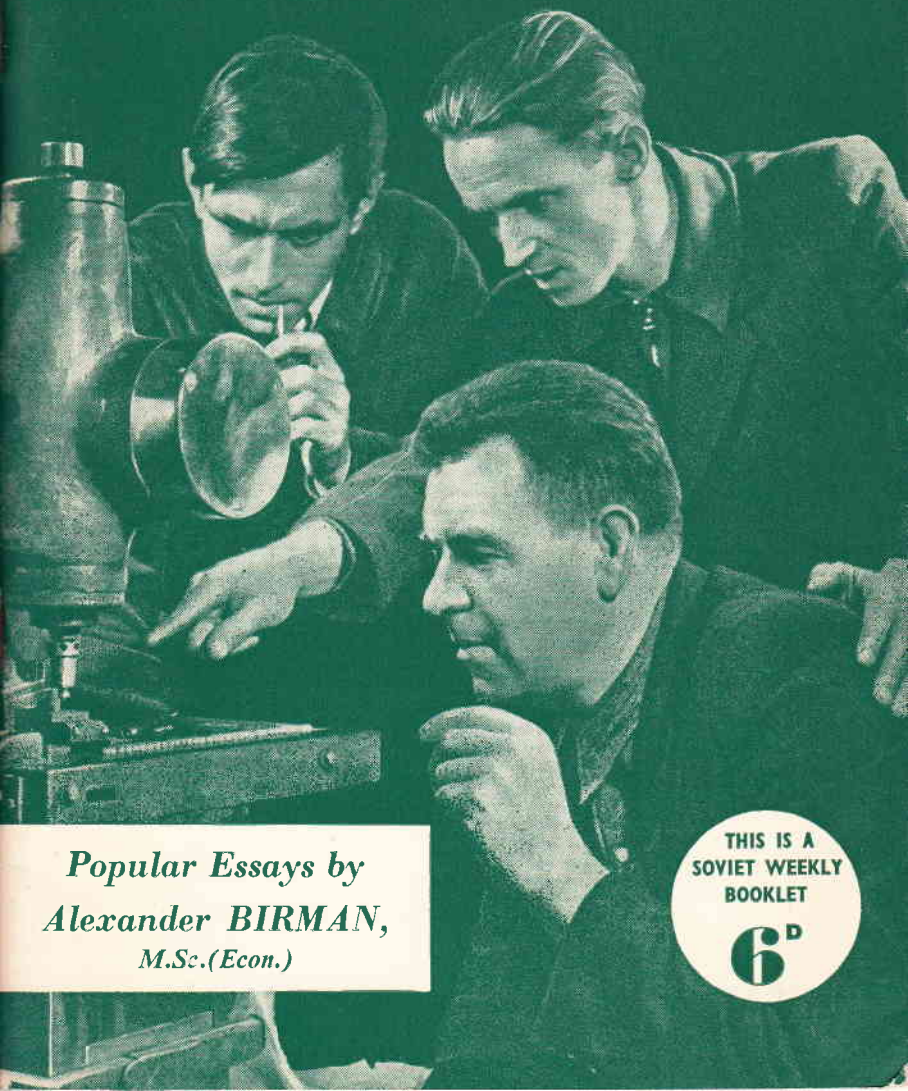


# Factory Management and Wages in the USSR



*Popular Essays by*  
**Alexander BIRMAN,**  
*M.Sc.(Econ.)*

THIS IS A  
SOVIET WEEKLY  
BOOKLET

6<sup>D</sup>

# Factory Management and Wages in the Soviet Union

BY

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## FOREWORD

THE ARTICLES included in the present booklet were published in *Soviet Weekly* during the past two years.

A glance at the titles reproduced here will show that their subject matter is mainly concerned with the daily economic activities of Soviet industrial enterprises—how the factories are run, factory management and planning, prices, profits and wages—as well as with such economic questions as the national income, how it is planned and who gets it.

As far as I can judge from my personal impressions during trips abroad and from what other people have told me, two very different, in fact contradictory, conceptions of Soviet society are current beyond the borders of the U.S.S.R.

Some people regard Soviet inhabitants as some quite peculiar beings, utterly different from anyone else, and are ready to believe any fables about the Soviet Union, no matter how far-fetched.

On the other hand there are those who believe that Soviet people are exactly the same as Englishmen, Frenchmen or Germans. They all dress, eat, drink, work and enjoy their time in the same sort of way.

This second point of view, generally speaking, is nearer the truth, but it contains one basic error. It does not take into account that the main distinguishing feature of the Soviet economic system—the absence of private ownership of the means of production and hence the absence of manufacturers, landowners, bankers and stockbrokers—puts its marked imprint on all aspects of social life, and of economic activity.

The articles presented in this booklet have been written in order to acquaint the British reader with several of these distinguishing features of Soviet reality which are most closely bound up with economic activities.

We would like the reader to feel—concretely, tangibly and visually—at least some of the details which together go to make up the essence of our country, but which are usually

less easily grasped or understood than such concrete things as a new model car or a dress design.

As I have already mentioned, some of these articles were published over a year ago. During this period big changes have taken place in the national economy of the U.S.S.R. Therefore, logically speaking, some of the things I wrote about need bringing up to date.

That was my original intention in preparing the material for the present edition.

However, as often happens in such cases, it became apparent that patching them up wouldn't really help. It was necessary either to rewrite them completely or leave everything as it was.

With the kind consent of the publishers I have decided to do the latter.

There only remains, therefore, a few words to be said in this connection.

The highlights of the recent changes in the economy of the U.S.S.R. have been the further decentralisation of the system of factory management, a still greater rise in the initiative shown by the people, and the extension of the rights of trade union organisations.

These questions, however, require much more detailed clarification than can be given here. And I hope to talk to readers about them in the pages of *Soviet Weekly*.

June 1958.

A. BIRMAN.

## I

### WAGES IN THE U.S.S.R.

#### Wages From the Economic Point of View

**W**E HAVE BEEN paying a great deal of attention to the question of wages in recent years.

In 1955 a State Committee on Labour and Wages was set up, with a big research institute under its control.

Many enterprises, particularly in the coal and engineering industries, have been testing out new forms and ways of payment for work.

The present system of wage scales, quotas, categories, piece-rates, etc., was established mainly in 1930-32. While actual rates have changed since then, of course, there have been no essential alterations to the system itself.

In the quarter of a century since 1932, however, there have been many changes in the methods of labour, and now we are working out corresponding changes in the methods of payment for it.

#### Wages Under Socialism

At the end of the last century, socialists everywhere were heatedly discussing an important question. How would wealth be distributed under socialism?

German socialists, for instance, worked out a draft programme which declared that the worker would receive under socialism "the full product of his labour".

That is, assuming he created, during a full work day, values amounting to £1—then his pay for that day would be £1.

All that is created by the worker must be given directly to him and his family, they declared. But Karl Marx himself, the founder of scientific socialism, opposed this seemingly "revolutionary" demand!

Marx agreed, of course, that under socialism only those will be paid who work. But he showed that the full value created by a worker cannot be given directly to him.

Society has common needs which must be satisfied. These include such things as health protection, schooling, maintenance of the aged.

And then you need reserve funds for emergencies—a drought, for instance, or other natural calamities.

The socialist state also needs money to meet administrative expenses—not to mention heavy defence expenditures, in the present world situation.

But that isn't all. The population increases every year, and the demand grows.

To satisfy that demand new factories must be built, new lands must be brought into cultivation. All that requires capital investment, too.

### **For Working People**

That is why, Marx explained, neither under socialism, nor under communism, will the worker receive in full the product he creates.

This product is actually divided into four parts:

- To replace the machines, materials and fuel expended in the process of production.
- To cover the common needs of society.
- To form new capital investments.
- To go directly to every worker and his family.

You will see that this distribution differs from the capitalist system in that there is no allocation for profit (payments for profits of owners were rather larger than the country's total wages bill in the pre-revolutionary years. In 1911, for instance, a Russian journal, the *Financial News*, gave the country's total wages bill as 557,700 million roubles, and total profits as 568,700 million).

Today, in one form or another, the entire product goes to the working people, part of it in the form of wages, that is, directly, and the other part through public channels.

## **The Soviet Wages System—Is It Fair?**

**I**N OUR SOCIALIST country, as we have seen, a substantial part of our national production is returned to the worker in the form of wages. On what principle is that "wage fund" distributed?

For instance, I know a young turner at the Red Proletarian Works here in Moscow.

He lives all by himself. But the worker tending the machine next to him has a family of five. They earn the same money. Is this fair?

Some of you might say it would be fairest to distribute everything according to the number of dependants in the family.

