

The Fading of the Traditional Postal Market Boundaries and a New Role for Postal Operators: A European Perspective



S. Romito, I. Vacca, A. Rovero, and S. Gori

1 Introduction

Exogenous structural phenomena have affected the postal industry in recent years. Mail volumes have dramatically decreased due to digitalization, while parcel volumes have increased mainly due to e-commerce growth. These trends will continue to shape the industry in Europe. In this context, universal service providers (USPs) have diversified their sources of revenues and profits, aiming to grab all the opportunities coming from new businesses such as the growth of parcels and to exploit the economies of scope from the post office network.

Another primary element affecting the industry is competitive pressure the traditional postal market is experiencing on both the “communication side” and the “parcel side.” Moreover, on the “parcel side,” many European postal operators (POs) sell e-commerce deliveries that are generally low-priced and interchangeable, with universal parcels included in the universal service (US) as described in the European postal directive. Hence the competitive field is unbalanced, as the USPs

The views presented are those of the authors and not of the affiliated institutions. We would like to thank our session chairman Prof. Pier Luigi Parcu and discussant Soterios Soteri for the constructive comments and suggestions. Furthermore, we would like to thank Prof. Tim Brennan for providing us, during the discussion in Dublin, a critical assessment of the paper and comments about SSNIP (small but significant and non-transitory increase in price) test. He believes that it is still a topic of debate how much the SSNIP test is a test on market dominance versus a test to identify the availability of substitute services or even more if the objective is to identify specific elasticity. We have taken into account his comments in our paper.

S. Romito (✉) · I. Vacca · A. Rovero
Poste Italiane, Rome, Italy
e-mail: SIMONA.ROMITO@POSTEITALIANE.IT

S. Gori
Poste Italiane, CeSPI, Rome, Italy

face competitive pressure in this growing market but have to bear universal service obligations (USO), while their competitors have no constraints. As a result, USPs have to exploit their operational infrastructure in other markets where this infrastructure may not be the best one.

Recently, in Europe, with regard to the communication side, the Netherland Court of Appeal (College van Beroep voor het bedrijfsleven or CBb 2018) reversed a decision of the National Authority (Autoriteit Consument & Markt or ACM), which certified the existence of significant market power (SMP) by PostNL in a 24-h bulk mail letter consignments market (§7.1.0, §8, §9, §10). According to the Court, the inclusion of electronic communication within the relevant market would have radically altered the conclusions of the Authority regarding PostNL's alleged dominance. The ACM should have considered the analysis conducted using the SSNIP^{1,2} test (small but significant and non-transitory increase in price) showing the potential substitution between physical and digital communications (§7.5, §7.6.1; §7.6.2; §7.8; §7.9.2). One can ask whether the SSNIP test applies to market dominance of a single firm, as opposed to understanding when a merger would increase market power, the purpose for which it was originally designed.³ With regard to parcels, recently in the aftermath of important decisions and evolution of the European regulatory framework including the European Court of Justice Judgment (2018), Cases Confetra and others (§ 76), the European Regulation on transborder parcels,⁴ the Decision SA.38869 (2014/N), and Resolution (Delibera AGCOM 2018a) N.399/18/CONS,⁵ there has been a debate on the parcel delivery market especially on the effects of e-commerce.

Section 2 of this paper analyzes the main dynamics of the postal industry, such as e-substitution, parcels' growth, and diversification of revenues. Section 3 raises questions about CBb's judgment and relevant market definition (from §7.6.2 to §7.9.4), based on "Commission notice on the definition of relevant market for the purposes of Community competition law (European Commission 1997)." The same section provides empirical evidence on the substitution between physical and digital communications. This may generate a peculiar outcome, on one side the new technology can vastly reduce demand for an old technology and the same time, on the other side this

¹The US Antitrust Division (1982), Horizontal Merger Guidelines, Department of Justice, indicates the hypothetical monopolist test has an instrument to define the relevant market. The SSNIP test is used in this kind of analysis as it measures the customer reaction to a hypothetical permanent small price increase (from 5% to 10%).

²This analysis is applied in a conceptual framework defined as a test of the hypothetical monopolist. In short, the analysis investigates, with empirical data and related evidences, whether product A finds sufficiently strong/close substitutes, for example, the product B.

