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Terminal Dues: Winners, Losers, and the Path to Reform

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Modern industrialized countries have long accepted the principle that postage rates should be based on the costs of production. The reasons are apparent. Cost-based rates are both efficient and fair. They are efficient in the sense that users can tell from the prices how much to spend on postal services and how much to spend on alternative, less costly, methods of communication. Cost-based rates are fair in the sense that no user is required to pay the costs of someone else's service and no operator is required to compete against services priced below cost. Narrow exceptions to this principle may be permitted, but only to promote a clearly defined public interest. While not assuring efficient costs of production — that requires either effective competition or appropriate regulation — cost-based pricing is a widely accepted first principle for postage rates that are not set by market forces.²

Yet what is taken for granted in regulating postage rates at the national level is almost wholly ignored when it comes to international postage rates. Post offices do not charge each other the same amounts for delivery of inbound international mail as they charge their own citizens for delivery of similar mail. For example, the U.S. Postal Service charges substantially less for delivery of German and Japanese letters than for delivery of identical American letters. By the same token, the post offices routinely charge users of outbound postal services much more than the actual cost of service. They have even agreed among themselves not to set international rates below domestic rates even though in many developing countries the cost of delivery — the primary cost of any postal service — is well below the cost of delivery of domestic mail.

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² By “cost-based” rates we refer generally to rates that are considered to be “cost-based” or “cost-justified” under economic regulatory regimes in the European Union, United States, and other industrialized countries. Broadly speaking, cost-based rates compensate a producer of postal (or other) services fully for the reasonable costs of inputs, including the cost of capital, without allowing profits in excess of that which would be earned in a normally competitive market. For purposes of this paper, it is unnecessary to delve in the complexities of “efficient costs” and cost allocation that confront national regulators because, in the end, we recommend that national regulators apply essentially the same standards to foreign letter post items as they do to domestic letter post items.

Why have international postage rates resisted the otherwise universally accepted principle that postage rates should be based on costs? For more than 40 years, the Universal Postal Union (UPU), the intergovernmental organization which establishes the rules for exchanging international documents and parcels, has labored to develop a fair and efficient approach towards “terminal dues” — the UPU’s term for the fees that a destination post office collects for the delivery of inbound international mail. For at least 20 years, officials in the U.S. government, the European Union, and the UPU itself have recognized that the only reasonable solution is to align terminal dues with the already cost-based domestic postage rates. Yet virtually no significant progress has been made to this end. Indeed, the UPU terminal dues system is often portrayed by insiders as a sort of postal Gordian knot, an intimidating complex of interrelated economic, operational, political, and legal threads that cannot be disentangled by ordinary mortals, much less ordinary government policy makers.

This fog of impenetrable complexity has been the main obstacle to reform. Everyone understands that a system of non-cost-based terminal dues results in winners and losers. Some post offices are underpaid for the delivery of inbound international mail, forcing up the prices of their domestic mailers. Other post offices benefit from overpayments and are effectively subsidized by mailers in other countries. Yet policy makers are in wholly in the dark as to who wins and who loses and by how much. They hesitate to take decisions that they do not understand but which may have adverse consequences for the national post office or for the post offices of developing nations. Without such basic information it is impossible to propose solutions.

This paper seeks to clarify how the UPU terminal dues system produces winners and losers and, guided by this illumination, to propose a fair and reasonable path to reform. The heart of this analysis is a mathematical model that estimates the bilateral flows of letter post items among industrialized countries — for analytical purposes taken to be the member countries of the Organisation for Economic Co-operation and Development (OECD) — and between industrialized countries and developing countries collectively. The model then estimates the differences between charges established by the UPU’s terminal dues system and charges that would be levied if terminal dues were properly aligned with domestic postage. This paper is divided into five sections. Section 1 briefly describes the historical development of terminal dues. Section 2 explains the mathematical model used to estimate bilateral payments for delivery of inbound international mail under different compensation schemes. Section 3 analyzes the distortions created, i.e., the discrepancies between UPU terminal dues and delivery charges aligned with domestic postage. Section 4 suggests how insights flowing from the model can be used to chart a course for reform. Section 5 summarizes our conclusions.

1 TERMINAL DUES SYSTEMS IN 2008

1.1 Universal Postal Union

Until 1969, each UPU member country delivered inbound international mail without charge. This system benefited post offices that exported more mail than they imported (usually those in industrialized countries) and penalized those that imported more than they exported (usually those in developing countries). In 1969 a UPU Congress held in Tokyo — a “congress” is a meeting of all UPU member countries held every four or five years to revise intergovernmental agreements governing international postal services — recognized the problem but was unable to agree on a simple, economically sound principle for compensating post offices with inbound imbalances. Instead, the Tokyo Congress adopted an arbitrary "terminal dues" charge of 0.50 gold francs per kilogram. Henceforth, if post office A sent post office B more kilograms of letter post mail than B sent A, then B could demand compensation of 0.50 gold francs (0.16 SDR) per kilogram for the excess.³

Terminal dues introduced a divisive factor into UPU congresses. Suddenly, real money was at stake, and countries benefitting from higher terminal dues far outnumbered those who were net payers. The terminal dues rate was tripled in the 1974 Lausanne Congress to 1.5 gold francs (about SDR 0.49) and more than tripled in the 1979 Rio de Janeiro Congress to 5.5 gold francs (SDR 1.90). In the 1984 Hamburg Congress, major post offices joined forces to prevent a similar increase. In the end, delegates compromised on a 45 percent increase, to SDR 2.641 per kg. The progress of this core terminal dues rate is shown in Table 1.

Table 1. UPU terminal dues: basic rates for developing countries

UPU Congress	Terminal dues (SDR)	Increase
Tokyo, 1969	0.163/kg*	
Lausanne, 1974	0.490/kg*	201%
Rio de Janeiro, 1979	1.797/kg*	267%
Hamburg, 1984	2.614/kg	45%
Washington, 1989	2.940/kg	12%
Seoul, 1994	3.427/kg	17%
Beijing, 1999	3.427/kg	0%
Bucharest, 2004	3.727/kg	9%
Geneva, 2008	3.831/kg to 4.162/kg**	3% to 12%

*Terminal dues have been converted from gold francs. **Rate rises each year from 2010 to 2013.

³ In 1969, the UPU used the gold franc (0.009334 oz. of pure gold) as its monetary unit. In 1979, the UPU defined the gold franc to be convertible into Special Drawing Rights (SDRs) — a monetary unit defined by the International Monetary Fund — at the rate of 3.061 gold francs per 1 SDR. The 1969 terminal dues charge was thus equal to about SDR 0.16. See UPU, Constitution (1979), Art. 7 & annot., *Acts of the UPU Annotated* (1981), vol. 1, pp. 16-17. Since 1984, the UPU has used the SDR as its the monetary unit for terminal dues and other accounts. In this paper, national currencies have been converted to or from SDRs as 30 September 2008. On that date, 1 SDR equalled € 1.0997, JP¥ 166.5, UK£ 0.8657, and US\$ 1.4731.

In holding down terminal dues, however, industrialized country post offices inadvertently created incentives for bypassing regular international mail channels. Typically, a post office would charge outbound international mailers far more than justified by the cost of terminal dues paid to destination post offices. In the 1980s, outbound mailers began to work with private transport companies to circumvent the system. The private carriers would collect international mail from mailers in country A and convey it to country B, where post office B would forward the mail to other post offices (C, D, E, and so on) for rates that were much more closely aligned to terminal dues charges. Why? Post office B offered this "re-mail" service for a small markup because re-mail allowed post office B to profit from the international distribution of mail that would otherwise never pass through post office B — i.e., it would go directly from post office A to post office C. Overall, re-mail offered international mailers significantly lower rates — and often better service — for mail sent to industrialized countries where postage rates were well above UPU terminal dues.

Growth of re-mail required the UPU to reconsider the principles of terminal dues. Ten years later, in 1999, the UPU officially accepted the long understood precept that terminal dues should "approach more closely the costs of the services rendered".⁴ In practice, this implies that terminal dues should be equal to domestic postage rates for comparable mail. In reality, however, in two decades the UPU has done little make it so. Instead, starting in 1989, the UPU adopted a two-tiered approach to terminal dues designed to protect industrialized countries against re-mail while satisfying the demands of developing countries for continuation of artificially low terminal dues rates for their mail.

The story of the evolution of the terminal dues system for industrialized countries since 1989 is exceedingly convoluted. For purposes of this paper, it is sufficient to summarize the terminal dues system as it existed in 2008, the date of key data in the terminal dues model presented below. In the Universal Postal Convention of 2004 (in effect in 2008), the terminal dues system for industrialized countries was called the "target system," and the one for developing countries was called the "transitional system". These labels were intended to convey a collective resolve that the "transitional" countries (i.e., the developing countries) would one day adopt the terminal dues system of the "target" countries (i.e., the industrialized countries). Omitting territories that are not UPU members in their own right (e.g., Gibraltar, Norfolk Island), the 28 target system countries were Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Israel, Italy, Japan, Liechtenstein, Luxembourg, Monaco, Netherlands, New Zealand, Norway, Portugal, San Marino, Spain, Sweden, Switzerland, United Kingdom, United States, and the Vatican.