If you have five, say, in your family then you would be paid five times as much.

Such demands were put forward in the early years of the revolution, but they were rejected.

As Lenin explained, wages cannot be distributed in this way.

Socialism is being built, he pointed out, by people who have been accustomed to work for many decades—centuries even—merely because of the need to make a living.

Labour is a hard, dull duty for them—something they would avoid if they could, that is, if the hard necessity of making a living were removed.

Now, you cannot change people completely, change their whole outlook and conditioning, merely by passing a few laws. You can't change them completely in two or three years—or even in twenty or thirty.

### **Not Utopians**

"We are not Utopians", Lenin said, "we have to face the facts soberly."

If workers were paid according to the number of their dependants, or if all were paid equally, then single people or those with small families would work badly, unproductively.

That meant that there was only one way left—to pay everyone according to the amount of work he does for society.

The worker who gives more will receive more, in the same degree.

Is this fair? Yes, because all people find themselves placed under the same conditions of remuneration.

Wages are neither raised nor reduced in the U.S.S.R. because of a person's sex, colour, origin, political or religious views. The basic principle is equal pay for equal work.

From this point of view, then, the system is fair; but of course, there are drawbacks to it.

Clearly under this system it is harder for a person with a large family than for a single person, for the sick than for the healthy, for an elderly man than for a youngster.

It is true, of course, that the socialist state comes to their aid by organising free education and health services, by granting pensions and benefits. But full fairness will exist only under communism—when all will receive as much as they want, according to their needs.

At this point you are probably asking:

But how are we to size up and compare the various types of labour? How do we decide the relative amount of labour done by the miner and the doctor, the steelmaker and milkmaid, the book-keeper and electric locomotive driver?

## Soviet Approach to Wage Scales

**E**VERYONE SHOULD BE paid in accordance with how much work he or she does, for the benefit of society. That is the principle of socialism.

It sounds all right—but how is it to be carried out?

We have the geologist and the textile worker, the driver and the carpenter. . . . How is their labour to be compared and evaluated?

This problem was made easier by the fact that the Soviet authorities did not have to start from the very beginning.

Correlations between various kinds of labour already existed—they had developed historically in pre-revolutionary Russia.

These were taken as the basis, with the immediate introduction of several measures:

- **Equal pay for equal work for both men and women.**
- **Equal pay for people of all races and nationalities.**
- **Abolition of excessively high salaries for people who occupied administrative posts.**

This was followed in the early thirties, as I have already mentioned, by a detailed wage system which is still in effect today.

At present all the various kinds of labour are divided into definite categories.

In every trade, the simplest kind of unskilled labour is rated as first category. Then the other, more skilled kinds of work are listed, gradually raising the category.

### Classification

There are eight categories in the engineering industries, seven in the chemical industries, etc.

This classification of the different types of labour was carried out by experts on the basis of past experience.

Of course there was a certain degree of convention and inaccuracy in the rates they established—but that's inevitable in all cases where man operates and not a machine! It can't be helped.

Amount of skill required, therefore, is one element in deciding a worker's wage category. But there are other elements.

The *conditions* of work for instance. A machine shop, to take an example, is quite a different thing to the chemical shop, which contains harmful vapours. Working underground or at a great height is much harder, of course, than simply on the surface.

### **Job Prices**

The harder the working conditions, therefore, the higher the category of the job.

Finally, the area where the people work is also taken into consideration. This is absolutely essential in such a vast country as the Soviet Union.

It is much easier to build a blast furnace in the southern part of the Ukraine with its mild, almost sub-tropical climate than in Eastern Siberia or in Arctic Archangel!

When you have worked out your neat categories, then you have to decide just how much should be paid, relatively, for each category.

In settling this question, our guiding principle was that there should be a considerable difference from category to category, because that would give the workers a strong incentive to raise their skill, and learn their jobs well.

In most branches of industry wage rates rise by from 10 to 15 per cent from one category to the next.

### **Minimum Rates**

The pay of the highest grade is 2.5 to 3 times that of the lowest, while in the especially complex and exacting branches of engineering it may be even four to five times greater.

That still leaves one question unanswered. How to fix the amount to pay for the lowest category?

This is not a simple question, for no matter what kind of work a person performs his wage must feed and clothe him. He has his needs and they must be satisfied.

On the other hand, the country's material sources were not boundless, especially in the years immediately following the first world war and foreign intervention.

So the pay rates actually existing at the time were used as the basis for the lowest, unskilled wage.

## **Piece Rates or Pay by the Hour?**

**I** HAVE EXPLAINED how wage rates are calculated in our country, relative to one another. The system I have described, however, can be applied to many different methods of working out the basic payments.

There are two main ones—one by the hour, on a time basis; and piece rates of one sort or another. In Soviet industry as far as possible we use the second method.

Pay by the hour is limited to the kinds of jobs where piecework isn't really practicable—service staffs, repair workers, many white-collar jobs.

We use both simple piece rates and progressive piece rates in our industry, as well as a progressive piece rate plus bonus system. As applied in the U.S.S.R. all these methods have certain important things in common.

### **Based on "Average"**

In the U.S.S.R. the production quotas, from which the piece rates are calculated, are based on the average qualifications of the average worker.

I would say that this is a very important point. I stress again—the work of the *average* worker, not that of the strongest and the most skilled as, for instance, in the case of the Taylor system.

Secondly, in the Soviet Union the trade unions play a decisive role in establishing the quotas, which are then discussed at general workers' meetings.

The management and the trade union give help, and provide training opportunities for any who find it difficult to fulfil the quotas at once.

Indeed, people failing to fulfil their quotas are rarely to be found in Soviet enterprises.

### **Readily Accept**

It is quite natural that under such conditions the workers readily accept the piecework system.



The progressive element in our piece-rate system is a substantial one. Usually the rate increases by a half for extra output up to a tenth of quota, doubles for the next tenth, and so on.

The piecework rate plus bonus system of pay gives the worker an extra bonus for high quality in his product, or for economy in the use of materials, etc.

At the motor works in Gorky, for example, a foundryman receives an additional 10 per cent on his piece rate for every per cent reduction in scrap, as compared with the amount allowed.

That, briefly, is our present system. But I have said that changes are contemplated. What are these changes, and why are we making them?

## Why the System needs Revision

I HAVE MENTIONED that our existing pay system was established over a quarter of a century ago.

All over the world in that quarter of a century prices have increased.

In the U.S.S.R., too, prices of many goods have gone up. But, although the wages system has not been altered, the actual wages themselves have grown even faster than the prices.

Real wages in 1955 were, therefore, three-quarters higher than in 1940 (averaged over the whole country). And wages of industrial workers had nearly doubled.

Wages had increased—but they had done so in a rather peculiar manner.

### Bonuses

The pay rates had remained almost unchanged, while the additional wages were paid in the form of various bonuses, progressive piece elements, etc.

This has had the effect of reducing the significance of

the actual basic rates, and has clogged the entire system of wages. It has become difficult for a worker to make out just what he has earned!

The establishment of production quotas has also complicated matters. Progress in engineering has brought new types of work into existence and called for revised production quotas.

### Problem

But since the basic rates had not been increased, rate-setters found themselves in a quandary.

Let us assume, for example, that in 1954 worker Sergeev earned 30 roubles a day, made up of 15 roubles basic rate and 15 roubles in bonuses of one sort or another.

Then a new type of work was introduced. If the technically appropriate quota were set and the work paid accordingly at the old basic rate, then the worker would lose his bonus and his earnings would be cut in half.

This, of course, was out of the question. So an artificially lower quota was fixed. The quota was overfulfilled, and the wages did not drop.

During the war and later, during the reconstruction period, various special bonus systems were introduced on particularly urgent jobs. This further deranged the wage system.

As a result of all this, the wage situation in a number of branches of the economy is now such that the rates and quotas are quite out of keeping with the economic conditions.\*

The worker takes home a reasonable wage, but this is achieved by adding on to his bonus, instead of an appropriate increase in the basic rates.

\* Since this was written new rates have been introduced in many industries.—Ed.

## Revising the Quotas

**P**ROPERLY SPEAKING, two elements of the wage system—production quotas and pay rates—need to be put in order.

The quotas must be technically realistic ones. They must be based on real labour productivity.

Though this may seem very simple it is not so easy to introduce such quotas throughout industry.

The following are the three main difficulties:

Firstly, we must determine precisely the productivity of the many scores of thousands of pieces of equipment during the production of many millions of different items.

After all, a lathe produces various parts. What is its productivity in the manufacture of each different type of commodity?

Secondly, the same machine producing the same items has different productivity at different enterprises, for many reasons.

For example, a lot depends on whether it is producing in big batches or in separate pieces.