³The US Antitrust Division (1982), Horizontal Merger Guidelines, Department of Justice, <https://www.justice.gov/archives/atr/1982-merger-guidelines>

⁴Regulation (eu) 2018/644 of the European Parliament and of the Council on cross-border parcel delivery services, 18/04/2018.

⁵It is worth including the "Compensation of Poczta Polska for the net of USO 2013–2015" (Decision of European Commission 2015) (§2.2) (analyzed in the paper by Romito et al. (2019) (§3, §4)).

may lead to a dominant position in a rapidly fading-out market. Section 4, observes the growth of e-commerce and some features of e-commerce parcels that make them substitutable with the universal parcel as outlined in the paper by Romito et al. (2019) and in line with the Polish case on the compensation fund cited above. Section 5 tries to imagine, based on the evidence, a new role for the PO in the changing postal industry. In Section 6, we discuss the fading of boundaries of the traditional postal sector and the development of a modern postal sector.

2 Main Dynamics of the Postal Industry

Like many economic sectors, the postal industry has been heavily affected by digitalization in recent years. More specifically, communication processes have been digitalized with a noticeable reduction in postal volumes. Unfortunately for the POs, this trend will not be reversed. Copenhagen Economics (2018a, p. 34–35) observed that interacting with the public administration electronically is “quickly becoming commonplace in many countries” in the EU. Public administration authorities will make it easier for citizens and companies to communicate with them electronically, e.g., change of residency, hospital appointments, and judiciary notifications. Access to the public sector via an electronic identification system is widespread, and in many EU countries, the same electronic identification can be used to interact with both public and private sector (e.g., Austria, Denmark, Iceland, Norway). Copenhagen Economics (2018a, p. 36) points out that the main reasons for the digitalization of communications are the “cost-saving potential for senders” and “the convenience to access, save, and store communication.”⁶ These reasons affect both the public and private sector. Table 1 shows the impact of e-substitution at EU level that affected the postal industry.

The data clearly show the significance and persistence of the negative trend that has affected mail volumes over the last 10 years.

The recent positive phenomenon for the sector is the increase in the parcel volumes, which can become an opportunity for USPs. This trend will continue as it is mainly determined by e-commerce rapid growth which will not end in the next

Table 1 The decline of mail volumes

	Average change rate per year: Letter post volumes		Letter post items per capita	
	2007–2011	2013–2016	2011	2016
EU countries	−4.10%	−4.20%	163	112

Source: Copenhagen Economics (2018a), WIK Consult (2013)

⁶Relative to the public administration reasons for not digitalizing communications are privacy concerns, technical difficulties with e-government platforms, and cultural preferences for traditional postal services.

years. Most European USPs benefit from this new volume flow, but they need to adapt their operational infrastructure. This change of the volume mixed with a growing weight of parcels and a lower weight of mail will determine new business opportunities but at the same time new operational challenges for USPs. According to a study carried out by Copenhagen Economics on European operators, many USPs have indicated in a questionnaire that the most efficient solution is to integrate single steps of production chains (Copenhagen Economics 2018a, p. 59–60) creating a combined network, for example, using postmen to deliver both small parcels and mail.

USPs will also face fierce competition from the existing players, which are also experiencing rising e-commerce-driven volumes. Copenhagen Economics (2018a, p. 81) observes that of about 17 national regulatory authorities, none of them notice a decrease of market shares of USPs' competitors.⁷ USPs have also to cope with bigger e-commerce players developing their own delivery network subtracting precious volumes. Specifically, Copenhagen Economics (2018a) reports that in EU countries, parcel volumes increased 13% per year from 2013 to 2016.

