



EQUIPMENT LEASING & FINANCE

**FOUNDATION**

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# JOURNAL

## OF EQUIPMENT LEASE FINANCING

VOLUME 41 • NUMBER 2 • SPRING 2023

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**Editorial Board**

### **From Traditional to Digital to Next-Generation Captive Finance**

*By Michael Donnary*

Captive finance companies know only too well that while they protect their existing business models, they are facing a changing marketplace. However, based on a Foundation study, many or most lack the bold vision and tangible actions necessary to prepare their organizations for a change in customer mindset. This article describes the direction, focus, and foundation that will help them remain competitive in an uncertain future.

### **Economic Obsolescence to Marine Assets: A Timely Update**

*By Basil M. Karatzas*

Valuation of marine vessels is complicated, not only in light of their high capital cost base but also in terms of shifting trading trends and a tightening regulatory environment, both domestically and internationally. The regulatory environment is only one variable. The ability to quantify functional and technological obsolescence is another. It is essential for lessors and other financiers to conscientiously analyze asset risk.

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## From Traditional to Digital to Next-Generation Captive Finance

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By Michael Donnary

Most of the captive finance companies (captives) participating in the 2022 Foundation captive finance study have been around for decades. Not long ago, captives needed three fundamental capabilities. First, they needed access to capital. Second, it was essential for them to build relationships with organizations that required financing. And third, they had to leverage a broad range of information to understand how to maximize their profits from leasing, lending, investment, and arbitrage.

Captive finance has come a long way, but even major developments like regulations, global markets, and digital transformation have not changed the need for these three fundamental capabilities.

Technology has enabled new financial products and services, better customer experience, and the real-time availability of information that captives need to maintain in order to pursue new profitable business models. Even today, capital, customer relationships, and information (or data) are still the three asset classes that shape modern captive finance.

However, times are changing within the captive finance industry. Captives know only too well that while they protect their existing business models, they are facing a changing marketplace. How individual companies will fare in this unfamiliar world is hard to predict. Some may be squeezed out by new entrants, such as technology companies and startups with the flexibility to react to changing customer needs. Some

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*Editor's note:* This article is based on a Foundation research report titled *Captive Finance: Embracing Change and Driving Innovation in a Disruptive Market*, published in February 2023. It is available at [www.leasefoundation.org](http://www.leasefoundation.org).

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***Customers are developing new habits in their interactions with financial institutions. Thus, they are changing their expectations and needs for the future.***

smaller providers may merge with larger companies, perhaps moving from captive into noncaptive business. Other providers will thrive, adapting to the new environment and achieving continued growth.

We can already see the first signs of an impact that will be orders of magnitude larger than anything that has come before. We now anticipate a demand for new equipment finance models, each offering immense opportunities for captives. These emerging business models include complex flexible consumption and bundled solutions requiring sophisticated digital originations, agile billing, and servicing ecosystems.

This evolution is composed of two major developments: customer expectations influenced by global best practices and intelligent products—in some cases, based on artificial intelligence. Combined, these independent and accelerating developments are shattering the foundation of captive finance, leading to a broad range of next-generation captive finance models. Today the future belongs to next-generation leasing and lending models.

## **A CHANGE IN CUSTOMER MINDSET**

Customers are developing new habits in their interactions with financial institutions. Thus, they are changing their expectations and needs for the future. The process of financing equipment, including its configuration, is changing sig-

nificantly. New services are offered to enhance the complete customer experience and promote brand loyalty. It is time for the classic set-up of captives to adapt and to keep up with all the new influences before customers are lost due to competition or outdated and inefficient business models.

Convenience is key. Responses from the 2022 Capgemini captive finance survey reflected that customers want more convenience and simplicity when it comes to conducting business with captives. Customers expect seamless transitions between online and offline transactions.

Customers' digital maturity is constantly increasing: they are using online channels for many transactions in their daily life, such as ordering goods or utilizing banking services. This often leads, in consequence, to captives' customers becoming increasingly dissatisfied with having to apply for financing in a disconnected online and offline environment.

Digitally savvy financing partners want to provide a full application process online, without any interruptions. The expectation of "Google fast and Apple easy" is a bar that just keeps getting higher. In apparent contradiction to this, however, survey responses reflected that those customers nonetheless want the ability to visit a dealership or engage some intermediary offline.

