

THE MONTHLY RESEARCH CONFERENCE CALL

ARGUS INVESTMENT STRATEGY: 5G, CLOUD RESHAPE THE TECH SECTOR



MODERATORS

Jim Kelleher, CFA

Director of Research

John M. Eade

Argus President

Joe Bonner, CFA

Senior Communication Services Analyst

Wednesday, February 6, 2019

11:00 a.m. ET

61 Broadway • NYC, N.Y. 10006

Telephone: (212) 425-7500

WHAT'S NEW AT ARGUS

FEBRUARY 2019

■ Focus List Changes

- Pfizer - value story in big pharma, with long-term growth in prospect
- Costco Wholesale - multiple strategies to stay relevant in the age of Amazon
- Packaging Corp. - corrugated box maker benefits from ecommerce
- KKR & Co. - Strengthening activity in private equity space
- Find it on website: Portfolio Strategy tab, Portfolio Selector

■ Argus Performance, 2H18

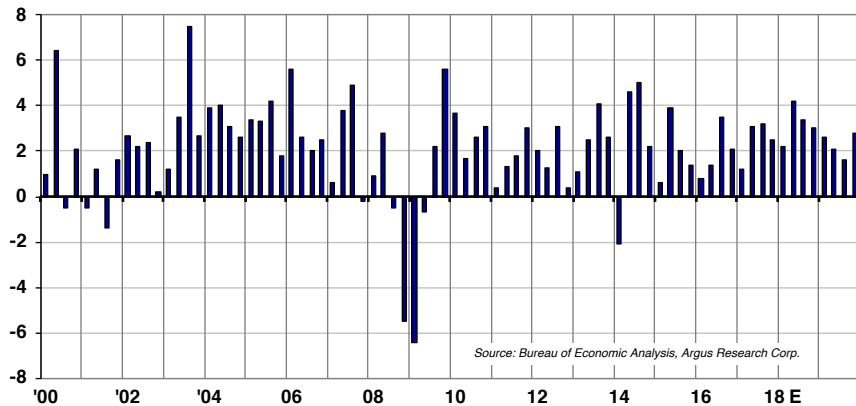
- 2H18: market challenges, but also long term strengths
- Investors Smartindex: Argus BUYs outperform on 3-, 4-, 5-years
- BARR rankings: Argus analysts peer-leading batting averages
- PS-FL stocks beat the index by 120 bps
- Argus Model Ports show strong 3-year performance vs. index
- Find it on website: About Us, Our Research, Quality Processes

■ BioPharma Outsourcing Report

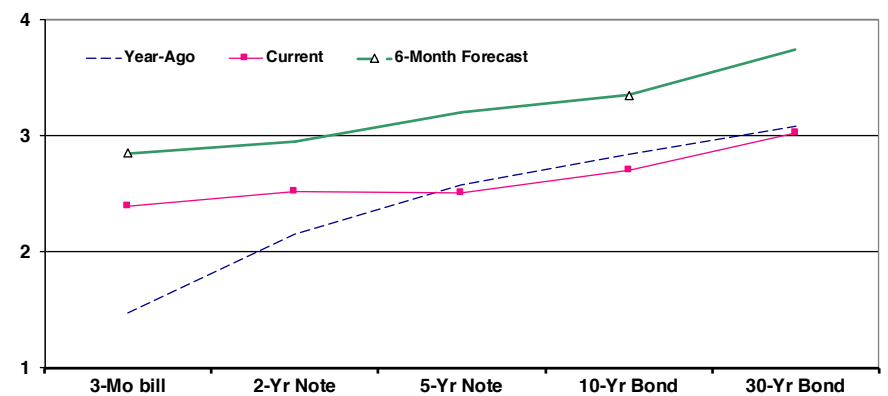
- Third Edition of BPOS Institutional report now on website
- Prepared in partnership with Capstone Headwaters
- Current report focuses on FDA-approved Cannibanoïd Therapies
- Find it on website: Front page under “Argus Sector Research”

