

Helicopter Market Survey



photo credit:
<http://www.russianhelicopters.aero/en/>

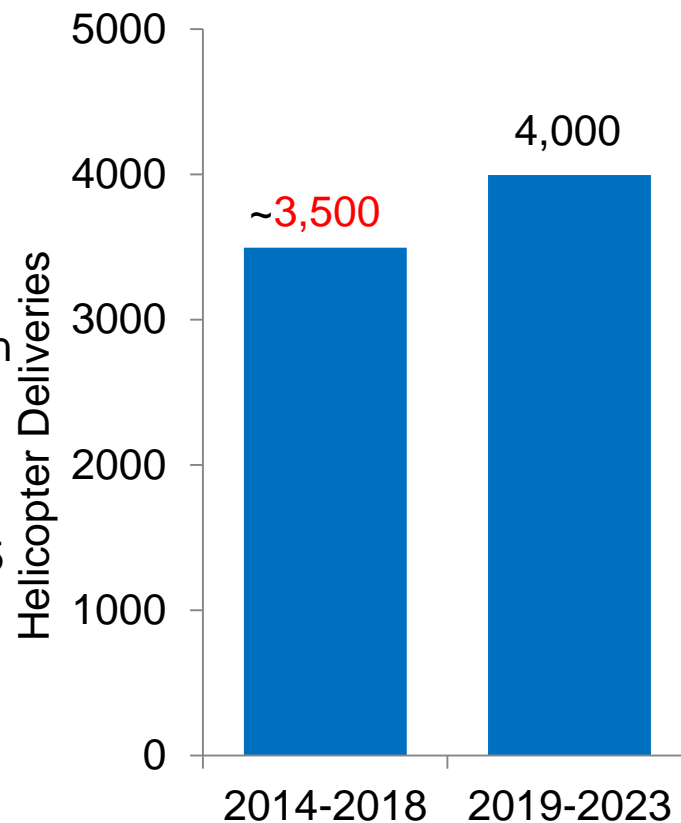
HeliRussia
May 2019

Honeywell

Paulo Menegusso

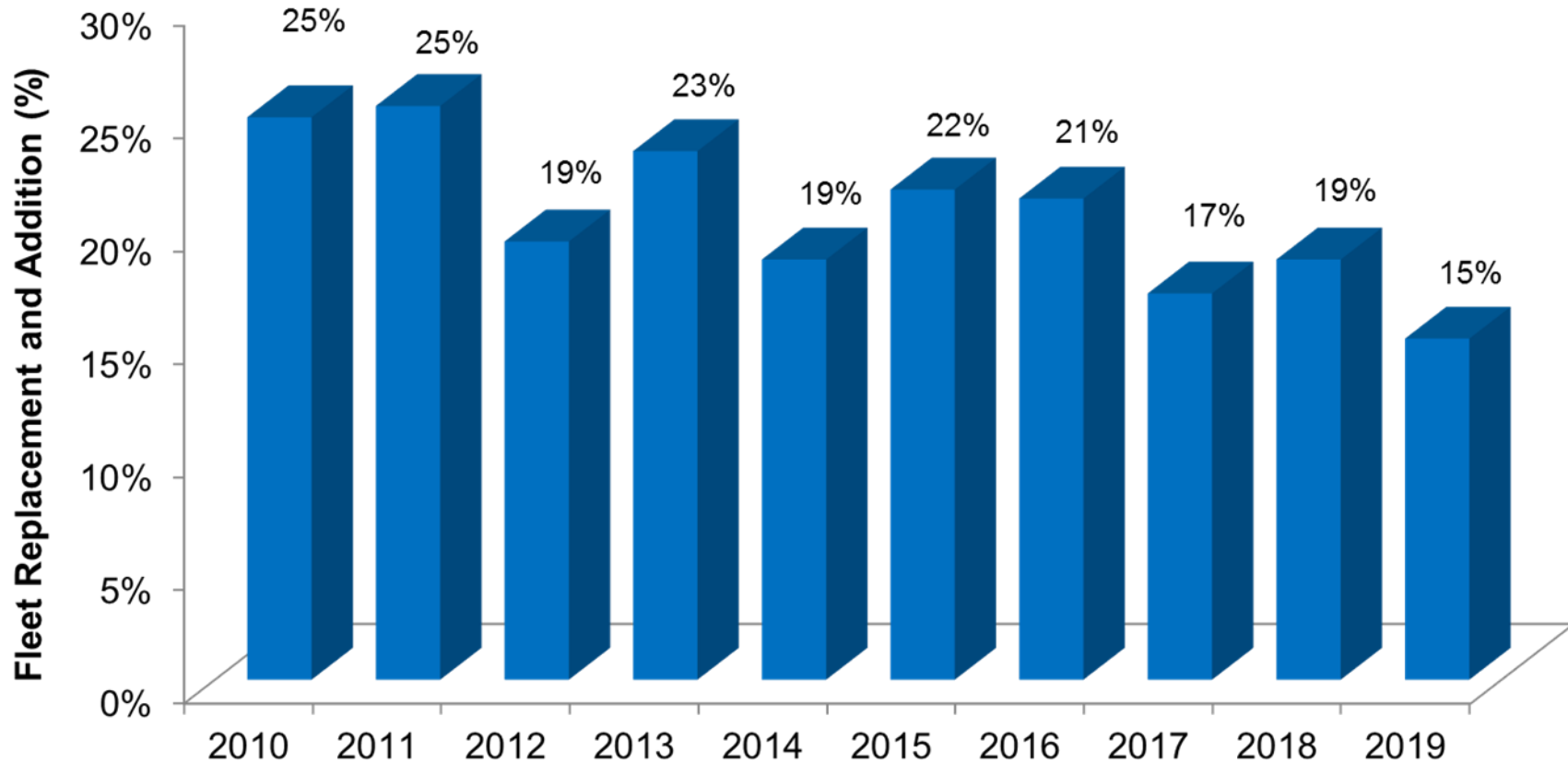
2019 civil helicopter outlook

- 21st annual world wide operator survey
 - Over 1000 operators covering ~13% of the turbine fleet
- **4,000** new Helicopter deliveries from 2019-2023
- Fleet replacement and expansion expectations lower
 - 5 Yr. purchase plans higher in North America, but lower in Europe, Latin America and Asia
 - Latin America has lowest 5 year fleet replacement and expansion rate this year at 9 percent of fleet
 - New purchase rate in BRIC similar to world average of 15 percent
- Near term outlook (2019 - 2021):
 - 55% of all 5 year purchases planned from 2019-2021
 - Average of **765** new turbine-powered helicopters per year



