

# Impact of the Covid-19 Pandemic on Public Healthcare Expenditure

Zhang, J.<sup>1</sup>, Izmirlieva, M.<sup>2</sup>

<sup>1</sup>GlobalData, Philadelphia, PA, United States; <sup>2</sup>GlobalData, London, United Kingdom

## Objectives

This study aims to assess if there was a statistically significant change in public healthcare expenditure during the COVID-19 Pandemic (2020–22) relative to the time period of 2000–19. More specifically, our study aims to find out whether the 70 markets for which GlobalData produces a healthcare spending forecast significantly increased public healthcare expenditure during the 2020–22 period relative to the other time period.

## Methods

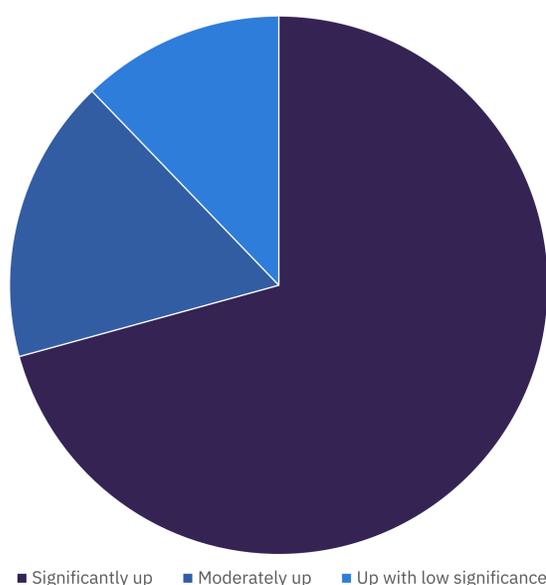
A regression was used to test the null hypothesis of no statistically significant change in public healthcare expenditure during the COVID-19 pandemic. Spending data for the 70 markets was based on GlobalData World Markets Healthcare (WMH) history data and forecast. The regression was run with public healthcare expenditure as the dependent variable and real GDP, public debt-ratio, and a dummy variable as the independent variables. The dummy variable was set to “1” during the 2020–22 period and “0” during the 2000–19 period.

## Results

The regression allowed us to estimate the average change in public healthcare spending during the COVID-19 pandemic compared to the pre-pandemic average. Our findings rejected the null hypothesis that there was no statistically significant change in public healthcare expenditure for 41 out of the 70 markets in our study during the COVID-19 pandemic.

While all 70 markets had higher public healthcare spending growth during the COVID-19 pandemic, 41 (59%) of them had higher public healthcare expenditure growth with statistical significance during 2020–22 relative to the 2000–19 period. Out of the 41 markets, 29 of them (71%) had higher public healthcare expenditure growth with high statistical significance (p-value at/below 1%) during the 2020–22 period; 7 markets (17%) had higher public healthcare expenditure growth with moderate significance (p-value at/below 5%); and 5 (12%) had low significance (p-value at/below 10%).

**Share of markets with higher growth in public healthcare expenditure in 2020–22 compared to the 2000–19 period**



Source: GlobalData

© GlobalData

### Difference in public healthcare spending growth by region

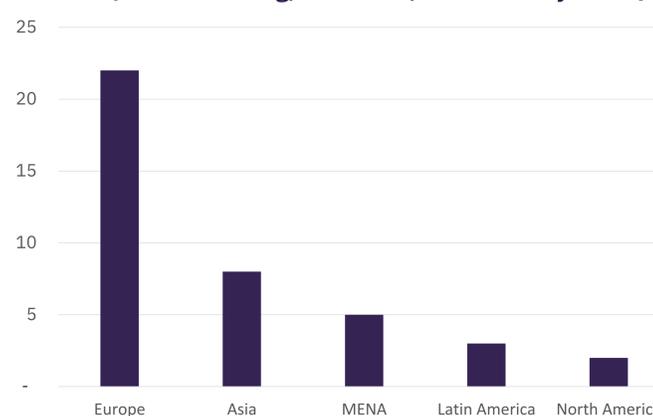
The distribution by region of the 70 markets included in this study is shown below:

- 31 European markets,
- 17 Asia-Pacific (APAC) markets,
- 12 Middle East and North Africa (MENA) markets,
- 7 Latin American markets, and
- 3 North American markets (US, Canada, and Mexico).

Among the 31 European market in our study, 17 (55% of the 31) increased public healthcare expenditure with strong or moderate statistical significance during the COVID-19 pandemic, while 5 (16% of the 31) increased public health spending with low significance.

In the APAC region, eight markets (47% of the 17 Asian markets in our study) boosted public health spend with strong or with moderate significance. A total of five MENA markets (42% of the 12 MENA markets in our study) increased public health spending with strong or moderate significance. In the Latin America region, three markets (43% of the seven Latin American markets in our study) boosted public health spending with strong or moderate significance. Public health spending growth was higher with strong significance in two North America markets (equivalent to 67% of the markets in the North America region).

**Number of markets where public healthcare expenditure increased in 2020–22 by region (includes strong, moderate, and low confidence)**



Source: GlobalData

© GlobalData

## Conclusions

Among the 41 markets where the growth in public healthcare expenditure increased significantly during the COVID-19 pandemic, there was a notable European presence: 71% of the European markets in our study increased public healthcare expenditure at a higher rate than in the 2000–19 period with strong, moderate, or low statistical significance. Just as noteworthy, 67% of the North American markets boosted public healthcare spending at a higher rate with strong significance during the pandemic. For the other regions, the weaker difference between growth rates in public healthcare expenditure during the pandemic period compared to the pre-pandemic period can be explained by a lower government ability to raise spending in some MENA, Latin American, and APAC markets, and partly by the different funding structure of some healthcare systems in these regions, where the share of public health spending remains low.