INDUSTRIAL REVOLUTIONS
1) THE RISE OF MECHANICAL POWER
2) THE ADVENT OF ELECTRICITY & COMMUNICATION
3) THE DIGITAL AGE & DEVELOPMENT OF MODERN COMPUTING
4) NOW – BUILDING & EXTENDING THE IMPACT OF DIGITIZATION IN NEW AND/OR UNANTICIPATED WAYS

GLOBAL HARD TRENDS

HARD TRENDS – GLOBAL
1) DEMOGRAPHIC
2) GOVERNMENT REGULATION
3) TECHNOLOGY
GLOBAL HARD TREND #1 - DEMOGRAPHIC

GLOBAL HARD TREND #1 – GDP IMPACT

GLOBAL HARD TREND #2 – REGULATORY
1) RENEWABLE ENERGY USE INCREASING
2) CYBER-CRIME POLICY EVOLUTION
3) ACCELERATING USE OF HIGH SPEED DATA ANALYTICS FOR AUDITING & COMPLIANCE
GLOBAL HARD TREND #3 - TECHNOLOGY

1) INCREASING USE OF MOBILE APPLICATIONS
2) INCREASING USE OF CLOUD & VIRTUALIZATION SERVICES
3) INCREASING USE OF NETWORKED SENSORS & MACHINES

TECHNOLOGY HARD TREND - FOCUS

• PROCESSING POWER
• DIGITAL STORAGE
• BANDWIDTH

Source for Graphic: Ray Kurzweil, DFJ

BLOCKCHAIN INNOVATION

Source: McKinsey Global Institute
TECHNOLOGY HARD TREND – AI EXAMPLES

1) Siri
2) Alexa
3) Tesla
4) Cognito – Phone Professional
5) Boxever – Travel Industry
6) John Paul – Luxury Travel
7) Amazon.com
8) Netflix
9) Pandora
10) Next – Learning Thermostat

GOVERNMENTAL RISK POOLING

HARD TRENDS

- Aging Workforce – Knowledge/Wisdom Transfer
- Increased Responsibilities of Local Government
- Creative Coverage & Risk Management Solutions
- Increased Use of Technology Will Empower Risk Pools
- Collaboration Will Continue & Accelerate
HARD TRENDS - CAPITAL MARKETS

1) GLOBALIZATION CONTINUES
2) TECHNOLOGY INNOVATION CONTINUES TO AUGMENT & DISRUPT MARKETS
3) WORLD FINANCIAL LEVERAGE INCREASING

GLOBAL FLOWS – TRADE, FINANCE, & DATA

Global flows of trade and finance are flattening, while data flows are soaring.

Source: McKinsey Global Institute
U.S. BOND MARKET

GLOBAL EQUITY MARKET

U.S. EQUITY MARKET

$85 TRILLION

Source: J.P. Morgan Asset Management

Source: World Federation of Exchanges, SIFMA

Source: J.P. Morgan Asset Management
SAA RISK POOL CLIENTS

Investment Management

HARD TRENDS

1) ROBO-ADVISOR & ARTIFICIAL INTELLIGENCE
2) RISE OF PASSIVE INVESTING & FALLING FEES
3) LOOKING BEYOND CONVENTIONAL INVESTMENT OPPORTUNITIES
4) EVOLUTION OF ADVICE/EDUCATION/SERVICE MODEL
5) LOWER EXPECTED RETURNS
THE WORLD AS 100 PEOPLE – ESG INVESTING?

RETURNS – TIME HORIZON

1972-2018
- 100% US STOCKS +10.40%
- 100% US FIXED INCOME +5.80%
- 50% / 50% +8.47%

2000-2018
- 100% US STOCKS +6.11%
- 100% US FIXED INCOME +4.64%
- 50% / 50% +5.88

RETURN/RISK EXPECTATIONS

Source: Portfolio Visualizer

Source: Research Affiliates
NOW WHAT?

SUMMARY OF MULTI-GENERATIONAL TRAITS

Independent
Competitive
Strategic
Collaborative
Optimistic
Collaborative
Resourceful

THE FUTURE IS STILL ABOUT RELATIONSHIPS
TO BE ELEVATED BY TECHNOLOGY...
CONSIDERATIONS

• HOW IS YOUR INVESTMENT PROCESS ADDRESSING THESE TRENDS?
  • ASSET ALLOCATION
  • ENTERPRISE RISK MANAGEMENT MODELING VS. CULTURE
  • BOARD/STAFF EDUCATION
    • (DATA VS. INFORMATION VS. KNOWLEDGE)
  • INVESTMENT POLICY FLEXIBILITY

CONSIDERATIONS #2

• HOW IS YOUR INVESTMENT PROCESS ADDRESSING THESE TRENDS?
  • STAFFING
    • INTERNAL
    • INVESTMENT MANAGER(S)
    • INVESTMENT ADVISORS
  • INVESTMENT MANAGER TECHNOLOGY PLATFORM & FLEXIBILITY
  • INVESTMENT ACCOUNTING & REPORTING