Many European USPs have faced the decrease in profits coming from mail volumes, and they have used their assets to offer services in areas completely different from mail. An example is the offering of higher-margin services (than mail) such as financial services and insurance services (e.g., France, Italy, Switzerland) through the post office network. The USPs have thus exploited the scope economies related to the sale of financial services through a large number of post offices, ensuring themselves a generous source of profits. Copenhagen Economics (2018a) shows that among EU countries, an average of only 53% of USP revenues come from postal services, with a maximum of 90% in Poland and as little as 16% in Germany.⁸

3 The Competitive Pressure of Electronic Communication on the Mail Market

The Commission notice on relevant market definition for the purposes of Community Competition Law (97/C 372/03) states that “market definition is a tool to identify and define the boundaries of competition between firms.The main purpose of market definition is to identify in a systematic way the competitive constraints that

⁷“Nine out of 17 NRAs replied to our survey that the incumbent’s three main competitors’ market shares in the national parcel segment are growing at an at least moderate pace and 3 classified the growth pace as strong. Eight of the responding NRAs considered the market stable. Not a single market was considered to exhibit declining market shares of the incumbent’s competitors” (Copenhagen Economics (2018a, p. 81)).

⁸Regarding these data the report specifies: “Countries that include other postal services not just letter post, FR, IE, and IT, – includes letter and parcel service; DE represents postal business revenues in total group’s revenues; NO represents the mail segments; HR, IS, LT, LU, and MT include other not specified postal services; PL includes all USO services; SE and CH revenues for communication services. The EU, EEA, and CH average is an unweight average.”

the undertakings involved face.” The Commission notice identifies three main sources of competitive constraints: demand substitutability, supply substitutability, and potential competition. The definition of a relevant market implies the definition of the “alternative source of supply for the customers...in terms of products/services and geographic location of suppliers.”

On the demand side, potential substitution may arise from a small and permanent change in prices.⁹ Competitive pressure from e-substitution on mail is relevant for the definition of the relevant market in the recent CBB’s judgment that annulled ACM’s decision. ACM found an abuse of a dominant position by PostNL in the multiple mail market with the delivery in J + 24 h. As a result, to PostNL’s network mandatory conditions for access by other POs were imposed. In defining the relevant market, ACM considered only simple qualitative comparison. ACM excluded a study that aimed to quantitatively define the boundaries of the relevant market using the SSNIP test and that showed potential substitution between PostNL services and the electronic communications. CBB ruled in favor of PostNL in its appeal of the ACM’s decision, rejecting ACM’s definition of the relevant market because of what it deemed insufficient evidence to support the exclusion of electronic communications (§ 7.8, § 7.10). Inclusion of electronic communications in the relevant market would change the outcome of the investigation, as it could revise the assessment of PostNL’s dominance.

In light of this, the Court considered it important that the evidence presented to support a specific definition of the relevant market be robust and convincing. The Court stated that the definition of the relevant market cannot be based only on the listing of the different characteristics of electronic communications with respect to postal services (§ 7.5; § 7.10). The ACM’s definition was challenged by the presentation of empirical evidence that produced different results based on the SSNIP (§7.6.4; §7.7; §7.8). Moreover, the Court did not accept ACM’s finding the alleged independence of digitalization from the competitive dynamics in the postal sector. In the past, when the ACM defined the relevant market in other sectors, it often used the SSNIP test. The Court found that a lack of data on long-term margins was not sufficient to justify ACM’s failure to carry out the SSNIP test (CBB, § 7.9.). Finally, ACM did not carry out all checks in order to decide whether the prices of multiple items were competitive, including an international comparison.

CBB’s judgment indicated that evidence showing the substitution between physical mail and electronic communications and that the analysis to determine the boundaries of the markets is increasingly complex. Market boundaries between digital and physical services are increasingly blurred. Electronic communications exert a competitive pressure that is ever more relevant to the point that the boundaries may disappear.

⁹Commission notice (1997, §17), “The question to be answered is whether the parties’ customers would switch to readily available substitutes or to suppliers located elsewhere in response to a hypothetical small (in the range 5–10%) but permanent relative price increase in the products and areas being considered. If substitution were enough to make the price increase unprofitable because of the resulting loss of sales, additional substitutes and areas are included in the relevant market.”

