

**10th WIK Königswinter Seminar on Postal Economics
Postal Markets between Monopoly and Competition
12-14 February 2007**

Regulatory Cost Accounting in the Postal Sector

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The Inspiration

“The Role of Scale Economies in the Cost Behavior of Posts”

presented at the 2004 WIK Koenigswinter Seminar.

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Work in progress

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Full paper to be published on seminar website

SCOPE OF PRESENTATION

1. When and why are regulatory cost accounts needed
2. Cost attribution methodologies
3. Current status of accounting separation in the European Union
4. Developing cost estimates in the absence of cost data
5. Conclusions

Distinction between financial accounts and regulatory cost accounts.

- **Financial accounts methodology well documented.**
- **Cost accounting methodology driven by reason for production**
 - business decisions
 - compliance with regulatory obligations.
- **Stewardship of assets and liabilities (Balance Sheet).**
- **Costs incurred (Income Statement)**

When and why are regulatory cost accounts needed

- In USA the 1970 'Postal Reorganization Act' established the Postal Rate Commission (PRC)
- Regulatory costs accounts had to be produced by the USPS to satisfy the PRC that a rate increase was warranted.
- Under recently enacted legislation they will be used to ensure that postal rates comply with the statute.

When and why are regulatory cost accounts needed

In Europe the 1997 European Postal Directive required all USPs to maintain accounting systems *"on the basis of consistently applied and objectively justifiable cost accounting principles."*

- Tariff Principles
- Terminal Dues Principles
- Cross-subsidy and Competition law (DG Comp "Postal Notice")

When and why are regulatory cost accounts needed

- **European Commission's 2006 proposals to amend the Postal Directive:**
 - Tariff Principles
 - Terminal Dues Principles
 - to monitor fair market conditions until competition becomes effective ;
 - **to calculate the net cost of the universal service; and**
 - **to provide information necessary to adopt decisions related to the universal service.**

Cost attribution methodologies

- **Direct Costs:**
- **Indirect Costs:**
- **Common Costs:**

Cost attribution methodologies

- **Direct Costs:**

Costs that can be directly and unambiguously related to a product or service.

Cost attribution methodologies

- **Indirect Costs:**

Common costs that can be apportioned to products or services on a measured non-arbitrary basis based on the relationship of the costs with directly attributable costs.

Cost attribution methodologies

- A key factor in identifying Direct & Indirect Costs accurately is the granularity of accounting.
 - **Staff Costs represent around 70%.**
 - **Staff used to deployed on a wide range of activities.**
 - **Advances in IT.**
 - **Match information to wages.**

Cost attribution methodologies

DELIVERY COST EXAMPLE

- Sequencing of letters, **INDIRECT**
- Amalgamation with larger and specialist items, **INDIRECT**
- Travel time from office to start of the route % vv, **COMMON**
- Travel time around the route, **COMMON**
- Time calling to deliver items of a specific product, **DIRECT**
- Time calling to deliver items for several products, **INDIRECT**
- Time waiting for addressee to provide signature or to accept a large item, **DIRECT**
- Time to complete an advice note **DIRECT**

Cost attribution methodologies

- **Common Costs:**

The remaining common costs are institutional overheads and administrative costs where no causal linkages with the services/products provided can be established.

Cost attribution methodologies

Not all companies allocate common costs to individual services / products. Two reasons why regulatory cost accounts of postal operators should do so:

1. Prices charged must be “cost orientated” and cost must be determined in a specific way.

2. Exceptionally high level of Common Costs.

- **USPS 44% of total costs**
- **Royal Mail 47% of total costs**
- **Largest cost category in almost all European countries, in particular those with lower volume**

Cost attribution methodologies

- Allocation basis can have a significant impact on the relative costs of specific services/products

	OPTION A Common costs allocated on Volume		OPTION B Common costs allocated on Total Direct and Indirect Costs	
	SERVICE A	SERVICE B	SERVICE A	SERVICE B
Volume	80	20	80	20
Direct & Indirect Costs Per unit	0.5	2.0	0.5	2.0
Total Common Costs	40	40	40	40
Total Allocated per unit		32		32
“Fully allocated” Cost	0.32	0.32	0.2	0.8
% difference compared with option A	0.82	2.32	0.7	2.8
			-15%	+20.7%