But the production quota for workers of the same category must be the same or there will be a discrepancy in their wages—and this will bring about movements of workers.

Thirdly, the technology of production is constantly changing and improving. Yesterday's quota is out of date in three months' time.

Experience shows that the newly established, technically realistic quotas are always considerably higher than the preceding ones—often half as much again. In order to maintain the earnings on at least the same level the basic pay rates must therefore be increased. This is precisely what is being done.

## Look Before You Leap!

**H**OW ARE WE going about revising quotas and basic rates? To do this with the fewest possible mistakes, we began with machine-building, the branch of industry employing the most highly skilled engineers and economists.

Fourteen factories with different principles of production were chosen—individual production, small-scale production, mass production and direct-flow production.

Experienced rate-setters worked out quotas which were discussed in detail in the shops and at general meetings of the workers.

Two wide conferences were held several months after the introduction of these new quotas.

One of the conferences was called by the Moscow Regional Council of Trade Unions. It was attended by chairmen of factory committees, chiefs of factory labour and wages departments, rate-setters, and leaders of the trade union wages commissions.

The second conference was held with the participation of the directors of enterprises, engineers, economists and scientists.

Both conferences were attended by representatives of the State Committee on Labour, and by the Press.

What did the discussions reveal?

The introduction of the new quotas, clearly, was "paying off".

Labour productivity increased. The earnings of workers rose by 4-5 per cent. And the share of the basic rates in total earnings rose sharply.

But problems and weaknesses were also brought to light.

For example, at the excavator plant in Voronezh, the whole thing was reduced to making the quotas comply with the new pay rates, instead of working them out scientifically. In some places the quotas were cut without any reason, and in some cases somewhat raised.

The problem of the number of categories also evoked

lively discussion. Many pointed out that the 14:5 ratio between the highest and lowest categories was insufficient to interest workers in improving their skills.

In their opinion the highest category should have a ratio of 16:5 or even 17:5.

They were told that with such differentials the wages of the bottom category would prove unjustifiably low.

Everybody agreed that such important decisions required a great deal of thought.

### Summing Up

As we have seen the principles of wages are unchanging. Equal pay for equal work, higher pay for more work.

Nor do the *forms* of wages call for any changes. They will be basically piece work, whenever reasonable; time work with bonuses in other cases.

Quotas must be technically realistic, properly reflecting the achieved level of labour productivity.

The basic rates must be raised to correspond with the new production quotas.

## Wages and Prices

**T**HERE ARE 50 million factory and office workers in the U.S.S.R. Wages form the major source of their incomes. And the value of their wages is largely decided by prices in the shops. From this point of view, how do things stand in the U.S.S.R.?

Of course, as an ordinary citizen with eyes in my head, I can say right away that, everywhere I go, I can't help noticing that the people are dressing better and more smartly every year, that the variety of goods in the shops is increasing and the demand growing.

Personal impressions are all very well, but from me, I know, you want something else—a general economic analysis of the situation.

First, is it true that in the U.S.S.R. the purchasing power of money has decreased as compared with before the revolution?

Yes, it is true. But this, of course, is also the case in every other country.

### Prices Down

In some countries the fall has been catastrophic—in Italy, for instance, by 1953 you needed 56 lira to buy what one lira would have bought in 1939. In France you needed 36 francs to buy what one would have bought before the Second World War.

And today, no one denies that in Britain, the U.S.A. and most other countries, the value of money is still on the downward trail.

In the Soviet Union, however, while it is true that prices are still higher than they were before the revolution, or indeed, before the Second World War, they have been going down rapidly over the past ten years or so.

Wages—as you know from my previous articles—have risen substantially during that period. So you don't need to be a mathematician to appreciate that, as the cost of living goes down, our standard of living has been going up.

Here is the actual price index (end of 1947=100):

				Foodstuffs	Other Com- modities
1948	..	..	..	82	86
March 1, 1949	..	..	..	68	78
March 1, 1950	..	..	..	53	65
March 1, 1951	..	..	..	48	63
March 1, 1952	..	..	..	43	62
March 1, 1953	..	..	..	38	57
March 1, 1954	..	..	..	38	53

Rents, incidentally, have remained a constant factor during the whole period. All rents are controlled—and there have been no rent changes since 1930. These rents are low, very seldom indeed exceeding about 4 per cent of the householder's income.

Since March, 1954, there have been no general reductions in retail prices. But prices of theatre, cinema and concert tickets have dropped by up to a fifth over the past few years. Books are cheaper, too.

Postages and fares were increased slightly in 1947, but not enough to make any real difference to the situation.

### **Real Wages Up**

If you take into account all these factors, you find that, by 1956, *real wages*—that is, wages in terms of what they will buy—had risen by 43 per cent, more than two-fifths, compared with 1950.

No wonder that in 1956 the shops reported that their overall sales had increased by nearly a tenth—and that by far the biggest increase took place in sales of the more expensive lines!

To complete the picture, I should point out that wages, important as they are, are only one source of real income in the U.S.S.R.

Schooling and the health service are free; cheap and free holidays can be had at the expense of the non-contributory state-controlled insurance fund; and many more similar items could be listed.

Then there are big retirement pensions, family allowances, etc.

We haven't included any of these things in the picture, but you will readily agree that they do a great deal to raise the actual standard of living.

## **II**

### **SOVIET FACTORIES**

#### **Soviet Factories and their Owners**

**I**F YOU LOOK at a Soviet factory from the outside, it differs little from any similar establishment anywhere else—the same chimneys, the same buildings and sidings.

But come a little closer. Walk through the gates, enter the shops and talk to the people.

Of course, a lot could be said about output; but a tractor is a tractor and shoes are shoes. Only an expert can tell how a factory is working by the quality of goods it is turning out.

The workers, however, are another matter.

Talk to them, look at their wages books, attend a production conference and a new world will open before you, a world called “a Soviet industrial establishment”.

Many Britons have visited this world. Some have liked it, others have not. This is natural, of course, when you see something new that differs from things you have grown accustomed to for a long time.

But not all people are able to go to the U.S.S.R., at least not in the near future. My aim is to give those who have not been there an idea of a Soviet industrial establishment.

This is not an easy task and I hope readers will not find the many facts, figures and examples too boring. Without them it is impossible to get a concrete picture.

#### **Numbers and Scale**

First, how many of these “industrial establishments” are there in the U.S.S.R.? At the end of 1955 there were 206,000 large and small state enterprises plus more than 107,000 producer co-operatives (workshops and other establishments).

There were over 350,000 smithies, flour mills, tile kilns, creameries and other collective farm enterprises.

And lastly, there were about 28,000 establishments operated by the consumer co-ops—tailoring and repair shops, applied art shops, etc.

Thus, our industry has a total of close to 700,000 establishments, not counting the building and construction industry, railways, water and motor transport, and other branches.

For the Soviet Union, where some 40 years ago one could travel for hundreds of miles without seeing a single factory chimney, the general development of industry has been truly history-making.

## Who Works There?

**H**OW BIG ARE the factories of the Soviet Union? Of course, they differ greatly, but large enterprises predominate. Out of every 100 workers, 64 work in factories employing more than 1,000.

And 14 in 100 are employed at huge plants with over 10,000 workers.

You may be interested in seeing how the sizes of our factories have grown in the years since the revolution. As an example, I take our factories producing pig iron, but you would get much the same picture whatever industry you chose:

	1913	1928	1940	1955
Number of works ..	87	40	38	39
Production (in tons)	4,200,000	3,300,000	14,900,000	33,300,000
Average output per factory (in tons)	48,000	82,000	392,000	854,000

The U.S.S.R. also has many smaller factories. Two-thirds of all our enterprises employ fewer than 100 workers each. These small establishments often produce very essential precision instruments, unique machine tools, medicines and other important things.

Who works at these enterprises? Here is another table, which tells an important story.

For each 100 employed at factories there were:

	1932	1940	1955
Workers .. .. .	75	76	82
Engineers and technicians ..	5	8.5	9
Clerical and Administrative staff ..	9	7	4

The proportion of engineers and technicians, you see, has nearly doubled, thanks to the wide development of secondary technical and college training.

When the reorganisation of the management of industry and construction, now under way, is completed, a lot more engineers will leave office desks, and return to the shops.

Better organisation of production, with the mechanisation of clerical work, has resulted in reducing the proportion of office workers by half.

## Two Views — Both Wrong

**W**HAT SORT of industry do we have in the Soviet Union? Two answers are frequently given to this question abroad. The answers contradict one another, but this doesn't really matter—for both of them are quite wrong.

The first view is that, in the Soviet Union, we produce only steel and machinery. We pay little attention they say to the output of consumer goods, goods for the people themselves.

