

The Trucking Industry: Solid Growth, but Large Cost Challenges Ahead

The trucking industry looks set to enjoy three or four years of reasonable growth, according to Bruce Allen, professor emeritus of business economics and public policy at Wharton, and Dan Clark, president and general manager of transportation finance at GE Capital. But not everything out on the road is smooth-running. Major challenges include rising fuel costs, a need to increase driver salaries substantially to steady the labor supply, a potentially large-scale transition from diesel fuel to natural gas, and increasing regulations. Part 1 of this two-part podcast series looks at growth prospects and major cost challenges.

An edited transcript follows.

Knowledge@Wharton: I'd like to welcome two experts on transportation to today's podcast at Knowledge@Wharton. They are [Bruce Allen](#), professor emeritus of business economics and public policy at Wharton, and Dan Clark, president and general manager of transportation finance at GE Capital, Equipment Finance. It's a pleasure to have both of you with us today. We're going to look at some of the most pressing issues in the U.S. trucking industry so thanks for joining us.

Dan Clark: Great to be here.

W. Bruce Allen: Great to be here.

Knowledge@Wharton: I want to start with an overview of the trucking industry's economic prospects. The industry tends to run in cycles, with downturns about once every five to seven years or so. We look to be in year five or six of that cycle with no downturn in sight at the moment. So what you think the next couple of years look like for the industry?

Clark: It's an abnormal cycle at this point. But looking out probably three to four years, it still looks fairly good. We've seen capacity continue to tighten within the U.S. fleet. And that's unusual for this part of the cycle. Normally you have some excess capacity building up so that you start to see the early signs of a downturn. But, unlike other cycles, the fleets are being much more

conservative during this one. I'd like to think that they've learned a lot through the other cycles, but I think some of the real cause is there are new regulations that are inhibiting them, along with the fact that there's just not a good driver supply to add to the U.S. fleet.

So, the combination of those two, along with some conservatism from previous downturns, is causing the signs to look fairly good for out three to four years at least at this point.

Knowledge@Wharton: Bruce?

Allen: It depends on how you define cyclical. I look at it in terms of how busy they are at what they're doing and the measure is ton-miles. If you go back to 1990, it's been monotonically increasing until the peak in 2008. Now, some years grow more and some years grow less. I don't like to do a lot of forecasting because forecasters are notoriously wrong. But nevertheless, from 1990 to 2009 ... if you look at that with respect with real GDP — so, you take out the inflation there — there is an amazing correlation of 0.98 between trucking ton-miles and real GDP. I was surprised at this by the way. So, then I did a subset from 2000 to 2009, because I think the economy's changing. What kind of stuff in the information economy has to move by truck? Certainly less than in the non-information economy. Some, but not as much.

But the correlation between 2000 and 2009 is .86, which is a very high correlation.

If you look then at the projections for real GDP in the future — and the Congressional Budget Office has done so — in 2014 it's 3.1%, 3.4% in 2015, the same in 2016, 2.7% in 2017. And then in 2018 to 2023, 2.2%. So, if you believe in that correlation there, it would seem to indicate that trucking is going to do well.... I think forecasting's sort of a dangerous game, but I'm basically optimistic because I think as the economy grows, trucking's going to grow.

Knowledge@Wharton: There hasn't been a transportation bill in Congress for the last couple of years and that means little new spending on highways. How important is that to the trucking industry? What are some of the implications regarding efficiency if we don't fix up bridges and roads, or expand, then there will be more traffic congestion. That can be lost travel time which, in an age of just-in-time inventories, can matter a lot to the customers.

Allen: The roads are pretty bad out there. The American Society of Civil Engineers gives a report card for all of the infrastructure in the country. And the 2013 report card was for bridges — C+ — that's actually a pretty good grade out there. But they call that "mediocre." For the roads it was a D and they call that "poor." So, this is just horrible. We won't allow a student to graduate with a D average here. It's a passing grade, but you can't graduate from Penn if your average is a D.

It's awful in terms of the deficit we have out there. The National Surface Transportation Infrastructure Financing Commission says that we need \$131 billion a year in the 2008 to 2035 period just to maintain the highways — even more if we wanted to upgrade them. The Texas Transportation Institute at Texas A&M does a study every year of congestion. Their 2013 report, which actually reflects data from earlier years, but not that much earlier, estimates that trucking congestion costs are about \$27 billion.

So, bad roads are bad for the truckers. And it means that trucking's going to be less reliable because there are going to be failures and you can't get from A to B in the time you could if the road was in pristine conditions. But the big thing also is congestion. You can't count on when you can get from A to B. If it was an unobstructed road, you could pretty much predict when you'd get from A to B.... And some of these just-in-time things, by the way, are 15 minute windows.

Clark: You're exactly right. When you look at the infrastructure, it is in dire need of modernization. If you look across the country, we need a sustainable, long-term plan. The short-term approaches — or no approach — that we've had the last few years just is not working for the industry at all. And as the professor stated, the current conditions of the highways really threaten the dependability of the delivery system. It's not uncommon for a load to be leaving the East Coast — say, Atlanta — and to have a time line in the Los Angeles market within a two-to-three hour window [for delivery]. So, you're going clear across the country and, with the conditions of the roads and bridges and congestion especially, it really threatens the long-term viability.

Allen: Until this year, we ran a three-day seminar, sponsored by AASHTO, which is the American Association of State Highway Transportation Officials, and DOT on infrastructure financing. And our constituent audience was state department of transportation heads and also CFOs, and then sometimes their high-level staff. And they all see this problem. And they're all tearing their hair out as to how to solve this particular problem. And, of course, not only does it affect the trucks, but you and I drive across those same roads and we experience the same thing.

