

The Swedish Parcel Market 2020

Report based on the PTS annual collection of parcel statistics in accordance with the EU Regulation on Cross-Border Parcel Delivery Services

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Foreword

The Swedish Post and Telecom Authority (PTS) is responsible for monitoring, analysing and describing the developments in the postal market. As a result of the coming into force of Regulation (EU) 2018/644 of the European Parliament and of the Council of 18 April 2018 on Cross-Border Parcel Delivery Services, the PTS received increased powers to collect data from businesses operating in the Swedish parcel market. As a result, the PTS has gained a better understanding of the parcel market and sees value in sharing this knowledge with stakeholders both domestically and internationally.

The purpose of this report is to examine how the parcel market has developed over the past few years in terms of market growth and market concentration. The statistics show that the parcel market is growing and that more businesses are entering the market. It is the first time that the PTS publishes a report on the parcel market. It is the intention of the regulator to continue to monitor the market and examine various aspects that are of importance for the functioning and the development of the market.

Dan Sjöblom
Director General

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1. Introduction

In June every year, the Swedish Post and Telecom Authority (PTS) collects data from businesses operating in the Swedish parcel market, in accordance with the EU Regulation on Cross-Border Parcel Delivery Services (EU 2018/644), (“the EU Parcel Regulation”).¹ The statistics include company turnover, parcel volumes and prices. The report uses this information to further examine the development of the parcel market in terms of market growth and market concentration.

The data in this report was collected in June 2021, the data is from 2020 and cover parcels up to 31.5 kg.

“Parcels” are defined as postal items which contain goods, with or without commercial value. Postal items which are over 20 mm thick are assumed to contain goods and therefore count as parcels.

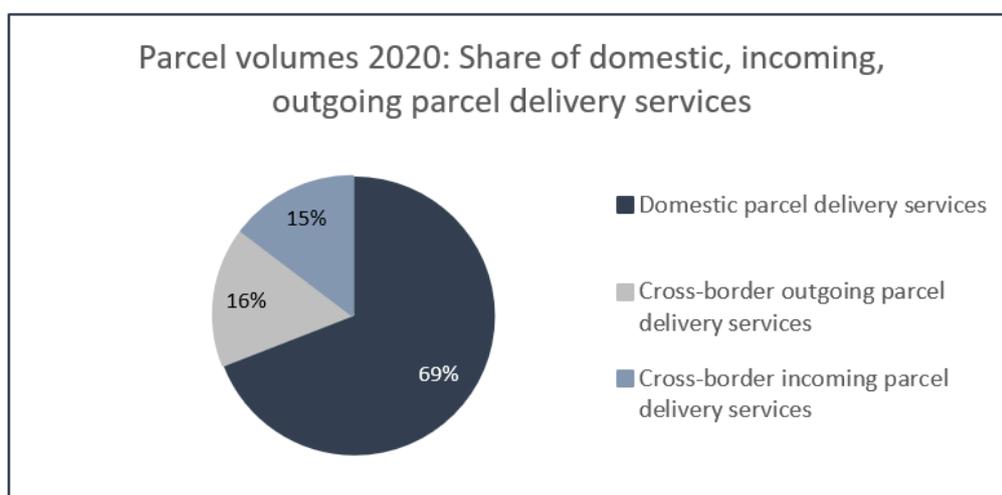
The statistics cover three different submarkets:

- **Domestic parcel delivery services:** include parcels where both the sender and the receiver are located in Sweden (“the domestic market”).
- **Incoming cross-border parcel delivery services:** include parcels where the sender is located abroad and the receiver is located in Sweden (“incoming parcels”).
- **Outgoing cross-border parcel delivery services:** include parcels where the sender is located in Sweden and the receiver is located abroad (“outgoing parcels”).

2. The parcel market's submarkets and growth

The largest submarket is domestic parcel delivery services (69 % of the market in terms of volumes), followed by cross-border outgoing parcel delivery services (16 %) and cross-border incoming parcel delivery services (15 %) (see chart 1 below).