The other opposite view maintains that Russia really has little heavy industry—it's still, in the main, a country which produces only "cotton goods".

### 250 Industries

What is the truth?

First place as regards value of output in our industry is held by engineering. Second place is taken by light industry, third by foodstuffs.

Then come the fuel, metals, chemicals and other industries.

Altogether we have more than 250 flourishing branches of industry. Forty years ago, we had less than forty.

Before the revolution, all mines, factories and plants were private property—the property of individuals or companies. Following the victory of the socialist revolution in 1917, many major industries were nationalised.

But in 1928, out of every 100 industrial establishments, 17 were still privately owned. It is true, however, that these were mostly small enterprises.

In 1937 the share of private property in industry dropped to one-five-hundredth. Today there is no “private” industry at all.

All industrial establishments in the U.S.S.R. are socialist property. Out of every 50 items produced, 49 come from enterprises belonging to society as a whole and operated by the state.

### **Co-ops' Share**

The other one item in 50 is produced by the co-operatives.

As I mentioned in the first article in this series there are 2.5 times as many co-operative establishments as state establishments, but these are relatively small in size.

The question of ownership has another aspect.

In 1953 out of every 100 industrial establishments 67 were run by central U.S.S.R. state organs. The others came under local jurisdiction. But two years later the situation had changed substantially.

The share of the central organs has now already dropped to 53 and is still going down.

When the reorganisation now under way is finished, there will be very few industrial establishments indeed under central state jurisdiction.

A large number of our factories and plants will come under the jurisdiction of the local authorities, while the others will be under dual jurisdiction, that of the U.S.S.R. as a whole and the governments of the individual union republics of the U.S.S.R.

And so, in various ways, we see the owner of the Soviet factory is—society.

## **Managerial Agencies**

**W**HAT ARE Soviet factory managements like? Well, to outward appearance, I suppose they look very much like similar bodies in British, French or American factories. There's the office, the costing and accounts departments, the sales staff, and so on. . . .

But this is only an outward appearance.

You can see the differences very clearly when you start examining the rights of management.

First, the director. Until recently he was appointed by the government department under whose jurisdiction the factory came. Now, after the reorganisation of our industry, he will be appointed by the local regional economic council.

The director is personally responsible for the operation of the enterprise. He has powers of hire and fire, he can promote or demote members of the staff, and his orders must be obeyed.

Life has shown that, without firm leadership, co-ordination and discipline, it is impossible to operate a modern industrial enterprise.

All the same, every step the director takes is subject to public influence.

Public opinion doesn't interfere in the way he carries on his concrete managerial activities, so long as there is no need for it to do so. But if the need arises, it quickly makes itself felt.

Let's take, for example, the way the factory is operated. The main quantities, etc., in the factory's production programme are indicated in the plan targets set the factory by the local economic council.

These targets are not, however, manufactured out of thin air, or even out of the desires or wishes of the economic council members.

All the details of these plans are worked out in the factory itself, in its various shops and departments. The plan is dis-

cussed at production conferences in which the vast majority of the workers take part.

In addition, a collective agreement is concluded each year between the management and the factory union branch which lays down very categorically what the management must do that year to improve working and living conditions for its employees.

In a Soviet factory, the director, like the other workers, belongs to the union. He can attend the meeting at which the collective agreement is finally approved. But, like other union members, at that meeting he has only one vote.

A specified proportion of the factory's profits from the sale of its products is retained at the works, and used for house building, bonuses and other purposes. I'll be dealing with that in more detail later.

The point I want to stress here is that these funds are spent with the participation of the unions, and under their control.

The director, I have said, has the power of "hire and fire". But any worker who disagrees with a dismissal or a demotion has the right of appeal against the director to the trade union or to the court.

If the union decides in favour of the worker, then its decision is obligatory for the director.

Management at lower level—shop superintendents, engineers, foremen, etc.—are similarly subject to effective checks from the appropriate lower level trade union bodies.

## How They Are Equipped

**E**ARLIER ON, I said I would write about the technical equipment of Soviet industry. It was easy to promise that—but not nearly so easy to keep the promise, for I said I would concentrate on things new to British readers.

Of course, to a lesser or greater degree, the machines, apparatus and instruments which make up the equipment

of a factory are very similar in Moscow, Birmingham or Detroit.

In some cases, the Soviet machines are better than the foreign ones. In others, the foreign equipment is superior to ours. We are, for instance, at present importing a large number of Czech looms.

Machinery, then, is roughly the same. . . . But this in itself is a point of importance and interest.

Don't forget that, 40 years ago, Russia was economically at least a century behind the West.

She had only a quarter of the machinery then installed in relatively tiny Germany. She had less than a tenth as much machinery as in America.

At the time of the revolution, in 1917, our huge country was using less electric power than Moscow region alone uses today.

This is an important point to note, for industrial progress everywhere today depends on the power potential available.

Today Soviet basic industries are second to none in their equipment. We have machinery in quantity and in quality.

We have automatic shops and even entirely automatic factories. We have huge vertical turning lathes able to machine parts weighing dozens of tons.

As for our power industry, these figures tell their own story: In 1913, our industry consumed 1,450 million kwh. of power. By 1928 it was consuming 3,300 million; by 1950, 60,600 million; and by 1955, 113,300 million.

These are facts. They are put forward in a far from boastful spirit. But they make clear that we have come a very long road in our 40 years of socialist development.

## The Bedrock of Our Industrialisation

**W**HEN SOVIET ENGINEERS are designing new machinery, naturally their main objective is to raise the productivity of labour. This is something which, you may say, is obvious. But all the same it is worth stressing, for higher productivity is in many ways the key to our advance.

As I have said before, we inherited an obsolete, worn out, inadequate industry from the tsars. That sort of industry couldn't provide the means of defence if we were attacked. Neither could it provide the materials for the more houses, more textiles, more food we needed.

Our industry, therefore, just couldn't raise the people's living standards. That's why Lenin said time and time again that productivity of labour was "the paramount, the essential factor for the triumph of the new social system".

There is, however, another aspect of the design of new Soviet machinery which is worth your attention.

When a Soviet engineer is designing a machine, he is thinking also of ways of making it easier for the operator to handle.

The plans for the development of our economy include a special section devoted to "mechanisation of laborious and heavy processes".

Mechanisation here had the purpose of making work easier as well as making it more productive.

Human sinews are replaced by cranes, special lighting eases eye strain, electricity combats smoke and heat in the shops.

Just one example—we are increasingly replacing open-hearth furnaces with electric smelting furnaces. These increase productivity, true—but, more important, they ease the labours of the furnace workers.

Figures? In 1928, we had only ten such electric smelting furnaces. By 1941 there were 207; ten years later, 407; and last year the figure had reached 659.

## Designers and Workers

**C**APITALIST OR SOCIALIST, in Britain, America or the Soviet Union, industrial undertakings have to have designing offices. They may give them different names, but their job is the same—the invention of new machines and equipment, the modernisation of existing plant.

The same thing is true of the technological departments which factories everywhere must have, to organise efficient mass production.

Another thing that, I don't doubt, is the same in east and west: the designers and technologists the world over are engaged in heated controversies, upholding their own particular ideas and views.

All the same? Yes—but it is only an outward similarity. There are also great differences.

### Co-operation

In my opinion, the chief difference is that Soviet designers and technologists work under altogether different conditions than do their western opposite numbers.

Soviet engineers and technologists are not separated by a wall from the workers. Indeed, they rely on the practical worker for help in overcoming difficulties and achieving their ends.

Moreover, every year hundreds of thousands of workers themselves invent new machines and improve old ones.

Every factory prints a special reference-book for inventors, which tells them what production problems urgently need solution. Everybody can make a suggestion.

Let's take, for example, not one of our giant factories, but a small one.

I don't suppose you've ever heard of the Moscow Type-foundry No. 2. Nor, come to that, have most Soviet people.

### Innovation

Last year the workers of this small enterprise put forward 150 suggestions for improvements in the production process. More than half of them were adopted.



The result? The factory worked more economically. The worker-inventors were rewarded. Working conditions at the factory improved.

Often such proposals are valuable not merely for the factory where they are made but for industry generally.

I'll give you an example of this and, in giving it, I'd like to make a point about *why* our workers help to improve production.

First, then, the example. It comes from a Karelian brick-field. There, one of the kiln workers spent a lot of time pondering over ways of increasing output of bricks.

Ring kilns for hardening the bricks were invented a century ago, and there didn't seem much that could be done to improve them. But this worker, Pyotr Duvanov, disagreed.

He found that, by slightly decreasing the number of bricks in the kiln and increasing the fire correspondingly, the brick baked in less than half the time!