The target terminal dues system of 2004 applied only to mail that both originated in and was destined for a target system country. For "letter post" items — regular letters, large flat envelopes, and small packets weighing up to 2 kg — target system post offices charged each other terminal dues calculated by applying a charge per item and a charge per kilogram. In 2008, the charges were supposed to be related to 66 percent of the domestic postage rate for a 20 gram letter sent by the priority or first class domestic postal service. In fact, however, terminal dues

⁴ UPU, 1999 Beijing Congress, Resolution C46/1999.

charges were constrained within tight cap and floor provisions. Charges could not exceed 0.237 SDR per item and 1.858 SDR per kg nor fall below 0.158 per item and 1.598 per kg. Since terminal dues for almost all industrialized countries were established by this rate band, not the link to domestic postage rates, the target system was not truly cost-based. For letter post items sent to, from, or between "transitional" countries, the terminal dues rate in 2008 was 3.727 SDR per kg regardless of the number of postal items per kilogram.

1.2 REIMS

A more cost-related, non-discriminatory terminal dues system was pioneered in 1988 by the post offices of Denmark, Finland, Iceland, Norway, and Sweden. Under the Nordic system, terminal dues were set at 60 percent of retail domestic postage rates. Nordic terminal dues thus approximated the charge for the delivery portion of the end-to-end service represented by the retail price. The Nordic system included penalties for poor quality of service. In effect, Nordic post offices treated each other as bulk mailers, which, of course, is what they were.⁵

In 1997, most EU post offices adopted a similar approach, called the REIMS II agreement. The REIMS II agreement was replaced by a REIMS III agreement in 2007 and by a REIMS IV agreement in 2009. In brief, the REIMS II terminal dues system established charges for inbound mail exchanged between REIMS post offices that were based on 80 percent of the domestic postage rates for priority or first class "letter post" items. REIMS recognized three shape-based categories of letter post items (letters, flats, and small packets) and different weight steps within each shape (e.g., 0 to 20 grams, 20 to 50 grams, etc.). The diverse shape-based and weight-based rates were homogenized by linear regression into a charge per item and a charge per kilogram using data from a survey of the actual distribution of letter post items among the shapes and weight steps. For non-priority mail, the terminal dues rate was set 10 percent below the rate for priority mail. In addition, the REIMS II agreement included a floor rate of 0.147 SDR per item and 1.491 per kg. In short, the REIMS II system was a more sophisticated and uncapped version of the UPU target system, one that better reflected domestic postage rates and costs.

2 TERMINAL DUES MODEL

As all neutral observers have recognized, the straightforward way to eliminate distortions in payments for delivery of international letter post items is for each post office to charge other post offices the domestic postage that would be due for delivery of similar letter post items. Domestic postage is the proper standard for two reasons. First, while it is impossible to obtain definitive cost data for the inbound delivery services of national post offices, one may reasonably rely on domestic postage rates as a proxy for costs. In most ICs, national law requires domestic postage rates to be based on costs and empowers an independent regulator to enforce this standard. Even without such controls, however, domestic postage rates must reflect costs because modern post offices are no longer subsidized from the public treasury; they must ensure that

⁵ C. Bruun, "Nordic Measurements 1991".

prices cover costs in order to survive in world with multiple alternatives to postal communications.⁶ Second, domestic postage is the proper standard because in the modern world it is unjustifiable to discriminate against foreign mailers in the pricing of universal postal services ensured by government. Put simply, it is no more acceptable for the French post office (for example) to charge the British post office a rate for delivery of inbound international letters that differs from comparable domestic postage than it would be for a Parisian postal clerk to charge English tourists a different rate for postage stamps than the rate paid by French citizens.

Therefore, in order to estimate the economic distortions caused by UPU or other terminal dues arrangements, the authors have developed a mathematical model that estimates differences between the delivery charges for inbound international mail calculated (1) according to domestic postage rates and (2) according to the terminal dues scheme under study.⁷ Our model focuses on the exchange of letter post mail among the 34 member countries of the Organisation for Economic Co-operation and Development (OECD) and mail exchanges between OECD and non-OECD countries.⁸ To simplify the following exposition, we shall refer to OECD countries as industrialized countries (ICs) and non-OECD countries as developing countries (DCs) even though not all OECD member countries are included in the UPU's target system for terminal dues purposes. Similarly, rather than using the UPU's confusing "target" and "transitional" labels for its two terminal dues regimes, we shall refer to the IC and DC terminal dues systems. In the model itself, however, calculations relating to the UPU terminal dues system conform to the rules for the target and transitional systems in effect in 2008.

What, precisely, is the domestic postage that would be due for delivery of inbound international letter post items? As indicated in the Nordic and REIMS terminal dues agreements, the appropriate domestic rate is not the full retail rate but something closer to the discounted rates charged bulk domestic mailers. Typically, a bulk mailer receives a discount of about 15 to 25 percent from the retail rate because the post office does not have to collect bulk mail and bulk mail is already sorted to some extent by the mailer. For non-priority mail, often labelled 'direct mail', post offices usually offer additional discounts that can be as high as 50 or 60 percent off the retail rate. Calculating "bulk mail" domestic postage that post office A should pay to post office B requires several bits of information: (1) the volume of mail dispatched by post office A; (2) the postage rates of post office B; and (3) the distribution of post office A's mail according to the rate categories of post office B. Most of this information is not publicly available so our

⁶ In our view, where a government continues to subsidize the domestic postal service for reasons of national unity or social development (as in some DCs), the postage rate for delivery of inbound international mail should include an appropriate portion of the subsidy as well.

⁷ Although the UPU itself has developed similar terminal dues models, it does not disclose mail flow data and calculations so that these studies offer no assistance to policy makers. So far as we are aware, our model represents the first attempt to clarify the global distortions caused by UPU terminal dues schemes.

⁸ We focus on the OECD for two reasons. First, more complete bilateral trade data is available for OECD countries than for other countries. Second, as explained in the paper, reform of the terminal dues system depends upon an appreciation of the different circumstances of post offices in industrialized and developing countries. Membership in the OECD is a reasonable indicator of industrialization although other indicators could also be used purposes of terminal dues reform.

terminal dues model necessarily relies on proxies and reasonable assumptions. In this section, we describe the premises of the model.

Estimating bilateral mail flows. Figures for bilateral volumes of mail are derived from the total outbound volumes of each post office for 2007 (available from the UPU) and from OECD statistics for bilateral trade in goods and services. These calculations require several steps.

According to UPU statistics, in 2007 the world's post offices dispatched about 5.85 billion outbound letter post items and received about 7.52 billion inbound items.⁹ Yet it is apparent that, for the world as a whole, total outbound volume must equal total inbound volume. Yet if the inbound figures are correct, then the origin post office is unknown for 30 percent of outbound mail (1.7 billion items). In developing a terminal dues model, the first question that must be asked is whether the total volume of mail received by post offices is 5.85 or 7.52 billion items? As noted above, it appears that in the last 15 years large mailers have begun to tender significant amounts of international mail to foreign post offices, i.e., to a post office other than the national post office where the mailer resides. This "extra-territorial" mail might be physically transported to a foreign post office ("re-mail," in UPU parlance), tendered to local office of a foreign post office (an "extra-territorial office of exchange" or "ETOE"), or electronically transmitted to a foreign country where it is printed and tendered to the post office ("non-physical re-mail"). Indeed, some post offices appear to be using such practices to save costs on outbound mail. Since competition among post offices is considered unseemly at the UPU, it may be that post offices that handle large amounts of extra-territorial mail are omitting this mail from their reported outbound volumes. Whether the large discrepancy between the reported outbound and inbound mail volumes can be explained by extra-territorial mail of unknown origin or by systemic accounting errors cannot be determined. The model therefore considers both possibilities. The "known origin" and "unknown origin" calculations may be considered as, roughly, lower and upper boundaries for the estimated distortions caused by non-cost-based terminal dues.

The next step is to allocate the known origin *outbound* mail volumes sent out by IC post offices to destination countries. UPU studies and our analyses suggest that a country's outbound international mail is closely correlated to revenues earned from export of commodities and, even better, services.¹⁰ For the OECD as whole, trade data imply that between 75 percent (commodities) and 83 percent (services) of outbound IC international mail is destined for another IC. The model adopts a figure of 80 percent. Intra-OECD mail is then allocated to bilateral pairs

⁹ The model relies on public and non-public statistics for letter post volumes of UPU member countries with a few adjustments by WIK. For comparison it may be noted that the UPU's 2010 Adrenale Report estimated that the total outbound letter post volume for 40 countries in 2008 was 4.72 billion and that this figure likely represented 85 to 90 percent of the global total -- implying total world outbound volumes of 5.25 to 5.55 billion items. See Adrenale Report, pp. 8,12.

