

# Chart 1 World Electronic Equipment Production By Type

Annual Quarterly Rate \$B (converted @ fluctuating exchange rates)

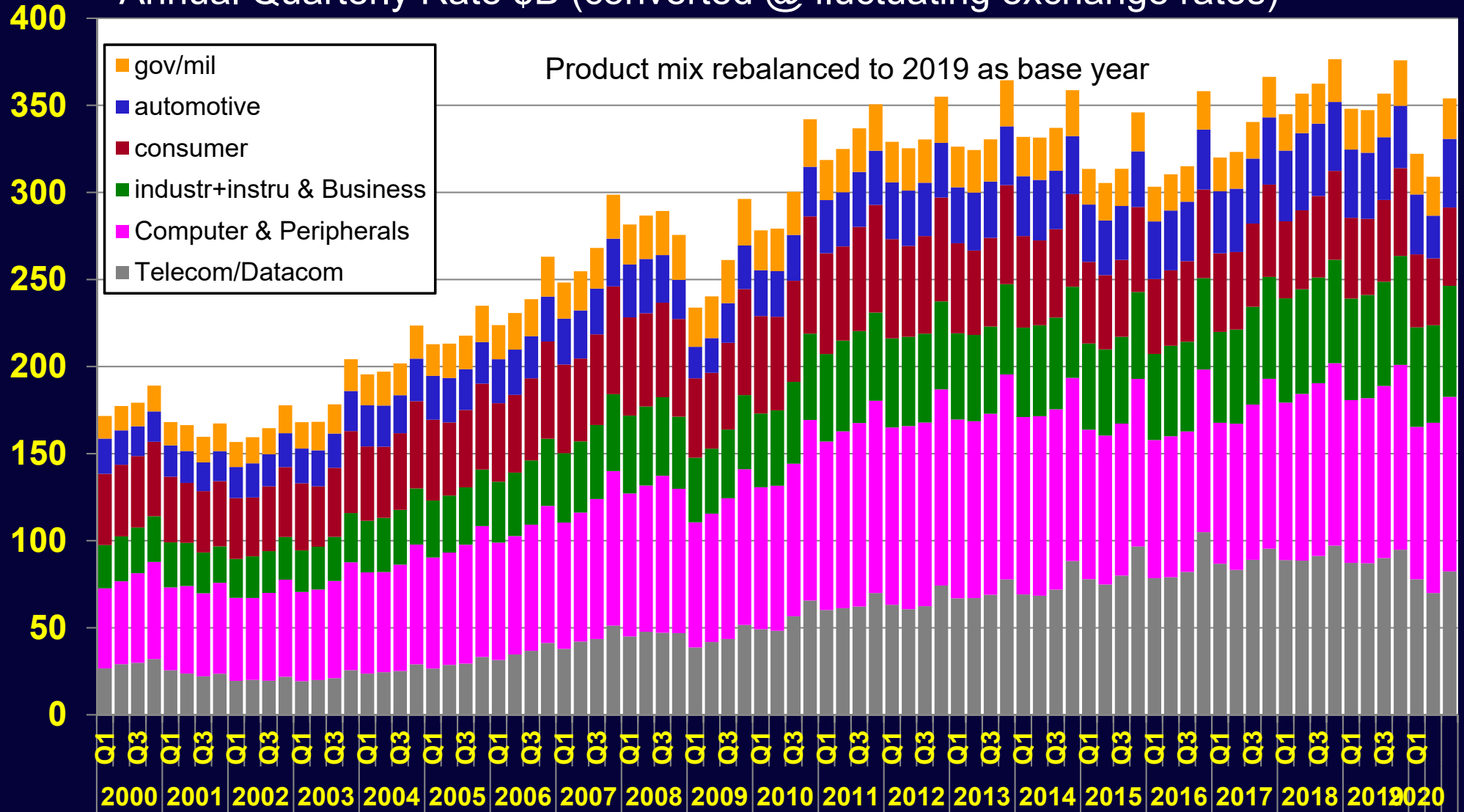
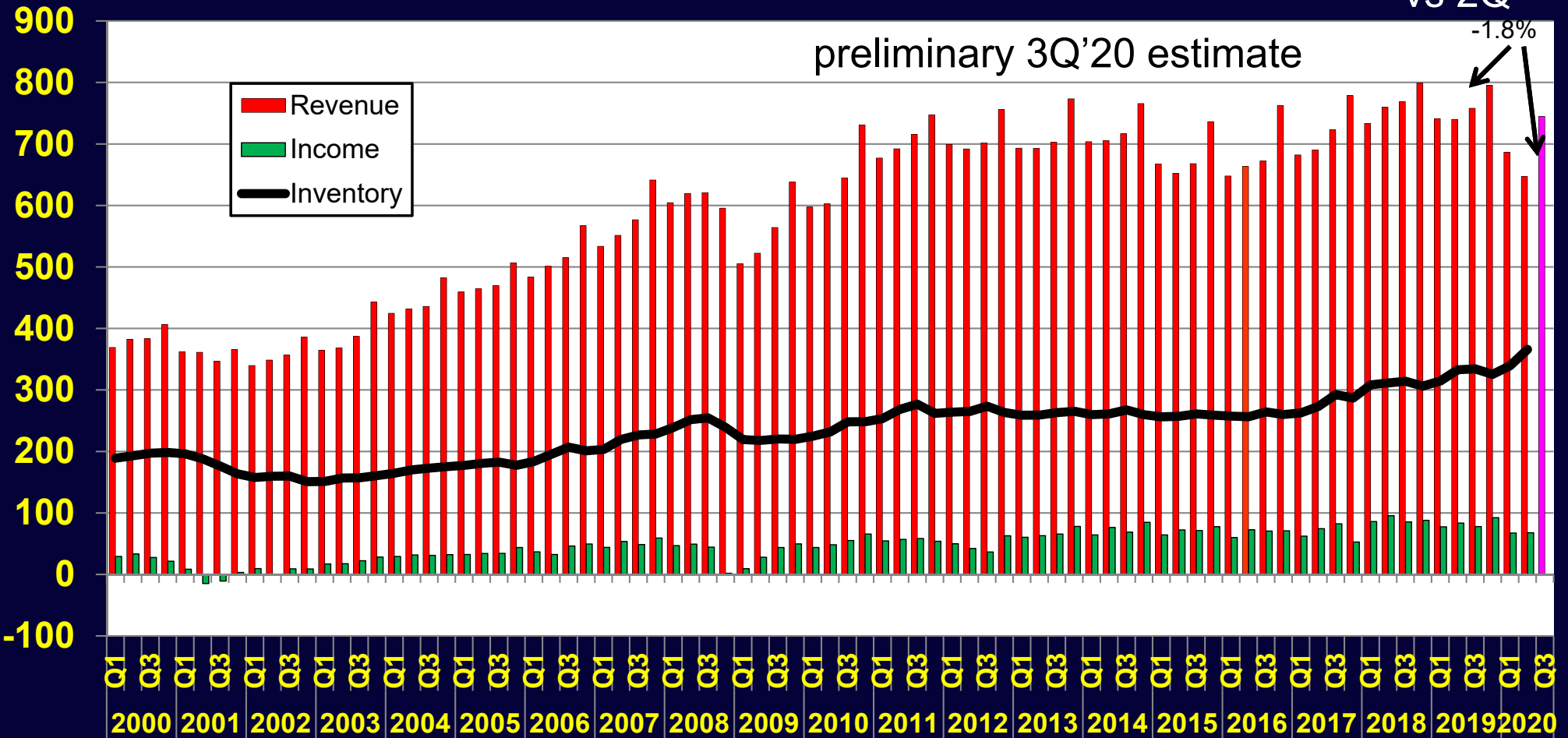