Chart 1: Proportion of domestic, incoming and outgoing parcel delivery services



Expressed in number of parcels, this corresponds to 295 million parcels distributed in 2020, of which 204 million parcels had both a sender and a receiver in Sweden, around 48 million parcels had a sender in Sweden and a receiver abroad, and around 43 million parcels had a sender abroad and a receiver in Sweden.

In terms of turnover the total value of the market was around 18.1 billion SEK in 2020, of which domestic parcel delivery services accounted for about 9.9 billion, outgoing parcel delivery services for about 5.9 billion and incoming parcel delivery services for ca 2.3 billion SEK.

Compared to last year, the parcel market has grown by 14.2 % in terms of turnover and 18.3 % in terms of volumes. The two submarkets which have grown the most are domestic parcel delivery services (17 % in terms of turnover, 19.5 % in terms of volumes), and incoming parcel delivery services (16.1 % in terms of turnover, 24.5 % in

terms of volumes). The market for outgoing parcel delivery services has also grown strongly with an increase of 9.2 % in terms of turnover and 8.7 % in terms of volumes.

Table 1: Parcel market turnover, volumes and growth 2020

Parcel market 2020 (in millions)	Turnout 2020		Difference 2019-2020	
	Turnover	Volumes	Turnover	Volumes
Domestic parcel delivery services	9 893	204	17%	19%
Outgoing parcel delivery services	5 928	48	9%	9%
Incoming parcel delivery services	2 255	43	16%	25%
Total market	18 076	295.4	14.2%	18.3%

The strong growth in all of the submarkets partly reflects the increase in e-commerce during the Covid-19 pandemic, and partly that three additional businesses (Budbee, Instabox, Airmeë) have been included in the analysis this year. Previous years these businesses were considered to be too small to be in scope of the data collection. However, even if these new businesses are excluded from the analysis, the growth in the market was still 10.3 % in terms of turnover and 12 % in terms of volumes.

3. Market concentration

3.1 Indicators of market concentration

3.1.1 Market shares

Usually market shares are calculated on the basis of value, except when the market is characterised by very homogenous products - i.e. where a cheap product successfully can replace a more expensive product - in which case market shares based on volumes may give a more accurate picture of the market.²

Even if a 'standard parcel' could be considered to be a relatively homogenous product, in practice, the products offered in the market differ to a large extent between different businesses, for example in terms of dimensions, weight classes and various service characteristics (e.g. delivery times, traceability, type of delivery (express, home, weekend/ evening delivery), as well as other aspects such as return policy and sustainability). This is particularly true at the aggregated level at which PTS is able to collect data under the EU parcel regulations. It is therefore our assessment that the products in the market are relatively heterogenous³. However, in order to present a complete picture of the market we present market shares in terms of both turnover and volumes.

3.1.2 The concentration ratio

We also calculate the concentration ratio, i.e. the sum of the market shares of the largest businesses in the market. A common measure is the concentration ratio of the four largest businesses (often called CR4). If CR4 exceeds 60 % a market is often categorised as an oligopoly, with or without a dominant firm. If CR1 (the market share of the largest company) exceeds 90 % a market is usually categorised as a monopoly.⁴

Table 2: Interpretation of the CR4-ratio⁵

Index value	Interpretation CR4 ratio
CR4 = 0	Perfect competition
0 < CR4 < 40	Effective competition or monopolistic competition
40 <= CR4 < 60	Loose oligopoly or monopolistic competition
60 <= CR4	Tight oligopoly or dominant firm with competitive fringe
90 >= CR1	Effective monopoly (near monopoly) or dominant firm with competitive fringe