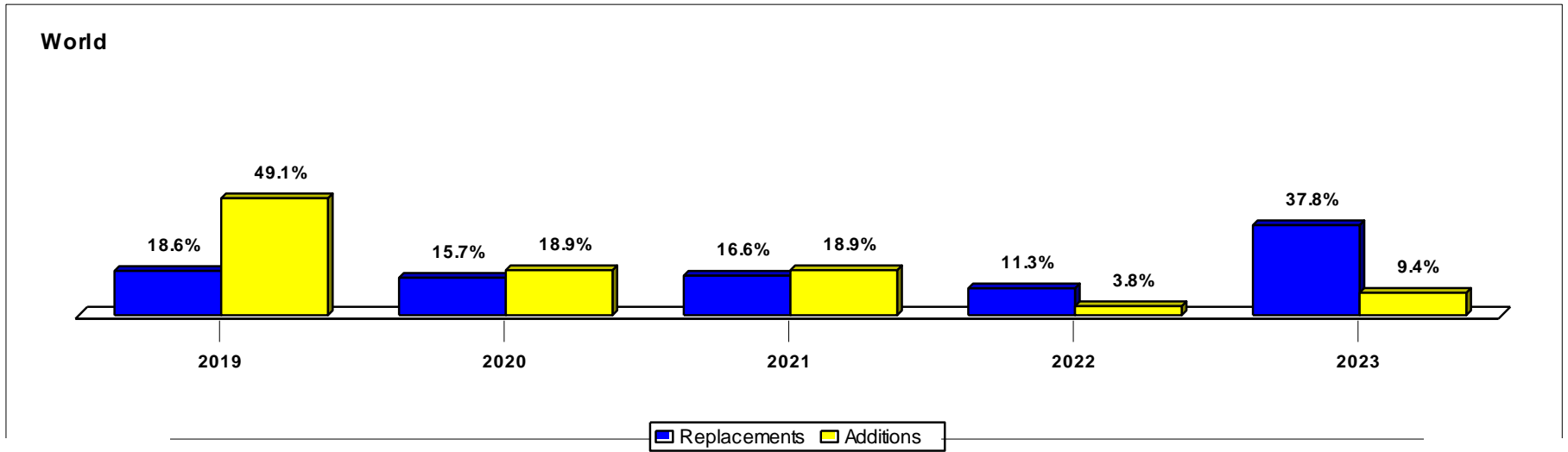
Operator caution persists into 3rd year

World fleet replacement and expansion plans **Honeywell**



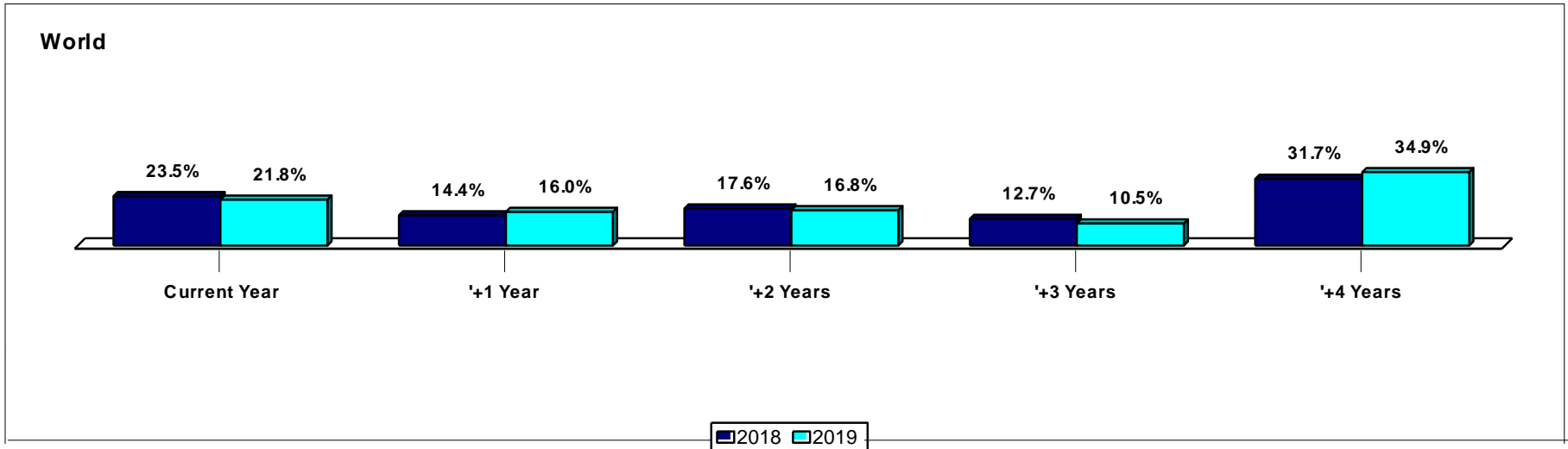
Most recent new helicopter 5 year purchase plans down 4pp due to lower expectations outside of North America

Five Year Fleet Replacement and Expansion Expectations for New Turbine-Powered Helicopters by Delivery Year