Table 2 Why digitalize communications

Elements that make business senders to shift to electronic communications	% of respondents that indicated the element
Cost-efficiency	70%
Service quality	40%
Consumer's preferences	35%
Operational needs	29%
Information security and privacy	15%

Source: Copenhagen Economics (2018b)

Other evidence for substitution come from a study developed by Copenhagen Economics (2018b) for Poste Italiane (Il ruolo delle Comunicazioni Digitali in Italia), aimed at better understanding the evolution and the role of digital communications in the Italian postal market. The study also developed a survey focusing on the main kind of communications between companies and users.¹⁰ It is worth noting that in private use (consumers to consumers), postal communication has long been associated with telephone communications (i.e., calls, SMS, chat) and in general via Internet. The survey showed that the overwhelming majority of companies, 98%, communicate with their customers using both mail and digital communications, and only 2% use exclusively paper to communicate.¹¹ Moreover, the survey showed that even small businesses¹² found no barriers in terms of IT-fixed costs in digitalizing, indicating no barriers to shifting between media. Table 2 shows the main reasons of the survey.

Another important element found in another survey in Copenhagen Economics (2018b)¹³ is the power of a bulk sender to encourage its customers to adopt digital communications. The survey also examined the consumers' point of view (the communications recipients). This is important because electronic communications can become a valid alternative to the paper communications only when consumers already use digital channels. The survey pointed out that 48% of the communications received by consumers who have current bank and utilities accounts are digitalized, with 52% paper-based. Three to 4 years ago, 34% of communications were digital, and 66% were paper-based.

¹⁰The survey tested more than 400 Poste Italiane's customers and considered the main uses for communications (such as invoices, periodic reports, bank statements, quotations).

¹¹It is worth noting that the data above exclude firms that have already completely digitalized their communications and are no more Poste Italiane's customers.

¹²Small businesses are defined as small office home office (SOHO) from 1 to 9 employers (Copenhagen Economics 2018b, p. 50).

¹³The survey measures the experience of a representative sample of all Italian consumers and in particular those who have a relationship with a company providing B2C services (utilities, telecommunications companies, banking institutions).

Copenhagen Economics (2018b) also followed the SSNIP test to define the relevant market.¹⁴ The SSNIP test has been applied to bulk mailer, and it has been tested by examining the volume decrease linked to a 10% increase in price. To measure correctly the volume decrease, it is important to notice also the inertial volume reduction of the market as the volume decrease is made of two phenomena: the decrease strictly linked to the price increase and the autonomous market trend. The test divided and measured both these phenomena, and the results show a relevant switch of bulk mailers to digital communications linked to a price increase of 10%. However, this could be an incorrect inference of a lack of market power, as analyzed extensively in the US antitrust literature, or it is better known as “Cellophane fallacy.”¹⁵

Both the Dutch case and Copenhagen Economics (2018b) support a finding of substitution between postal service and digital communications. Another piece of evidence is the observation in the Court of Justice Judgment (2015), in Case Bpost SA C-340-13, where bpost and the French Government noted that “postal services [...] are currently faced with a growing choice of competing methods of sending, particularly that of electronic mail.” Moreover, ERPG (2018, §5) found that there is a “fundamental shift of interpersonal communication to digital modes of communication, new businesses and business strategies (e-commerce, innovative delivery services, e-substitution).” The Fondazione Ugo Bordoni’s (FUB) study (2019) (“E-substitution nel mercato postale della corrispondenza”) found that the boundaries of the postal industry market are blurring due to electronic communications. Hence, certain specific electronic communications should be correctly included in the postal industry market. The study observed that electronic communications partly “hybridize” traditional mail services, such as the registered mail replaced by certified electronic mail, and the bulk (B2C and B2B) mail.¹⁶

The evidence above indicates advanced and strong substitution between paper and electronic communications. Traditional relevant postal markets should be redefined by enlarging the boundaries. Economic studies could be used to redefine these boundaries.

4 The Role of E-Commerce on the Parcel Side

On the other side of the mail market, there is growth in parcel volumes due to the significant increase in e-commerce shipments. Eurostat (2017)¹⁷ showed that the percentage of turnover on e-sales in 2017 was 17% of the total turnover of enterprises

¹⁴This analysis is applied in a conceptual framework defined as a test of the hypothetical monopolist. In short, the analysis investigates, with empirical data and related evidences, whether product A finds sufficiently strong/close substitutes, for example, the product B.

