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Governments and Firms' Perspective

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1 Introduction

Modern postal service began in the UK in 1840 (Royal Mail Group (2014)) with a system characterized by universal pricing regardless of origin or destination, and by the prepaid system of postal stamps. This basic arrangement for postal service has since been adopted in countries around the world and has become the international norm.

An important network industry, postal service has traditionally been provided by national governments in the form of a monopoly. While postal service at first comprised only the exchange of letters for personal correspondence, service soon expanded to include the delivery of parcels, newspapers, periodicals, direct mail, and many other items. In some countries, postal organizations have evolved to encompass even banking and insurance businesses.

However, postal service now faces an important turning point in its mission to deliver information and goods. Hard copy letters are becoming obsolete as they are rapidly replaced by electronic messages and quick, easy cellphone calls. Another big challenge in the postal industry is the introduction of competition among postal service providers, part of the trend toward deregulation in recent years designed to mitigate the lack of efficiency of traditionally monopolistic government-run postal services. In other public utility industries, for example industries providing electricity, gas, water, rail service, and so on, competition policies have been implemented and privatization carried out either wholly or in part. It is the purpose of this paper to examine where postal service stands today and to provide advice relevant to its future policy and management.

This paper consists of five sections after the introduction. Beginning in the second section, explanation and discussion focus mainly on the selected countries, chosen as examples which best show the characteristics of postal service in terms of regulation, liberalization, governance and strategies: the UK, France, Germany, the US, and Japan. The second section gives an overview of postal service: (i) size, (ii) organizational form, and (iii) major regulations regarding such matters as entry, price, and regulatory body.

The third section concerns the movement toward liberalization of postal services, which has garnered much attention in recent years in many countries. We will give historical reasons for governments' decisions to pursue liberalization.

The fourth section discusses the universal service obligation (USO), with a focus on businesses covered by the USO, postal items to which the USO applies, financial backing for the USO, and other related issues. After listing the characteristics of USOs of each country, we will discuss methods of USO measurement: (i) the deficit approach, (ii) the net avoidable cost approach, (iii) the entry pricing approach, and (iv) the profitability cost approach.

The fifth section discusses management issues. It is important to note that liberalization which includes privatization spurs more radical reforms in management than liberalization without it, and that this topic might have particular relevance to deciding future policy. This section focuses especially on (i) governance structure, (ii) diversification strategy, and (iii) internationalization strategy.

2 Summary of Postal Service in Selected Countries

In this section we will give an overview of postal services in the selected countries: the UK, France, Germany, the US, and Japan. We will focus on the following items: 1) size of postal services, 2) ownership and managerial type, 3) regulations such as those related to entry and price, and regulatory body.

2.1 Size of Postal Services

Table 1 shows a comparison of the size of postal service organizations in FY2012. As there are variations among these countries in terms of population and total land area, we use the unit number per population and land area.

The number of post offices is on average about 30 to 50 per 1000 km² of land area. The US, with its huge land area, has a much smaller number than average, and Japan, 70% of whose land area is comprised of mountains, has a much larger number. It is also worth noting that the UK's number is slightly larger because its non-permanent post offices are included in the total.

Second, the number of employees is similar among these countries, except for Germany, which has between 2 to 4 employees per 1000 population. The number of employees for Germany includes part-time staff.

Table 1 Comparison of Size of Postal Service in FY2012

Country	UK	France	Germany	US	Japan
Main provider	Royal Mail	La Poste	Deutsche Post DHL	USPS	Japan Post
Population (thousand)	62,798	63,458	81,991	315,791	126,435
Area (1000 km ²)	242.9	551.5	357.0	9,629.0	377.9
Number of post offices ^(a) (Per 1000 km ² area)	48.7 ^(b)	30.9	36.4	3.1	64.9
Number of employees (Per 1000 population)	2.39 ^(b)	3.57	5.17 ^(c)	1.99	3.09
Number of delivery items ^(d) (per 1000 population)	0.29	0.24 ^(e)	0.25	0.47	0.17
Postal service revenues ^(f) (per population)	127.2	293.0	581.2	134.4	105.4

(Notes):

- (1) These numbers are obtained from Statistics of Universal Postal Union and from each country's home page.
- (2) In item (a), this number includes both permanent post offices and post offices under contract.
- (3) In item (b), this number is for FY2011.
- (4) In item (c), this number is the total number of employees including both permanent employees and part-time staff.
- (5) In item (d), this number is the total number of letter-post items (domestic service) and ordinary parcels (domestic service).
- (6) In item (e), this number is for FY2011 and includes international service (dispatch), but excludes unaddressed advertising items.
- (7) In item (f), the unit is SDR (Special Drawing Rights). 1SDR = 140.8846 yen in January 2014.

The number of delivery items is also similar among these countries, except for the US, where the number is inflated by the high letter-post volume, most likely the result of massive direct mailing advertising activities.

Finally, postal service revenues per population are apparently similar among these countries, except for Germany, whose revenues are about 4 to 5 times higher than for other countries, presumably because Deutsche Post has likely included in its total revenues those of DHL, a leading global postal service provider with which it has merged. We will discuss this type of international business strategy in a later section.

2.2 Organizational Form

Postal service can be organized in several ways. In this section, by considering ownership, managerial type as organizational structure, and the range of related services in the selected five countries, we will examine the organizational forms which postal service may take. Table 2 shows the organizational form of postal services.

