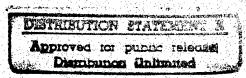


JPRS-EEI-84-017

9 February 1984

# East Europe Report

# ECONOMIC AND INDUSTRIAL AFFAIRS



Û,





DITC QUALITY INSPECTED & FOREIGN BROADCAST INFORMATION SERVICE





JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

#### PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service, Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in <u>Government Reports</u> <u>Announcements</u> issued semi-monthly by the National Technical Information Service, and are listed in the <u>Monthly Catalog of</u> <u>U.S. Government Publications</u> issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

JPRS-EEI-84-017

### 9 February 1984

# EAST EUROPE REPORT Economic and Industrial Affairs

# CONTENTS

### BULGARIA

		Firm To Deliver Computerized Railway Control System (Per Sabroe; BERLINGSKE TIDENDE, 7 Jan 84)	1
CZECHO	SLOVAKIA		
		ews Research and Development in CSSR (Milan Chrtek; HOSPODARSKE NOVINY, 16 Dec 83)	3
		ons in Agricultural Food Supplies Examined (Jaroslav Vigner, Olga Stikova; PLANOVANE HOSPODARSTVI, No 11, 1983)	9
GE RMA N	DE MO CRA	TIC REPUBLIC	
		arged With 'Credit War' Against Socialist Countries (G. Noetzold, D. Bakkour; LEIPZIGER VOLKSZEITUNG, 27 Dec 83)	29
HUNGAR	Y		
		nges in Wage Payments, Scales Examined (Endre Varkonyi; MAGYARORSZAG, 1 Jan 84)	32
		ations in Income Tax Structure Explained (Vilmos Cserveny Interview; NEPSZABADSAG, 21 Dec 83)	39
POLAND			
	Princ	sts Confer on Gaps Between Economic Policy, Reform iples (RZECZPOSPOLITA, 11 Jan 84)	43

- a -

[III - EE - 64]

	ZYCIE GOSPODARCZE Editor Rates Record of 14th Plenum (Karol Szwarc; ZYCIE GOSPODARCZE, No 48, 27 Nov 83)	45
	Baka Summons Firm Execs for New Tax Rate Briefing (Urszula Zatorska; ZYCIE GOSPODARCZE, No 50, 11 Dec 83)	50
	Memoir by Former Gierek Economic Adviser Reviewed (Andrzej K. Wroblewski; PRZEGLAD TECHNICZNY, No 1, 1 Jan 84)	53
	Planting of Crops	57
	Raising of Livestock	
	Special Legislation Brings Reform to LOT Airlines (Andrzej Kozminski; TRYBUNA LUDU, 23 Dec 83)	60
	Small, Private Trades-Crafts Suspicious of Government Intentions	
	(Agnieszka Wroblewska; PRZEGLAD TECHNICZNY, No 50, 11 Dec 83)	63
	Hard Currency Deposits Up for 'PKO' Savings Bank (Zofia Skowron; TRYBUNA LUDU, 30 Dec 83)	67
	Demographic Analyst Comments on Recent Baby Boom (Wladyslaw Konrad Interview; ZYCIE WARSZAWY, 16 Dec 83)	69
	Results of June Livestock Inventory Considered Unfavorable (RADA NARODOWA GOSPODARKA ADMINISTRACJA, No 19, 19 Sep 83)	73
	Inventory Results, by Krystyna Szelenbaum General Livestock Situation, by Jozef Luchowiec	,,
ROMANTA	•	
	Briefs	
		88
YUGOSLA	VIA	
	Oil Refinery Production in 1983 (V. Subic; PRIVREDNI PREGLED, 4 Jan 84)	89
	Data on Liquidity, Bank Credit, January-October 1983 (D. Brdar; PRIVREDNI PREGLED, 23 Dec 83)	92

- b -

•

#### BULGARIA

#### DANISH FIRM TO DELIVER COMPUTERIZED RAILWAY CONTROL SYSTEM

Copenhagen BERLINGSKE TIDENDE in Danish 7 Jan 84 p 10

[Article by Per Sabroe: "Danish Computer Will Control Bulgarian Trains"]

[Text] Dansk Signal Industri is first in the world with a computerized safety installation; the Bulgarian State Railways are buying the equipment.

The computer control of stations, signals and switches on the Vejle-Holstebro stretch of the DSB [Danish State Railways] has attracted attention among railways abroad, and delegations are streaming to Herning and Holstebro to study the new system.