Cost attribution methodologies

Article 14(3)(b)(iii) of the Postal Directive is quite specific:

... the [common] cost category shall be allocated on the basis of a general allocator computed by using the ratio of all expenses directly or indirectly assigned or allocated

This system is quite prescriptive

- It limits the potential to incorporate political objectives in the price structure
- It precludes the consideration of demand elasticity in the allocation of overhead.

Net Cost of Universal Service Obligation

IAS 20 has very specific rules about accounting for government assistance

- payments received by USPs will have to be accounted for by reducing the amount of common costs to be allocated
- Where no payment is received
 - either no net cost of universal service
 - or universal service financed by cross-subsidy.
- No reason to allocate some common costs only to universal services.

RCAs can be significant input to calculation of net cost of USO

- But some items, e.g. value of brands and ubiquity, not normally included in financial accounts

Current status of accounting separation in the European Union

Accounting separation in the EU-25

Legal requirements and practice(as of end 2005)

Level of separation that is legally required (no. of MS*)	Practice: Annual sub-mission to regulator? (no. of MS*)	First year when regulatory accounts were submitted to NRA			
		Before 2005 (# MS)	2005/06 (# MS)	Never (# MS)	
A) Sep accts for US and non-US	25	20	14	7	4
B) Sep accts for res service	22	19	14	6	2
C) Sep accts for each res service	19	17	12	6	4
D) Sep accts for each non-res US	19	15	12	5	2

Source: WIK-Consult (2006), Main Developments in the European Postal sector 2004-2006.

Current status of accounting separation in the European Union

Approval of regulatory accounts in the EU-25 (as of end 2005)

NRA approved cost system in year?	(# of MS, N=24)	
<2005		11
2005/2006		3
Never		10
Allocation of transport cost reviewed by NRA?	(# MS, N=23)	11
Allocation of delivery cost reviewed by NRA?	(# MS, N=23)	9
% of assigned cost known to NRA?	(# MS, N=21)	7
Formal review of data quality by NRA?	(# MS, N=25)	9

Source: WIK-Consult (2006), Main Developments in the European Postal sector 2004-2006.

Developing cost estimates in the absence of cost data (1)

Postal cost data generally is not publicly available except in the U.S

Where some data is available range around the mean is significant

NRAs therefore unable to check on the reasonableness of cost estimates by comparing them to costs of other operators:

Differences might be due to:

**operating procedures,
efficiency, or
errors in accounting**

Have developed a model

to test reasonableness of cost estimates for a post of a given size and

to provide reasonable values when no other estimates are available.

Developing cost estimates in the absence of cost data (2)

	min	mean	max
Collection	5.0	12.0	22.0
Transport	2.0	7.3	14.0
Sorting	4.0	15.8	26.3
Delivery	27.5	49.6	77.0
Overheads	-	14.9	43.0

Source: NERA for EC (July 2004)

Developing cost estimates in the absence of cost data (3)

In an enterprise with fixed and variable cost, the percentage of variable cost increases as the number of units produced increases.

