

The Swedish Parcel Market 2021

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 the developments in the postal market, ensuring that postal services meet society's needs, and promoting efficient competition in the market. Since 2018, the PTS is the designated national regulatory authority for Regulation (EU) 2018/644 of the European Parliament and of the Council of 18 April 2018 on Cross-Border Parcel Delivery Services, which aims to promote competition and price transparency in the parcel market. Since the coming into force of this regulation, the PTS has gained increased powers to collect data from businesses operating in the Swedish parcel market. The purpose of this report is to describe the developments in the Swedish parcel market in terms of market growth and market concentration. Based on these statistics, the PTS can conclude, that the parcel market is a dynamic and growing market, with an increasing number of actors operating within the various segments in the market.

Dan Sjöblom
Director General

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1. Introduction

1.1 Introduction

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

The statistics in this report were collected in June 2022, and refer to the calendar year of 2021. This year’s data collection covers 27 individual businesses. Data for businesses which are part of the same business group have been aggregated up into one company. This includes the ten businesses that are part of Early Bird (formerly MTD), which have been aggregated into one company, “Early Bird (MTD)”, as well as DHL Freight and DHL Express which have been aggregated into “DHL”. After this aggregation, 17 actors remain on the market.

“Parcel” is defined, in accordance with the EU Parcel Regulation, as a postal item containing goods with or without commercial value, other than an item of correspondence, with a weight not exceeding 31.5 kg. The regulation further assumes that postal items which are over 20 mm thick contains goods, which are therefore categorised as parcels. The statistics cover three different submarkets:

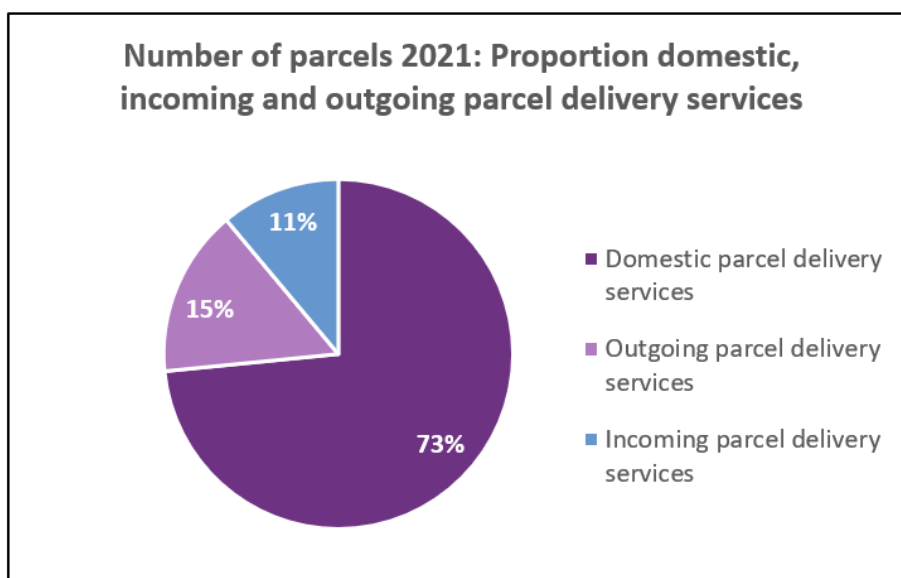
- **Domestic parcel delivery services:** parcels where both the sender and the receiver are located in Sweden (“the domestic market”);
- **Incoming cross-border parcel delivery services:** parcels where the sender is located abroad and the receiver is located in Sweden (“incoming parcels”);
- **Outgoing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

2. The parcel market's submarkets and growth

2.1 Parcel market submarkets

The parcel market's largest submarket is domestic parcel delivery services, which constitute 73 % of the market in terms of the number of distributed parcels. Second largest is cross-border outgoing parcel delivery services (15 %), followed by cross-border incoming parcel delivery services (11 % of the market).

Chart 1: Proportion of domestic, incoming and outgoing parcel delivery services (in terms of volumes)



2.2 Parcel market volumes, turnover and growth

In 2021, approximately 358 million parcels were distributed, of which ca 263 million parcels had both the sender and receiver in Sweden (domestic services), 55.5 million parcels had the sender in Sweden and the receiver abroad (outgoing services), and 39.7 million parcels had the sender abroad and the receiver in Sweden (incoming services).

In terms of turnover, the total value of the market was 22 billion SEK in 2021, of which the domestic market constituted 12.4 billion, outgoing parcels 6.7 billion, and incoming parcels 2.9 billion.