Table 2 Organizational Form of Postal Service

Country	UK	France	Germany	US	Japan	
Provider	Royal Mail	La Poste	Deutsche Post DHL	USPS	Japan Post	
Establishment year						
State owned:	1660	1804	1876	1775	1871	
Public Corporation:	1969	1991	-	1971	2003	
Corporatization:	2001	2010	1995	-	2007	
Privatization:	2013	-	2000	-	-	
Company type	Holding company type	Single corporation type	Single corporation type	Public corporation type	Holding company type	
Ownership	30% public ownership ^(a)	100% public ownership	21.0% public ownership ^(b)	100% public ownership	100% public ownership	
Post	100% subsidiary of holding company	Corporation	Corporation	Public Corporation	100% subsidiary of holding company	
Other business	Banking	None	100% subsidiary of post company	None	None	100% subsidiary of holding company
	Insurance	None	Associated company of post company	None	None	100% subsidiary of holding company
	Front customer service	100% subsidiary of holding company	None	None	None	100% subsidiary of holding company ^(c)

(Notes):

- (1) This information has been modified from information obtained from the Ministry of International Affairs and Communications (2013c) and each organization's homepage.
- (2) In item (a), the number is the ratio of public ownership (government and government-related financial organizations).
- (3) In item (b), the number is the ratio of public ownership (government-related organizations) from the Deutsche Post (http://www.dpdhl.com/en/investors/shares/shareholder_structure.html, accessed on September 4, 2014).
- (4) In item (c), this company was integrated into the Post company on October 1, 2012.

Royal Mail is a member of the Royal Mail Group, which has one holding company and one main postal service company. Royal Mail Group, Ltd., which is owned by Royal Mail plc, has two brands 'Royal Mail' and 'Parcelforce Worldwide' and three affiliated companies: Royal Mail Investments Ltd., Royal Mail Estates, Ltd., and Romec Ltd. In 2013, Royal Mail was privatized and about 70% of its shares were sold to the private sector.

According to Le Groupe La Poste (2013), France's La Poste Group has six main companies subsidiary to the parent company La Poste S.A and many others associated with these six companies. La Banque Postale, the former postal savings division of La Poste S.A., now works as a main financial services provider in the group, and became a subsidiary in 2006. Although La Poste S.A. became a public limited company in 2010, 73.7% of its shares were still held by the French government as of 2013.

Germany's Deutsche Post DHL is an independent company with two internal divisions, Post-eCommerce-Parcel and DHL, in addition to Corporate Center. According to Deutsche Post DHL (2013), the Post-eCommerce-Parcel division handles mail, e-post, press services, export and import, and global eCommerce. The DHL division has three sub-divisions: Express, Global Forwarding, Freight, and Supply Chain. Corporate Center provides main office functions for the entire company, including board services, corporate controlling, corporate finance, and human resource management. Though not shown in the figure, Deutsche Post DHL has many affiliated companies, associated companies, and joint ventures around the world. The origin of Deutsche Post DHL was Deutsche Post AG, created during the privatization of Deutsche Bundespost in 1995. Deutsche Post acquired DHL in 2002 and integrated related business operations under the DHL brand. Worthy of note is that Deutsche Postbank AG and Deutsche Telekom AG were separated from Deutsche Bundespost when it was privatized and now have no capital ties with Deutsche Post DHL.

The USPS falls into the category of public corporation, a quasi-independent organization operated by the government, with one segment incorporating mailing, shipping, packages, and international services. According to the United States Postal Service (2013), the USPS began operations in 1971, after the Postal Reorganization Act of 1970 stipulated that the Post Office be transformed into a self-funding entity.

Japan Post Group, which is a holding company type organization, has three main service providers—Japan Post, Japan Post Bank, and Japan Post Insurance—in addition to 16 affiliated companies and consolidated subsidiaries. These three service providers were created under Japan Post Holdings, when Japan Post was privatized in 2007. One hundred percent of

the shares of Japan Post Holdings are still held by the government. Japan Post Insurance and Japan Post Bank also subcontract operations to Japan Post.

From these results, we can summarize as follows. First, postal services are largely publicly owned. Among the selected countries—in France, the US and Japan—postal service organizations have 100% public ownership. In the UK and Germany, however, ownership is more private sector- or business-oriented.

Second, as for company type, these postal organizations can be divided into three groups: 1) the single corporation type, which includes Deutsche Post DHL and La Poste; 2) the holding company type, which includes Royal Mail and Japan Post; and 3) the public corporation type, which includes the USPS. Deutsche Post DHL, La Poste, Royal Mail, and Japan Post are all stock companies with several divisions and affiliated companies.

Last, the postal service industries in France and Japan also provide banking and insurance services. This strategic behavior will be discussed in Section 4.

2.3 Major Regulations and Regulator

This section will provide an overview of the main regulations and regulatory bodies related to postal services. As Table 3 shows, regulatory situations vary among countries. First, as for entry regulations, while both the UK and the US have none, there are limitations on entry (i.e., through licensing or permission systems), in France, Germany and Japan. There are differences in regulation only in services related to personal correspondence, such as letters. For parcel delivery service, there are no entry regulations at all.

Second, there is much variation in price regulation among countries, especially in non-competitive service. With no price regulation, the UK is the most liberalized country, while Germany and the US have stricter regulations: the price of non-competitive service must be approved by the regulator. Falling somewhere between are France and Japan, where price is not subject to strict limitations but must simply be reported in advance. For competitive service, there are no regulatory limitations except in the US, where price regulation is apparently still rather conservative.

Last, Mizutani (2014) argues that the existence or non-existence of an independent regulator is an important factor affecting the fairness of judgment regarding incumbents and new entrants.