The first export order--to Bulgaria--has now been received.

The system was developed by Dansk Signal Industri, and is directed toward remote control of the stretch with least possible use of personnel.

In Holstebro and Herning there are two big microcomputer installations that control the operation and in addition to this the system includes 12 other, smaller stations on the single-track stretch.

The control of the trains looks entirely different from the ordinary big desks that showed all signals and switch points.

The train controller sits at a screen which shows in colors the area that he or she is directing. Each color has its meaning, and that gives a quick survey of all conditions on the stretch of track. The system is operated by striking keys like those of an electric typewriter.

Normally the traffic on the lines through central and western Jutland are controlled by a train controller in Herning, but in abnormal situations he can delegate the control to the local stations, where operating desk and screen are set up.

Errors Are Prevented by the Computer

Railways require a high degree of security, and two programs are built into the computer which check each other's maneuvers every second. There is thus a built-in security against error, which prevents the switches from being set in such a way that trains can enter an "enemy" track--a track on which a train is coming in the opposite direction.

In case of operating error, the signals show red automatic11y.

In addition, the computer remembers all maneuvers of the last 30 minutes, so that if an accident should occur in spite of all security precautions, it is possible to obtain a write-out, a log book, that shows all signal and switch operations carried out, and it is quick to see where the responsibility for the error is to be placed.

With these built-in security precautions it has been possible to get recognition of the system among the European railways.

After 2 years' negotiations, Dansk Signal Industry has succeeded in getting the order signed, and now for the time being two installations the size of those in Holstebro and Herning are to be shipped to stations of about the same size in Pobit Kamap and Septemvri, which are on the stretch between the Bulgarian capital Sofia and Istambul, Turkey.

The director of the project, civil engineer Bertelsen, informs us that the contract includes training of Bulgarian railway personnel, who will come to Denmark in batches of ten. At Dansk Signal Industri it has been necessary to learn the Cyrillic letters, since Bulgaria uses the same alphabet as the Soviets, and it was also necessary to learn that the Bulgarians mean "yes" when they shake their heads, and "no" is indicated by nodding and throwing the head back a little.

Dansk Signal Industri is owned by L.M. Ericsson. Director A. Wiuff says that the Danish firm hopes to get several orders of similar size, while the parent company in Sweden is developing systems for operating quite large railway yards.

8816 CSO: 3613/68

#### BANK VIEWS RESEARCH AND DEVELOPMENT IN CSSR

Prague HOSPODARSKE NOVINY in Czech 16 Dec 83 p 4

[Article by Eng Milan Chrtek, kraj administration of SBCS (Czechoslovak State Bank) at Hradec Kralove: "Research and Development Through the Eyes of the Bank"]

> [Text] The evaluation of the development during the Seventh 5-Year Plan so far makes it clear that we have been making insufficient use of research and development achievements. In many enterprises an extensive development predominates, production innovation is slow. Product technology and cost effectiveness are not up to world standards. The kraj administration of the Czechoslovak State Bank at Hradec Kralove has been studying these problems for more than 10 years. Since 1973 it has been analyzing innovation, technical standards and quality of products, fulfillment of tasks of technological development and license policy. A total of 66 enterprises of the engineering, chemical and consumer industries in the East Bohemia kraj have been The author of this article not only deals with evaluated. the results of the analysis of 1982, but reflects also on the causes of established facts.

The analysis of 1982 has confirmed again that technological standards of production have not been improving to such an extent as to create prerequisites for a more significant change in the intensification of the national economy. There still persists the problem of a large assortment of products, which in fact increased 7.6 percent since 1980, primarily because of light industry. A desirable decline in the number of manufactured types took place in the engineering industry only. The large assortment of products prevents narrower specialization and the result is the manufacture of a large number of average products. Considerable excessiveness of the assortment is confirmed also by the low ratio of obsolete products eliminated annually, which declined from 4.6 percent of the total number of products in 1980 to 1.4 percent in 1982. A full 71.2 percent of enterprises surveyed did not eliminate one single product from manufacture. This means that production programs are not substantially revised and obsolete products with lower use values continue to be manufactured.