3.1.3 Herfindahl-Hirschman Index

We also calculate the Herfindahl-Hirschman Index (HHI), which is a measure of market concentration. The HHI is calculated as the sum of the squared market shares in the market. An increase in the index is usually interpreted as an increase in market concentration, i.e. a decrease in competition, but needs to be interpreted in its context, as such an increase may also reflect a reallocation of market shares to more efficient businesses.⁶ A HHI value below 1500 (15 %) is often interpreted as low market concentration; a value between 1500 and 2500 (15 – 25 %) as moderate concentration; and a value that exceed 2500 (25 %) as high concentration. The maximum value that the index can take is 10000, which reflects 100 % concentration, i.e. monopoly.⁷

Table 3: Interpretation of the Herfindahl-Hirschman Index

Index value	Interpretation HHI
<1500	Low concentration
1500-2500	Moderate concentration
>2500	High concentration
10 000	Max = monopoly

3.1.4 Instability Index

In addition, we also calculate the Instability Index, which is a measure of the change in the relative position of the businesses in the market, and which is usually used as an indicator of the intensity of competition. The index is calculated as the absolute change between two time periods in the market share of each company, summed up over all companies in the market. If the value of the index is close to zero it indicates that the allocation of market shares is relatively stable; if the value is close to one, that that the market shares are relatively instable. The higher the value of the index, the higher the intensity of competition.⁸

3.2 Market concentration: total market

At the level of the total market, there are 23 businesses operating, of which 11 have a market share in terms of turnover which exceeds 1 % (see Table 4 below).

Table 4: Market shares and market concentration: total market

Parcel distributor	Turnover (total market)		Parcel distributor	Volumes (total market)	
Postnord	40 - 45%	(-0.5)	Postnord	50 - 55%	(-4)
UPS	10 - 15%	(-0.5)	DHL	10 - 15%	(-1)
DHL		(-0.6)	Schenker		(-1)
Schenker	5 - 10%	(-0.6)	Bring Parcels	5 - 10%	--
Bring Parcels		--	UPS		--
TNT	1 - 5%	(-0.7)	Instabox	1 - 5%	--
FedEx		(-0.1)	Budbee		--
Budbee		--	TNT		--
DSV Road		(-0.7)	Point Logistik		(+1)
Instabox		--	Best Transport, PREMO, FedEx, Airme, SVHL, VTD, DSV Road, CityMail, Prolog, Jetpak, Bussgods, Asendia, NiM Distribution, Hall Media	<1% individualt, 6% combined	
Jetpak		(-0.4)			
Best Transport, Airme, Bussgods, PREMO, Asendia, SVHL, CityMail, VTD, Point Logistik, Prolog, NiM Distribution, Hall Media	<1% individually, 2.84% combined				
HHI index:	2233		HHI index:	3194	
Concentration:	22%		Concentration:	32%	
Change 2019-20:	-4%		Change 2019-20:	-14%	
CR4 (largest four):	78%		CR4 (largest four):	82%	
Instability index:	0.05		Instability index:	0.09	

The largest business is Postnord (the provider of the universal service in Sweden), with a market share of 40 – 45 % in terms of turnover, followed by UPS and DHL, both of which have a market share around 10 – 15 %, respectively. Thereafter come two businesses with a market share between 5 and 10 % (in order of size: Schenker and Bring Parcels), followed by six businesses with a market share between 1 and 5 %, respectively (TNT, FedEx, Budbee, DSV Road, Instabox and Jetpak). The 12 smallest businesses each individually have a market share of less than 1 %, and together a combined market share of around 3 %.

Compared to last year, most of the largest businesses have seen their market share decrease somewhat. This partly reflects that three new businesses have been added to the analysis this year. The picture does, however, not change much if these businesses are excluded from the analysis. Even if excluded, most companies would have seen a decrease in their market share over the past year. The exception is

Postnord, whose market share increases by 1 percentage point if the new businesses are excluded. This can be interpreted such that the new businesses have “taken” market shares from all other companies in the market, but especially so from Postnord.

