



# Rise of robotics

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# Learning objectives

During today's session you will learn about

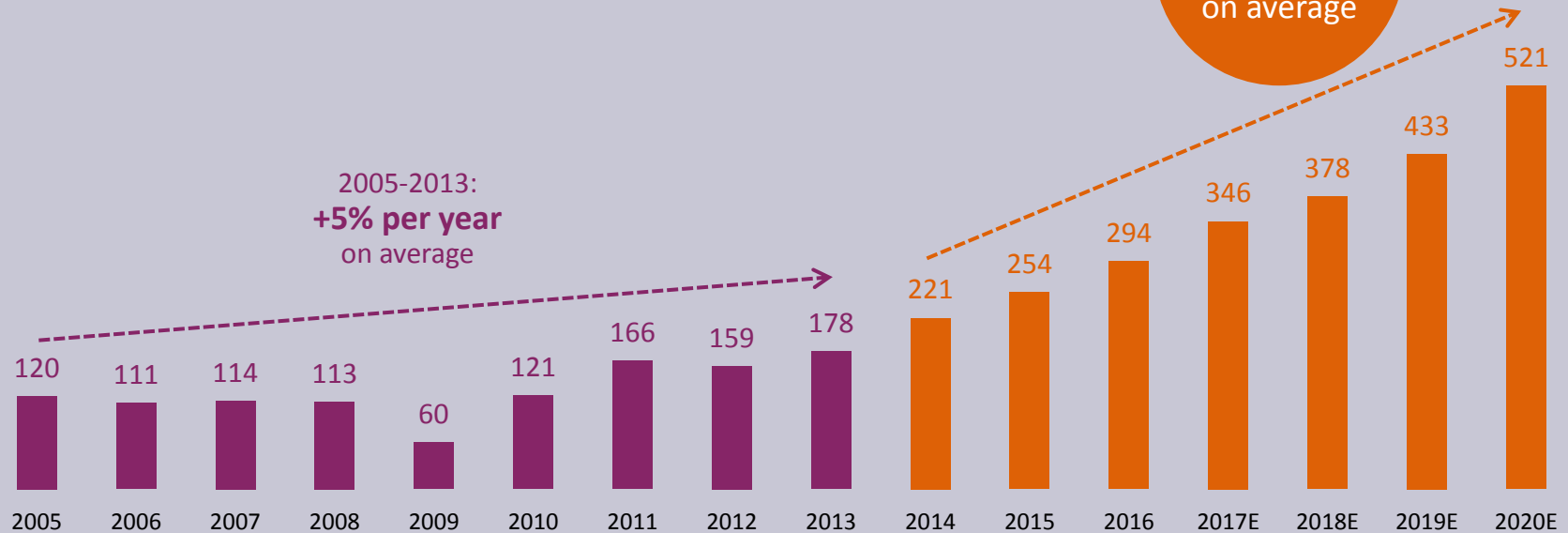
1. The typical technology life cycle
2. The investment characteristics of the technology and robotech sectors
3. The long-term themes and current innovations within the technology and robotech sectors

# Just the beginning of a multi-year investment theme

Worldwide annual supply of industrial robots  
(units in thousand)