Table 1: Parcel market turnover, volumes and growth in 2021

Parcel market 2021	Turnout 2021		Growth 2020-2021	
	Turnover (bn SEK)	Volumes (mn)	Turnover	Volumes
Domestic parcel delivery services	12.4	263.1	25.6%	29.0%
Outgoing parcel delivery services	6.7	55.5	20.0%	16.8%
Incoming parcel delivery services	2.9	39.7	15.7%	-9.0%
Total market	22.0	358.3	22.5%	21.4%

Compared to last year, the parcel market has grown by 22.5 % in terms of turnover, and 21.4 % in terms of volumes. The submarket that has grown the most is the domestic market (+25.6 % in terms of turnover, +29 % in terms of volumes), followed by outgoing parcel delivery services (+20 % in terms of turnover, +16.8 % in terms of volumes).

In contrast, the market for incoming parcel delivery services has shrunk by 9 % in terms of volumes, but increased by 15.7 % in terms of turnover. This result is a combination of pandemic and price effects. During the Corona pandemic, many parcel delivery operators saw large increases in the volumes of incoming parcels, especially in 2020 where most of the restrictions were in place. These effects were then dampened in 2021, as restrictions were removed. During the same time, average revenues per incoming parcel (approximated as turnover/parcel) have increased for the majority of businesses in the dataset.

3. Market concentration

3.1 Indicators of market concentration

3.1.1 Market shares

Market shares are usually calculated on the basis of value, which is considered to be a good estimate of a business' general ability to overcome obstacles in the market and offer products which consumers find attractive. The exception is where a market is characterized by very homogenous products, where market shares based on volumes may give a more accurate picture. In a homogenous market, products are similar; a cheap product can easily replace a more expensive product. In such a market, a business that offers a new, substantially cheaper product, can have a large competitive impact, even if it does not earn large revenues.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, e.g. in terms of dimensions, weight classes, delivery times, traceability, place of delivery (home/service point/parcel locker), premium services (express/evening/weekend delivery), sectors served (B2C, B2B, C2X), as well as other aspects such as sustainability. It is therefore PTS assessment that the products in the market, on the aggregated level at which we collect data, are relatively heterogenous.³ However, in order to present a complete picture of the market, this report presents market shares both in terms of turnover and volumes.

3.1.2 The concentration ratio

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

Table 2: Interpretation of the CR4-ratio

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
CR4 <= 60	Tight monopoly, or dominant firm with a competitive fringe
CR1 >= 90	Effective monopoly (near monopoly), or dominant firm with competitive fringe

3.1.3 Herfindahl-Hirschman Index

Herfindahl-Hirschmann Index (HHI) is a measure of market concentration, which 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 towards more efficient businesses. ⁵

A HHI value below 1500 (15 %) is usually 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. ⁶

Table 3: Interpretation of the Herfindahl-Hirschman Index

Index value	Interpretation HHI
<15%	Low concentration
15 - 25 %	Moderate concentration
>25 %	High concentration
100 %	Max = monopoly

3.1.4 Instability Index

Instability index is a measure of the change in the relative position of the companies in the market and is often used as a measure of the intensity of competition. The index is calculated as the sum of the absolute change in market shares over a time period. If the index value is close to zero it indicates that the allocation of the market shares is relatively stable, if close to one, that the allocation is relatively instable. The higher the value of the index, the higher the intensity of competition. ⁷

3.2 Market concentration – Total market

There are 17 businesses operating at the level of the total market, of which 12 individually has a market share (in terms of turnover) which exceeds 1 %.

Table 4: Market shares and market concentration – total market

Parcel delivery operator	Market share (turnover) Total market	
Postnord	40-45%	1
DHL	10-15%	-1
UPS	10-15%	-1
Schenker	5-10%	-2
Bring Parcels	5-10%	0
FedEx	1-5%	0
TNT	1-5%	0
Budbee	1-5%	1
Instabox	1-5%	1
DSV Road	1-5%	0
Early Bird (MTD)	1-5%	0
Best Transport	1-5%	0
5 actors individually <1 %	ca 2% combined	--
HHI	22.6% ↑	(22.5%)
CR4 (four largest)	76% ↓	(78%)
Instability Index	0.08 ↑	(0.04)