¹⁰ For ICs, using average export revenues for the period 2005 through 2009, the coefficient of determination (r-squared) between the value of commodities exports and total outbound mail volume is about 0.73; for services exports, the figure is about 0.83 (in some cases, it is necessary to rely on the data for import of services to fill in gaps in reports of services exports). For DCs, data for trade in services is not complete enough to use services exports, and the correlation with commodities exports is not nearly as good as for ICs.

of ICs based on bilateral trade statistics.¹¹ For example, if 15.1 percent of French exports go to Germany, then the model assumes 15.1 percent of the outbound international mail reported by La Poste also goes to Germany. For each IC post office, letter post volume to DCs — i.e., to the rest of the world — is the mail not allocated to another IC country. As with trade generally, the result is that ICs differ significantly in the proportion of mail sent to DCs.

The volume of known origin *inbound* mail for each IC post office is determined as follows. The volume of inbound mail received from other ICs is given by the outbound analysis. The volume of mail received from DCs countries is unknown but a rough approximation is suggested by UPU studies. It appears that DCs receive about twice as much mail as they send to ICs. The model assumes that this is case for the OECD as a whole and then allocates the inbound mail to individual ICs in proportion to their shares of the outbound mail from ICs collectively. For example, if France accounted for 9.7 percent of all IC to DC letter post items, then the model assumes that 9.7 percent of DC to IC letter post was destined for France. In a few countries, these calculations imply a total inbound volume that exceeds what the IC post office reports. In such cases, all bilateral flows have been adjusted proportionally to avoid this contradiction.

At this point, the model addresses the mail of *unknown origin* described above. The foregoing calculations imply that IC post offices received 4.25 billion items whereas they report a total inbound volume of 5.20 billion items. This is 953 million of the global 1.67 billion discrepancy between inbound and outbound volumes reported by the world's post offices. The model assumes, as an upper limit possibility, that all of these 953 million letter post items of unknown origin actually originated from mailers in other ICs and were tendered to foreign post offices using remail, ETOEs, or distant printing but not reported as outbound mail by those post offices. Half of the mail is assumed to have been presented to post offices in industrialized countries (i.e., using the UPU's target system), and half to post offices in developing countries (i.e., using the UPU's transitional system).

In sum, the model begins with a plausible pattern of bilateral mail flows among ICs (the OECD countries) and between ICs and DCs (the non-OECD countries) that fits with the known facts. According to the model, the IC to IC letter post consisted of about 3.77 billion items (65 percent of the world total) or 4.73 billion items if inbound items of unknown origin are included (63 percent of the world total that includes all mail of unknown origin). The ICs exported 943 million letter post items to the rest of the world and received 472 million items in return.

Domestic postage rates. The second requirement for the model is domestic postage rates. An almost complete set of 2008 retail priority postage rates for each country is available from the UPU. In the model the appropriate domestic postage for delivery of inbound international priority letter post items is assumed to be 80 percent of the retail rate (the same as in the REIMS II agreement) for delivery in ICs and 100 percent in DCs. Since UPU data is limited to priority or first class services, it is also necessary to make an assumption about the extent of non-priority

¹¹ The model uses revenues from service exports plus 25 percent of revenue from commodity exports. In a few cases, revenues from service exports are reported as negative, e.g., when insurance pay more out in claims than collected in insurance premiums. In such cases, the model uses the absolute value of the export revenues since mail is likely generated regardless of the direction of the revenue flow.

mail in international mail flows and the discount from priority rates given to non-priority mail. The model assumes that 40 percent of letter post items sent by ICs are non-priority and 10 percent of letter post items sent by DCs. The discount from delivery of non-priority inbound mail is assumed to be 40 percent for mail delivered in ICs and 20 percent in DCs.¹²

Profiles of outbound international mail. The third piece of information needed in our model is the distribution or “profile” of letter post items across the shape-based and weight-based categories of domestic postage rates in the destination country. Since 1998, UPU studies indicate that average weight of cross border items has increased significantly. A recent survey provides a break down by shape and weight of letter post items dispatched by 12 countries and less detailed information about a larger number of countries.¹³ While it is unclear how representative these figures are, it appears that the increase in the average weight per item is due primarily to a decrease in the proportion of small letters and a corresponding increase in the proportion of large envelopes and small packets and, to a lesser extent, to a decrease in the lighter items within each shape. In our model, we use the 12 country profile as a starting point and adjust these proportions to modify the average weight per letter post item to 80.0 grams (12.50 items per kg) for mail dispatched by IC countries¹⁴ and 75.5 grams (13.25 items per kg) for mail dispatched by DCs.

Using these assumptions, it is straightforward to calculate the domestic bulk mail rate that would be charged for delivery of a typical letter post item. The amount varies according to the postage in each destination country and the profile of mail dispatched by the origin post office. For example, the model posits that a shipment of letter post mail from an IC post office includes 69.8 percent letter envelopes, 19.1 percent large envelopes, and 11.1 percent packets. Forty percent of these items are assumed to qualify for a non-priority discount. In 2008, the average domestic postage per item for delivering a bulk shipment of such mail was (in SDRs) 1.14 in Italy, 0.71 in Germany, 0.47 in the United States, and 0.47 in Spain.

The model also estimates the charge for delivery of the same letter post items calculated according to various terminal dues schemes and compares this with the domestic postage charge. Figure 1 shows, for each of the ICs, the estimated domestic postage charges in SDR that would be assessed for delivery of a typical inbound international letter post item received from another IC and, in contrast, the charges that result from (1) the UPU IC-IC terminal dues provisions in effect in 2008, (2) the UPU IC-IC terminal dues without floor and cap provisions, (3) the UPU DC terminal dues charge (applicable to DC-IC), and (4) the REIMS II terminal dues system (without the floor rate provisions).

As shown in Figure 1, UPU IC terminal dues are substantially below comparable domestic postage rates in almost all ICs. Because of the tight cap and floor constraints, UPU IC

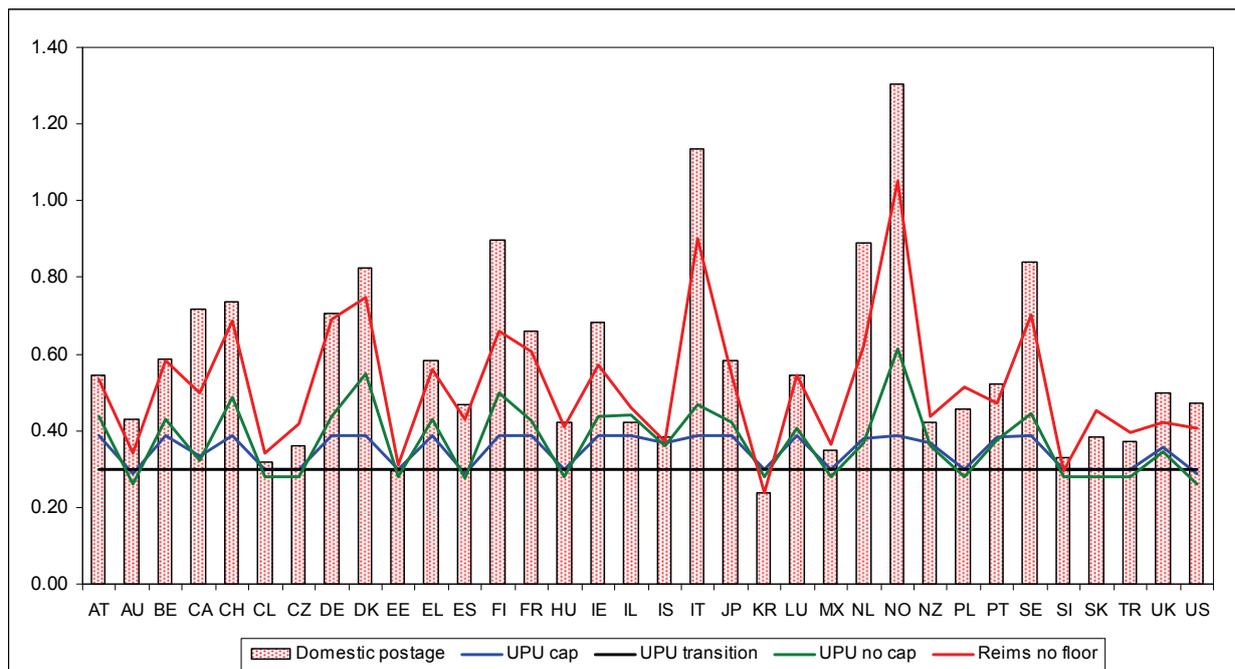
¹² Discounts for bulk and non-priority mail actually vary from country to country, but country-specific discount data are unavailable.

¹³ UPU, POC C1 TDG 2011.1 Doc 4a Annex 4, “Analysis of responses to the questionnaire on flow volumes and profiles for designated operators” (13 Apr 2011). We also adjusted the average weight of packets to 400 grams, a rough compromise between the data reported in table 3 (12 countries) and table 4 (57 countries).

¹⁴ More precisely, we assigned the IC profile only to the 25 OECD countries that are also “old target” countries under the UPU classification. UPU data is categorized according to terminal dues groups not OECD status.

terminal dues rates poorly reflect variations in national postage rates. On average, the UPU terminal dues payments are 31 percent below the domestic postage charges that ICs would apply to a typical letter post item received from another IC. Even if the cap and floor constraints are removed, the UPU IC approach remains about 27 percent too low. On the other hand, the REIMS II formula appears to respond better to variations in national postage rates but to yield charges that are about 14 percent too high on average (or 6 percent too low without the floor provision).