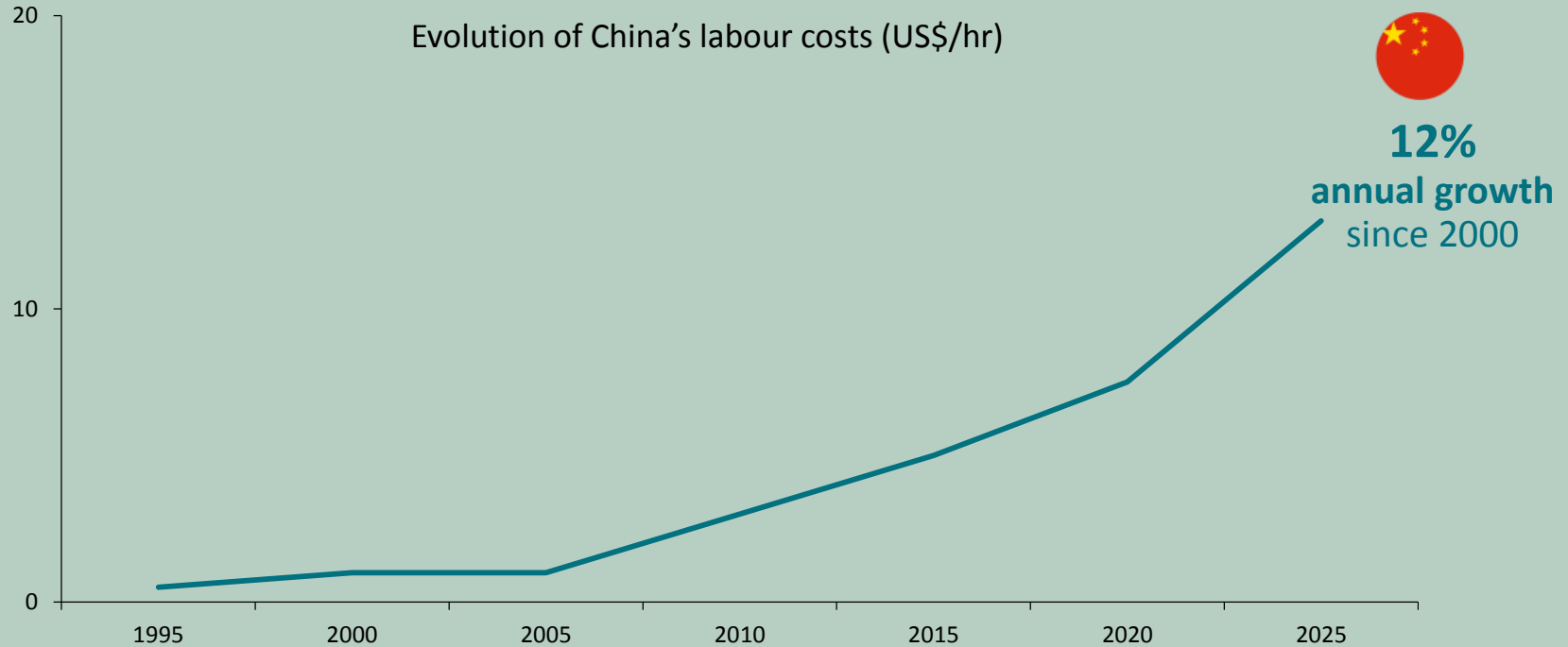
2014-2020:  
**+15% per year**  
on average

