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Estimating the Effects of UPU Terminal Dues, 2014 – 2017

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I. Introduction



Terminal dues: the problem

- Terminal dues rates for delivery of inbound international mail — are set by the Universal Postal Union, an intergovernmental organization.
- TDs are fixed at politically acceptable levels that are unrelated to costs, distortive, and anti-competitive.
- Rate-setting is dominated by the largest countries and their posts.





- The economic effects of UPU rate-setting are hidden from outside scrutiny by bewildering complexity and secretiveness.
- TDs have not been subject to normal supervision by governments, regulators, and senior postal executives.

Purpose of the paper

- To estimate (within broad bounds) the economic effects of UPU delivery rates agreed in 2012 and effective from the beginning of 2014 to the end of 2017.
- To encourage scholars, regulators, and government officials to take a closer look at the international postal system.

II. The UPU and the 2012 terminal dues system

Universal Postal Union: Doha Congress, 2012

- The UPU consists of 192 member countries.
- Terminal dues are established by the Universal Postal Convention.
- UPU meets in a Congress every 4 years to revise the Convention. Most recent: 2012 Doha Congress.
- Postal officials, not governments, develop the TD provisions.



The UPU is dominated by a relatively small group of the largest post offices.

Terminal dues apply the "letter post"



* MAIL * EXPRESS	GUARANTED' **** TRACKED *** INSURED *
FLAT RATE ENVELOPE	
	UNITED STATES POSTAL SERVICE



Letter (P)

Small lettersized envelope. Average 20 g.

Flat (G)

Large envelope for unfolded documents, reports, etc. Average 124 g.

Small packet (E)

Any parcel, box, or rigid envelope weighing up to 2 kg. Average 354 g.

Primary product for e-commerce

Letters and Flats (PG)

Composition of letter post by volume, 2009



Composition of letter post by weight, 2009



For TD purposes UPU members are divided into 6 groups

TD Group	Number of UPU members	% of outbound mail	% of inbound mail	
1.1	41	77%	73%	
1.2	13	8%	4%	
2	22	4%	6%	
3	39	7%	10%	
4	54	3%	4%	
5	49	1%	2%	

Group 1.1 dominates the international postal system



Three TD schedules established in 2012

- Intra-Group 1.1. Mail exchanged between Group 1.1 countries only.
 - Includes the 24 major industrialized counties.
- **"Group 122"**. Mail exchanged between countries in Groups 1.2 and 2 or between those groups and Group 1.1.
 - Includes relatively small, newly industrialized countries, e.g., Hong Kong, Singapore, Bermuda, Qatar.
- "Group 345". Mail sent to or from countries in Groups 3, 4, and 5.
 - Includes developing countries and large, new industrialized countries, such as China, India, Brazil, and Russia.
- TDs create **economic distortions** because they are
 - **Uniform** (in some sense) and therefore unrelated to costs.
 - Available only to post offices for items sent from their national territories.

III. How to calculate the distortive effects of UPU terminal dues

In principle: Compare TDs to equivalent domestic postage

- Aligning TDs with domestic postage is the most correct, lessdistortive approach.
 - Eliminates discrimination between nationals and foreigners.
 - Domestic postage is best proxy for (unknown) costs of production.
- Steps required to estimate economic distortion:
 - 1. Estimate the volumes of outbound and inbound letter post mail for each country for the years 2014 through 2017.
 - 2. Allocate the outbound letter post sent from each county to every other destination country.
 - 3. Estimate the TDs payable under the 2012 UPU Convention for each bilateral flow (both directions).
 - 4. Estimate the delivery charges to equivalent domestic postage.
- Then,

 $Eqv. Dom. Postage - UPU TD = Discrimination \approx Eco. Distortion$

In practice: Difficulties abound

- Data for international postal volumes are incomplete and dubious
 - Many large post offices do not report data to the UPU.
 - Total world inbound and outbound volumes are highly inconsistent.
- Allocation of postal volumes to bilateral flows is non-public.
 - This paper uses bilateral trade in services data as first step in allocating outbound mail to bilateral flows to/from 38 OECD countries.
 - The allocation model is built up from successive estimates of (1) intra-EU 30 flows; (2) extra EU 30 flows; (3) other OECD flows except the US; and (4) US flows.
- Estimation of TDs and "DomPost" also requires assumptions about composition of letter post by weight step and shape (P, G, E).
- <u>The Terminal Dues Model in this paper produces reasonably plausible</u> <u>but rough and illustrative estimates of the effects of terminal dues</u> <u>consistent with known data</u>.

"Base scenario"

	Change 2014-2107	Annual chng 2015-2017		
Default volume increase from 2011				
— Letters (P) and Flats (G)	-10%	-4%		
— Small packets (E)	15%	12%		
Default increase in domestic postage				
— Group 1.1 (from 2013)	4%	4%		
— Group 122 (from 2011)	6%	3%		
— Group 345 (from 2008)	15%	3%		
Percent of domestic postage equivalent to TDs	70%			
Flows exempted from calculations	United States - Canada			

- The "base scenario" implies
 - 2014: Average LP item: 98.3 g. Small packets are 18% of letter post.
 - 2017: Average LP item: 123 g. Small packets are 26% of letter post.

"Base scenario"



IV. Intra-Group 1.1 terminal dues

Intra-Group 1.1. Flows by region



Intra-Group 1.1. UPU TDs

- Rates are expressed as **X per kg** and **Y per item**.
- X and Y are nominally related to domestic postage rates
 20 g letter and 175 g flat rates.
- But actual TDs are established by cap and floor limits.
 - Cap and floor limits are unrelated to domestic postage or costs.
 - Cap and floor increase 3% per year from 2014 to 2017.
 - Secondary cap: no increase more than 13% per year.
- Intra-Group 1.1 TDs apply only to intra-Group 1.1 flows.

