

Abstract: The Change in the Wage System and its Impact on the Production Management at Toyota: the End of Ohnoism?

In 2004, Toyota has modified the method to fix the production allowance, which had constituted an important part of the wage for the blue-collar workers and occupied a central place in the Ohno's production management.

The production allowance (called "*bu-a-i*" in Japanese at first), systematized by the founder of the Toyota Production System (TPS), Taiichi Ohno, during 1950-1965 as a means for managing the productivity of the work teams as well as the working hours of all employees, had then a closed relationship with the productivity management and Kaizen activities. The production allowance was determined every month as the individual basic wage of employees being multiplied by the coefficient of production allowance, which was fixed every month by the classification of productive efficiency of all work teams. If the increased productive efficiency of a team were classified into an upper category, then the team members could receive next month a larger production allowance pro rata to their individualized basic wage. This system constituted, for the management, an important means for managing the shop floors: Ohno had been surveying the movement of production efficiency of all work teams. But the production allowance signified, for the workers, the shared profit gained by the productive efforts of the work team, so that it was an incentive system given to the employees for assuring the quality and security of their work and increasing the productivity by working correctly and doing Kaizen.

This system of production management coupled with the wage system was called into question at first at the end of 1980s, the peak of Japanese bubble economy, because it was regarded as one of main reasons for the labour crisis: newly employed young workers quitted massively because of overloaded work and disorder in work organization caused by excessive diversification of products on the one hand, and rapidly increasing demand, which they had to cope with under the constraints of the TPS like the just-in-time production. So that, the first important modification of the wage system was made in 1992-1993 after its minor revision in 1990: reduction of the weight of the production allowance in the standard wage from 60% to 40% and creation of a grade allowance (10%) and an age allowance (10%). In 1992, the way to classify the productive efficiency was changed from the comparison of all work teams to that of

the work teams within a homogeneous factories group: a group of foundries, forges, stamping and sheet metal shops, a group for mechanical components, a group for body welding, painting and plastic moulding, and an assembly group. And in 1993, the method to fix the production allowance was altered: now, the coefficient of production allowance, fixed within each group, was applied to the sum fixed for each worker's grade (hierarchical rank), so that the workers of the same grade and the same coefficient received the same amount of production allowance. In addition, the weight of the production allowance, renamed productivity allowance, in the standard wage was reduced from 40% to 20% by increasing the share of the grade allowance and the age allowance from 10% to 20% respectively, and the production allowance was abolished for the white-collar employees (engineers and office workers, under the managerial level position) by increasing the grade allowance to 40%. This modification had surly taken care of inequality in mechanization of production process, which affected the productivity: in a word, the production efficiency of labour intensive shops were lower than that of the mechanized shops, and in turn, it was also the case of the amount of production allowance. At this moment, this modification did by no means call into question the essential of the Ohno system: the production continued to be managed as before. A radical change finally appeared in 2004.

In 1999, Toyota planed the new wage systems for both blue-collar workers and white-collar employees, by conceiving the wage grade. The standard wage of the blue-collar workers now consists of the sum of the pay for the employee's gained ability (PEA, equivalent of the basic wage in the past), the productivity allowance, determined every month by the amount by wage grade multiplied by the coefficient of productivity allowance (PA), the allowance related to the grade position, then fixed by wage grade (GA), and the age allowance (AA); the share of each member is 30%, 20%, 30%, and 20%, whereas the standard wage of the white-collar employees is the sum of the PA (50%) and the GA (50%). The change of the name of each member in the wage system could be considered as a change in the reasoning of payment, but did not mean, in the case of blue-collar workers, the radical change of their wage. Five years after, however, the radical change was realized about the determination of the productivity allowance: only one coefficient of productivity allowance, applied to all blue-collar workers, is fixed for one year, and revised in April taking account of the increase in the productivity of Toyota as a whole in the precedent year. Consequently, the workers of

the same wage grade receive the same amount of productivity allowance throughout the year. This change is, we could say, a denial of the production allowance system as a means of production management, created by Ohno. So, a question is raised about why this change was made, and what kind of impact it had on the production management.

In my presentation, I'll try to explain the reason why Toyota has introduced this new productivity allowance, based on the company documents and my interviews with the labour relations department and workers' union, and the modification made of the evaluation and management system of productivity, based on the interviews with the production management department of Toyota.

[Publication list about the subject] Shimizu K. (1995) "Kaizen et gestion du travail chez Toyota Motor et Toyota Motor Kyushu : Un problème dans la trajectoire de Toyota", *Actes du GERPISA*, No. 13, pp.13-42. Shimizu K. (1999) *Le toyotisme*, Collections Repères, La Découverte, Paris. Shimizu K. (2004) "Reorganizing Kaizen Activities at Toyota : Kaizen, Production Efficiency, and Humanization of Work", *Okayama Economic Review*, Vol. 36, No. 3, pp. 1-25. Shimizu K. (2009) "The Uncertainty of Toyota as the New World Number One Carmaker" ; in M. Freyssenet (ed.) *The Second Automobile Revolution : Trajectories of the World Carmakers in the 21st Century*, Palgrave, Macmillan, Hampshire and New York, pp. 69-94.