



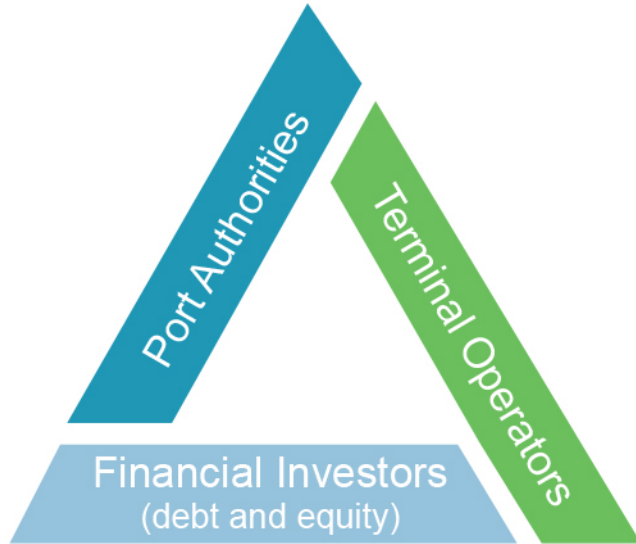
# 2017 AAPA Annual Conference – Long Beach

Joshua Hurwitz

October 3, 2017

# Moffatt & Nichol Commercial Advisory Services

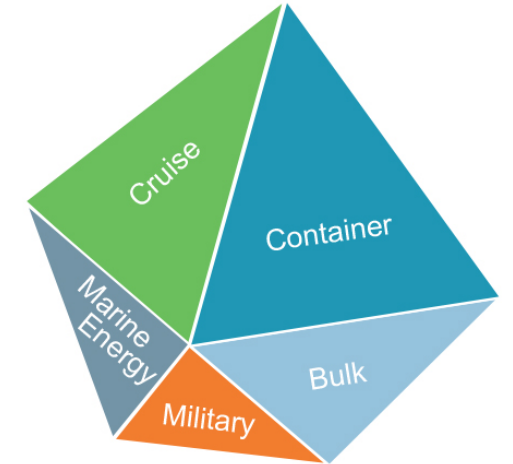
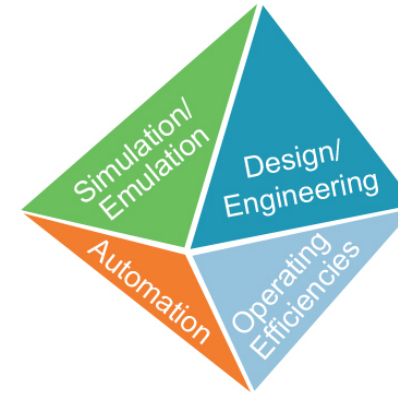
## Who we serve



## Commercial Advisory Services



## Port Engineering / Design / Operations



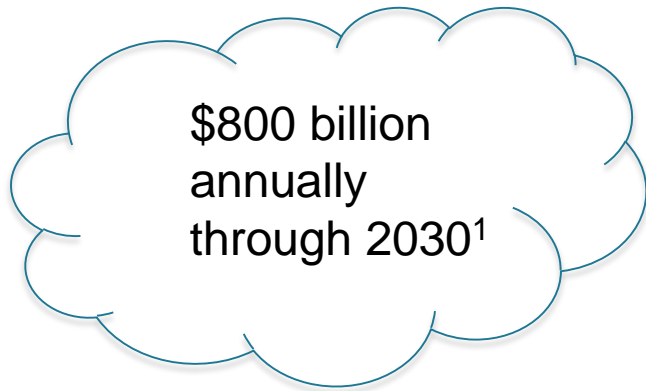
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# Private Sector Port Financing, Investment and Development Trends

1. Infrastructure investment requirements exceed public finance capacity, calling for increased use of PPPs and private financing
2. Shipping industry market dynamics are pressuring the status quo
3. Port authorities need to understand market trends and how they may impact their policy goals
4. Anticipated technology changes have the potential to fundamentally reshape our way of life, and how we move goods to market

# Infrastructure investment need is greater than availability of public finances

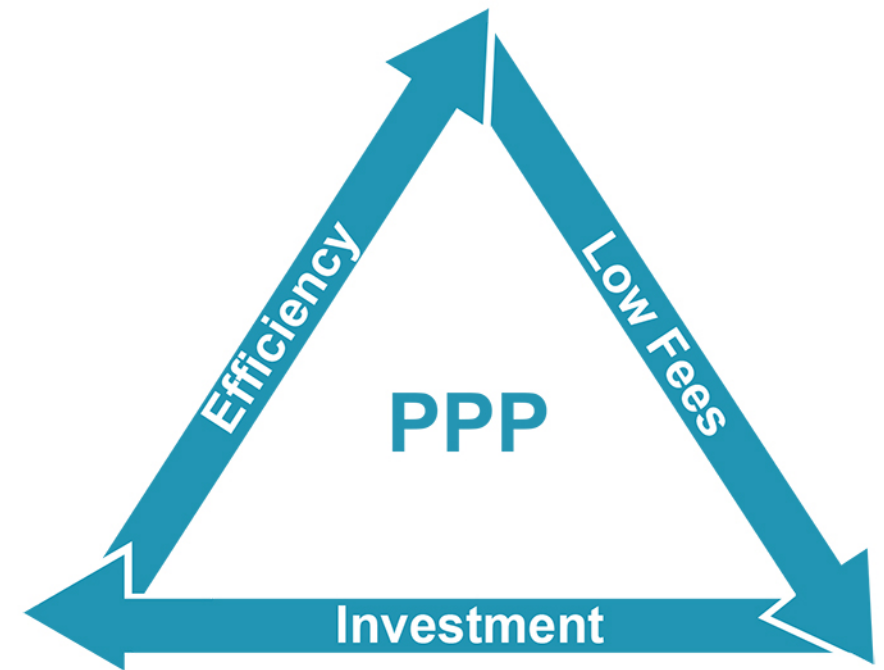
## Chronic underinvestment in infrastructure