2005-2013:  
**+5% per year**  
on average

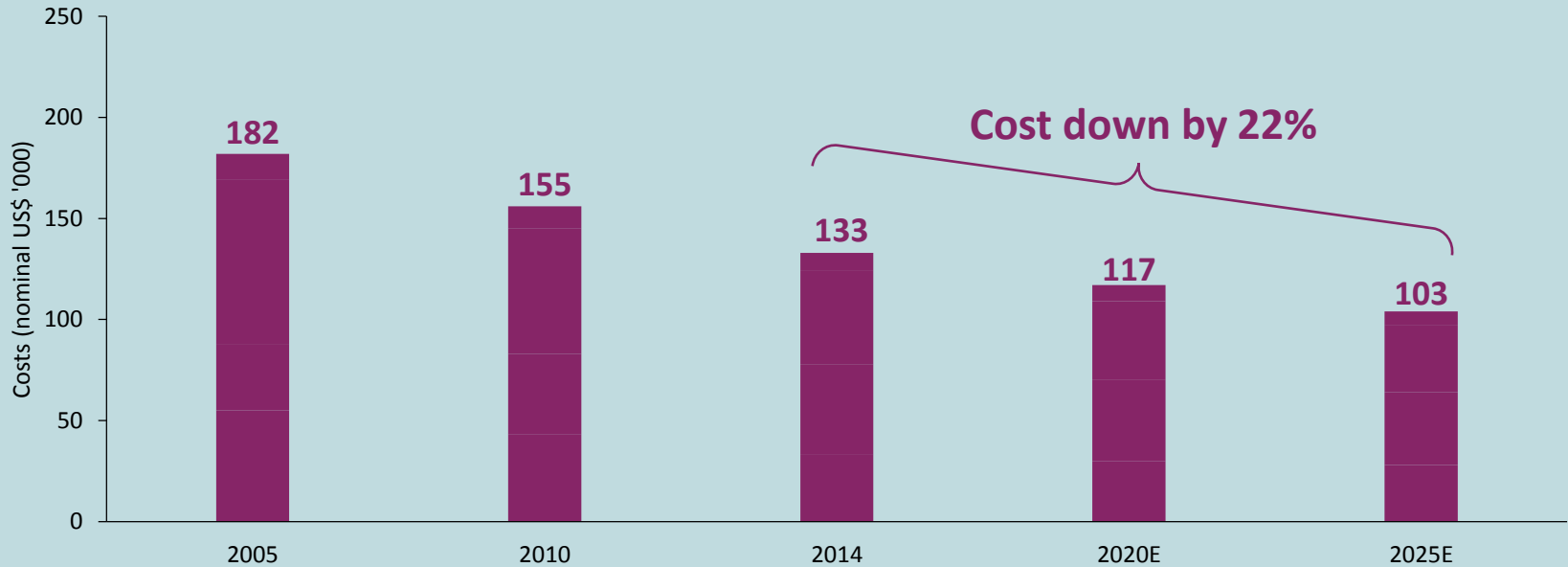


Source: AXA IM. chart: IFR World Robotics 2017. Performance results of the past are not a reliable indicator for any future returns or trends. The growth of the global robotics market is not a reliable indicator of performance of the securities/companies which will be selected.