Figure 1. Domestic bulk rates versus UPU and REIMS terminal dues systems for a typical IC origin letter post item (SDR)



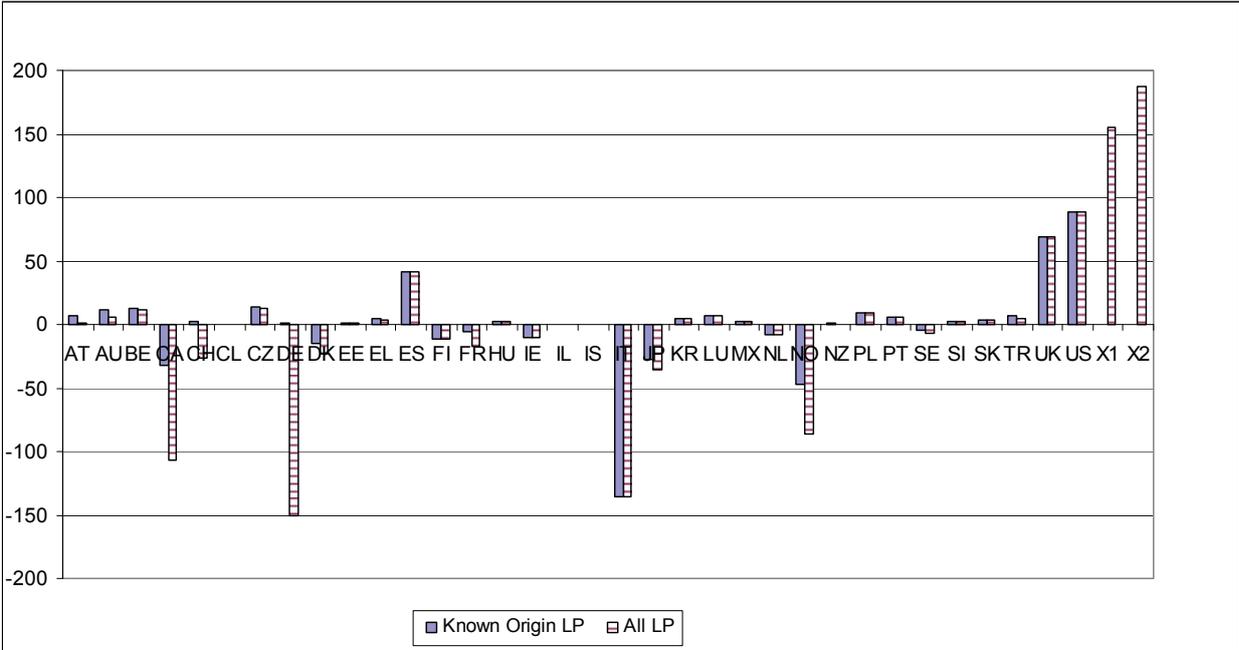
3 WHO WINS, WHO LOSES?

Whether or not a post office wins or loses using the understated charges of the UPU terminal dues system rather than comparable domestic postage depends on two major factors. First, low, relatively uniform rates favor exporters over importers for the simple reason that they are buying more of an underpriced service, inward mail delivery. Second, the UPU system favors low cost post offices over high cost post offices, because they are, in effect, trading their own low cost delivery services for the more costly delivery services of other post offices. Thus, a low cost exporter like the UK's Royal Mail wins, and a high cost importer like Italy's Poste Italiane loses.

Figure 2 shows the estimated net gains or losses on the exchange of international mail between ICs countries if UPU terminal dues were charged consistently by all — instead of bulk domestic postage charges. Since some post offices participated in alternative non-UPU terminal dues arrangements in 2008 (REIMS or bilateral agreements), this figure shows the effects of the UPU terminal dues scheme in principle, not the actual net payments among IC post offices. The net gain or loss per country is derived by comparing the balance that remains after paying UPU terminal dues for outbound mail and receiving UPU terminal dues for inbound and comparing

that figure to the balance that would result if the same country had paid and received charges based on domestic postage rates. For each IC, the net gain or loss is calculated by disregarding inbound mail of unknown origin (solid bar) and by including inbound mail of unknown origin (hatched bar).

Figure 2. UPU terminal dues v. bulk domestic postage: gains (losses) on intra-OECD letter post (mil SDR)

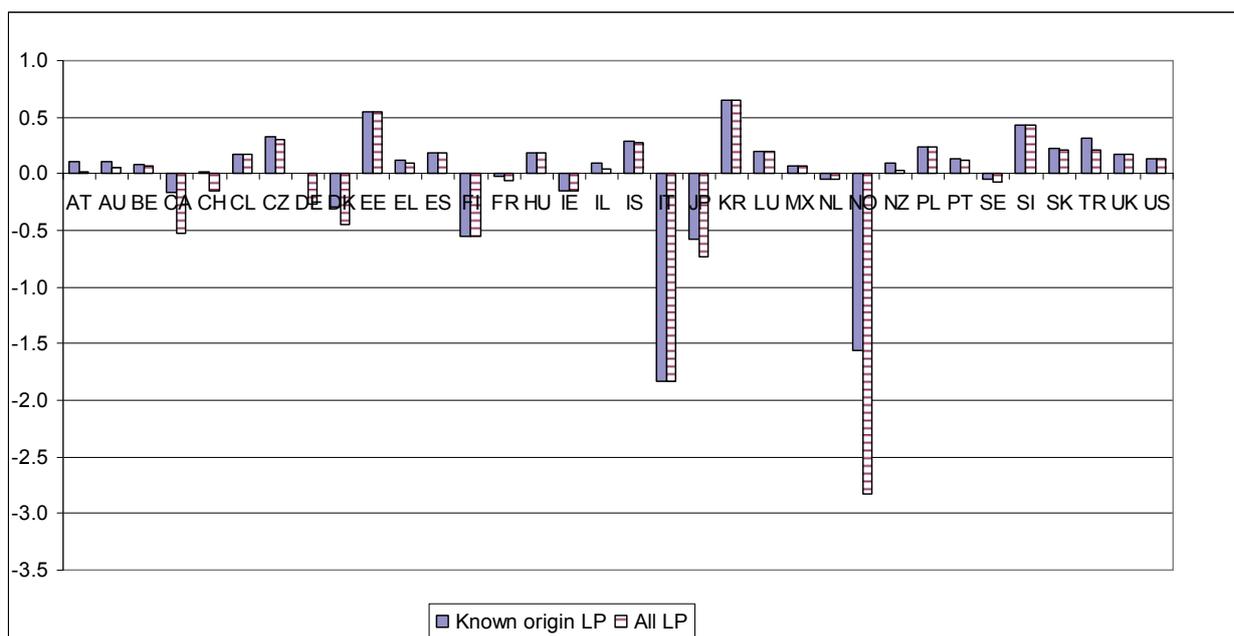


The overall effect of the UPU terminal dues system is to transfer a substantial sum of money from losers to winners. Taking into account only the outbound mail reported by origin post offices ('known origin'), it appears that winners gain about 299 million SDR. The big winners are the Royal Mail (UK), the U.S. Postal Service, and the Spanish Post Office. The major losers are Poste Italiane, Norway Post, Japan Post, Canada Post, Irish An Post, Finland Post, and Post Denmark. If mail of unknown origin is taken into account — i.e., if the post offices actually received all of the inbound mail they reported — then the losses of these post offices are exacerbated significantly, especially for Deutsche Post, which reports much more inbound mail than our trade-based model predicts. Counting unknown origin mail also implies major losses for Swiss Post and La Poste (France). The total transfer from losers to winners jumps to 618 million SDR. On the other side, the unknown mailers and post offices who are dispatching unreported extra-territorial mail become the biggest winners. In the figure, they are collectively listed as X1 (letter post dispatched from IC post offices) and X2 (letter post dispatched from DC post offices). Economic distortions result primarily from underpayment of inward delivery. According to the model, IC post offices collectively undercharge each other by about 1.1 billion SDR, 1.4 billion if unknown origin mail is included.

Figure 3 presents the same information per outbound letter post item. If origin post offices adjust outbound international postage rates to reflect gains or losses resulting from terminal dues distortions, Figure 3 shows how much the price increase or decrease would be per

average outbound item.¹⁵ For example, Italian outbound mailers would need to pay about 1.84 SDR (€ 2.00) per outbound letter post item on average to offset net losses incurred in delivering inbound letter post items at UPU terminal dues. In Norway, outbound mailers would need to contribute between 1.56 to 2.83 SDR (14 to 26 Norwegian kroner) per outbound item depending on how much unknown origin mail is received; for Japanese mailers, the comparable figures are 0.58 to 0.74 SDR (JP¥ 97 to 123). On the other hand, mailers in the United Kingdom could benefit by 0.17 SDR (UK£ 0.15) per outbound item while Spanish and American mailers could receive a discount of 0.18 (€ 0.20) and 0.13 SDR (US\$ 0.21), respectively.