Parcel delivery operator	Market share (volume) Total market	
Postnord	50-55%	0
DHL	10-15%	-1
Schenker	5-10%	-3
Bring Parcels	5-10%	0
UPS	1-5%	0
Early Bird (MTD)	1-5%	1
Instabox	1-5%	2
Budbee	1-5%	1
Airmee	1-5%	0
TNT	1-5%	0
7 actors individually <1 %	ca 3% combined	--
HHI	31% ↓	(32%)
CR4 (four largest)	78% ↓	(82%)
Instability Index	0.10 ↑	(0.09)

Note: red markings = "deterioration"; green markings = "improvement"

Postnord is the largest actor with a market share between 40 and 45 % (turnover). Next comes two companies with a market share between 10 and 15 % (DHL, UPS), followed by two companies between 5 and 10 % (Schenker, Bring Parcels). Seven companies have a market share between 1 and 5 % (FedEx, TNT, Budbee, Instabox, DSV Road, Early Bird and Best Transport). The five smallest companies each has less than 1 % of the market individually, and a combined market share of ca 2 %.

Compared to last year, Postnord, Budbee and Instabox have strengthened their position with ca 1 percentage point each. In contrast, three players have lost market share – DHL and UPS (ca 1 percentage point each) and Schenker (ca 2 percentage points). The position of the remaining actors is relatively unchanged, each with either a positive (green) or negative (red) change of less than one percentage point.

The CR4 indicator shows that the four largest companies in the market have a combined market share of 76 % (turnover), which has declined over the past year by ca 2 percentage points. This means that, overall, the market power of the largest companies has declined, in favour of the smaller companies. Particularly Instabox and Budbee have strengthened their position over the year. Based on the CR4 ratio we can also determine that the distribution of market shares is in line with the definition of an oligopoly, in this case with one dominant player (Postnord).

The HHI shows a concentration of 22.6 % (turnover), which is moderate market concentration. This represents a marginal increase from 22.5 % last year, which primarily reflects that the largest player has strengthened its position somewhat.

Instability index shows a value relatively close to zero, which can be interpreted as relatively stable competition. The index value of 0.08 means that, in terms of the reallocation of market shares, measured in percentage points, 8 percentage points have been reallocated during the year. This constitutes an increase from a value of 0.04 in the previous year, which can be interpreted such that the intensity of competition has increased somewhat over year, i.e. a larger proportion of market shares have been reallocated.

Basing the analysis on market shares in terms of volumes gives a similar result. The same five companies are on top of the list. It can be established that four companies (UPS, FedEx, DSV Road and Best Transport) each have a larger market share in terms of turnover, compared to volumes, and that the opposite is true for Postnord and Airmea. This may be interpreted as a reflection of differences in the composition of products offered, where some companies to a larger degree have differentiated products for which they can charge a higher price, e.g. a stronger focus on the business sector and/or premium products. It can also be established that the market is more concentrated, but that the degree of concentration has declined at a higher rate, when the indicators are calculated on the basis of volumes instead of turnover.

3.3 Market concentration – Domestic market

In the domestic market, 16 businesses operate, of which 11 individually has a market share which exceeds 1 % (in terms of turnover).

Table 5: Market shares and market concentration – domestic market

Parcel delivery operator	Market share (turnover) Domestic market	
Postnord	55-60%	3
DHL	10-15%	-2
Schenker	10-15%	-4
Instabox	1-5%	2
Budbee	1-5%	1
Bring Parcels	1-5%	0
Early Bird (MTD)	1-5%	1
Best Transport	1-5%	0
DSV Road	1-5%	0
Airmee	1-5%	1
Jetpak	<1%	-1
5 actors individually <1 %	ca 2% combined	--

Parcel delivery operator	Market share (volume) Domestic market	
Postnord	55-60%	2
DHL	10-15%	-3
Schenker	5-10%	-4
Early Bird (MTD)	5-10%	1
Instabox	5-10%	2
Budbee	1-5%	1
Bring Parcels	1-5%	0
Airmee	1-5%	1
Best Transport	1-5%	0
7 actors individually <1 %	ca 2% combined	--

HHI	35%	↑	(33%)
CR4 (four largest)	84%	↓	(86%)
Instability Index	0.15	↑	(0.08)

Note: red markings = "deterioration"; green markings = "improvement"

Postnord is the largest actor in the domestic market, with a market share of 55-60 % (turnover). Next follows two businesses with 10-15 % (DHL, Schenker), followed by seven businesses with 1-5 % (Instabox, Budbee, Bring Parcels, Early Bird, Best Transport, DSV, Airmee and Jetpak).

Compared to last year, four players have strengthened their position (Postnord, Instabox, Early Bird and Airmee). DHL, Schenker and Jetpak has lost market share, whereas the position of the remaining actors is relatively unchanged.

