Is the U.S. labor market for truck drivers broken?

PHS6900 Journal club

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Professional development | October 29, 2019

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Overview of study

Burks, S. V., & Monaco, K. (2019). Is the US Labor Market for Truck Drivers Broken. Monthly Lab. Rev., 142, 1.

The importance of trucking industry:

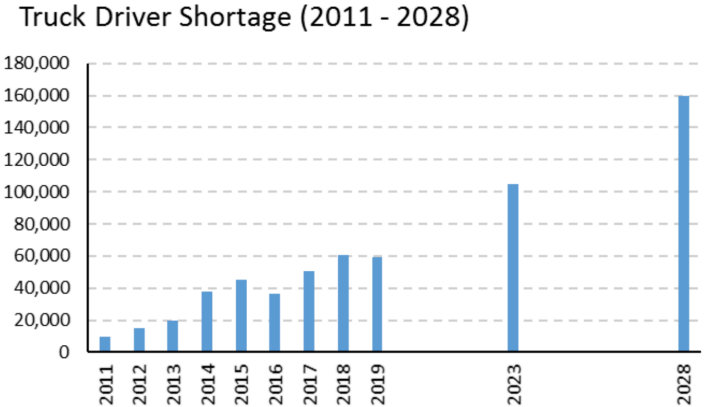
1. 61% of the total freight (by value)
2. 3.5% of GDP

U.S. Bureau of Labor Statistics (BLS) Occupational Employment Statistics (OES) survey 2017:

- 1.75 million heavy and tractor-trailer truck drivers
- 877,670 light truck or delivery services drivers
- 427,000 driver/sales workers

Study setting

The American Trucking Association (ATA) has been arguing systematically a shortage of truck drivers.[1]



ATA warns that the **driver supply will fail** as current drivers age.

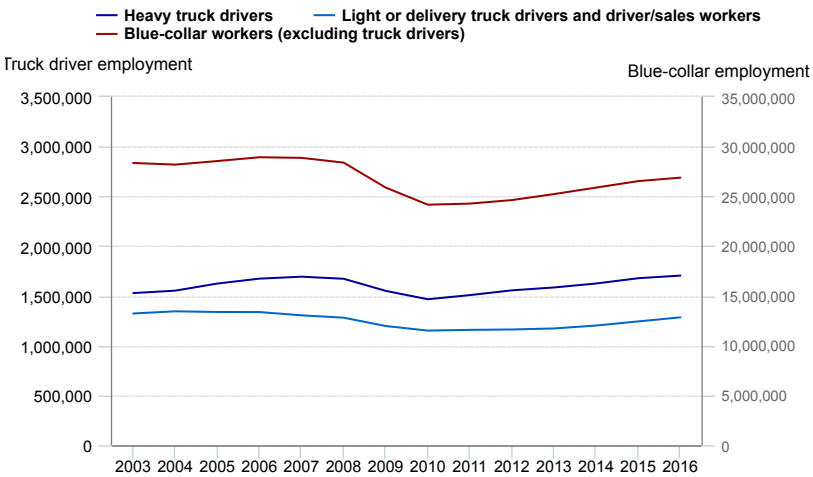
Population studied

- *U.S. Bureau of Labor Statistics (BLS) Occupational Employment Statistics (OES) survey*
  - A nationally representative survey of nonfarm business establishments with a large sample size.
  - Question: what are the employment and earnings of truck drivers relative to those of other workers?
- *Current Population Survey (CPS) data*
  - the patterns of occupations and industries from which drivers come and to which they go during the period 2003–17
  - individual-level data
  - Question: why are the truck drivers switching jobs?