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***Flexible consumption models have evolved far beyond the familiar cost-per-click models. Intelligent equipment in every industry is now capable of producing and transmitting valuable data in real time.***

In this respect, a seamless customer experience is imperative. The availability of a comprehensive ecosystem—including consistent data throughout the customer journey as an overall digital strategy—is key to fulfilling customer expectations.

This standard has already been implemented in other industries. For example, Amazon has seamlessly embedded financing options in to their customers' journeys. When a consumer views a product on Amazon, they are presented with the purchase price as well as a 12-month, interest-free financing option. Once a product is added to the cart, the customer has the option to pay over time with Affirm. This embedded financing option adds value without adding friction to the customer journey.

## INTELLIGENT FINANCIAL SERVICE PRODUCTS

Innovation remains a challenge for captives, as their major growth drivers in the past have been financing, consisting of relatively straightforward product bundling and pay-per-use models. It is not surprising that further innovation has been widely neglected. Obviously, there are different variants of the financial products, and they are often combined with service components from which a customer can choose.

However, compared to other industries, the degree of innovation in captive organizations is low. Conve-

nience in the bundling of products and services on a single contract and invoice will increasingly drive financing decisions. Flexible consumption models have evolved far beyond the familiar cost-per-click models. Intelligent equipment in every industry is now capable of producing and transmitting valuable data in real time.

These innovative and often complex solutions must be delivered through an overall customer experience that is on par with those currently found in the consumer space. Banks are reimagining ways to deliver an integrated omnichannel banking experience through mobile apps. For example, Capital One's mobile app can be used across multiple platforms, including the Apple Watch, which keeps track of customers' credit scores and offers advanced features to track purchases.

## CHARACTERISTICS OF INTELLIGENT FINANCIAL SERVICES PRODUCTS

As Figure 1 shows, our study identified nine characteristics of intelligent financial services products:

**Customize.** Intelligence for matching customer demands is the key aspect for combining nonfinancial and financial products.

**Advise.** They can analyze, make predictions, and advise based on historical and real-time data.

**Adjust.** They can adjust their features based on various data

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*Anticipating is hard. This is particularly true when it comes to equipment leasing and lending. No one can predict the future.*

sources, as well as on new insights or triggers.

**Connect.** They have the ability to connect with other products for creating new product bundles.

**Personalize.** They can create the perception of a completely individual and customized product (segment of one) for the customer.

**Contextualize.** They have the ability to adjust appearance and features, depending on contextual, environmental, and situational awareness.

**Security.** They respect customer-specific privacy expectations and ensure zero tolerance security and compliance.

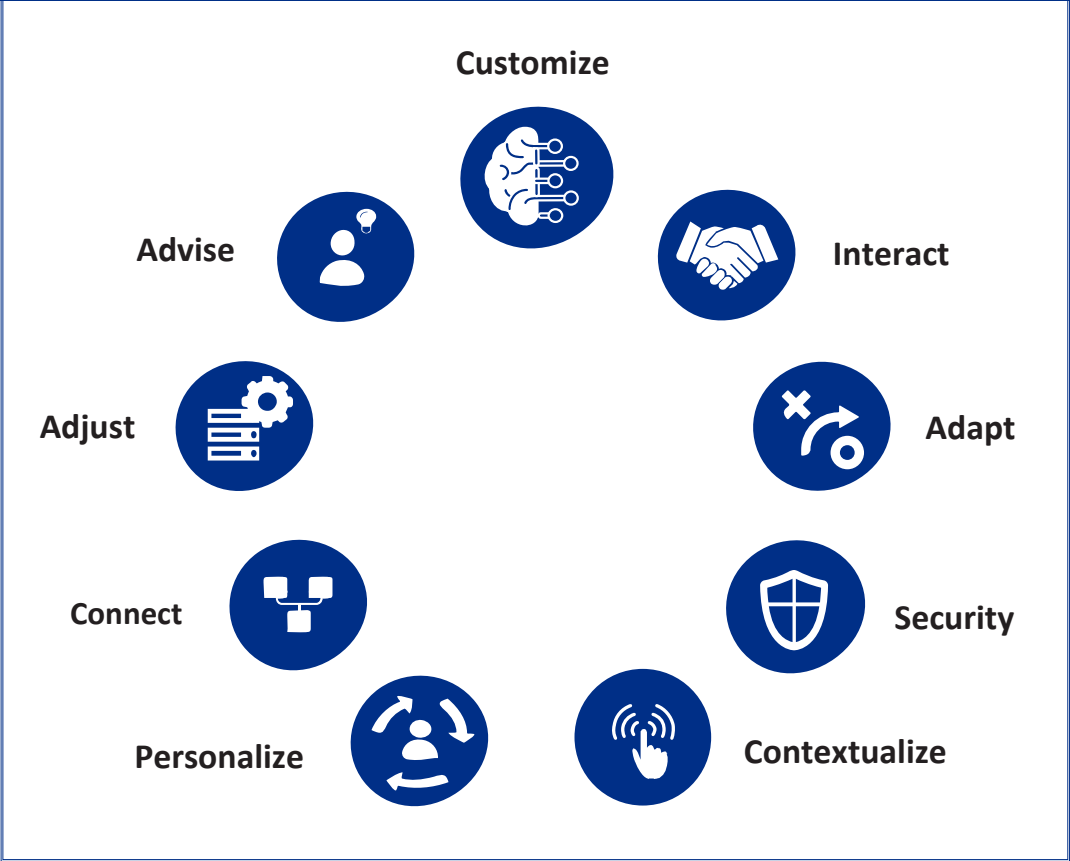
**Adapt.** They can adjust the presentation and communication of product features to the level of knowledge of the customer.

