

THE SOURCE for Critical Information and Insight™



IHS TECHNOLOGY, MEDIA & TELECOMMUNICATIONS

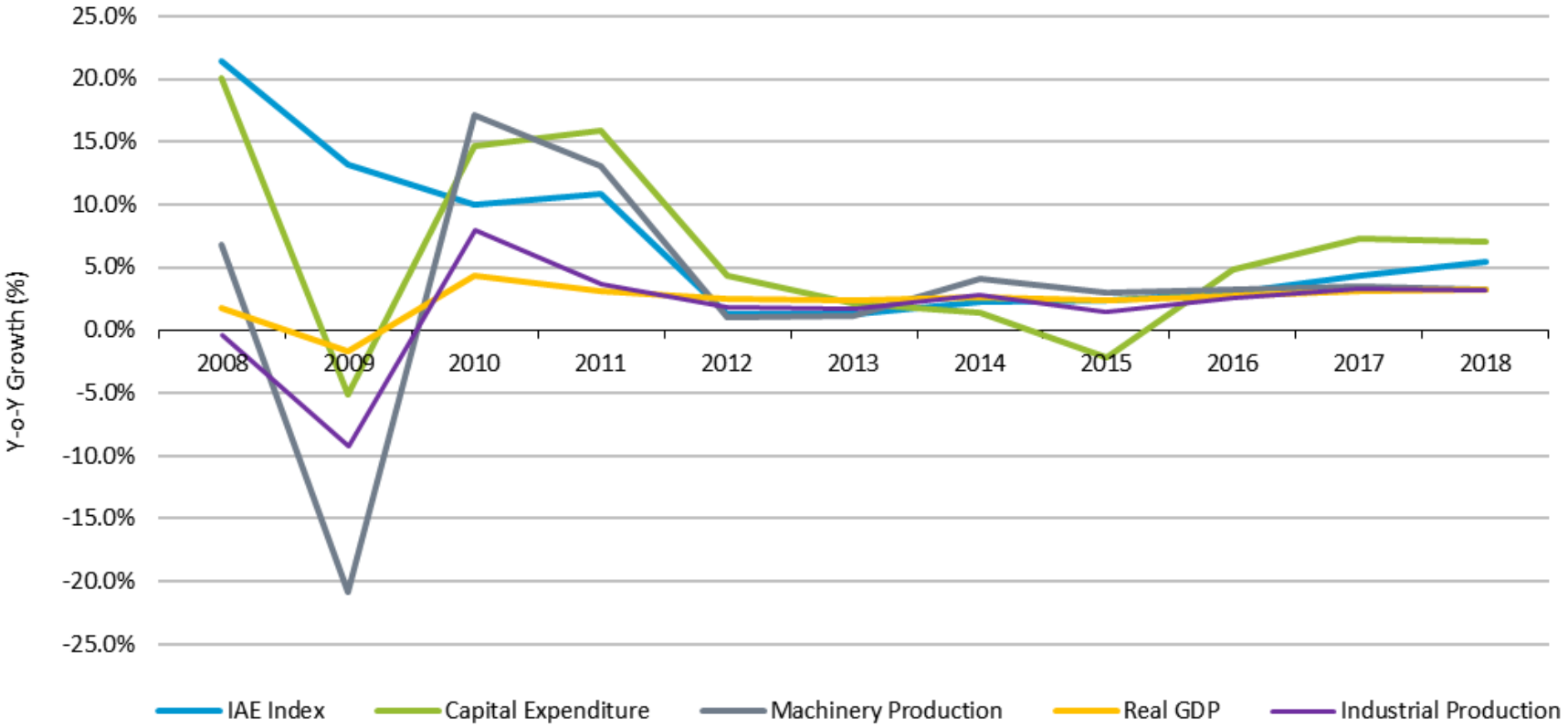
IHS END MARKET UPDATE - EMBEDDED

Mark Watson, Senior Research Manager
+44 (0) 1933 402255
Mark.Watson@ihs.com



Automation market vs. other indices

Major indices comparison



2015 summary – Industrial automation



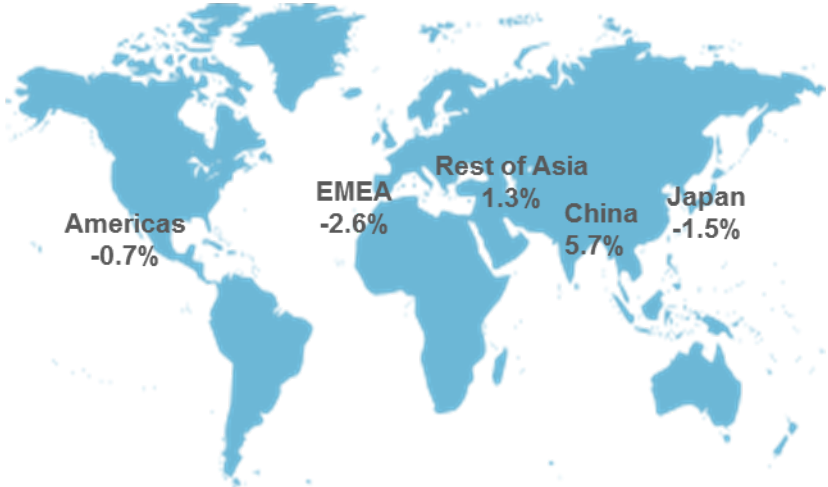
\$176B

2015 Equipment Revenue

- M** 36.5% Motors & Motor Controls
- A** 38.2% Automation Equipment
- P** 25.4% Power Transmission Equipment

\$40.1 billion Motors & Generators	\$30.8 billion Discrete Controllers	\$15.1 billion Rotary Products
\$24.1 billion Motor Controls	\$19.5 billion Process Control	\$29.5 billion Linear Products
\$17.0 billion Switchgear		