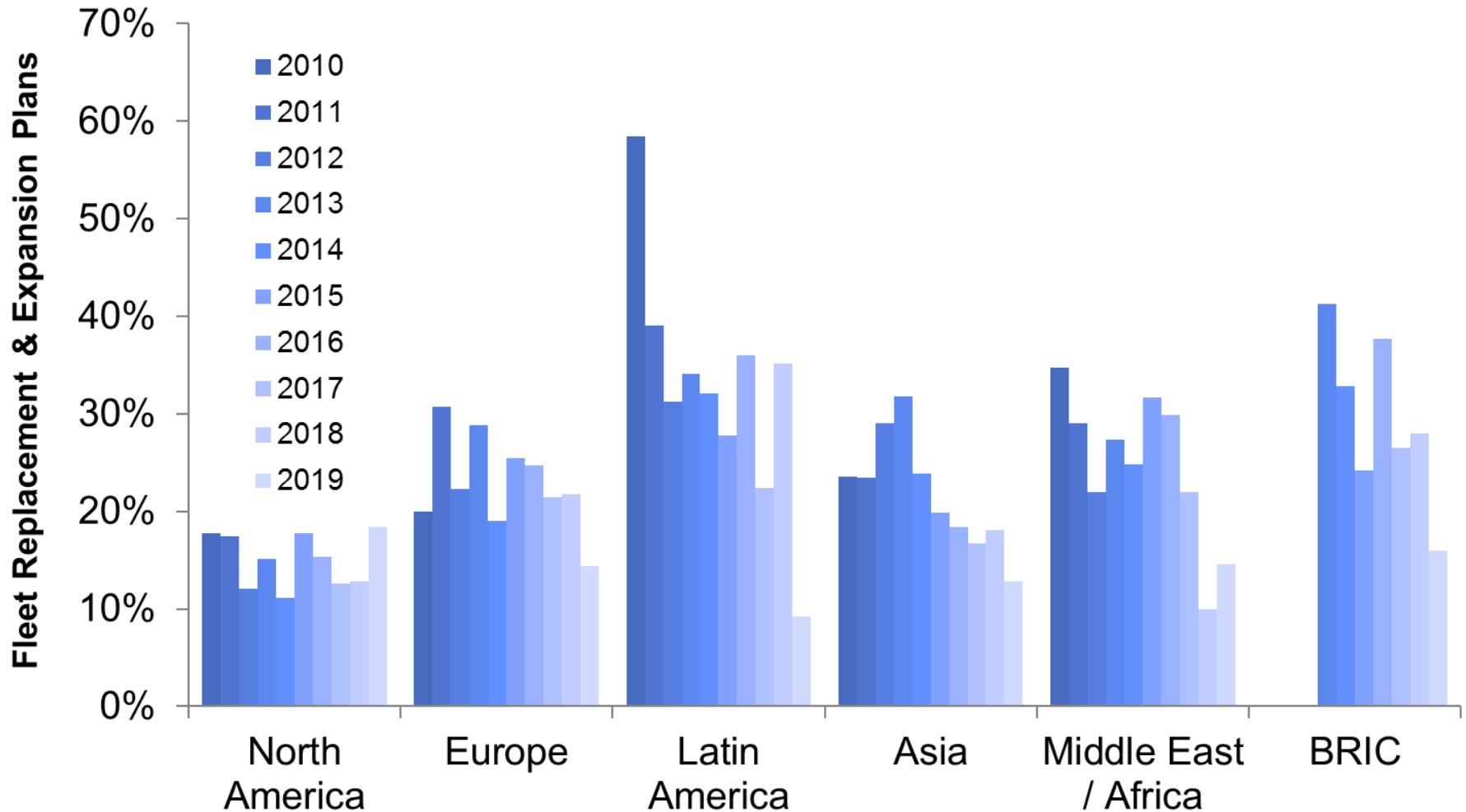
Five Year Fleet Replacement and Expansion Expectations for New Turbine-Powered Helicopters by Delivery Year