### **Motivation**

On balance, the kilns turned out twice as many bricks by the Duvanov system.

Now, why did Duvanov trouble about this?

Of course, he did well financially out of it; indeed all the workers benefited.

For, really, Duvanov wasn't motivated by the desire to get rich or to become the owner of a factory!

What he wanted was to help the people to build more houses, schools, clubs, theatres, factories and mills.

There are thousands of people like Duvanov in Soviet enterprises.

## **Tomorrow**

**I** BY NO MEANS wish to give the reader the impression that everything is perfect, or that there are no deficiencies in the production techniques of Soviet industry!

The Soviet people are far from being complacent, and there are things they are not content with in this field.

When the draft law for reorganising the management of industry was being discussed a good deal of criticism was voiced, most of it well founded.

The reorganisation that is now nearly completed will greatly stimulate technical progress.

Management will be brought closer to production, and so will research establishments, laboratories, colleges and technical schools.

There will be a closer contact between production and science.

The make-up of the working people is at present also undergoing considerable changes.

For several years there has been an influx to industry of young people who have completed secondary school—leaving school at 17 or 18, instead of 14 or 15, as previously.

These youngsters are well educated, with a broad outlook.

At first, of course, they cannot do much, but all the old-timers are of one mind—that these youngsters will make good.

They know physics and geometry, they do not shrink from blueprints. They look at everything critically, and are always searching for possible improvements.

Today all enterprises situated in one economic area are managed by the area economic council. This gives the factories and mills infinitely wider possibilities for specialising in their production and co-operating with one another.

But that's the subject for another story!

## **Branches of Industry**

**I** HAVE TO BEGIN with figures once again, as it is the simplest way of explaining many complicated things.

Modern Soviet factories have achieved a high degree of specialisation.

The number of actual branches of industry have, however, been growing. In 1912, there were 189. By 1944 the figure was 290.

Even those figures given by one of our experts fail to show the full picture. For many of the 1912 "branches of industry" listed employed only a few score workers.

The production of icons, for instance, provided occupation for 143 persons, while graphite production employed 36.

In actual fact, there were not more than 100 real branches of industry at that time.

The present-day official figure of 290 doesn't supply a complete picture of the many-sidedness of Soviet industry.

One of these branches, for instance, is called "engineering for light industry". This, in fact, consists of four specialised industries producing machinery for the leather, footwear, textile and garment industries.

Each of these four branches includes many enterprises turning out vast quantities of goods.

But that's not all. In textile engineering, for example, there are specialised branches, turning out equipment for ginneries, for spinning, weaving, and knitted goods factories.

Of course, you can't say with absolute accuracy how many branches of industry there are in the U.S.S.R., for industry is in a state of constant progress and is bringing into being more and more branches.

Their total at present is about 400. And the growth in their numbers is not chiefly due to sub-division of existing branches but principally to the creation of new ones.

So we have a very large, specialised, complicated industry, all to be run by means of a co-ordinated plan.

### All For One

**T**HE TRADE MARK of the Moscow Motor Works ornaments the radiator of the six-seater ZIL-110 car, yet in fact there are 76 factories taking part in its production.

They supply 1,250 different materials and parts of the machine.

The production of equipment for one of the world's largest

hydro-electric stations, at Kuibyshev on the Volga, involved the co-operation of some 500 enterprises.

The escalators used in the Moscow underground railway are built jointly by 18 factories.

The Kharkov engineering works co-operate with 392 other factories all over the country. I could give many more examples of this kind.

Thus effective results are obtained from *specialisation* and co-operation.

Before the war, for instance, when entire blooming mills were manufactured at the Novo-Kramatorsk works in the Donbas, it took from two to 2½ years to turn out a unit.

Now it takes less than a year to manufacture a blooming mill—thanks to co-operation among dozens of factories, producing various units of the machine.

### Socialist Co-operation

**H**OW DOES THIS DIFFER, the reader may ask, from industrial practice in Britain or America?

In the U.S.S.R., specialisation and co-operation have important specific features and advantages.

As I pointed out in an earlier article Soviet enterprises are not privately owned—they belong to the whole of society.

It follows from this that specialisation and co-operation are put into effect in accordance with a single plan, making provisions for many years ahead and encompassing the entire country.

Soviet enterprises are not limited in their activities by private ownership of land and water, of patents, or of banks.

They all belong to the society as a whole.

### No "Secrets"

They are free from commercial or technical secrets, from competition among different firms, from monopoly of markets or sources of raw materials.

Soviet enterprises can and do avail themselves of the help

of scientific and research establishments, from the Academy of Sciences itself to the smallest college laboratory.

And finally, in spite of the Soviet Union's immense size, this process of co-operation is not confined within its own borders.

Soviet industries are co-ordinating their work to a steadily increasing degree with that of the industries in other socialist European and Asian countries.

This is achieved by agreements on scientific, technical and economic co-operation and mutual aid.

All this explains the high degree of flexibility of Soviet industry and its ability to organise rapid mass production of goods required, whether farm machinery, air liners, TV sets or washing machines.

### Why the Criticism?

**I**F YOU WERE to look over the Soviet newspapers of the past few months,\* you would find that they feature an enormous number of letters and articles written by the readers on the subject of the reorganisation of industrial management.

About half these letters dwell, in one way or another, on the problems of specialisation and co-operation.

What is the tone of these letters? The writers all acknowledge that in the forty years of the Soviet system the people have achieved important economic successes. But, at the same time, they stress that sufficient use is not made of the possibilities afforded by a socialist society and a planned economy.

The management of industrial enterprises by industrial ministries created obstacles in those enterprises' contacts with one another, even within the limits of a single city or district.

In order to make full use of the capacity of "its" factory, a ministry tended to enlarge the variety of its output, thereby decreasing the factory's specialisation.

There were cases of "carrying coals to Newcastle" in a number of industries.

\* i.e. at the time of writing.—*Ed.*

This is being done away with now. All enterprises situated within the boundaries of a particular geographical area are being managed by the appropriate economic council.

The possibilities of a more sensible division of labour among them is thus being increased many times over.

This system also improves the methods of co-operation between the different economic areas.

The plan results for January-June this year have already shown the result—a growth in output and a lowering in the costs of production. The Soviet customer will receive more goods at lower prices.

### Where We Began

**T**ODAY IT WOULD be hard to name a type of goods that is not produced in the U.S.S.R.

You may answer: "So what? Other countries, too, produce a large variety of goods!"

But we look back not so many years to a time when our country had very little industry at all.

What did Russian industry produce 40 years ago, before the revolution? Well—building materials, sawn wood, bricks and a small amount of glass and cement. Some production of locomotives and rolling stock, certain types of shipping, cotton textiles, paper, sugar . . . and that was about all!

The basic fuel was wood. Only a small quantity of coal and oil was produced.

At the "peak" of industrial production in Russia, before the revolution—in 1913—our output of machine-tools totalled the magnificent figure of 1,800 metal-cutting units!

In St. Petersburg (now Leningrad), industry depended on imported coal. The textile mills had to rely on German dyes.

Sewing machines were imported from America, tramcars from Belgium.

Even sickles and scythes were mostly imported from Austria.

Even this low production level broke down as a result of the First World War. Industrial output in 1917 was little more than two-thirds of the 1913 level.

That, then, is where our industry stood 40 years ago. That is the "foundation" from which we started. Where did we go from there?

## Multiplying Industry by Thirty

**T**HIS SUBJECT PRESENTS writers with two problems—not enough material in some aspects; much too much material in others. However, it is the superabundance of material which is giving me a headache (but not, I hope, you!).

I will try to outline the facts without transforming the story into a column of statistics. Let us take, first, the rate at which our country's overall production has grown since 1913.

For every 100 items produced in 1913, we were turning out 132 in 1928 (first Five Year Plan days); 852 in 1940 (just before war interrupted our progress); 1,476 in 1950 (when postwar reconstruction was more or less complete); and 3,021 in 1956.

So by last year, you see, we were producing *more than 30 times as much* as we did before the revolution.

### Proportion

But the amount of production isn't everything. *What* you are producing is important, as well as the quantity. Before the revolution, only a third of our industrial production was of machinery and raw materials. The rest was consumer goods.

This proportion was striking evidence of Russia's industrial backwardness.

So after the revolution we paid special attention to increasing output of "means of production"—of factories and machinery, etc.

## Quality and Prices

**I**HAVE SAID that there is still unsatisfied demand in our country for certain goods. Does this lead to lower quality and higher prices?

The state has set standards of quality that are obligatory on all manufacturers.

These standards have been set up jointly by experts in all branches of production, doctors, educationists and others.