MACRO FORECASTS

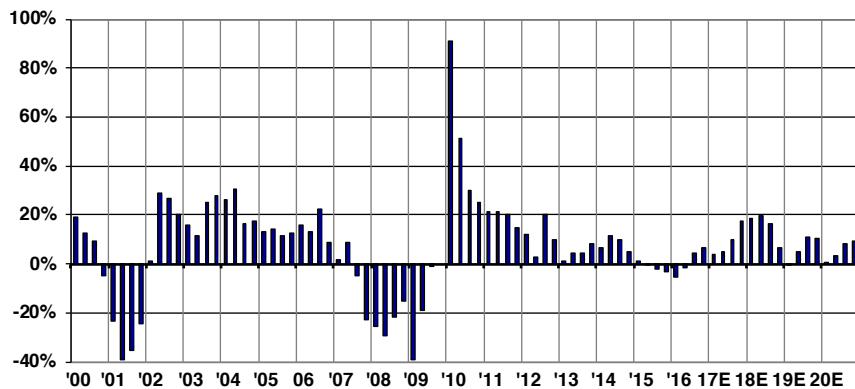
REAL GDP W/FORECASTS (%)



TREASURY YIELD CURVE (%)

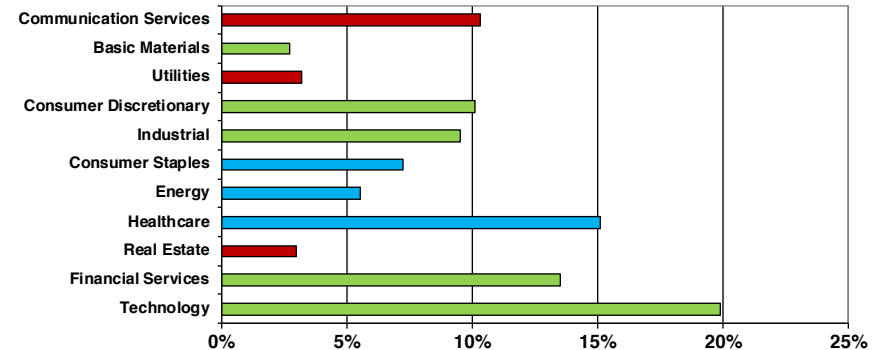


S&P 500 QUARTERLY EARNINGS GROWTH



MARKET SECTOR DISTRIBUTION - PERCENT OF S&P 500

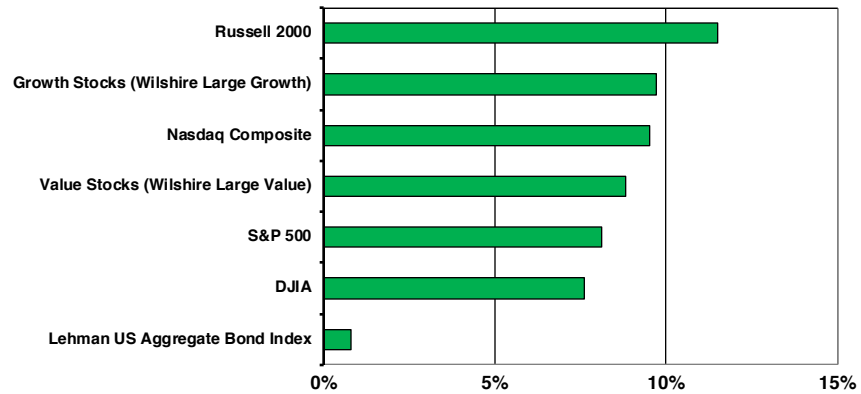
Sectors in Green are Recommended Overweight; Blue are Marketweight; Red are Underweight



