May 2019

Industry Insight

Equipment rental and leasing

Contents

Summary	01
Outlook	03
Introducing the industry	05
Dimensioning the industry	07
Value chain model	09
Legislative and regulatory framework	11
Summary of competitive forces	12
Demand side drivers	13
Drivers of supply	16
Industry rivalry	19
Critical success factors	22

INDUSTRY INSIGHT
Equipment rental and leasing

Compiled by:

Paul Clark
Industry Economist
Phone: +64 9 336 5656
Email: paul.clark@westpac.co.nz

Summary

This report focuses on New Zealand's renting and leasing industry, which is primarily concerned with providing a wide range of tangible goods, such as cars, computers, consumer goods, and industrial machinery and equipment, to customers in return for a periodic rental or lease payment.

The renting and leasing industry in New Zealand is relatively large. Turnover in 2017 was an estimated $4.7bn, making it roughly the same size as New Zealand's horticulture and fruit growing industry. The biggest chunk of this came from renting and leasing of passenger vehicles to individuals, mostly tourists and businesses, followed closely by household goods, and other equipment used in transporting freight. Renting and leasing of heavy machinery makes a relatively small contribution to industry turnover.

The fortunes of the industry are linked to economic activity, although this is a bit of a generalisation. Times of heightened economic activity are typically associated with greater procurement, but that could be through outright purchase or by renting and leasing. The extent to which firms and individuals procure through renting and leasing depends on a number of other factors, some macro, others micro.

Key macro drivers include the level of activity in downstream consuming industries, the number of households in existence, and number of firms in operation. Simply put, the more people there are, and the higher economic activity is, the more renting and leasing activity there is likely to be. Other drivers include the stock of machinery and equipment already in existence and how well utilised it is. This is particularly important given the emergence of the sharing economy, where electronic marketplaces are becoming increasingly commonplace and almost anything can be swapped for cash.

Ultimately though, decisions on whether to rent, lease or buy are informed by a number of micro factors that determine the relative benefits of each option. Renting and leasing offers some significant advantages.

It's a cost effective and flexible option, especially near-term. There are no large capital outlays, few if any responsibilities for repairs and maintenance and there is no need to make allowances for depreciation. Rental and leasing expenses are also tax deductible. Equipment and machinery is provided when and where needed and usually can be handed back when an upgrade becomes available. It offers protection against technological obsolescence, and for equipment embodying the latest technology, the possibility of efficiency gains.

Not surprisingly, the rental market has grown strongly. Global growth in equipment rental and leasing has grown by an annualised rate of 5.4% since 1998. New Zealand has followed suit, with gains of a similar magnitude being recorded in most market segments.

Being able to meet this demand is a real challenge for the industry. Some rental and leasing firms will go out of their way to anticipate demand and adjust supply accordingly. A few larger ones will even go as far as using analytics and big data to do this. However, for the vast majority, especially the multitude of small firms that participate in this industry, how much they supply is based on past experience.

But supplying equipment is only half the story. Repairing and maintaining it so as to ensure optimal performance is just as important. This means having access to specialist technical knowledge to ensure that equipment is able to perform in line with expectations. Larger firms often run their own workshops, employing a number of technical staff. Their smaller counterparts may also employ some technicians, but tend to outsource to specialist maintenance workshops for bigger repair jobs. A key challenge for the rental and leasing industry is how to maintain this knowledge given technical skills shortages and an aging workforce.

Firms in the rental and leasing industry largely compete on price. This is particularly true where firms offer the same equipment for rental or similar assets that offer the same level of functionality. However, determining the price or rental rate is complex. Firms not only need to consider the range of factors that underpin the demand for and supply of equipment, they also need to consider whether an asset offered to the market can be priced at a level that is profitable.

This requires the consideration of a number of factors, including the purchase price of the asset concerned, company policy on how quickly this purchase price should be recouped, the length of time the asset can be rented out for, expenses incurred, and its future price on disposal.

But it not just price that is important. Firms in the industry like to say that they compete on service quality, and to an increasing extent, this is true. In large part this is because of increased competition coming from new market entrants and in some market segments, the growing threat posed by participants in the technology-enabled sharing economy. Customers are also becoming much more sophisticated, with the internet in particular providing the ability to compare.

Firms have responded to these competitive threats by beefing up their service offering, hiring staff that are able to listen, show empathy and are solution orientated. They have also expanded their product range, which in some cases has led to acquisition activity, and have begun to engage in the sharing economy, either directly as participants, or indirectly as suppliers.

Relationships have always been an important aspect of this industry, and providing advice is a key component. If anything, this has intensified, with firms increasingly looking to provide solutions tailored to individual customer needs, as a way of differentiating themselves. That is, firms are slowly shifting from being product pushers to being business partners.

However, this is a minority. Most firms operating in this industry continue to meander along as they always have. Some have been around a long time, focusing on niche markets, eking out a living off well developed relationships and the advice that they are able to provide. Others just push product. These firms are likely to be vulnerable to take-overs by firms looking to supplement their own product range.

Outlook

The rental and leasing industry is in rude health, and this is likely to remain the case for the foreseeable future. However, growth in turnover is likely to slow a bit from today's fast pace as the economy slows. Longer-term, industry fortunes are likely to be shaken up by rapid technological change, which will create more opportunities for peer-to-peer sharing in more market segments. Increasing levels of disintermediation will, however, threaten the existence of many smaller firms unable to adjust to the new competitive paradigm.

The structural factors that have traditionally underpinned demand for rental and leased equipment have been very strong in recent years, but are likely to be less supportive in the future.

The key one of course is the economy, which we forecast to continue growing over the foreseeable future. However, we are also picking the pace of growth to slow over coming years and this is likely to mean that firms might not be calling as much on their rental providers as they would have been had economic growth been stronger. A slowing economic growth profile is also likely to mean fewer new firms in existence, which should further curb the appetite for rental and leased equipment.

Interest rates, which we forecast to go lower over the next couple of years, also have a role to play. We see two opposing impacts. On the demand side, we expect that lower interest rates will encourage some firms to purchase outright rather than rent. However, that won't be the case for all firms. On the supply side, lower interest rates are likely to encourage rental and leasing firms to take out new loans to replace older stock with new equipment. They will compete for the business of customers that haven't opted to purchase in a lower interest rate environment.

Population demographics are also likely to have an impact, especially now that net migration into New Zealand, having topped out in 2016, has begun to moderate. With natural increases remaining relatively constant, it's likely that population growth in New Zealand will slow and so too the number of new households. This should help to limit demand for rented household goods.

However, a slowing economy is not necessarily all bad news for the rental and leasing industry. When economic growth is lower and uncertainties are heightened, some firms will look to rent rather than buy because renting is inherently more flexible and offers some significant near-term cost advantages.

Customers might also start to circumvent the rental and leasing industry by tapping into peer-to-peer networks. In the near-term this is only likely to be at the margin. Longer-term, however, it's likely to be a different story. As technology progresses, we expect to see a shift in momentum with firms increasingly tapping into peer-to-peer sharing networks to access equipment, effectively disintermediating traditional rental and leasing activity in a broadening range of market segments.

How rental and leasing firms react to the changing tide will be critical. The key to prosperity will still lie in having access to the right quantity and quality of equipment at the right time to address the requirements of an increasingly sophisticated customer base that will, because of the advances in technology, have a widening range of procurement options available to them.

Most small firms will do nothing and carry on as they always have done. They are likely to do okay, at least for a while.

But they will be vulnerable, not only because of growing disintermediation, but also new market entrants who, attracted by returns that can be achieved, are likely to cherry pick the most profitable market segments. Some small firms are likely to be become targets for acquisition.

Other small firms will adjust to the new competitive paradigm by becoming a lot more customer focused. This will involve much more than just providing advice. Being able to form relationships, already an important feature of the industry, will become critical, as will the ability to really understand customer needs.

These firms will move up the value chain, competing on the ability to add value to their customer's business. They will, however, remain niche players.

Larger firms are likely to acquire some of those firms that have not made the adjustment to the new competitive paradigm. Acquisitions will enable them to develop the scope and scale they need in order to compete as "one stop" shops. They will also look very closely at their customer base, using big data, their own transactional data and various analytical tools to segment their client base according to need. Segmentation will allow these firms to deliver an appropriate level of service, which will include providing tailored solutions, much like their smaller counterparts.

Larger firms will also meet the threats posed by peer-to-peer sharing. They are already supplying participants in that market and can be expected to continue to do so in the future. But they will do more. Indeed, it's highly likely that they will set up their own peer-to-peer networks, using subsidiaries to distribute product to the market.

Introducing the industry

Defining the industry

The rental and leasing industry includes firms that provide a wide array of tangible goods, such as cars, computers, consumer goods, and industrial machinery and equipment, to customers in return for a periodic rental or lease payment.

This report focuses on firms that supply the following to the rental and leasing market:

Passenger vehicles refer to sedans, hatchbacks, station wagons, SUVs and mini buses that are subject to short-term and long-term rentals, as well as long-term lease arrangements.

Other equipment and goods refers primarily to household appliances, from electronic goods such as television, audio and computer equipment, to household and office furniture. Also included would be electrical appliances, from fridges to dishwashers as well as other goods, including DIY tools, pot plants, art work, bicycles, camping and sporting equipment.

