

# To reinforce solidarity in and with enterprise

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## Abstract

In a context of a massive and durable unemployment, the micro economic challenge must be revisited to produce a well balanced growth at the enterprise level.

This paper is a short presentation of a new model of remuneration for workers, shareholders, aiming a structural fair sharing of the added value and of the risks in enterprise (Guillet, 2001), to finally change drastically the relationship between partners and to improve the contribution of the micro economy to the State challenge.

It's also the opportunity to show how to extend this new model when the identified categories of partners are higher than two.

*Key words:* growth, well balanced, model, strategy, enterprise, company, paradigm, employment

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## Introduction

A well-balanced growth between production, profits, consumption ability, employment induced, are impacting so strongly the social stability that they represent goals that we must consider nowadays as essential.

Our analysis has already led us to suggest a new model of remuneration for workers and shareholders, towards a structural fair sharing of the added value (and risks) in the "stock companies" (Guillet, 2001).

This paper shows how to extend the distribution of risks and profits when more than two "insiders" and "outsiders" must be considered.

## A new model of remuneration in the enterprise

Shareholders and wage-earners are partners in enterprise. They are interested to belong to a successful and durable structure. The first category of partners hoping a maximum of dividends, the

second category a maximum of salaries. Thus, the sharing of the produced wealth is the base of an everlasting (structural) conflict between labour and capital...

Nowadays the gap between wages and capital incomes is such that the time is come to wonder whether, in enterprise, and in the interest of both categories of partners, a new distribution of the created (added) value has to be considered (Braudel, 1988).

The purpose of this model is to lead shareholders to a positive look on the salaries and to lead workers to a positive look on the profits. In other words, the purpose is that shareholders and wage-earners switch from distrust relationship to trust, from structural conflict to structural cooperation.

With this new model, the partners have firstly to negotiate the ratio between the remuneration of one category relatively to the other one...

The model is said "ideal" when, whatever the dividends ( $D$ ) and the wage masses ( $S$ ) are, the negotiated ratio is respected. In

other words, whatever are the (*post*) profits and the (*ante*) wage masses, the final remuneration distribution respect the *ante* negotiated ratio between the remuneration of workers and these one of the capital owners (Guillet, 2004; Guillet, 2013).

From the social point of view, this above fact which induces flexibility is essential. As it limits the predetermined wage charges to give space for a flexible part in the workers remuneration, this model offers new prospects to perpetuate the paid employment. It means a new breathing for the enterprises. This “internal” flexibility is also a real opportunity for improving the context of the long term employment.

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In its simplest presentation, the new model admits two kinds of partners, shareholders and wage-earners (Guillet, 2004).

Traditionally, the “net added value” *VA* (wealth or added value produced) is the sum of the wages  $S^*$  and the dividends  $D^*$ , the ante fixe charge  $F = S^*$  while the post benefit  $B = D^*$ , we can write that  $VA = S^* + D^* = F + B$ . And the formula in bracket explains the recurrent conflict between capital owners and workers along the past centuries.

The new model which induces for both partners a new and positive view of  $S$  and  $D$  is able to change radically the relationship between workers and shareholders !

With the proposed new model, new wages ( $S$ ) and new dividends ( $D$ ) appear.  $S$  and  $D$  characterize respectively the "specific" workers income and the "specific" shareholders income.

The total remuneration of the shareholders is now the sum of the (new) dividends and of a bonus linked on the (new) wage mass. The pegging coefficient of this bonus being  $\alpha$  and :

$$Ra = D + \alpha x S \quad (1)$$

Symmetrically, the wage-earners' total remuneration  $Rs$  is built from the (new) wage mass, to which a participation to the results bonus, linked to the (new)

dividends, is added. The pegging coefficient being  $\beta$  and :

$$Rs = S + \beta x D \quad (2)$$

Using now matrix writing, we can write to take the place of (1) and (2) equations,

$$\begin{bmatrix} Ra \\ Rs \end{bmatrix} = \begin{bmatrix} 1 & \alpha \\ \beta & 1 \end{bmatrix} x \begin{bmatrix} D \\ S \end{bmatrix}$$

The “Ideal” model is got when the value of the negotiated ratio  $Ra/Rs = k_m$  whatever are the  $D$  and  $S$  values.