#### Higher Innovation Rate -- Lower Quality

We have also analyzed the production innovation rate -- the ratio of new products to the entire commodity production. Those products which have been manufactured for a period not exceeding 3 years are regarded as new. It is encouraging that their share has increased both in numbers and volume in recent years. They accounted for 13.06 percent in 1980 and for 19.56 percent of the entire commodity production 2 years later. Their share, however, is still rather small -- it was below 10 percent in almost one-third of the enterprises, and five of them did not manufacture any new products.

From the mutual relation between the entire commodity production and new products introduced in 1 year we compute the innovation cycle which reflects the number of years necessary for the complete replacement of the existing assortment. It amounted to 15.3 years in 1982. The innovation cycle in the engineering industry recently shortened from 18.1 years in 1980 to 12.1 years in 1982, and thus reached again the level which had been attained already in 1974. It is favorable that the innovation cycle has become shorter, even if in comparison with other developed states production innovation is still rather slow.

We derive the quality of innovations at the present time from the evaluation of the technical standards according to decree No 82/1980 of SBIRKA and from the evaluation of products' quality by the state testing laboratories according to law No 30/1968 of SBIRKA those new products which will be manufactured as part of the implementation of the state research and development plan are subject to the mandatory evaluation of technical standards. Additional products to be included in evaluation may be decided upon by the evaluating agencies on their own initiative or by the production organizations in accordance with their request. A numerical comparison reveals an increasing share of technically progressive products in the total commodity production from 0.99 percent in 1981 to 1.50 percent in 1982. Disquieting, however, is the fact that this share with regard to new products declined in 1982, which means that while the production innovation increased, its quality decresed.

The state testing laboratory evaluates the quality of products in a similar way by including them in three quality groups according to law No 30/1968 of SBIRKA on testing by state laboratories. The evaluated items amounted to 35.7 percent of the entire commodity production in 1982. It must be welcomed that in comparison with the previous year the ratio of products included in the first quality group increased from 6.53 percent to 8.32 percent, while the number of products included in the third quality group declined.

Good Evaluation -- Diminished Sales

According to what has been said above, the technically progressive products and products included in the first quality group can be regarded as top quality products. If we put these two groups together, then we see that the ratio of these products in the total commodity production was 6.23 percent in 1980, 7.52 percent in 1981 and 9.82 percent in 1982. The increasing ratio of top quality products in the total commodity production could easily lead us to self-satisfaction that everything is in order. Is that really so?

In the first place, we must realistically see that, despite the rising trend, the top quality production volume is still small and inadequate for effective sale on foreign markets. As of now we are far from being able to sell those best products only. If we want to achieve the required export volume, the present situation forces us to sell also at a low price.

From a longer time perspective, we can also conclude that, although the ratio of top quality products in total commodity production has increased, our enterprises' export capacity and profitability of our exports to the markets of nonsocialist states is declining at the same time. The ratio of exports by all centrally managed industrial organizations in the East Bohemia kraj to the nonsocialist states is total sales declined from 7.50 percent in 1980 to 7.22 percent in 1981 and 6.82 percent in 1982. Despite the low share of engineering exports, there was the largest relative decline in this sector's export capacity -- from 5.39 percent in 1980 to 3.30 percent in 1982. This is a disturbing fact because, according to the intentions of the Seventh 5-Year Plan, the engineering industry should play a key role in increasing the export volume. The declining effectiveness of exports to the non-socialist states can be judged also from the value of the export margin indicator, which dropped from 94 in 1980 to 83 in 1982.

The comparison reveals that, while an increase in the number of products of world standard is administratively recorded, the decline in export competitiveness and profitability of exports indicates that in foreign commodity exchange our products are not regarded as being of top quality. It will therefore be necessary in the future to find a more objective method of their testing which will correspond to the criteria applied to foreign-made products. These conclusions are confirmed by the comparison of 1981/1982 indexes, showing an increase in the value of top-quality products to 140 and in export volume of 111.7, but only to 101 to the nonsocialist states. The designation of products as being technically progressive and in the first quality grade is often advantageous for the respective enterprises only because they can then claim preferential pricing. The effect for the society is minimal.

The proof of products' real quality is for us also the evaluation of complaints, the cost of their settlement and the computation of losses caused by inferior production. The complaints [about the quality of merchandise] amounted to 0.40 percent of sales in 1981 and to 0.54 percent in 1982. The number of complaints increased in the engineering industry, where the index reached 167 in 1982. An unfavorable finding was the increase in the number of complaints from foreign customers. In direct proportion to the increase in legitimate complaints, the cost of their settlement also increased.