Other vehicles and transport equipment refers primarily to skids, pallets and containers which are used to transport and store goods. However it also refers to other equipment, such as locomotives, rail freight and passenger carriages used by rail operators, leisure crafts and recreational vehicles such as powerboats, yachts, caravans, motorcycles and jet skis. This segment would also include the leasing of large road based freight vehicles, buses, articulated trailers and large sea going transport vessels.

Heavy machinery and scaffolding equipment primarily refers to large complex cranes and other access equipment, such as less complex truck mounted cranes, cherry pickers, scissor lifts and hoists. Also included would be earthmoving and other heavy construction equipment, ranging from excavators, bulldozers to dump trucks, compaction machinery, continuous haulers and mineral processing equipment.

The descriptors "asset", "equipment" and "machinery" used in this report refers to the broad range of consumer goods, machinery, equipment and vehicles rented and leased by firms in this industry

Table 1: Industry size by turnover

Market Segment	Turnover (2017 $bn)
Passenger Vehicles	1.65
Short-term rental	0.56
Long-term rental	0.11
Operating vehicle leasing	0.72
Other services	0.26
Other Equipment and Goods	1.37
Electronic equipment rental	0.42
Furniture rental	0.38
Domestic appliance rental	0.31
Other goods rental	0.26
Other Vehicles and Transport Equipment	1.02
Pallet, skids & containers rental	0.43
Other transport equipment rental	0.20
Large vehicle rental	0.19
Aircraft leasing	0.11
Large Vessel leasing	0.09
Heavy Machinery and Scaffolding	0.64
Cranes & access equipment rental	0.20
Earth Moving & Other Heavy Constr.	0.13
Scaffolding	0.12
Other hire equipment	0.09
Non-hire activities (setup and sales)	0.06
Forklift rental	0.04
Total	4.68

Source: Stats NZ, IBISworld, Westpac

Defining terms

Renting is typically for a short time-period, normally up to a year, with the option to extend at the end of the rental period. Rentals are suited to the temporary use of assets where there is an expectation that it will not be needed long-term. Rental contracts are generally quite casual.

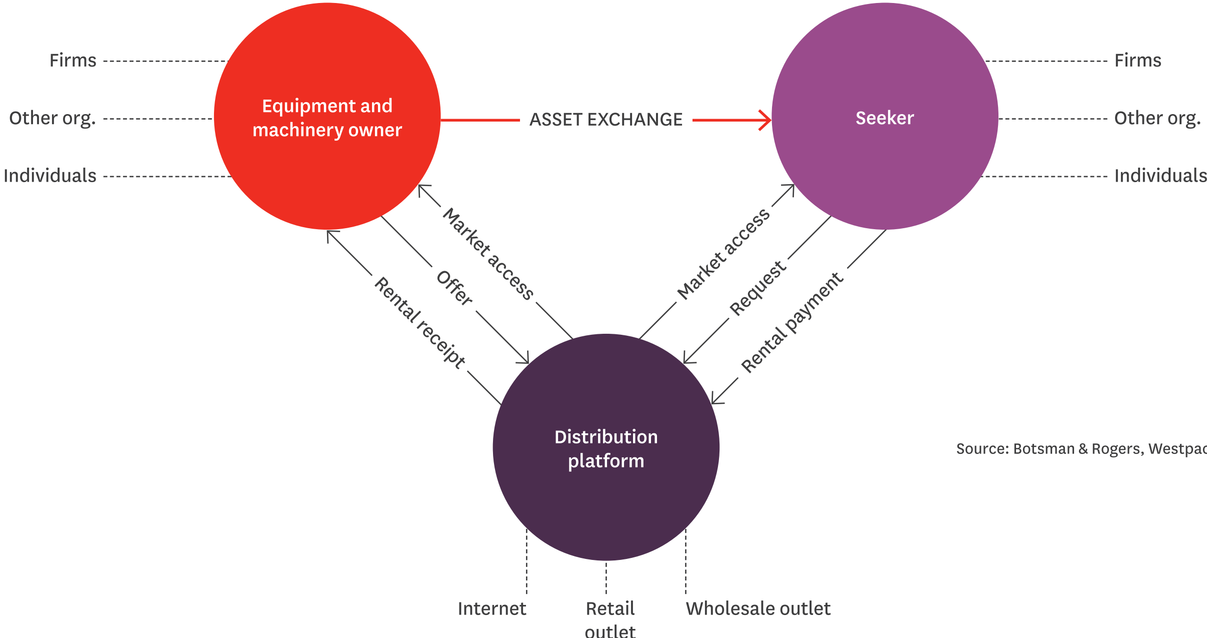
By contrast, **leasing** is typically for a much longer time-period, anywhere between 1 to 20 years. A **lease** agreement is a formal arrangement where the lessor (owner) grants the use of an asset to a lessee (user) in exchange for periodic payments over an agreed lease period. At the end of this period, the asset is returned to the lessor unless the rental agreement allows for the purchase of the asset by the lessee at its residual value.

For tax and accounting purposes a distinction is made between operating and financial leases. Leases are regarded as financial leases when the value of lease payments makes up most of the fair market value of the leased asset, when the length of the lease makes up most of the effective useful life of the leased asset, and there is an option to purchase at the end of the lease period. By contrast, operating leases are those where there is no option to purchase on expiry date.

Sharing of equipment is a related activity, although it differs from renting and leasing in that it involves market transactions between peers rather than between businesses and downstream consumers. Facilitated by the technology advances and the growing pervasiveness of the internet, sharing is typically informal, of a short-term nature, and unlike renting and leasing, is often not a core function of those that participate.

One of the underlying shifts in worldview and thinking is from needing to own to simply to having access to shared assets

Figure 1: Generic renting, leasing, sharing model



Source: Botsman & Rogers, Westpac

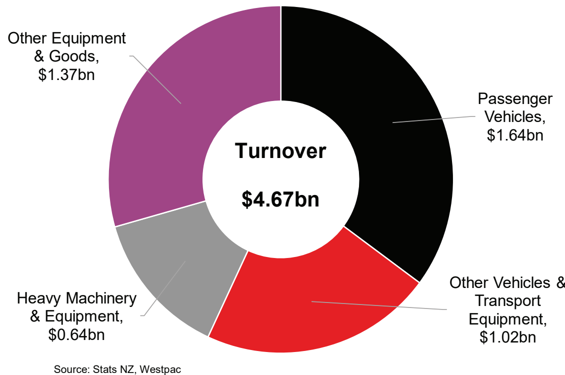
Dimensioning the industry

Size of the industry

This industry is large and is estimated to have generated turnover of $4.7bn in 2017. This makes it roughly the same size of New Zealand's horticulture and fruit growing industry.

Industry revenues have grown strongly, rising by an average of 11% since 2014. Strong economic growth, rising tourism numbers (both foreign and local), and increased construction activity, underpinned by post-earthquake recovery efforts in Christchurch, are likely to have been among the key drivers.

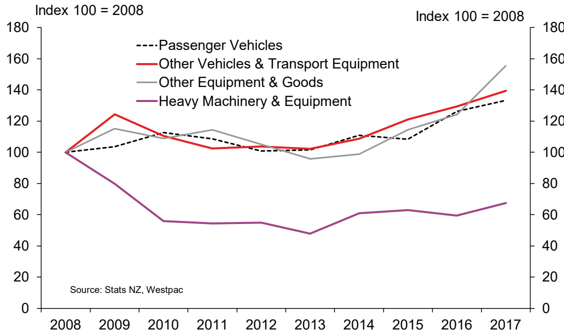
Figure 2: Industry turnover - 2017



Growth would have been stronger had it not been for heavy machinery and scaffolding market segment, which has performed relatively poorly over the past 4 years.

That said, passenger vehicles, and other equipment rentals, the two largest contributors to industry turnover, adding just over $3bn collectively, still managed to grow strongly over the period.

Figure 3: Industry turnover by market segment



> The industry employs almost 11,000 people, but this changes from year to year. Employment patterns typically lag the performance of the industry as a whole

Shape of the industry

Two types of firms operate in this industry. The first are those that rent out consumer goods, motor vehicles and equipment to walk-in customers through a retail outlet or store front facility.

The second are those that are engaged in leasing machinery, equipment and motor vehicles directly to businesses, typically on long-term lease basis. These firms operate independently or act as an outlet for equipment manufacturers.

There are many firms operating in the rental and leasing industry. That said, most market segments are dominated by 3 or 4 firms, which collectively account for between 25%

Table 2: Shape of the rental and leasing industry

	Firms 2018	Average number of employees	Top tier concentration (%)	Average turnover ($m)
Other Equipment and Goods	2,235	1.8	8	0.6
Passenger Vehicles	804	4.6	25	2.1
Other Vehicles and Transport Equipment	723	0.9	28	1.4
Heavy Machinery and Scaffolding	498	4.7	33	1.3
Total	4,260	2.6		1.1

Source: Stats NZ, Westpac

and 35% of industry turnover. The exception is the other equipment and goods market segment, where the top 4 firms account for less than 10% of industry revenue.