The market concentration is 35 %, i.e. moderate concentration, which has increased by 2 percentage points over the year, which primarily reflects the strengthened position of the largest actor.

The four largest companies have a combined market share (CR4) of 84 %, which has declined by 2 percentage points over the year, reflecting the strengthened position of the smaller players in the market.

Instability index shows a value of 0.15, which represents an increase from 0.08 over the past year. I.e. the intensity of competition has increased somewhat over the year.

Market shares on the basis of volume shows a similar picture. In particular two companies have a larger share in terms of volumes (Early Bird and Instabox), which potentially could be interpreted such that these companies primarily compete within segments which are more homogenous, in which they have been able to successfully compete on the basis of price.

3.4 Market concentration – Incoming parcels

On the market for incoming parcels, 12 businesses operate, of which 8 have a market share which exceed 1 % (turnover).

Table 6: Market shares and market concentration – incoming parcels

Parcel delivery operator	Market share (turnover) Incoming parcels		Parcel delivery operator	Market share (volume) Incoming parcels	
Postnord	25-30%	-6	Postnord	45-50%	-14
UPS	15-20%	0	UPS	20-25%	5
FedEx	15-20%	2	Bring Parcels	10-15%	4
TNT	15-20%	1	Schenker	5-10%	1
Bring Parcels	5-10%	2	TNT	5-10%	2
DHL	5-10%	1	DHL	1-5%	1
Schenker	1-5%	0	FedEx	1-5%	1
Budbee	1-5%	--	Budbee	1-5%	--
4 actors individually <1 %	<1% combined	--	4 actors individually <1 %	<1% combined	--
HHI	17% ↓	(19%)	HHI	31% ↓	(43%)
CR4 (four largest)	77% ↓	(80%)	CR4 (four largest)	87% ↓	(91%)
Instability Index	0.12 ↓	(0,13)	Instability Index	0.27 ↑	(0,09)

Note: red markings = "deterioration"; green markings = "improvement"

Postnord is the largest player in the market for incoming parcels, with a market share of 25-30 % (turnover). Next comes three companies between 15 and 20 % (UPS, FedEx, TNT), followed by two companies between 5 and 10 % (Bring Parcels and DHL), followed by two companies between 1 and 5 % (Schenker and Budbee).

Compared to last year, Postnord, above all, has lost market share, whereas remaining companies either have strengthened their position (FedEx, TNT, Bring Parcels, DHL), or has a position that remains relatively unchanged.

HHI shows a market concentration of 17 %, which is moderate market concentration. Since last year, the concentration has declined by 2 percentage points. The four largest companies have a combined market share (CR4) of 77 %, which has declined by 3 percentage points over the year.

Instability index shows a value of 0.12, which represents a decline from 0.13 in the previous year. I.e. a somewhat smaller proportion of market shares have been reallocated, compared to last year.

Calculating market shares in terms of volumes shows a similar picture. In this market, too, the degree of market concentration is higher, but has declined to a larger extent, when the competition indicators are calculated on the basis of volume. The value of the instability index is also higher, and shows that 27 percentage points have been reallocated over the past year.

3.5 Market concentration – Outgoing parcels

On the market for outgoing parcels, 14 companies operate, of which 8 have a market share which exceeds 1 % (turnover).

Table 7: Market shares and market concentration – outgoing parcels

Parcel delivery operator	Market share (turnover) Outgoing parcels	
UPS	30-35%	0
Postnord	20-25%	-1
DHL	15-20%	2
Bring Parcels	10-15%	-1
FedEx	5-10%	1
TNT	1-5%	0
Schenker	1-5%	0
Budbee	1-5%	1
6 actors individually <1 %	ca 2% combined	--
HHI	21% ↓	(21.5%)
CR4 (four largest)	85% ↓	(86%)
Instability Index	0.07 ↑	(0.06)

Parcel delivery operator	Market share (volume) Outgoing parcels	
Postnord	35-40%	-1
Bring Parcels	20-25%	-2
UPS	15-20%	-1
DHL	10-15%	0
Budbee	1-5%	2
FedEx	1-5%	0
TNT	1-5%	0
Schenker	1-5%	0
Asendia	1-5%	0
5 actors individually <1 %	ca 1% combined	--
HHI	25% ↓	(26%)
CR4 (four largest)	89% ↓	(91%)
Instability Index	0.06 ↓	(0.10)

Note: red markings = "deterioration"; green markings = "improvement"

UPS is the largest player in the market for outgoing parcels, with a market share between 30 and 35 % (turnover). Next comes Postnord (20–25 %), followed by DHL (15–20 %), FedEx (5–10 %), followed by three companies which individually has a market share between 1 and 5 % (TNT, Schenker, Budbee).