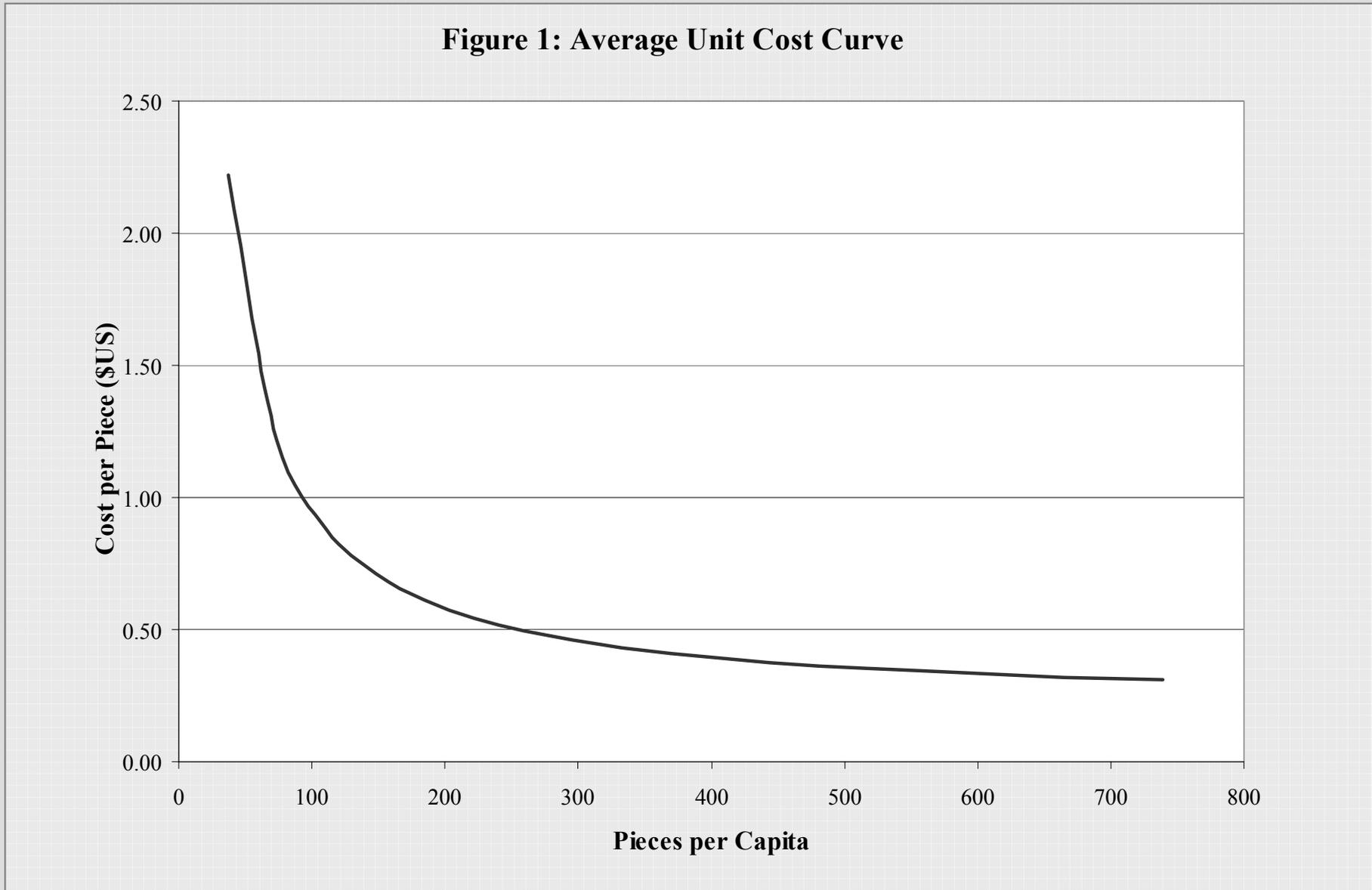
In the postal context the costs of some functional activities are largely variable and other activities are largely fixed

If volume per capita were reduced in the USPS, mail processing and transportation activities and in-office portion of delivery would shrink basically in line with volume, but street delivery activity would shrink only a little because it is largely fixed.

Simple linear cost model was developed to explore the effect of fixed cost on average unit costs