All segments host a large number of small firms, most of whom have a narrow regional focus and/or specialise in specific types of equipment. By contrast, most large rental and leasing firms have representation across the country

Most large firms operating in the rental and leasing industry are local subsidiaries of foreign firms, some of whom operate in many different countries. Examples include AvisBudget, one of the largest passenger car rental firms in the world with a presence in over 180 countries and by far the biggest in New Zealand, Crown Equipment, which rents out forklift trucks, and CHEP New Zealand, a subsidiary of Australian-based Brambles Limited, which provides logistics management of standard transport equipment, including pallets, skids and containers.

However, some large firms are New Zealand based. Hirepool, New Zealand's largest equipment rental firm, rents out a range of different types of equipment, from transport and access equipment to heavy machinery, scaffolding and even commercial vehicles. Other notable New Zealand based firms include Royal Wolf Trading New Zealand, which is a leading supplier of containers to the rental market, and Ezi Car, which is one of the largest car rental firms operating in New Zealand, with about 3,000 cars under management.

A few of these large firms operate in more than one market segment. Hirepool is clearly one of those. Another is Avis Rent A Car, which together with its subsidiary Budget Rent A Car, supplies both passenger and commercial vehicles to the rental market.

A number of these firms generate as much as 40% of their revenue from asset sales, with further a 10% to 20% coming from repairs and other services

In addition, there are firms that operate within the rental and leasing industry, but are actually peer-to-peer intermediaries. A notable example is EquipmentShare, which acts as intermediary or broker, renting out underutilised equipment and machinery already owned by other firms to peers that require those assets for productive purposes.

Value chain model

A value chain describes the range of activities that are required to bring a product or service from conception through the intermediary phases of production to final consumers.

Figure 4 summarises the value of inputs used and outputs produced by the rental and hiring industry in New Zealand using basic price data from Stats NZ 2013 Input-Output tables. Because they are expressed in basic price terms, they exclude taxes payable, any subsidies received and transport charges that are invoices.

The inputs used by the industry can be broadly categorised as either being a service, material, labour, or "other". This latter category refers to an annual depreciation expense incurred by rental and leasing firms on machinery and equipment, most of which is rented or leased out.

Services used by firms operating in the rental and leasing industry are diverse. They range from utilities such as electricity and waste water to commercial property and financial services. Service providers to the industry come in all shapes and sizes.

The largest single service provided to the industry is equipment hire, which accounts for just under a quarter of all expenditure on services. It's not uncommon for rental or leasing firms in different market segments to hire equipment from others if they are not in a position to address their customer needs directly. An industry source suggested that larger firms will often rent specialised equipment from smaller firms to address one-off and/or small volume requests. This happens across all market segments.

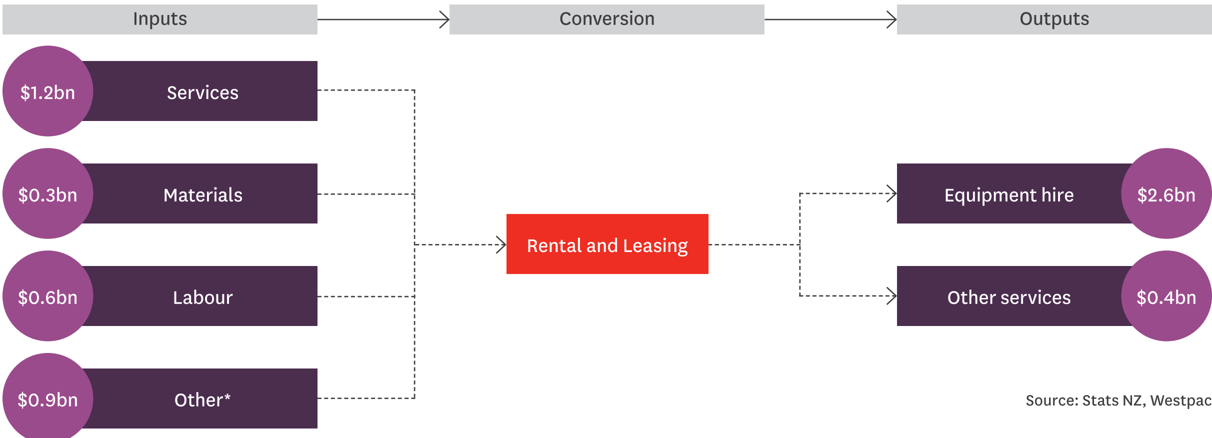
The rental and leasing industry also spends a lot on professional services. According to Stats NZ, it spent about $200m on advertising, marketing, management consultancy and accounting services. Maintenance

Table 3: Inputs into the rental and leasing industry

Input	$m (2013 prices)
Services	
Equipment hire services	260
Intellectual property licensing services	143
Leased property services	109
Financial intermediation services	103
Advertising and marketing services	60
Maintenance of transport machinery & equipment	58
Management consultancy	46
Accounting and taxation services	38
Maintenance of transport other equipment	33
Road freight services	29
Computer software and services	27
Legal services	25
Maintenance of domestic and office equipment	20
Materials	
Motor vehicle, trailers, and semi-trailers	94
Non-residential building construction	44
General industrial equipment	23
Cementitious products	17
Fabricated metal products	17
Electrical equipment	16
Computers	13

Source: Stats NZ, Westpac

Figure 4: Simplified value chain mapping of the rental and leasing industry



Source: Stats NZ, Westpac

Note: Inputs and Outputs are shown in basic prices for the year ended March 2013. The basic price of an input or output is the monetary amount received by a supplier plus any subsidies received less any taxes payable. It excludes transport charges invoiced separately by a supplier.
* "Other" refers to the depreciation of fixed assets.

services, covering anything from office equipment to transport machinery and equipment, amounted to an estimated $120m, while financial intermediation services, which presumably includes interest and other expenses, totalled just over $100m.

Materials are used by firms to ensure that rented equipment performs in line with expectation. Key material inputs are transport vehicles, warehousing and storage facilities, maintenance workshops and industrial equipment.

Labour costs for this industry are significant. To a large extent this reflects increasing levels of employment, with the number of people working in the rental and leasing industry having risen from 9,000 in 2009 to about 10,900 in 2017. About 50% of this increase was due to a pickup in employment in the heavy machinery and scaffolding market segment. In addition to customer relations, firms operating in this segment require procurement and technical expertise, covering the maintenance, assembly and disassembly of machinery.

The other big increase in employment was in the equipment and other goods market segment, which is concerned with renting out a diverse range of household goods and appliances. As technological change gathers pace, firms in this market segment are increasingly hiring workers with technical product knowledge.

Legislative and regulatory framework

The legislative and regulatory framework that applies to the rental and leasing industry is primarily concerned with clarifying and enforcing the rights and obligations of rental and leasing firms and those of customers. For the most part, the rental and leasing industry is not heavily regulated. Legislation and regulations that apply are unlikely to unduly curtail the operations of firms in New Zealand.

Supplementing this framework are a set of licensing and registration requirements and product specification rules, most of which focus on the safety and performance characteristics of machinery and equipment rented or leased out by industry.

Key pieces of legislation are the **Fair Trading Act 1986** and the **Consumer Guarantees Act 1993**, which specify the obligations of all types of firms when selling or renting out products, and the general rights of consumers regarding product quality, service, pricing, safety and other factors.

Failure to meet these obligations can result in prosecution by the Commerce Commission

The **Credit Contracts and Consumer Finance Act 2003** is more specific to financial transactions that might take place and include lease and rental agreements related to the industry. This act specifies the obligations of lessees and lessors in relation to businesses practices, contractual arrangements, and payments (amount owing, terms, interest rates, fees and other details). Disputes related to credit contracts are covered under the Financial Service Providers (Registration and Dispute Resolution) Act 2008.

In addition to legislation there are number of registration requirements that firms operating in this industry need to adhere to. Passenger and large vehicle rental firms, for example, are required to obtain an appropriate Transport Service Licence (TSL) from the New Zealand Transport Agency (NZTA). They can be fined should they be convicted of operating without a TSL and have their vehicles impounded for up to 90 days.

All vehicles to be rented or leased are required by law to have a warrant of fitness in the case of passenger vehicles, or a certificate of fitness for larger vehicles. This is to ensure they meet the necessary safety standards.

There are also a number of in-service safety and testing **standards** that apply to specific types of equipment and machinery in use. These operating standards are set out by Standards New Zealand and apply mostly to heavy machinery/scaffolding as well as different types of transport equipment. Failure to comply with these standards can have significant legal implications for rental and leasing firms, including product indemnity and public liability.

There have been some changes to the **accounting treatment** of leases, but those mostly affect firms that lease equipment. Changes to International Financial Reporting Standards (NZ IFRS), which came into place on the 1 January 2019, effectively removes the distinction between operating and financial leases by bringing nearly all leases onto the balance sheet. The net result is an improvement in the visibility of the company's lease commitments and economic realities.

For rental and leasing firms, the impacts are less significant because they can still classify and account for leases as either operating or finance leases. However, rental and leasing firms will still be required to disclose additional information about their leasing activities, including their exposure to residual risk.

Summary of competitive forces

The competitive forces affecting the rental and leasing industry are becoming more intense. The key to prosperity lies in having access to the right quantity and quality of equipment at the right time to address the requirements of an increasingly sophisticated customer base that has, because of the advances in technology, a broadening range of procurement options available to them.