Chart 2

# Electronic Equipment Suppliers Composite of 213 Public Companies

## Revenue, Net Income & Inventory

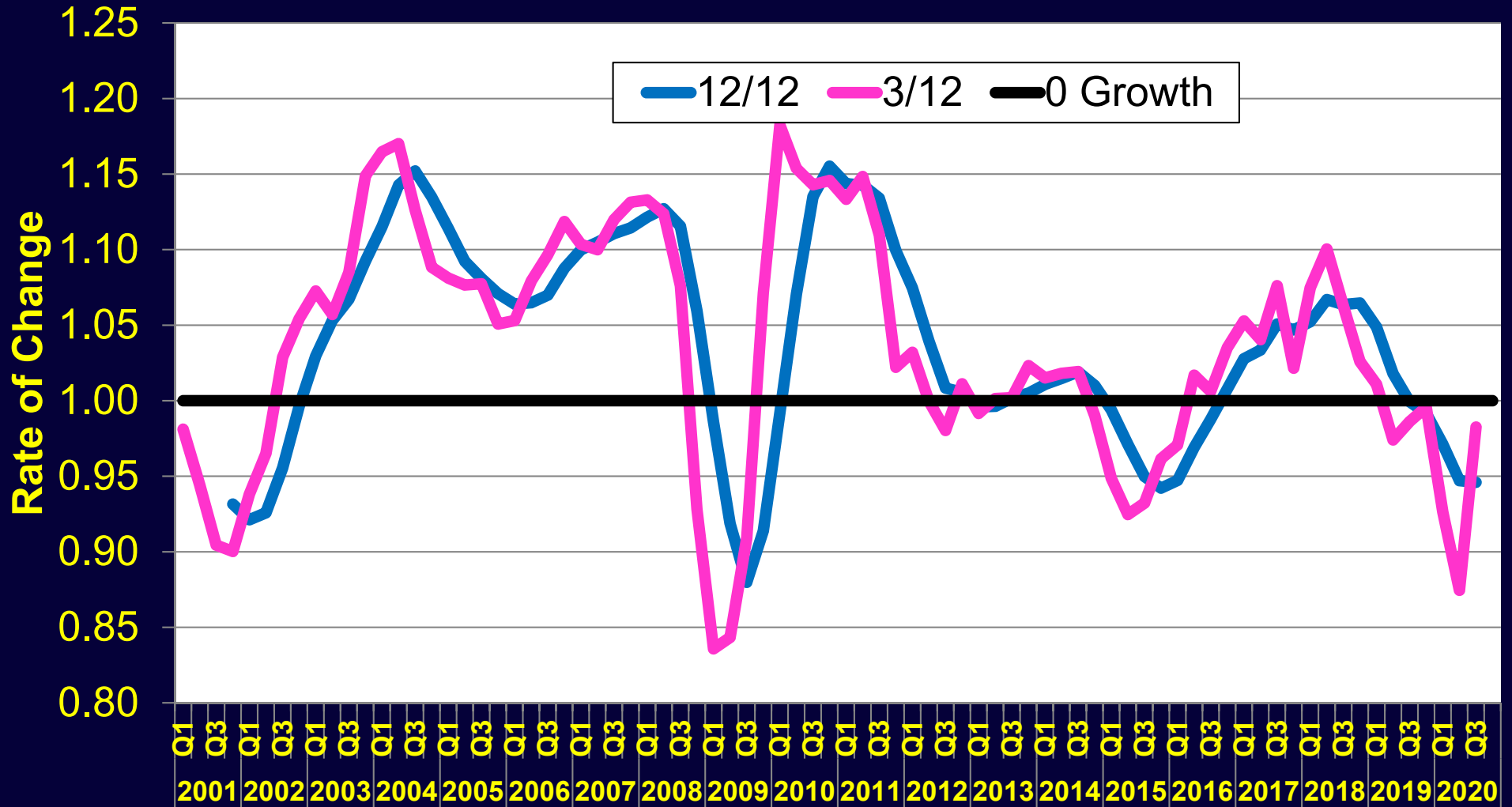
3Q up 15%  
vs 2Q



Computer 13, Internet 13, Storage 17, Communication 30, SEMI 40, Medical 21, Instruments 16, Military 21, Business & Office 6, Consumer 21, Automotive 15