2015 Regional Sales Growth



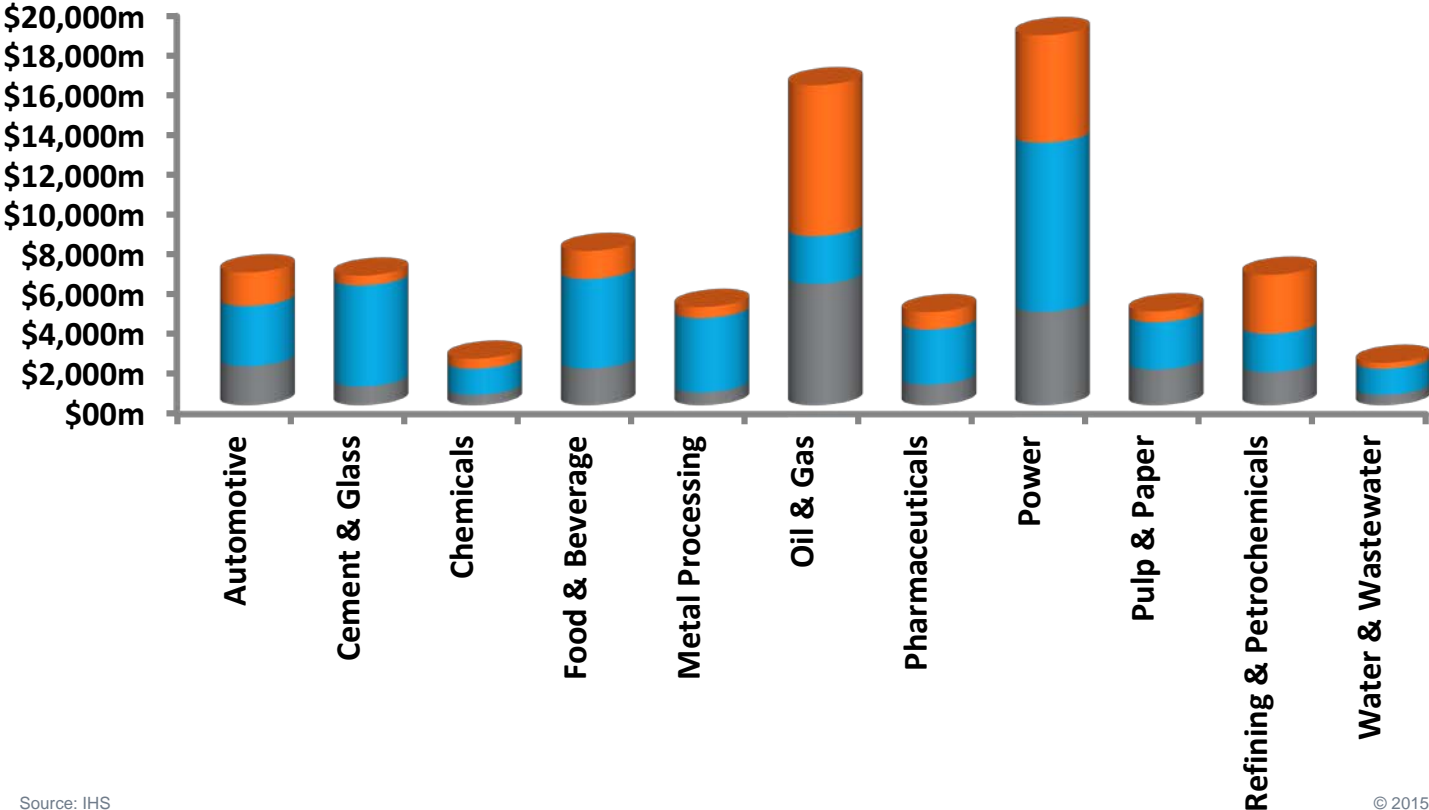
2015 Market Drivers

Global GDP 2.5% Growth	42.3% IAE Sales into Discrete Manufacturing
Machinery Production 2.9% Growth	42.5% IAE Sales into Process Manufacturing
Capital Expenditure -3.2% Decline	



Process markets pulling down industrial automation growth

- Capex spend on automation equipment is expected to decline 3.2% in 2015, pulling down overall growth of in the market.