## Availability of private financing

PPP's can leverage private and public funds to fill the gap

## Possible policy goals



<sup>1</sup> McKinsey Study, 2016

# Different investors in the port space; risk profiles drive investment decisions

## Two Types of Capital



1. Debt
2. Equity

## Three Types of Investors



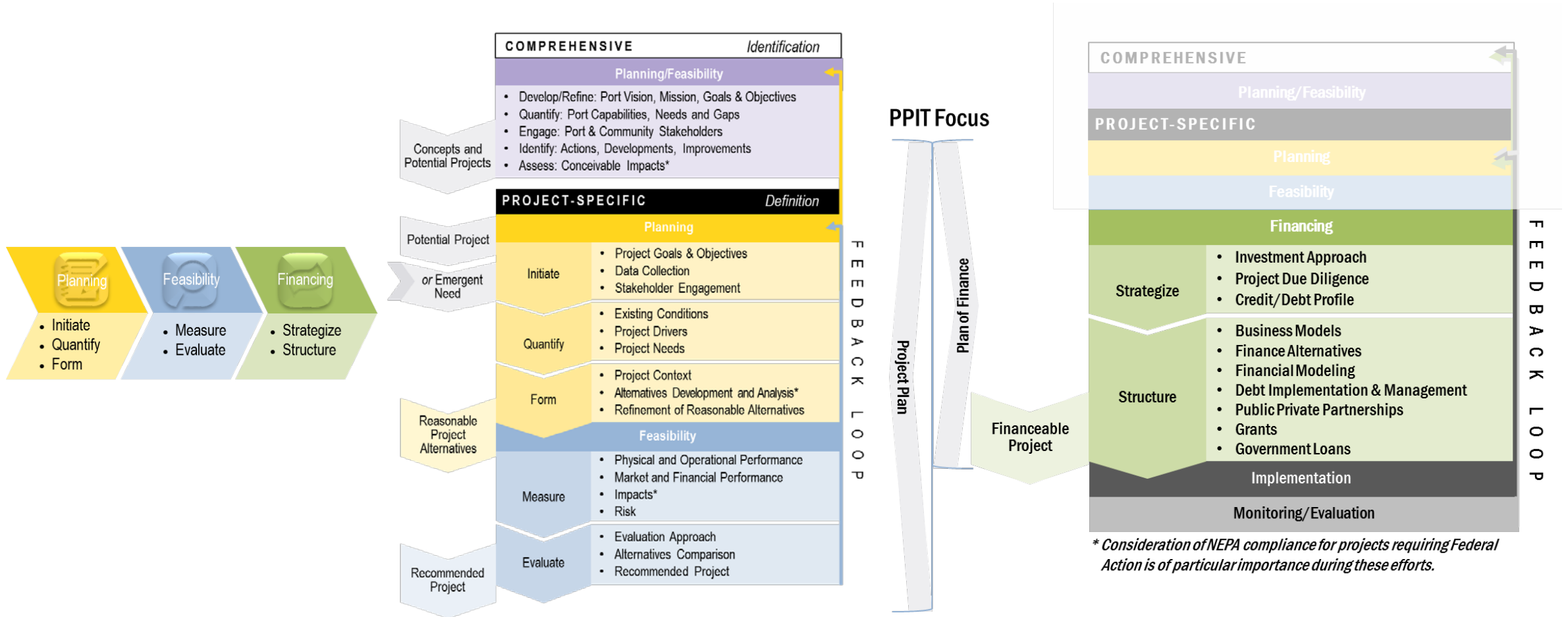
1. Strategic
2. Financial
3. Public

## What Infrastructure Investors Want

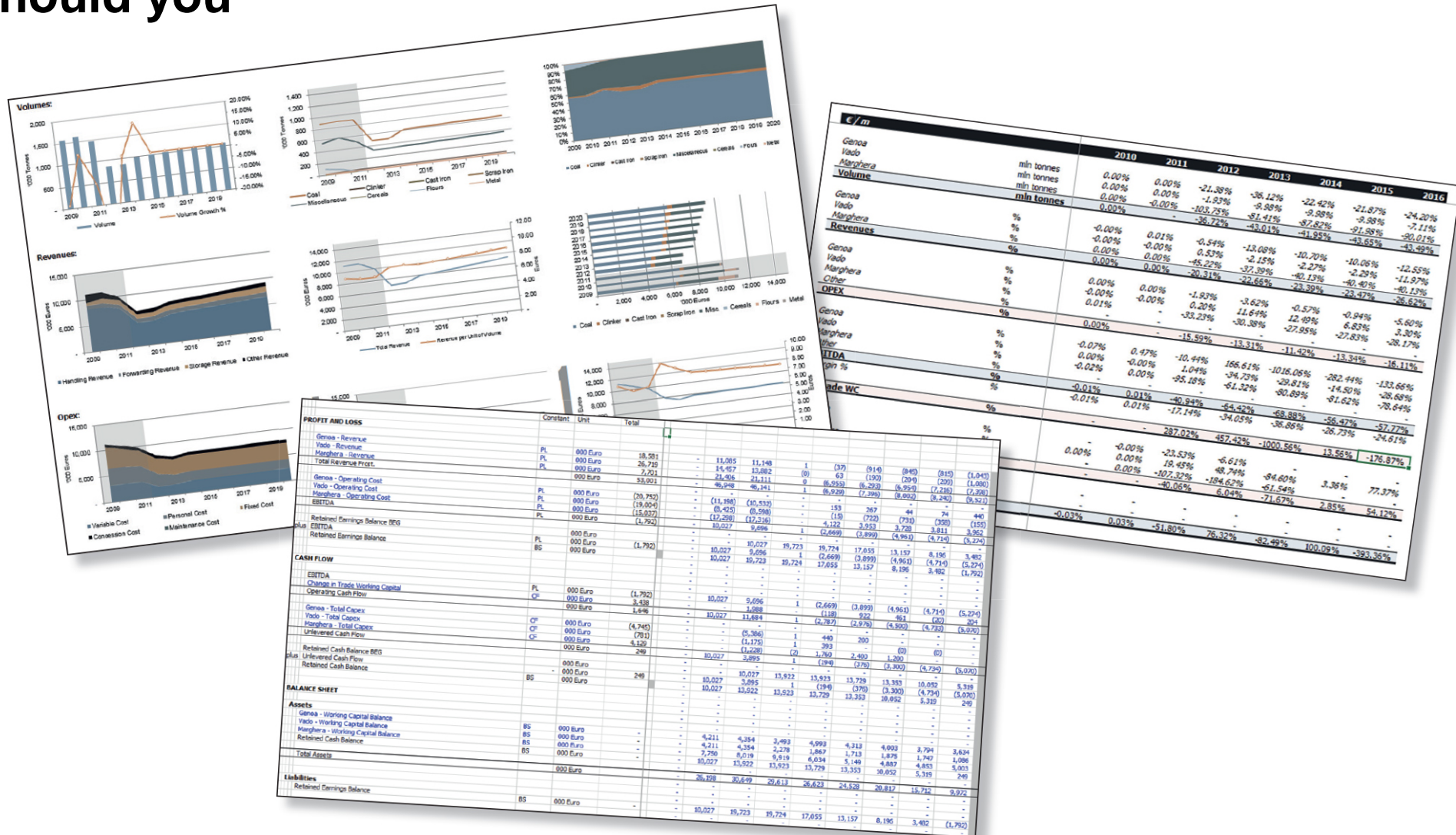


1. Essential services resilient to the economic cycle
2. High barriers to entry
3. Predictable and resilient long-term cash flows
4. Inflation-linked revenues
5. Predictable operations and maintenance capital