Figure 3. UPU terminal dues v. bulk domestic postage: gains (losses) on intra-OECD letter post per outbound LP item (SDR)

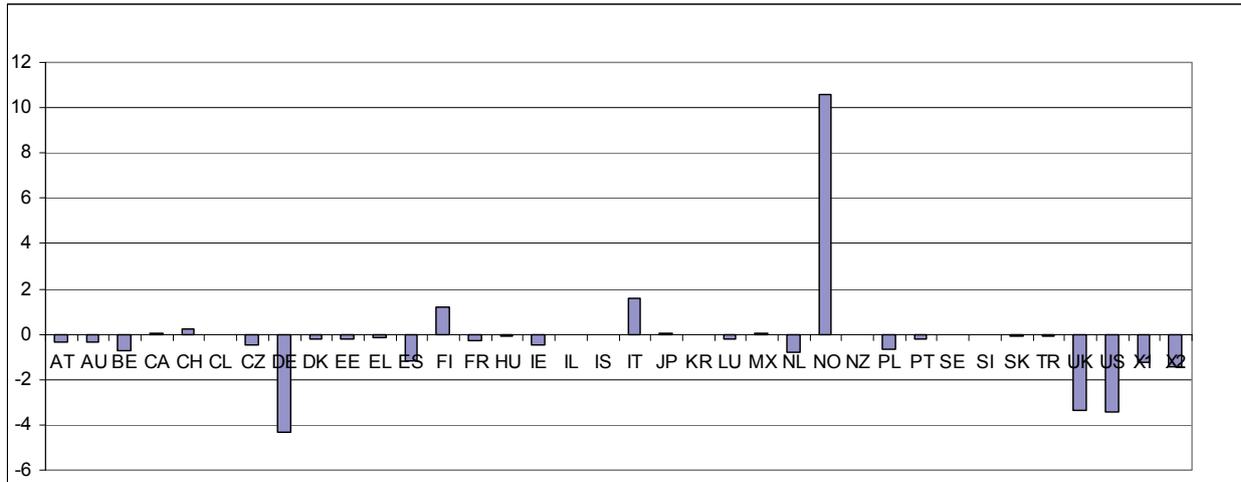


Net gains and losses do not, however, capture fully the distortions caused by the UPU terminal dues system. The net gain or loss obscures distortions in relations with individual foreign post offices.

Consider the case of the Sweden Post. Sweden Post appears to be net loser of 4.1 million SDR in the exchange of known origin mail with other ICs. This net figure, however, is a composite of both positive and negative distortions in the relations between Sweden Post and other IC post offices. Under the UPU terminal dues scheme, Sweden Post would pay the U.K.’s Royal Mail (for example) 3.00 million SDRs for delivery of 8.44 million inbound letter post items, an underpayment of 1.21 million SDR when compared to the domestic postage charge of 4.21 million. On the other hand, Sweden Post would charge Royal Mail 3.88

¹⁵ The artificial gains or losses resulting from non-cost-based terminal dues must translated into higher or lower rates for other mailers, but it is unknown to what extent specific post offices seek to pass on all of these gains or losses to outbound international mailers alone. What is known is that IC post offices generally keep prices of international letter post well above the actual costs incurred, including terminal dues costs, producing “a large margin at the posting country.” Adrenale Report, p. 30.

Figure 4. UPU terminal dues v. bulk domestic postage: net gains (losses) on bilateral exchanges of Sweden Post (mil SDR)



million SDR for delivery of 10.05 million items, an underpayment of 4.57 million SDR compared to a domestic postage charge of 8.45 million SDR. Sweden Post suffers a net loss in this exchange of 3.36 million (4.57 million less 1.21 million SDRs). This net loss is an economic distortion which Sweden Post must make up by overcharging someone else (or a payment from the Swedish government). Figure 4 shows Sweden Post’s net gains or losses with respect to each IC post office and with respect to the mail flows originating (by assumption) in an unknown IC and posted via IC post offices (X1) and DC post offices (X2). If the absolute values of the *net* losses and gains are added up, the total *distortions* (as we shall term it) in Sweden Post’s postal relations with other ICs is almost 34.2 million SDRs, including the 2.7 million SDRs in underpayments for delivery of inbound international mail of unknown origin. Indeed, if all of the underpayments and overpayments were added together — instead of offset against one another — the sum would come to 77 million SDRs.

Figure 5. UPU terminal dues v. bulk domestic postage: total bilateral gains and losses on intra-OECD exchanges of letter post (mil SDR)

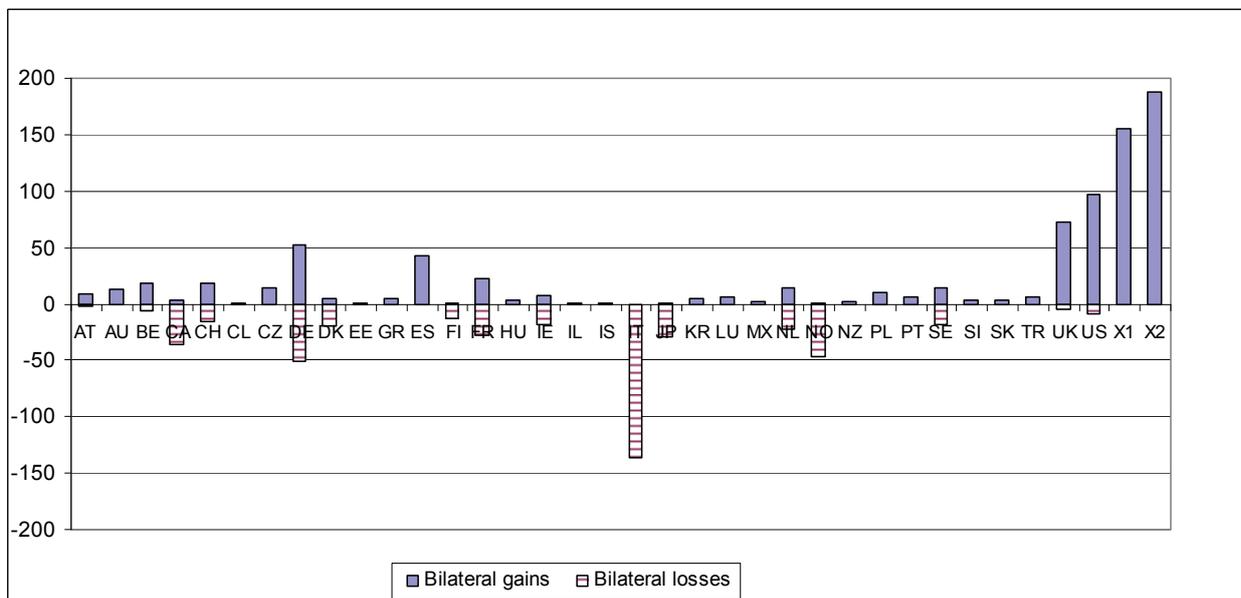
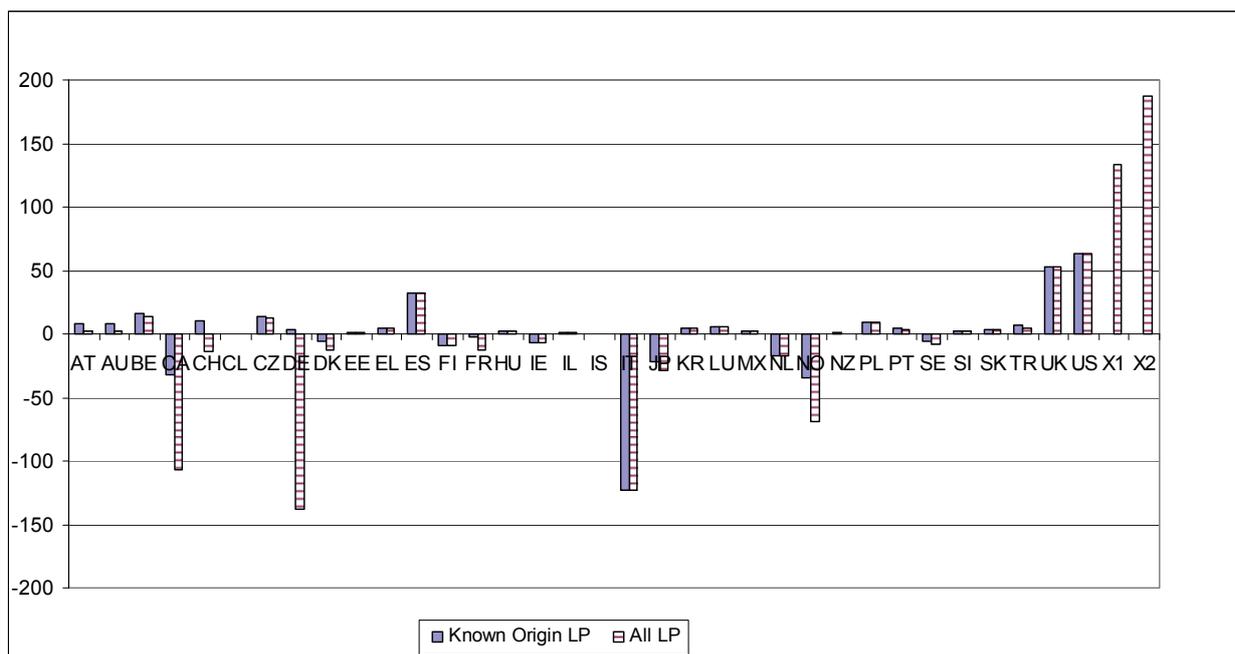


Figure 5 shows the sum of net gains and losses in bilateral relations for the 34 IC post offices. Predictably, net winners tend to have more net gains than losses while net losers exhibit an opposite balance. For the IC-IC international mail market as a whole, the total value of the delivery of known origin letter post — measured by the domestic postage that should have been paid — is about 2.4 billion SDR. The total distortions implied by UPU terminal dues — both gains and losses experienced in bilateral exchanges — is about 0.92 billion SDR. Taking into account unknown origin mail would add another 0.34 billion SDR in distortions.

