Framing contracts and jurisdiction ahead to match $p$ = ”Economy Funds” and $v$ = ”Economy Velocity” that can be modelled with typical approaches for fuction $z$ = ”arrival state” depending on $x$ = ”starting state”, so that “work” $W = F \cdot r = F \cdot (z - x)$:

Table 1: Modelling Functions

| Type | Model | Linearisation |
|---|---|---|
| Linear | $z = a + bx$ | $z = a + bx$ |
| Gemetric | $z = a \cdot x^b$ | $\log z = \log a + b \cdot (\log x)$ |
| Exponential deca. | $z = a \cdot b^x$ | $\log z = \log a + (\log b) \cdot x$ |
| Exponential nat. | $z = a \cdot e^{bx}$ | $\ln z = \ln a + bx$ |
| Periodical | | |
| Polynomial | | |
| Taylor | | |

Linear optimization to achieve target states “$z, h$”:

1. Oneness situaiton modelling:

   minimize efforts = $z$ or maximizie return = $z$

$$\begin{aligned} &\text{target:} && z = c^T \cdot x \\ &\text{min. constraints:} && [a_{ki}] \cdot x \geq b \\ &\text{max. constraints:} && [a_{ki}] \cdot x \leq b \\ &\text{condition:} && x \geq 0 \end{aligned} \tag{1}$$

2. Duality situation modelling:

   minimize efforts = $z$ and maximize return = $h$

$$
\begin{array}{ll}
\text{target min.:} & z = c^T \cdot x \\
\text{min. constraints:} & [a_{ki}] \cdot x \geq b \\
\text{condition:} & x \geq 0 \\
\quad \textit{and} & \\
\text{target max.:} & h = b^T \cdot y \\
\text{max. constraints:} & [a_{ki}]^T \cdot y \leq c \\
\text{condition:} & y \geq 0
\end{array}
\tag{2}
$$

3. Normalization:

$$
\begin{array}{ll}
\text{target:} & z = c^T \cdot x \\
\text{min. constraints:} & ([a_{ki}] - x_{n+k}) \cdot x = b \\
\text{max. constraints:} & ([a_{ki}] + x_{n+k}) \cdot x = b \\
\text{condition:} & x \geq 0
\end{array}
\tag{3}
$$

4. Solutioan with Simplex algorithm

multilinear and exponential models …