¹⁵“Undertaking a market definition analysis at monopolistic prices can lead one to define too broad a market and fail to identify market power when it is present, which is known as the ‘Cellophane Fallacy’,” United States Department of Justice, Monopoly Power, Market Definition and the “Cellophane” Fallacy, <https://www.justice.gov/atr/monopoly-power-market-definition-and-cellophane-fallacy>

¹⁶“E-substitution nel mercato postale della corrispondenza” (p. 22–23).

¹⁷Data are related to 2017.

with ten or more employers. In the EU-28, the percentage of enterprises making e-sales is about 20%, with Ireland (35%), Sweden and Denmark (32%), Belgium (30%), and the Netherlands (27%) having higher percentages.

Important new elements in the legal landscape are emerging. “The parcel delivery services are changing fast,” as observed by the recital 30 of the Regulation (eu) 2018/644. This recital recognized the importance of the change in these services set rules in order to improve them “especially for individuals and micro and small businesses.”¹⁸ Another important recent development was the Court of Justice Judgment, Cases Confetra, and others (§ 76), which also allowed requiring the contribution from firms to a USO compensation fund if they provide services interchangeable “to a sufficient degree with the universal service.” Moreover, the same judgment has stated (§ 76) that national legislation can define “haulage, freight-forwarding and express mail undertakings providing services involving the clearance, sorting, transport and distribution of postal items constitute, except where their business is limited to the transport of postal items, postal service providers.” The European Commission in UPS/Tnt Express (2013, at §207) noted that both express and standard parcel deliveries have been increasing, with standard shipments having grown more.

This growth may be linked to the rise of e-commerce, the growth of B2C deliveries, as these deliveries “are predominantly shipped by deferred shipments,” that is, standard deliveries. In Italy, the NRA has started an analysis of the delivery market also aimed at examining the effects of the e-commerce growth on the market. This trend of increasing e-commerce volumes is destined to continue, and therefore, it becomes fundamental to understand the characteristics of these items. The proper understanding of these characteristics allows to correctly classify such mailings and to correctly define the boundaries of the mail market on the “parcel side.” Recently Romito et al. (2019) attempted to classify these items by analyzing the characteristics of these shipments. Several EC Decisions have identified price and delivery time as the main features to classify these items. Most of the e-commerce shipments appear to have the same characteristics of the universal parcel (low price and no committed delivery).¹⁹ Services interchangeable with universal services have to contribute to the compensation fund.

FUB’s study (2019) found that the majority of e-commerce shipments are similar to universal services, so that they should be included in the postal industry market.²⁰ Furthermore, the Dutch State Secretary for Economic Affairs and Climate’s letter “An affordable postal letter in a digital society” (2018) observed that e-commerce shipments are growing and they should be included in a “broader” market that could

¹⁸Recital 9, Regulation (Eu) 2018/644.

¹⁹UPS/Tnt Express, 2013, at § 156, “In line with its decisional practice, the Commission identifies the relevant product markets on the basis of the speed of delivery (that is to say, express delivery services - commonly understood as services with a next day delivery commitment, and standard/deferred delivery services)”. In the most recent Decision, Fedex/Tnt Express (2016 at § 90), the Commission defined “deferred delivery services” as those “with a longer delivery time” comparing to express deliveries which are “also considerably more expensive.

²⁰FUB (2019), E-substitution nel mercato postale della corrispondenza, p. 22–24.

include even logistic services.²¹ Finally, WIK Consult (2019) noticed that in the delivery market, “the boundaries between standard parcel and express services are blurred – and will become more so.”²²

It is worth noting that recital 15 of the EU Regulation 2018/644 observes about e-commerce parcels that “they are often processed in the letter post mail stream.” In Resolution (Delibera AGCOM 2018b) 452/18/CONS (§ 4.2.6. – V.15; V.17), the Italian national regulatory authority (here after AGCOM) pointed out that about 80% of e-commerce parcels weigh less than 2 kilos. They undergo the same operational processes of registered mail if there is the signature and regular mail otherwise. Both e-commerce parcels and mail can be delivered to receivers if there is the signature or in the postbox (when there is no signature) by the postmen together with other universal services. Both the Regulation and the Italian NRA AGCOM’s Decision (§ 4.2.6. – V.15; V.17) show that the overwhelming majority of e-commerce parcels use the same operational processes of universal services, which is another element that shows the substitutability of majority e-commerce parcels with universal parcels.