Intra-Group 1.1. TDs per kg of typical LP



Intra-Group 1.1. Underpayment per kg of letter post, 2014



Intra-Group 1.1. Underpayment per kg of small packets, 2017



Intra-Group 1.1. Estimated volumes outbound and inbound



Intra-Group 1.1. Discounts given for inbound LP



Intra-Group 1.1. Discounts received for outbound LP



Intra-Group 1.1. Net gain or loss from UPU TDs



V. Distortions in competition

Competitive effects of UPU terminal dues

- UPU terminal dues create **false cost accounts** by ignoring the reciprocity of TD discounts
 - Discounts for delivery of A to B mail are compensated, in part, by discounts for delivery of mail sent from B to A.
 - The origin post may bases prices for outbound competitive products on TDS, ignoring actual costs.
 - Discounts inbound mail provided by the origin post are paid by mailers in the country of origin.
- UPU terminal dues create a net intra-Group 1.1 subsidy.
 - A intra-Group 1.1 subsidy provided by the destination post is paid by mailers in the country of destination.
 - A intra-Group 1.1 subsidy benefits mailers in the origin country.
- These effects harm both **private competitors** and **posts operating outside their national territories** (ETOEs).

Example: US to Denmark

	Volume mil	Weight kg mil	TD/kg SDR	TD total SDR mil	Discount %	
Discount on Outbound LP						
Outbound domestic postage TDs	2.31	0.23	12.12	2.76		
Outbound UPU TDs	2.31	0.23	5.29	1.20		
Outbound discount			6.83	1.55	56%	
Discount on Inbound LP						
Inbound domestic postage TDs	0.82	0.08	8.49	0.69		
Inbound UPU TDs	0.82	0.08	4.01	0.32		
Inbound discount			4.48	0.36	53%	
Sources of outbound discount						
Discount on inbound delivery paid by U.S. mailers					23%	
Intra-Group 1.1 subsidy paid by Danish mailers					77%	

US Postal Service confirms competitive distortions

"Terminal dues rates are a significant factor in setting outbound international mail rates, . . . Increasing terminal dues rates, especially significant increases resulting from elimination of the cap or directly tying the rates to domestic mail rates, would result in a considerable increase in the cost of delivery of letter post mail abroad. . . .

"The Postal Service estimates that **if the cap in terminal dues were eliminated in the upcoming Convention cycle**, rates for outbound international mail would increase . . .

- Depending on the destination country, First Class Mail International (FCMI) rate increases would range from 5 percent to well over 60 percent. . .
- [For services for bulk letters and direct mail] rate increases would be significantly higher . . . **nearly 150 percent increase for mail to Denmark**, more than 120 percent increase for mail to Norway, and an estimated 70 percent increase for mail to France."

US Postal Service, 27 Aug 2012, filing with Postal Regulatory Commission

Summary of potential distortions due to UPU TDs



V. Exchanges between Group 1.1 and Groups 122 and 345

Group 1.1 inbound LP by TD groups



Group 1.1 outbound LP by TD groups


VI. Summary indicators and alternatives

Summary indicators

- Intra-Group 1.1 discount on inbound letter post
 - Indicates extent potential distortion in trade among industrialized countries.
- Group 1.1 discount for letter post from Groups 122 and 345
 - Indicates extent of subsidy from industrialized countries in favor developing countries.
- Intra-Group 1.1 subsidy
 - Indicates extent of subsidy from "losing" countries their mailers to "winning" countries and their mailers.
- Relative burden for "winners" and "losers" (Discount given for all inbound LP – Discount received for outbound Intra–Group 1.1 LP) / Kg of outbound LP
 - Rough indicator of relative burden of UPU TDs for winners and losers.

Base scenario distortions (1)



Base scenario distortions (2)



Base scenario burdens



Alternative 1: "E-commerce scenario"

	Change 2011-2014	Annual chng 2015-2017
Default volume increase from 2011		
— Letters (P) and Flats (G)	-15%	-10%
— Small packets (E)	30%	20%
Default increase in domestic postage		
— Group 1.1 (from 2013)	5%	5%
— Group 122 (from 2011)	5%	5%
— Group 345 (from 2008)	15%	4%
Percent of domestic postage equivalent to TDs	70%	
Flows exempted from calculations	United States - Canada	

- The "base scenario" implies
 - 2014: Average LP item: 107 g. Small packets are 21% of letter post.
 - 2017: Average LP item: 161 g. Small packets are 38% of letter post.

E-commerce scenario distortions



E-commerce scenario burdens



Alternative 2: "Cherry picking" application of the Convention

- Group 1.1 countries pay terminal dues aligned with terminal dues except for a few "cherry pickers" who have the political/economic power to demand UPU terminal dues.
 - Cherry pickers demand UPU TDs in each bilateral relationship in which they will had a net gain of SDR 250,000 per year.
- Cherry pickers are:
 - Germany
 - Netherlands
 - Spain
 - United Kingdom
 - United States

Base scenario distortions with cherry picking



Base scenario burdens with cherry picking



E-commerce scenario distortions with cherry picking



E-commerce scenario burdens with cherry picking



VII. Conclusions

Conclusions

- UPU TD system introduces distortions in international letter post market which are substantial relative to the size of the market.
- The UPU TD system benefits some industrialized countries at the expense of others by hundreds of millions of SDRs annually.
- The UPU TD system benefits developing countries by providing discounts for delivery of letter post sent sent to industrialized countries.
 - Benefits are not reasonably related to the needs of specific developing countries and are subject to abuse by developing countries and partners from industrialized countries.
- The UPU terminal dues is anti-competitive; it restrains competition from private operators and ETOEs.