Comparison of 2018 and 2019 Surveys



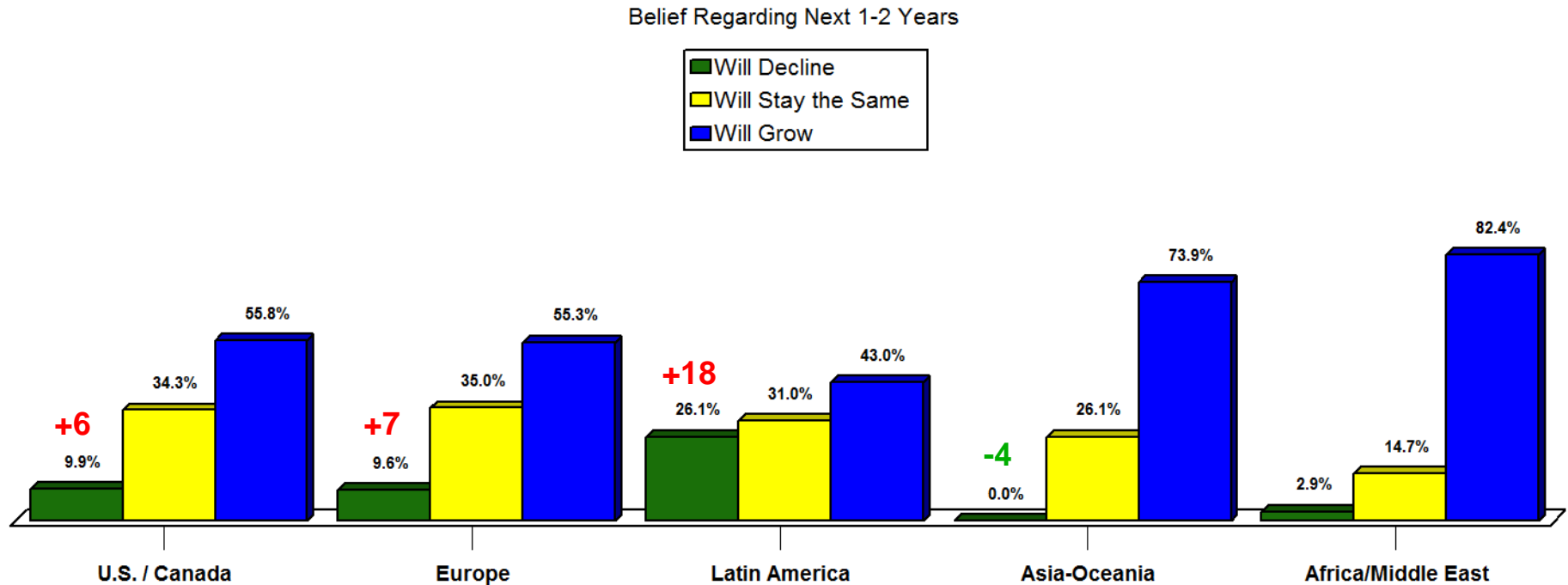
New Helicopter Purchase Plans by Region

Honeywell



5 year plans higher in North America and MEA, but significantly lower in Europe and Latin America