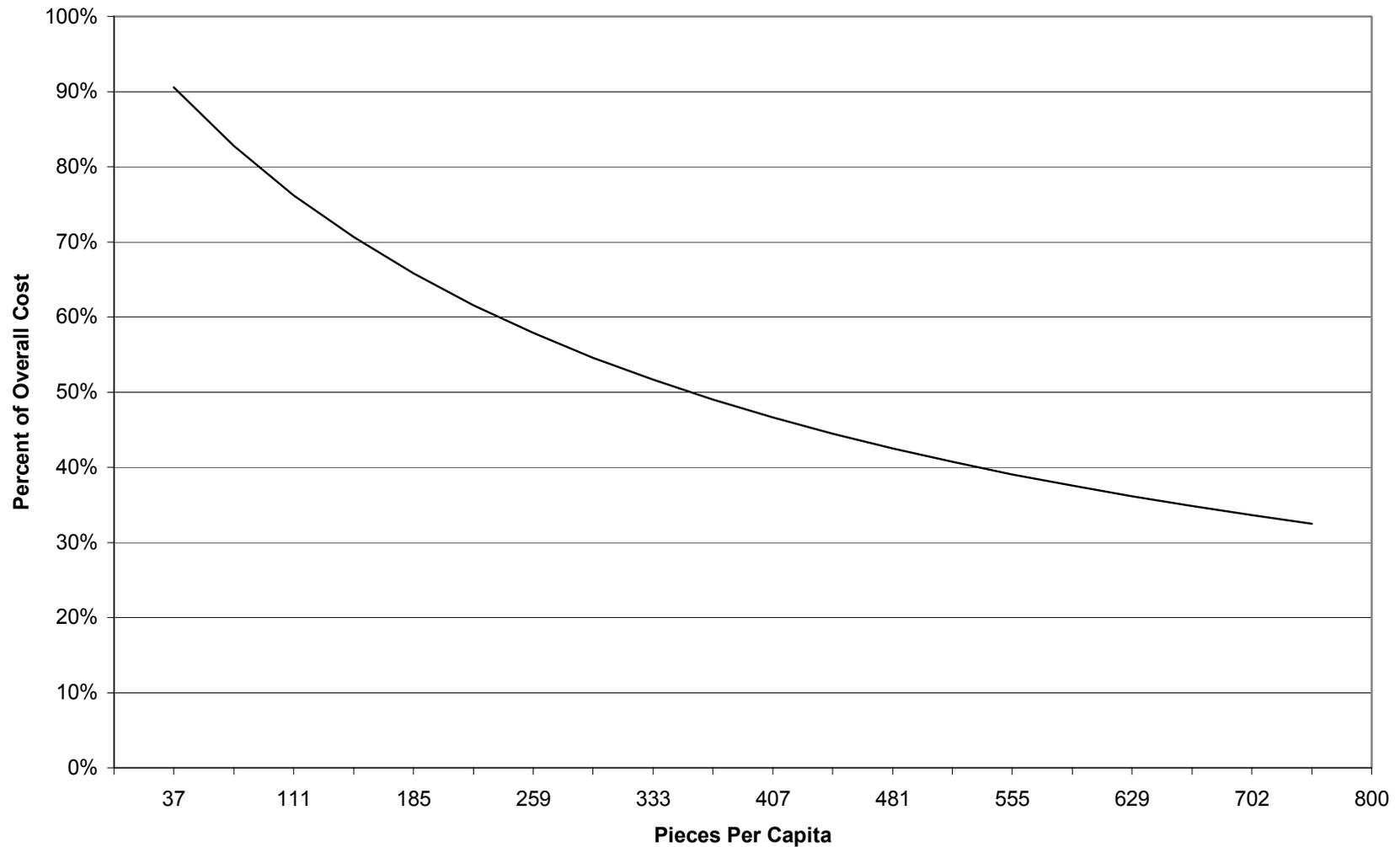
Model validated by comparing results with information from by nine posts with a range of pieces per capita from over 700 to c. 100

Developing cost estimates in the absence of cost data (4)

