### Cloud storage pricing: a comparison of current practices

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#### Introduction

Price survey

Two-part approximation

Cloud storage solutions are spreading...

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Introduction

Price survey

Two-part approximation

- Cloud storage solutions are spreading...
- …and so pricing schemes…

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Price survey

Two-part approximation

- Cloud storage solutions are spreading...
- …and so pricing schemes…
- ...but how can customers make sense of such variety?

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- Cloud storage solutions are spreading...
- …and so pricing schemes…
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How do we compare pricing schemes?

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Price survey

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- Cloud storage solutions are spreading...
- …and so pricing schemes…
- ...but how can customers make sense of such variety?

How do we compare pricing schemes?

Can we focus on the cheapest ones?

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- Price survey
- Pointwise comparison

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Price survey

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- Price survey
- Pointwise comparison
- Overall comparison and Pareto dominance

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### Cloud providers under analysis





symform



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**Block Rate Pricing** 

#### **Bundling Pricing**

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**Block Rate Pricing** 



#### **Bundling Pricing**

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#### Amazon

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Amazon

Google Drive, IDrive, SugarSync, Mozy, Dropbox, Carbonite Cloud storage

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### Unit prices

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#### Unit prices



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Pointwise comparison is correct...

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- Pointwise comparison is correct...
- ...but does not reveal overall properties...

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- Pointwise comparison is correct...
- ...but does not reveal overall properties...
- ...which can be revealed by an approximation model

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# The two-part tariffing scheme is the simplest of nonlinear pricing

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# The two-part tariffing scheme is the simplest of nonlinear pricing

$$p = f + v \cdot x$$

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# The two-part tariffing scheme is the simplest of nonlinear pricing

$$p = f + v \cdot x$$

# The parameters can be derived through a least squares approach

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We can adopt a Pareto dominance approach

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#### We can adopt a Pareto dominance approach

Schemes with higher fee and higher marginal price are removed

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 Just Amazon adopts a block rate pricing schemes All the others adopt a bundling pricing scheme Cloud storage pricing Naldi-Mastroeni

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Price survey

Two-part approximation

- Just Amazon adopts a block rate pricing schemes All the others adopt a bundling pricing scheme
- Through a two-part tariff approximation we can skim the non-competitive providers off in the procurement procedure

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- Just Amazon adopts a block rate pricing schemes All the others adopt a bundling pricing scheme
- Through a two-part tariff approximation we can skim the non-competitive providers off in the procurement procedure
- We end up with two competitors for consumers and three competitors for business customers

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- Through a two-part tariff approximation we can skim the non-competitive providers off in the procurement procedure
- We end up with two competitors for consumers and three competitors for business customers

Prior avoidance of non competitive pricing schemes can be accomplished

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