Chart 3

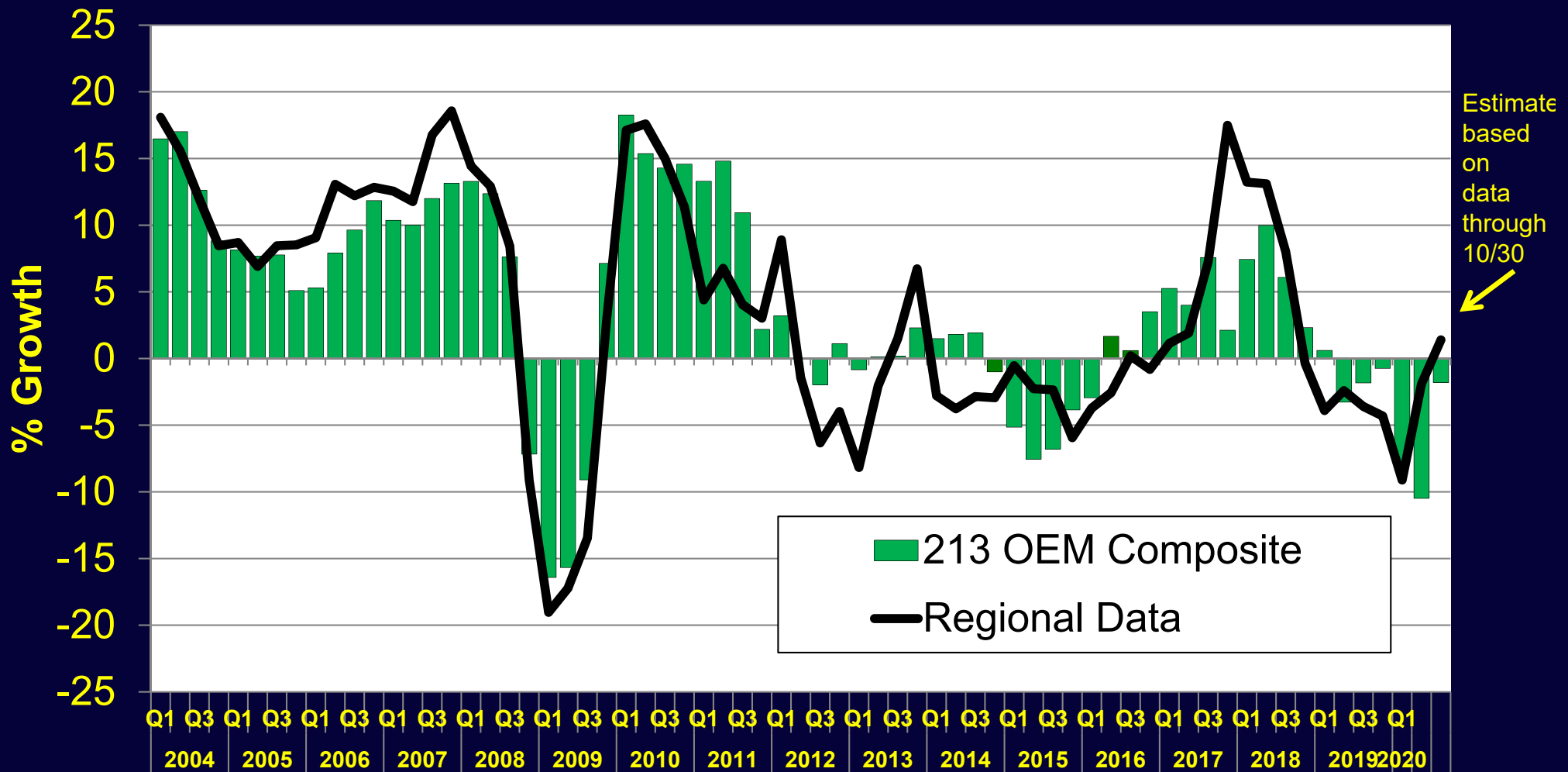
# Global Electronic Equipment Shipment Growth 12/12 & 3/12 Rate of Change (US\$)