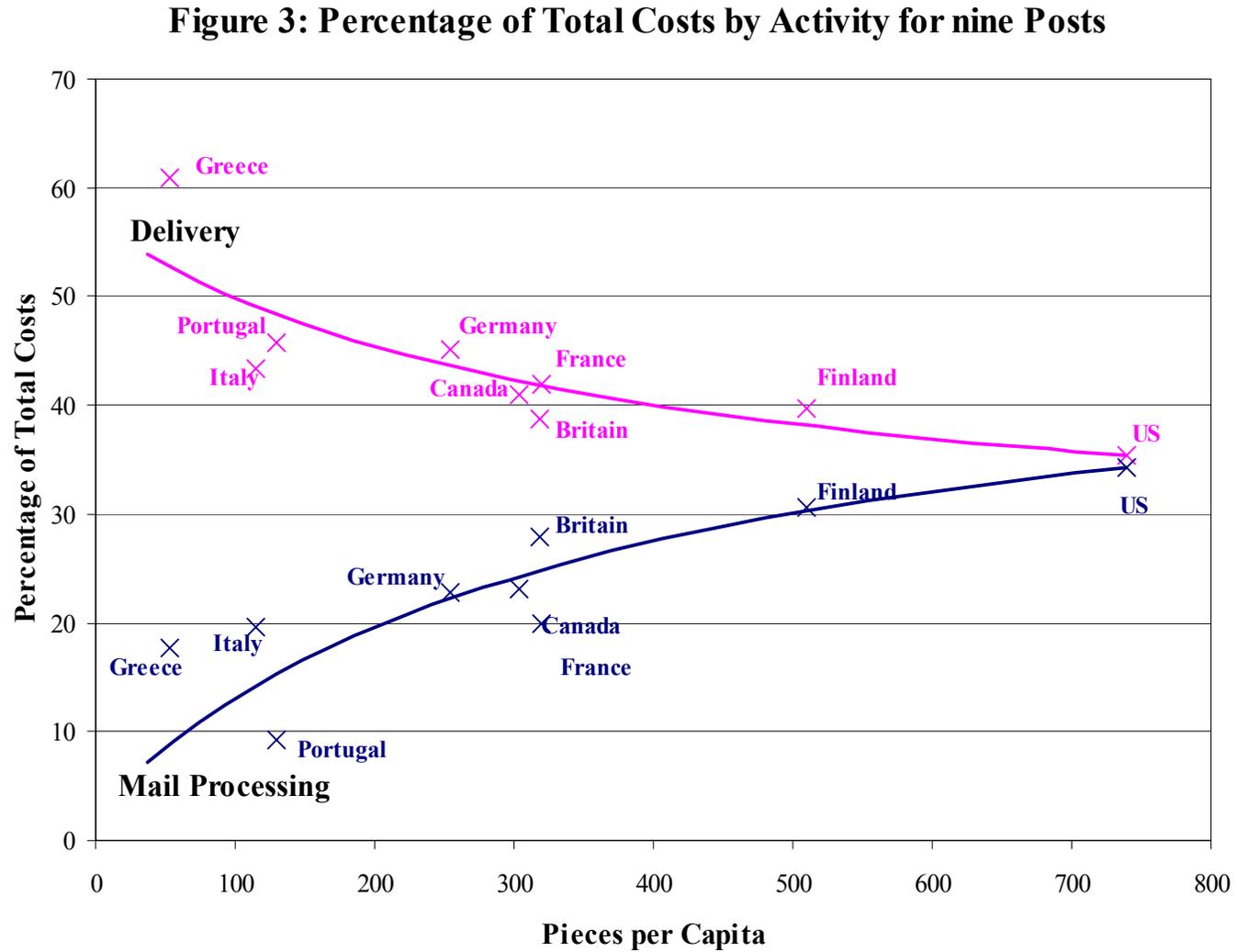


Developing cost estimates in the absence of cost data (5)