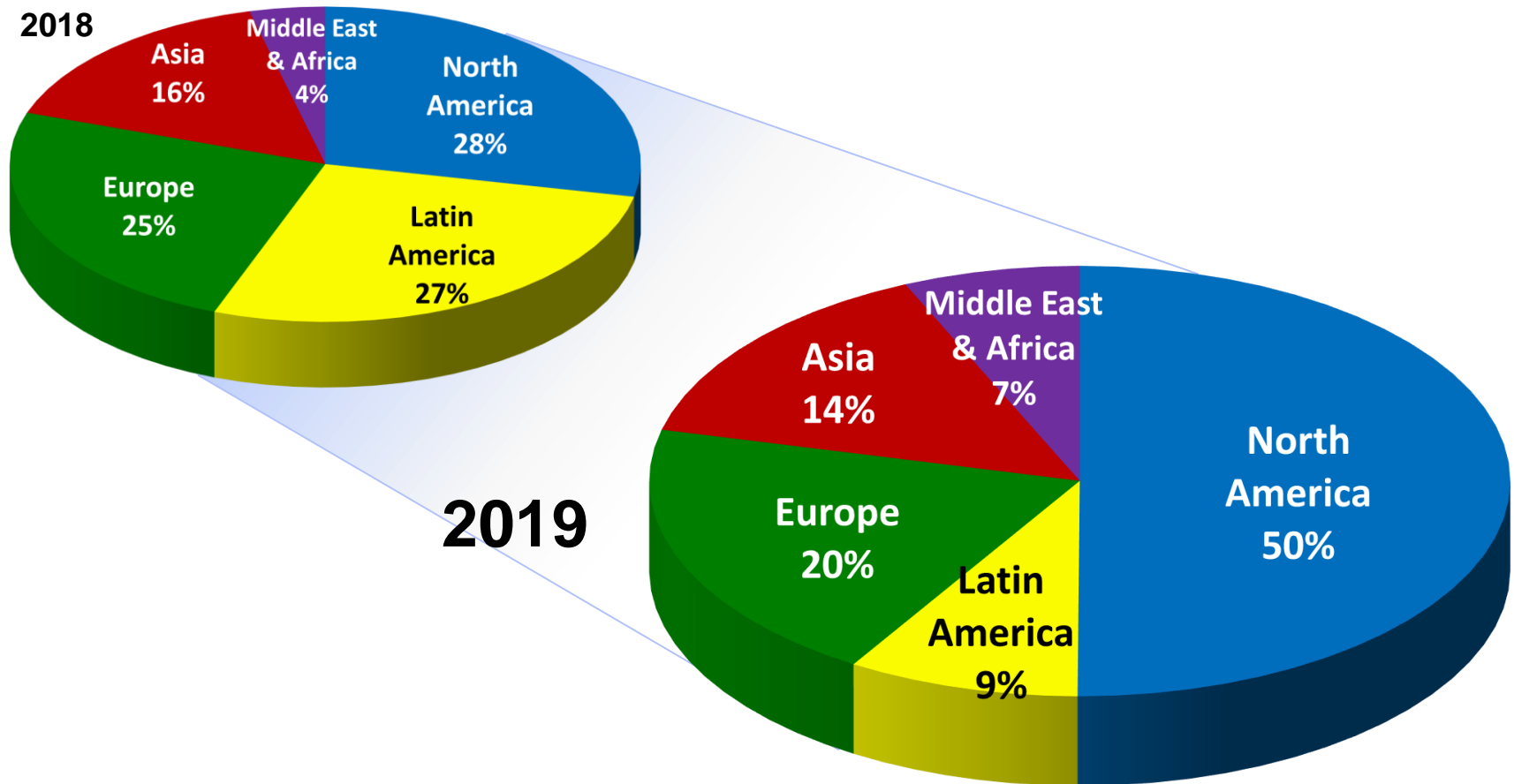
View of Future Economic Conditions



Significant increase in pessimistic views about future economic conditions when compared to last year, especially in Latin America