What about alternative terminal dues regimes? An often proposed variation of the UPU terminal dues system is to eliminate floor and cap restraints. Figure 6 shows the net gains and losses by country if the UPU terminal dues system were applied without upper (cap) and lower (floor) limits on the per item and per kg charges.¹⁶ Elimination of the cap provides a little relief to high cost post offices but fails to change significantly the pattern of distortions. The essential problem is that the UPU terminal dues formula is too simplistic and fails to reflect accurately variations in domestic postage. The total economic transfer from losers to winners is reduced from a range of 299 to 618 million SDR to a range of 258 to 545 million SDR (depending on whether unknown origin mail is included). Total distortions decline correspondingly.

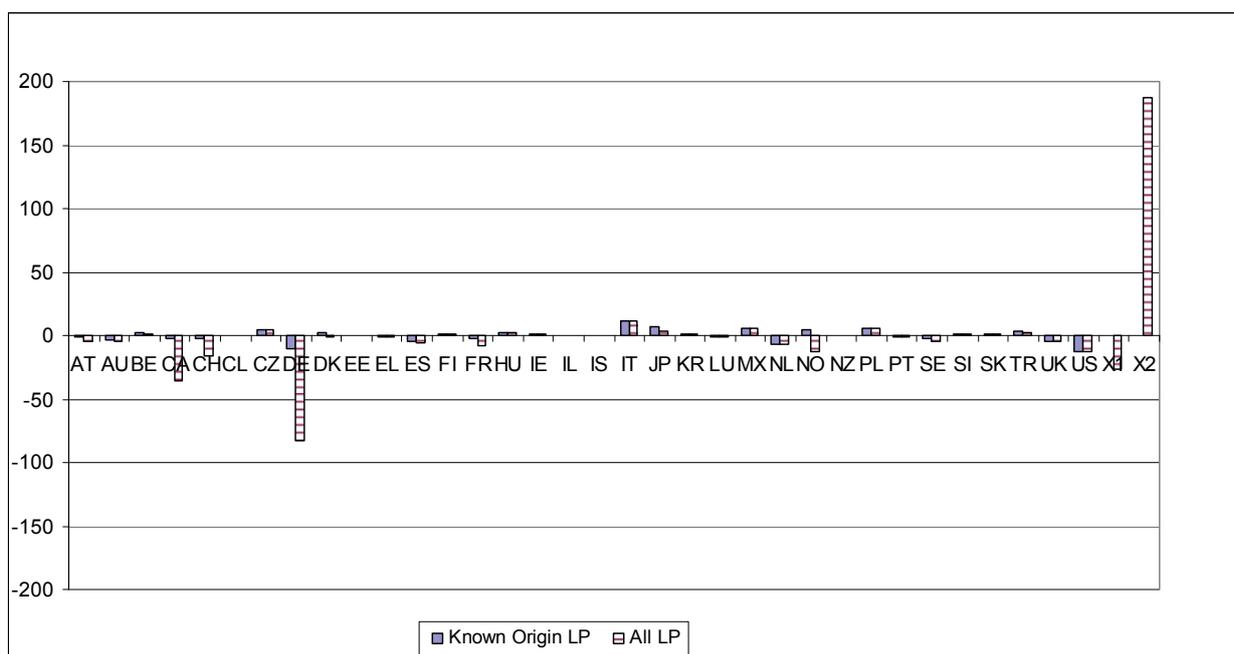
Figure 6. UPU terminal dues without cap and floor limits v. bulk domestic postage: gains (losses) on intra-OECD letter post (mil SDR)



¹⁶ It is not entirely clear how to construct an “uncapped” version of the UPU terminal dues system. The UPU terminal dues system provides for the calculation of a linear formula (i.e., a rate per item and rate per kg) from the 20 gram priority letter in two steps. Step 1 calculates a per kg rate and then applies the per kg floor and cap constraints. Step 2 calculates a per item rate from the — possibly constrained — per kg rate and then subjects the per item rate to per item floor and cap constraints. Step 1 reflects the weight and item relationships in the UPU’s floor constraints. An “uncapped” version of the UPU terminal dues system could be constructed by either of two methods. The first method would be to calculate both steps without reference to the UPU floor/cap constraints. The second method would be to calculate the per kg rate as required by the UPU step 1 and then calculate the per item rate without reference to the UPU constraints. Counterintuitively, perhaps, the second method results in higher terminal dues for high cost post offices, and this is the method used in the model.

Figure 7 shows the effect of introducing REIMS II terminal dues (without the floor provisions) throughout the OECD – compared to bulk domestic postage charges.¹⁷ Note the change in scale of the Y-axis in the figure. Unlike the UPU terminal dues system, REIMS II rates take into account how domestic postage rates vary with weight and shape. According to the model, REIMS II substantially reduces deviations from domestic postage payments while reversing the roles. Overall the losers would transfer about 56 million SDR to the winners if only the known origin mail is considered and up to 231 million SDR if all unknown origin mail is included (because of the presumed possibility of re-mailing through DCs). Total distortions produced by REIMS II are still significant, about 155 million SDR for “known origin” mail.

Figure 7. REIMS II terminal dues without floor limits v. bulk domestic postage: gains (losses) on intra-OECD letter post (mil SDR)



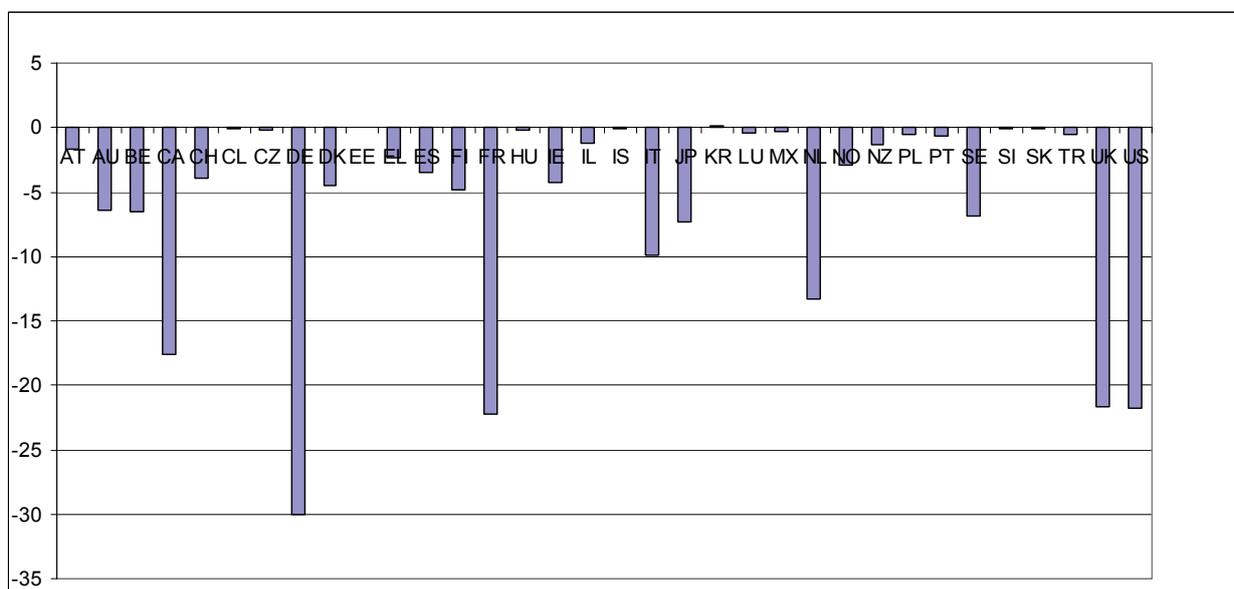
The terminal dues model may also be used to explore the effects of the UPU system on exchanges of mail between ICs and DCs. For letter post items that ICs *send to* DCs, the model calculates that in 2008 ICs paid DCs about 281 million SDR for delivery under the UPU terminal dues system. If they had paid domestic postage rates instead, the bill would have been 253 million SDR. Given the uncertainties in the model, these figures are essentially the same. That is, ICs collectively paid DCs collectively about the right amount for delivery of international mail. The story is much different for letter post items that ICs *received from* DCs. Given the assumption that ICs received half as much mail from DCs as they sent to DCs, the model indicates that the ICs charged DCs about 133 million SDR in UPU terminal dues whereas they would have received 297 million SDR in domestic postage. The effect is a subsidy of 164 million SDR in the form of low postage charges.