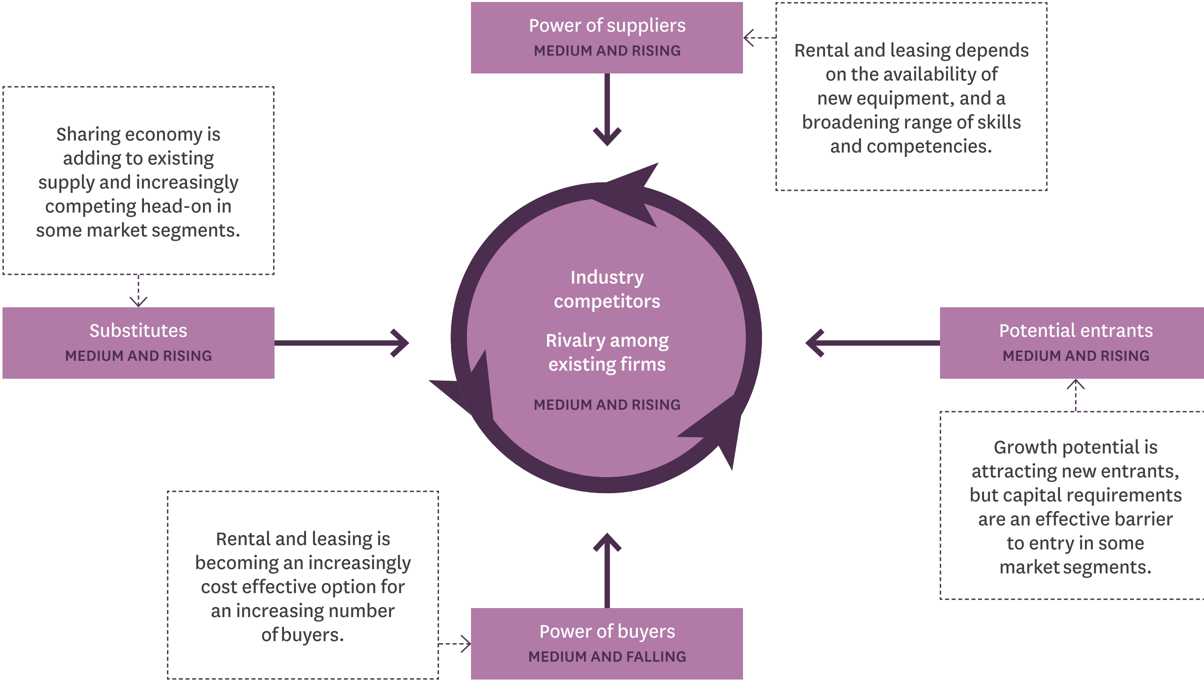
Rental and leasing firms compete not just with firms that provide those procurement options, but also with each other and new entrants (although having the necessary financial resources is a key barrier to entry in most market segments). In effect, rental and leasing is a substitute for other forms of procurement. Indeed, it tends to be one of the cheaper and more flexible options available, especially near-term – a key reason perhaps why rental and leasing activity has continued to grow strongly, both in New Zealand and internationally.

Competition among rental and leasing firms is largely based on price and service, the latter being a function of strong relationship management skills, the ability to problem solve and product knowledge. For most though, price remains key and setting it requires juggling purchase costs and rental expenses with rental incomes and price clawbacks on disposal.

Figure 5 below summarises the magnitude of the competitive forces shaping the rental and leasing industry in New Zealand and provides a high level assessment of where they are headed in the future. Specifically it assesses whether a competitive force currently has a "high", "medium" or "low" impact on rental and leasing firms and whether this impact will be "rising", "stable" or "falling" in the future.'

The figure uses a framework developed by Professor Michael E Porter from Harvard Business School. It includes three forces that relate to "horizontal" competition: the threat of substitutes, which in this case refers to the demand for equipment purchased outright or that might be shared; competition between rental and leasing firms; and the threats posed by new entrants attracted to the growth potential of this industry. It also includes two other forces that relate to "vertical" competition, namely the relative negotiating position of those that supply inputs to rental and leasing firms, ranging from equipment to finance and technical expertise, to the bargaining power of customers, shaped by alternative procurement methods, technology, activity in downstream markets and the level of equipment already in existence.

Figure 5: Porters 5-Forces model



Source: Westpac

Demand side drivers

Buying patterns and attitudes about asset rental, leasing and ownership continue to evolve. Consumers, from individuals to firms, have become far more comfortable with and savvy about renting, leasing and, increasingly, sharing.

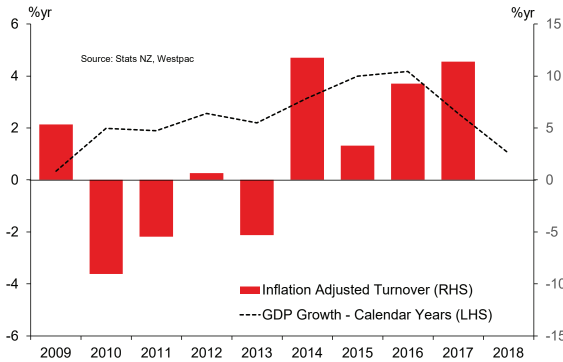
Macro drivers

Economic Activity

Demand for machinery and equipment, ranging from household goods and passenger vehicles to transport equipment and heavy construction machinery, tends to rise when the economy expands, but falls when economic activity contracts.

The same is true irrespective of how they are procured. That is, more machinery and equipment tends to be rented and leased when times are good. The opposite is largely true when economic times are bad.

Figure 6: Industry turnover vs GDP growth



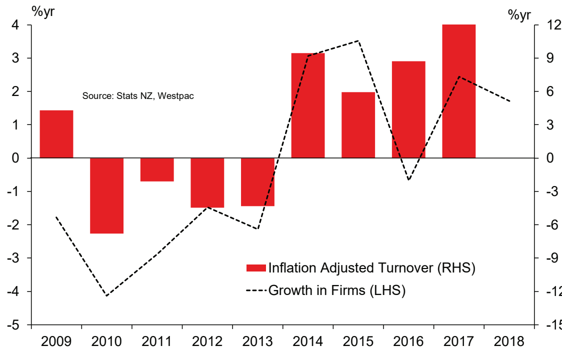
Rental and leasing activity tends to be more volatile than the economy overall, easily outpacing on the upturn, but underperforming when economic growth eases. However, this is a generalisation and sensitivities to changes in economic activity tend to differ depending on the market segment and the circumstances that might be facing individual firms. An industry source suggested that some firms who might ordinarily have purchased expensive heavy machinery during the good times were more likely to rent or lease during times of economic uncertainty.

> We expect the New Zealand economy to slow over the next few years, and as a consequence growth in rental and leasing activity should ease

Consumers

Simply put, the more firms and households there are, the more rental and leasing activity there is likely to be. An increase in the number of firms is typically correlated to a stronger economic performance, while net migration has been a significant driver of household formation in New Zealand in the recent years.

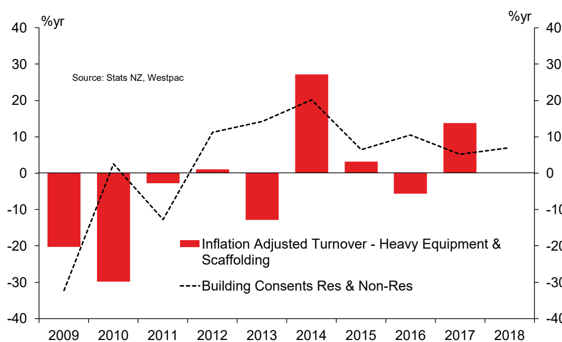
Figure 7: Industry turnover vs growth in firms



Downstream economic activity

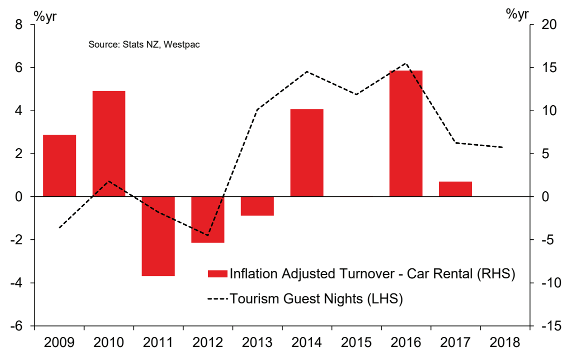
Rental and leasing activity reflects a positive correlation with what is happening in downstream industries. For example, demand for heavy machinery and scaffolding is linked to what happens in construction and mining, while demand for transport equipment depends on activity in the warehousing and transportation sectors.

Figure 8: Industry turnover vs building consents



Similarly short-term passenger car rental is closely linked to tourism, mostly foreign arrivals but also locals looking to hire vehicles for longer trips. Factors affecting tourism, such as economic activity in source countries, length of stay and the availability of accommodation can have a significant impact on car rentals.

Figure 9: Industry turnover vs tourist guest nights



By contrast, demand for long-term car leases, which generates about 45% of car rental firm revenues, is driven by demand from firms operating in all industries and so more closely follows the overall pattern of economic activity than any one particular industry.