Five Year Demand for New Helicopters by Region

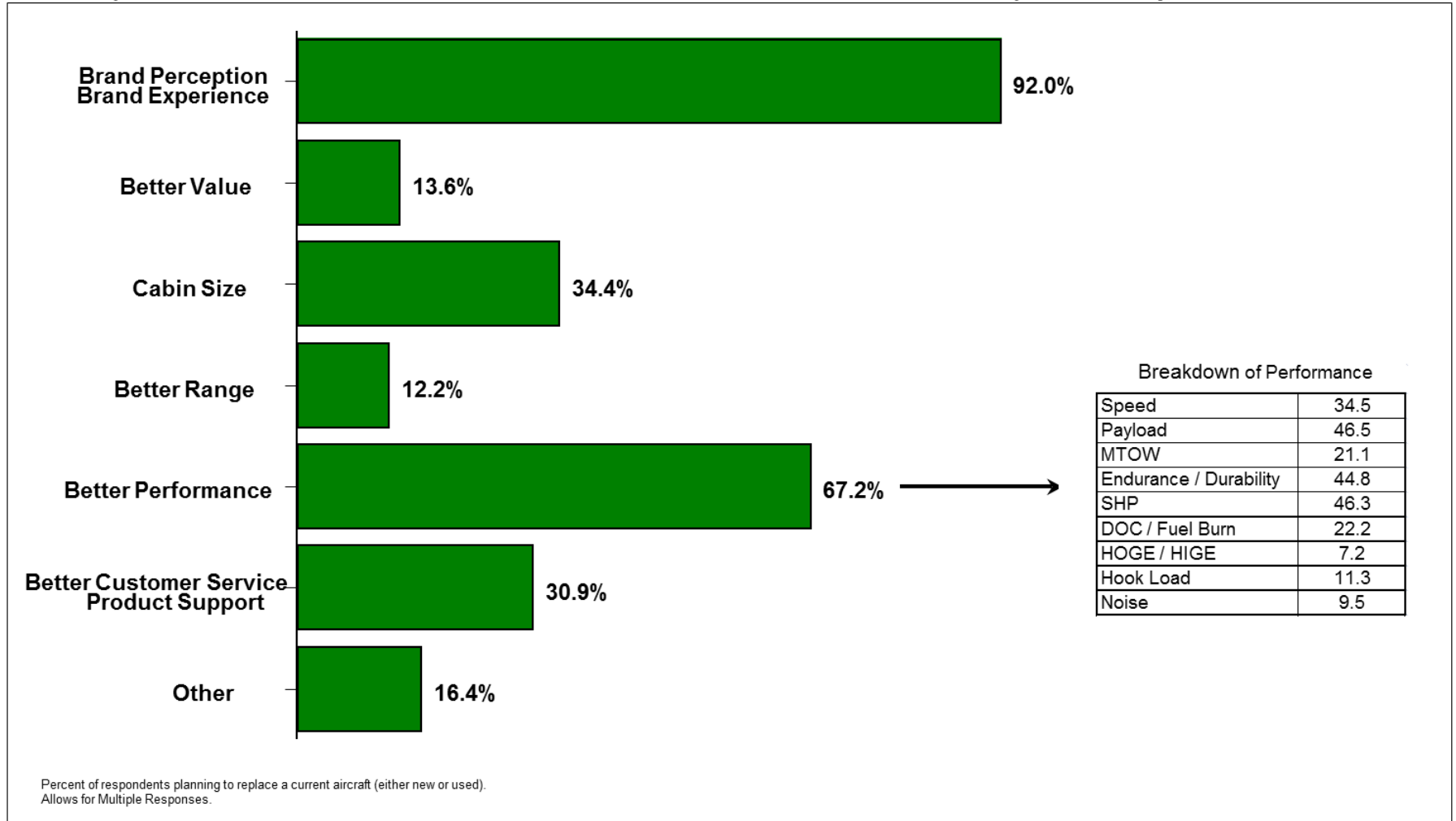
Extrapolation of survey data to world fleet



**North America account for 50% of global demand
Latin America lost significant share vs. last year**

Reasons for Model Choice - Worldwide

“Compared to alternatives in the same class, what makes this model the best choice for replacement of your current aircraft?”