Figure 2: Fixed Cost as a Percentage of Overall Cost

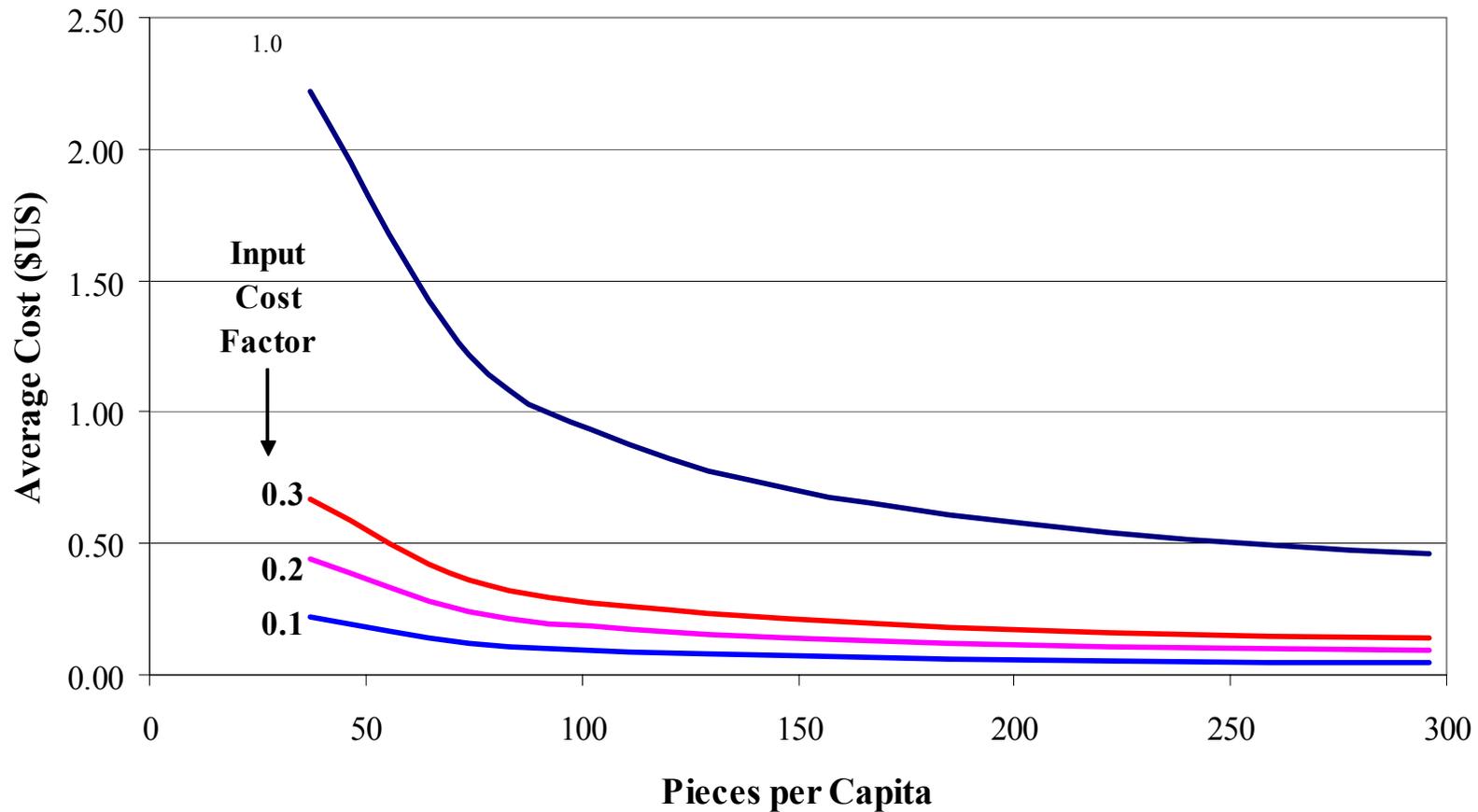


Developing cost estimates in the absence of cost data (6)