Table 3 Main Regulations and Regulatory Bodies

Country		UK	France	Germany	US	Japan
Major Law		Postal Services Act (2011)	Postal Services and Electronic Communications Code	Postal Law (Postgesetz)	U.S. Code (Title 39)	Postal Law
Entry Reg.	Personal correspondence	None	License ^(a)	License ^(b)	None	Permission
	Parcel	None	None	None	None	None
Price Reg.	Non-competition service	None	Report in advance, Order of change and suspension	Approval ^(c)	Approval ^(d)	Report in advance
	Competition service	None	None	None	Approval ^(e)	Report after
Independent regulatory body		Yes	Yes	Yes	Yes	No
Regulator		Office of Communications: Ofcom	Electronic Communications and Postal Regulation Authority: ARCEP	Federal Network Agency for Electricity, Gas, Telecommunications, Post and Railway : BNetzA	Postal Regulatory Commission : PRC ^(f)	Ministry of Internal Affairs and Communication

(Note):

- (1) This information was obtained from the Universal Postal Union (2014), the Ministry of International Affairs and Communications (2013a) and other organizations and regulators in selected countries.
- (2) In item (a), a license is not always necessary for domestic-only and non-delivery services.
- (3) In item (b), a license is necessary for addressed letters (i.e. personal correspondence) of less than 1kg, and direct mail items.
- (4) In item (c), prices should be approved for addressed letters (i.e. personal correspondence) of less than 1kg and direct mails. However, bulk mail with more than 50 items per unit is excluded.
- (5) In item (d), the postal service may implement postage rate changes for market-dominant products, subject to a minimum of 45 days advance review by the Postal Regulatory Commission (PRC), for consistency with the price cap and certain factors and objectives.
- (6) In item (e), for competitive products, the Postal Service may implement competitive price changes on 15 days' notice for rates not of general applicability (negotiated service agreements) and on 30 days' advance notice for rates of general applicability, subject to filing with, and review by, the Commission.
- (7) In item (f), the PRC is the regulator for the USPS only, and private providers are excluded.

An important feature of postal service in Japan is that regulators and policy makers are one and the same, a situation quite different from that in many European countries and the US, where postal service regulators are separate from ministries (departments) involved in policy making. In Japan the government itself both creates and regulates policy, one reason being that competition in the postal service has not become fully open. The market itself is tightly limited to existing incumbent companies, and the idea of pursuing fair judgment from disinterested regulators has not taken hold in Japan.

The regulatory situation is more advanced in European countries such as the UK, France and Germany, which have independent regulatory bodies, in compliance with Article 22 of EU Directive (97/67/EC), stipulating that postal service in each country must maintain an independent regulatory body separate from the supervisory authority.

3 The Liberalization of Postal Services

This section summarizes the liberalization of postal service. Details can be found in, for example, Crew et al. (2008) and Eccles (2008).

3.1 A History of the Liberalization of Postal Service

Traditionally provided by national government, postal service began to be reformed in the late 1980s. Two important 1988 reforms stand out: (i) action toward an integrated postal service market within the European Union, and (ii) efforts to rectify the monopolistic postal service situation in New Zealand. The first reform aimed to create inside the European Union a common market with standard rules. The second reform involved introducing competition. While monopolistic postal service has the advantage of fostering the provision of stable service, monopolies are costly due to the lack of competition, a problem worldwide postal reforms were intended to address. Major reforms are as follows:

1992	Postal Green Paper by EU toward a future integrated market ¹
1993	Abolition of monopoly in the Swedish postal service
1997	The first EU Postal Directive (Directive 97/67/EC)
2000	Abolition of a monopoly situation in postal service and construction of a regulatory body in the UK,

¹ The Postal Green Paper by the European Commission (1992) examines each country's current situation, existing problems and future potential problems, and investigates feasible solutions in order to implement policy to realize a future integrated market in the EU.

Privatization of Deutsche Post

2002	The second EU Postal Directive (Directive 2002/39/EC)
2005	Privatization of Japan Post and subdivision of postal services
2008	The third EU Postal Directive (Directive 2008/6/EC)

Among these reforms, we will summarize the essence of the EU Postal Directives. The first EU Postal Directive has four important points. First, postal service should fulfill a minimum universal service obligation. Second, gradual and controlled liberalization of postal service must be carried forward. Third, the price of universal service obligation should reflect its cost. Last, accounting separation must be observed between monopolistic and non-monopolistic postal services. The second EU Postal Directive stipulated that monopolistic postal services be reduced. The third EU Postal Directive asks member states to liberalize the postal service market by the end of December 2010, with the exception of some countries which are given an extended deadline of the end of December 2012. It is worth noting that there has been much variation in the process of liberalization of the postal service from country to country.

3.2 Reasons for Liberalization

The liberalization of postal service was spurred by liberalization in other industries, notably air transportation, telecommunications, and energy (i.e. electricity and gas utility). Beginning in the early 1980s in the UK and the US, massive deregulation and privatization quickly caught on worldwide, common trends being the privatization of state-owned corporations, the introduction of new regulation schemes such as incentive regulations (i.e. price-cap, yardstick regulation), the reduction or abolition of entry barriers, and the embracing of free competition to/in the market.

The postal service industry was a latecomer to liberalization, lagging about ten years behind other public utilities industries, despite the increasingly urgent need for liberalization, for several reasons. The first reason was the clear necessity of integrating postal service with other telecommunication tools such as the facsimile and the Internet. For example, according to Post and Parcel (2011), such integrated systems as E-Postbrief by Deutsche Post and Digiposte by La Poste have been in operation since 2010. Liberalization was necessary also because competition had severely increased against rivals such as the private mail express services that were proliferating in the 1980s. Furthermore, the traditional core business of postal service industry—personal letters—was being supplanted in the 1990s by e-mail. Third, the decline in

demand and the increase in the cost of postal service worsened the managerial and financial situations. To solve these problems, national governments exhorted post offices to improve efficiency, ultimately leading to the liberalization of postal services through reforms in the post office, price setting, the introduction of competition, and other areas.

4 The Universal Service Obligation

Although there is no concrete definition of “universal service,” there seems to be consensus about what it means. A report by the OECD (1991) defined universal service as having four components: universal geographical access, universal affordable access, universal service quality and universal tariff. Based upon these ideas, the universal service obligation (USO) could be defined as the obligation of a provider to provide good quality service to all users at uniform and affordable prices (Mizutani, 2012). In this section, we explain the characteristics of the USO and methods of calculating it.

4.1 Situation of Universal Service Obligation in Selected Countries

Table 6 shows an international comparison of the USO system for postal service. It can be seen that selected countries have adopted similar approaches. Postal items to which the universal service obligation applies are mainly letters, registered mail, guaranteed mail and parcels. Postal tariff is applied at a flat rate nationwide.

