

Getting more value from your fleet

Companies may be overvaluing the flexibility that comes with leasing—they would be better off buying planes, ships, and trucks outright. The key is in the timing.

Steve Saxon

Leasing would seem to be an ideal way for companies in the transportation and logistics industries to control their exposure to the ups and downs of the business cycle.¹ In theory, it gives them the flexibility to allow their fleets of ships, aircraft, and vehicles to shrink when demand declines and grow when it picks up again, or to switch to new technology as it becomes available.

In our observation, however, few managers can—or do—take advantage of the flexibility they have paid for. And in these industries, with high fleet costs and razor-thin margins, even a small reduction in overall costs can translate into a substantial increase on the bottom line.² That

makes it well worth examining assumptions about the costs and benefits of leasing compared with owning. At one global airline, for example, we calculated that a 5 percent reduction in fleet costs would lead to a 20 percent increase in profit margin.

Our analysis of fleet and leasing costs for transportation companies suggests that many could outperform their competition and increase returns to shareholders if they owned the core of their fleets and leased only when it made a real difference. For this to be effective, however, companies must take a consistent approach to acquisitions, making fleet additions on a regular schedule without regard for the cycle.



Valuing flexibility

Some transportation companies lease a large proportion of their fleets out of necessity, because they lack access to capital, or for expediency, so that they can quickly add or remove capacity or upgrade to new technology. Many lease for the flexibility of being able to reduce capacity when demand falls.

In practice, however, many companies are unable to reduce their fleets during downturns, since leases seldom conveniently expire as demand declines. One global shipping line we observed, for instance, had no large ship leases expiring during the 2008–09 crisis, though it leases more than half its fleet. And even under ideal circumstances, if a company were to structure its leases so that a consistent number expired annually, only a fraction of the fleet would do so in any given year. For example, with average leases of five-year duration, a company would need to lease half its fleet in order to achieve 10 percent flexibility each year. Many companies would have liked 10 to 20 percent of their leases to expire in the 2008–09 crisis in order to adjust to the reduction in demand.

Leasing can allow companies to return older, less efficient assets to lessors and upgrade to the latest technology more rapidly than they could if they owned those assets outright. For example, new generations of more fuel-efficient and larger aircraft reduce the total cost per seat by 10 to 15 percent every 10 years. Singapore Airlines reportedly leased its most recent Airbus A330s for five to six years to bridge the gap until next-generation Boeing 787s and Airbus A350s arrive later this decade. But there are limits to this flexibility. In practice, this works for lessees only when they have better insight into the timing of major technical innovations than lessors do,

because lessors will naturally price any timing benefits into their leasing costs.

The flexibility that leases offer is clearly valuable. The question is whether it justifies the premium companies pay for it—typically 10 to 15 percent more for leased aircraft and trucks than for owned ones, but often as much as 25 percent more for ships. Moreover, leased assets can be more expensive to operate. So-called wet-leased ships, for example, are operated by a crew provided by the lessor, which creates less incentive to keep fuel costs down than when ships are operated by crews provided by the lessee. Leased aircraft may also have higher maintenance expenses than owned aircraft, as lessees must invest to meet the strict return conditions set by lessors. From our research, the result is that the premium paid for leasing is often 3 to 7 percentage points higher than the benefits in flexibility that leasing brings (Exhibit 1).

Finally, the profit margins that lessors earn also suggest that transportation companies over-value leases. While transportation companies typically have razor-thin margins over the cycle and often return below cost of capital, lessors do much better. Aircraft lessors return 10 percent or more on capital, and some suggest even this figure may be low: for instance, Guy Hands—the chairman and chief investment officer of Terra Firma, which owns Irish lessor Awas—states that returns of 18 to 20 percent can be achieved. To some degree, lessors benefit because they can access cheaper funds than transportation companies themselves can access; for example, GE, International Lease Finance Corporation, and Boeing Capital have credit ratings that are 7 to 10 notches higher than those of the main US airlines. But by and large, lessors' returns come

Exhibit 1

On average, the benefits of leasing do not justify the costs.

Marginal value of flexibility, % of total ownership cost	Flexibility to shrink fleet in downturn ¹	3–4
	Flexibility to access new fleet with lower operating costs ²	3–4
	Tax advantages ³	<1
	Total benefits	7–8
Marginal added costs of leasing, % of total ownership cost	Increased capital costs ⁴	10–15
	Increased operating costs ⁵	~1
	Total costs	10–15

¹Based on benefit of being able to return capacity in downturns instead of idling it; assumes a capacity reduction of 15–20% during downturns that occur every 5–8 years.

²Based on modeling assuming new generation of aircraft/ships every 10 years with 10–15% more efficiency on fuel, with fuel making up 40% of the cost base; discount rate of 10%.