# Labour costs are rising...

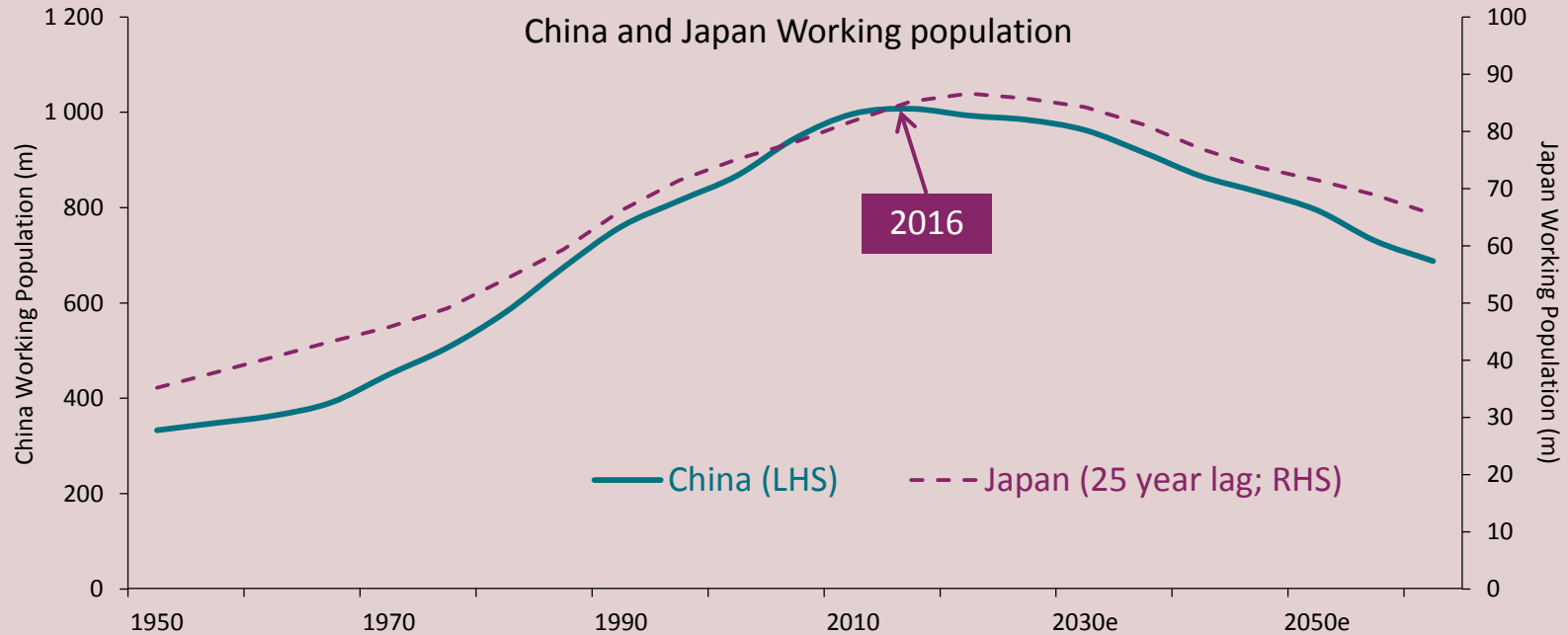


# ... while robots are cheaper & more flexible



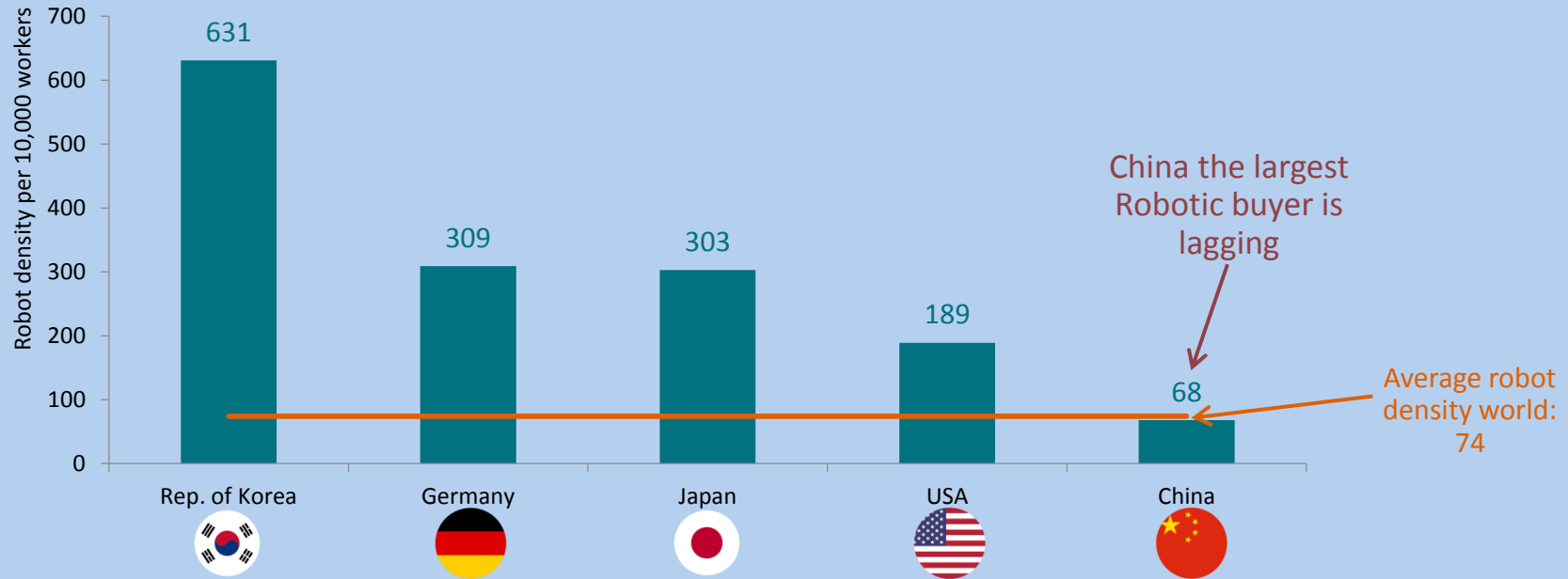
Source: ABB, Economic Justification for Industrial Robotic Systems, 2007; International Federation of Robotics, World Robots; expert interviews; BCG analysis