Interest rates

Interest rates also have a role to play. As a general rule, lower interest rates reduce the cost of purchasing equipment. This could be attractive for some firms, especially those that have historically purchased outright.

However, it's not all one way. Lower interest rates often mean that rental and leasing firms are able to supply the market with more equipment at cheaper rental rates. Should rental prices fall further than purchase repayments, it is reasonable to expect more firms, including those that have traditionally purchased outright, to rent or lease.

Existing stock levels

Demand is a function of the existing stock of assets already owned, rented or leased. For example, an increase in passenger vehicle sales which adds to the overall vehicle fleet can reduce demand for passenger car rentals from locals. Similarly, a rise in electronic equipment purchases tends to curb the appetite for television rentals and sound equipment.

However, it's not just existing stock levels that can impact on renting and leasing activity. The ability to share and optimise its use is also important. The growth in peer-to-peer sharing networks globally has resulted in an overall increase in the utilisation of assets by matching needs and haves in ways that bypass traditional forms of distribution, including renting and leasing. The same trends are becoming more evident in New Zealand, although we are lagging behind other developed countries.

> Firms in the rental and leasing industry are becoming increasingly disintermediated by customers who are empowered to transact directly with each other

Seasonality

Demand for rental machinery/equipment/vehicles can also reflect a seasonal pattern. Longer sunlight hours during summer, for example, means that more construction work can be done in a given day. Because construction activity tends to be project based, this typically means shorter rental periods for rented assets such as access equipment and other heavy machinery for a given level of work.

The opposite is true for car rentals, which tend to pick up strongly during the summer months when foreign tourist arrivals increase, but fall away thereafter in the colder months.

> Matching supply to demand is a complex task for rental and leasing firms, especially when seasonal patterns need to be considered

Micro drivers

At a micro-level there are a number of reasons why firms and individuals in New Zealand increasingly prefer to rent or lease machinery and equipment.

Increased flexibility

Renting is typically a more flexible option than purchasing outright and can be tailored to a customer's specific requirements. This remains the case, despite the rapid expansion in innovative purchasing options.

Assets can be rented when and where needed, after which they are simply handed back. Furthermore, if newer assets become available, rented assets can simply be returned and upgraded if necessary. Renting or leasing is thus ideal for equipment that routinely needs upgrading – for instance, computers and electronic devices.

Renting is particularly suited to situations where equipment is used intensively for short bursts of time, possibly to satisfy a temporary increase in production, but lies idle outside of these periods. Renting also enables firms to address specialist or one-off requests, fill in when regular machines need maintenance or fail, and/or help with meeting deadlines.

> Renting makes more sense than purchasing if an asset is utilised less than 60% of the time

Improved competitiveness
Firms in New Zealand continue to procure assets so that they can compete more effectively. Resulting additions to capacity not only provide the scope, scale and reach needed to exploit business opportunities, they can often lead to efficiency gains, especially if it involves newer equipment. For smaller firms, the ability to scale up allows them to compete on a more equal footing with large firms that have deep pockets, and who might already own their own equipment.

Renting or leasing also enables firms in New Zealand to focus on their core business. Managing and operating asset fleets is not usually a core competency of most firms, so it makes sense to outsource this function to those that specialise in this area.

About 85% of firms in the US rent equipment, and 89% of these intend to rent more equipment in the future

Reduced opportunity costs
Firms in New Zealand are increasingly renting or leasing because it does not it require the large capital outlay normally associated with the purchase of an asset, typically funded through bank and/or finance company loans. As a result, the capital value of the rented asset is not reflected on the balance sheet either as an asset or debt liability, which implies heightened ability to borrow. Perhaps more importantly, it also means that capital used to purchase assets can be used to pursue other opportunities which might be closer to core business.

Reduced operating costs
As a general rule, firms in New Zealand that rent or lease do not pay for repairs or maintenance. Nor do to they pay transport costs, which can be advantageous, especially for firms that have regionally diverse operations. These expenses, which can be significant as well as unpredictable, are normally incurred by the rental firm and incorporated into 100% tax deductible rental payments.

Reduced risk exposure
Renting and leasing is a particularly attractive option for firms just starting out or are in the growth phase of their life cycle and do not wish to put a whole lot of capital at risk.

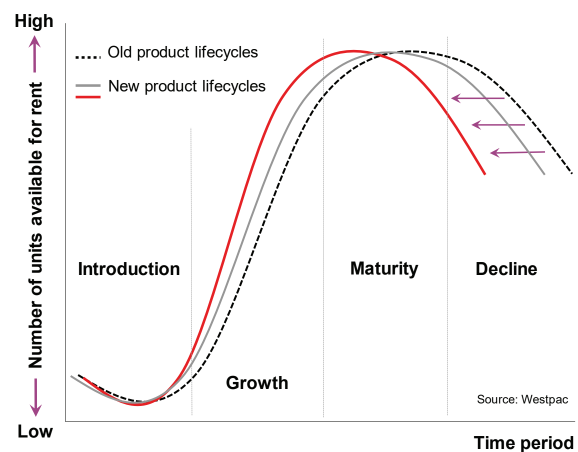
Firms that rent or lease equipment also have an effective hedge against obsolescence and a resulting loss of competitiveness. Competition in the market means that rental firms will normally offer newer machines that get jobs done faster and more efficiently than older machines.

Being stuck with outdated machinery is the biggest drawback of purchasing equipment outright, especially where it involves large-scale expenditure. By contrast, under a rent or lease agreement, equipment can easily be returned for the latest model, encompassing the latest technology.

Updated equipment typically offers a number of advantages, including improved levels of safety, compliance with tightening emission regulations, reduced environmental impacts and productivity gains.

These advantages are likely to become more important in the future. As competition among equipment manufacturers intensifies, technological advances are occurring at an ever quickening pace, resulting in a shortening of equipment lifecycles. This means that new equipment is being introduced to the rental and leasing market at ever reducing intervals.

Figure 10: Equipment lifecycles and rental market volumes



In the same way rented equipment can make firms more competitive, renting also helps to avoid the risk of machines becoming unusable or obsolete

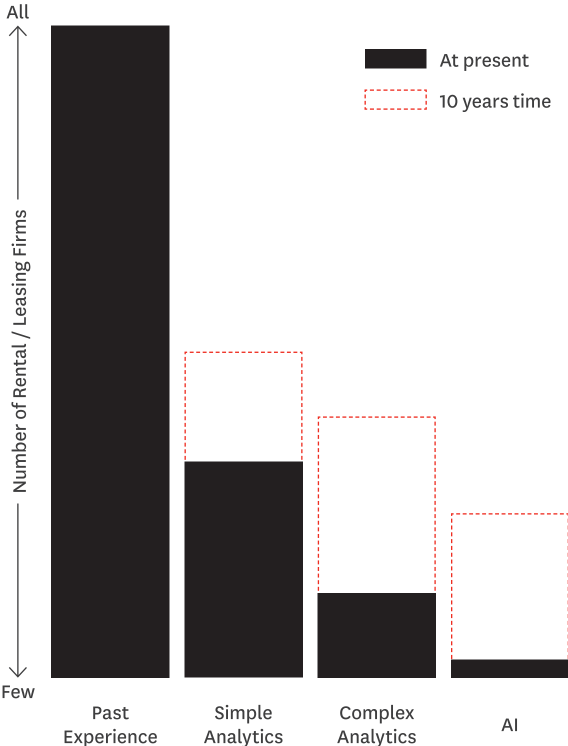
Drivers of supply

The supply of assets into the New Zealand rental and leasing market is influenced by nature of demand, the availability of factor inputs and the returns that can be achieved.

Anticipating demand
At its heart, rental and leasing is a time mismatch industry. Equipment is purchased by rental and leasing firms for an extended period of time and then rented out for relatively short bursts. As such, these firms need to be able to anticipate future demand when making their purchases.

The vast majority of firms operating in New Zealand make their equipment purchases on the basis of past experience. Should demand turn out to be more than expected, firms have a choice in how they respond. They can either do nothing and miss out on business, purchase or rent additional equipment from others, or use existing stock that they might have tagged for sale.

Figure 11: Approaches to assess demand



However, some firms in the industry have adopted a more proactive approach to assessing demand. This is relatively easy where there is a known pipeline of work, such as in the construction industry. Rental and leasing firms that supply heavy machinery, scaffolding and access equipment to this industry are able to adjust their supply accordingly.

It's more difficult when demand is unpredictable. In such cases, firms will often try and gain a better understanding of demand by assessing the changes that might be occurring in their customers' operating environment.

For some of the larger firms in the industry, understanding the nature of demand is a far more complex exercise. Some of the larger players in the passenger car rental market, for example, use complex analytical tools and vast amounts of data (including historical transactional data and social media chatter) to predict demand, which in turn informs the amount of stock they need to hold.

Machine learning, encompassing artificial intelligence (AI), is set to revolutionise the way rental and leasing firms predict demand in the future

Asset availability
The supply of assets to the rental and leasing market also depends on being able to procure them from manufacturers and/or distributors, both locally and from abroad.

This is not usually an issue, but can be. Sometimes, a make or model might be discontinued, prompting a flurry of activity as firms scramble to look for replacements, which might come with different features and, of course, different pricing.