1 Results 1: OES

Employment of truck drivers and blue-collar workers

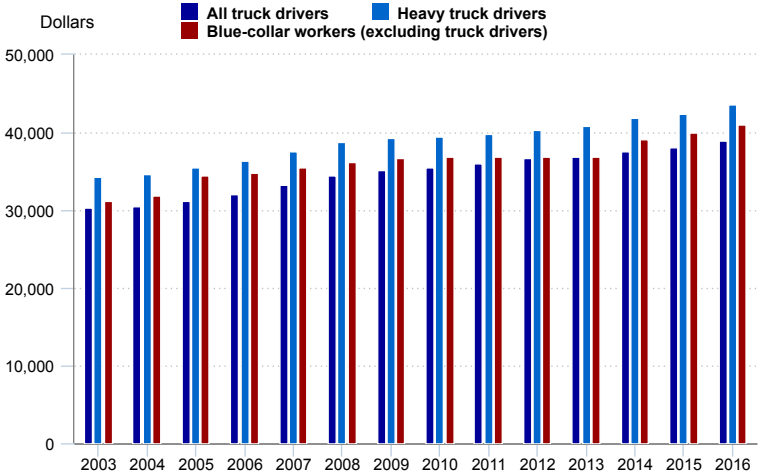
Figure 1. Employment of truck drivers and blue-collar workers, 2003–16



Click legend items to change data display. Hover over chart to view data.
Source: Authors' calculations based on data from the Occupational Employment Statistics survey.

Earnings of truck drivers

Figure 2. Nominal earnings of truck drivers and blue-collar workers, 2003–16

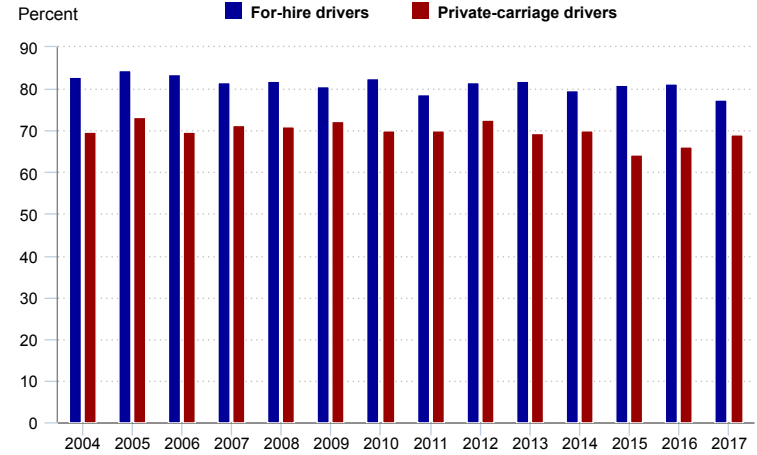


Click legend items to change data display. Hover over chart to view data.
Source: Authors' calculations based on data from the Occupational Employment Statistics survey.

2 Results 2: CPS

Occupation retaining percentage

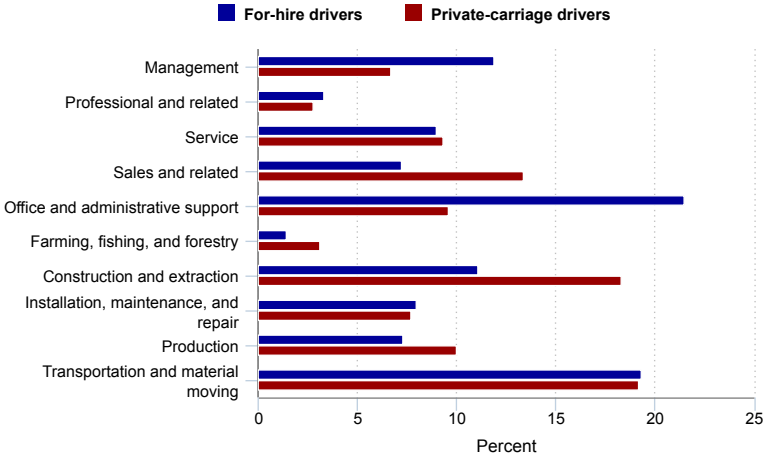
Figure 3. Percentage of truck drivers who retain their occupation in period 2, 2004–17



Click legend items to change data display. Hover over chart to view data.
Source: Authors' calculations based on data from the Current Population Survey Outgoing Rotation Groups, 2003–17.

Who is entering truck driving industry?

