



Labour shortages in the global logistics industry

This article will provide an overview of:

- The shortage of logistics workers and the extent of the problem around the world
- The impact of the shortage on the industry
- The results of surveys examining the issue
- Why the industry is not attractive to the younger generation
- The role of migration in addressing the shortage
- Solutions and innovations which reduce the need for labour.

Despite the massive investments needed in ports, airports, roads, trucks, ships and airplanes, the logistics industry is essentially a people business. A shortage of skilled employees needed to provide the services (the 'soft infrastructure') therefore has a disastrous effect on the efficiency and profitability of the industry.

Although to date it is the issue of driver shortages which has mainly caught the media's attention, many of the same underlying problems which affect transport are also impacting on labour in warehousing, not least due to the vast expansion of e-fulfilment sites.

As discussed below, shortages are occurring at all job levels within the industry. Whilst committed and high quality drivers or warehouse operatives are just as important to a successful business as experienced and qualified management, shortages need to be addressed in different ways by governments and businesses. With around a quarter of all logistics costs being staff related, to ignore the problem will lead to pressure on supply chain costs and ultimately less competitive economies and depressed growth.

How bad is the shortage?

Many national industry associations claim that their members are facing labour shortages due to factors such as retirement, barriers to entry, poor working conditions, low wages and a lack of interest in the profession by young people, to name a few. Although there are very few hard statistics to back up this assertion, there is what the Kuehne Logistics University terms, in its report on the issue for the World Bank, an 'expert consensus'.

Road freight associations have been at the forefront of raising the issue in terms of driving staff and some key data is highlighted below:

- In the United States, the American Trucking Association (ATA) reported in 2015 that US trucking was 48,000 drivers short.
- In the UK, the Freight Transport Association reported a shortfall of 55,000 truck drivers in 2017.
- In Germany alone, the industry is expected to lose 250,000 truck drivers (around 40%) in the next 10-15 years to retirement, creating a shortfall of 150,000 drivers. The average age of a German truck driver is 47.
- In Sweden, the Swedish Road Operators Association estimates an annual shortage of 4,000 to 5,000 truck drivers
- In Denmark, DEKRA asserted in May 2016 that Danish road freight lacked 2,500 drivers.



- In Norway, the Norwegian Road Haulers Association (NLF) has reported a lack of 3,000 truck drivers.

While there may be figures that claim the road freight industry in a country is short of x number of drivers, an important question is how is that known? There are different techniques to estimate the shortage, one of which is to use national labour statistics. For instance, The UK's Freight Transport Association sets out its methodology as follows:

'From the [UK] Labour Force Surveys for 2016 and 2017, the estimated extra jobs created year-on-year across all roles is around 0.33 million, or roughly 1%. At the same time, the estimated LGV driver population has fallen by 4.4%. This translates to a calculated shortfall of around 52,000 drivers based on job number trends.' The shortage is reinforced by unemployment figures. In the UK, in the second quarter of 2017, only 455 goods vehicle drivers were unemployed, compared with 15,255 in March 2009 during the so-called Great Recession.

Of course, surveys, whether government or business, should be treated with caution although it does seem that some degree of confidence can be placed in these particular results.

Qualitative survey data is another way to get a more detailed insight into the problem. The World Bank's Logistics Performance Index (LPI), for instance, contained a question which specifically probed this issue. The survey looked at the problem at four different levels of logistics resourcing.

1. Operative staff e.g. truck drivers or warehouse pickers
2. Administrative staff e.g. traffic planners, expeditors or warehouse clerks
3. Logistics supervisors e.g. warehouse shift leaders or traffic controllers
4. Logistics managers e.g. those responsible for transport, warehousing operations or SCM.

Overall 35-39% of respondents said that availability of skilled workers was low or very low in operative, administrative and supervisory roles. However, the greatest skills shortage existed at managerial level with 50% of respondents admitting having difficulty finding the appropriately trained staff.

The survey found that there was a perceived shortage of skilled workers at all levels in developed and developing countries. However the problem was worst in developing countries for those 'mid-tier' functions and those countries which performed best in the LPI typically had fewer problems in recruiting skilled employees.

Broadly speaking, the survey found that skilled logistics managers were harder to find in developing countries, whilst in developed countries, blue collar workers were the most difficult to find. The biggest challenges were faced by employers in Latin America and Caribbean region, where there were particular problems in recruiting logistics managers.