Source: IHS

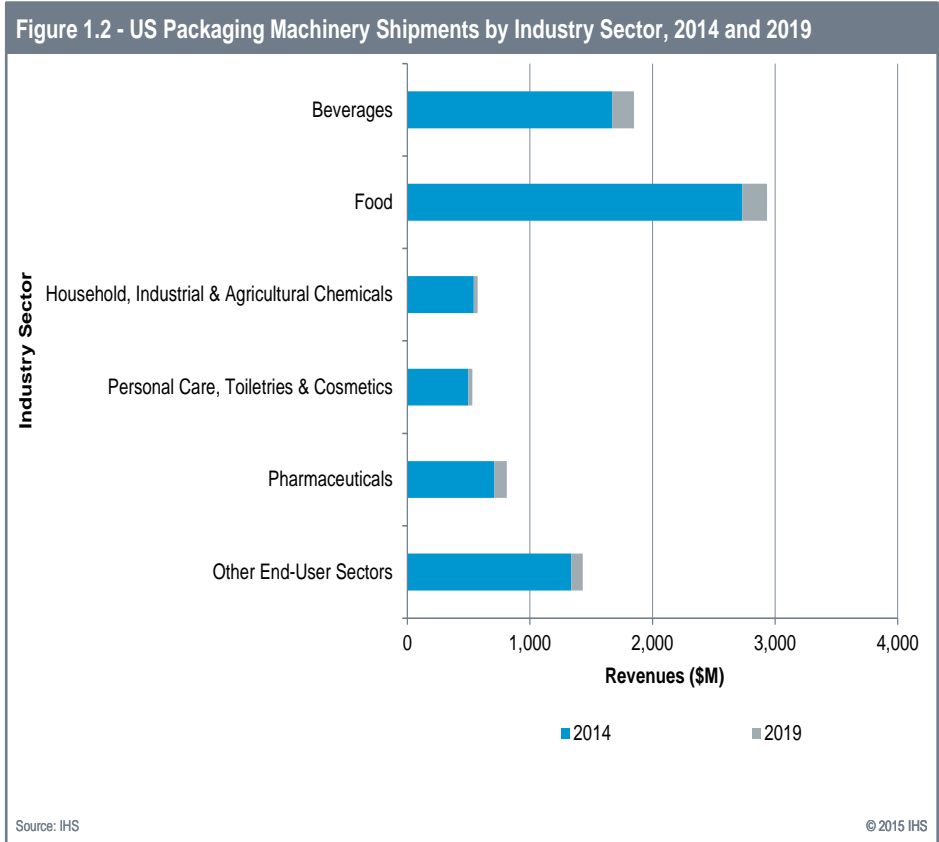
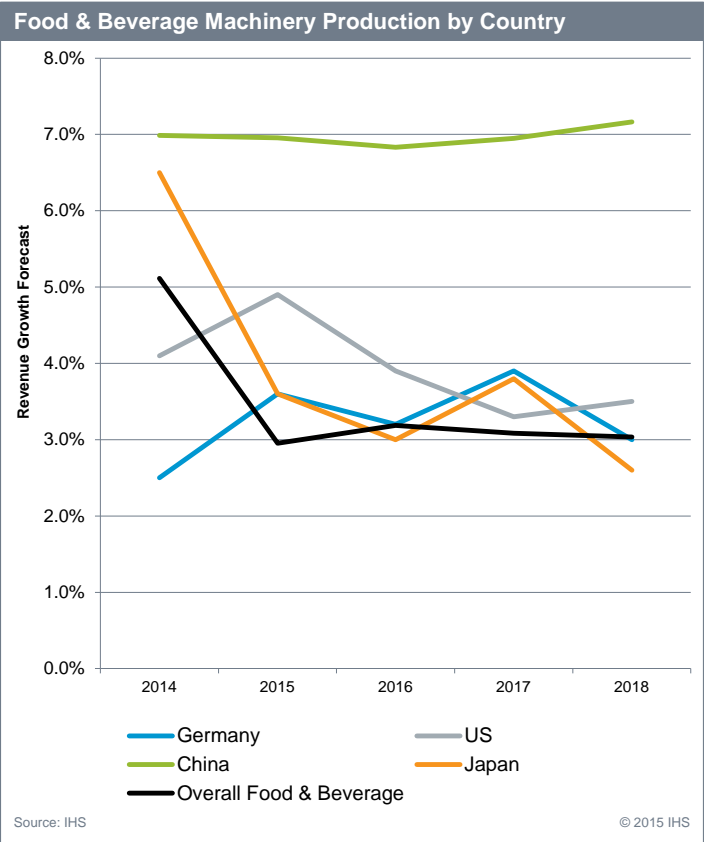
© 2015 IHS



Typically high growth machinery markets posting slower growth

- Food & Beverage & Packaging Machinery

The growth in population across much of the US has stalled and in some cases is decreasing slowly. Growth of packaging machinery and food & beverage will continue in regions with strong population growth or increasing household income, but is slower due to general economic slowing.