**Interact.** They complement all of these other characteristics with natural language interaction capabilities that understand and express human emotions.

**NEXT-GENERATION BANKING AND CAPTIVE FINANCE MODELS**

Anticipating is hard. This is particularly true when it comes to equipment leasing and lending. No one can predict the future, but we have identified a series of new business

**Figure 1.Characteristics of Intelligent Financial Services Products**





***Smaller local or regional banks can barely afford to keep their IT compliant with constantly increasing regulations. But with BaaS, they can leverage a modern banking platform with a variable cost base.***

models with great potential. These new archetypes are banking as a service (BaaS), industry platforms, embedded captive finance, and invisible financing.

### **Banking as a Service**

Banking as a Service (BaaS) is its own next-generation business model, but it also enables other new business models relevant to captive finance. It gives banks the ability to leverage their investments in IT by getting other banks and funders to switch from outdated IT to modern platforms. Smaller local or regional banks can barely afford to keep their IT compliant with constantly increasing regulations. But with BaaS, they can leverage a modern banking platform with a variable cost base.

Subject to applicable state law, BaaS has the potential to enable firms without a banking license to offer financial services products through white labeling. White-label financing allows these nonbank entities to offer their customers funding, branded with their company name and logo, with the entire financing life cycle managed by the funding partner.

A large retail chain can use consumer financing (buy now, pay later; branded credit cards; consumer loans) to expand customer experience, drive sales, and increase profitability. BaaS is the foundation on which many other next-generation consumer and commercial banking models are built.

### **Platform Business Models**

Platform business models are a major force in our economy. Companies like Amazon and Apple have mastered the platform approach. Consumers now find it hard to escape such platforms due to their optimal customer experience. Consumer platforms play a dominant role in our economy, and many of these platforms have a clear strategy to replace banks, independents, and captives for financial services needs through their own financial products.

However, captives still have a window of opportunity in equipment leasing and lending. They can build industry platforms that bring all players within an industry and across the entire value chain together. Co-creation on these platforms can make them game changers for industries, enabling co-creation captives to infuse their financial expertise, advice, and products to leverage significant data monetization as an opportunity for creating new revenue streams.

### **Embedded Captive Finance**

Embedded captive finance ensures the seamless integration of separate financial and nonfinancial products into a single customer experience. Through embedded captive finance, leasing and lending functionality is absorbed into physical products, technology, and platforms to establish a seamless customer experience. Although the product, service, and financial

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***From a customer experience perspective, the business model becomes invisible. The focus is on connecting and integrating the financing advisory and financing products with equipment, subscriptions, and other customer needs.***

transaction are separate, the experience for the customer is seamless.

Ideally, product and financial offerings are indistinguishable. Embedded payments for ride-sharing or in-car payments are good examples of this.