Second, although the USO is maintained in the postal service, the monopoly situation no longer remains. Competition is applied in almost all fields of postal service, except in the US, where the USO system appears to be conservative.

Third, although there are variations among countries in the financial means for maintaining the USO, there are four main sources: (i) tax privileges, (ii) funds, (iii) subsidies, and (iv) loans. Obtained by exemption from Value Added Tax, tax privilege refers to a financing method used in European countries such as the UK, France and Germany. Funds, used in France, Germany and Japan, are another source for the USO, although there are slight differences among the countries as to who should contribute. Subsidies from the national government also support the USO. In the US, borrowing and the right to issue bonds are also allowed as ways to finance the USO, though these methods are used sparingly.

Table 5 The Universal Service Obligation System in the Postal Service

Country	UK	France	Germany	US	Japan
Provider	Royal Mail	La Poste	Deutsche Post	USPS	Japan Post
Coverage Business for Universal Service Obligation	Postal service	Postal service	Postal service	Postal service	Postal service, Banking, Insurance ^(a)
Items for Universal Service Obligation in Postal Service	Postal matters under 20kg, registered mail, guaranteed mail ^(b)	Letters under 2kg, newspapers, magazines under 2kg, parcels under 20kg, registered mail, guaranteed mail	Letters under 2kg (including registered mail, guaranteed mail, cash on delivery), Parcels under 20kg	Services provided by USPS	Postal items under 4kg, registered mail, content-certified mail
Description of service standard ^(c)	Yes	Yes	Yes ^(d)	Yes	Yes
Competition field	All	All	All	All except monopoly field	All
Monopoly field ^(e)	None (abolition in 2006)	None (abolition in 2011)	None (abolition in 2008)	Postal items with standard tariff less than tariff as much as 6 times & its weight less than 12.5 ounce (about 350 g), Monopoly on postal receiving box	None (abolition in 2003)
Financial Backing for the USO	Tax Privilege: Exemption from Value Added Tax (VAT)	Tax Privilege: Exemption from Value Added Tax (VAT)	Tax Privilege: Exemption from Value Added Tax (VAT)		
	Subsidies: Support from national government ^(f)	Subsidies: Support from national government ^(f)			
		Fund: Contribution to fund by each organization according to amount of sales ^(g)	Fund: Contribution to fund by each organization according to amount of sales ^(h)		Fund: A portion of Japan Post Holding company profits
				Others: Borrowing, issuing of bonds	

(Note):

- (1) This table was devised by the authors based on Mizutani (2012), the Ministry of International Affairs and Communications (2013a), the Ministry of International Affairs and Communications (2013b), ERGP (2012).
- (2) In item (a), according to the Ministry of International Affairs and Communications (2013b), the Postal Business Law was revised in 2012 to extend coverage of the universal service obligation to postal banking and postal insurance services.
- (3) In item (b), Article 3.4 and Article 3.5 in the EU Postal Directives in 1997 included different items to be covered by the universal service obligation. Here we follow Article 3.5, which stipulates that, at the discretion of individual countries, the minimum requirement be expanded to parcels under 20kg.
- (4) In item (c), as for details of USO service standards, see Mizutani (2012).
- (5) In item (d), according to information from the Universal Union (2014), Deutsche Post currently provides all universal services nationwide without a formal legal obligation.
- (6) In item (e), before full liberalization, an exclusive reserve range had been approved in order

to ensure financial sources for the USO in each country's postal service market. This exclusive reserve range remains in effect in, for example, the USPS, and is meant to allow use of the profits generated by separating parts of service according to weight and tariff for the USO. At beginning of EU Postal Directive in 1997, the exclusive reserve range covered postal items with a tariff of less than 5 times the minimum tariff and less than 350g. Since then, the exclusive reserve range has shrunk and it was decided in the EU Postal Directive in 2008 that the range be abolished by 2010 or 2012.

- (7) In item (f), according to the Ministry of International Affairs and Communications (2013a), subsidies in the UK and France are not used for the USO. However, as we consider them to be part of the USO, we listed them here.
- (8) In item (g), La Poste and new entrants contribute to the fund according to the amount of their sales.
- (9) In item (h), organizations with annual sales of more than 500 thousand EURO contribute to the fund.

4.2 Methods of Measurement of the Universal Service Obligation

As for calculation methods of the cost of the universal service obligation (USO cost), in general, four kinds of approaches have been used in industrial countries since 2000: (i) the Deficit Approach (DA), (ii) the Net Avoidable Cost Approach (NAC), (iii) the Entry Pricing (EP), and (iv) the Profitability Cost Approach (PC). Each approach defines USO cost differently.

Deficit Approach

In the deficit approach, the deficits in postal service that a postal service provider must supply are defined as the universal service obligation (USO) cost.

The advantage of this approach is that it is easily calculated, and counterfactual assumptions are not necessary because this approach can use actual financial data from providers providing postal service. The disadvantage is that we cannot judge whether the USO cost measured is the cost yield under the condition of the most efficient management by the provider. If the USO cost is approved without factual observation of the situation, the USO cost may include inefficiency.