213 OEM company sales composite (converted to weighted average by product sector)

# Electronic Equipment Sales

## Quarterly Revenue Growth



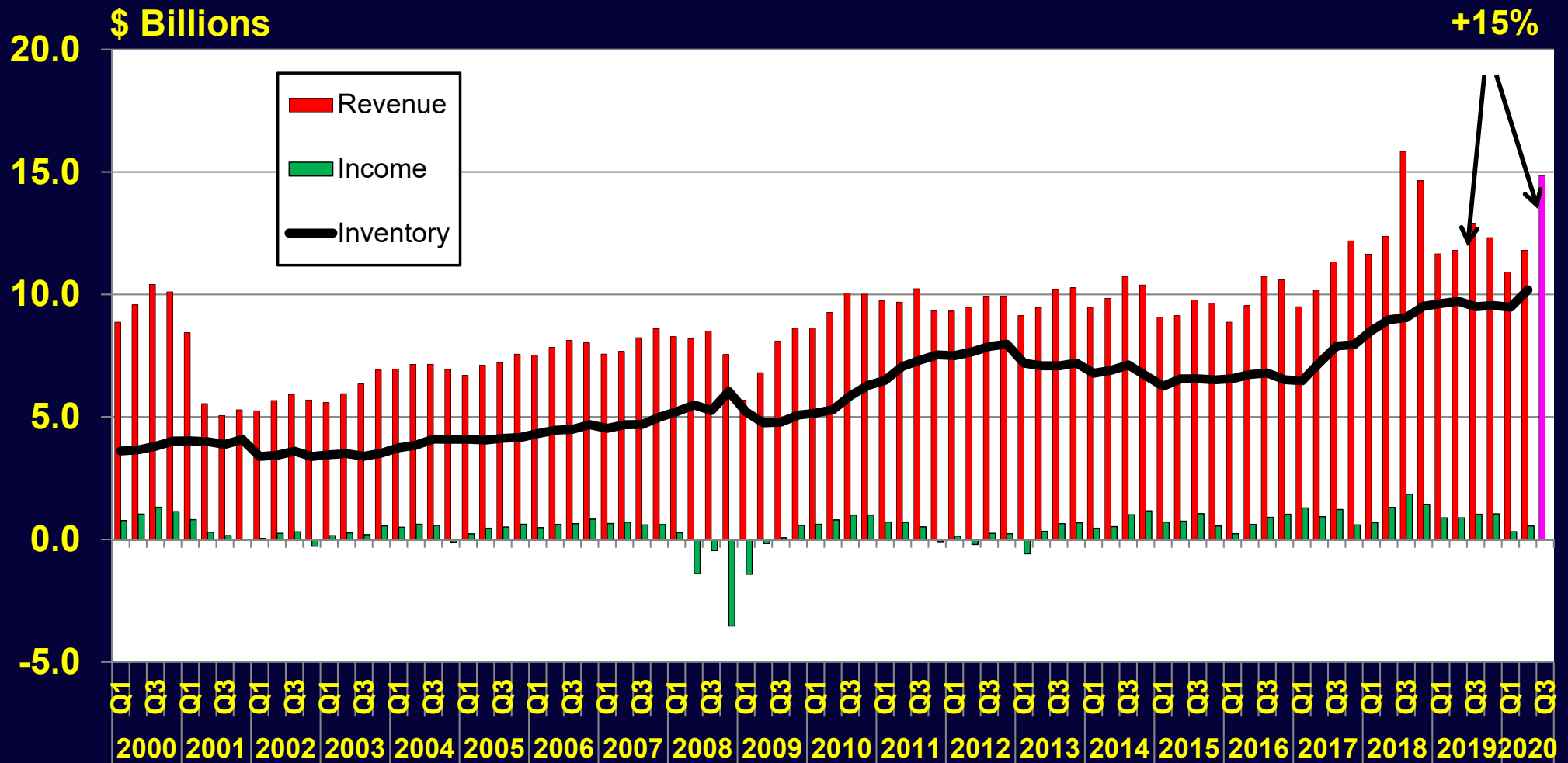
213 OEM company sales composite vs. Regional electronic equipment shipment model

Chart 5

# Passive Components

## Composite of 14 Companies

### Revenue, Net Income & Inventory



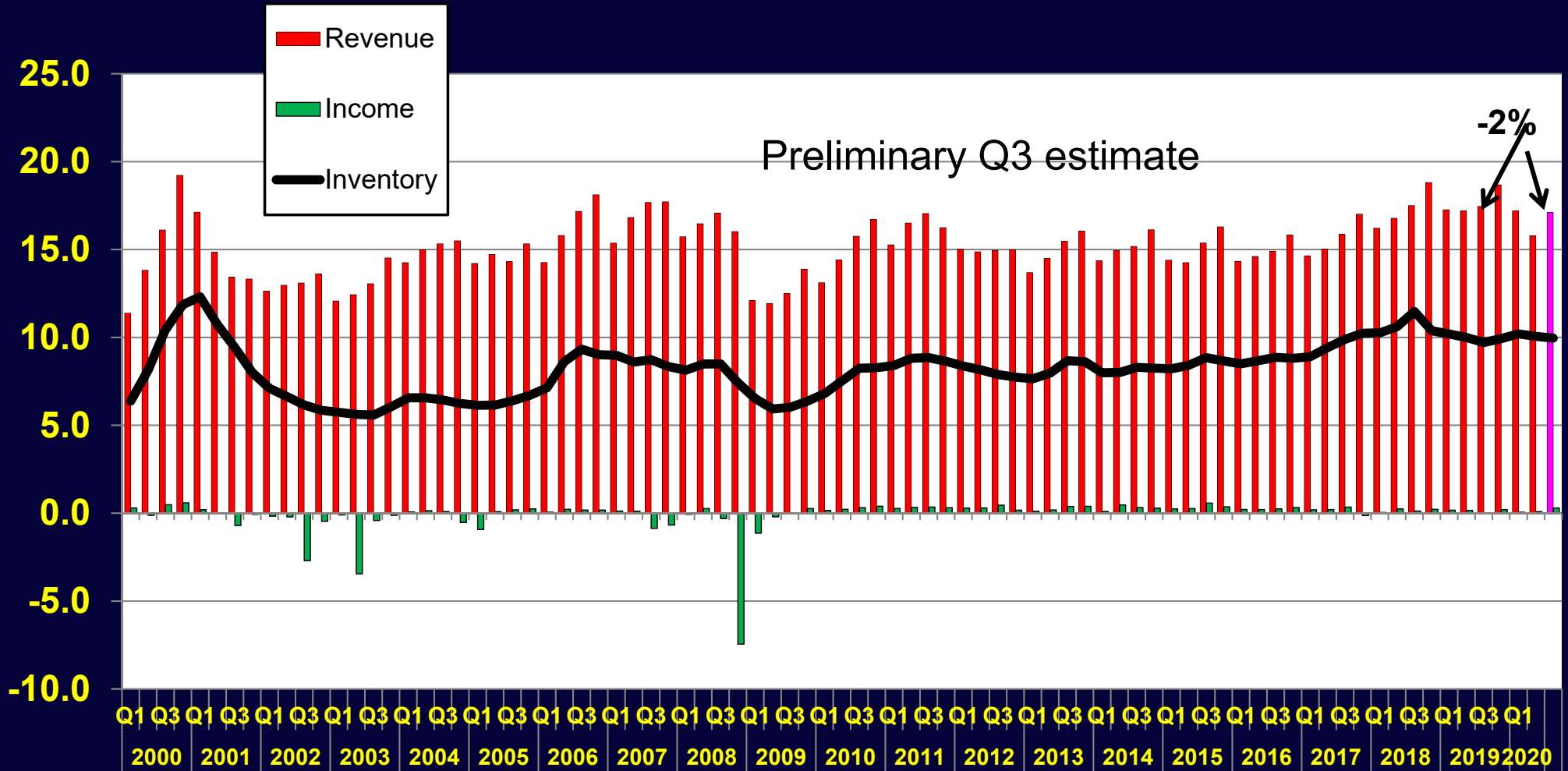
ALPS, AVX, Bel Fuse, Diodes, International Rectifier, Kemet, Knowles, Littlefuse, Murata, RF Micro, Rohm, Vishay, TDK, Yageo;  
Euro, Yen & NT\$ converted to US\$ at fluctuating exchange rates