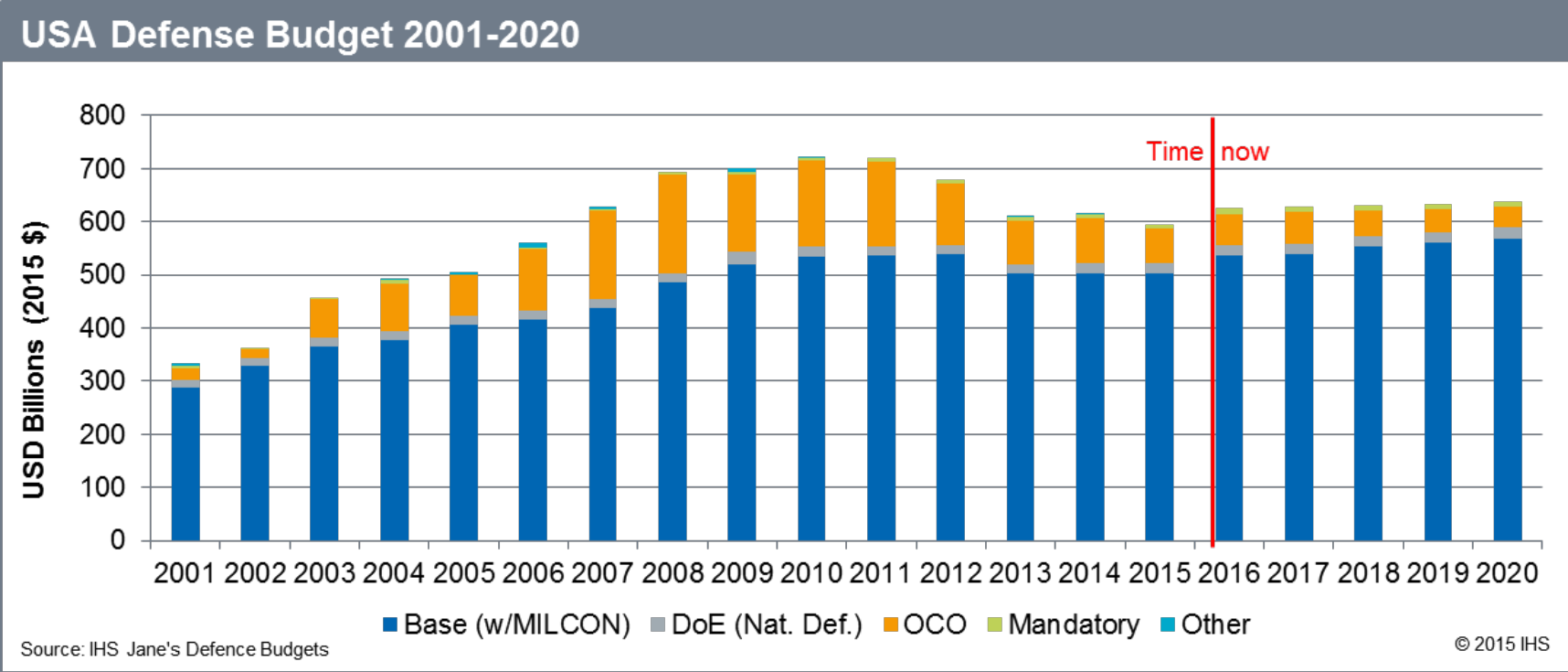


Industrial automation – Challenges and opportunities

- Challenges
 - Collapsing commodity demand
 - Overcapacity continues from 2013
 - Stock market correction; impact on industry
 - China slowdown
 - Digitalization – cyber security, software, integration
- Opportunities
 - Robotics as low cost labour alternative
 - High-tech sectors continue to perform well
 - Smart manufacturing (IIoT) – move to services and software
 - Decentralized intelligence – local and automated decision making