Compared to last year, DHL, FedEx and Budbee have strengthened their position, whereas Postnord and Bring Parcels have lost market share. The market shares of the remaining players have remained relatively unchanged.

HHI shows a market concentration of 21 %, which is moderate concentration, which has declined marginally over the past year.

CR4 shows that the four largest companies have a combined market share of 85 %, which has declined somewhat over the previous year.

Instability index has increased somewhat, i.e. a somewhat larger proportion of market shares have been reallocated during the year, compared to the previous year.

Market shares based on volumes shows a similar picture, with the same four players topping the list, albeit Postnord is now the largest player, followed by Bring Parcels, UPS and DHL. In this market too, market concentration is larger, but has declined at a higher rate, when concentration indicators are calculated based on volume.

3.6 Concluding discussion

This section has examined the degree of market concentration in the Swedish parcel market. We have focused the analysis on market shares calculated in terms of turnover, since it is our assessment that the market is relatively heterogenous on the level of aggregation on which PTS collects data. In order to present a complete picture of the market, however, the report also presents market shares calculated on the basis of volume.

The analysis shows that there is a moderate degree of market concentration (HHI) in all of the submarkets, with the exception of the domestic market, which is characterised by a high degree of concentration. During the period of 2018-2021, the concentration has declined in all submarkets, except in the market for outgoing parcels, where the degree of concentration has remained relatively unchanged since 2018.

The concentration ratio (CR4) has over the period 2018-2021 declined in all submarkets, except in the market for outgoing parcels. A decline in the ratio means that the market power of the largest companies has declined, in favour of the smaller companies. This development has been particularly strong in the domestic market, where CR4 has declined by 7 percentage points since 2018, which primarily reflects the continued growth of small but growing companies such as Instabox, Budbee, Airmee and Early Bird. In the market for outgoing parcels, the CR4 ratio has increased over the period since 2018, but has declined somewhat in 2021. The decline in 2021 reflects that relatively new players, such as Airmee and Instabox, has started entering this market as well.

Instability index, which shows the degree of reallocation of market shares, shows a value close to zero in all of the examined submarkets, which indicates relatively stable competition in these markets. Over the period 2019-2021, the value of this indicator has increased on the level of the total market and in the domestic market, but has decreased somewhat in the markets for incoming and outgoing parcels. In 2021, the intensity of competition was the highest in the domestic market.

Postnord is the largest actor in all of the submarkets, except in the market for outgoing parcels, where UPS is the largest player. The market share of Postnord has over the period 2018-2021 declined in all submarkets, except in the domestic market, where it, seen over the whole period, has remained relatively unchanged. In the market for outgoing parcels, UPS is the largest player, but has lost market share over the previous year.

Overall, it is the view of the PTS that the analysis based on various indicators of market concentration shows a relatively positive picture of the market. An increasing number of companies operate within the various submarkets, and the markets are generally characterised by moderate and/or declining concentration since 2018. The exception is outgoing parcel delivery services, but in this market too, we have seen an improvement in the indicators over the past year.

Table 7: Development in indicators over time (calculated on the basis of turnover)

(Turnover)	HHI				CR4 ratio				Instability index			Postnord (%)			
Submarket:	2021	2020	2019	2018	2021	2020	2019	2018	2021	2020	2019	2021	2020	2019	2018
Total market	23%	22%	23%	24%	76%	78%	80%	80%	0.08	0.04	0.04	40-45%	40-45%	40-45%	40-45%
Domestic	35%	33%	36%	37%	84%	86%	91%	92%	0.15	0.08	0.03	55-60%	50-55%	55-60%	55-60%
Incoming	17%	19%	18%	18%	77%	80%	79%	78%	0.12	0.13	0.15	25-30%	30-35%	20-25%	25-30%
Outgoing	21%	21%	22%	21%	85%	86%	86%	81%	0.07	0.06	0.11	20-25%	20-25%	25-30%	25-30%

Note: HHI: green = moderate; red = high concentration. Postnord's market share: the darker the blue, the higher the value.

References

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- ¹ EU Parcel Regulation, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018R0644&rid=2>
- 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. There will of course be submarkets which have segments where there is a higher degree of homogeneity, 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 HMG (2020), State of competition: Existing competition indicators
- ⁶ 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.
- ⁷ Sys (2009), Is the container liner shipping industry an oligopoly?