New Zealand's relatively small market also poses challenges. According to one industry source, when global demand rises, large equipment manufacturers sometimes focus their efforts on exploiting opportunities in key markets rather selling into the small New Zealand market. Similarly, a number of smaller car rental and leasing firms operating in New Zealand report being outbid at offshore car auctions by large volume purchasers supplying much bigger markets.

Even in New Zealand, there are challenges. According to one industry source, rental and leasing firms often pay significantly less than the market price for rental stock because they buy in bulk and are repeat buyers. However, when times are hard and equipment sales are slow, manufacturers or distributors, looking to maximise revenues will sometimes shift focus, targeting customers that pay higher prices.

A number of large rental and leasing firms that might rent out a wide range of different types of equipment typically like to promote themselves as a "one stop" shop. In cases where they cannot supply a specific piece of equipment, they will often rent from smaller firms that might specialise in a particular niche.

Firms in the leasing industry typically will look to build long-term relationships with their suppliers to ensure that they can get the latest equipment when needed

Technical skills requirement

Supplying equipment to the rental market is only half the story. Repairing and maintaining it so as to ensure optimal performance is just as important. Indeed, an industry source suggested that servicing equipment can be a big money earner in some market segments, even after an asset that had previously been rented, has been sold. This is particularly prevalent in the heavy machinery and access equipment market.

In addition to having the necessary parts, providing repairs and maintenance services normally means having access to specialist technical knowledge. Larger firms often run their own workshops, employing a number of technical staff. Their smaller counterparts may also employ some technicians but tend to outsource major repair jobs to bigger workshops. A key challenge for the rental and leasing industry is how to maintain this knowledge given technical skills shortages and an aging workforce.

But it's not just hard technical skills that are needed. By definition firms in this industry are service orientated – in fact service quality is a key area where they compete with each other; so staff need to be able to listen, they must have empathy and be solution orientated.

An industry source indicated that because of shortages, they invest heavily in developing technical skills in-house

Technology

Rental and leasing activity is still largely based on relationships with handshakes being critical to the customer-supplier dynamic. Despite this, technology is innovating a number of industry processes and becoming increasingly more important to rental firms and the overall customer experience.

Advancing technologies, online marketplaces and the widening use of social media, artificial intelligence (AI) and chat bots that can be accessed wirelessly at any time of the day is fundamentally reshaping how customers interact with rental and leasing firms. These factors are effectively reducing search and selection costs while simultaneously increasing transparency and comparability of service offerings. In turn they are driving ever greater demands from increasingly sophisticated customers, who have divergent needs and are looking for tailor-made solutions

They are also simplifying the process of renting and leasing equipment, with automation becoming more and more prevalent. The increased use of Blockchain, a form of distributed ledger that accepts inputs from various parties in the procurement process, to deliver smart contracts, is set to transform rental and leasing procurement.

Feasibility

Ultimately the decision to supply equipment to the rental or leasing market is driven by the return on investment (ROI) that can be generated and the profitability of doing so.

In determining the ROI and profitability, firms consider a number of often interrelated factors. These include the purchase price of the asset to be rented, the expected sales price on disposal, the rental income that can be generated over the lifetime of the asset concerned and any expenses, such as repairs and maintenance, depreciation and interest payments, to be incurred when providing the asset for rental.

However, in considering these factors, they also have to consider what influences them. Rental income, for example, is partly a function of rental rates (expressed as a per unit of time), which in turn, are informed by the type of asset being rented out, the prevailing competitive dynamics in the rental market, and the period of time deemed acceptable by the rental or leasing firm to recoup the purchase cost of an asset from rental income. An industry source, whose firm focuses on renting out small industrial equipment, power tools and access solutions, suggested that they try to recoup their purchase costs between 12 to 18 months. Others may opt for a longer period, depending on the nature of the asset and how hard it works. Another industry source operating in the passenger car rental space, indicated that they swap out about half of their fleet every 6 months or so.

However, rental income is also determined by the length of time that an asset is likely to be rented out for – at best a subjective assessment based on past experience. This utilisation rate is expressed as a percentage of total time that the asset is in ownership. An industry source suggests that firms will generally target a rate of between 75% and 80%.

But that is not all. Rental rates, and by implication rental income expectations, also have to incorporate expenditures likely to be incurred in providing a rental asset. These tend to increase as assets age and more repair and maintenance work is required. Interest payments to funders such as banks and equipment finance companies can also be considerable, to the extent that an industry source has suggested that firms are more likely to supply equipment into the rental market in a low interest rate environment.

Replacement cycles for machinery and equipment differ depending on the nature of the asset and how it has been worked. These in turn are reflected in the rental income generated and expenses incurred

Firms also have to factor in the cost of purchasing an asset and how much it might sell for when disposing of it. Most of the time the disposal price won't be known, although its depreciated book value is likely to provide a good guide, especially if the equipment has been properly maintained. Older rental equipment can either be sold through auctions, directly to businesses looking for cost effective machinery or to dealerships that specialise in second hand equipment. Some rental and leasing firms may also look to include ex-rental/lease equipment in their stock available for sale.

Alternatively, rental and leasing firms might have a buyback arrangement in place, where the rented or leased equipment is sold back to the supplier at an agreed price. Under this arrangement the disposal price is known. Sometimes, this price will be the same as the purchase consideration, other times it might be at a discount to the initial purchase price. An industry source has suggested, for example, that larger car rental and leasing companies will often purchase a large number of rental vehicles at a heavily discounted price from a vehicle distributor, use it for a limited period, and then sell it back to the same distributor at the same price it paid when purchased (effectively de-risking the asset).

Rental firms consider a range of variables when determining whether they should supply equipment into the rental and leasing market

Industry rivalry

Rental and leasing firms compete largely on price and to some extent the quality of the service that they provide. Differentiation is largely a function of the range and quality of equipment offered to the market, the ability to respond to customer needs and the provision of ongoing support.

Price

Most firms in the rental and leasing industry compete on price. This is particularly true where firms offer the same equipment for renting or leasing or where they offer similar assets with the same level of functionality.

However, determining the price or rental rate is complex. Firms not only need to consider the range of macro-economic forces that underpin the demand for and supply of equipment, they also need to consider various factors that determine the financial viability of offering an asset to the rental and leasing market at a competitive price,

As mentioned in the previous section, factors to be considered include the purchase price of an asset, company policy on how quickly this purchase price should be recouped, the length of time this asset can be rented out for, expenses incurred, and the price at disposal.

An industry source indicated that these factors need to be considered collectively when setting prices. Some firms, for example, may opt to lengthen the period over which the purchase price is to be recouped. In the short-term this enables them to set lower prices, which may help to buy market share. However, longer-term it could expose them to increased levels of expenditure, specifically interest charges on funding provided which mount up over time, and increased maintenance and repair bills, which can escalate over longer periods as assets start to age. It also potentially exposes them to lower disposal prices, with industry sources suggesting the possibility of receiving a lower than book valuation if the asset has not been properly maintained.

Of course, firms are still able to set lower rental prices if they are able to procure assets at a lower prices than their competitors. Most firms are unlikely to have the resources to buy in bulk at lower prices. That said, there are a handful of firms that have the ability to purchase in bulk across a range of asset types, but whether they do or not depends on broader competitive considerations and the ever changing imbalance between supply and demand. Examples might include some of the big car rental firms operating in New Zealand, who typically buy a large number of vehicles at a point in time. Similarly, some of the big heavy and transport equipment providers in New Zealand will invest heavily when the time comes.

An industry source suggested that this industry is all about providing the right equipment for the right job

Service

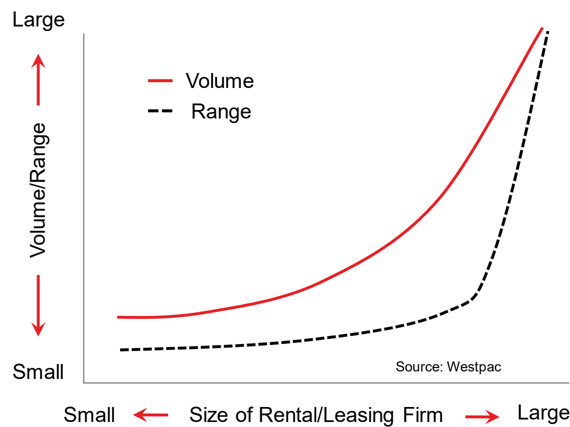
But it not just price that is important. Firms in the industry like to say that they compete on the quality of service they deliver, and to an increasing extent this is true. In large part this is because of increased competition coming from new market entrants, and in some market segments, a growing threat from participants in the technology-enabled sharing economy. Customers are also becoming much more sophisticated, with the internet in particular providing the ability to compare market offerings.

Customers increasingly expect to deal with professional operations

Service though, is an extremely broad concept.

One way of defining it is through the amount of equipment that is made available for rentals. As a general rule, larger firms tend supply a larger volume and a broader range of equipment to the rental and leasing market. They often market themselves as “one stop” shops, able to provide equipment “packages” at lower cost. These firms will often supplement their own rental stock by hiring equipment from smaller firms if they have shortfalls in meeting a customer’s requirements.