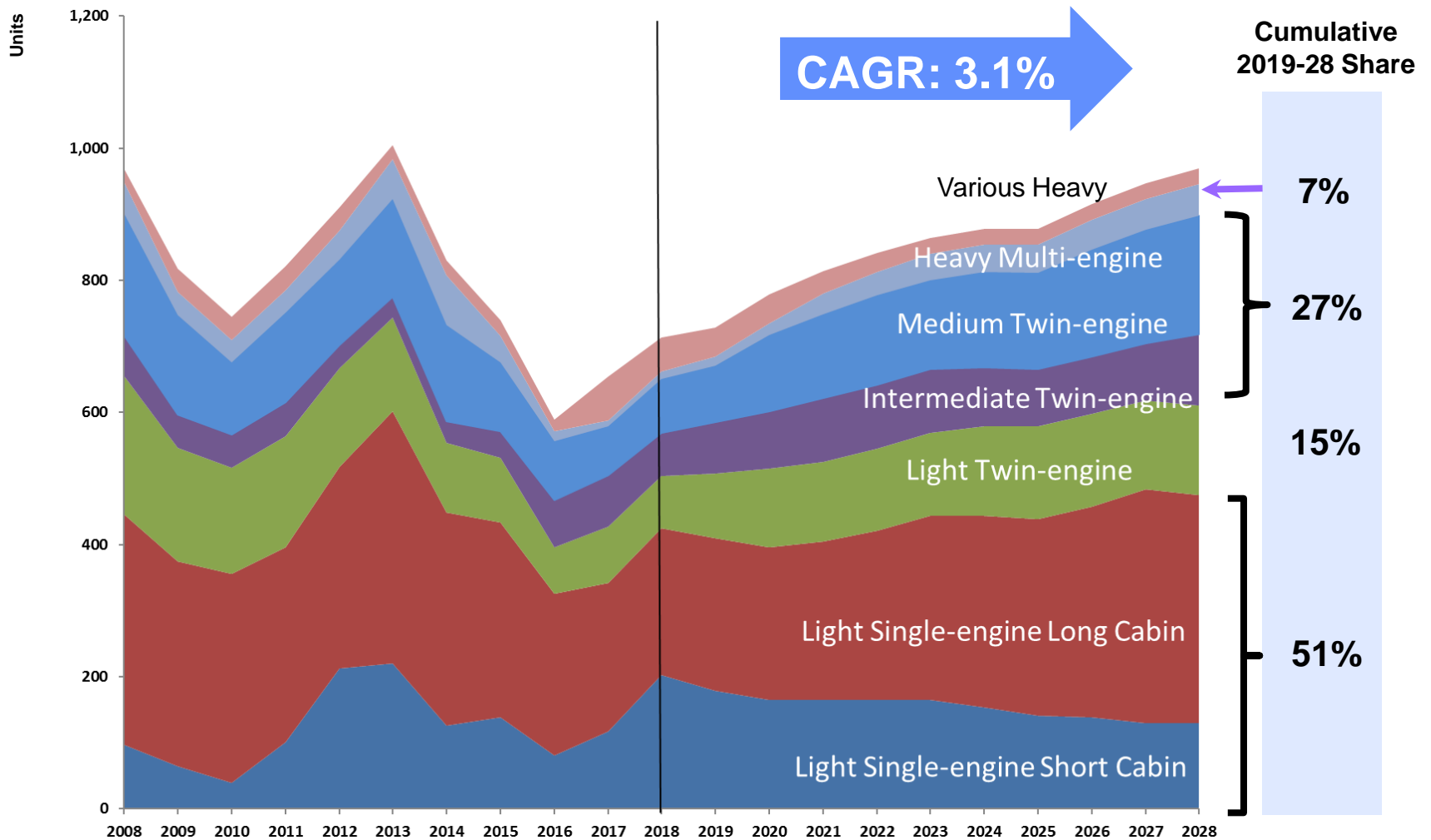
Brand performance most important driver of model choice

Trade Matrix for Turbine-Powered Aircraft to be Purchased New Within the Next Five Years