Foodstuffs below standard cannot be issued from the warehouse.

If footwear or clothing proves to be below the required standards, it is sold at a much lower price—the difference being met by the producing enterprises.

Quality of output is checked at the factory not only by its special checking departments but also by the trade unions and other organisations.

They arrange exhibitions of defective goods, find out the causes of the defects and do away with them.

Good training, of course, is the basic way of getting rid of defects in production. And a great deal is done to improve the skills of workers in every section of industry.

Prices do *not* go up. Fixed by the state, they have been going steadily down ever since the war.

Bread, for instance, is now less than a third the 1947 price. Sugar costs less than half, and butter only a little over half what it did ten years ago.

Similarly with consumer goods.

If we take the 1947 price level as 100, the present-day level is 82 for clothes, 48 for leather footwear, 67 for silks.

These price cuts have been made possible largely as a result of increased productivity—so there you can see, again, why Soviet workers are eager to improve the efficiency of their work to produce more, better and cheaper.

## Heavy Industry and Consumer Goods

**W**HAT PROPORTION should there be between output of heavy industry—the manufacture of “means of production”—and output of consumer goods?

In the Soviet Union today the proportions here are roughly the same as in all other leading industrial countries; a little over two-thirds output of means of production, and the remaining third consumer goods.

So far as basic items are concerned, the table below should make the position clear.

Our output of machine-tools today is far in excess of our own needs, and we therefore are able to export them in large quantities.

While, as you see, the proportion of consumer goods to heavy industry has dropped, the actual quantity of consumer goods produced has grown very rapidly.

Today we produce almost 11 times as many consumer goods as we did before the revolution. Our population over the same period has grown by only a third. So you can work it out for yourself! The people have vastly more goods at their disposal than they did 40 years ago.

	1913	1956
Coal .. .. .	29,100,000 tons	429,200,000 tons
Oil .. .. .	9,200,000 tons	83,800,000 tons
Steel .. .. .	4,200,000 tons	48,600,000 tons
Cement .. .. .	1,800,000 tons	24,800,000 tons
Metal-cutting machine-tools ..	1,800	121,320
Cottons .. .. .	2,950 million yds.	6,000 million yds.
Silks .. .. .	46,600,000 yds.	824,900,000 yds.
Sugar .. .. .	1,300,000 tons	4,400,000 tons

## The Factory Makes a Profit

**T**HE SECOND WATCH FACTORY of Moscow is a modern enterprise equipped with the latest precision machinery. Although most of the workers are young people, they are highly skilled.

Last year the factory sold goods for 418 million roubles.

Of that total 369 million went for production expenses, leaving a profit of 49 million roubles.

Now, before I go any further, I should explain that we use a different system of calculating profit to that used by British enterprises.

In our figures, we ignore completely the cost of equipping and building the enterprises—such capital expenditures are met by the state. We only consider the actual running expenses.

Calculated by our system, this factory made a profit of slightly more than 13 per cent in 1956 (by the British system it would be about 4 per cent). By Soviet standards this profit is rather high.

## Where the Profits Come From

**W**HERE DO THE PROFITS made by factories come from in the U.S.S.R.? Some western “experts” declare that, in fact, they are created at the expense of the customer and are therefore an indirect tax.

This opinion, however, is absolutely wrong. The sources of profit, as we shall see, are entirely different.

In my articles on wages I have already pointed out that if the workers were to receive back personally and directly *all* the values they create, society would be left without means for further development or for the satisfaction of such needs as health services, education, etc.

Karl Marx pointed out a century ago that, in socialist society, the workers would have to leave part of their labour

at the disposal of society as a whole, while the other, much bigger part, would form their wages and other incomes.

In the U.S.S.R., profit is that part of their labour the workers create for society as a whole.

"This is very involved philosophy," some reader might complain. "How does it work out in practice?"

Practically, it works out in three ways:

Firstly, wages at industrial establishments usually grow somewhat more slowly than labour productivity.

There are different wage systems in Soviet industry, but usually if output per head rises annually, say, by 8 per cent, wages increase only by 4 to 5 per cent.

Secondly, the utilisation of machinery and materials improves from year to year.

A machine serves longer, less raw material and fuel is expended per unit of output.

Thirdly, all kinds of overhead expenses are reduced—transport and storage of materials, reduction of managerial staff, etc.

There have, incidentally, been particularly big cuts recently in these overheads, due to the reorganisation of management which has been going on.

A big part is also played by the growing volume of production.

If, for instance, the factory last year put out a million watches and this year 1,200,000 on the same production floor space, then there is no need to increase the office staff, to spend more for lighting, etc.

Consequently the profit made by a Soviet industrial establishment is created in the process of production. It is not an indirect tax. The consumer has nothing to do with it at all.

## Factories that Make a Loss

**W**E HAVE DISCUSSED the source from which Soviet factories make their profits. But quite a few Soviet enterprises operate at a loss. When this year's budget was being debated, M.P.s pointed out that almost one in three failed to make a profit.

Why? There might be two reasons.

Firstly, of course, poor work by some establishments.

Each factory or plant is given a production plan, an estimate of expenses and the price of output.

A plant which does not fulfil its plan or exceeds its estimates cannot change the sales price. Consequently, it operates at a loss. But there are few such establishments.\*

In the cases of the great majority of our "unprofitable" enterprises, their losses have been anticipated in their plans.

Yes, that is true, strange as it may sound!

The plan provides, for example, for a factory spending 80 roubles for each pair of children's shoes, but selling them for 65 roubles.

### The Reasons Why

The state provides a subsidy to cover the difference, or the factory covers it itself from profits on some other manufactures it turns out.

Why is this done?

There are many articles which the state considers must be sold at low prices accessible to all, irrespective of their cost of production.

Children's clothing and footwear, many medicines, school textbooks, mineral fertilisers, many farm machines, are some of them.

But there is still another reason for making a loss.

Often a new plant or an enterprise which is putting out new items finds it difficult to keep expenses within the set limits.

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\* In Moscow last year, for example, only 5 enterprises failed to fulfil their plan.—Ed

This path has been covered by almost all Soviet industrial establishments. Without the help of the state, such famous mammoth works as the Stalingrad Tractor Works, the Kuznetsk Iron and Steel Mills and many others would not have been able to get over the difficulties of their initial period.

Profitability of an enterprise is regarded not only from the standpoint of today but also from that of the coming 10-15 years.

### Where the Profits Go

**T**HE WATCH FACTORY we have been using as an example made, we reported, 49 million roubles profit last year. Where did all this money go?

Two million of it went to the Bonus Fund. What happens to that I'll explain later.

Three million more went to subsidise improvement and repairs of the factory's housing estates.

The rents here are strictly limited by law and for this reason the factory must cover part of the expense on improvements and repairs.

About 14 million roubles were invested in expanding the factory, installing new equipment, increasing the stocks of fuel and materials.

The balance, over 30 million roubles, was paid into the state budget.

Of course, the proportions of expenditure will vary from factory to factory, but on the average about 70 per cent of all profits go to the budget.

These big receipts from industry make it possible for the state to manage with a minimum of taxes from the population.

Taxes paid by the people make up only 8.3 per cent of budget revenue in the U.S.S.R.

From the budget the money received from industrial establishments goes chiefly for new construction, and for education and health services.

In other words, having made a round trip, the profits created by the working people come back to them again.

### The Bonus Fund

**A**S I MENTIONED, the Second Moscow Watch Plant made a profit of 49 million roubles in 1956.

Of this sum, 2 million roubles were set aside for the factory's special bonus fund.

Just what is this fund?

We make wide use in the U.S.S.R. of the bonus system to encourage labour productivity and to develop the economy in general.

The main form of payment is, of course, wages, particularly piece-rate wages. But piece-rates alone cannot really embrace all the many sides of production life.

Suppose, for instance, a worker has suggested a better method of restoring lubricating oil for second use.

His wages are not affected by this, for his own output has not changed. In cases like this, the bonus system comes into play.

The bonus fund comes, you note, from the *profits* of the enterprise. To be more exact, from 1 to 6 per cent of planned profits, and from a fifth to half above-plan profits go to this fund.

The actual proportion depends on the nature of the production.

How much of this goes directly into the worker's pocket?

At the Second Watch Plant, employees received 304 roubles on the average as bonuses in 1956.

I know you aren't familiar with our currency. You ask: "Is that a lot or a little?"

Judge for yourself: a fortnight's accommodation at a small holiday resort costs about 300 to 400 roubles on the average.

The bonus amounts to a little less than a fortnight's wages for an ordinary worker.

## Workers Control the Funds

**D**ON'T COUNT YOUR chickens before they're hatched! And don't try to decide what profits you have made before the accountants draft their annual report!