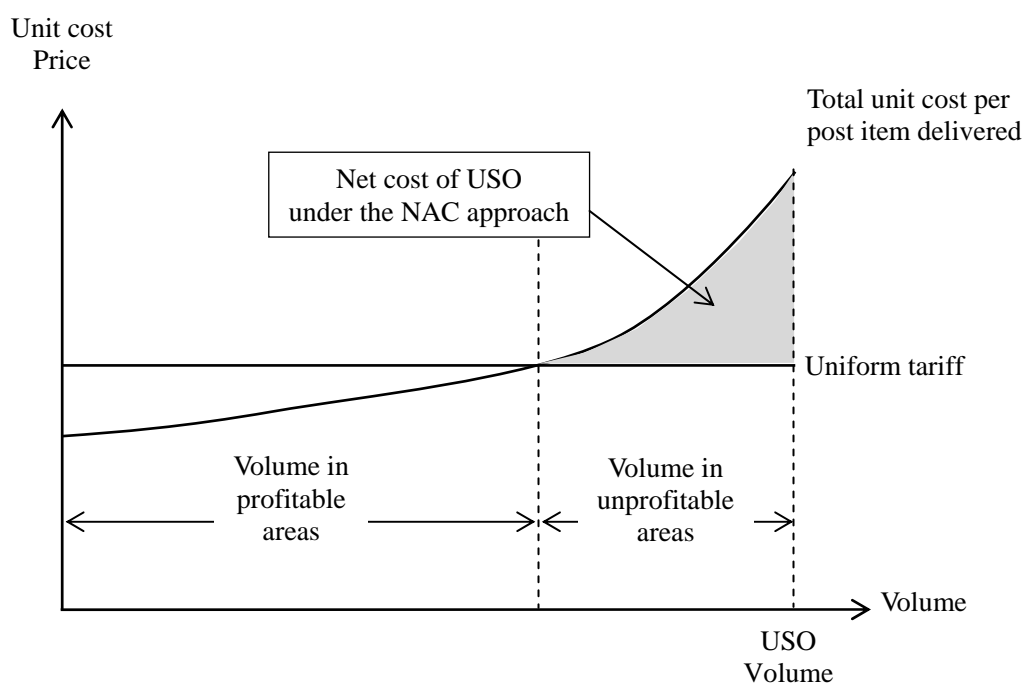
Net Avoidable Cost Approach

In the net avoidable cost approach, USO costs are defined as those that a provider need not incur if it does not provide services, that is, costs created in unprofitable areas (or services). This approach was originally developed for calculation of USO costs in the telecommunications industry. According to Maruyama (2002), this approach was further

developed by Elsenbast et al. (1995) with the aim of applying it to the postal service industry².

As an example, USO costs according to the net avoidable cost approach are shown in Figure 1, where the unit cost per postal item in a given area is arranged from the lowest to the highest on the horizontal axis. Therefore, the curve of the unit cost per postal item delivered is increasing. The difference between the unit cost and the uniform tariff, that is, the shaded areas in this figure, are the USO costs.

The calculated USO cost in this approach largely depends on the size of the delivery routes (or areas). If it is difficult to obtain information on delivery routes (or areas), then the unit size of delivery routes (or areas) will necessarily be manifested as large, resulting in underestimation of the USO cost.



(Note): This figure was devised by the authors based on Figure 5 in Frontier Economics (2013).

Figure 1 The USO Costs in the Net Avoidable Cost Approach

² As for estimation examples, there are studies such as Castro and Maddock (1997) for Australia, National Economic Research Associates (1998) for 15 EU countries, Poscomm (2001) for Cosignia data, Uranishi (2004, 2007) for Japan, and Mizutani and Uranishi (2006).

Entry Pricing Approach

The USO cost obtained by the entry pricing (EP) approach is defined as the reduction of profit of the incumbent postal service provider caused by a new entrant's cream-skimming due to competition.

The EP approach makes certain assumptions. First, the USO is applied to an incumbent postal service provider. Second, the incumbent postal service provider maintains services financially by cross-subsidizing from profitable to unprofitable services under a uniform tariff. Third, a new entrant sets up marginal cost pricing lower than the uniform tariff of the incumbent and enters only postal service markets where the incumbent price is higher than that of the entrant (i.e. cream-skimming entry).

The EP approach has the advantage of recognizing the necessary USO costs under competitive circumstances, as it makes assumptions regarding competition in liberalized postal service markets. However, the USO costs estimated here would vary with the varying assumptions made about competitive environments.

Profitability Cost Approach

The profitability cost (PC) approach defines the USO cost as the difference between the profitability level where the USO is in effect and the profitability level where it is not.

In a liberalized postal service market, a postal service provider without the USO can cross-subsidize between profitable and unprofitable postal service, reducing costs by lowering service standards in the unprofitable postal service, thereby attaining profit maximization.

On the other hand, a postal service provider with the USO must provide services with a consistent service standard, even if services are not consistently profitable. It is difficult, therefore, for the provider with the USO to improve profitability, which remains lower than that of the provider without the USO.

If the provider with the USO can be guaranteed compensation for the profit difference (i.e. the difference between the profit with and without the USO), then it can attain the same profitability level even while subject to the USO. The PC approach measures this profitability difference as the USO cost.

According to Cremer et al. (2000), the PC approach is considered as the best, most sophisticated approach to calculating the USO cost in a liberalized competitive postal market.

5 Governance Structure and Strategy

This section describes governance structure and corporate strategies, with Deutsche Post DHL (Germany), La Poste (France), Royal Mail (UK), USPS (US) and Japan Post (Japan) selected as the main providers.

5.1 Governance Structure

The board structure of these five providers will be discussed here, with attention to the following points: (i) board type, (ii) board size and composition, (iii) appointment of board, (iv) relationship with government, (v) important shareholders, and (vi) type of corporate governance. The governance structure of each organization is summarized in Table 6.

First, according to Douma and Schreuder (2013), board structure can be categorized into a one-tier or two-tier type. In a one-tier system, all board members are appointed by a shareholders' general assembly and belong to the same board. In contrast, a two-tier system consists of the executive board (top management members) and the supervisory board (outside directors). The main difference in these systems is in the type of monitoring. In a one-tier system, executive members are monitored by non-executive members of the same board, while in two-tier system, top management members are monitored by outside directors.

The one-tier system is frequently seen in the US and the UK, while the two-tier system is common in continental Europe and Japan. In the postal industry, in fact, Royal Mail and the USPS have adopted the one-tier system, while Deutsche Post DHL and Japan Post use the two-tier system. However, La Poste and Japan Post Holdings, the parent company of Japan Post, have one-tier boards.