And we have also shown that the model is ideal when  $\beta x \alpha = 1$  (Guillet, 2004) or.

$$\begin{bmatrix} Ra \\ Rs \end{bmatrix} = \begin{bmatrix} 1 & k_m \\ 1/k_m & 1 \end{bmatrix} x \begin{bmatrix} D \\ S \end{bmatrix}$$

## Advantages of the new model

### A fair distribution of the added value

In the case of profits, a part is distributed to the wage-earners. In the case of losses (negative dividends), wage-earners are also concerned. Thus the wage-earners remuneration is partially flexible and mirrors the results of the company.

On their side, if shareholders don't receive the whole profit, they receive a part of remuneration which is indexed to the wage mass and which delays the lost of their engaged funds. Their risks are thus limited.

### A structural negotiation

Putting the new model into practice requires a negotiation phase during which partners define *ante* the rate of their payments  $Ra / Rs$ . This mediation ratio is called  $k_m$  (Guillet, 2001; Guillet, 2004)

### New dividends and new wage mass

When compared to the traditional payment model, the « new » model induces new calculations, « new » dividends  $D$  (since they are no longer representing the total of benefits  $B$  of the enterprise), a « new » wage mass  $S$  (because it no longer represents the total of the predetermined loads  $F$  of the enterprise).

Now with the new model,

$$F = (I + \alpha) x S \quad (3)$$

$$B = (I + \beta) x D \quad (4)$$

$$VA = B + F \quad (5)$$

Where we can anticipate that the new wage mass value  $S$  remains opened for negotiation (assuring 3), while the value of  $D$  is calculated from (4).

### *Examples*

We suppose that with the traditional model the net added value is  $F=S^*=10$ ;  $B=D^*=2.5$  and  $VA=F+B= S^*+D^*=10+2.5=12.5$

Using now the new "ideal" model we will probably negotiate  $k_m = 0.25$  (thus  $\alpha=0.25$  and  $\beta=4$ ).

If we wish maintain the  $F$  value, we deduce from (3) that  $S=8$ ... And from (4) that  $D=0.5$ .

*Supposing now that VA value reaches 15...*

Then with the same values for  $\alpha$  and for  $S$ ,  $D$  becomes  $=1$  and we can check that  $R_a = 3$ , that  $R_s=12$  and  $R_a / R_s = 0.25 =$  the negotiated value of  $k_m (=2.5)$ .

But now if losses occur, for example  $D = -0.1$ , then  $R_a = -0.1 + 0.25 \times 8 = 1.9$  while  $R_s = 8 - 4 \times 0.1 = 7.6$  and we can check that  $R_a / R_s = 0.25$  remains the negotiated value of  $k_m$ .

We can also anticipate that a significant VA value change may be an opportunity to change the old model for the new one, defining a new  $\alpha$  value, a new  $S$  value.

Here we must think that the accounting point of view appears with the retained value for  $S$  because, by changing the model, we must check always that  $F = (I + \alpha) x S$  is lower than ( or equal to) VA...

### **Flexibility of payment and impact on employment**

Due to this flexibility, it can be anticipated that the enterprise will be better disposed to employ workers for long term contract.

For wage-earners, more flexibility must not be dissuasive. They directly benefit of the collective result..

### **A unique analysis of growth**

If growth is always implored, we rarely know exactly what is hidden behind this concept. Is it the production growth ? Is it the added value growth ? Is it the work productivity growth ?

Traditionally, growth of production is necessary for the employment creation. But there is a "bemoil", because it needs also that this growth of production be upper than the growth of the work productivity !

Using the ideal model, it can also be shown that, whatever is the indicator retained ( $Va/F$ ,  $Ra/F...$ ), the measured growth has the same value ! And since growth of  $Ra =$  growth of  $Rs$ , it means also that, shareholders, workers, share the same analysis of the growth !