Chart 6

# Large U.S EMS Providers

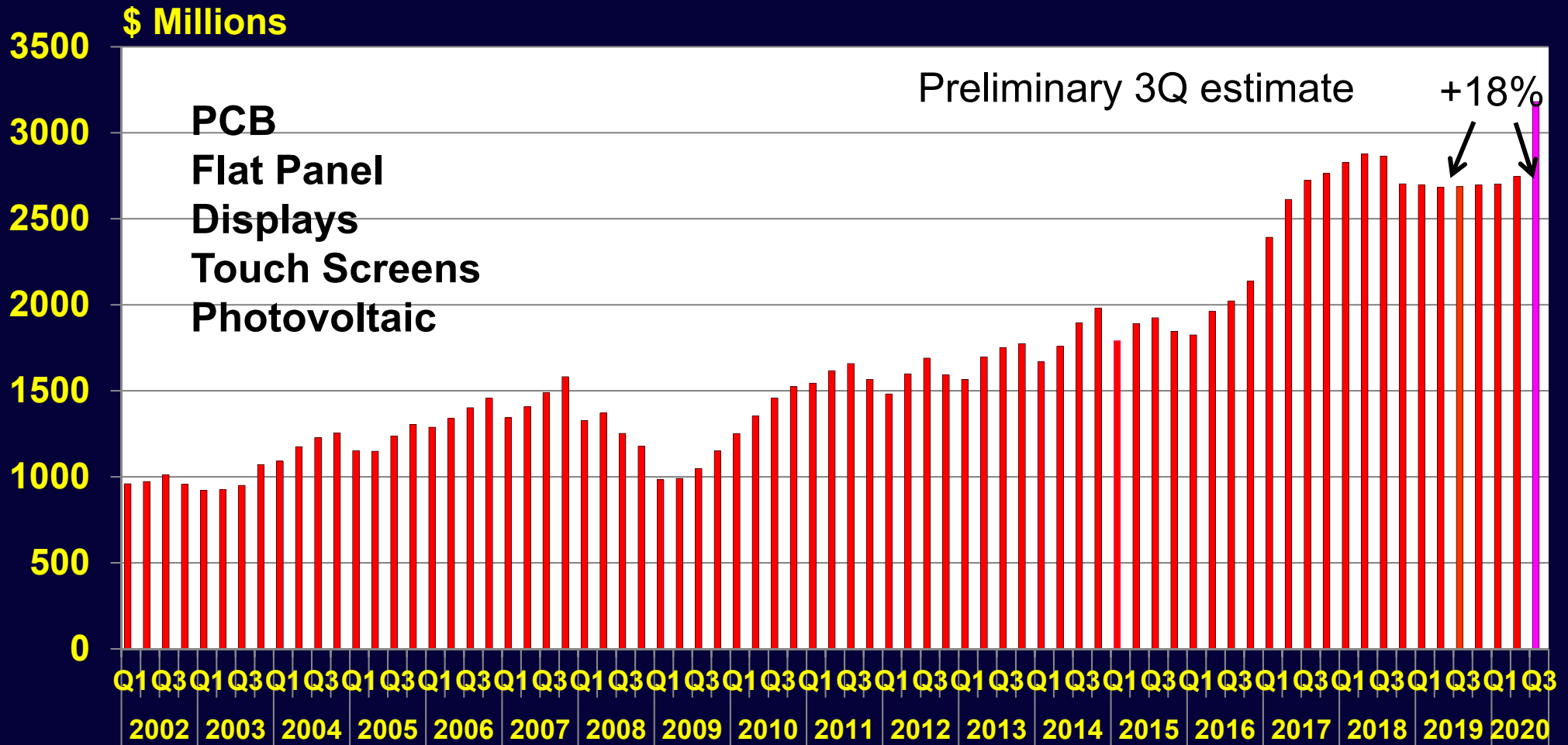
## Composite of 7 Public Companies

### Revenue, Net Income & Inventory



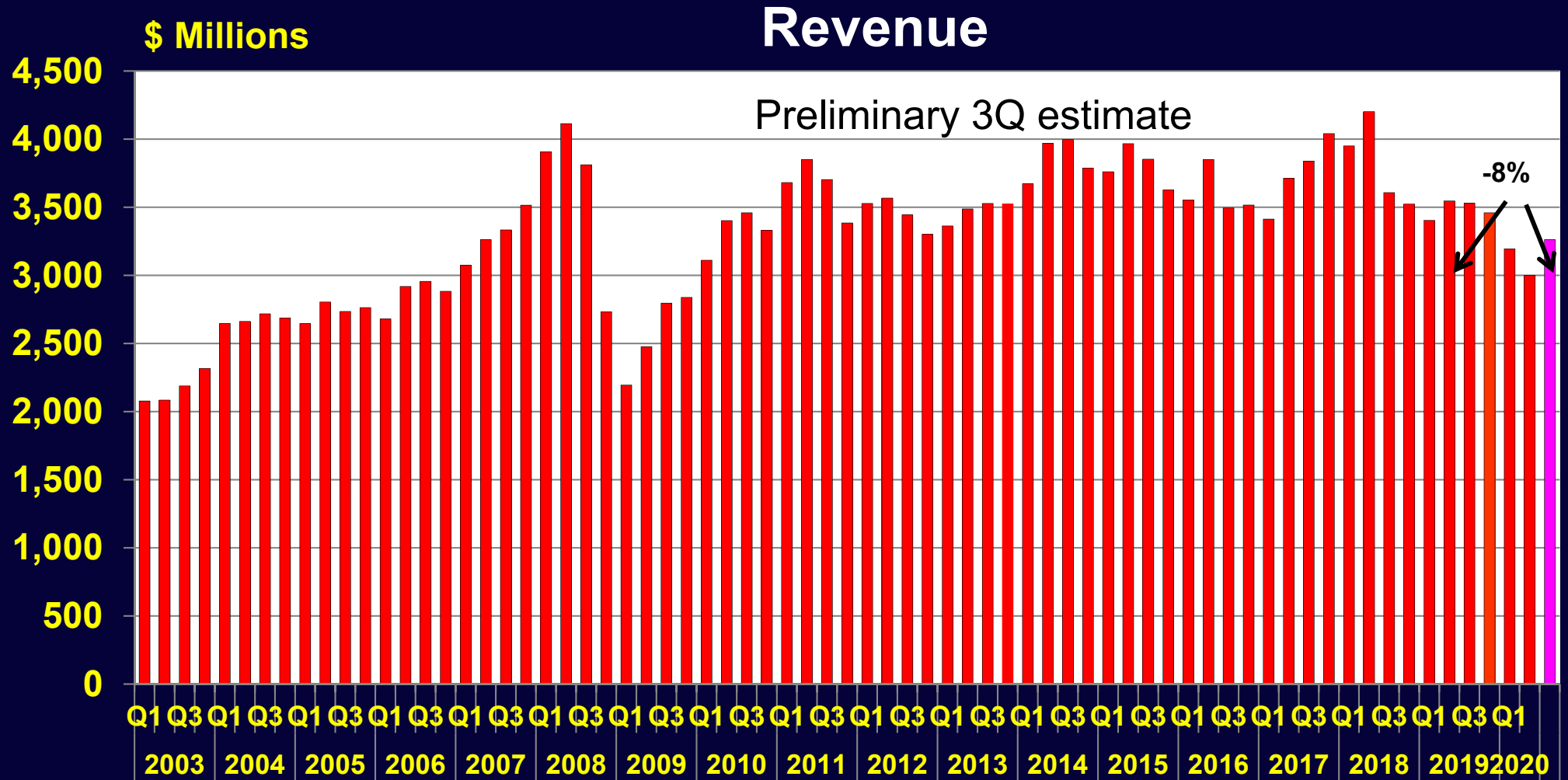
Benchmark+Pemstar, Celestica, Flex+Solectron, Jabil, Plexus, Sanmina, Sypris

# Chart 7 Process Equipment Related Suppliers Composite of 12 Companies Revenue



C-Sun, Tailing Technology, Camtek, Cadence, ESI, GSI Group, Mentor Graphics, Nordson, Rofin-Sinar, Coherent, Orbotech, Data I/O

# Chart 8 Material Suppliers (excluding laminate) Composite of 14 Companies



Momentive, OM Group, Taiwan Glass, Baotech, Glotech, Shenmao, Wahlee, Topoint, Cabot Micro, Cookson Elec, Eternal Chemical, Hexcel, Chang Wah, Platform Specialty Products