The other important point on governance structure involves the monitoring system (i.e. market-oriented or network-oriented). In the market-oriented system, the markets play an important role in monitoring through, for example, active "voice and exit" by shareholders and threats of takeovers in the stock market, which can strongly influence corporate management. In a network-oriented system, various organizational or individual networks with stakeholders play a major role, important factors being relationships and connections between business groups, large shareholders, banks, and individuals in top management. In a network-oriented system, a company can be heavily influenced by few large shareholders, such as banks and the government.

In the postal service industry, the governance system of these five organizations has

been network-oriented. Since postal service providers are more or less regulated by the government, they have been owned totally or mostly by the government through certain organizations even after privatization, or have remained in some way connected to the government. However, as the example of Deutsche Post DHL shows, governance systems for some operators progress toward the market-oriented type. Shareholder composition has become diversified in Deutsche Post DHL, though large shareholders retain their influential power. In contrast to other organizations examined here, the USPS remains in the public sector, although is organized as a public corporation.

Table 6 Governance Structure of Postal Organizations

Organization	Royal Mail	La Poste	Deutsche Post DHL	United States Postal Service (USPS)	Japan Post
Board type	One-tier board	One-tier board	Two-tier board	One-tier board	One-tier board at Japan Post Holdings, two-tier board at Japan Post
Board size and composition	1 chairman, 3 executive directors, 7 non-executive directors	21 members (as required by law)	6 on board of management, 20 on supervisory board (the number of board members is determined to be at least 2 by law. When the company requires more members, supervisory board decides the number.)	9 Governors, Postmaster General, Deputy Postmaster general	Japan Post Holdings: 13 members (8 are outside directors). Japan Post: 9 members on board of management (6 are outside directors), 3 on supervisory board (2 are outside auditors).
Appointment of the board	Appointed by an ordinary resolution of the company or by the board.	12 - recommended by the government and appointed by the General Meeting 2 - appointed by decree 7 - elected by the employees CEO - selected by board of directors	On supervisory board, 10 - representatives of shareholders 10 - elected by the employees. Supervisory board appoints the board of management.	The President appoints 9 governors, and 9 governors appoint postmaster general and deputy postmaster general.	Shareholders' general assembly appoints the board of management and supervisory board. Board of management appoints and monitors CEO.

Relationship with the government	Through Postal Services Holding Company, the government has the right to nominate one non-executive director to maintain at least 10 per cent control in voting rights.	Representatives of the government can attend board of directors' meetings, though they do not have voting rights.	The government holds 21% of the shares via KfW Bankengruppe.	Quasi-independent organization in the government.	Japan Post is totally held by Japan Post Holdings, and Japan Post Holdings is totally held by the government.
Important shareholders	Postal Services Holding Company (totally owned by UK government), which has 29.98% voting rights.	French government (73.7%) and French public financial institution, Caisse des Depots et Consignations (26.3%).	KfW Bankengruppe (21%, largest shareholder). The other shareholders: institutional investors 67.8% (USA 13.8%, Great Britain 14.85%, Germany 12.3%, and others 26.95%), private investors (11.2%)	-	Japan Post Holdings (100%) in Japan Post, Government (100%) in Japan Post Holdings
Type of corporate governance	Market-oriented and partially Network-oriented (Shareholder composition is diversified, while the influential power of the government is	Network-oriented (The government has large, direct influential power on the management.)	Market-oriented and partially Network-oriented (The floating stock ratio is relatively high: 79% at the end of 2013. Shareholder composition is	Network-oriented (Directly involved in governmental policy.)	Network-oriented (Under high influential power of the government via Japan Post Holdings.)

	consolidated in managerial decision-making.)		diversified but maintains the influential power of the government.)		
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(Note): This table was devised by the authors based on Deutsche Post DHL (2013) , Le Groupe La Poste (2013), Royal Mail plc (2014), United States Postal Service (2013), and Japan Post Holdings (2014).

5.2 Diversification Strategy

A relatively important strategy in postal service has been diversification, as it can compensate for the decline in the core mailing business through a shift to more profitable activities, even though providers face severe competition with rivals.

Postal providers have most commonly diversified into the logistics, parcel, express, and finance industries, all of which utilize the existing synergies of network, market, and/or technology. Providers can realize combined innovations and shared costs through collaborations among business lines. In contrast, diversifying into non-related business requires additional management resources not common or readily available to providers of postal service.

The related diversification strategy is common and can be classified into two types: the post-banking-insurance service type and the postal-service-only type.

La Poste and Japan Post are included in the post-banking-insurance diversification type. La Poste has diversified through affiliated companies and joint ventures, with La Poste S.A., for example, engaged in the banking business (i.e. La Banque Postale) and the mobile telephone business (i.e. La Poste Mobile). Other business diversification includes real estate activities (e.g. industrial platforms, small and medium-sized retail spaces and commercial premises) by Poste Immo. Revenue for the whole group was comprised of 47.4% for mail, 26.9% for parcels and express, and 25.0% for banking in 2013. According to Le Groupe La Poste (2013), the group plans to proceed with related diversification based on existing assets as part of the new strategic plan "La Poste 2020: Conquering the Future."

There are legal restrictions on how Japan Post may diversify. Affiliated companies are subject to legislative bounds, and their operating plans require permission from the government. As a result, Japan Post Group is limited to banking (i.e. Japan Post Bank) and insurance (i.e. Japan Post Insurance), logistics, and real estate, in addition to its core mail business. Its revenue was comprised of 60.0% for mail, 20.5% for banking, 12.4% for life insurance in 2013.

On the other hand, the postal-service-only type is limited mainly to such activities as letter and parcel delivery. Deutsche Post DHL, Royal Mail and the USPS are included in this type. Deutsche Post DHL has focused on the specific areas of mailing and global logistics, in fact withdrawing from the banking business completely when all shares of Deutsche Postbank AG were sold to Deutsche Bank AG in 2012. As a result, the divisional revenue of Deutsche Post DHL was comprised of Post-eCommerce-Parcel (27.8%), Express (21.5%), Global Forwarding, Freight (27.0%), and Supply Chain (25.9%) in 2013.