This problem has been long-standing. In an interview with Ti back in 2005, the then Managing Director of Exel China (now DHL Supply Chain), Roland Chong, said that his biggest challenge in doing business was retaining good people. The strength of his company's brand meant that he didn't have trouble attracting well qualified professionals especially by targeting relevant universities which provided courses in the sector, although smaller companies were not so lucky. However retaining staff was a severe problem, especially with the high number of logistics operators entering the market. One can only imagine with the scale of growth in e-commerce logistics in China that this



problem has not got any easier despite the vast number of students being trained at Chinese universities.

Indeed, a problem identified by the China Federation of Logistics and Purchasing is that whilst China's universities are turning out 100,000 qualified students a year who are aiming for managerial positions, its vocational colleges are only producing 90,000 students to fill far more numerous administrative roles.

What problems does a labour shortage cause?

It might be thought that an obvious impact of a labour shortage would be the increased price of logistics services. In theory tightness in the market should translate into higher wages for drivers and thus higher rates for shippers. Unfortunately, in the EU at least, the data is inconclusive as road freight rates have not risen significantly over the last ten years at all. Even looking at the data on a country-level does not reveal any major rate growth in Western European markets. This is undoubtedly due to a range of other input costs such as the price of diesel and of course the supply-demand situation at any one time.

The situation in the US is perhaps different. On a recent analyst call organized by the investment bank, Stifel, experts from The US National Transportation Institute asserted that there was a very strong correlation between higher rates and driver pay. As one rises so does the other, although not necessarily at the same rate.

However, there are other ways in which a driver shortage can impact upon the industry. As identified by Kuehne Logistics University, these are:

- loss of service quality as workers have to put in longer hours to compensate for a lack of co-workers
- reliance on filling posts through temping agencies and high turnover reducing productivity
- the demand for trained personnel and the 'poaching' that this leads to impacts on the amount of training companies are willing to invest, given the high turnover of staff.

Why don't people want to work in logistics?

There are many reasons why a career in logistics is not appealing for drivers or warehouse operatives. These include:

- Driver pay

In the US, 'For-hire' drivers (as opposed to private fleet) have seen their wages go up just 6.3% since 2006 which in real terms has meant a cut in their standard of living. Back in 1979 (prior to deregulation of the market) their pay was around double what it is today. Obviously, this has been a boon for shippers, but at the same time it has reduced the appeal of the industry to new entrants.

- Increased qualifications and barriers to entry

Authorities are continually seeking to improve the quality of goods vehicle drivers which increasingly involves higher levels of qualification. The effects of this have been felt not least in the US where drivers have been asked to pass tests to be able to remain in the industry. This 'compliance' as it is termed has considerably reduced the pool of available labour as retirements accelerated. In the US



and other countries, such as the UK, drivers have to pay for their own training which can run into several thousands of dollars.

- Security

In many parts of the world, drivers and their vehicles are targets for organized and casual crime. From sophisticated hijacking of targeted vehicles, extortion of money through threats to opportunistic 'curtain-slash' crime, drivers are highly vulnerable.

- Working conditions

In many countries there are very few facilities for drivers to take their statutory breaks. This often forces them to stop overnight in laybys, sleeping in their cabs, with implications for their health and well-being.

- Work life balance

Whilst previous generations of drivers may have been prepared to spend many days away from home, this is now not so much the case. With unemployment falling, there are often alternative jobs available paying comparable wages without the need to travel.

- Alternative driving options

These options are increasing with the growth of the 'gig' economy in the taxi and on-demand restaurant food delivery sectors. Similar wages can be earned, with more flexibility in working hours whilst staying local.

These issues have meant that younger people are less interested in the profession which is creating what could be called a demographic 'time bomb'. Retirement figures and the average age of drivers are increasing which does suggest that even if there may not be a severe driver shortage now, there certainly could be in future. According to figures from the NTI, more than 57% of drivers in the US are 45 years or over compared to just 45% in 1994.

Migration in Europe

With the free movement of labour across the EU, what role, if any has this played in exacerbating or ameliorating the problem in Europe? Given the wage disparities between Western European based hauliers and Central and Eastern European (CEE) based hauliers, one might think that this may have led to a huge number of CEE drivers living and working in Western Europe. According to the FTA, around 14% of the UK's driver workforce are EU nationals. Around 7% of the UK's overall labour market is made up of EU nationals, and although they are over-represented in trucking, the proportion which they make up is not that large. It is possible that immigration of EU nationals has helped keep wage growth and thus rate growth muted in Western European markets over the last decade, though the size of the impact is unclear, if it is significant at all.