The integration of new data sources and equipment sensors opens entirely new leasing and lending product features (e.g., dynamic credit lines based on parent and captive risk models) or even new product categories (e.g., dynamic project finance through Internet of Things devices). Capgemini defines *Internet of Things* (IoT) as a concept whereby the objects are connected to the internet and are able to identify themselves to other devices without human interaction.

### **Invisible Finance**

Invisible finance is a new financial services business model that currently exists only at the experimental fringes of our economy. Our definition of *invisible finance* describes a nonfinancial product or service that includes an indistinguishable finance capability. The bundled solution, which results from the combination of a nonfinancial product or service and associated financing, goes so far that the necessary financial functions are an integral part of the overall product and hence inseparable from each other.

An entry-level invisible finance model connects equipment leasing products with nonfinancial prod-

ucts and services. From a customer experience perspective, the business model becomes invisible. The focus is on connecting and integrating the financing advisory and financing products with equipment, subscriptions, and other customer needs. The bundled solution should integrate financial advisory and financial products in a way that makes them available but does not take focus from the main product, service, or transaction itself.

Life events such as a house purchase, marriage, vacation, and leisure activities are examples of emerging opportunities for invisible banking in the consumer space. Although invisible finance can be seamless, in many cases, the customer still has separate actions, agreements, and contracts that are not necessarily fully integrated.

### **GETTING READY FOR NEXT-GENERATION CAPTIVE FINANCE**

Based on our research for the captive finance study, invisible finance is currently beyond the considerations of most captive leaders. However, there is a strong case for starting to evaluate and strategize. This is due to both the incredible opportunity to grow a captive's business and the significant threat to their existence. Our research shows that these next-generation financing models require a fundamentally different approach to business strategy, as well as financial and operating models.

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*Captives must significantly improve customer experiences in the physical economy as well as in the interaction and transition to digital economies.*

First, we have identified seven distinctive asset classes (Figure 2) that leaders must understand deeply for business strategy and capital allocation.

**Relational assets** – trusted customer relationships and the best customer experience

**Financial assets** – access to capital and credit risk/score

**Brand assets** – brand awareness and customer perception

**Data assets** – parent, partner, and customer data; analytics and insights, security and privacy

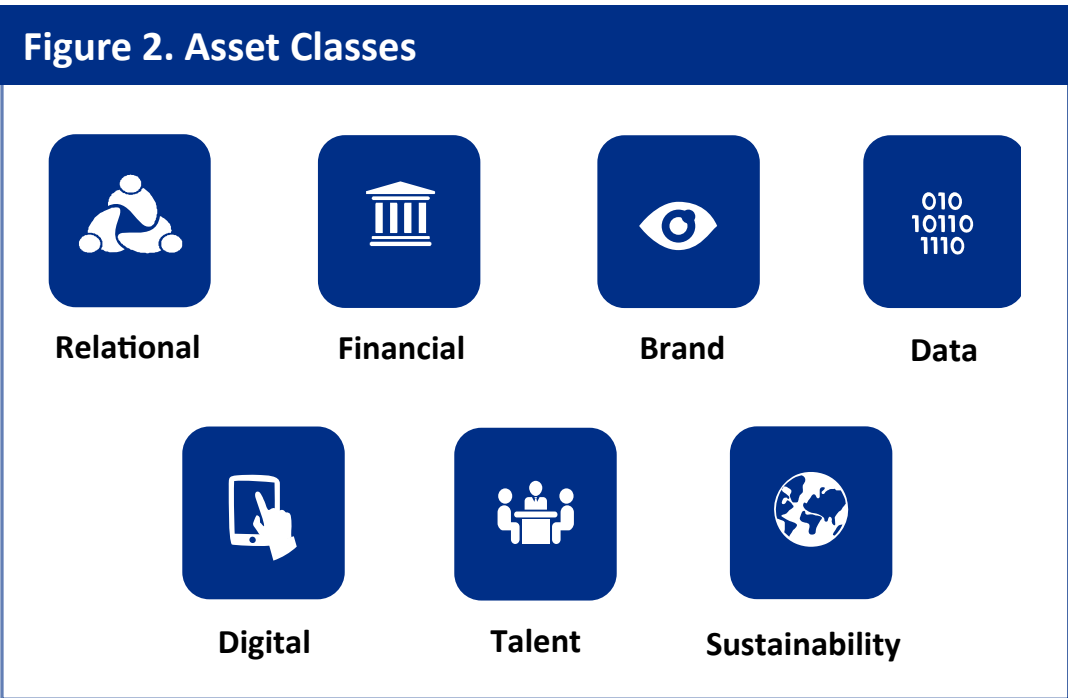
**Digital assets** – unique content, features, and capabilities; digital products and services