Royal Mail has affiliated companies which operate non-mailing services, such as Royal Mail Investments Limited, Royal Mail Estates Limited, and Romec Limited. However, the main activity is limited to post-related service. The divisional revenue of Royal Mail was comprised of 82.4% for UK Parcels, International & Letters (UKPIL) and 17.5% for General Logistics Systems (GLS) in 2013.

Diversification of the USPS is legislatively restricted. The Congress also requires USPS to adhere to the core business of mailing and package service. Thus, USPS has only one segment based on the same network. According to United States Postal Service (2013), the major service categories are First-Class Mail, which is offered mainly for letters and postcards, Standard Mail, which is offered for any item including advertisements and marketing packages, Shipping and Packages, International, Periodicals, and Other. Services involving First-Class Mail, Standard Mail, and Periodicals are dominant in the US market.

5.3 Internationalization Strategy

Diversification strategy frequently includes corporate internationalization. First, Deutsche Post's DHL operates in Europe, the Americas, Asia Pacific, the Middle East and Africa. DHL has expanded its business through vigorous acquisition of local companies: Danzas in Switzerland and Van Gend & Loos in Netherland in 1999, Airborne Express in USA in 2003, Blue Dart in India in 2005, and Professional Parcel Logistics (PPL) in Czech Republic in 2006, etc.

La Poste Group works actively on internationalization through affiliated companies. For example, SofiPost has Asendia, a joint venture with Swiss Post. GeoPost also has affiliated companies in various countries, such as GeoPost Intercontinental Entities, DPD Germany Entities, DPD UK Entities, and SEUR Spain Entities. Moreover, the group actively acquires foreign companies. For example, Asendia purchased Pitney Bowes in the UK and invested in 40% of eShopWorld in Ireland in 2013.

Royal Mail also aims for internationalization. According to Royal Mail plc (2014), it has UK Parcels, International & Letters (UKPIL) division, which operates in the UK and on an international basis under the 'Royal Mail' and 'Parcelforce Worldwide' brands. In addition, as an international logistics company, General Logistics Systems (GLS) operates in European 37 countries. Moreover, Royal Mail is investing in joint ventures with the Bank of Ireland: Midasgrange Limited for financial services and First Rate Exchange Services Holdings Limited for foreign exchange services.

The USPS, operated by the government and subject to heavy regulation and government policy, has no branches in foreign countries as of 2013.

Japan Post has a Chinese consolidated subsidiary, Japan Post International Logistics Co., Ltd., for logistics in Japan and China. However, Japan Post has no other branches in other countries as of 2013.

In summary, Deutsche Post DHL, La Poste, and Royal Mail have taken active steps to expand operations internationally, while the USPS and Japan Post are lagging behind in internationalizing.

6 Concluding Remarks

This paper has aimed to provide information useful to policy makers involved in planning for the management of postal service. Five countries were selected—the UK, France, Germany, US and Japan—and the characteristics of their postal services were described in terms of regulation, liberalization, governance, and strategies. Variations were noted in regulatory structures and liberalization policies. Governance structure and corporate strategies were deemed to be of increasing importance as postal service providers adopt a more corporate company style. The important points made in this paper are summarized as follows.

First, variations have been observed in the liberalization of postal services among countries. Two important factors are ownership and competition. Provision by the private sector through privatization is more productive-efficiency-oriented, and it is necessary to introduce competition in situations where monopolistic organizations exist. The general trend in liberalization is toward privatization and competition, with the UK and Germany in the vanguard.

Second, it is necessary to maintain the universal service obligation (USO), but procuring financial backing is problematic. Among various financing methods, the USO fund seems reasonable.

Third, the governance structure of postal service provider varies from country to country, according to corporate law. As for company type, postal organizations are divided into three groups: the single corporation type (e.g. Deutsche Post DHL and La Poste), the holding company type (e.g. Royal mail and Japan Post), and the public corporation type (e.g. the USPS).

Last, as for internationalization strategy, Deutsche Post DHL, La Poste and Royal Mail have taken steps to expand their operations internationally, while the USPS and Japan Post have been slower to make inroads abroad.

References

- Castro, M. and R. Maddock (1997) "The Universal Service Obligation for Post: Some Australian Calculations," In M. A. Crew and P. R. Kleindorfer. (eds.) *Managing Change in the Postal and Delivery Industries*, Kluwer Academic Publishers, Boston, MA, USA, pp. 258 – 269.
- Cremer, H., A. Grimaud and J. Laffont (2000) "The Cost of Universal Service in the Postal Sector," in M. A. Crew and P. R. Kleindorfer (eds.) *Current Directions in Postal Reform*, Kluwer Academic Publishers, Boston, MA, USA, pp. 47 – 68.
- Crew, M. A., P. R. Kleindorfer and J. I. Campbell Jr. (2008) "Postal reform: introduction," in Crew, M. A. , P. R. Kleindorfer and J. I. Campbell Jr. (eds.), *Handbook of Worldwide Postal Reform*, Edward Elgar, Cheltenham, UK / Northampton, MA, USA, pp. 1 – 12.
- Deutsche Post DHL (2013) *2013 Annual Report*, Deutsche Post DHL .
- Douma, S. and H. Schreuder (2013) *Economic Approaches to Organizations*, fifth edition, Pearson.
- Eccles, R. (2008) "EU law on postal services," in Crew, M. A., P. R. Kleindorfer and J. I. Campbell Jr. (eds.), *Handbook of Worldwide Postal Reform*, Edward Elgar, Cheltenham, UK / Northampton, MA, USA, pp. 245 – 261.
- Elsenbast, W., F. Pieper and U. Stumpf (1995a) *Estimating the Universal Service Burden of Public Postal Service*, WIK Discussion Paper No. 150.
- Elsenbast, W., F. Pieper and U. Stumpf (1995b) "The Cost of Universal Obligation in a Competitive Environment," Paper Presented on The 3rd Konigswinter Seminar on Postal and Delivery Economics.
- ERGP (2012) "ERGP Report on Net Cost of USO – VAT Exemption as a Benefit or a Burden," ERGP (12) 29, European Commission, Brussels.
(http://ec.europa.eu/internal_market/ergp/documentation/documents/index_en.htm
accessed in September 25, 2014).
- European Commission (1992) *Green Paper on the Development of the Single Market for Postal Services*, Commission of the European Communities, COM (91) 476 final, Brussels, Belgium.
- Frontier Economics (2013) "Study on the principles used to calculate the net costs of the postal USO: A report for the European Commission" Frontier Economics Ltd, London.
(http://ec.europa.eu/internal_market/post/doc/studies/2012-net-costs-uso-postal_en.pdf