Figure 12: Volume and range of equipment supplied by firm size



Another way of defining service is the quality of advice that firms offer to their customers. All rental and leasing firms rent/lease products to customers on an off-the-shelf basis, which is largely transactional in nature. Most will also provide some basic advice on how to operate equipment safely as well as what applications a particular piece of equipment might be most suited to. Relatively few, however, have the capacity or the ability to deliver complex advisory services that lead to the development of customised solutions.

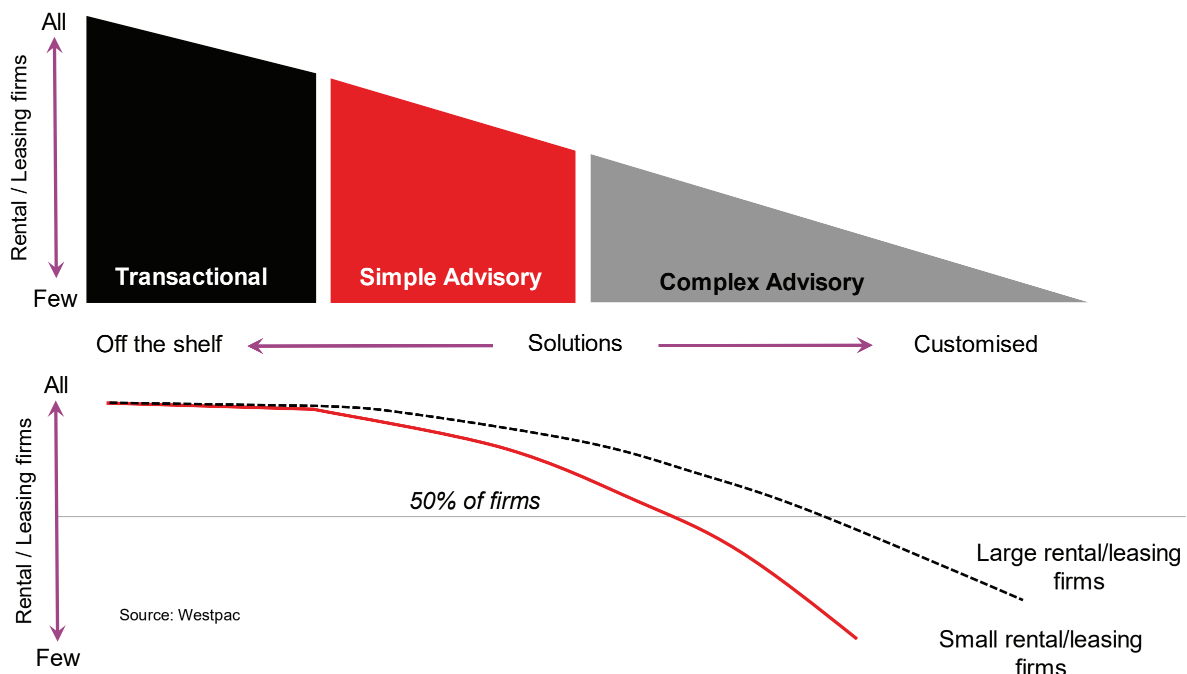
In recent years the scope of product advice has widened, with safety issues and advice on environmental impacts increasingly becoming front of mind

Those that do have shifted from being product pushers and advisors to business partners that work closely with their customers over an extended period of time to deliver rental products that meet their needs.

Typically these would be key customers that spend a lot. However, this doesn't preclude the possibility of developing customised solutions for smaller customers that have niche requirements and are happy to pay a premium for it.

Service is also reflected in how responsive rental and leasing firms might be to changing customer demands. Incumbent firms face threats from many sides. Customers are becoming more sophisticated and more demanding. At the same time new entrants are coming thick and fast, cherry picking the most lucrative areas, especially those

Figure 13: Spectrum of service offerings by firm size

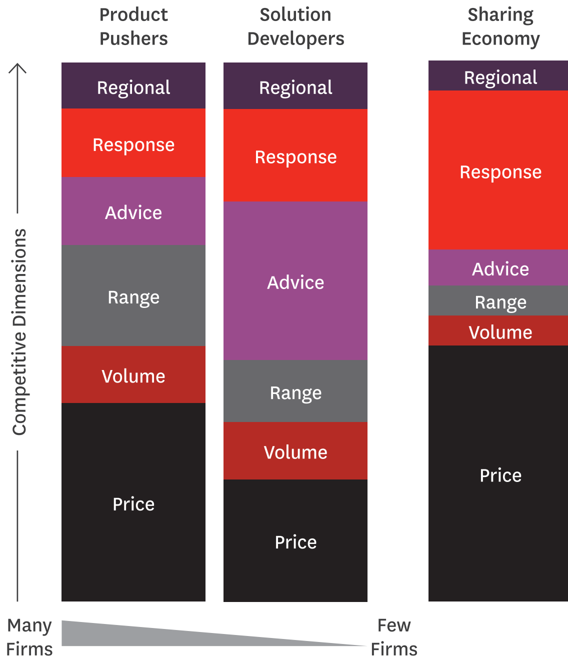


that do not require massive capital to start up. Areas would include fast moving household appliances, including electronic goods and kitchen appliances, office equipment and office furniture.

Added to this is the emergence of a peer-to-peer sharing networks, which is creating new, agile, customer focused businesses able to compete head-on with traditional retailers and rental/leasing firms. The rise of the internet, social media, big data, algorithms and AI has had the effect of increasing the supply of underutilised assets currently in ownership and making those available for use by others. Uber for example, is a smartphone-app based taxi-booking service which connects users who need to get somewhere with drivers that are willing to give them a ride in return for payment.

Some traditional rental and leasing firms have responded by becoming more nimble, responsive and customer focused, using technology to reach their customers as well as enhance collaborative relationships they already have with other firms. They are also embracing peer-to-peer sharing networks, either by becoming direct participants in the sharing economy or by partnering/supplying others that are.

Figure 14: Basis of competition between firms



Source: Westpac

Service also has a regional dimension. Larger players have a broad regional representation with outlets in the major metropolitan areas as well as provincial New Zealand. Some operate on a franchisee basis, while others operate a more corporatised structure.

As a general rule, large firms are also very good at moving rental equipment to those areas where activity is likely to be strongest. By contrast, smaller firms tend to operate with a narrow regional focus. They service the local community and will often seek to gain a market presence by getting involved in local community events.

Critical success factors

Irrespective of what equipment a rental or leasing firm might supply to the market, there are number of common factors that are critical to the achieving success in this industry.

The first critical success factor is having access to the right quantity and quality of factor inputs.

This means having people with the necessary entrepreneurial, relationship, advisory, technical and conceptual thinking skills to deliver innovative solutions. These attributes and skills are often in short supply.

Figure 15: Critical success factors

Source: Westpac

It also means having access to the right equipment. This can be either be held in stock or can be obtained from equipment manufacturers/distributors, other rental and leasing firms or participants in peer-to-peer sharing networks. Although not usually an issue, accessing equipment can quickly become so, especially if a required make or model of equipment has been discontinued or is in short supply. When this happens rental and leasing firms are often left scrambling for suitable replacements.

Having access to reliable equipment that can be utilised for long periods is a critical success factor

The second critical success factor focuses on having the internal capacity to combine these inputs effectively in order to maximise rental revenues and minimise rental expenses. In essence, this refers to the various systems (including IT), processes and work organisation methods being in place to ensure that assets are managed in the most cost effective way possible. Asset management, which refers to the procurement, maintenance, storage, distribution and tracking of rented/leased machinery and equipment, is key.

Having internal capacity also means having a strong service ethic. As a service industry, this has always been important, although it's becoming even more so given the amount of information that customers now have access to, which allows them to make product comparisons or read reviews at the push of a button.

Being customer centric is critical. Successful rental and leasing firms are those that listen to their customers, understand their needs, and leverage off their product expertise and know-how to recommend best-fit solutions. They do not necessarily have to tailor solutions to be successful, although offering a personalised service does help. Firms that are likely to be less successful are those that have a limited understanding of what their customers need and continue to push product. An industry source has suggested that there are many small firms that have been around for a long time that still operate in this way. These firms exist in all market segments, but are particularly prominent among those renting or leasing transport equipment and household goods.

The third critical success factor is having the ability to adapt to changing market circumstances. Successful firms do this by continually re-evaluating whether the stock they have on hand is still relevant, and taking action where necessary. This means removing low utilisation and perhaps older stock which is costly to hold and purchasing stock that is likely to be used more should demand conditions allow. This is particularly relevant in market segments such as electronic household goods, where technological change is rapidly making existing equipment obsolete.

The fourth critical success factor is having well developed relationships along the value chain. This is an industry that is based on relationships not only with customers, but also with the manufacturers and distributors of equipment to be offered to the rental and leasing market. Relationships are particularly important for the many small firms that do not have the scale to deliver "one stop" solutions and/or have limited purchasing power. One industry source suggest that good relationships with finance companies are especially important, especially during time when credit is not freely available.

The final critical success factor relates to having a clear vision of markets being targeted. Larger firms in this

industry are increasingly leveraging off past transaction data, unstructured data and social media chatter to categorise customers into groups based on common characteristics. They then develop marketing strategies specific to each customer segment to exploit any opportunities that might exist.