If we instead examine market shares in terms of volumes, the picture does not change much – the same five businesses are still at the top of the list, although UPS moves down from second to fifth place in terms of volumes. We can see that several of the largest companies have a market share in terms of turnover that exceeds their market share in terms of volumes, which could indicate differentiated products for which they can charge a higher price. The exception is Postnord and Schenker, which both have a larger market share in terms of volumes, which may reflect that they (together with DHL) are the only companies that are present on a country-wide basis. Instabox and Budbee also have market shares in terms of volumes that exceed their market shares in terms of turnover.

With respect to market concentration, the largest four companies hold 78 % of the market in terms of turnover (down from 80 % last year). As can be seen in Table 4 above, the data on market shares meets the definition of an oligopolistic market with a dominant firm.

When calculating the Herfindahl-Hirschman Index (HHI), we get a value of 2233, i.e. moderate market concentration. Compared to previous year (2019), the index has decreased by 4 %, i.e. somewhat lower concentration. This can be interpreted as an improvement in competition, even though small changes in the metrics should be interpreted with caution.

The metrics on market concentration worsen somewhat if they are calculated on the basis of volumes instead of turnover. HHI shows a relatively high concentration (32 %) and the largest four businesses combined have 82 % of the market. Both metrics have, however, improved somewhat since last year (HHI has decreased by 5 percentage points, CR4 by 7 percentage points).

When we calculate the instability index we get an index value that is relatively close to zero, which can be interpreted as relatively stable competition. The value of the index has increased somewhat over the past year, which means that in 2020 we have seen a somewhat larger reallocation of market shares. The degree of instability is higher in terms of volumes than in terms of turnover. This could be an indication that there are submarkets where some segments have a higher degree of product homogeneity, and that this is reflected when the market shares are calculated on the basis of volume.⁹

3.3 Market concentration: domestic market

There are 22 businesses operating in the domestic market, of which nine have a market share in terms of turnover that exceeds 1 %.

Table 5: Market shares and market concentration in the domestic market

Parcel distributor	(domestic market)		Parcel distributor	(domestic market)	
Postnord	50 - 55%	(-2)	Postnord	50 - 55%	(-6)
Schenker	10 - 15%	(-1)	DHL	10 - 15%	(-2)
DHL		(-2)	Schenker		(-2)
Budbee	1 - 5%	--	Instabox	1 - 5%	--
Instabox		--	Budbee		--
Bring Parcels		--	Bring Parcels		--
DSV Road		(-1)	Point Logistik		(+1)
Best Transport		--	Best Transport		--
Jetpak		(-1)	PREMO, Airmee, SVHL, VTD, CityMail, DSV Road, Prolog, Jetpak, Bussgods, NiM Distribution, TNT, UPS, Hall Media, FedEx	<1% individually, ca 8% combined	--
Airmee, Bussgods, UPS, TNT, PREMO, SVHL, CityMail, VTD, Point Logistik, Prolog, NiM Distribution, FedEx, Hall Media	<1% individually, ca 4% combined				
HHI index:	3337		HHI index:	3400	
Concentration:	33%		Concentration:	34%	
Change 2019-20:	-8%		Change 2019-20:	-18%	
CR4 (largest four):	86%		CR4 (largest four):	86%	
Instability index	0.08		Instability index	0.13	

Postnord is the largest company in the domestic market with a market share of 50 – 55 % in terms of turnover (which has decreased by two percentage points over the last year). Following Postnord there are two businesses which each individually have a market share between 10 and 15 % (Schenker and DHL), followed by six businesses with market shares between 1 % and 5 % (in order of size: Budbee, Instabox, Bring Parcels, DSV Road, Best Transport och Jetpak).

The domestic market is the submarket with the highest degree of market concentration. The four largest businesses combined hold 86 % of the market and when we calculate the HHI we get a share of 33 %, i.e. relatively high concentration. Both metrics have, however, reduced over the past year (from 91 % and 36 %, respectively).