### **The model and off-shore manufacturing**

According to the model, wage mass, profits are now two positive data for all the partners. This model induces a well-balanced economic and social development.

### **An alternative to a bankruptcy**

By changing the traditional model of remuneration for the new one, many possibilities are offered aiming to "adjust" the "new" loads  $F$  [ $F = (I + \alpha) x S$ ] lower than the existing VA and finally to avoid any bankruptcy (See later "accounting detail" development).

When growth does not reply to the anticipations, the suggested model offers a track for a fair sharing of what are the actual results. And the "adaptation" offered by the model is a good way for the enterprise to survive to a bad sequence rather than disappearing with its first difficulty...

## About the partners relationship

We can anticipate that the psychological impact induced on each partner has a positive effect on the "dynamic of the group" (Guillet, 2013)...

## Some rules to extend solidarity towards more than two partners

In case of joint stock companies, managers may be considered as a third kind of partners (Guillet, 2004).

If we call shareholders "A", workers "S", and managers "G",

$Ra$  is the shareholders remuneration,

$Rs$  is the workers remuneration,

$Rg$  is the management remuneration,

$k_{m,a/s}$  is the negotiated rate value between the shareholders and the workers remunerations

$k_{m,s/g}$  is the negotiated rate value between the workers and the management remunerations

$k_{m,g/a}$  is the negotiated rate value between the management and the shareholders remunerations

$D$  is the "own" (or specific) shareholders earnings

$S$  is the "own" (or specific) workers salary

$G$  is the "own" (or specific) management earnings

And the ideal 3x3 [T] matrix is got when,

$$a_1^2 = k_{m,a/s}$$

$$a_2^3 = k_{m,s/g}$$

$$a_3^1 = k_{m,g/a} = 1/(k_{m,a/s} \times k_{m,s/g})$$

To give a numerical example of an ideal 3x3 [T] matrix (supposing that  $k_{m,a/s}$  is always 0.25 and the negotiated  $k_{m,s/g} = 5$ ), then  $k_{m,g/a} = 0.8$  and,

$$\begin{bmatrix} Ra \\ Rs \\ Rg \end{bmatrix} = \begin{bmatrix} 1 & 0.25 & 1.25 \\ 4 & 1 & 5 \\ 0.8 & 0.2 & 1 \end{bmatrix} \times \begin{bmatrix} D \\ S \\ G \end{bmatrix}$$

$$Ra = D + 0.25xS + 1.25xG$$

$$Rs = 4xD + S + 5xG$$

$$Rg = 0.8xD + 0.2xS + G$$

And the added value VA ( $Rg$  is now included !)=  $Ra + Rs + Rg$

We can easily control that, whatever are the values of  $D, S, G$ , each ratio  $Ra/Rs, Rs/Rg, Rg/Ra$ , check the corresponding values of  $k_m$

For instance, if  $D=1, S=9, G=0.5$ , then

$$Ra = 1 + 0.25 \times 9 + 1.25 \times 0.5 = 3.875$$

$$Rs = 4 \times 1 + 1 \times 9 + 5 \times 0.5 = 15.5$$

$$Rg = 0.8 \times 1 + 0.2 \times 9 + 1 \times 0.5 = 3.1$$

And,

$$Ra/Rs = 0.25 = k_{m,a/s} \quad (Rs/Ra = 4)$$

$$Rs/Rg = 5 = k_{m,s/g} \quad (Rg/Rs = 0.2)$$

$$Rg/Ra = 0.8 = k_{m,g/a} \quad (Ra/Rg = 1.25)$$

If  $G$  is an *ante* value it represents a load for the company, to be a component of  $F$ . If not,  $G$  is a component of  $B$ .