³Airlines and shipping companies pay relatively little tax due to favorable regimes.

⁴Based on fully loaded (depreciation and financing) cost difference.

⁵Based on 2% fuel-efficiency gain on owned fleet, consistent with experience in shipping; this factor is not important for airlines.

from the premium they charge the transportation companies for flexibility.

Making the most of the cycle

What should transportation companies do? Our analysis shows that most companies would be better off owning as much of the base level³ of fleet as they expect to need, given their financial position and projected long-term growth rate. Beyond that, they should lease equipment in a more opportunistic fashion, adding to capacity to experiment with new routes or expand when capital is scarce.

For companies that have access to capital, owning more of the fleet gives them an opportunity to distance themselves from the pack. Additionally, although some companies have preferred leasing because it appears to put less stress on

the balance sheet than ownership, investors typically see through such machinations⁴—and in any case, impending International Financial Reporting Standards regulations requiring capitalization of leases on the balance sheet will explicitly recognize their inherent debt-like nature.⁵

Not surprisingly, timing is critical if companies want to own more of their fleets. Prices of new aircraft and ships are cyclical, moving with the same economic cycles as the airlines and shipping companies themselves. The prices of new-build ships can fluctuate by 30 percent or more (and prices of leased equipment by over twice that). But most companies purchase new equipment toward the top of the cycle, when prices are highest. This is understandable: they are flush with cash and typically at or above capacity,

and they believe additional growth will be profitable. In contrast, purchasing at the bottom of the cycle requires committing cash in a time of losses and uncertain future demand.

The challenge is that there is typically lead time for new assets. A popular aircraft model ordered today may not be delivered for four years due to the order book at manufacturers; most shipyards take two years to deliver orders placed during peaks. That means assets are often delivered in the down cycle, when they are not required and

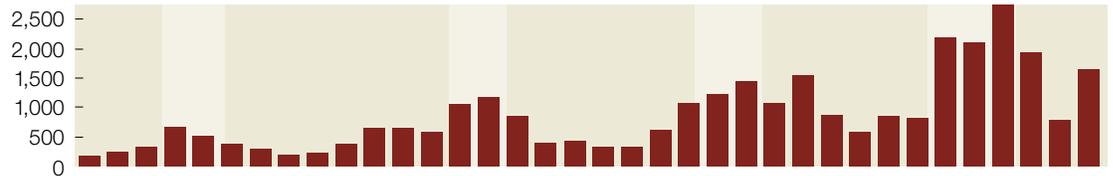
cannot be deployed profitably. The cycle of orders and deliveries in the airline industry illustrates this problem (Exhibit 2).

A strategy adopted by some airlines—as well as some shipping companies and most lessors—is to try to time fleet acquisitions such that the company buys at the bottom of the cycle for delivery at the top. Of course, this requires major commitments of cash when losses are heavy. In our experience, the management and boards of many publicly listed lessees see this as too big a risk.

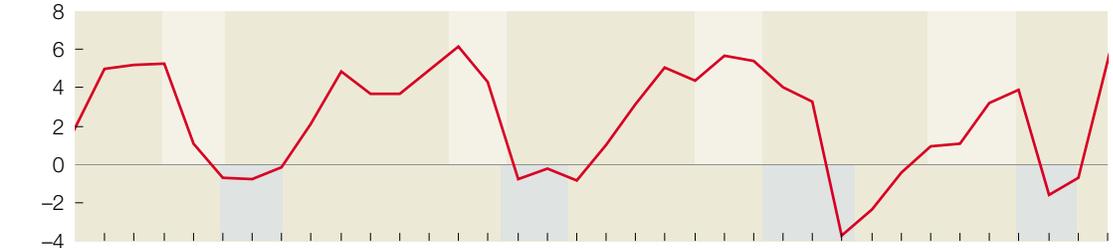
Exhibit 2

Deliveries come when they're least needed.

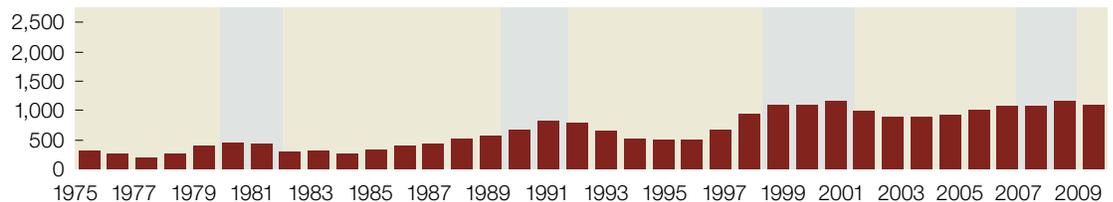
Orders, units



Operating profit margin, airline-industry example, % of turnover



Deliveries, units



Source: International Civil Aviation Organization; International Air Transport Association; *Airline Monitor*; McKinsey analysis