# Working population is contracting...



# ... & there is a huge potential for further robotics adoption

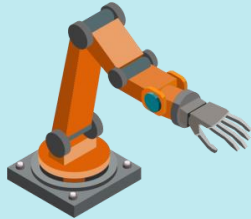
Robot density per 10,000 workers



# Key themes within our strategy\*

## Industrial Automation

(c. 35%\*\* of the universe)



## Transport

(c. 15%\*\* of the universe)



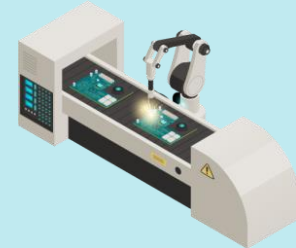
## Healthcare

(c. 15%\*\* of the universe)



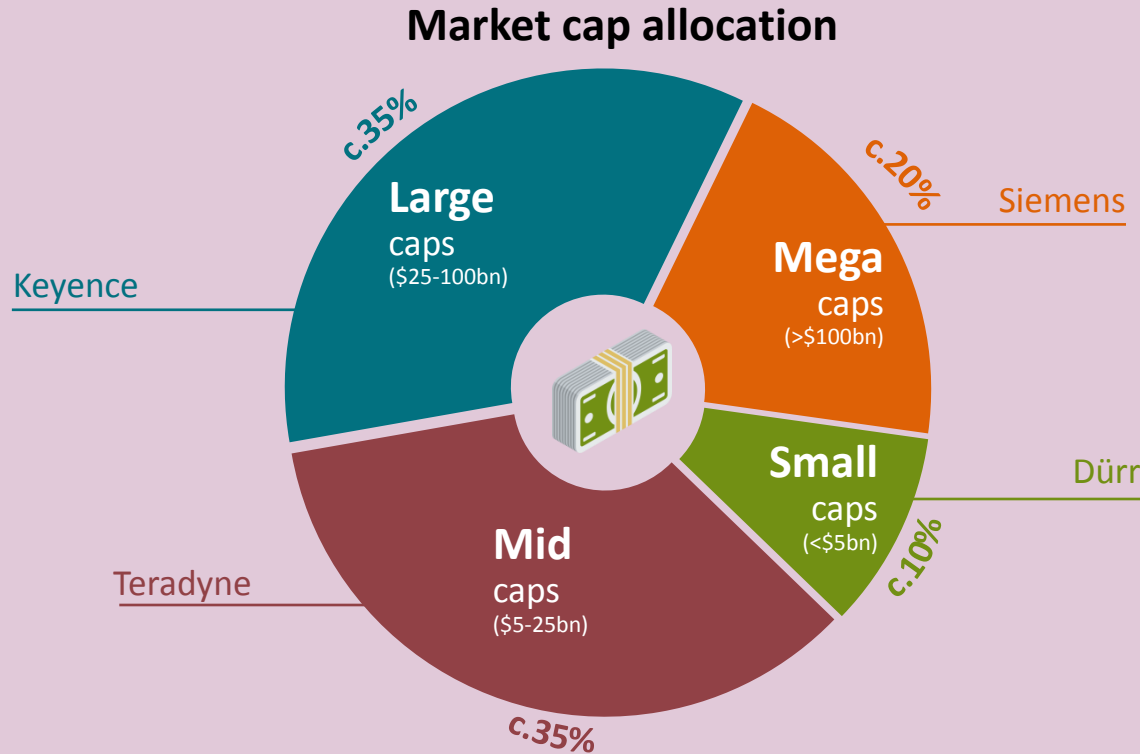
## Technology Enablers:

Semiconductors / Software / Connectors/ Artificial Intelligence  
(c. 35%\*\* of the universe)





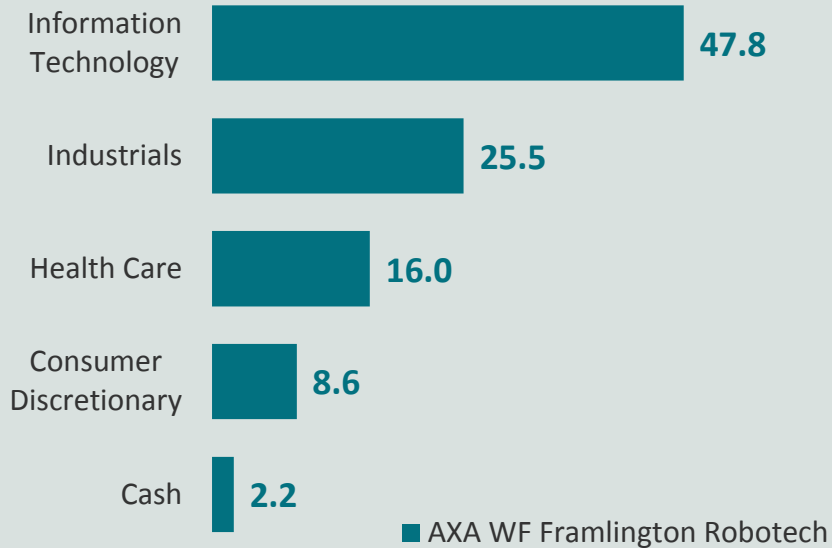
# Typical structure of the Robotech strategy (1)



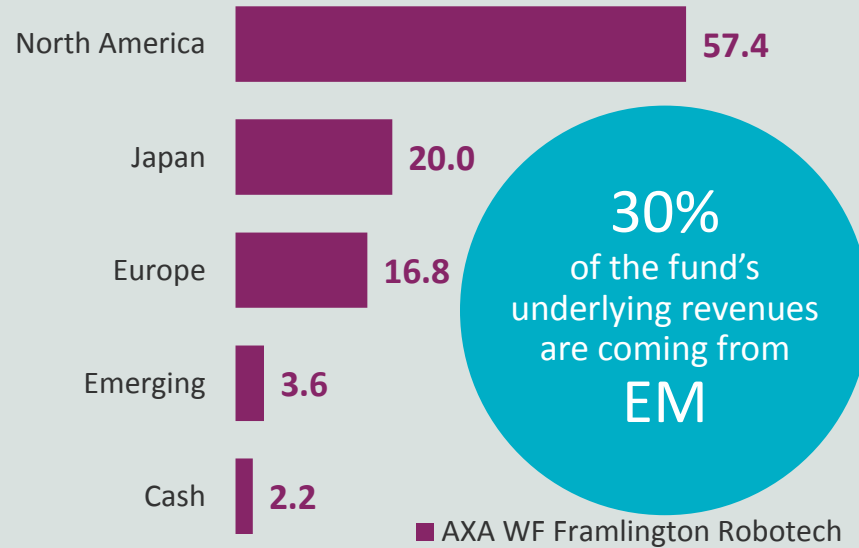
Source: AXA IM as at 30/04/2018. For illustrative purposes only. The stock examples specifically identified herein do not represent all of the securities purchased, sold or recommended for client accounts.