In practice, therefore, each enterprise spends only those bonus funds which were accumulated on profits from the year before.

This makes it possible to draft a paper plan of expenditure and distribute the money to best advantage.

Present legislation provides that not a kopek of the bonus funds of any enterprise shall be spent without the consent and direct control of the trade unions.

The management and the trade union committee, therefore, estimate fund expenditures at the beginning of each year.

Usually, these estimates, as well as the actual expenditure of the case, are brought before all the workers.

There can, of course, be no single rule about allocation of these funds for all enterprises, but experience has revealed certain proportions most frequently observable.

About half the bonus fund usually goes for capital construction over and above the state construction plan.

This includes the erection of blocks of flats for the workers of the enterprise in question, the construction of clubs, stadiums, kindergartens, etc.

The other half goes to pay for holiday accommodation, for bonus or for cash aid in case of accident or other trouble that may overtake one or another of the workers.

Just what are the bonuses paid for?

The most general answer should be: For good work.

This may include suggested improvements, exceptionally fine output, help to young workers learning their trades, care with equipment and materials, precision in calculations—even taking good care of children in the factory kindergarten or preparing the dinners in the factory canteen particularly well!

## Practical Results

**I** HAVE SEVERAL TIMES instanced conditions at a Moscow watch-making factory. But don't think that factory was specially selected! Tens of thousands of factories have similar bonus funds—the grand total allocated to these funds last year throughout industry was more than 3,000 *million* roubles.

### One Factory . . .

Here, by way of example, is how the workers of the Moscow Rubber Factory distributed their bonus fund last year.

Firstly, they built a camp for the children at a beauty spot near the capital.

This camp included six hostels, a staff block, a canteen, a stores building and other auxiliary premises.

In the centre of the camp is a club house with a big hall and six rooms for the use of amateur groups—choir, dancing, sport, hobbies, etc.

Next year (and every year from now on) more than 700 children of the factory's workers will be able to spend a month's holiday in this camp during the summer.

Secondly, they re-equipped their club. The theatre hall was completely refurnished, and special premises were fitted out for hobby groups.

Thirdly, about half the fund was distributed in individual bonuses.

### . . . and Others

The Kharkov Tractor Factory used part of its fund to erect a splendid health centre fitted out with all the most modern equipment.

The Moscow Motor Car Works keeps a large holiday centre on the Baltic coast. . . .

You'd be quite wrong, of course, if you thought all our factory workers are experts on their factory's finance! But, at the same time, it would be very hard to find any of them who haven't a very clear idea of how the bonus fund is made



up, and spent—not just from balance sheets, but from the realities of their daily lives.

## Socialist Bookkeepers

**S**OVIET ENTERPRISES HAVE no “commercial secrets”. Unlike some enterprises elsewhere, their balance sheets are brought to the attention of every worker and to the general public.

This is the typical practice:

Shop production conferences are held on the sixth or seventh of the month.

After the shop superintendent has reported, the accountants give a detailed analysis of the month's balance sheet.

Naturally, this is not a fully detailed analysis. It is a brief, businesslike statement showing the planned and the actual expenditure of the shop, the planned and actual production, savings or losses.

And it names the persons responsible for both.

Of course, you can't always find a simple black or white answer to the problems the figures reveal. But the accountants—and the workers—dig pretty deeply.

The chap who keeps the books, therefore, has a very responsible job, before the workers.

And he shares the responsibility of the management for the correctness and legality of all the enterprise's financial operations.

If an order issued by the management runs counter to the law, then the accountant must reject it, or simply refuse to sign the document.

And without his signature, the bank will not cash the cheque, the stores will not issue any goods, and the cashier will refuse to pay for them.

Conflicts often occur between the management and the accountants (who are also in the wrong sometimes!)

Such disagreements go to the higher authorities, and sometimes even to the public organisations.

## Our 'Financiers'

**“S**OCIALISM IS ACCOUNTING”. Lenin said that in the early days of Soviet government. This is how he explained it:

Under capitalism, enterprises belong to individuals or companies. Their own financial interests, of course, lead the owners to protect their valuable possessions.

Under socialism, however, the individual working man and woman hasn't the same personal interest, for the enterprise belongs to all the people, not to individuals.

Only the advanced section of the workers then understand properly the vital need to protect this public property.

Therefore, Lenin said, strict financial accounts must be kept.

Another point: Distribution of goods is based on labour—that is, on the amount of labour each individual gives to society.

This means that careful account must be taken of what everyone has done and received.

Watching the accountant at work in his office, you might think little has changed in the past forty years. But appearances are deceptive!

The revolution has changed everything, and even this seemingly most unassuming and discreet profession has not escaped.

But what of the financiers?

The word “financier” is associated in our minds with stock exchanges, shares, intricate terms and inexplicable transactions as the result of which some people grow rich while others are ruined.

But the Soviet Union has no stock exchanges, with their speculations and agitation.

We do, however, have financiers, or rather financial experts, in our enterprises.

But they are by no means a survival of the past: we train them today in dozens of schools and colleges.

## Why We Need 'Financiers'

**W**HY DO WE need them?

We need them because economic life is complicated and many sided. We can't do away with money, credits, accounting, taxes and investments—even under socialism.

There are, for instance, enterprises owned by co-operative societies, and small privately-owned shops. Transactions between these two groups and the state-owned factories require corresponding accounting arrangements.

And then there's accounting within a state enterprise.

The Moscow Dynamo factory turns out electric motors of about 600 types and kinds.

It uses more than 1,000 basic materials, and its stores contain more than 20,000 kinds of tools and other equipment.

And there are much bigger enterprises. How can their work be controlled? By reducing all its items to roubles.

Let us assume that at the end of the year the amount of metal in one warehouse is greater and at another smaller.

Our financial experts see that the expenditures of the enterprise are covered, and exact payment from the customers.

They receive loans from the banks and repay them. They pay the contributions due to the budget, receive allocations.

Our "financiers", however, can't raise prices! They don't engage in speculations, nor do they buy stocks or shares. And they can't use any property as security.

Their function is to supervise through the medium of money the work of the enterprise and the fulfilment of its production programme.

Of course, under communism, when we'll have enough goods to satisfy all the requirements of everyone, there'll be no need for money.

Then, perhaps, Soviet enterprises will no longer employ any "financiers". At present, however, they play a very important role.

## Changes and Improvements

**M**Y STORY ABOUT a Soviet enterprise is drawing to a close, but not because I have said everything.

The life of a Soviet enterprise has many other interesting aspects, and it is well nigh impossible to tell about all of them in a brief series of articles.

I should like to finish this series with a description of the changes which have taken place in connection with the reorganisation of our system of managing industry and construction.

In the past, most enterprises came under the control of one or another industrial ministry. But now, with a very few exceptions, there are no more ministries in industry.

Enterprises are controlled by an economic council which covers the whole industry of a specific area.

Usually this area is a complete region or republic of the U.S.S.R.

You probably know all that already. But, though the most spectacular, this is not the only—nor the most important—change.

Several million people voiced their opinions during the discussion of the reorganisation, a discussion which lasted all through the spring.

These opinions, originally spoken or written, filled three large volumes in the Kharkov economic area alone.

The proposals were carefully studied and are now being put into effect.

In this way, you can say that our reorganisation is directly based on the experience accumulated by millions of people over many years.

## New Planning

**D**URING THE DISCUSSIONS on managerial re-organisation, many demands were made with regard to planning methods, accumulated by millions of people over many years.

The old system of drawing up plans from top to bottom—that is, from the ministries to the departments, and from the departments to the enterprises—was particularly objected to.

In keeping with the clearly expressed opinions of the majority in the discussions, planning now begins at the *bottom*, i.e., with the enterprise.

The plans thus drawn up are submitted to the economic councils, thence to the republican planning commissions and, finally, to the State Planning Commission of the U.S.S.R.

At the enterprises, the plan is also drawn up from the bottom, i.e., from the shops to the factory as a whole.

Individual teams and shifts calculate their possibilities and express their wishes.

On this basis, the shop management drafts a plan for the shop and reports it to a general shop meeting.

Then it is considered by the factory management.

Trade union, Party, youth and other organisations play a very important part in this.

The difficulties must in no way be underestimated.

### New Needs

To begin with the enterprise knows what it can do, but it does not know the needs of the country. Technical progress also shows itself very vividly.

For example, steam locomotives, certain types of agricultural machinery and drugs, etc., are no longer needed. But the factories that produce them take a lot of convincing!

Secondly, the enterprise has no idea of the needs in new commodities whose designs have just come out of designing offices of the laboratories of the research institutes.