**Talent assets** – knowledge empowerment, agility, development, and opportunities for employees

**Sustainability assets** – environmental focus, social inclusion, appropriate governance structure

The second step is to assess the opportunity space for next-generation captive finance and to develop the ability to create intelligent financial services products that are relevant for the leasing and lending industry. Captives must significantly improve customer experiences in the physical economy as well as in the interaction and transition to digital economies.

Third, captive leaders must create strong “sense and respond” capabilities. This will enable them to stay in tune with customer preferences and expectations that may lead to new opportunities or a shift in existing factors within the organization. These predictive capabilities will become a question of survival, as new competitors from outside the industry are not constrained by legacy business processes and leverage systems that can dramatically level playing fields.





***Despite the enthusiasm, however, we see a lack of bold vision and tangible actions on the part of captive finance companies to get their organizations ready. We are confident that captives need to start now.***

Depending on the business strategy and the opportunity space identified for next-generation captive finance models, leaders must adapt their capital allocation to the seven distinctive asset classes. Furthermore, they need to redefine their business model and start developing 12 superpowers. But then comes the hardest step: activate. This is the process of getting the organization ready for this new environment.

The following are the superpowers that captives must develop to thrive and stay ahead of competitors that play by different rules.

#### **Direction**

1. driven by a bold vision that shapes the required digital DNA for enabling distinct business strategies
2. driven through new leadership styles, mindset, and behavior
3. built on new, innovative, and agile business models

#### **Focus**

4. obsessed with customer experience
5. able to create new products and services through co-creation, based on new technology
6. connected and effortless
7. sustainable and driving the circular economy

#### **Foundation**

8. secure, legally compliant, and manages risks in a smart way
9. able to attract and keep top talents

10. built on flexible IT platforms and architecture
11. designed for minimal manual operations
12. insights-driven and employs predictive analytics

## **CONCLUSION**

Through our research and daily work with leasing and lending firms, we see a strong interest in understanding the coming waves of change. Despite the enthusiasm, however, we also see a lack of bold vision and tangible actions on the part of captive finance companies to get their organizations ready. We are confident that captives need to start now, as the transformation needed for this new world of business will take a few years and is different from their current digital transformation initiatives.

Lastly, captives will also face competition from financing sectors that they do not even realize exist, perhaps in the form of a new fintech with a business model that does not exist today. No one can predict the future, but our research shows us that the potential for captives to get left behind in the race for new leasing and lending business models compels them to act now.

Rather than being caught by surprise, we believe captive leaders should consider this view of the future. It should be used as inspiration to act and invent their own future—instead of letting others define their destiny for them. ■



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By Basil M. Karatzas

It seems that one cannot open a business newspaper these days without running into an article about carbon footprint, emissions, and “future proof” technologies. No doubt we live in times of accelerated momentum. In the marine industry, that includes complying

with new environmental mandates as well as environmental, social, and governance (ESG) criteria or standards. To those, add the ever-present sense of urgency for the commercial application of new technologies.

No one disputes that running an environmentally friendly operation



Shown on the Mississippi River, the MV Stephanie Stone is a towboat built in 1974, with its engines (and emissions) grandfathered.

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***Specifically in the marine industry, whether for domestic (Jones Act) or for international shipping, the implications are even more pronounced, given the high capital cost base of marine assets.***

or piece of equipment, is a highly commendable goal that should underlie business decisionmaking. At the very least, we owe it to ourselves and to future generations to maintain a clean environment.

However, from a strictly economic point of view, the concern arises that if new equipment and machinery are “advanced,” then logically, existing equipment ought to be “dumb,” “bad” or obsolete. Accordingly, existing equipment should automatically be valued at a discount to new equipment and also at a discount to its estimated residual (or book) value.