¹⁷ Although the REIMS III agreement was in effect in 2008, its provisions are unknown. However, the main provisions of the REIMS II agreement are known and believed to differ little from REIMS III. In the model, the REIMS II rates are applied to all IC-IC mail flows, whereas the UPU terminal dues system and the uncapped variation apply only to flows between UPU “target” countries (figures 2 to 6).

The burden of the UPU terminal dues system is distributed unevenly among OECD post offices. For an average letter post item from the DCs, UPU terminal dues come to only 0.28 SDR. High cost post offices are more adversely affected than low cost post offices because the UPU terminal dues rate covers a smaller percentage of costs incurred. For example, Norway Post, loses about 1.08 SDR per average LP received from a DC and Poste Italiane 0.90 SDR, whereas the Spanish Post Office and the U.S. Postal Service lose about 0.21 SDR.

The estimated overall net loss for ICs collectively on letter post items exchanged with DCs is 192 million SDRs. Net gains and losses on bilateral exchanges for each IC are shown in Figure 8.

Figure 8. Gains and losses in exchange between OECD post offices and rest of the world (mil SDR)



4 REFORMING UPU TERMINAL DUES

It should be emphasized that actual terminal dues payments of IC countries in 2008 were not as economically distorted as suggested by our terminal dues model. Many European post offices have adopted REIMS or bilateral terminal dues agreements that provide more cost-based charges than the UPU system. Nonetheless, UPU terminal dues were in effect in many IC-IC postal relations and continued to influence other relations by serving as a default standard against which alternative arrangements were negotiated. And postal relations between ICs and DCs were almost completely established by the UPU terminal dues system. Hence, it is fair to say that UPU terminal dues system continues to exert a distorting, though not definitive, influence on the postal relations of IC countries.

How can the UPU terminal dues system be reformed to reduce economic distortions? On a policy level, the path to reform is not only well lit, it has been recognized by policy makers for two decades. In 1990, the U.S. Department of Justice observed, *“To the extent that terminal dues differ from the actual cost of completing delivery, they have the potential to distort competition*

and unfairly disadvantage private competitors.”¹⁸ In 1992, the European Commission declared, “The compensation charges between postal administrations for delivering each others mail (terminal dues) ought to reflect actual inward costs. Since inland tariffs will be related to costs, the *compensation charges between postal administrations ought to be based on the delivery proportion of the inland tariff*, with some supplement for the extra handling necessary and for profit.”¹⁹ In 1997, a UPU committee on the future of international postal relations declared unambiguously “*rates of terminal dues which are not based on the internal tariffs or costs of delivery in the country of destination, create incentives for an economically wrong organization of cross-border transport networks and letter-post streams.*”²⁰ In short, there is already broad agreement on the principles of reform.

At a political and legal level, the problem is more complicated, but only slightly more so. Compared to the tangle of irreconcilable interests presented by many issues on the desks of today’s policy makers, reform of terminal dues can only be considered one of the lowest of the low hanging fruit. The key to political agreement, we suggest, is to divide the issue into three manageable portions.

An agreement on IC-IC terminal dues. In postal terms, the industrialized countries are different. The major industrialized countries of today developed in an age when paper-based communications were vital to the commercial and social life of the nation. IC post offices are the main source and the main consumers of the international letter post. Virtually all of the major economic distortions created by the UPU terminal dues system are concentrated in the postal relations among ICs. The newly industrializing countries and the developing countries will never be as reliant paper-based communications as the older industrialized countries have been. Thus, the economic distortions caused by the UPU terminal dues system are almost entirely a concern of the industrialized countries, and most of the problems can be resolved by an agreement among these countries.

A political agreement on terminal dues among the governments of industrialized countries should certainly be feasible. All parties have a common interest in undistorted trade, including trade in postal and delivery services. As our terminal dues model shows, there are only a handful of significant beneficiaries of the current distorted system of terminal dues payments, primarily Spain, the United Kingdom, and the United States. All are large, highly developed economies with relatively little at stake in the international postal sector. For Spain, outbound international post accounts for 4.8 percent of all letter post items; for the U.K., less than 2.8 percent; for the United States, less than 0.4 percent. On the other hand, the current system imposes (in the absence of alternative arrangements) significant economic harm on a

¹⁸ Letter from James F. Rill, Assistant Attorney General, Antitrust Division, U.S. Department of Justice, to Thomas G. Martin, Office of Technical Specialized Agencies, Bureau of International Organization Affairs, U.S. Department of State, dated 19 Oct 1990.

¹⁹ European Commission, *Green Paper on the Development of the Single Market for Postal Services*, COM/1991/0476 (11 Jun 1992), p. 251.

²⁰ CA C1 1997 Doc 2, “Study on the legal, regulatory, technological and commercial environment in relation with the single postal territory principle,” paragraph 5 (5 Sep 1997).

double handful of post offices and their mailers — including Canada, Denmark, Switzerland, Germany, France, Japan, Italy, and Norway. For the losers, on average, inbound international mail comprises 4.3 percent of their total mail. Moreover, virtually all of the main protagonists — both winners and losers (with the possible exception of Japan) — are required by their national laws to promote cost-based postage rates and avoid price-fixing and other anti-competitive practices.²¹ The bottom line is that (as our terminal dues model helps to clarify) the UPU terminal dues system distorts a substantial proportion of all bilateral postal relations while providing a significant net benefit to only a relatively few countries and imposing a significant burden on a larger, but still relatively small, number of countries. Agreement among this small group of affected parties should suffice to effect reform, and the path to agreement is both well lit and consistent with existing law.

Nor is there any obscurity to the legal technicalities required. Article 13 of the European Postal Directive is, in effect, a good first draft. Article 13 defines the principles for terminal dues on letter post items within the universal service exchanged among member states of the European Union and already applies to 24 of the 34 OECD countries. IC governments would only need to generalize Article 13 slightly.²² For example, an IC level version of Article 13 might include such provisions as: (1) a commitment to grant operators and mailers from other countries non-discriminatory access to government ensured universal services on the same terms as available to national residents; (2) a commitment that providers of universal services will provide, for their primary universal services, simplified linear tariffs that are aligned to domestic tariffs; (3) a recognition that providers of universal services should be able to adjust tariffs and adopt alternative bilateral arrangements among themselves where such adjustments and arrangements are cost-justified and transparent; and (4) a commitment to ensure that compliance is enforced by an impartial and effective regulatory authority. While such an agreement would be fully consistent with the acts of the UPU, it would constitute a small but positive innovation in one sense. It would limit the intergovernmental agreement to the *principles* of terminal dues arrangements and leave it to operators and regulators to fix the actual charges.²³ Such an

²¹ In the European Union, in 1999 and 2003, the European Commission twice held that the REIMS II terminal dues agreement is a “price-fixing” agreement under European competition rules but permitted the agreement to become effective because of certain public interest provisions not included in the UPU terminal dues system. Commission Decision of 15 September 1999, Reims II, OJ L 275, 26 Oct 1999, p. 17; Commission Decision of 23 October 2003, Reims II renotification, OJ L 56, 24 Feb 2004, p. 76. In addition, Articles 12 and 13 of the European Postal Directive positively require terminal dues to be cost-oriented and non-discriminatory. In the United States, the antitrust laws apply to UPU agreements relating to all U.S. postal services other than those covered by the postal monopoly law. Unlike in the EU, there is no American precedent applying the antitrust law to terminal dues although US and EU competition laws are broadly similar. In addition, U.S. postal laws require that prices of international “competitive products” (generally including bulk international letter post items) cover direct costs (“attributable costs”) and that the prices of international “market dominant” products are consistent with the cost-based criteria applicable to domestic market dominant postal products. See 39 U.S.C. §§ 407(c), 409(e), 3622, 3632.

²² Universal Postal Convention (2008), Article 27(4)(2) also offers a limited precedent: “Designated operators of countries in the target system shall make available to other designated operators the rates, terms and conditions offered in their domestic service, on conditions identical to those proposed to their national customers.”

²³ Such an agreement is not inconsistent with the acts of the UPU. Since 1989, the Universal Postal Convention has permitted countries to adopt alternative terminal dues arrangements by bilateral or multilateral agreement.

approach is, of course, fully consistent with the thrust of domestic postal reform in the ICs since the 1970s.

An agreement on terminal dues rebates for “social mail” sent by DCs to ICs. As our terminal dues model shows, virtually all of the economic benefits that DCs obtain from the UPU terminal dues systems comes from low “transitional” terminal dues that IC post offices charge on international mail received from DCs. Among IC governments there appears to be widespread support for continuing to provide low rates for delivery of DCs “social mail” including personal correspondence, individual parcels, newspapers, cultural items, and similar material. On the other hand, there is widespread agreement that DC post offices should not abuse this concession by reselling low rates to mailers or post offices from industrialized countries.

How can IC governments continue to protect social mail from DCs without subsidizing mailers who have no just claim to subsidy? The answer is *not* low, non-cost-based terminal dues rates for DC-origin mail. This places the burden of distinguishing between social mail and other types of mail on the receiving post office, an operationally impossible task. Instead, IC post offices should apply the same terminal dues rates to both DC and IC mail, and IC governments grant DC governments a periodic rebate sufficient to cover an agreed proportion of the terminal dues for social mail. To this end IC and DC governments should agree on objective criteria for determining a fair allowance for social mail and a reasonable discount for such mail. Then, it would be up to DC governments in the originating countries, not IC post offices in the receiving countries, to ensure the rebates are reflected in low international postage rates for the intended beneficiaries. While some rebates may not in fact be used in this manner (a problem with current system as well), the overall program will be substantially more fair, transparent, and free of incentives for abuses by IC mailers and post offices. It would give IC governments new flexibility to give additional assistance to the least developed countries.