US defense budget 20-year profile

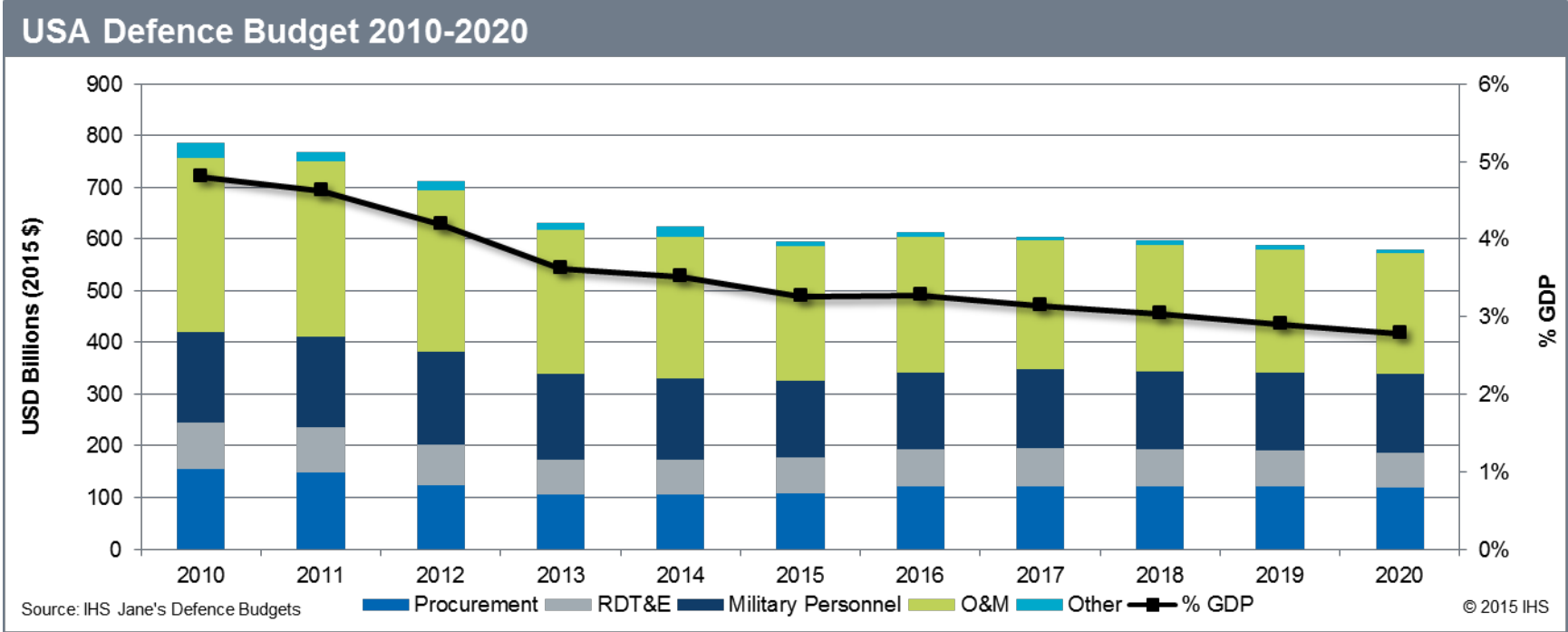


- DoD Budget has a 1.4% 5-Yr CAGR overall
- Base Budget 5-Yr CAGR is 2.5%, but OCO CAGR is -10%