If instead we instead examine market shares based on volume, the picture does not change much. The same companies are topping the list, and in terms of concentration we get a similar picture. The degree of market concentration has, however, decreased over the past year (HHI has reduced by 18 percent, CR4 ratio has reduced from 94 % to 86%).

3.4 Market concentration: incoming parcels

On the market for incoming parcel delivery services there are 11 businesses operating, of which 7 have a market share that exceeds 1 %.

Table 6: Market shares and market concentration: market for incoming parcels

Parcel distributor	Turnover (incoming)		Parcel distributor	Volumes (incoming)	
Postnord	30 - 35%	(+6)	Postnord	60 - 65%	(+4)
UPS	20 - 25%	(-2)	UPS	15 - 20%	(-3)
FedEx	10 - 15%	(-1)	Bring Parcels	5 - 10%	(-1)
TNT		(-2)	Schenker		(-1)
Bring Parcels	5 - 10%	(-1)	DHL	1 - 5%	--
DHL		(-1)	TNT		--
Schenker		--	FedEx		--
Budbee, DSV Road, Jetpak, Bussgods	<1% individually, 1.4% combined		Budbee, DSV Road, Jetpak, Bussgods	<1% individually, ca 1% combined	

HHI index:	2030	HHI index:	4430
Concentration:	20%	Concentration:	44%
Change 2019-20:	10%	Change 2019-20:	9%
CR4 (largest four):	78%	CR4 (largest four):	92%
Instability index:	0.13	Instability index:	0.08

Postnord is the largest business with a market share between 30 and 35 % (which has increased by six percentage points over the past year), followed by UPS with a market share between 20 and 25 % (which has decreased by two percentage points). Most of the largest companies in the market have lost market shares over the past year, with the exception of Postnord.

The degree of market concentration is substantially lower in the market for incoming parcel delivery services, compared to the domestic market, but has increased somewhat over the past year. Together the four largest companies have a market share of 78 % (up from 77 % last year), and when we calculate the HHI we get a share of 20 % (compared to 18 % last year).

If we instead examine market shares on the basis of volume, the picture is more concentrated. Postnord has a market share of around 60 – 65 % (which has increased by four percentage points since last year). The largest four companies, combined, have 92 % of the market (unchanged since last year) and the HHI share is 44 % (compared to 41 % last year).

3.5 Market concentration: outgoing parcels

There are 12 businesses operating in the market for outgoing parcel delivery services, of which 7 have a market share that exceeds 1 %.

Table 7: Market shares and market concentration: market for outgoing parcels

Parcel distributor	Turnover (outgoing)		Parcel distributor	Volumes (outgoing)	
UPS	30 - 35%	(+1)	Postnord	35 - 40%	(-5)
Postnord	20 - 25%	(-2)	Bring Parcels	20 - 25%	(+1)
DHL	10 - 15%	(+1)	UPS	10 - 20%	(+1)
Bring Parcels		(+1)	DHL		(+1)
TNT	5 - 10%	(-1)	TNT	1 - 5%	--
FedEx		--	FedEx		--
Schenker	1 - 5%	--	Schenker		--
DSV Road, Budbee, Asendia, Jetpak, Bussgods	<1% individually, 2.4% combined		Budbee		--
			Asendia		(+1)
			DSV Road, Jetpak, Bussgods	<1% individually, 0.1% combined	

HHI index:	2027	HHI index:	2510
Concentration:	20%	Concentration:	25%
Change 2019-20:	-1%	Change 2019-20:	-12%
CR4 (largest four):	82%	CR4 (largest four):	90%
Instability index:	0.07	Instability index:	0.10

The market for outgoing parcels is the only submarket where Postnord is not the largest business in terms of turnover. UPS is the largest company, with a market share between 30 and 35 %, followed by Postnord with a market share between 20 and 25 %. UPS has increased its market share by around 1 percentage point over the past year, whereas the market share of Postnord has decreased by two percentage points.

