



SUBURBIA PRESENTS

**THE IMPACT OF RIDE-
SHARING PLATFORMS
ON DRIVER WAGES IN
THE NETHERLANDS**

ALTERNATIVE DATA FOR EVERYONE
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1. Summary

Since December 2012 ride-sharing platforms have been operating at scale in the Netherlands. Unlike a traditional taxi business, these services do not own any cars; instead they provide a matching platform for passengers and self-employed drivers, and profit by taking a cut from each ride.

Increased competition for incumbent taxi drivers could have adverse effects on the labour market dynamics of wage-employed and self-employed drivers. Using alternative data on freelancers' wages, this report will look if the introduction of ride-sharing platform had a positive boost on hourly wages of self-employed drivers and whether other industries exhibited a higher increase in wages of the self-employed in the Netherlands.

When compared to the change in the average hourly wages of an average freelancer, we find that hourly wages for the self-employed drivers have almost stagnated with a slight increase only for the starting positions.



2. Introduction

During the past decade, ride-sharing (e-hailing) platforms like Uber, Ola, Grab, Lyft etc. have become very popular. The reasons behind this popularity lie on a variety of reasons: passengers value the convenience, safety and the fact that these platforms are considered cost-saving substitutes of taxi service. While in the U.S., the number of drivers joining e-hailing force has increased exponentially, in Europe taxi-drivers have rebelled following the launch of the service. The competition that the taxi drivers now face in the point-to-point transportation service industry is higher along with lower earnings potential.

For instance, as the demand for Uber increases, the earnings potential for self-employed drivers increases. For anyone to become a ride-sharing driver, all one needs is the relevant licence, car registration and the app registered on their smart phone.

Ultimately, e-hailing platforms have incentivized not only taxi drivers but also non-taxi drivers to become self-employed drivers. E-hailing drivers enjoy the work flexibility the platform permits, while exhibiting higher hourly earnings than traditional taxi drivers. A possible explanation for these higher earnings of e-hailing drivers could be that these drivers benefit from **higher capacity utilization** as now they can find their passengers easily through the app and drive more rides per hour.

However, not all types of drivers utilize the app the same way. For that reason, the types of self-employed drivers are divided in three categories: start, medium and high. As a variety of micro, labour or macro variables have an effect on wages and wage fragmentation amongst industries, the task of finding the extent of capacity utilization becomes more difficult

3. Data and Insights

Data on hourly wages of freelancers have been collected from Publimix (2018). Publimix collects information about hourly tariffs on freelancers, self-employed, ZZP-ers, grouped in more than 170 professions.

Answers to the following questions could shed some light in the effect that e-hailing has had on drivers' wages:



3.1 What happened to the wages and their increase of an average freelancer before and after the introduction of e-hailing platforms?

Table 1: Hourly wages of the average freelancer

	Average Start (growth)	Average Medium (growth)	Average High (growth)
1996-2012	41.99	60.24	117.75
2013-2018	69.5579 (65.6%)	98.48 (63.48%)	174.27(87.10%)

Table 2: Yearly change in the hourly wages of the average freelancer

	Yearly growth (start)	Yearly growth (medium)	Yearly growth (high)
1996-2012	1.21	1.58	2.92
2013-2018	0.08	0.10	0.95

Figure 1: Wages of an average freelancer from December 1996 until June 2018



Wages of all types of freelancers saw a sharp increase right after the financial crisis. During the financial crisis, due to increasing cost restrictions and a decrease in the demand, many business owners gave their employees advice to start for themselves and switch from wage-employed to self-employed contracts.



With work still to be done, business owners hired their former employees as freelancers. In turn, this move added a lot of new freelancers who had a lot of experience and therefore were able to collect higher wages. This could explain why the percentage change in the hourly wages of the high type was higher than when compared to the rest.

Collection bias may also be in play as respondents to the Rate guide shifted from starters to more experienced workers and as a result the difference between high and low types increased further. After e-hailing was introduced there is little volatility afterward for all three types of jobs.

3.2 Did the hourly wages of self-employed drivers increase after the introduction of e-hailing platforms?

Table 3: Hourly wages of self-employed drivers

	Drivers start	Drivers medium	Drivers high
2002-2012	17.18	20.63	24
2013-2018	21.21 (23.4%)	24.73 (18.86%)	26.68 (11.16%)

Table 4: Yearly change in the hourly wages of self-employed drivers

	Yearly change in starting wages	Yearly change in medium wages	Yearly change in high wages
2002-2012	0.07	0.11	0.10
2013-2018	0.21	0.10	-0.01 (insignificant)

In Figure 2 (below) we can see the trend of hourly wages of the three categories of drivers (start, medium and high). As it can be observed, there is a slight increase in the hourly wages short after e-hailing introduction. In fact, drivers in the start function earned on average 17.18 euros per hour before and 21.21 euros after the introduction of e-hailing (an increase of 23.4%). Medium drivers earned on average 20.63 euros per hour and after 24.73 euros per hour (an increase of 18.86%). High driver used to earn on average 24 euros per hour before e-hailing and now they earn on average 26.68 euros per hour, or an increase of 11.16% more.