US DoD Budget > USD8.6 Trillion Since 9/11, but OCO Is Decreasing



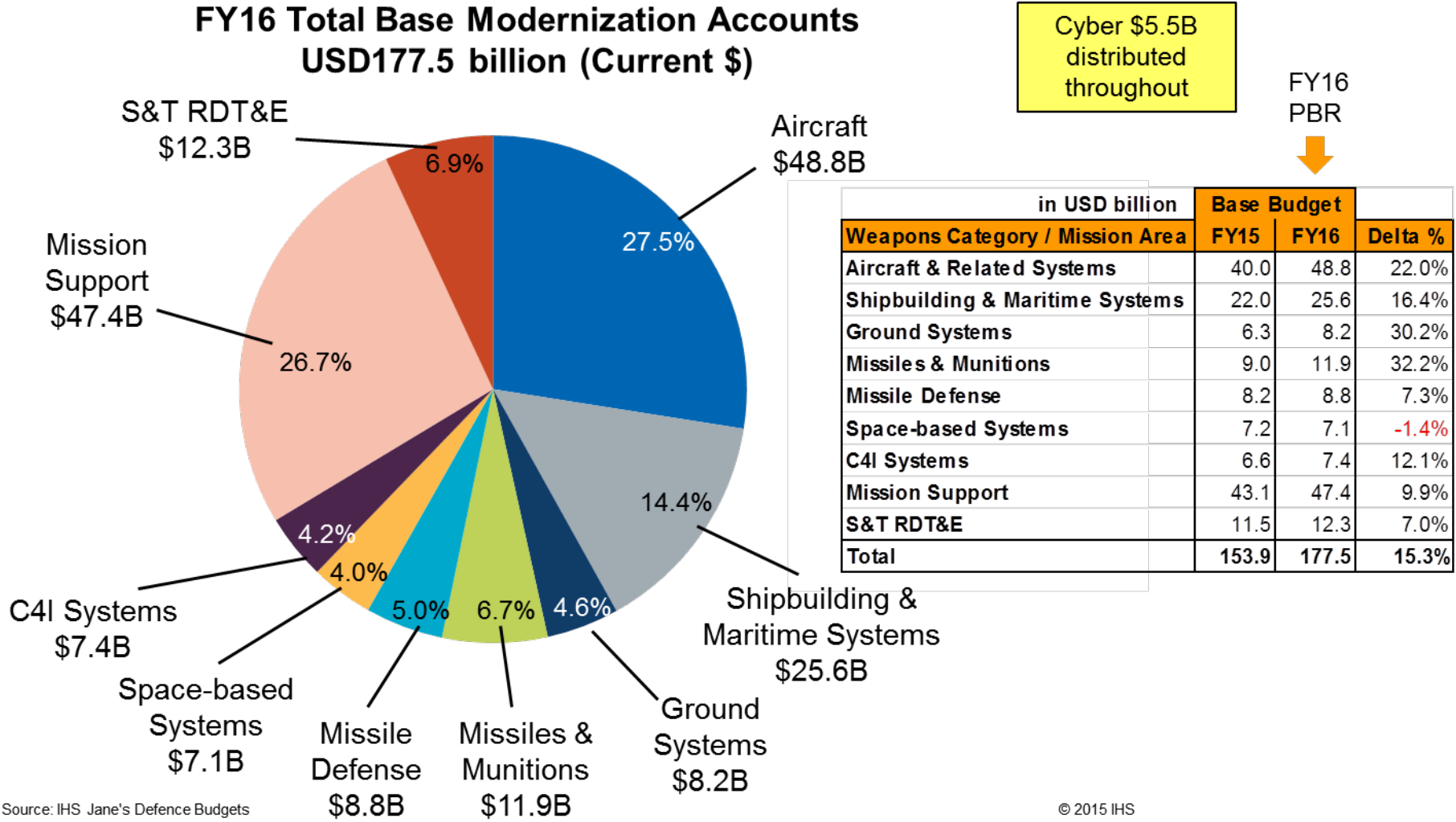
US defense budget profile



- Defense % of GDP decreasing: 4.8% in FY10 → 3.0% in FY18
- USD172 billion FY14 investment smallest in a decade – result of sequester
- Investment increasing y-o-y from FY14 to FY19 (32.6%) at 1.1% CAGR