In terms of market concentration, the market for outgoing parcels is the submarket that has the lowest degree of market concentration in terms of the HHI. The four largest companies have a combined market share of 82 % (unchanged since last year). When we calculate the HHI we get a share of 20 % (down from 21 % last year).

If we instead examine market shares in terms of volumes, Postnord is largest with a market share between 35 and 40 %, which, however, has decreased by five percentage points since last year. Just like the other submarkets we get a more concentrated picture in terms of volumes, with a HHI of 25 % (down by 12 % over the year), and a CR4 ratio of 90 % (down from 92 %).

3.6 Concluding discussion

In this report we have examined the degree of market concentration in the Swedish parcel market. We have focused our analysis on market shares in terms of turnover because it is our assessment that the products in the submarkets covered by the report are relatively heterogenous. In order to present a complete picture, we have also presented market shares on the basis of volumes (see above).

The analysis shows that there are a number of businesses operating in all of the submarkets, and that most of the submarkets are characterised by a moderate and/or decreasing degree of market concentration. This is illustrated in Table 8 below.

Table 8: Degree of market concentration and development over time (based on turnover)

In terms of turnover:	HHI			CR4 ratio			Instability index		Postnord market share		
	2020	2019	2018	2020	2019	2018	2020	2019	2020	2019	2018
Total market	22%	23%	24%	78%	80%	80%	0,05	0,04	50-55%	55-60%	55-60%
Domestic	33%	36%	37%	86%	91%	92%	0,08	0,03	55-50%	60-65%	60-65%
Incoming	20%	18%	18%	78%	77%	78%	0,13	0,05	60-65%	60-65%	60-65%
Outgoing	20%	21%	21%	82%	82%	81%	0,07	0,06	35-40%	40-45%	45-50%

Note: Market share of Postnord: the darker the blue, the greater the market share

The domestic market is the submarket with the highest degree of market concentration, which, however, has decreased over the past three years, both in terms of HHI and the CR4 ratio.

The degree of market concentration is the lowest in the markets for incoming and outgoing parcel delivery services, both with a HHI that shows moderate concentration. The degree of concentration has remained relatively stable in these two submarkets over the past few years, although in 2020 it increased somewhat in the market for incoming parcels, and decreased somewhat in the market for outgoing parcels.

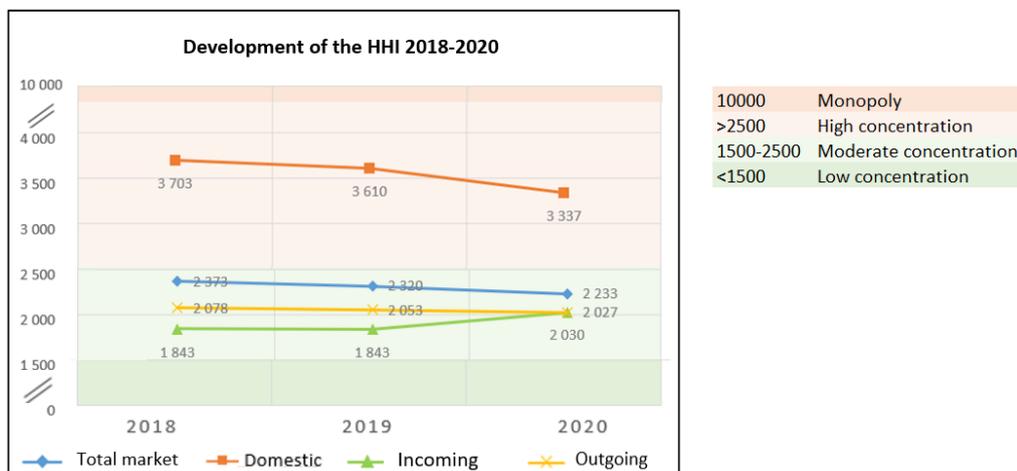
Postnord is the largest business on all of the submarkets, with the exception of the market for outgoing parcels (where UPS is the largest company). The market share of Postnord has decreased in all of the submarkets, with the exception for incoming parcels, where its market share has increased over the past two years. The increase over the past year in the market for incoming parcels partly reflects that at least some of the smaller businesses appear to have been hit harder by flight restrictions during the Covid-19 pandemic. It may also reflect that providers of the universal service, generally, may have found it easier to solve emerging issues related to cross-border parcel distribution during the pandemic.