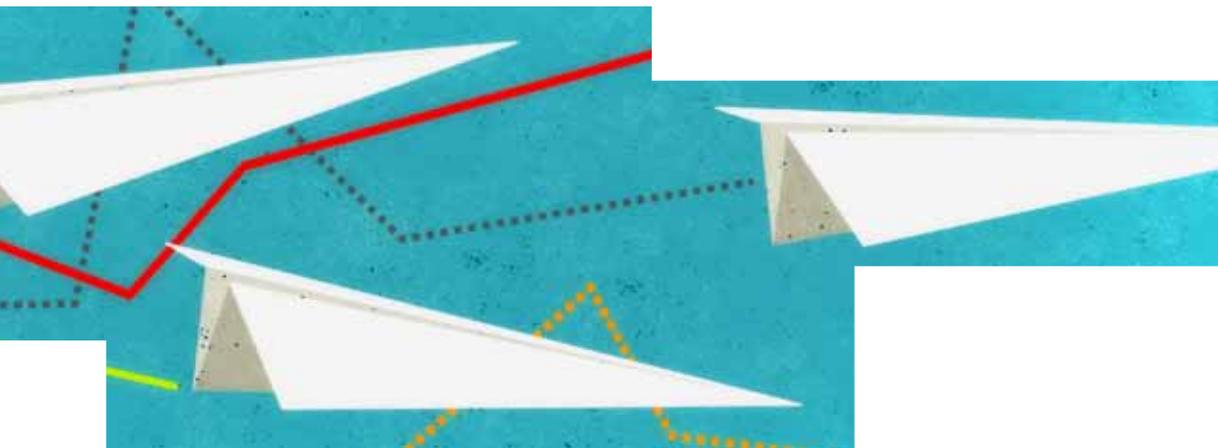
A better strategy would be for companies to place orders for new equipment at consistent intervals throughout the cycle. Such an approach can give companies a significant edge. For example, our analysis found that a shipping company would have beaten or equaled all of its peers—including those typically recognized for their skill in asset purchasing—on average purchase price if it had bought through the cycle against a long-term growth rate. Moreover, its fleet costs would have been 10 percent lower than average and generated industry-leading returns at 2 percentage points above its cost of capital.

Clearly, managers and boards will need discipline to stick to such a policy. The experience of one global fleet operator is illustrative. The company was losing money and demand was low, so board members were naturally skeptical about increasing capacity. Managers first met one-on-one with the most influential board members to examine how much more the company paid than its peers because of past decisions. They also discussed how little they used their lease flexibility, mapping it against asset prices and cyclicity. Ultimately, the board agreed that

a commitment to through-cycle ordering was the right course for the company. And because the company had just raised capital, it had the resources to place orders when competitors could not. The move has positioned it well to survive the downturn.

It is also valuable to separate the fleet-purchasing unit from day-to-day operational managers. Operational managers are often quite tactical, pushing to expand the fleet as the cycle progresses because they are closest to the customers clamoring for more capacity. The pressure is hard to ignore, which is why many companies end up with too much capacity when the cycle turns down. By separating the fleet-purchasing unit, the company sends a clear message to sales and operations that their role is to sell the capacity the company has—not to plan the fleet.

The transition is not easy. Operational managers often protest that they face capacity constraints in up cycles and feel they are being held back by their fleet colleagues. Moreover, fleet decisions inevitably rest with CEOs, many of whom came up through operations and sales themselves



and are sympathetic to demands for capacity during the up cycle. And even boards can fall prey to the biases that sway capital decisions: we have the money and we have demand, so why wouldn't we buy now?

Nevertheless, a through-cycle approach would not only help individual companies. If adopted industry-wide, it would also improve overall industry performance—smoothing cyclicity, improving stability, and leading to lower, less volatile new-build prices. While gains are eventually likely to be passed on to customers in the form of lower rates, given the competitive nature of the industry, those able to execute a through-cycle purchasing strategy early will have an advantage.



Leasing is a valuable tool for companies under certain circumstances. However, it should not be a substitute for disciplined fleet acquisitions. ○

¹ This article considers only operating leases, not financial leases. The decision to commit to a financial lease is similar to the decision to commit to a purchase but provides a different way of financing the purchase.

² Fleets directly account for 15 to 20 percent of the cost base of airlines and shipping companies (the focus of this article) and indirectly affect a further 20 to 40 percent.

³ Base level is defined as the level of fleet that the company is certain to need to operate the core of its network—typically 60 to 80 percent of the total fleet.

⁴ See “Why accounting rules shouldn't drive strategy,” *McKinsey Quarterly*, February 2007.

⁵ See “Leasing: Changing accounting rules shouldn't mean changing strategy,” *McKinsey Quarterly*, April 2011.

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