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## The ideal model generalisation for "n" kinds of partners

After two or three kinds of partners, we can easily find other (categories of) partners and generally a " $n \times n$ " ideal [T] matrix to get the global incomes "[R]" from the matrix "[P]" which representing each own income, as follow :

$$\begin{bmatrix} R_1 \\ R_2 \\ R_3 \\ \dots \\ R_n \end{bmatrix} = \begin{bmatrix} 1 & a_1^2 & a_1^3 & \dots & a_1^n \\ a_2^1 & 1 & a_2^2 & \dots & a_2^n \\ a_3^1 & a_3^2 & 1 & \dots & a_3^n \\ \dots & \dots & \dots & 1 & \dots \\ a_n^1 & a_n^2 & a_n^3 & \dots & 1 \end{bmatrix} \times \begin{bmatrix} P_1 \\ P_2 \\ P_3 \\ \dots \\ P_n \end{bmatrix}$$

With the added value VAh (gross operating income), such as,

$$VAh = F + B = R_1 + \dots + R_n.$$

If each negotiated value of the ratio  $R_i / R_j$  is called  $k_{m,i/j}$  then [T] matrix is said ideal when all the  $R_i / R_j$  ratio calculated from [T] x [P] are not depending of the [P] values and is equal to  $k_{m,i/j}$ .

## Advices to built an ideal [T] matrix for "n" partners

To help us to build the ideal matrix [T], we note that by definition :

$k_{m,1/2} \times \dots \times k_{m,(n-1)/n} \times k_{m,n/1} = 1$  ( then the negotiation concerns only “ $n-1$ ” values of  $k_m$ )

For any “ $i$ ” and “ $j$ ”,  $k_{m,j/i} = 1/k_{m,i/j}$

It can be shown (Guillet, 2004) that [T] is ideal when  $a_i^j = k_{m,i/j}$

(Thus  $a_i^j \times a_j^i = 1$  and

$$a_1^2 \times a_2^3 \times \dots \times a_{n-1}^n \times a_n^1 = 1)$$

And mathematically, whatever  $w$  is,

$$k_{m,i/j} = k_{m,i/w} \times k_{m,w/j}$$

But here, we must also underline that following the spirit of the model, all values of  $k_{m,i/j}$  are negotiated “*ante*” by the partners and can be re-negotiated it is requires by the “situation” to avoid any conflict on the remunerations topic. But negotiations about  $k_{m,i/j}$  values let also opened the door to a new distribution of VA between  $F$  and  $B$  ! (See above, the bankruptcy anticipation case).

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Amongst these “ $n$ ” partners, we can find the “future” consideration, hidden behind the investment, the State remuneration hidden behind the taxes (on labour, on profits) etc.

### Example of 4 partners

If there is 4 kinds of partners, the fourth might advantageously be the “future” represented by the *ante* decided investment “ $V$ ” and the final investment “ $Rv$ ”.

We can assume that the final  $Rv$  investment is, after the *ante*  $S, G, V$  implication values, partially depending (indexed) on what is the values of  $D...$

And the 4x4 ideal matrix for getting  $Ra, Rs, Rg, Rv$  from  $D, S, G, V$  and always respecting the negotiated  $k_m$  ratios ...

For example, when the negotiated values are  $k_{m,a/s} = 0.25$  ;  $k_{m,s/g} = 5$  ;  $k_{m,g/v} = 2$  and  $k_{m,v/a} = 0,4$  we get easily the “ideal” 4x4 [T] matrix such as,

$$\begin{bmatrix} Ra \\ Rs \\ Rg \\ Rv \end{bmatrix} = \begin{bmatrix} 1 & 0.25 & 1.25 & 2.5 \\ 4 & 1 & 5 & 10 \\ 0.8 & 0.2 & 1 & 2 \\ 0.4 & 0.1 & 0.5 & 1 \end{bmatrix} \times \begin{bmatrix} D \\ S \\ G \\ V \end{bmatrix}$$

$$Ra = D + 0.25xS + 1.25xG + 2.5xV$$

$$Rs = 4xD + S + 5xG + 10xV$$

$$Rg = 0.8xD + 0.2xS + G + 2xV$$

$$Rv = 0.4xD + 0.1xS + 0.5xG + V$$

And the added value VA ( $Rg$  and  $Rv$  are included) =  $Ra + Rs + Rg + Rv$

We can do the same checking of the “ideality” of this 4x4 matrix we did with 3x3 ideal matrix (or 2x2 configuration).

