which are inherently subject to uncertainties, risks and changes in circumstances that are difficult to predict. The use of words such as “will,” “intend” and “expect,” among others, generally identify forward-looking statements. However, these words are not the exclusive means of identifying such statements. In addition, any statements that refer to expectations, projections or other characterizations of future events or circumstances are forward-looking statements and may include statements relating to future revenue, expenses, margins, profitability, net income / (loss), earnings per share and other measures of results of operations and the prospects for future growth of trivago N.V.’s business. Actual results and the timing and outcome of events may differ materially from those expressed or implied in the forward-looking statements for a variety of reasons, including, among others:

- our ability to grow our revenue in future periods, or at rates deemed sufficient by the market without reducing our profits or incurring losses;
- any acceleration of long-term changes to consumer behavior and industry structure arising from the COVID-19 pandemic that may continue to have a significant adverse effect on our future competitiveness and profitability;
- the potential negative impact of the worsening economic outlook and inflation on consumer discretionary spending;
- geopolitical and diplomatic tensions, instabilities and conflicts, including war, civil unrest, terrorist activity, sanctions or other geopolitical events or escalations of hostilities, such as the war in Ukraine;
- our continued dependence on a small number of advertisers for our revenue and adverse impacts that could result from their reduced spending or changes in their cost-per-click, or CPC, bidding strategy;
- our ability to generate referrals, customers, bookings or revenue and profit for our advertisers on a basis they deem to be cost-effective;
- factors that contribute to our period-over-period volatility in our financial condition and result of operations;
- any impairment of intangible assets and goodwill;
- the continuing negative impact of having almost completely ceased television advertising in 2020 and only having resumed such advertising at reduced levels in 2021 and 2022 on our ability to grow our revenue;
- our ability to implement our strategic initiatives, including our planned investments in brand marketing;
- increasing competition in our industry;
- our reliance on search engines, particularly Google, which promote their own product and services that compete directly with our accommodation search and may negatively impact our business, financial performance and prospects;
- our ability to innovate and provide tools and services that are useful to our users and advertisers;
- our business model's dependence on consumer preferences for traditional hotel-based accommodation;
- our dependence on relationships with third parties to provide us with content;
- changes to and our compliance with applicable laws, rules and regulations;
- the impact of any legal and regulatory proceedings to which we are or may become subject;
- potential disruptions in the operation of our systems, security breaches and data protection; and
- impacts from our operating globally;

as well as other risks and uncertainties detailed in our public filings with the SEC, including trivago's Annual Report on Form 20-F for the fiscal year ended December 31, 2022, as such risks and uncertainties may be updated from time to time. Except as required by law, we undertake no obligation to update any forward-looking or other statements in this review, whether as a result of new information, future events or otherwise.