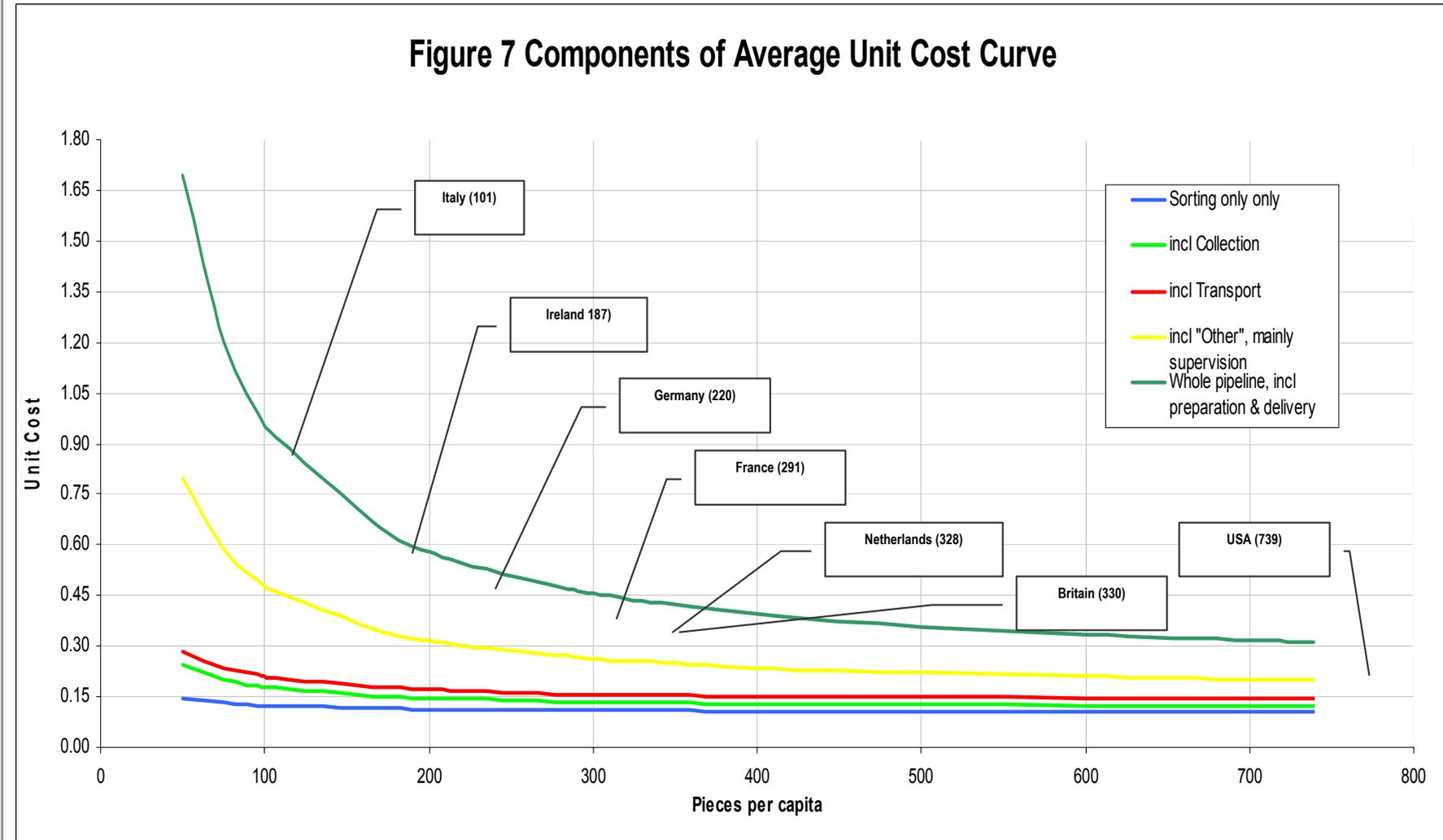


Developing cost estimates in the absence of cost data (7)