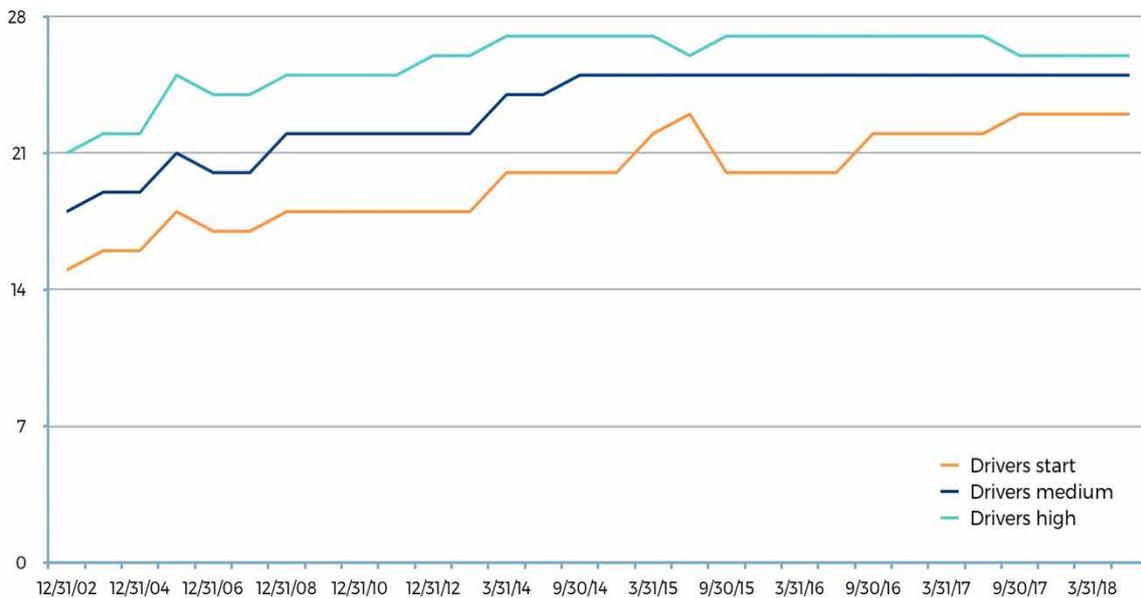


Why?

Consumers perceive ride-sharing platforms as cost-saving substitutes of taxis. Therefore, the preferred service is the one with the lowest price and the ones who get a bigger share of the market will be the start-type drivers. After e-hailing implementation, all types of drivers can make use of the platform to find costumers more easily and save on gas by driving around to find them. However, demand is quite sensible to prices as costumers consider e-hailing as a cost-saving platform.

A complementary explanation to why the starting type saw a higher increase is the flexibility terms that e-hailing platforms have in the work supplied. Drivers can choose their own driving time and places to operate. This incentivized non-drivers to become self-employed drivers of the starting type, which increased the hourly wages of the start-type.

Figure 2



3.3 Is there a significant difference between drivers wage increase and other professions wage increase?

After the introduction of ride-sharing platforms, drivers of all categories saw a much smaller increase in their wages than an average freelancer. This could hint that competition kept the wage growth at a minimum for drivers. Within the average freelancers group, the hourly wage of a freelancer of high type increased more than the hourly wages of an average freelancer of start or medium type. For a self-employed driver the opposite happened: The hourly wage of the start type drivers increased more than other categories.



4. Limitations

First, wages used in this work are derived from a mathematical calculation per each type of work of any profession. Given a level of education, experience and a set of factors that affect wages, Bosman (2018) is able to determine the market value of any freelancer. These data might not always correspond with the real wages.

Second, changes in wages before and after ride-sharing came to Holland could have been affected by a number of variables that might or might not be related to Uber. After all in order to prove a shock impact of Uber on drivers' wages, one needs a set of variables that affect wages and data that is more frequently measured. In order to prove causation, a proper econometric model would have been used, had we included in our analysis a full set of time-varying characteristics including the unemployment rate, the share of the population with a college degree, the female population share, and age groups etc.

Last, as Bosman (2018) already controls for heterogeneity factors between drivers and freelancers in types of work, the problem of between-heterogeneity is solved to a certain degree but not to the fullest as factors might not capture all heterogeneity issues in between.

5. Conclusion

Using alternative data on freelancer's wages, this report aimed to answer whether ride-sharing platforms have had a positive impact on drivers wages in the Netherlands.

When compared to the wages of average freelancers of any type (start, medium and high), the wages of freelance drivers increased much less.

On the upside, work flexibility created an attractive environment for everyone that had a car, a licence and very little experience to become a driver. The starting salary of beginning drivers also outpaced gains from more experienced drivers, as competition may have increased the starting salary of new drivers at traditional taxi and limousine firms.

All told, hard data suggests drive hailing apps are not the absolute antagonists portrayed in media both traditional and social. Yet stagnating wage growth compared to the rest of the economy shows that new business models disrupt not only the user experience and the gig economy, but society as a whole.



6. Appendix

I. What happened to wages of freelancers in other industries?

The impact of the introduction of ride-sharing on other professions is less evident. After 2012, cooks of all types saw a small decline in their wages. Dancers of all types all saw a gradual increase while truck drivers saw a small sharp increase in their hourly wages followed with a sharp decrease.

II. What happens when we control for inflation?

Since 2012, prices have increased on average by 0.68% each year. In other words, 1 euro in 2012 is the equivalent in purchasing power to 1.042 euros in 2018. Wages of drivers in starting position were 18 euros in 2012 or 18.75 euros in 2018 prices. As wages grew to 23 euros an hour, this increase could cover for inflation.

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