Min Z1 = $\sum\_{j=1}^{J}\sum\_{m=1}^{M}(\frac{FJ\_{jₘ}^{l}+2FJ\_{jₘ}^{m}+FJ\_{jₘ}^{u}}{4})×$YJjₘ+$\sum\_{k=1}^{K}\sum\_{r=1}^{R}(\frac{FK\_{kr}^{l}+2FKJ\_{kr}^{m}+FK\_{kr}^{u}}{4}) ×$YKkr

+$\sum\_{i=1}^{I}\sum\_{j=1}^{J}\sum\_{o=1}^{O}( \frac{CI\_{io}^{l}+2CI\_{io}^{m}+CI\_{io}^{u}+TIJ\_{ij}^{l}+2TIJ\_{ij}^{m}+TIJ\_{ij}^{u}}{4}$)XIJijo+$\sum\_{j=1}^{J}\sum\_{k=1}^{K}(\frac{CJ\_{j}^{l}+2CJ\_{j}^{m}+CJ\_{j}^{u}+TJK\_{jk}^{l}+2TJK\_{jk}^{m}+TJK\_{jk}^{u}}{4}$) XIJijo +($\frac{CK\_{k}^{l}+2CK\_{k}^{m}+CK\_{k}^{u}+TKL\_{kl}^{l}+2TKL\_{kl}^{m}+TKL\_{kl}^{u}}{4}$) XKLkl

Max Z2 =$\sum\_{j=1}^{J}\sum\_{k=1}^{K}RANk$j + XJKjk

s.t:

$ \sum\_{k=1}^{K}xkL$kl $\leq (1-\frac{α}{2}$( . $\frac{D\_{l }^{m}+D\_{l }^{l}}{2}$ + ($\frac{α}{2}). \frac{D\_{l }^{u}+D\_{l }^{m}}{2} , ∀$ l=1…., L

 $\sum\_{k=1}^{K}xkL$kl $\geq (\frac{α}{2}$( . $\frac{D\_{l }^{m}+D\_{l }^{l}}{2}$+ ($1-\frac{α}{2}). \frac{D\_{l }^{u}+D\_{l }^{m}}{2} , ∀$l=1…., L

$ \sum\_{i=1}^{I}XIJ$ijo = $\sum\_{k=1}^{K}XJK$jk $ ,∀$ j=1, …., J

* $\sum\_{i=1}^{I}XJK$jk $\leq (1-\frac{α}{2}$( . $\frac{XJK\_{jk}^{m}+XJK\_{jk}^{l}}{2}$ + ($\frac{α}{2}). \frac{XJK\_{jk}^{u}+XJK\_{jk}^{m}}{2}$ $ , ∀$ k=1…., L
* $\sum\_{i=1}^{I}XJK$jk$\geq (\frac{α}{2}$( . $\frac{D\_{l }^{m}+D\_{l }^{l}}{2}$+ ($1-\frac{α}{2}). \frac{D\_{l }^{u}+D\_{l }^{m}}{2} ,∀$ k=1…., L
* $\sum\_{i=1}^{I}XJK$jk $\leq \sum\_{m=1}^{M}CAPJ$jm $×$YJjm
* $\sum\_{l=1}^{L}XKL$kl $\leq \sum\_{r=1}^{R}CAPK$kr $×$YKkr $ , ∀$ k=1…, K
* $\sum\_{m=1}^{M}YJ$jm$\leq $1$ , ∀$ j$=1,…,J $
* $\sum\_{r=1}^{R}YK$kr$\leq $1$ $ $, ∀$ k=1…, K
* LDoSijo$\leq $XIJijo$<$UDo$×$Sijo$ , ∀$ i, j, o

 $\sum\_{o=1}^{O}S$ijo$\leq $1$ $

* $\sum\_{o=1}^{O}\sum\_{j=1}^{J}XIJ$ijo$\leq $($α$.$\frac{CAPI \_{i}^{l}+CAPI \_{i}^{m}}{2})+(1- α) . \frac{CAPI \_{i}^{m}+CAPI \_{i}^{u}}{2}) ,∀$ i=1…., I
* Sijo, YJj$m,$YKk $,ϵ\left\{0,1\right\}$
* XIJijo, XJKjk, XKLkl$\geq 0 $