5 The PO’s New Role in the New Age of the Postal Industry

The postal industry continues to change. Both universal and other services are seeing the competition from other services such as electronic communications, which can substitute for different kinds of physical communications. In this new era, the PO is seeing the blurring of the boundaries of its traditional postal markets and should consider what steps to take. Figure 1 tries to describe the new postal operator’s role considering communication and the delivery markets in which they operate.

The Incumbent Postal Operator could become the “link” between the communication and delivery markets that are being heavily impacted by digitalization, and physical communication has been more and more displaced by digital communication, while the delivery market has experienced an enhanced role due to digitalization. A primary role can be played by the post office network as a strategic asset that can become a tool to promote social inclusion (in some cases contributing to reduce the digital divide by bringing digital services inside the premises of the post office), as Gori (2018) showed,²³ due to its network that ensures a physical presence in both

²¹“On the other hand, adjoining markets driven by e-commerce are growing, especially in the parcels market and the broader delivery services market..... possibly becoming a market for the delivery of products or services, such as letters, parcels, and weekly meal boxes or an even wider logistics services market” Ministry of Economic Affairs and Climate Nederland (2018), An affordable postal letter in a digital society, p. 1.

²²Slide 24.

²³Gori (2018), (§ 6), “The specific characteristic of widespread physical presence and consumers’ trust of the Postal Operators, i.e. once again building on their legacy assets, can lead to a new strategy that fully integrates them in the digital world” (p. 13).

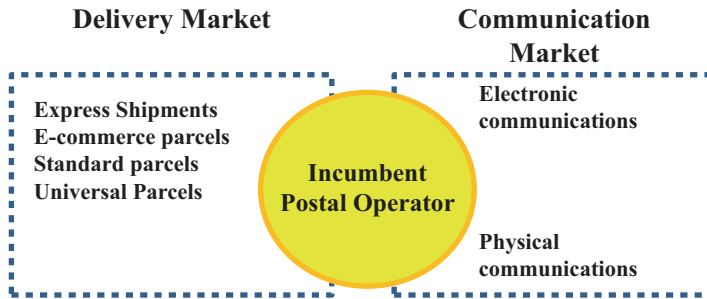


Fig. 1 The new PO's role in the delivery and communication markets

rural and urban locations. UPU (2018) emphasized that the delivery network used for the universal services can deliver e-commerce parcels. Along this line, the Italian NRA AGCOM in Resolution 452/18/CONS (§ 4.2.6. – V.16) underlines that players in the postal market are delivering e-commerce parcels and are reorganizing the delivery network to better exploit the synergies from the joint delivery of mail (especially registered mail) and e-commerce parcels (AGCOM 2018b).

The FUB Foundation goes a step forward and envisions even a “digitalized post office” where other services besides mail and parcels delivery are available such as services delivered on behalf of the local and regional postal administration (e.g., Spain and Italy). The PO can perform its new role in different ways, following the different business models developed in response to digitalization. Gori (2018) observed different reactions of USPs to the Internet revolution, and they have clustered them into two groups, those who “embrace primarily digitalization and technological development with the aim to improve their traditional business model, and the second group choosing a radical diversification of the business models adjacent of other market area” (Gori 2018, p. 6).

6 Conclusions

The progressive digitalization and the e-commerce development are reshaping the postal industry. The shift is so deep that it must be reflected in a change in the regulatory and legal context in all its different aspects. Recently the ERPG (2018, §4.1) underlined in a report that an important issue that the European legislator has to bear in mind:

is whether there is still a specific postal market and, if so, how this market may be determined. The elements to consider in doing this exercise are the “convergence... between postal services and electronic communications on the other hand, the diversification of services provided by postal operators, the most recent technological innovations, the new business models and strategies deployed by postal operators and other market players (e.g. vertical integration etc.) and changing consumer behavior and demand.

Moreover UPU (2018) stated that:

it is important to consider the recent trend in some countries to give a wider definition of the postal market in their national regulations which also incorporates digital communications. This interpretation implies a resizing of traditional postal services' share in this new wider market, thus opening a reflection on the re-definition of the role of postal operators.