An important factor in technical progress are the licenses. Purchased licenses demonstrate how foreign research and development is used in our country, while licenses sold by us are the yardstick of the standard and marketability of our creative work in foreign countries. According to the submitted data, of the entire set of 66 enterprises surveyed only 4 signed 13 license agreements (there were 16 agreements in 1981). Only one enterprise in the chemical sector sold licenses to foreign customers -- seven in all.

The data on the kraj need not necessarily reflect the actual situation in licenses because the record-keeping was transferred from many enterprises to VHJ's [economic production units]. Despite some inaccuracy, however, there is an obvious isolation of our enterprises from research and development in the world. Enterprises are compelled to disperse research on a variety of tasks, and this is reflected in a large number of assignments and unfinished projects, as well as slow implementation. At the present time, no state, and particularly no small one, can afford to engage in discovering something that was already discovered long ago.

The analysis for the entire kraj has confirmed that the technical standard of production and products' innovation are not on the level that our national economy requires for the implementation of tasks of the Seventh 5-Year Plan. It reveals that the planned production volumes are achieved primarily by the manufacture of products of average technical and economic standards, and that export competitiveness in the nonsocialist countries and profitability of foreign commodity exchange has declined. Particularly disturbing is the fact that these problems are most noticeable in the engineering sector. When we project the curve of this trend into the future, then we must definitely arrive at the conclusion that these negative tendencies must be changed.

The above analysis makes clear the consequences of a dilatory application of scientific and technological achievements in the production process. It is necessary, however, to examine also the reasons for this delay.

If we pose the question of the difference between an enterprise employing new technological elements and an enterprise persisting in the obsolete mode of production, the we must unfortunately state that there is virtually none. So long as they fulfill the plan, both enterprises derive benefit from society. The plan of both enterprises gradually absorbs low and high production efficiency, respectively, and through the index method it is further detailed.

From the analysis of 1983 operations plans of industrial organizations in the East Bohemia kraj, we can conclude that the enterprises took over in their plans by 100.9 percent the detailing of top quality products (that is, technically progressive products and those included in the first quality group), but in doing so they reduced the index to 90.5 in comparison with the reality achieved in 1982. The 1983 plan anticipates a reduction of the share of these products in total production from 8.05 percent attained in 1982 to 7.18 percent. A similar regressive development can also be observed in other qualitative indicators (such as return on of capital assets, export capacity to the non-socialist countries, profitability of exports). It is striking that the detailing of the plan which was supposed to lay greater demands on the enterprises actually succumbs to their pressure. As a result, the enterprises fulfill their tasks easily while degrading the indicator on the time dimension. Under no circumstances can it be asserted that the demanding detailing of the plan will solve the problems of research and development, but it is certain that small assignments do not provide any incentive for the enterprises.

Production Targets Are Met but Sales Lag Behind

Present practice makes enterprises much more interested in compliance with the production indicators than in the ultimate use of manufactured products. This is confirmed by the fact that most of the enterprises met the targets set for commodity production, output and profit, but the deviations from the plan are shown in individual directions of sales. An enterprise which has manufactured but not yet sold a product includes in the output its value at the domestic wholesale prices, although the product may be sold to the customer and particularly if it is exported at a price considerably different.

A similar economically abnormal situation develops in those instances when the sale is not yet certain, the finished product remains in the warehouse, its value is included in the economic result and the profit derived from it is distributed by the producer, although the product has not yet been sold and nobody knows whether it will ever be sold.

The plus or minus difference between the selling and wholesale price in the area of domestic as well as foreign trade is absorbed by the state, and the producer is thus isolated from the market and also from the consumer. This disrupts the reproduction process (production--exchange--distribution-- consumption) in the sense that we distribute before the exchange takes place. This system of economic valuation of production results ensues in the redistribution of incomes between the producers in such a way that we actually reduce the profit of prosperous enterprises and increase it for the enterprises operating at a loss.

