Chassis: What in the World Will We Do?

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Malcolm McLean - Father of Containerized Shipping

- Trucking 1934
- Hoboken, NJ 1937
- Designed, patented and bought Pan-Atlantic Steamship Company: 1956
- Today, roughly 90% of what used to be international breakbulk cargo is shipped by container
The Standard Shipping Container

- Breakbulk: Boxes, Crates Sacks, Bales, etc.
- Stevedores and Longshoremen
- McLean - 25% cheaper due to speed
- Reduced loading and loading time by 84%
- Reduced cost by 35%
Containers Have Fostered Intermodalism
Standard International Chassis

• A wheeled under carriage onto which the container fits
• Marine chassis, ocean carrier chassis, ocean liner chassis, or ocean container chassis
• The linchpin to international freight
Roadability

- The average age of chassis is 19 years
- Most have no anti-lock brakes, radial tires or LED lights
- The IMO has mandated certain minimum requirements
- Chassis safety regulations equals “roadability” with the burden of compliance falling on the marine terminals and drayage companies, not the ocean carriers.

CONTAINER ROAD ACCIDENTS

- Containers have been flung off the chassis due to sudden breaking.
- There has been relatively lesser number of accidents during rail transportation of containers.
Global vs US Chassis Regimes

• Everywhere else in the world container chassis are supplied by customers, truckers, or off-terminal pools, and are brought to the marine terminal by the drayage driver.
• Drivers do not interchange chassis with the ocean carriers or terminal operators.
• Costs or delays in obtaining a chassis are therefore an internal drayage company issue and of no concern to the marine terminals.
• In the US, however, chassis leasing companies are the predominant model.
Great Recession 2008

Figure 3. Key shipping companies have faced stagnant or declining revenues in recent years

Source: S&P Capital IQ, Deloitte Services LP economic analysis.
3 Major Chassis Lessors

Approximately 500,000 units
Legacy Contracts
Ports Need Space for Chassis Storage
Chassis Access Can Cause Terminal Congestion

Truckers Not Paid for Extra Chassis “Turns”
Current Solutions: Chassis Pool Variants

The varying nature of who controls chassis in the five U.S. regions underscores the difficulty in reaching a single national model for their use.

Source: Intermodal Association of North America

[Map and pie charts showing chassis supply by region for different regions in the U.S.]
Open Choice

Open choice is the ability of a trucker or shipper to determine which IEP (chassis lessor) it uses to provide a chassis for moving a container to or from a terminal, rather than the carrier making that decision and stipulating the Intermodal Equipment Provider (IEP)…
Ocean Carrier Mergers & Chassis

From April 2017

2M Alliance
- Maersk
- MSC
- HMM (Hyundai)
- Hamburg Sud

Ocean Alliance
- CMA CGM
- Cosco
- OOCL
- APL
- Evergreen

The Alliance
- NYK Line
- Hapag-Lloyd
- K Line
- MOL
- Yang Ming

Recommendations

1. Update OCEMA
   • Individual ocean carriers should have nothing to do with chassis provision, maintenance or management; Legacy contracts null and void; free market can decide which provider is successful
   • All responsibility for inspection and M&R is the province of the motor carrier

2. Adopt a national chassis pool model: open choice

3. Mandate a modern chassis fleet nationwide

4. Investigate chassis utilization analytics and chassis fleet rightsizing for typical US port sizes

5. Investigate the roll of chassis in disaster resilience
   • The US chassis fleet is not adequate for resilience
   • Winter of 2017-2018 Chicago and Memphis were hit by massive chassis shortages at intermodal rail terminals
   • Hurricane Irma was a significant dislocator of chassis
Thank You

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