The economic implications of such statements are self-evident not only to any type of asset owners, not only to lessors and equipment finance companies but also to financiers, who may have exposure to future value of assets (via balloon loan payments, residual value insurers, and so on).

Specifically in the marine industry, whether for domestic (Jones Act) or for international shipping, the implications are even more pronounced, given the high capital cost base of marine assets. From a lowly inland towboat that costs several million dollars to build new (roughly \$6.5 million for a 2000 hp vessel) to a Jones Act wind turbine installation vessel (WTIV) with a \$600+ million newbuilding cost, any asset risk can be material.

Likewise, in international shipping, from a small handy-size bulker (\$28

million for 38,000 deadweight) to an LNG tanker with a \$260 million newbuilding contract price, even a small percentage drop in secondary market values would lead to multimillion dollar write-offs. (An LNG tanker transports liquefied natural gas.)

## **NEW TECHNOLOGIES AND OBSOLESCENCE**

In the last couple of years, in our marine survey and appraisal practice, we have had to field an ever-greater number of concerns and questions from financiers, mostly lessors and equipment financiers, about the impact of new technologies on existing marine assets and requests to quantify functional and technological obsolescence risk on marine assets. Whether for relatively new marine assets or assets approaching the end of their economic life, a new generation of assets would have an impact, but likely at a different rate. Likewise, for marine assets in critical operations (tank barges or tanker vessels) the impact of obsolescence likely will be higher than for backwater assets, such as barges, deck barges, and inland pushboats.

From an appraiser’s point of view, obsolescence is a form of depreciation or deterioration of an asset. There is physical depreciation of an asset, with which we all are familiar, and which is attributable to the age of an asset and its wear and tear from daily use. Additional depreciation might occur due to functional

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obsolescence—loss in value due to factors inherent in the property itself—exemplified by changes in design, materials, or process resulting in inadequacy, overcapacity, excess construction, lack of functional utility, excess operating costs, and so on. Economic obsolescence can occur due to the loss in value or reduced desirability of ownership arising from forces external to a property.

Modern vessels are generally new and improved designs of existing equipment that allow for marginally better performance in some way, and that would pertain to functional obsolescence. On the other hand, there is the risk that external-to-the-equipment variables may affect its performance, such as new environmental regulations for lower emissions, that, unless they come with some “grand-fathering” provisions, may render existing equipment useless.

Further delving into appraisal terminology, we find the fine differentiation of curable and incurable depreciation (obsolescence), whereby it makes economic sense to upgrade a piece of equipment and remedy its functional or economic obsolescence. Sometimes the cure may be minimal and would make economic sense. However, other times the cure may require the complete redesign and reconstruction of a vessel, to the effect that an asset owner is economically better off to look for a replacement asset.

Functional obsolescence is generally quantifiable. For instance, a newer design that has 10% incremental capacity or 10% lower operating expenses would not face an existential risk. Moreover, the economic differential between an older and a newer asset is fairly obvious and mostly indisputable. However, new regulations that impose a new working frame for a (marine) asset would not be so readily quantifiable.

## THE EFFECTS OF GRANDFATHERING

Even when the asset is grandfathered (granted regulatory exemptions to operate), its economic life cannot be the same again, so to speak. In their simpler forms, grandfather clauses come with limiting provisions such as geographic region to operate, or requiring existing ownership to be maintained, so as not to allow any grandfathering to be passed along to buyers.

Thus, while a (marine) asset is exempted to comply with new regulations, it may not be allowed to be positioned to another region or area or jurisdiction, or be sold, without losing its exemption qualifications. Just like that, the value of the asset can change, if now it cannot be allowed to move around as freely as before.

One example of grandfathering is compliance with Subchapter K in the Jones Act passenger ves-

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***In short, maritime asset operators face a plethora of environmental regulations in various sectors, with a few cracks and loopholes in between.***

sel market. In this case, existing passenger vessels are designated as “inspected” by the U.S. Coast Guard, thus ensuring that they were built and have been maintained to regulations at the time of their original construction—but not necessarily to current regulations of Subchapter K. This can be a detrimental detail when appraising (and financing) passenger vessels in the Jones Act–U.S. market.