In practice we sometimes encounter views which refuse to judge enterprises according to the sale of their products. They justify this on the grounds that it is not feasible to differentiate the economic results of individual enterprises in this way because this has an impact on the financial incentives for workers who are largely not responsible for it. These views, however, fail to answer the question of whether it is feasible to judge enterprises equally regardless of whether they bring profit or loss to society. This means equally to support enterprises manufacturing products with a low use value in which the consumer is not interested and which accumulate in our warehouses, and enterprises which manufacture final products of world standard which can be sold abroad easily and profitably. After all, the answer is clear-cut. The equalization of financial incentives on the one hand makes possible a comfortable life, while on the other hand it kills the initiative not only of enterprises, but also of individual workers.

It must be said in conclusion that I see the principal causes of the unsatisfactory situation in the application of achievements of research and development not only in the lack of understanding on the part of enterprises, but primarily in the area of the eocnomic principle of management which makes

7

it possible for the enterprises to behave in an uneconomical way. It is clear that the presently used methodology of plan detailing cannot precisely transform "downward" the intentions of the center. A plan formulated in terms of directives does not provide enough room for flexible changes in production according to the customer's demands. The present system of valuation and distribution of production makes the enterprises interested in production but not in sales. The appraisal of exports at domestic prices isolates them from the external economic conditions and does not make it possible to judge the merits of enterprises according to their actual contribution to society.

10501 CSO: 2400/166

#### DIRECTIONS IN AGRICULTURAL FOOD SUPPLIES EXAMINED

Prague PLANOVANE HOSPODARSTVI in Czech No 11, 1983 pp 45-60

[Article by Eng Jaroslav Vigner and Eng Olga Stikova, Research Institute of Agricultural and Nutritional Economy, Prague: "Directions for Effective Supply of the Populace With Nutrition"]

[Text] Nutrition and its providing is an integral part of the dynamically developing changes in the standard of living of an advanced socialist society. Due to its economic significance and biological substance, it compels constant attention as the basic and irreplaceable part of the style and quality of life.

Our republic belongs among countries with limited natural conditions, a fact that logically becomes reflected in food production. Providing for the needs and continuous development, first of all, of agricultural production consequently calls for considerable imports of intensification means (industrial fertilizers, extracted grouts, animal meals, cereals, etc.). Dependence of the Czechoslovak agrofood complex on imports constituted also one of the causes of the negative development of our balance of payments in foreign trade; this is in direct linkage with external and internal changes in the Czechoslovak economy and the potential for continued development of the entire The dictum applying to a socialist society is that it is impossible economy. to meet the needs of socialist life style successfully without coming to grips with the problem of nutrients. That is why the highest party and government organs set the goal for achieving a high degree of self-sufficiency in production of basic nutrients in connection with the efforts to maintain and improve the attained standard of living. It involves meeting one of the basic necessities of life at a commensurate optimum level while respecting the given possibilities in the spheres of material, manpower and natural resources and technological conditions. That calls for economizing the entire process of generation and circulation of material sources of nutrition, mobilizing unused internal resources and effectively utilizing existing resources.

1. Agricultural Production and Providing of Nutrition for the Populace

Agricultural primary production is the initial link of the process of economic renewal which at a given volume and structure of nutritive raw materials shares in a decisive manner in the available amount of nutritive factors that back up the nutritional level of CSSR populace. By its production it provides for the major part for meeting the needs of an important sphere of the living standard of the populace--food consumption. In view of the fact that the share of food-stuffs in total retail turnover amounts to almost 50 percent, agricultural pro-duction promotes realization of a significant share of buying power and contributes to providing harmony between paid out wages, bonuses and income on the one hand and consumption on the other hand.

As long as we characterize the position of agriculture within the national economy as a whole, e.g., from the viewpoint of generation of national income, its value has not changed, for all practical purposes, over the last 10 years (using 3-year averages of 1969-71 and 1978-80). However, the share of national income generated in agriculture in total national income decreased from 10.6 to 7 percent. If societal measure of social product were to be used in the computation of national product, the share of agricultural mass production in generation of national income (average for 1978-80) would amount to 12.9 percent. By analogy, the number of workers in agriculture has been decreasing, both absolutely and relatively, in comparison with the total number of workers in other production sectors. While in 1970 one worker in agriculture provided nutrition for 12.1 inhabitants, in 1980 it was already 16.1 inhabitants.

However, the significance of agriculture must be viewed in the context of the development of the worldwide food situation, where disparities between demand for foodstuffs and their production are increasing. Foodstuffs are becoming in a constantly increasing measure strategic commodities. The existing imbalance also becomes logically reflected in increasing prices of foodstuffs and the intensification means that are indispensable for achieving increases in agricultural production.