# Typical structure of the Robotech strategy (2)

## GICS Sector split

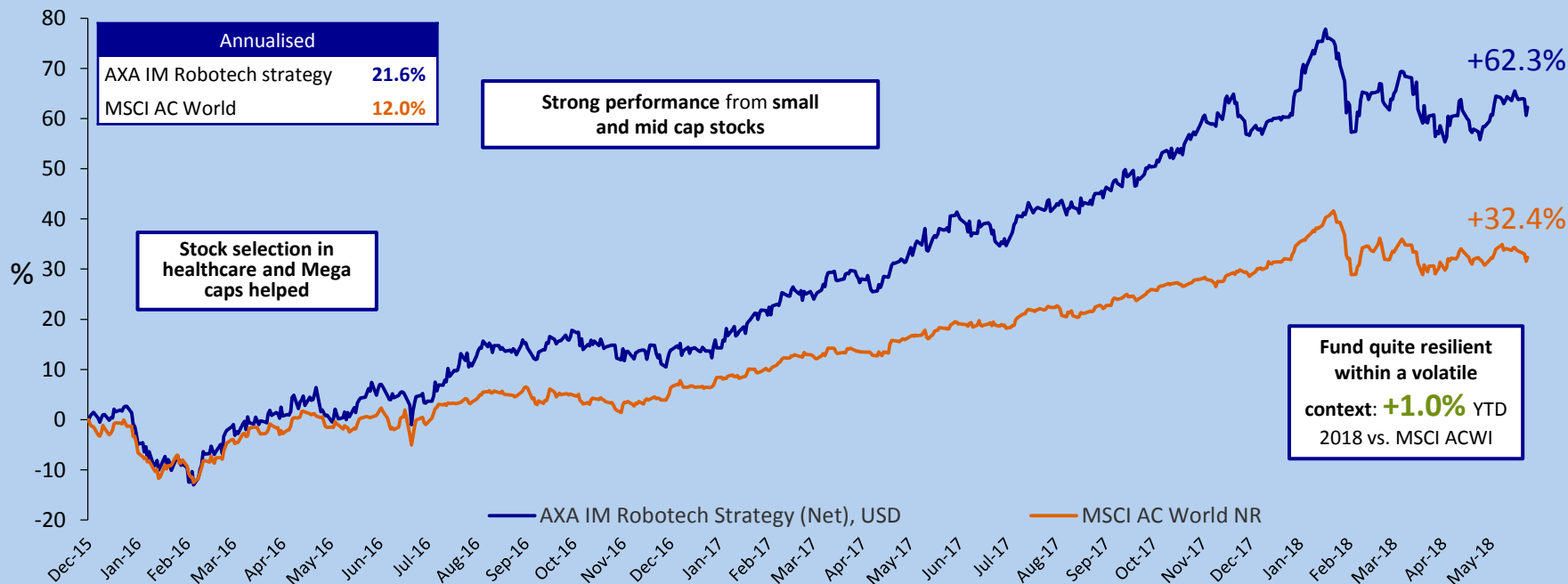


## Geographical split



# Performance of the Robotech strategy\*

Explanation of the outperformance since inception (08/12/2015)