- accessed in September 25, 2014).
- Industry Commission (1992) *Mail, Courier and Parcel Services*, Industry Commission of Australia, Report No. 28, Canberra, Australia
- Japan Post Holdings (2014) *Summary of Statement of Accounts in March 2013 (2014 Nen 3 Gatsuki Kessan no Gaiyo)*, Japan Post Holdings (in Japanese).
- Japan Post (2014) *Documents Pursuant to Section 13 of Act on Japan Post Holdings Co., Ltd. (Nihon Yubin Kabushikikaisha-ho Dai 13 jo ni Motodoku Shorui)*, Japan Post (in Japanese).
- Le Groupe La Poste (2013) *Registration Document 2013*, Le Groupe La Poste.
- Maruyama, S. (2002) “Universal Service Obligation Cost in Postal Service: Concept and Measurement in Foreign Countries (Yubin no Yunibasaru Sabisu Kosuto: Kangaekata to Shogaikoku no Keisoku),” *Institute for Posts and Telecommunications Policy Monthly Report (Yusei Kenkyusho Geppo)*, No.161, 2002.2, pp.149-163 (in Japanese).
- Ministry of International Affairs and Communications (2013a) *Situations of Several Foreign Countries: Situations of the Universal Service Obligations of Postal Services and Introduction of Entry Competition of Personal Correspondence Services in Foreign Countries (Shogaikoku no Jokyo: Shogaikoku no Yubin Jigyo no Yunibasaru Sabisu no Jokyo Oyobi Shinsyo Sotatsugyo heno Kyoso Dounyu no Jokyo)*, Ministry of International Affairs and Communications (in Japanese).
- Ministry of International Affairs and Communications (2013b) *Current Situations and Background of the Universal Service Obligations of Postal Services (Yubin Jigyo no Yunibasaru Sabisu no Genjo to Keii)*, Ministry of International Affairs and Communications (in Japanese).
- Ministry of International Affairs and Communications (2013c) *International Trend of Postal Business (Yubin Jigyo wo Torimaku Kokusaitekina Doko)*, Ministry of International Affairs and Communications (in Japanese).
- Mizutani, F. (2012) *Regulatory Reform of Public Utilities: The Japanese Experience*, Edward Elgar, Cheltenham, UK / Northampton, MA, USA.
- Mizutani, F. (2014) *Looking Beyond Europe with a Special Focus on Japan*, Discussion Paper, No.2014 - 24, Graduate School of Business Administration, Kobe University.
- Mizutani, F. and S. Uranishi (2003) “The Post Office vs. Parcel Delivery Companies: Competition Effects on Costs and Productivity,” *Journal of Regulatory Economics*, Vol.23, No.3, pp.299-319.
- Mizutani, F. and S. Uranishi (2006) *Special Post Office, Privatization and Universal Service*

- Obligation Costs*, Discussion Paper, No. 2006 - 05, Graduate School of Business Administration, Kobe University.
- National Economic Research Associates (1998) “Costing and Financing of Universal Service Obligations in the Postal Sector in the European Union,” Final Report for EC DH XIII (http://ec.europa.eu/internal_market/post/doc/studies/1998-nera_en.pdf accessed in September 26, 2014)
- OECD (1991) *Universal Service and Rate Restructuring in Telecommunication Tariff*, OECD, Paris, France.
- Post and Parcel (2011) “La Poste Launches Digiposte Solution,” *News, Views & Jobs for the Global Mail & Express Community*, March 3rd, 2011 (<http://postandparcel.info/36736/news/la-poste-launches-digiposte-solution/> accessed September 20, 2014)
- Postcomm (2001) “An Assessment of the Costs and Benefits of Consignia’s Current Universal Service Provision,” A Discussion Document of Postcomm, June 2001. (<http://stakeholders.ofcom.org.uk/binaries/post/508.pdf> accessed in September 26, 2014)
- Royal Mail Group (2014) *Fact Sheets of Royal Mail Group: History of Royal Mail Group*, London, UK (<http://www.royalmailgroup.com/media/fact-sheets> in September 17th, 2014).
- Royal Mail plc (2014) *Annual Report and Financial Statements 2013-14*, London, UK.
- United States Postal Service (2013) *Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934*, Washington, D.C., USA.
- Universal Postal Union (2014) *Status and Structures of Postal Entities*, Universal Postal Union. (<http://www.upu.int/en/the-upu/status-of-postal-entities/about-status-of-postal-entities.html> accessed in September 9th, 2014)
- Uranishi, S. (2004) “Liberalization of Postal Service and Maintaining Universal Service Obligation: Estimation of Providing Costs (Yubin Jiyuka to Yunibasaru Sabisu Iji: Kyokyu Kosuto no Haaku),” *Public Corporation (Koei Kigyo)*, Vol.36, No.2, pp. 2-9 (in Japanese).
- Uranishi, S. (2007) “Simulation of Maintaining Universal Service Obligation in Postal Service (Yubin Jigyo ni okeru Yunibasaru Sabisu Iji ni Kansuru Simyureshon),” *Journal of Public Utility Economics (Koeki Jigyo Kenkyu)*, Vol.59, No.2, pp. 55-68 (in Japanese).

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