The development of value and material indices within the sphere of providing nutrition for the CSSR populace between 1960-1980 shows distinct structural changes. Their basic characteristic is a decrease in consumption of many foodstuffs of animal origin. For the specified period the annual consumption of cereals in recomputation to flour showed a per capita decrement by 19.2 kg (i.e., by 15.3 percent), potatoes by 26.2 kg (22.6 percent) and legumes by 0.3 kg (23.1 percent). However there also occurred a decrease in the consumption of vegetables (in recomputation to fresh vegetables) by 11 kg (14 percent) and fruit by 1.1 kg, i.e., by 2 percent (using 3-year averages); the causes of this development must be seen in the inadequate development of domestic production of both commodities, in shortcomings persisting in the supply and demand relations as well as distribution and, further, in inclement conditions at the conclusion of the monitored period. The overall decrease within all five groups of foodstuffs amounts to almost 58 kg (16.1 percent).

On the other hand, there occurred a substantial increase in the annual per capita consumption of eggs by 7.7 kg (by 139 eggs, i.e., by 77.8 percent), meat on the bone by 28.8 kg (50.7 percent) and milk, in recomputation to liquid milk, by 61.8 kg (36.2 percent); the overall increase for these three groups represents a full 98 kg (41.3 percent).

Retail turnover in foodstuffs increased more than twofold over the past 20 years and by the late 1970's its growth rate exceeded even the dynamic growth of industrial commodities.

The volume of gross agricultural production (in constant prices) increased in the period 1970 through 1980 by 21.6 percent, whereby animal production increased by 28.3 percent, while plant production increased by only 13 percent. This disproportion was compensated for by importation of commodities of a primarily input nature. At the same time, e.g., food prices in the international capitalist trade increased more than 3.5 times and those of other agricultural raw materials 3.1. With inadequate marketing of Czechoslovak products of agricultural origin on foreign markets came unfavorable development of a passive balance of payments, the value of which increased during the monitored period by 80 percent with progressive increases in the Sixth 5-Year Plan.

Development of the degree of self-sufficiency in the years 1979-1980 is shown in Graph 1, wherein current prices were used to express own production to bring it into conformity with available specification of the value of exports (prices achieved through exportation) and the value of imports (in prices quoted as "all charges paid to CSSR border," to include V R C V [expansion unknown]). The graph shows a lower measure of self-sufficiency in produce of plant origin, particularly cereals, fruit, vegetables and oleaginous produce, whereby only the last one showed an increasing trend in the measure of self-sufficiency. Animal products are characterized by a high measure of self-sufficiency which, however, was attained at the cost of high volumes of imports, primarily fodders.

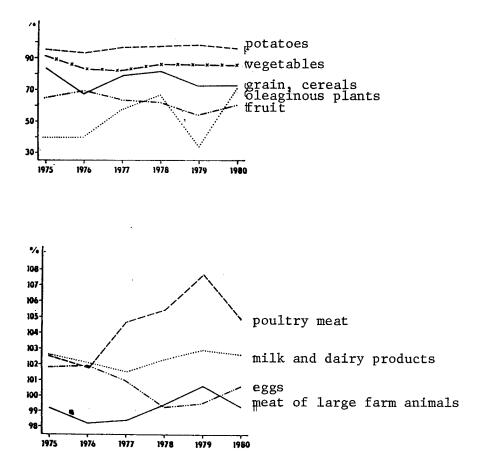
(in millions of Kcs in prices	free of ch	arges to	borders	of the	supplier	countries)
						<u>1980</u>
Indicator	<u> </u>	<u>1965</u>	<u>1970</u>	<u>1975</u>	<u>1980</u>	<u>1960</u>
IMPORTS						
Foodstuffs	2861	3059	3936	4644	7088	247.7
Raw Materials	1990	2398	2465	4242	6044	303.7
Total	4851	5457	6401	8887	13132	270.7
EXPORTS						
Foodstuffs	722	854	1039	1950	3427	474.7
Raw Materials	726	930	967	1732	3564	490.9
Total	1448	17.84	2006	3682	6991	482.8
Surplus	-3043	-3673	-4395	-5205	-6141	180.5
Source: "Analysis of Self-su	fficiency De	evelopmer	nt in Foc	d Produ	iction",	
Federal Bureau of Sta					,	

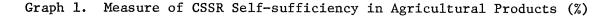
Table 1. Imports and Exports of Foodstuffs and of Raw Materials of Plant and Animal Origin in 1960-1980

eral Bureau of Statistics, Prague 1982.