The instability index, when calculated, shows a value closer to zero than one in all of the submarkets, which indicates relatively stable competition in these markets. The

degree of reallocation of market shares have increased somewhat over the past two years, which can be interpreted as more intensive competition, even though this is based on relatively small changes in the index. It may also reflect the increasingly strong competition in the last mile segment. This trend has been apparent over the past few years, and has previously been described in the PTS annual report *The Swedish Postal Market 2021*¹⁰. In 2020, the reallocation of market shares was the most intense in the market for incoming parcel delivery services, which at least partly reflects Postnord’s strengthened position in this market during 2020.

In sum, the PTS concludes that the analysis based on various indicators of market concentration shows a relatively positive picture of the market, particularly because the parcel market is a relatively young market. Even though based on small changes in the metrics, the picture is generally one of moderate and/or decreasing market concentration, with an increasing number of businesses operating in the market, and a somewhat increased intensity in the competitive dynamics.

Chart 2: Development of the Herfindahl-Hirschman Index (HHI), 2018 - 2020



The degree of market concentration, however, only gives a partial picture of the competitive dynamics in the market. The analysis could therefore be supplemented by examining how the market dynamics affect the turnout in other relevant variables usually associated with a market with well-functioning competition, e.g. the turnout in prices and the degree of innovation in different segments of the market.

References

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- ¹ The EU parcel regulation, see: <https://eur-lex.europa.eu/legal-content/SV/TXT/PDF/?uri=CELEX:32018R0644&from=EN>
- ² Busu (2012), An economic analysis of the degree of market concentration: Competition indicators; Department of Justice & FTC (2010), Horizontal Merger Guidelines
- ³ This is with respect to the aggregated level at which PTS is able to collect data in accordance with the EU parcel regulation – domestic market, incoming and outgoing parcel delivery services. Of course there are submarkets with segments where there is a higher degree of homogeneity in the supply of products, e.g. some B2C segments. At the moment, however, PTS do not have access to data on a more disaggregated level under the EU parcel regulation.
- ⁴ Gwin (2001), A guide for industry study and the analysis of firms and competitive strategy
- ⁵ "Tight oligopoly" has been defined as a market where eight or fewer companies have more than 50 % of the market, and where the largest company has 20 % or more of the market. "Loose oligopoly" has been defined as a market in which fewer than 20 companies have 75 % of the market, but no individual firm has more than 10 to 15 %. See Brodley (1967), Oligopoly power under the Sherman and Clayton Acts
- ⁶ HMG (2020), State of competition: Existing competition indicators
- ⁷ Department of Justice & FTC (2010), Horizontal Merger Guidelines, § 5.3. It should, however, be noted that the European Commission appears to have a somewhat stricter interpretation of the HHI. However, in contrast to the DoJ and the FTC, the Commission has not, as far as we know, established a clear definition of markets in terms of the HHI, which is why we use the definition in DoJ & FTC (2010). In addition, our main purpose with the metric is to find an indicator which allows us to monitor the development over time, and at the moment the American definition therefore appears to be the best one available.
- ⁸ Sys (2009), Is the container liner shipping industry an oligopoly?
- ⁹ Given that you can expect a higher intensity in the reallocation of market shares in a market with homogenous products, compared to a market with differentiated products in which you can expect that businesses to a larger extent compete on the basis of quality and service, and that there is a higher degree of customer loyalty.
- ¹⁰ See The Swedish Postal Market 2021, chapter 2.4 (particularly 2.4.2).