# The AAPA Port Planning and Investment Tool Kit

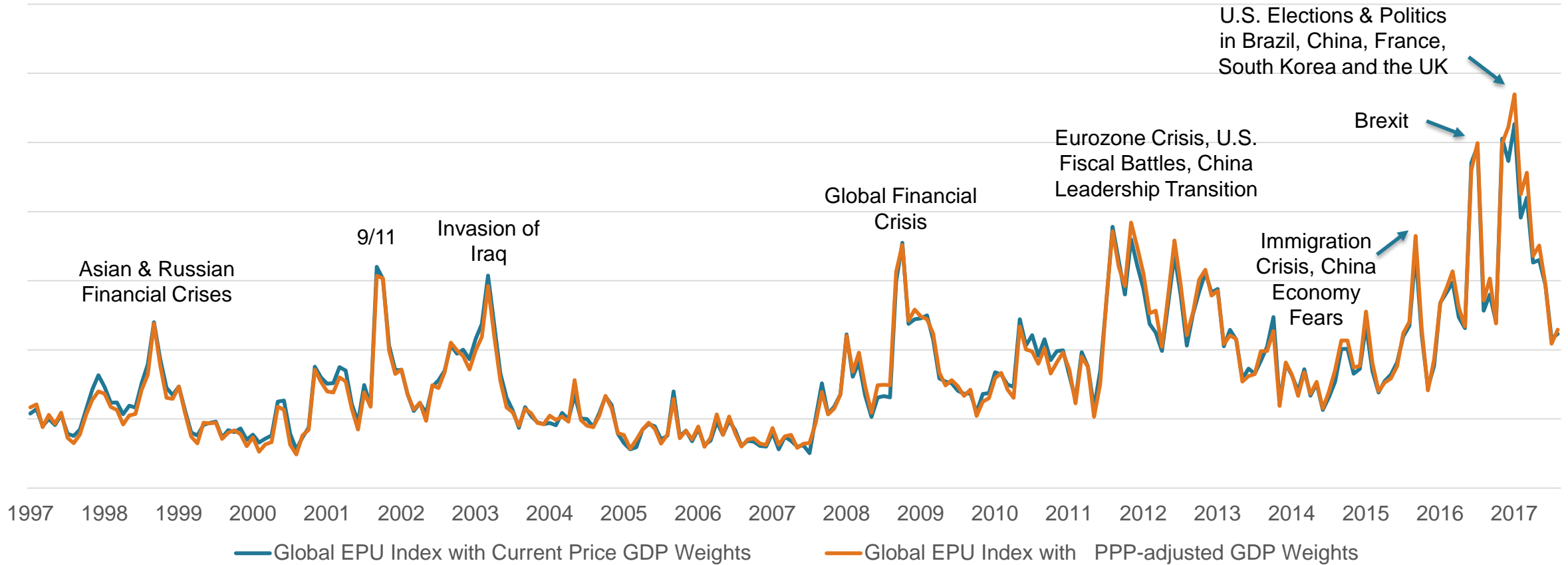


# Private investors evaluate opportunities using a financial model, and so should you



# It feels like it's getting harder