Inasmuch as grandfathering and exempting from compliance appear convoluted regarding the valuation of marine assets, compliance itself can be even more complicated. For the marine industry, the International Maritime Organization (IMO) of the United Nations is responsible for setting regulations in the international marine industry; however, again, the responsibility to enforce such regulations rests with local jurisdictions. This suggests that some jurisdictions may not care enough to enforce them in the first place, or they have higher priorities.

For the United States, although it is a signatory to the IMO, generally U.S. regulations take precedence over IMO regulations, especially in inland waters. In other words, an international vessel calling to a U.S. port must comply with both IMO and U.S. regulations, whereas a Jones Act vessel trading exclusively in the United States effectively can ignore the IMO regulations for the most part. The now famous Sub-

chapter M regulation, coming into effect in 2022, has been an effort to synchronize IMO and Coast Guard regulations in the tugboat industry. It has highly impacted both operations and tugboat values.

There are yet more complications. For example, while the Coast Guard sets the navigation regulations, the Environmental Protection Agency generally runs emissions and environmental regulations in the United States. Furthermore, certain individual states (such as California and Texas) enact their own environmental laws, which may be more stringent or lenient than the federal standards.

In short, maritime asset operators face a plethora of environmental regulations in various sectors, with a few cracks and loopholes in between. For instance, a well-known industry practice for vessel owners and operators consists of signing newbuilding contracts at the last minute (with additional options for more contracts) on the eve of new deadlines, just to be able to build grandfathered vessels in the future, for example, having Tier II engines while the standard for newer vessels will be Tier III or Tier IV engines. The higher the tier the lower the emissions, but also the higher original cost of such an engine (more components and electronics involved) and the higher operating cost over time, and thus the (economic) preference to stick with lower-tier engines.

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*While for a large ocean vessel such as a supertanker LNG may be an energy efficient, low-emitting fuel, a tight-dimensioned harbor tug is unlikely to have storage space for liquefied natural gas tanks.*

## COMPLIANCE: LIMITS BUT NOT SOLUTIONS

More interestingly, regulations define limits (such as for emissions) but not solutions, which are left to the individual companies to devise, adopt and implement. In order to render a vessel compliant with emission regulations, a vessel operator might elect to install exhaust gas cleaning systems (EGCS), colloquially known as *scrubbers*; or modify the vessel to burn better quality fuels, ranging from marine diesel to natural gas to methanol and ammonia; or possibly to have hybrid technologies on board for dual fuel or even battery power.

Another complication: there is no magic bullet fuel or technology to address the problem of energy and operational efficiency while allowing for minimal or zero emissions. Different fuels have certain advantages and may be ideal for certain types of vessels while they may be completely unsuitable for other vessel types.

For instance, while for a large ocean vessel such as a supertanker LNG may be an energy efficient, low-emitting fuel, a tight-dimensioned harbor tug is unlikely to have storage space for liquefied natural gas tanks. Thus, LNG effectively is not an option for small vessels. Likewise, while battery and electric power may be suitable for small vessels on regular routes (such as small ferries), battery power packs would be prohibitively heavy to propel a supertanker.

Clearly, a lessor in the marine space navigates a fragmented set of regulations and an even wider option set of fuels and technologies. If a vessel is not properly certificated at multiple levels or jurisdictions, its present and future market value may be affected. Likewise, another variable in present or future market value could arise from getting a vessel fitted to burn a new type of fuel but subsequently facing hiccups in the production or supply of such fuel—now or in the future, locally or regionally, where a buyer of the vessel may wish to reposition it upon acquisition.

The list of permutations can be quite extensive. Accordingly, the concerns and questions posed by asset managers of leasing and equipment finance companies are indicative of their considerations and thought analysis. For these players, sourcing the “right” marine asset to finance and ensure predictable residual values is of utmost importance.

It may be that building and financing only top-tier vessels is a way to ensure minimal asset risk, at least in terms of economic obsolescence. That may be one legitimate choice to optimize the asset risk profile, but how about economic returns? A marine asset that is considered top notch from an engineering or regulatory point of view may not necessarily be a good investment. For example, a methanol-powered towboat under construction in the Jones Act market has a cost basis of

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***One might suppose that the charterers would be willing to pay up for such a high-specification vessel. Based on their track record, however, do not bet on it.***

4 times that of a comparable, conventional towboat. While the asset risk is nominally minimized for this methanol-powered asset, it is hard to see how such a vessel can commercially compete in the market against vessels with a fraction of its cost basis.