The overall increases in agricultural production provided up to now for a viable growth of deliveries to agriculture, which together with the volume of investment projects amounted to Kcs 75.9 billion in the Sixth 5-Year Plan. Availability of long-term production assets per worker increased during the Sixth 5-Year Plan by 1.5 (i.e., to Kcs 218,000) and the growth rate is the

highest in comparison with the remaining sectors of the national economy.





Similarly, the volume of supplied industrial fertilizers increased in comparison with the Fifth 5-Year Plan in recomputation per 1 hectare of farm land by an average 20.4 percent. Production of fodder mixtures increased almost twofold over the past decade.

The process of industrialization and intensification of agriculture is becoming reflected in steep increases in its demand on costs which, however, is not met by commensurate increases in the volume of agricultural production. Growth in the volume of production costs increased in the Sixth 5-Year Plan by an average of 39.1 percent in comparison to the preceding 5-year period. The highest increment within this increase accrued to cost of materials that participate in it by almost 50 percent. The reasons for this economically detrimental cost-intensive development are due to a failure to come up with commensurate production results through intensification and substitution inputs, exceeding technoeconomically justified norms and standards (seed, fodder, energy, etc.), increases in the procurement price of investments, machinery and equipment, energy, and the objectively increasing demands of intensification of agriculture on funds and materials. This runs up the cost of producing raw materials for foodstuffs, and providing the populace with nutrition is becoming constantly more demanding economically.

### Food Consumption and the Attained Nutritional Level

Their assessment shows a relatively high consumption of many foodstuffs in the CSSR. However, analyses show that their production does not provide for a fully balanced nutrition. In comparison to industrially advanced countries the differences in the volume (quantity) of consumed foodstuffs are not significant; their volume in our country, with the exception of vegetables, fruit and dairy products, is rather excessive. However, substantial differences are found in the consumption quality (utilitarian value) of food products. Differences appear in qualitative indicators such as, on the one hand, shortages in the nutritional and hygienic value of input raw materials and, on the other hand, the degree of processing, readiness for expedient use, packaging of food products, etc.

Some economically advanced countries are at the present time reassessing the trend in the structure of food consumption, specifically on a qualitatively new level. With the use of brand new technological processes in the food industry, raw materials of plant origin are processed to look so attractive that in many cases they become direct substitutes for conventional animal products (meat, milk and products thereof). This return to foods of plant origin, commercial interests aside, is based on an enire set of health aspects, among them reduced intake of animal fats and cholesterol, increased share of essential fatty acids, etc. Health aspects are also starting to play a more significant role in conventional plant products opposing the trend of their progressive denaturing.

Providing healthy nutrition to the populace and attaining optimal food consumption encounters many problems, such as, e.g.:

--quantitatively excessive consumption;

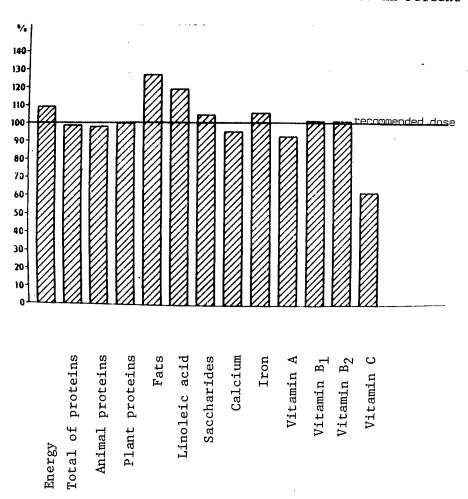
--basic structural and qualitative shortcomings;

--undesirable development of retail turnover, i.e., the stagnating high share of foodstuffs (slightly below 50 percent) connected primarily to inadequate supply of consumer goods in quantity, structure and quality;

--continuously increasing pressure on quantitative increases in food consumption that for all practical purposes make it impossible for agricultural and food production to undertake the requisite structural and, particularly, qualitative changes.