to tell the future, but it has never been easy

## Global Economic Policy Uncertainty, January 1997 to August 2017

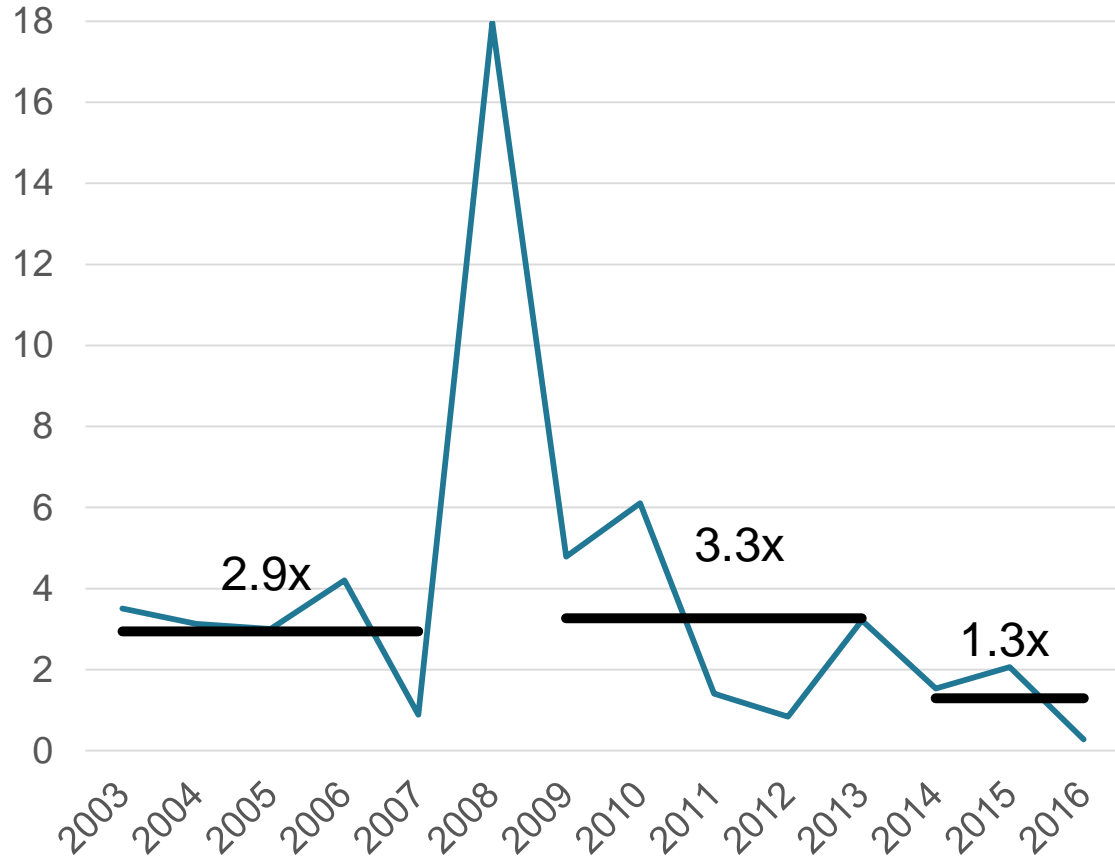


Source: PolicyUncertainty.com; Baker, Bloom and Davis