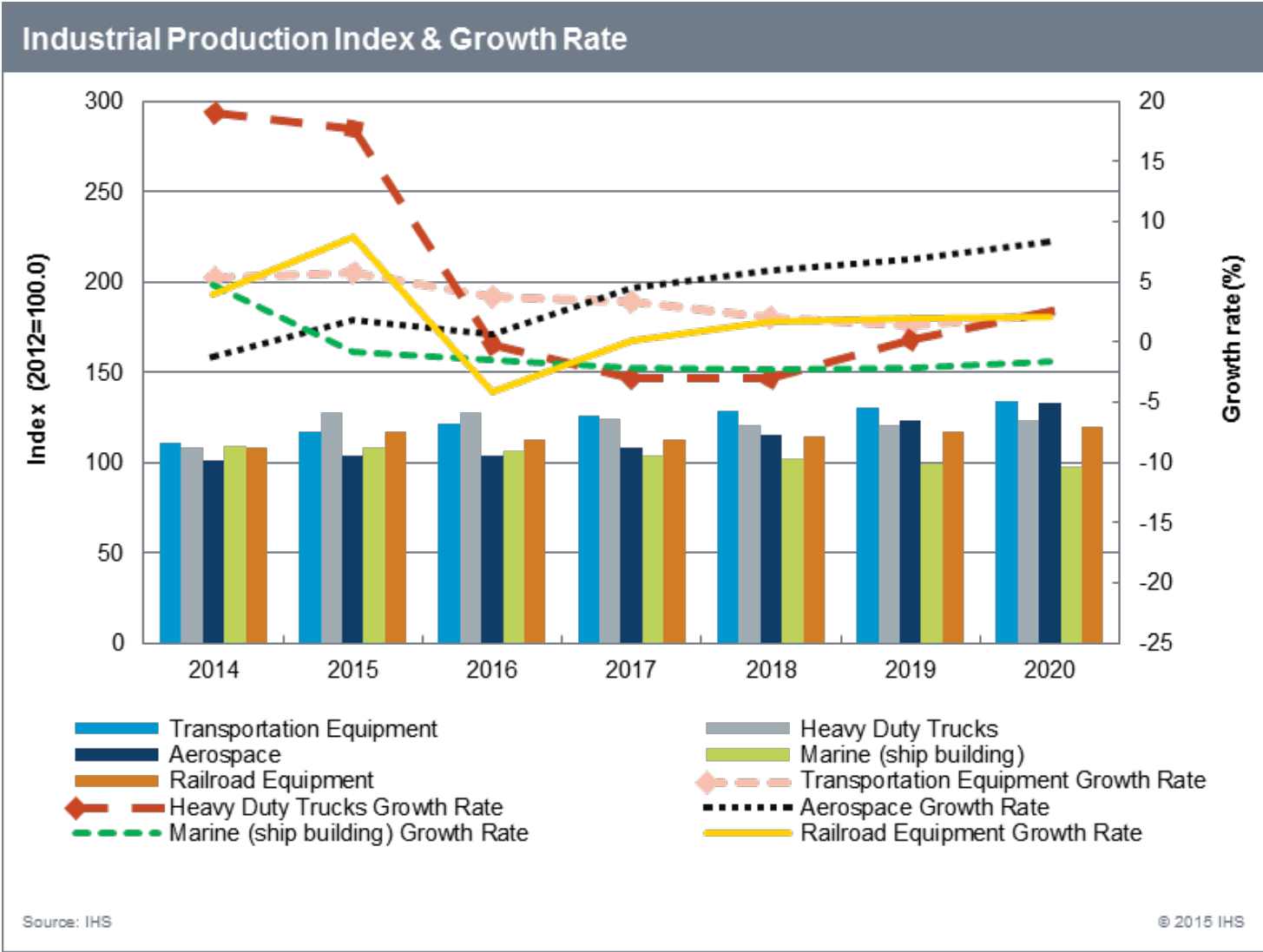
US Defence Budget Essentially Flat from FY13 to FY18 in Real Terms

DoD budget by mission category





Transportation – Still a hot opportunity?



Summary and questions

- Challenging MP and CAPEX environment; opportunity with smart manufacturing
- DoD budget has a 1.4% 5-Yr CAGR overall (although declining OCO)
- Good FY16 growth in military ground systems, missiles & munitions and aircraft spending; \$13.6 billion combined increase from FY15
- Industrial production – declining marine index from 2016 to 2020; growth percentage for aerospace increasing to 2020 (flat spot in 2016)

Questions....Thank you!

IHS Customer Care:

Americas: +1 800 IHS CARE (+1 800 447 2273); CustomerCare@ihs.com

Europe, Middle East, and Africa: +44 (0) 1344 328 300; Customer.Support@ihs.com

Asia and the Pacific Rim: +604 291 3600; SupportAPAC@ihs.com

COPYRIGHT NOTICE AND DISCLAIMER

© 2015 IHS. All rights reserved. No portion of this presentation may be reproduced, reused, or otherwise distributed in any form without prior written consent of IHS. Content reproduced or redistributed with IHS permission must display IHS legal notices and attributions of authorship. The information contained herein is from sources considered reliable, but its accuracy and completeness are not warranted, nor are the opinions and analyses which that are based upon it, and to the extent permitted by law, IHS shall not be liable for any errors or omissions or any loss, damage, or expense incurred by reliance on information or any statement contained herein. In particular, please note that no representation or warranty is given as to the achievement or reasonableness of, and no reliance should be placed on, any projections, forecasts, estimates, or assumptions, and, due to various risks and uncertainties, actual events and results may differ materially from forecasts and statements of belief noted herein. This presentation is not to be construed as legal or financial advice, and use of or reliance on any information in this publication is entirely at your own risk. IHS and the IHS logo are trademarks of IHS.