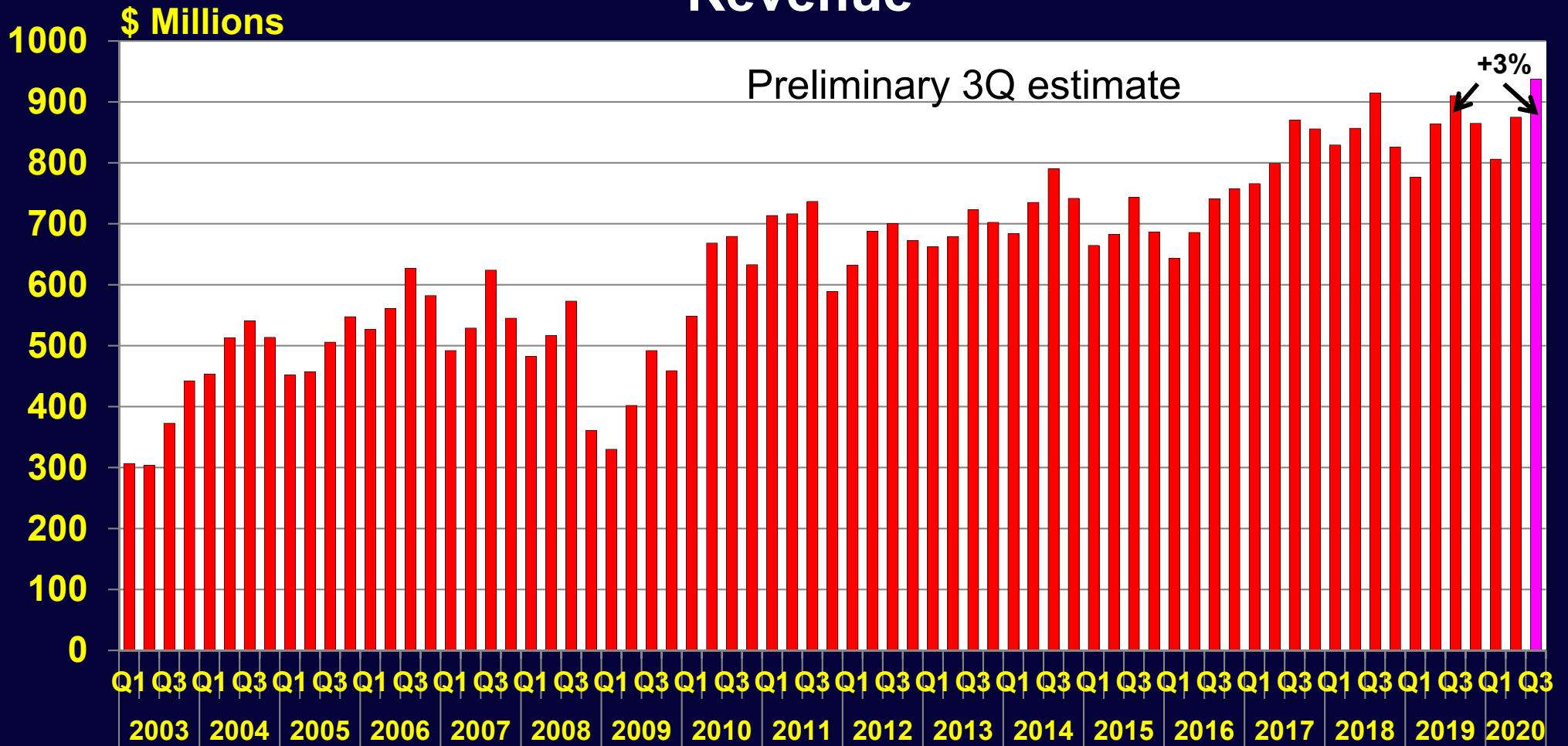
NT\$ & GBP converted to US\$ at fluctuating exchange



Chart 9

# Rigid & Flex Laminate Suppliers Composite of 13 Companies

## Revenue



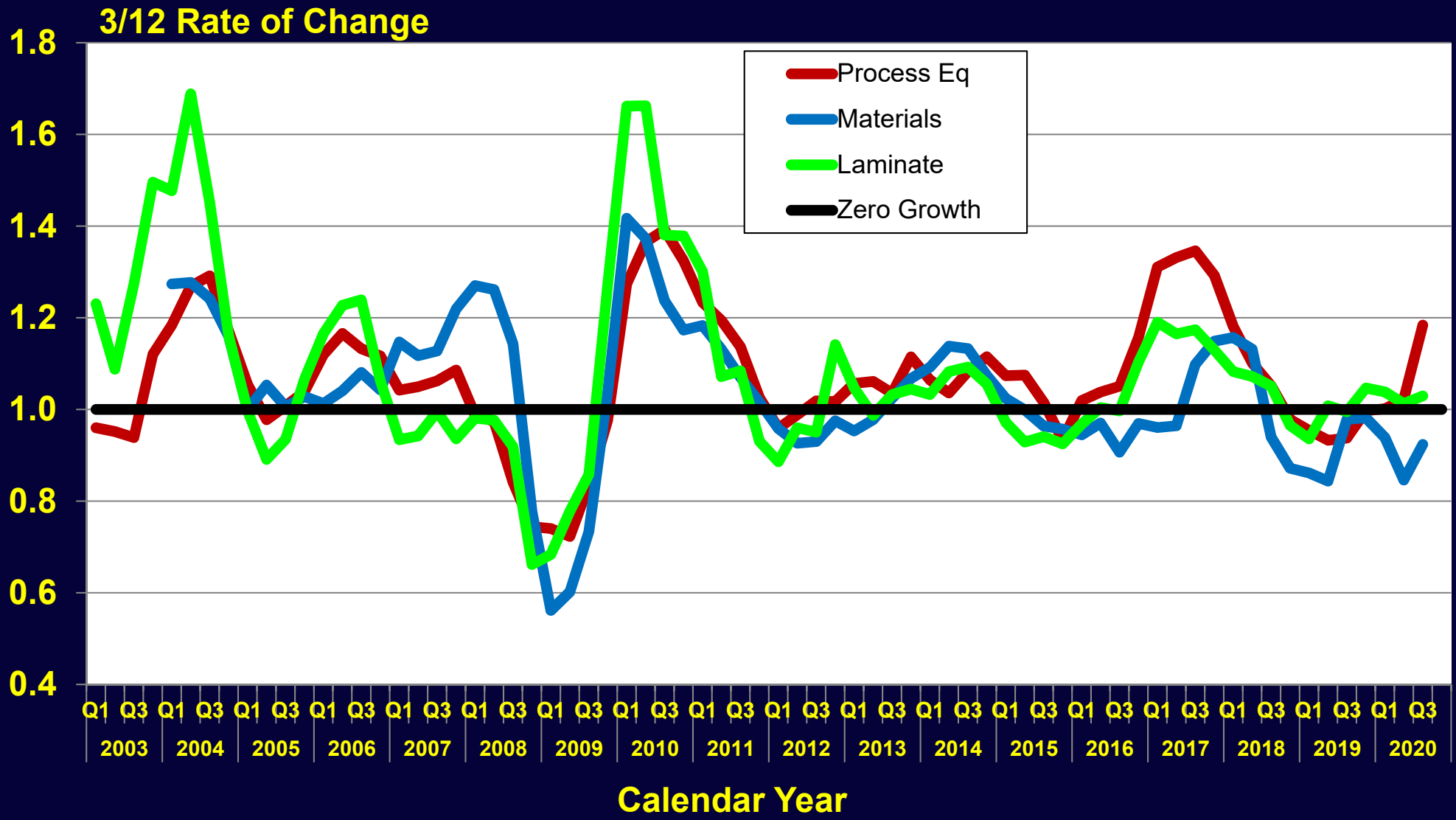
Arisawa, Arlon Electronic Materials, Elite Materials, Hwa Woei, Iteq, Microcosm, Park Electrochemical, Rogers, Shinemore, Taiflex, Thinflex, Top Union, Uniplus