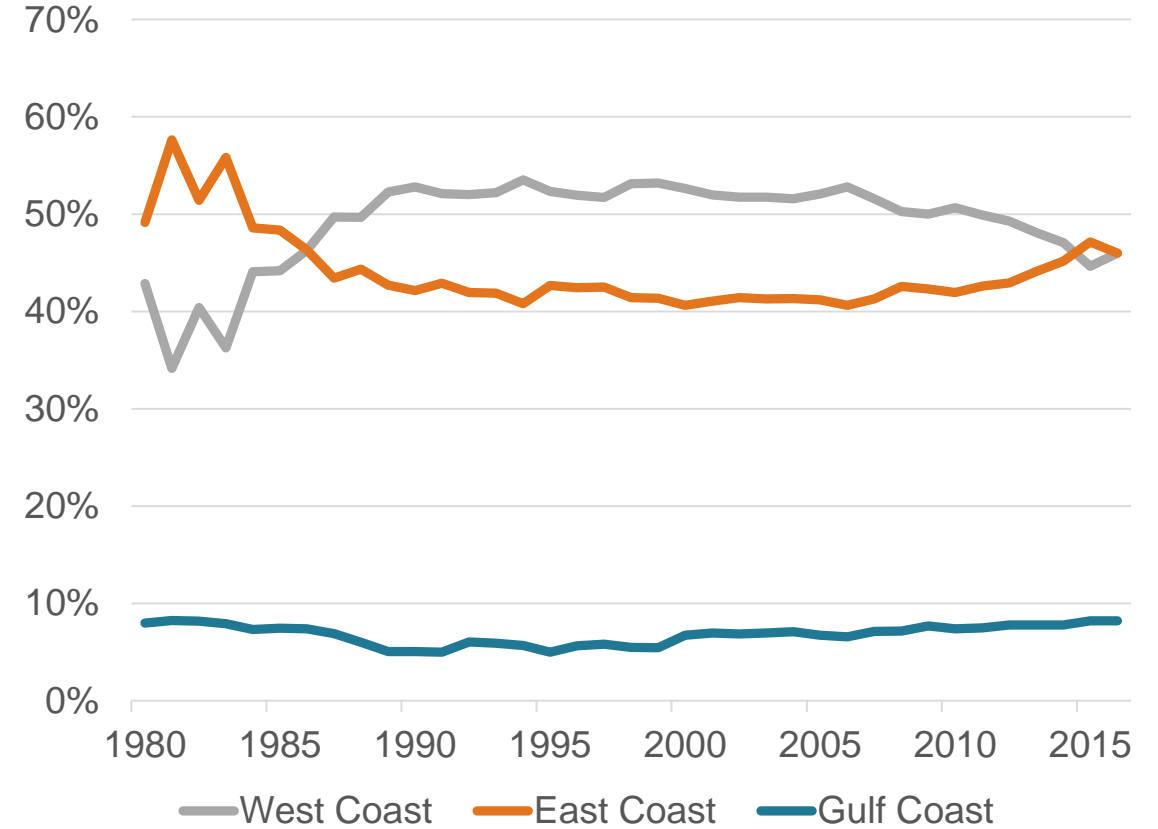


# Overall volume growth not as exciting; more uncertainty over market shares

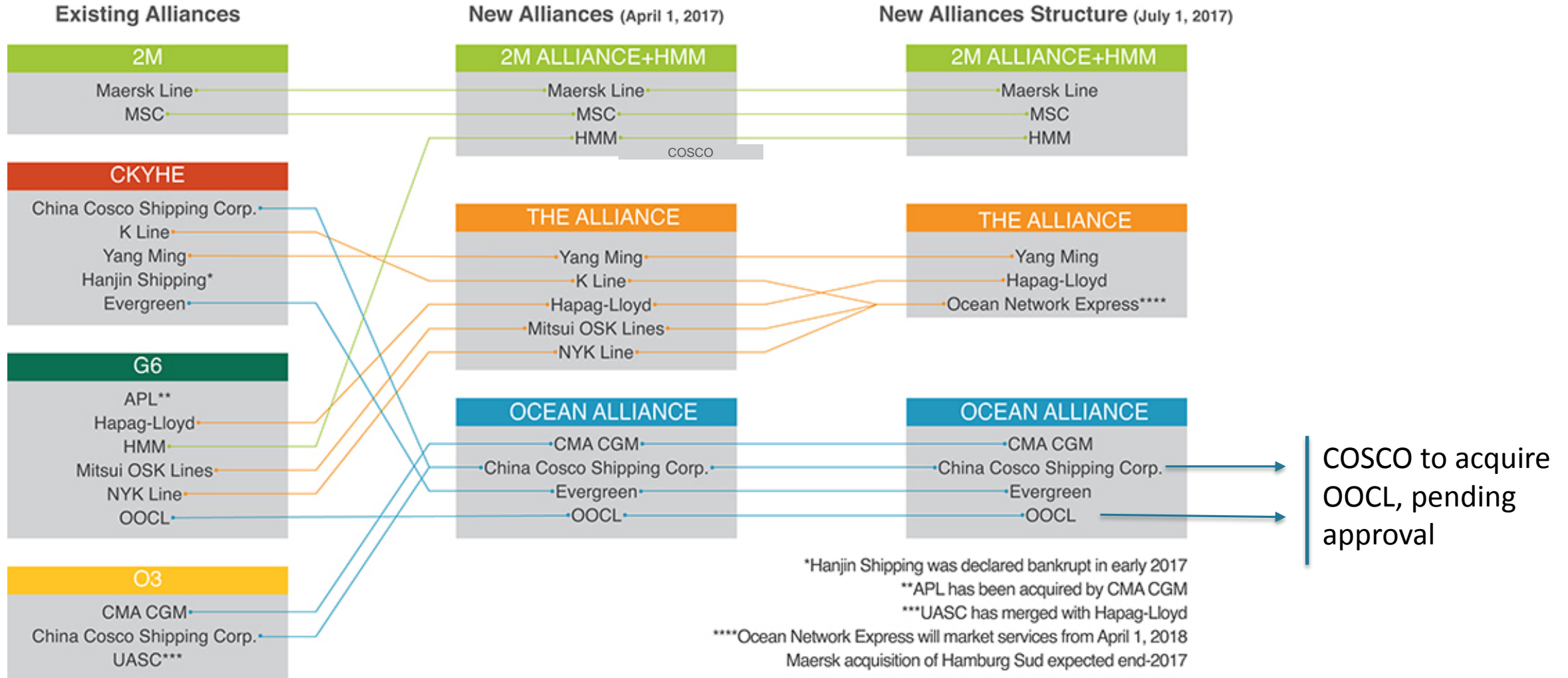
## U.S. TEU to GDP growth multiple trending downward