However, realising these opportunities requires that the other critical success factors have to be in place. This means that not only must the right quantity and quality of factor inputs be available, organisational capabilities and the ability to respond to changing market developments must be configured correctly. If this isn't the case, being able to segment customers according to geographic spread, size and needs, will mean nothing.

Disclaimer

Things you should know

Westpac Institutional Bank is a division of Westpac Banking Corporation ABN 33 007 457 141 ('Westpac').

Disclaimer

This material contains general commentary, and market colour. The material does not constitute investment advice. Certain types of transactions, including those involving futures, options and high yield securities give rise to substantial risk and are not suitable for all investors. We recommend that you seek your own independent legal or financial advice before proceeding with any investment decision. This information has been prepared without taking account of your objectives, financial situation or needs. This material may contain material provided by third parties. While such material is published with the necessary permission none of Westpac or its related entities accepts any responsibility for the accuracy or completeness of any such material. Although we have made every effort to ensure the information is free from error, none of Westpac or its related entities warrants the accuracy, adequacy or completeness of the information, or otherwise endorses it in any way. Except where contrary to law, Westpac and its related entities intend by this notice to exclude liability for the information. The information is subject to change without notice and none of Westpac or its related entities is under any obligation to update the information or correct any inaccuracy which may become apparent at a later date. The information contained in this material does not constitute an offer, a solicitation of an offer, or an inducement to subscribe for, purchase or sell any financial instrument or to enter a legally binding contract. Past performance is not a reliable indicator of future performance. Whilst every effort has been taken to ensure that the assumptions on which the forecasts are based are reasonable, the forecasts may be affected by incorrect assumptions or by known or unknown risks and uncertainties. The ultimate outcomes may differ substantially from these forecasts.

Country disclosures

Australia: Westpac holds an Australian Financial Services Licence (No. 233714). This material is provided to you solely for your own use and in your capacity as a wholesale client of Westpac.

New Zealand: In New Zealand, Westpac Institutional Bank refers to the brand under which products and services are provided by either Westpac or Westpac New Zealand Limited ("WNZL"). Any product or service made available by WNZL does not represent an offer from Westpac or any of its subsidiaries (other than WNZL). Neither Westpac nor its other subsidiaries guarantee or otherwise support the performance of WNZL in respect of any such product. The current disclosure statements for the New Zealand branch of Westpac and WNZL can be obtained at the internet address www.westpac.co.nz. For further information please refer to the Product Disclosure Statement (available from your Relationship Manager) for any product for which a Product Disclosure Statement is required, or applicable customer agreement. Download the Westpac NZ QFE Group Financial Advisers Act 2008 Disclosure Statement at www.westpac.co.nz.

China, Hong Kong, Singapore and India: This material has been prepared and issued for distribution in Singapore to institutional investors, accredited investors and expert investors (as defined in the applicable Singapore laws and regulations) only. Recipients in Singapore of this material should contact Westpac Singapore Branch in respect of any matters arising from, or in connection with, this material. Westpac Singapore Branch holds a wholesale banking licence and is subject to supervision by the Monetary Authority of Singapore. Westpac Hong Kong Branch holds a banking license and is subject to supervision by the Hong Kong Monetary Authority. Westpac Hong Kong branch also holds a license issued by the Hong Kong Securities and Futures Commission (SFC) for Type 1 and Type 4 regulated activities. This material is intended only to "professional investors" as defined in the Securities and Futures Ordinance and any rules made under that Ordinance. Westpac Shanghai and Beijing Branches hold banking licenses and are subject to supervision by the China Banking Regulatory Commission (CBRC). Westpac Mumbai Branch holds a banking license from Reserve Bank of India (RBI) and subject to regulation and supervision by the RBI.

UK: The contents of this communication, which have been prepared by and are the sole responsibility of Westpac Banking Corporation London and Westpac Europe Limited. Westpac (a) has its principal place of business in the United Kingdom at Camomile Court, 23 Camomile Street, London EC3A 7LL, and is registered at Cardiff in the UK (as Branch No. BR00106), and (b) authorised and regulated by the Australian Prudential Regulation Authority in Australia. Westpac is authorised in the United Kingdom by the Prudential Regulation Authority. Westpac is subject to regulation by the Financial Conduct Authority and limited regulation by the Prudential Regulation Authority. Details about the extent of our regulation by the Prudential Regulation Authority are available from us on request. Westpac Europe Limited is a company registered in England (number 05660023) and is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority.

This communication is being made only to and is directed at (a) persons who have professional experience in matters relating to investments who fall within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order") or (b) high net worth entities, and other persons to whom it may otherwise lawfully be communicated, falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as "relevant persons"). Any person who is not a relevant person should not act or rely on this communication or any of its contents. The investments to which this communication relates are only available to and any invitation, offer or agreement to subscribe, purchase or otherwise acquire such investments will be engaged in only with, relevant persons. Any person who is not a relevant person should

not act or rely upon this communication or any of its contents. In the same way, the information contained in this communication is intended for "eligible counterparties" and "professional clients" as defined by the rules of the Financial Conduct Authority and is not intended for "retail clients". With this in mind, Westpac expressly prohibits you from passing on the information in this communication to any third party. In particular this communication and, in each case, any copies thereof may not be taken, transmitted or distributed, directly or indirectly into any restricted jurisdiction. This communication is made in compliance with the Market Abuse Regulation (Regulation(EU) 596/2014).

Investment Recommendations Disclosure

The material may contain investment recommendations, including information recommending an investment strategy. Reasonable steps have been taken to ensure that the material is presented in a clear, accurate and objective manner. Investment Recommendations for Financial Instruments covered by MAR are made in compliance with Article 20 MAR. Westpac does not apply MAR Investment Recommendation requirements to Spot Foreign Exchange which is out of scope for MAR.

Unless otherwise indicated, there are no planned updates to this Investment Recommendation at the time of publication. Westpac has no obligation to update, modify or amend this Investment Recommendation or to notify the recipients of this Investment Recommendation should any information, including opinion, forecast or estimate set out in this Investment Recommendation change or subsequently become inaccurate.

Westpac will from time to time dispose of and acquire financial instruments of companies covered in this Investment Recommendation as principal and act as a market maker or liquidity provider in such financial instruments.

Westpac does not have any proprietary positions in equity shares of issuers that are the subject of an investment recommendation.

Westpac may have provided investment banking services to the issuer in the course of the past 12 months.

Westpac does not permit any issuer to see or comment on any investment recommendation prior to its completion and distribution.

Individuals who produce investment recommendations are not permitted to undertake any transactions in any financial instruments or derivatives in relation to the issuers covered by the investment recommendations they produce.

Westpac has implemented policies and procedures, which are designed to ensure conflicts of interests are managed consistently and appropriately, and to treat clients fairly.

The following arrangements have been adopted for the avoidance and prevention of conflicts in interests associated with the provision of investment recommendations.

(i) Chinese Wall/Cell arrangements;

(ii) physical separation of various Business/Support Units;

(iii) and well defined wall/cell crossing procedures;

(iv) a "need to know" policy;

(v) documented and well defined procedures for dealing with conflicts of interest;

(vi) steps by Compliance to ensure that the Chinese Wall/Cell arrangements remain effective and that such arrangements are adequately monitored.

U.S.: Westpac operates in the United States of America as a federally licensed branch, regulated by the Office of the Comptroller of the Currency. Westpac is also registered with the US Commodity Futures Trading Commission ("CFTC") as a Swap Dealer, but is neither registered as, or affiliated with, a Futures Commission Merchant registered with the US CFTC. Westpac Capital Markets, LLC ('WCM'), a wholly-owned subsidiary of Westpac, is a broker-dealer registered under the U.S. Securities Exchange Act of 1934 ('the Exchange Act') and member of the Financial Industry Regulatory Authority ('FINRA'). This communication is provided for distribution to U.S. institutional investors in reliance on the exemption from registration provided by Rule 15a-6 under the Exchange Act and is not subject to all of the independence and disclosure standards applicable to debt research reports prepared for retail investors in the United States. WCM is the U.S. distributor of this communication and accepts responsibility for the contents of this communication. All disclaimers set out with respect to Westpac apply equally to WCM. If you would like to speak to someone regarding any security mentioned herein, please contact WCM on +1 212 389 1269. All disclaimers set out with respect to Westpac apply equally to WCM.

Investing in any non-U.S. securities or related financial instruments mentioned in this communication may present certain risks. The securities of non-U.S. issuers may not be registered with, or be subject to the regulations of, the SEC in the United States. Information on such non-U.S. securities or related financial instruments may be limited. Non-U.S. companies may not subject to audit and reporting standards and regulatory requirements comparable to those in effect in the United States. The value of any investment or income from any securities or related derivative instruments denominated in a currency other than U.S. dollars is subject to exchange rate fluctuations that may have a positive or adverse effect on the value of or income from such securities or related derivative instruments.

The author of this communication is employed by Westpac and is not registered or qualified as a research analyst, representative, or associated person under the rules of FINRA, any other U.S. self-regulatory organisation, or the laws, rules or regulations of any State. Unless otherwise specifically stated, the views expressed herein are solely those of the author and may differ from the information, views or analysis expressed by Westpac and/or its affiliates.