## **PERSPECTIVE ON GREEN VESSELS**

One might suppose that the charterers would be willing to pay up for such a high-specification vessel. Based on their track record, however, do not bet on it. From a practical point of view, while all major charterers (i.e., oil companies, grain houses, etc.) advertise their green initiatives, most of the time they will not invest in a greener vessel. The bottom line takes precedence over green credentials, which at least partially explains why vessel operators pursue grandfathering policies even for newbuildings instead of building a top-notch vessel.

As the question was pointedly framed on a slide at a trade conference last year, “WTF with the newbuildings?”—meaning, Where is the financing for the top-notch newbuildings? Who pays for these new, high-specification marine assets? If blue chip charterers do not pay up for green vessels, there is little incentive for a vessel operator (with much shallower pockets than these well-established charterers in the form of energy, grains, and mining companies) to go for

high-specification vessels in the first place.

Such a reluctance to undertake the financial commitment and provide long-term employment for new, state-of-the-art marine assets implies certain duplicity on the part of these established charterers. Even as they advertise their commitment to a green environment, they do not seem to put their money where their mouth is.

However, on narrow economic terms, as the construction of and transition to new, green marine assets is in slow motion, existing marine assets maintain relatively strong asset prices, whether economically obsolete or not.

From the perspective of both an asset manager and a marine appraiser, trying to value marine assets in present time under such circumstances is challenging. However, it is even more challenging having to assess residual values for the vessels in a changing world, based on where the world may be five years into a leasing transaction.

New assets may be shiny and attractive and apparently inherently minimize asset risk, but they may not necessarily provide superior returns. Older assets may be cheaper and earn almost as much as a new asset, but they also stand to lose a lot in a shifting or a weakening market. For instance, in a strong freight market that raises all boats (literally and figuratively), old and new vessels enjoy good

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***Diligence encompasses selecting types of vessels that have higher resilience to obsolescence as well as considering which vessel designs and vessel age brackets will hold up reasonably well in the future under a wide range of circumstances.***

returns. That said, in a poorly performing market and high underutilization, charterers opt for modern vessels just because they are almost as cheap to charter as older vessels. Simply stated, if the daily rate is rock bottom, why not simply go first class with a modern vessel?

## CONCLUSION

In conclusion, we are not suggesting that profitable investments cannot be made in the marine industry. After all, many other industries are facing equally seismic shifts in terms of new technologies, regulations and consumer patterns. However, any lender, investor, or lessor in the marine industry—including the service providers on whom capital providers depend upon for professional advice, such as marine surveyors and marine appraisers—must perform a conscientious analysis of the asset risk involved. This diligence encompasses selecting types of vessels that have higher resilience to obsolescence as well as considering which vessel designs and vessel age brackets will hold up reasonably well in the future under a wide range of circumstances.

It is important to remember that the marine industry, like other modes of transport, cannot be outsourced, offshored or substituted. As a reminder, classifying transport workers and mariners as essential workers during the Covid-19 pandemic signaled the importance of the marine and transport industry to maintaining a normal daily lifestyle for the average citizen.

Fashion and consumer trends may shift with time. However, the shipment of end-product containerized cargo, raw materials (like ores), energy sources (oil, natural gas, and so on), and industrial materials (like fertilizers and industrial chemicals) is essential to sustain human activity and maintain better living conditions for people around the world. Cargoes and commodities will physically have to be transported seaways tomorrow and a hundred years from now, a testament to the endurance of the marine transport industry.

In a world of accelerated technological and regulatory evolution, for a successful marine asset investment, any financier must endeavor to fully understand all marine asset risk associated with the asset under consideration, not only at the time of initiating a transaction but also taking a decade-long forward look.

Older and newer marine assets have different asset risk profiles—which themselves are dynamic with time and not necessarily in sync with each other. Thus, in our opinion, financiers in the marine industry should try to offset such asset risk by staying focused on the marine assets (both asset class and vintage) within their core expertise. The goal is an understandable, predictable asset risk profile, with the source of the capital and objectives of the investment aligned with the asset risk profile. ■

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