## Coastal shares of container cargo will continue alternating



# Liner Consolidation and Alliances



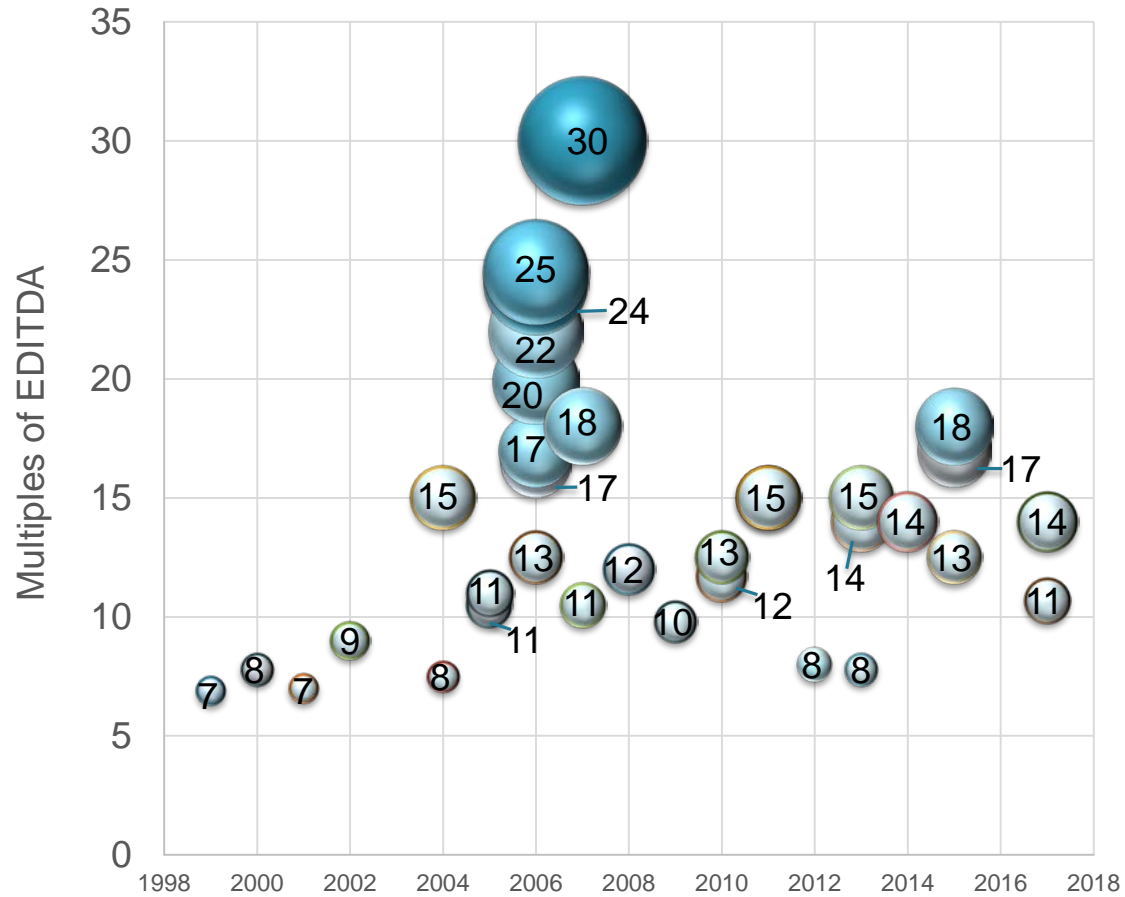
# Consolidation trickling down to terminals and port authorities

- Port of Oakland consolidates from 8 terminals to 3
- US Regulators approve Miami Terminal Alliance, allowing SFCT and POMTOC to jointly negotiate service contracts with liner alliances
- ONE, China COSCO expected to each rationalize their terminals in Southern California
- NW Seaport Alliance: Seattle-Tacoma cooperating to maximize the utility of their terminal assets and avoid misaligned capex investments
- Portland loses its only container terminal