Current Aircraft ¹	Piston Engine	Light / Intermediate Single-Engine	Light Twin-Engine	Intermediate / Medium Twin-Engine	Heavy Twin-Engine
Piston (R44)	92.3	7.7			
Light/Intermediate, Single-Engine		95.4	2.1	2.1	0.4
Light, Twin-Engine			58.0	42.0	
Intermediate/Medium, Twin-Engine		1.4	14.3	82.1	2.1
Heavy, Twin-Engine					100.0

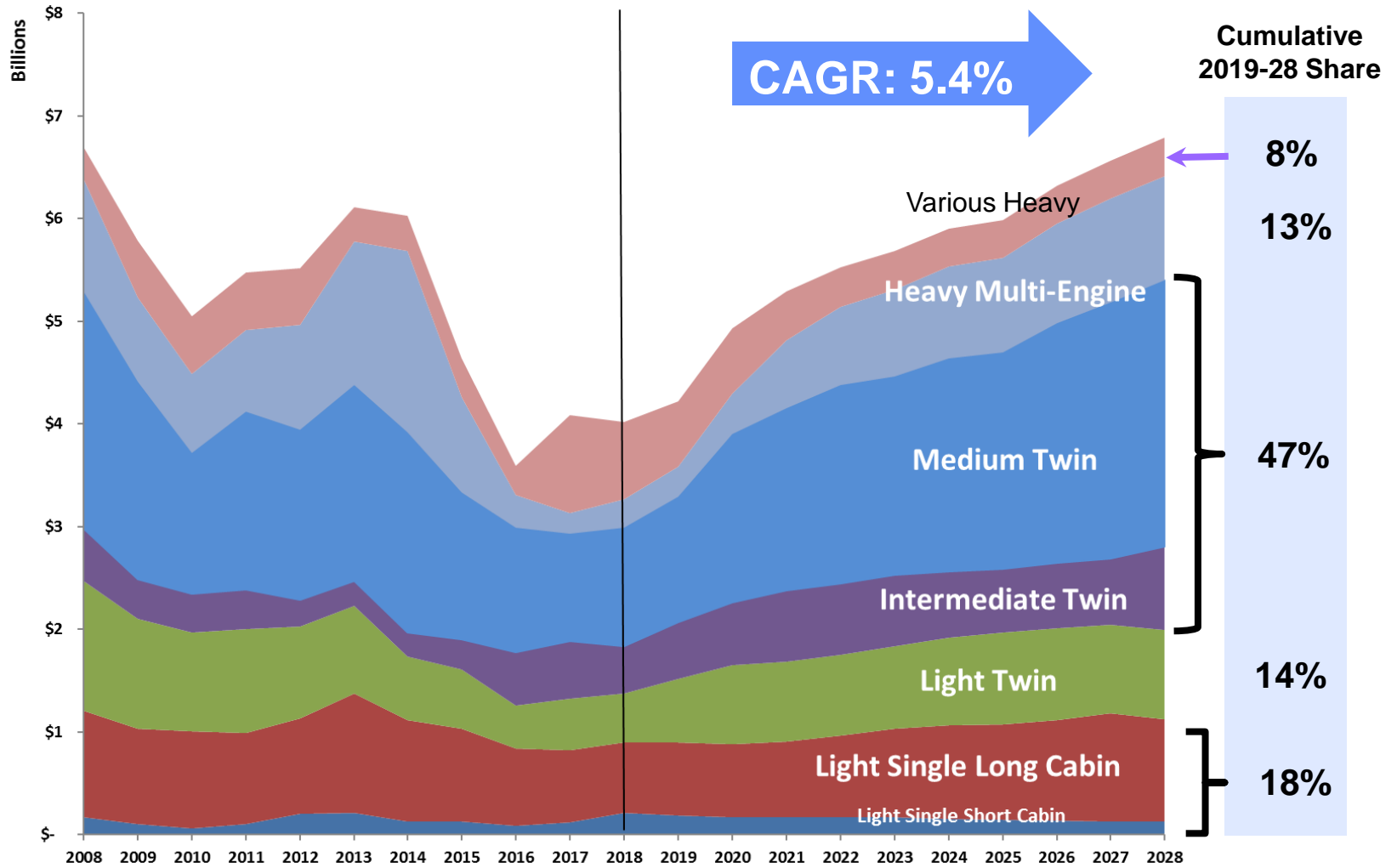
Light Twin operators expressing significant desire to upgauge platforms

Market Outlook by Helicopter Class - Units



~8,600 New Helicopter Deliveries from 2019-2028

Market Outlook by Helicopter Class – 2014 Dollars



New Helicopter Deliveries Worth ~\$57B from 2019-2028