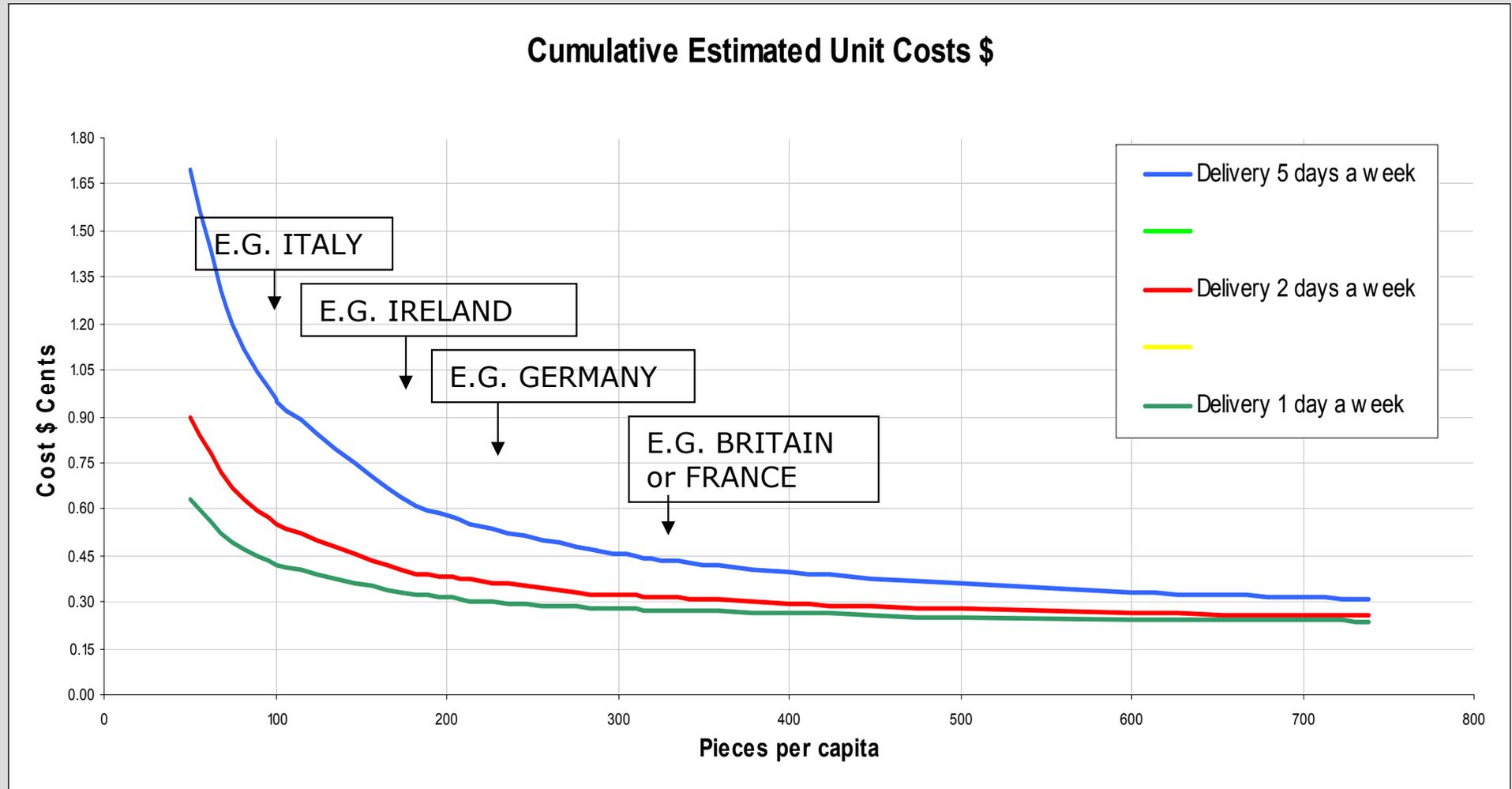
Figure 5: Family of Average Unit Cost Curves
with Proportional Adjustment Factor = 0.1, 0.2, 0.3



Developing cost estimates in the absence of cost data (8)



The Postal Cost Curve



Based on Analysis by Bob Cohen, US Postal Rate Commission, adapted.

Draft Conclusions

- 1. Little public information on regulatory cost accounts**
- 2. Serious doubts on quality of regulatory accounts in most EU Member States (based on survey of regulators)**
- 3. Granularity of accounting is crucial to identifying Direct and Indirect Cost**
- 4. Common Costs very high in posts and EU Postal Directive gives no discretion as to how they are allocated**
- 5. Model enables NRAs to calculate a benchmark that is applicable to their operators**
- 6. Variances between actual accounts and benchmark should be investigated and explained**
- 7. Regulatory accounts can only provide part of the input when calculating the net cost of the USO**