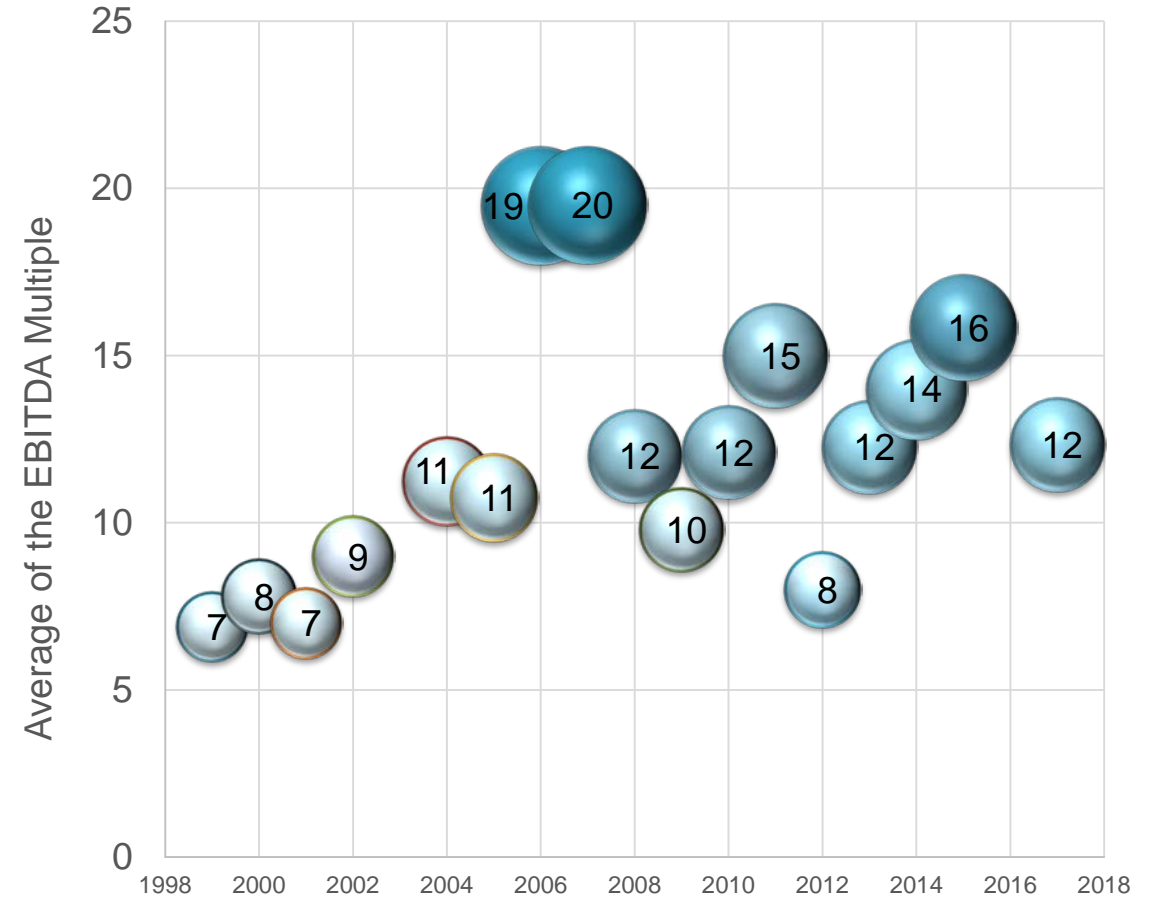


# Valuations are increasing but are not always the main obstacle to deals

## All Transactions



## Yearly Average of Transactions

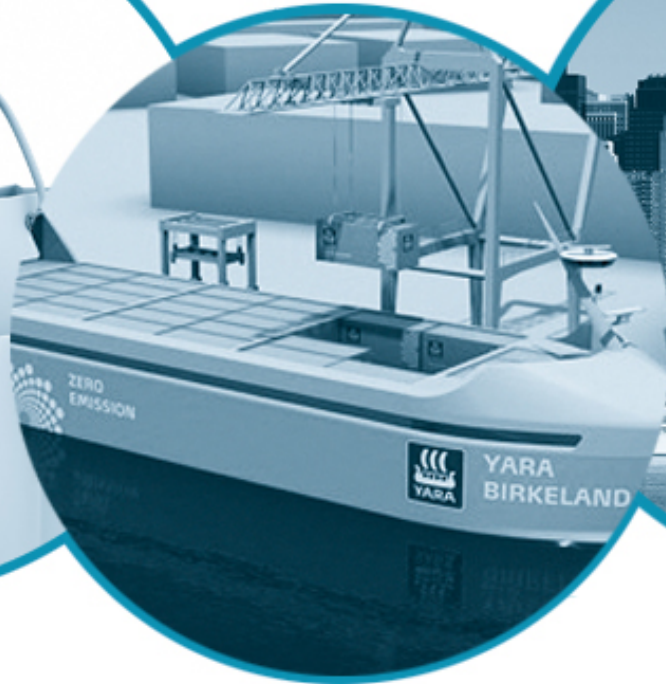


# Three Trends Worth Keeping an Eye On

1. Trends in e-commerce & retail; implications for logistics



2. Trends in autonomous technology

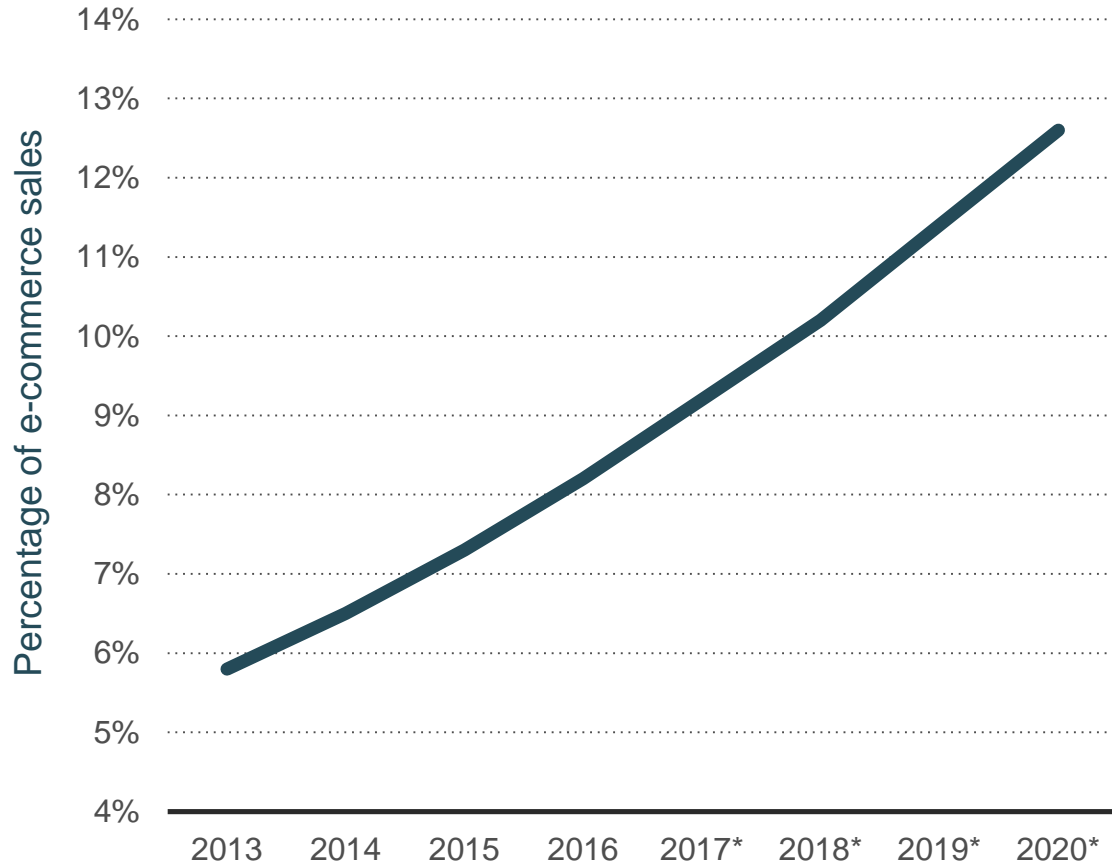


3. Trends in what investors value



# Consumer trends exerting pressure on logistics

## The Rise of E-Commerce



Source: eMarketer

## Mobile “Snacking”



“Snacking” concept courtesy of Jim Tompkins

# Autonomous Vehicles

## Vessels



## Trucks



## Personal Vehicles



Sources: Yara & Kongsberg, Scania, Otto, Volvo

## Data (and context) is now the most valuable asset class

### Top ten companies by market cap, 1997 and 2017

1997	Industry	Mkt. Cap \$bn	2017	Industry	Mkt. Cap \$bn
General Electric	Conglomerate	223	Apple	Tech/Data	806
Royal Dutch Shell	Oil and gas	191	Alphabet	Tech/Data	657
Microsoft	Tech/software	160	Microsoft	Tech/Data	577
Exxon Mobil	Oil and gas	158	Amazon	Tech/Data	468
Coca-Cola	Beverage	151	Facebook	Tech/Data	500
Intel	Tech/hardware	151	Berkshire Hathaway	Conglomerate	454
Nippon T&T	Telecom	146	Alibaba Group	Tech/Data	453
Merck	Health care	121	Johnson & Johnson	Pharma	358
Toyota	Automotive	117	Exxon Mobile	Oil and gas	341
Novartis	Health Care	104	JP Morgan Chase	Financial	332



# In Conclusion

1. Infrastructure investment requirements exceed public finance capacity, calling for increased use of PPPs and private financing
  - Private financing comes with their own set of needs
2. Shipping industry market dynamics are pressuring the status quo
  - Creating risks and opportunities
3. Port authorities need to understand market trends and how they may impact their policy goals
  - Will require careful analysis, well-designed partnership structures, clarity on goals and trade-offs
4. Anticipated technology changes have the potential to fundamentally reshape our way of life, and how we move goods to market

# THANK YOU

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