The UPU is well equipped to devise and administer such a system of terminal dues rebates for DCs given clear guidelines from UPU member governments. Indeed, in many respects, such an approach is but a small extension of concepts and analyses that have been under study at the UPU for years. What is needed is a well articulated initiative by a leading IC and DC governments.

An agreement establishing a simple classification of DC post offices based on the domestic postage rates. The last agreement we suggest to reform the UPU terminal dues system is an improved approach towards setting delivery rates for mail delivered by DCs, that is, letter post items received by 157 DCs from 191 ICs and DCs. Our terminal dues model suggests that DCs collectively, unlike ICs collectively, are receiving terminal dues that are reasonably aligned with domestic postage. Nonetheless, the current UPU approach could be substantially improved.

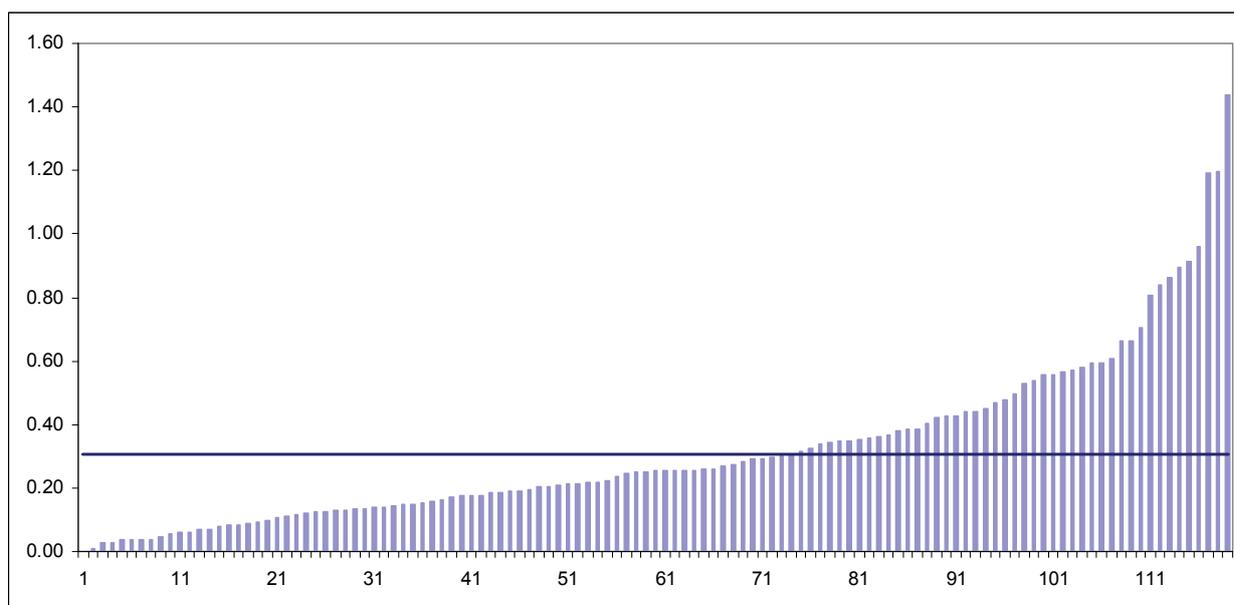
At the outset, it should be recognized that the objective that all DC post offices should be prepared to adopt cost-based terminal dues strictly aligned with domestic postage is unrealistic. Improved telecommunications technologies make it unlikely that any DC will ever become as dependent on international paper-based communications as current ICs. For the foreseeable future, almost all DC post offices will continue to participate in the international postal market as

small operators in a larger market populated with many similar operators. By unrealistically tying DCs to reforms appropriate only to IC to IC postal relations, the concept of a “transitional” phase for DC post offices has inappropriately and unjustifiably raised concerns for DC post offices. What is needed is a terminal dues approach that is suited to the international delivery services of the DCs. For DCs as well as ICs, it is neither just nor reasonable to charge foreign mailer rates that are substantially above or below the costs. Therefore, the same principle — cost-based delivery charges — should guide reform for DCs as well as DCs, but with moderation and common sense.

Among DCs, domestic postage rates vary enormously. Figure 9 shows the variation in domestic postage rates that would be levied on a typical letter post item received from an IC by the 119 DCs for which we could calculate the average postage rate. This figure also shows a level line indicating the terminal dues charge that results from the UPU terminal dues system. It is apparent that the UPU terminal dues rate produces a charge that is too high or too low by a wide margin in almost all cases. Yet it is also apparent that IC and DC post offices would face much higher transaction costs if they were required to apply 157 different sets of domestic postage rates to the relatively small flows of mail destined for each DC post office.

The sensible reform, therefore, is to classify these post offices in groups based on their domestic rates.²⁴ Figure 9 suggests that four or five rate groups would adequately achieve the objective of cost-based terminal dues without introducing undue burden and complexity into the system. While such a scheme should include reasonable safeguards against abuse and anticompetitive behavior, it appears that an appropriate system of rate groups will minimize incentives for such conduct in the first place.

Figure 9. Domestic postage rates and terminal dues charge for an average letter post item from an IC (SDR)



²⁴ For foreign mailers, rate groups for DCs should include a fair proportion of any subsidy that the government contributes to the operation of domestic postal services.

Potential political objections to such a plan are obvious. DCs who experience a reduction in their terminal dues may oppose the plan even if the result is fairer to foreign mailers. The long term answer to this objection is to point out that artificially high terminal dues act like a tariff wall against incoming postal items. Elevated terminal dues rates will ultimately discourage foreigners from sending mail to a destination country and, at the same time, encourage them to shift written communications to electronic alternatives. If individual DC governments want to discourage inbound international mail, then they should do so by means of an import duty, not accept a phantom duty imposed by the UPU.

The balancing of short term gains against long term losses and the needs of one group against the needs of another is also a proper subject for future negotiations within the UPU. Nonetheless, we submit that governments need to declare clearly the principles towards which terminal dues reform must aim, whether by embracing a simple system of rate groups for DC post offices, as we have suggested, or by specifying an alternative goal.

5 CONCLUSIONS

Because details of international exchanges of mail among post offices are, for the most part, hidden from public view, this terminal dues model can only demonstrate the basic effects of the UPU terminal dues regime and its variants. Without actual postal data, it is impossible to calculate financial effects with precision. Moreover, non-UPU agreements among post offices have, to some extent, ameliorated the effects of the UPU terminal dues system through bilateral terminal dues agreements, although the extent is unknown because these agreements, too, are non-public.

The caveats notwithstanding, the infirmities in the UPU terminal dues arrangements discussed in this paper are still very much part of the international postal system. It may be hoped the model presented in this paper will help policy makers to understand what insiders in the game of international postal politics have long known: that the UPU terminal dues regime produces significant distortions in the flow of international mail. These distortions are not random or peripheral to the terminal dues system. Countries with low domestic postage and/or net exports benefit from the UPU terminal dues system; countries with high domestic postage and/or net imports are disadvantaged. Distortions have been perpetuated by the winners of the game to gain at the expense of the losers. At the same time, the system creates a pervasive pattern of distortions that affects international postal relations generally. Overall, in postal relations among OECD countries, the sum of the distortions — net gains and losses in bilateral relations taken together — would equal about 40 percent of the value of the market (i.e., the sum of payments that would be properly due if domestic postage were charged).

The necessary reforms are simple and well understood. Most of the distortions are concentrated in the 30 or so currently industrialized countries and less than a dozen of these countries are significant net winners or losers from the current system. If industrialized countries will agree to give mailers in other countries non-discriminatory access to their universal postal services on the same terms as given their own citizens, most of the distortions — and

complexities — will disappear. The European Union has already made a good start for intra-EU mail. The European approach could and should serve as the starting point for a more general agreement among all industrialized countries.

Reforming postal relations between industrialized countries and the much larger number of developing countries is more complicated, but not prohibitively so. Industrialized countries generally support continuation of subsidized postage rates for delivery of social mail received from developing countries while deploring use of these privileges by undeserving mailers, such as multinational companies from industrialized countries. The UPU terminal dues system, which relies on enforcement by the destination post office in an industrialized country, has proved impossible to enforce. It would be far simpler and more just to replace this approach with a system of rebates for terminal dues allocated by the UPU according to objective criteria and administered by the governments in the developing countries where the mail originates.

With respect to terminal dues payments to post offices in developing countries, the UPU terminal dues system presently provides one rate for all 157 developing countries and aims one day to provide 157 different rates based on the domestic postage in each country. Neither approach is sensible. The UPU should develop a simple set of terminal dues groups based on domestic postage rates (including allowances for subsidies by national governments, if any). Such an approach would be fairer to post offices in developing countries while retaining the virtues of simplicity found in the current system.

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