NT\$ converted at fluctuating exchange

Chart 10

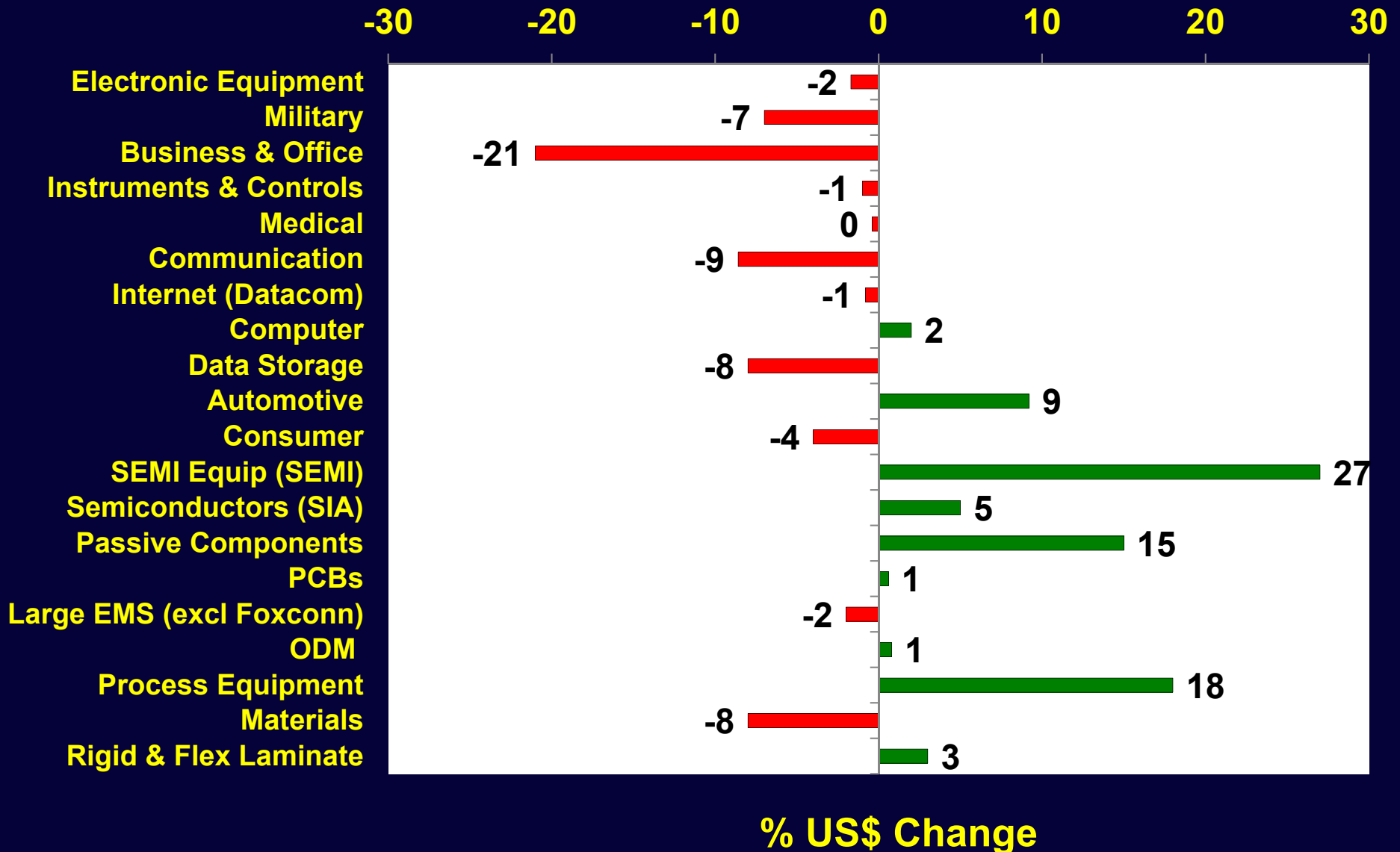
# Global Growth Rates

## Process Equipment, Materials & Laminate



Company Financials of 12 Laminate suppliers, 13 material suppliers & 8 Process Equipment Suppliers

# Global Electronic Supply Chain Growth 3Q'20 vs. 3Q'19 (preliminary estimate)



US\$ equivalent at fluctuating exchange; based upon industry composites including acquisitions