Knowledge@Wharton: Is that why some of those trucks are passing us going so fast? They're trying to make up some time?

Allen: Well, careful now, lots of the trucks now to conserve fuel have governors on them. And that's

why you can actually pass trucks on highways now. [A speed governor or speed limiter can be used to limit the top speed of a vehicle.]

Clark: And that hurts the safety factor as well when they're going along on at 60 to 62 miles an hour on average and automobiles are going closer to 70 — that can cause extra problems.

Knowledge@Wharton: Another big issue for the industry right now is rising costs. The two main ones often cited are fuel and labor. How big of a problem is that right now?

Clark: Well, both are obviously the two largest expenses within the industry. Fuel is one that, over the last 10-15 years, has seen consistent increases. But right now it's at a relatively high level and staying constant. The good thing with fuel is that there are fuel surcharges in place with most shippers. So, therefore, once the fuel gets above — and the fuel surcharge is generally set at a dollar — so, once it's above a dollar everything above that is set on fuel surcharge so that gets passed on.

Where the pain comes is when you see the quick spikes up because that drains cash flow and then takes a period of time for them to be able to generate the cash that they'll [need to] level it out over a period of time.

Now, drivers on the other hand, are our major challenge. The fleet within the U.S., the smaller fleets have about 70% turnover on an annual basis. Some of the larger fleets will end up [with] 90% to 100% turnover on their drivers. And it's a continual rotation. So, you not only have a lot of turnover, you don't have enough drivers, as I spoke about earlier, in the population.

So, this is a constant turmoil within the industry and it's only getting worse because the population of drivers continues to age. Right now, the typical driver will make about \$60,000 a year. In my opinion, that is going to have to probably increase to \$70,000 to \$75,000 a year to start getting new people to come into the industry to drive the trucks.

Knowledge@Wharton: This is long haul drivers we're talking about, correct?

Clark: Yes.

Allen: I agree with what Dan says. And the guys are continuously jumping. And it always amazed me when I first saw this, and this has been going on for a long time. This 100% turnover rate that means the guy you see — we used to say in college, "The people that you see next to you — one of out of four of those guys won't be there at graduation." But in the trucking industry it's the guy who is next to you won't be there next year. And, wait a minute, you won't be there next year either. This is mind boggling. So, you have to continuously train and go through the hiring process and so on. It's the grass is always greener type of situation that you see out there.

As Dan mentioned, there really is a big aging [problem]. There's a tremendous percentage, maybe 20% or more who are within 10 years of retirement.... In the 1970s and 1980s, it was a glamorous industry. The last cowboy ... *Smoky and the Bandit*, *BJ and the Bear*, *Convoy* type of TV shows and songs. But the current group of individuals just isn't interested in that kind of lifestyle. And, you'd think that with the unemployment rate so high, that there ought to be just a bevy of individuals that would qualify to work in the industry. And one of the big difficulties is that it does take some degree of talent to drive a truck. It's not like driving your Volkswagen Beetle. But that's not insurmountable.

Clark: One of the biggest challenges within the industry is just getting the new population in — and the view of a truck driver. I was out giving a speech a few weeks ago and made a comment to the audience of transportation executives and other people in the industry. I said, "How many of you look around your dining room table ... and say, 'I'd like them to be a truck driver'?" And these people have been the industry and obviously nobody raised their hand. And I think that there's a major perception issue within the industry

about truck driving. And that's something the industry has to work on diligently to try to change.

Knowledge@Wharton: Can you give me a rough estimate of the percent of labor involved in the cost of delivering an average shipment?

Allen: I think it's large.

Clark: Sure.

Allen: I can remember in the airline industries when fuel actually took over from labor as being the highest situation. And that was over 30% of the operating costs of running an airline. But I don't know what it is in the trucking industry.

Clark: I was just going to guess somewhere in the 30% [range] because, if you figure a \$60,000 average salary and they run 120,000 miles a year, that's 50 cents a mile right off the top on labor. And fuel would be somewhere, give or take, 70 cents a mile. So they're right in the same range of what it would be.

Allen: That's about right because we think about fuel efficiency standards and these guys are out there making six to seven miles a gallon.

Knowledge@Wharton: Driver salaries might have to go from averaging \$50,000 to \$70,000 or \$75,000 — jumping maybe 30% to 40%. But if everyone has to do that, is there not a level playing field? Just as when the cost of fuel goes up, everyone has to pay it. It gets reflected somewhere in the prices that end-users may pay. But if that has to happen, isn't it just a matter of — not a simple matter — but a matter of passing costs on?

Clark: It's a free market. Yes, I think you're exactly right. It's more of a timing issue of how it will be passed on and what shippers allow it at what time frame. And the one area that's going to help in that regard is ... the sheer capacity. Capacity's getting very tight right now. If you look at the spot market, which is what is paid to haul a shipment that is not under contract, it's at very high levels. So what that's saying is that the overall capacity in the industry is very tight. What you're going to be able to see is the fleets will be able to pass on cost increases, which instead of going to the profit line, to net income line, will go off on the expense line. But hopefully be able to retain the drivers and bring more in.

Allen: I agree. The other constraint is just sort of the elasticity of demand question. You charge what the traffic will bear for the commodities, and is there a limit on what the commodities will bear. And might you switch traffic to rail?

Takeaways:

- The trucking industry is like to enjoy reasonable growth over the next three to four years.
- Road conditions are poor and that is leading to delivery delays, a major concern in an era of just-in-time inventories.
- The inability to attract a sufficient supply of drivers at current salaries suggests driver salaries will likely have to rise 15%-40% — from an average of \$60,000 annually today to an average of \$70,000 to \$75,000 in order to fill the need for drivers.