FlexAdjust Pricing Mechanism

A simple, flexible, fair and transparent volume-based pricing model

Problem

Rigid pricing models pose risks in uncertain or variable usage scenarios

- **Traditional contracts often have fixed unit prices**
  - €/day, €/kg, $/hour, £/month, €/MWh, etc.
- **Prices usually depend on expected usage levels**
  - quantity purchased, monthly consumption, contract duration, etc.
- **Significant differences between actual and expected usage can penalize one party**
  - if usage is lower than expected, suppliers risks not covering his fixed costs
  - if usage is higher than expected, client could end up overpaying
- **Volume-based discounts are fair and generally accepted, but rarely negotiated upfront**
  - overconfidence in assessing future needs
  - overestimating the complexity of upfront volume-based negotiations
  - underestimating the difficulty of post-contract renegotiation
- **Post-contract renegotiations are difficult and may cause conflicts**
  - renegotiations often have a winner and a loser, creating conflicting interests
  - the party benefiting from volume discrepancies has no incentive to renegotiate
  - the disadvantaged party may lack leverage to obtain price revisions
  - potential for frustration, tension, and conflict on both sides

Solution

FlexAdjust: a flexible volume-based pricing model (1/2)

Principles

- Prices adjust automatically based on actual consumption
- **Price adjustment** mechanism is simple and transparent, based on the common « **scale factor** » model
- A FlexAdjust price is defined by 3 main parameters:
  - **reference unit price** (U_0)
  - **reference quantity** (Q_0)
  - **scale factor** (F): an **adjustment coefficient**, in %, applied on unit price when **volume increases by 10x**
- Parties do not need to commit to **target volumes**, but if they do, the unit price for the target volume is applied from day 1. In this case:
  - If the target volume is not reached within pre-agreed period, a **price correction** is made to compensate for the difference with a price correction **multiplier of 2x**.

Example Nr 1

- A lawyer charges 300 €/hour for a 20 hour assignment
  - these are the reference conditions
  - his adjustment coefficient is 70% (scale factor)
- For a 200 hour assignment:
  - actual quantity is 10x more than reference quantity
  - actual price is 70% of the reference price = 210 €/hour
  - total cost for 200 hour is : 42 000 €
  - the client gets a 30% discount on the reference price
- For a 2 hour assignment:
  - actual quantity is 10x less than reference quantity
  - actual price is (1 / 70%) = 143% of the reference price = 429 €/hr
  - total cost for 2 hours is : 858 €

Solution

FlexAdjust: a flexible volume-based pricing model (2/2)

Formula

- Unit price is calculated as follows:

$$U = U_0 \times (Q/Q_0)^{\log(F)}$$

Where:

- U is the actual unit price
- U_0 is the reference unit price
- Q is the actual cumulated quantity
- Q_0 is the reference quantity
- F is the scale factor

- Cumulated quantity is calculated over an agreed **aggregation basis**, for example:
  - cumulated quantity over the last 12 months
  - quantity per order (independently of past/future order)
  - quantity per month (independently of past/future month)
- Parties may also agree on **minimum** and/or **maximum:** unit price, total quantity, quantity per order or per month, …

Example Nr 2

Producer's general terms:

- Producer sells potatoes at a reference price of 1 €/kg for a reference quantity of 1000 kg (1 ton)
- Adjustment coefficient is 70%
- Unit price per order is based on cumulated quantity over the last 12 months
- Minimum order quantity is 100 kg per order
- Minimum price is 0.49 €/kg (= 0.7^2 , price for 100 tonnes)

Transactions:

- You sign a contract with a target quantity of 10 tons per year
- You place a 1st order for 1 ton: your initial price is based on the target of 10 tons/yr, so you pay $0.7^{\log_{10}(10/1)}$ = 0.7 €/kg = 700 €
- You place a 2nd order for 4 ton, and still pay 0.7 €/kg = 2 800 €
- At the end of the year, you end of buying only 5 tons and paid 3 500 €
- However, the unit price for 5 000 kg should be $0.7^{\log_{10}(5/1)} = 0.7^{0.7}$ = 0.78 €/kg
- The price correction is 0.08 * 2 (price correction multiplier) = 0.16 €/kg, amounting to 793 € for 5 tons. So you pay a total of 4 293 € (0.86 €/kg)
- This price correction is designed to discourage over-estimating your target
- However, the price correction is less severe than if you had committed to a minimum quantity of 10 ton, for which you would have had to pay 7 000 €.