The corollary of this is that there should be noticeable shortages in the CEE region and in fact there is anecdotal evidence that the movement of well qualified driving staff from Eastern to Western Europe has had an impact. Romania is one market where this has been noted.

In the warehouse



The huge growth in the number of e-Commerce fulfilment centres has been a major factor in the pressures seen on logistics worker employment. In many regions this demand has been met by the ready supply of migrant labour, seeking largely unskilled roles. In one infamous case in the UK, it was revealed by a major sports retailer that around 90% of jobs in its national distribution centre were filled by Eastern European migrants.

Whilst it is possible to operate this business model if there is an 'open-door' migration policy, it will be interesting to see if it can be maintained post-Brexit. If indeed there are restrictions on the number of low-skilled migrants allowed to come to the UK this would inevitably have an impact on logistics costs and even the ability of companies to recruit, full-stop. Not everyone would see this as a bad thing. The case of the sports retailer mentioned above shone a light on some of the worst practices in the industry not to mention the impact on the local communities of a low pay economy.

Solutions to logistics worker shortages

What can be done about shortages? A previous perception and usage survey undertaken by Ti found that the overwhelming reason for the shortage was the lack of good quality candidates available. This could be characterised as a 'supply' issue and one over which the logistics industry has little control. It is related to the quality of education and training which candidates receive prior to coming into the industry, and a major issue which governments will need to address.

However, the industry can have influence over many of the issues identified above. For example, according to the survey undertaken by Ti, low pay is a major factor in putting people off coming into the industry. Many (if not all) logistics companies would say that in a hyper-competitive market place, increasing pay is not an option. Basic economics suggest that this may be a self-righting problem, as a shortage of labour will necessarily push up the going-rate until an equilibrium is reached and wage levels become attractive again. However, this fails to take into account that the poor industry working conditions may put off the most talented applicants, again creating a skills shortage, although not necessarily a labour shortage.

It should also be noted that in a regional/global economy there will be macro implications from increasing logistics costs. These could range from rising inflation to job losses, as manufacturers locate to lower cost labour markets.

In the US, companies have made major efforts to recruit compliant drivers, including offering 'referral' bonuses to staff who can find appropriate employees (sometimes in excess of \$3,000). Not only does this help find new drivers but also ensures higher retention rates through the generous bonus scheme.

It is clear that it will be a challenge for the industry to break out of this low pay/low quality cycle of decline in which it is trapped in many parts of the world. Logistics companies, their clients and governments all have a role to play in this.

A low profile in educational establishments and poor industry image, can also be addressed by the industry. Some initiatives have already been taken, such as the 'Love Logistics' campaign in the UK or national advertising by carriers such as UPS and DHL. This will inevitably lead to a higher, better public perception. But, according to Ti's survey, far more needs to be done if it is to tempt the brightest candidates away from alternative career paths in the high tech or banking sectors, for example.



Operational initiatives

Another important aspect of the supply side that is changing is the continued development of transport networks, either 'less-than-trailer load' or 'full trailer load'. These are generally provided by the larger providers and offer both higher service levels and lower costs through their ability to work assets harder. In addition, this trend has been extended through the emergence of 'pallet-networks', which are often groups of smaller providers who sell a low-cost service for small batch sizes.

Alongside this, logistics companies are becoming more efficient through the use of Transportation Management Systems and Warehouse Management Systems. As with the operational networks cited above, technology can help increase the utilization of assets as well as drivers. For example, using latest dynamic routing software can increase the number of drops a driver and their van undertake a day, reducing the need for additional manpower.

These two trends illustrate that the supply side is gradually becoming more efficient, particularly in terms of its ability to work fixed assets. The issue of how hard semi-fixed assets (i.e. trucks) are worked, is an important one.

The future

Logistics resource issues may only be a temporary challenge for the industry as automation in the warehouse will reduce the reliance which the sector has on low cost labour. This could involve increasing the productivity of operatives through, perhaps, augmented reality glasses, or eliminating roles completely by using fully automated robots for put away or bringing the picking face to the worker.

Although it may be a long time before trucks are truly driverless, semi-autonomous technologies are already making drivers' lives easier. It may be that authorities require drivers to have fewer qualifications if the truck can make decisions for the driver. And, if vehicle manufacturer Mercedes Benz is right, the driver becomes more a truck and load manager than a driver and this enhanced role could be more attractive to potential workers.

However, this is for the future. Right now, structural issues in the industry and a perception problem amongst the wider population need to be addressed if the shortage of skilled and qualified logistics workers is to be overcome.