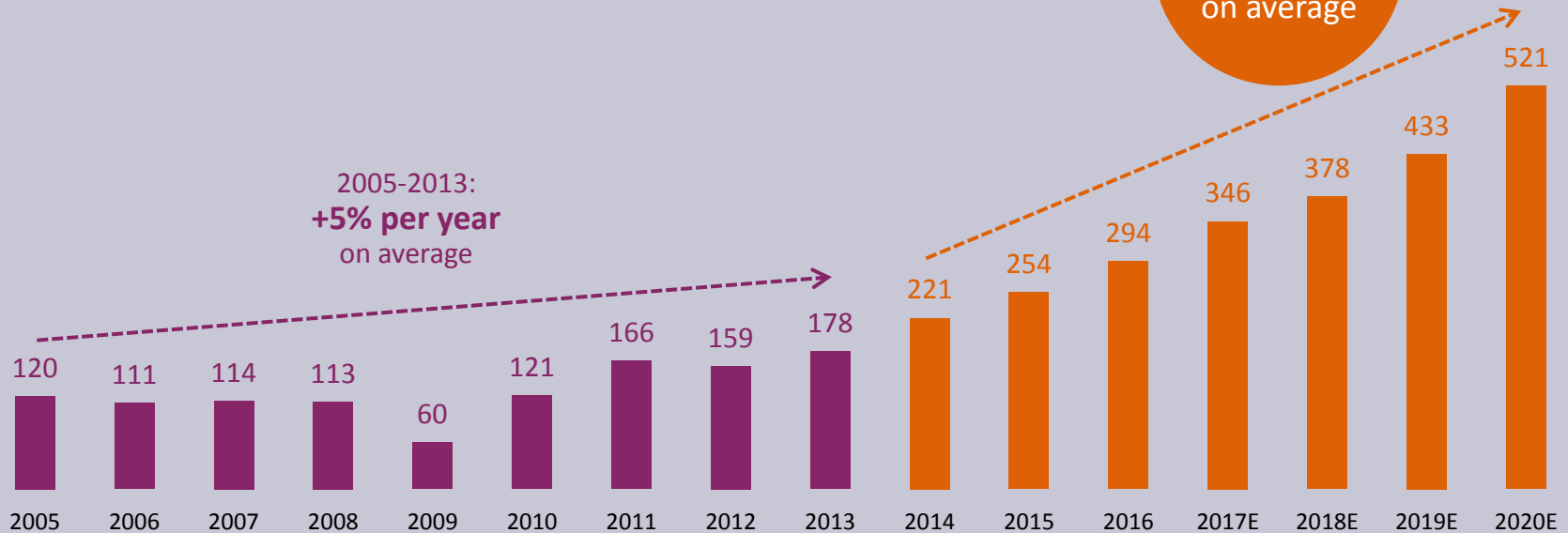
Source: Lipper as at 31/05/2018. \*AXA IM Global Robot Technology Equity Mother Fund is the representative account of the strategy for illustration purposes. Basis: NAV, Net income reinvested, net of fees in USD, 1.13% fees. The figures provided relate to previous months or years and past performance is not a reliable indicator as to future performance. Performance calculations are based on the reinvestment of dividends. Index's performance is calculated on the basis of dividends. The strategy does not have a reference index. The strategy's performance indicator, the MSCI All Country World NR Index, is given as a basis for comparison only. The representative account may not be available in your jurisdiction \*\*M&A: Mergers and Acquisitions (1) There is no guarantee that the strategy will achieve its goals.

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# AXA World Funds - Framlington Robotech Fund

## Risk and Reward Profile

A Sub-Fund of AXA World Funds SICAV

Share class: AXA World Funds - Framlington Robotech F Capitalisation GBP (ISIN: LU1529781202)

*This Sub-Fund is managed by AXA Funds Management S.A., part of the AXA IM Group*

Share Class F Capitalisation GBP (LU1529781202) is representative for Share Class F Distribution GBP (LU1529781384).



The risk category is calculated using historical performance data and may not be a reliable indicator of the Sub-Fund's future risk profile.

The risk category shown is not guaranteed and may shift over time.

The lowest category does not mean risk free.

### Why is this Sub-Fund in this category?

The capital of the Sub-Fund is not guaranteed. The Sub-Fund is invested in financial markets and uses techniques and instruments which are subject to some levels of variation, which may result in gains or losses.

### Additional Risks

Counterparty Risk: Risk of bankruptcy, insolvency, or payment or delivery failure of any of the Sub-Fund's counterparties, leading to a payment or delivery default.

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