### Example of 5/6 partners

Now, the 5th partner invoked could be the State by the way of taxes ...

And, following the same “solidarity” between the State and each enterprise, we can consider that the final “State income” is depending on what are the profits recorded by the considered enterprise.

Thus, to represent this “5th partner”, it’s more pertinent to introduce two new lines to take account that taxes on labour and taxes on dividends may be different. Thus taxes on net benefits (or on dividends) are called  $Xd$  with their associated  $k_{m,xd/a}$  and taxes on labour are called  $Xl$  with their associated  $k_{m,xl/s}...$

For instance, supposing that the State taxes calculation rules are such that  $k_{m,xd/a} = 0.25$  and  $k_{m,xa/s} = 0.2$  then using the previous method to get the ideal 6x6 matrix, and extending always the same numeric example, we will find :

$$\begin{bmatrix} Ra \\ Rs \\ Rg \\ Rv \\ R_{Xd} \\ R_{Xl} \end{bmatrix} = \begin{bmatrix} 1 & 0.25 & 1.25 & 2.5 & 4 & 1.25 \\ 4 & 1 & 5 & 10 & 16 & 5 \\ 0.8 & 0.2 & 1 & 2 & 3.2 & 1 \\ 0.4 & 0.1 & 0.5 & 1 & 1.6 & 0.5 \\ 0.25 & 0.0625 & 0.3125 & 0.625 & 1 & 0.3125 \\ 0.8 & 0.2 & 1 & 2 & 3.2 & 1 \end{bmatrix} \times \begin{bmatrix} D \\ S \\ G \\ V \\ Xd \\ Xl \end{bmatrix}$$

**Etc. (if other partners must be identified !)**

*Accounting detail...*

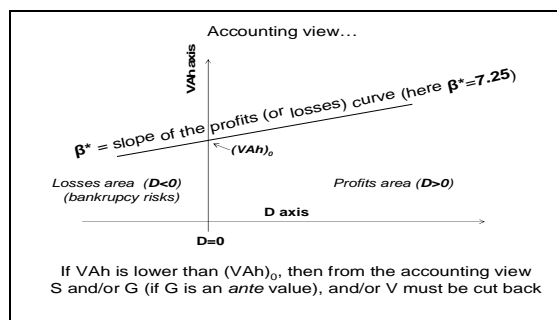
If there is no other load, the added value  $VAh$  (gross operating income) = the sum of all *ante* values ( $F$ ) and all *post* values ( $B$ )  
 $VAh = F + B = Ra + Rs + Rg + Rv + R_{xd} + R_{xl} \dots$

For instance, when  $G$  is *ante* value (as  $S$ ), we can write, with  $(VAh)_{D=0} = VAh$  got when  $D=0$ ,

$F = (VAh)_{D=0} = VAh - \beta^* \times D$  (where  $\beta^*$  is the sum of the 1<sup>st</sup> column of [T] values; here = 7.25)

And  $D = [VAh - (VAh)_{D=0}] / \beta^*$

Traditionally, accounting services must control that the loads ( $F$ ) are maintained lower than  $(VAh)_{D=0} \leq VAh$  (figure below)



Following the figure above, if  $G$  is a *post* value, we will calculate  $(VAh)_{D=G=0}$  which takes the place of  $(VAh)_{D=0}$ , then we define  $\lambda = G/D$  to calculate  $\beta^{**} = \beta^* + \lambda \times \tau$  ( $\tau$  being the sum of the 3<sup>rd</sup> column of [T] values), and  $\beta^{**}$  takes the place of  $\beta^*$ .

## Conclusion

If each private enterprise belongs to the hard core of the economic activity of one nation, some operational conditions or a new kind of flexibility must be invented. It can be also an opportunity to reinforce the solidarity between its own challenge and its contribution to improve the economic and social challenge at the State level.

Waiting a new approach of the development (Stieglitz, 2002), the aim of this paper is to show how to extend the model developed during the works relating to “Conditions to strengthen links between shareholders and workers in joint-stock companies” (Guillet, 2001) when other partners have to be considered.

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