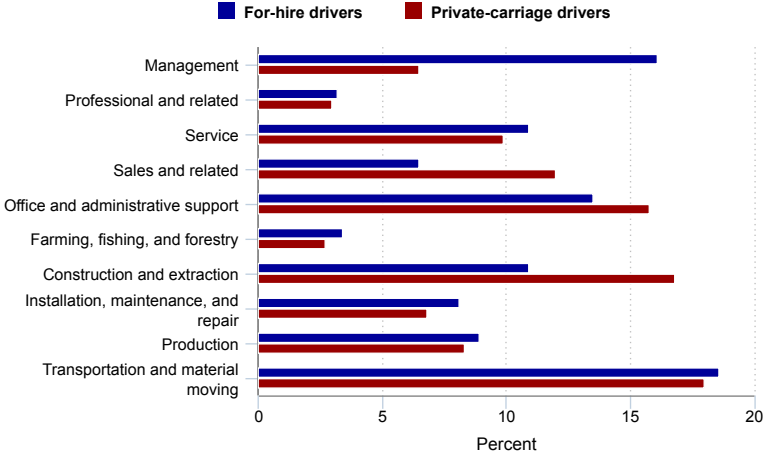
Figure 4. Percentage of workers who enter truck driving, by initial occupation departed



Click legend items to change data display. Hover over chart to view data.
Source: Authors' calculations based on data from the Current Population Survey Outgoing Rotation Groups, 2003–17.

Who is leaving truck driving industry?

Figure 5. Percentage of workers who leave truck driving, by occupational destination



Click legend items to change data display. Hover over chart to view data.
Source: Authors' calculations based on data from the Current Population Survey Outgoing Rotation Groups, 2003–17.

CPS econometric models of occupational in-migration

Table 1: Probability of exiting truck driving between period 1 and period 2

Variable	For-hire drivers		Private-carriage drivers	
	Specification 1	Specification 2	Specification 1	Specification 2
Standardized usual hours (period 1)	0.779*** (-5.52)	—	0.908** (-2.14)	—
Standardized weekly earnings (period 1)	0.844*** (-1.67)	—	0.747*** (-2.58)	—
Expected earnings increase	—	1.17 (1.34)	—	1.41*** (3.71)
Expected earnings decrease	—	1.01 (0.06)	—	0.981 (-0.18)
Expected difference in hours (expected − current)	—	1.03*** (5.84)	—	1.009* (1.93)
Standardized percentage of heavy trucks	—	—	0.267 (-18.09)	0.267*** (-18.32)
Observations	5,465	5,465	6,202	6,202

CPS econometric models of occupational out-migration

Table 2: Probability of entering truck driving in period 2 among occupational switchers

Variable	For-hire drivers		Private-carriage drivers	
	Specification 1	Specification 2	Specification 1	Specification 2
Standardized usual hours	1.120** (-2.024)	—	1.115** (-2.47)	—
Standardized weekly earnings	0.652*** (-3.64)	—	0.639*** (-4.80)	—
Expected earnings increase	—	1.285*** (2.06)	—	1.318*** (2.85)
Expected earnings decrease	—	0.846 (-1.12)	—	0.566*** (-5.15)
Expected difference in hours (period 2 – period 1)	—	0.991 (-1.55)	—	0.992* (-1.69)
Observations	85,977	85,977	86,298	86,298

3 Results 3: Perceived shortage

Explanation of perceived persistent truck driver shortage

Long-distance truckload (TL) motor freight, is a “secondary market”.

- High levels of competition
- Similar average costs
- Limited ability to differentiate prices in the product market

Therefore, individual firms are forced to accept *high turnover* as a cost-minimizing strategy.

Final conclusion

Although long-distance truck drivers has

- high turnover rates,
- problems of recruiting and retaining drivers,

This is not a “broken market”. Overall the trucking industry is “healthy”.

4 Implications

Summary and implications

1. employment in the occupation has been resilient,
2. nominal annual wages have persistently exceeded blue-collar workers,
3. the occupations from which drivers come and to which they go are similar,
4. truck drivers have lower occupational migration than other workers with similar education levels.

Overall, the labor market for truck drivers works about as well as the labor markets for other blue-collar occupations.

Questions

1. How accurately did news article report these findings?
2. Limitations of this study?

References I

1 American Trucking Associations. ATA Releases Updated Driver Shortage Report and Forecast. 2019.