Thirdly, the enterprise does not know how much raw

materials, fuel, equipment and machine-tools it will be allotted.

It is no secret that our country still has less of some types of metals and other materials than it requires to satisfy the needs of the processing branches of our industry.

It is impossible to draw up a plan without taking all this into account. And it is here that the economic councils come to the rescue.

They maintain permanent contact with the overall state planning bodies and advise the enterprises.

## Factory Neighbours

**U**NTIL RECENTLY THE RELATIONS between the neighbouring enterprises, if they came under the jurisdiction of different ministries, were weak.

Naturally these neighbours didn't compete, nor did they hide things from one another—but as long as decisions rested with departments and ministries a long way away, there was a limit to local co-operation. Departmental barriers got in the way.

The situation has now radically changed. The local economic council is the only manager and it is interested that the enterprises in its area should maintain the closest possible economic relations.

Though very little time has elapsed since the economic councils were set up, essential changes are already in hand.

It has turned out that some enterprises are in a position to help others with repairs, transport, steam, power, tools and spare parts, with elaboration of designs, analyses and research.

In very many cases it has been found a good idea to redistribute various types of equipment among plants.

There is no need for foundries at every plant, it is much more profitable to have one (or a few) for the entire economic area.

It has now become easier to fill urgent and unforeseen orders for neighbouring plants, and to carry out many forms of mutual aid.

## New Problems

REPRESENTATIVES OF THE VARIOUS enterprises in each geographical area now meet in regular conferences.

Many once apparently insurmountable problems are now finding easy solutions, while other new problems are appearing.

What, for instance, about the enterprises that were interconnected before the reorganisation? Some of them depended on supplies from the others, but are now in different areas.

Obviously there are possibilities that such factories may find themselves in the position of unwanted step-children!

The danger of such regional tendencies were mentioned already during discussions on the reorganisation of management, and they are still talked about today. Every now and again we read in the papers reports of instances of such regional favouritism.

How is this combatted?

Simply! It has been laid down that orders received from other economic areas must be filled first—i.e., before those for enterprises of the same area.

It is considered that an enterprise has not fulfilled its plan if it has not satisfied all the consumers in other economic areas.

And public attention is focused on this problem.

Briefly speaking, Soviet enterprises are supplied on the basis of a plan.

Before reorganisation, each ministry had its local supply departments of raw materials, fuel, etc., for its enterprises, which resulted in an excess of small departments and some scattering of resources. It also, of course, raised supply costs.

A supply organisation has now been set up in each economic area. As it will be relatively close to the enterprises, there will be no need to keep large stocks. Hence, the utilisation of resources throughout the country will improve and production along with it.

## III

### THE NATIONAL INCOME OF THE U.S.S.R.

#### Working Out Our Income

IN THE SOVIET UNION we do not calculate our national income in the same way as in the West, so I must begin with an explanation of how we work it out.

In the West, national income is defined as the sum of the incomes of the different groups of the population: workers, farmers, factory owners, bankers, government employees, professional people, and so on.

It might appear that that is the right way it should be calculated, for, after all, surely the *national* income should be the income of the whole nation?

Actually, however, this method makes the national income at least a fifth more than it really is, for a lot of incomes are included twice.

Let me give an illustration: After the incomes of workers and farmers have been totted up, the incomes of government employees are added. But these government employees receive their incomes out of taxes paid by the workers and farmers, among others—in other words, out of incomes already included.

The same is true of the incomes of doctors, teachers and many other categories of the population.

To avoid showing the national income as more than it actually is, we work it out differently in the U.S.S.R.

From the total product put out in a particular year by all the branches of material production—let us estimate it, in terms of cash, as 1,000 units of money—we deduct the expenditures of material (raw material, fuel, tools, and depreciation of buildings and machinery) in achieving this product.

Let us assume that these expenditures come to 600 units.

The remainder (1,000—600) is 400 units—and that is the national income produced in the year.

This way of calculating the national income, in our opinion, has the additional advantage of making it possible to analyse the amount of national income produced by the individual branches of the economy, such as industry, agriculture, building construction, and so on.

## How the Income Rises

**H**A VE A LOOK at this little table. It shows the way in which the Soviet national income has risen since the revolution, allowances being made for fluctuations in prices (with the 1913 level equalling 100):

1928	..	..	119	1950	..	..	1,003
1940	..	..	611	1955	..	..	1,686

Thus in Soviet years, in spite of three grim wars—including the intervention against the U.S.S.R. in 1918-20—our country's income has increased nearly 17 times over!

Why has this rapid rise in our country's income taken place?

In our view, there are three reasons: the numerical growth in the population; the increase in the number of people employed in material production; and higher labour productivity.

In the 42 years from 1913-55 our country's population increased from 159,200,000 to 200,200,000. The increase would have been still greater if not for the heavy losses in the war years.

The main reason for this rapid increase in population was the higher standard of living and better health, and the consequent lower death rate.

The death rate in 1913 was 30.2 per 1,000 but in 1955 it was 8.4, or about a quarter of the former rate.

Incidentally, we may point out that in 1913 Russia had 28,000 doctors, while in 1955 the U.S.S.R. had 334,000.

What about people working in material production?

In 1913 the country had 12,900,000 workers, but one of the consequences of the First World War was considerable unemployment which lasted for a long time.

By 1928 we had 10,800,000 employed—still a lower figure than in 1913.

However, the country's industrialisation resulted in a demand for skilled workers, and by the end of the first Five-Year Plan (1932) we had 22,800,000 workers on our rolls.

Five years later the figure reached 27 million, and by the Second World War 31,500,000.

During the war the number again dropped, the figure at the end of 1945 being 28,300,000.

The fourth and fifth Five-Year Plan periods exceeded the prewar level of economic development and brought a great many more people into industry.

By the end of 1950 we had 39,800,000 workers; by the end of 1955, 47,900,000; and at the end of 1956, 50 million.

## What You Do and How You Do It

**I**MPORTANT AS THIS IS, it isn't everything. We must take into account not only how many workers we have but what they are doing.

In the U.S.S.R. 852 in every 1,000 of all gainfully employed are engaged in material production, leaving only the other 148 in non-production branches.

The national income is produced only in the sphere of material production, so obviously the more people engaged in that sphere, the more rapid is the rise in the national income.

The third main reason for our high national income is increased labour productivity.

The number of workers, we have seen, has increased four times over since 1913—but the national income increased almost 17 times over in the period.

Not only more people have begun to work, but everyone

working is producing more, and consequently the national income is higher.

In the 40 Soviet years, the technology of production has increased tremendously.

For instance, the number of metal-cutting and forge-shop machines has increased practically 20 times over, and our output of electricity during the same period has risen almost 90 times over.

Before, the bulk of the work was done by hand, but today the U.S.S.R. is one of the most developed countries in the world in degree of mechanisation.

As a result of all this, labour productivity during this period increased eight times over in industry and more than four times over in the transportation system.

## Who Gets the National Income?

**W**E HAVE FOUND OUT who produces the national income. Now let us see who gets it.

Since there are no foreign concessions or companies in the Soviet Union, no part of the national income goes abroad. In 1913 the amount of profits pocketed by foreign companies exceeded the amount spent by the government on education and the health services.

At the end of 1955, out of every 1,000 Soviet citizens, 583 were wage earners and 417 peasants. In other words, the population consisted entirely of working people.

Consequently, the national income was used by those who produced it—the working people.

The workers receive their income in the form of wages, while peasants get theirs in the form of income from the collective farms to which they belong and from their personal kitchen gardenis.

There are also other incomes: interest on savings deposits and winnings on loans or lotteries.

Individuals, of course, may win a considerable amount of

money, but overall the income of the population from interest and winnings come to less than 3 per cent.

Finally, the government pays for education, health and other social services.

If all this is correct then, since the national income is rising, the individual incomes should be rising too. This is so, as the figures confirm.

In the 1951-55 period, real wages rose by nearly two-fifths and peasants' income by a half.

Of course, not all the national income goes straight back into the pockets of the workers and peasants. If it did, the country would be left with no reserves for further development.

Actually, approximately three-quarters of the national income goes straight back to the people. The other quarter is set aside and converted into more power stations, factories, railway lines, etc.

The country, too, is forced to spend some of the national income on its defence.

Our government keeps these expenditures as low as possible—but they provide yet another reason why we long for the day when the easing of world tension will make armed forces unnecessary—and so we will achieve an even higher standard of living.

ALEXANDER BIRMAN, author of this booklet, is  
a regular contributor to

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A chat about wages by workers in the First Watch Factory, Moscow. Alexei Borisov, on the right, a fitter in the factory's power department, is a member of the Trade Union Committee and Chairman of the Wages Commission within the Factory.