A new role of the PO seems to emerge at the same time a change of the regulatory context becomes a need. The PO is becoming the link between the delivery and communication markets exploiting its primary assets the delivery network, the post office/acceptance point network, and proximity services. An updated regulatory outlook is necessary to support the PO's new role. Obsolete regulations run the risk of damaging the PO's evolution. A first step in Europe might be a new definition of relevant markets in antitrust analysis/cases taking into account the digitalization of the communications. Another step in Europe might be analysis of parcel markets and e-commerce shipments by NRAs in order to properly regulate these new streams of deliveries. These new regulatory frameworks will have to take into account the specificities of two groups described above by Gori 2018, ((1) those embracing digitalization but without changing the business model and (2) those taking a more radical business approach) to avoid a "one fit for all" model.

References

- AGCOM. (2018a). Delibera N.399/18/CONS Avvio dell'analisi del mercato dei servizi di consegna dei pacchi.
- AGCOM. (2018b). Delibera n. 452/18/ CONS Definizione del test di replicabilità delle offerte di servizi di recapito di invii multipli di Poste Italiane e dei criteri per la sua conduzione.
- College van Beroep voor het bedrijfsleven. (2018). Case numbers: 17/1385, 17/1387, 17/1389, 17/1390 <https://uitspraken.rechtspraak.nl/inziendocument?id=ECLI:NL:CBB:2018:440>
- Copenhagen Economics. (2018a). *Main developments in the postal sector (2013–2016), Study for the European Commission*. Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs.
- Copenhagen Economics. (2018b). *Il ruolo delle comunicazioni digitali nel mercato postale*. Study for Poste Italiane.
- Court of Justice Judgment. (2015). Bpost Sa, C 340/16.
- Court of Justice Judgment. (2018). Confetra and Others, C 259/16.
- Decision of European Commission. (2013). Case No COMP/M 6570 UPS/TNT Express.
- Decision of European Commission. (2015). SA.38869 (2014/N) – Compensation of Poczta Polska for the net of USO 2013–2015.
- Decision of European Commission. (2016). Case No COMP/M7630 Fedex/TNT Express.
- Directive 97/67/EC of the European Parliament and of the Council with amendments, (15 December 1997).
- ERPG. (2018). *Developments in postal sector and implications for regulation*.
- European Commission. (1997). *Commission notice on the definition of relevant market for the purposes of Community competition law (97/C 372/03)*.
- Eurostat. (2017). *Eurostat statistics*. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=E-commerce_statistics#The_share_of_turnover_from EDI-type_sales_is_greater_than_that_from_web_sales

- Fondazione Ugo Bordon. (2019). *E-substitution nel mercato postale della corrispondenza*, February, 2019. http://www.fub.it/it/News/Eventi/La_trasformazione_digitale
- Gori, P. (2018). Postal operators as “Ground Based” online platforms. In *New business and regulatory strategies in the postal sector*. Cham: Springer.
- Ministry of Economic Affairs and Climate Nederland. (2018). *An affordable postal letter in a digital society*, 15 June 2018.
- Regulation (eu). (2018). *2018/644 of the European Parliament and of the council on cross-border parcel delivery services*, 18/04/2018.
- Romito, S., Gori, S., & Rovero, A. (2019). Compensation fund in postal service: A step forward after the Polish case. In *New business and regulatory strategies in the postal sector*. Cham: Springer.
- United States Department of Justice. *Monopoly power, market definition and the “cellophane” fallacy*. <https://www.justice.gov/atr/monopoly-power-market-definition-and-cellophane-fallacy>
- UPU. 2018. *Digital policy and regulatory considerations for postal operators – White paper – Document from the Electronic Services Development Group*.
- US Antitrust Division (1982). Horizontal Merger Guidelines. Department of Justice. <https://www.justice.gov/archives/atr/1982-merger-guidelines>.
- WIK Consult. (2013). *Main developments in the postal sector (2010–2013)*. Study for the European Commission.
- WIK Consult. (2019). *Development of cross –border e-commerce through parcel delivery. A study for DG GROW*.