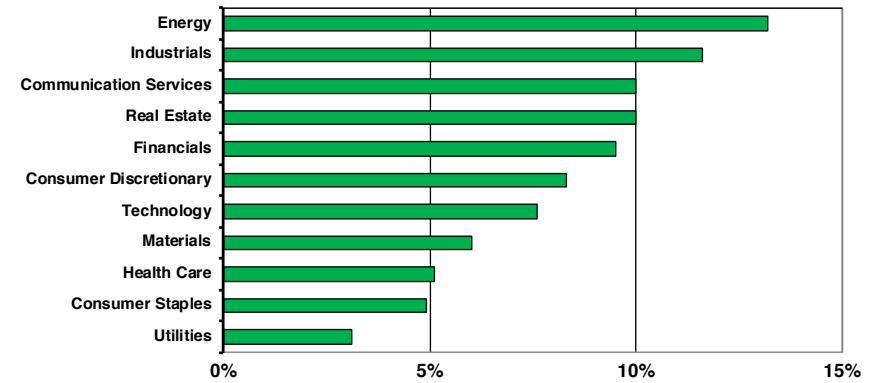
MARKET PERFORMANCE

DATA AS JANUARY 31, 2019

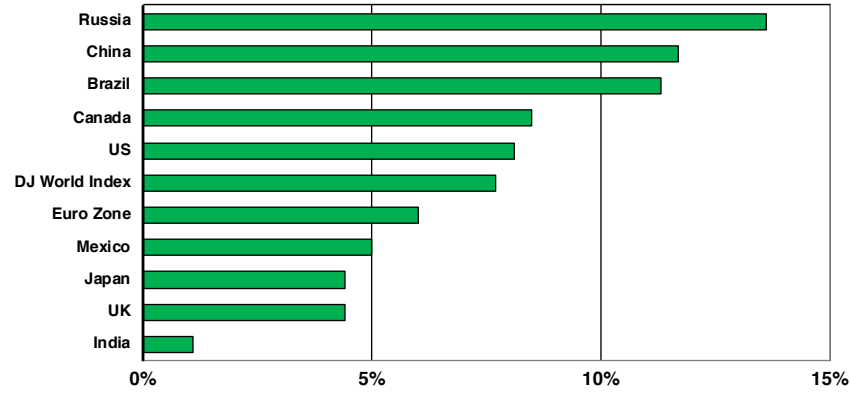
MAJOR INDEX



SECTOR



GLOBAL EQUITY MARKETS



TECHNOLOGY HARDWARE: CLOUD, BIG DATA, SOCIAL, MOBILE, SECURITY, AI, IOT

■ Fundamental Change:

- Then: tech companies sell to each other
- Now: tech companies sell to the world

■ Cloud displacement of on-premises data center much faster than expected

■ Need to be pervasive (social), always on (mobile) and trusted (security) have pushed enterprise onto the cloud at an accelerating rate

■ AI enables IoT in the industrial world by bringing scale and cognizance to complex system management

TECHNOLOGY HARDWARE: 5G AND THE FUTURE OF ACCESS

■ **Fundamental change:**

- Then: wireless and mobile device are linked to each other
- Now: for the first time, 5G wireless may take over wireline access

■ **5G: Where are we?**

■ **ERIC: 5G is here**

■ **NOK: not so fast, come back next year**

■ **5G will require the network core to manage unprecedented traffic**

■ **Not just RAN gear, but optical (CIEN), switching & routing (CSCO), components (GLW), test & measurement (VIAV), and device (AVGO)**

TECHNOLOGY HARDWARE STOCKS: CLOUD AND THE DATA MANAGEMENT CHALLENGE

- More data, all of it to be archived, managed, available
- Rise of the memory makers
- Semiconductors (MU), Devices (WDC), systems (NTAP)
- Cloud scale
- IaaS (AMZN)
- Cloud management
- SDK (TWL)
- IoT enablers
- Industrial semis (ADI, TXN)

TECHNOLOGY HARDWARE STOCKS: 5G AND THE FUTURE OF ACCESS

- **5G will require the network core to manage unprecedented traffic**
- **Not just RAN gear**
- **Optical (CIEN)**
- **Switching & routing (CSCO)**
- **Components (GLW)**
- **Test & measurement (VIAV)**
- **Connectivity (AVGO, QCOM)**
- **Device (AAPL)**

5G – TELECOMS: REVOLUTION OR EVOLUTION?

- **5G – The next generation wireless network**
- **A scale step-up in network efficiency**
- **The IoT opportunity**
- **Consumer marketing hype v. reality – 2020/2021?**
- **Verizon may be first**
- **AT&T and T-Mobile not far behind**

DISCLAIMER

The Argus trademark, service mark and logo are the intellectual property of The Argus Research Group, Inc. Investing in any security or investment strategy discussed in this presentation may not be suitable for you and it is recommended that you consult an independent investment advisor. Investments involve risk and an investor may incur either profits or losses. Past performance should not be taken as an indication or guarantee of future performance. Argus officers, employees, agents and/or affiliates may have positions in funds or stocks discussed in this presentation. The opinions and information contained herein have been obtained or derived from sources believed to be reliable, but Argus makes no representation as to their timeliness, accuracy or completeness or for their fitness for any particular purpose. Argus shall accept no liability for any loss arising from the use of this presentation or the materials contained in this presentation.