The nutritional value of raw materials consumption in the CSSR is shown in Graph 2, where the intake level of individual nutritional factors is compared

with the recommended nutritive dose for an average inhabitant of the CSSR. This comparison shows primarily a striking deficit in vitamin C that is met to only 62 percent; in view of the considerably uneven supply of fruit and vegetables in the course of a year, its intake decreases during the winter and spring months to as little as 35 percent of the recommended dose. Not fully met among other nutritional factors is the recommended dose of vitamin A and calcium. An entirely insignificant deficit is detectable in proteins of animal and plant origin. On the other hand, the recommended nutritive dose is sharply exceeded in the case of fats-lipides, namely by 24 g per capita per day, i.e., 26.1 percent, and, further, saccharides by 17.5 g per capita per day, i.e., by 4.7 percent. Both factors also figure in the excessive energy intake which is higher by 1057 kiloJoules, i.e., by 9,2 percent in comparison to the recommended dose. Exceeding of other nutritive factors cannot be rated as negative, because it is not harmful to humans within the current structure of food consumption.



Graph 2. Nutritional Level in the CSSR (1980-1981) and Its Comparison to the Recommended Dose in Percent

14

In addition to ineffective expenditure of social labor (excessive intake of energy at an approximate average of 1,000 kiloJoules per capita per day calls for an approximately Kcs 5-6 billion worth of annual input of social labor for a population of 15.5 million inhabitants), the existing shortcomings and disparities between the level of nutrition intake by the populace and its quantified need have a negative effect on the state of health of the populace (high occurrence of obesity, increasing occurrence of metabolic disturbances, digestive tract diseases, atherogenetic afflictions, etc.) for the treatment of which the society must expend considerable amounts of money.

Thus, the requirement of providing an adequate food supply for our society must be seen first of all in upgrading the qualitative aspect of its consumption oriented toward optimum nutrition as the basic prerequisite for continued development of the standard of living of the populace. In connection with continued improvement of its quality it is imperative to have a long-term concept formulating the basic directions and mutual proportions of development in the individual spheres of consumption of material resources.

#### 2. Population Food Supply Demands and Agricultural Production

The biological substance of nutrition makes it possible to quantify the criteria of this basic human need that approach the desired optimum. In view of the fact that the nutritive level of our populace has reached its quantitative (energetic) saturation, this approach must not be encouraged further. In a situation when society is limited in its material, manpower and natural resources as well as technological conditions, the national economy criterion of optimal benefit must have two aspects, namely all-round meeting of human needs and economically effective utilization of limited production resources.

It is specifically with respect to the relatively high predictive capability for quantifying human nutritional needs, which is approaching its optimum, that it is possible to quantify the demands on the sphere of production of foods which meet those needs and, by using economic elements characterizing the demands of food production, point out the economically feasible directions.

These problems formed the subject of research in the Research Institute of Agricultural and Nutritional Economy in Prague. Their processing involved problems relevant to demands on the structure and intensity of agricultural production from the viewpoint of the potential for providing healthy nutrition for the populace in a manner most effective for the national economy, i.e., by optimum utilization of existing resources with effective expenditute of social labor in primary production of raw materials for food with emphasis on a higher degree of self-sufficiency. The starting point herein was construction of a quantitative model, the variable assignment of which, with the use of the linear programming method, was optimized to the requirement for minimizing the overall value of social labor needed for meeting the nutritional needs of the CSSR populace. The model encompassed 61 agricultural products directly slated for nutrition, but not, e.g., types of meat that are low in volume of production and consumption, nor those for which insufficient data is available regarding the economy of their production (rabbits, venison, horse and goat meat). In the

final meat group and nutritional balances, the constant volume for consumption of these types was estimated at 3 kg per capita per year in recomputation to the value with bone. Further, not included were also types of vegetables and fruits used in insignificant volume and, finally, noncompetitive types of foods (marine fishes and seafood products, rice and tropical fruit), where we assume the following volumes in the food and nutritional balance\*:

	1901	e Z.		
Indicator	Required con- sumption volume in kg per capita per year	ports in ko ner	Imports needed for 15.5 mil- r lion inhabit- ants in 1000 t	Actual imports in 1000 tons 1978-80 average
Marine fishes/seafood products	3.3	3.3	51.1	49.3
Rice	4.0	5.0	62.0	76.0
Citrus fruit	16.0*	10.4	248.0	158.0
Other tropical fruit	1.0	4.2	15.5	64.2

Table 2

Source:

ource: CSSR Statistical Yearbook 1981 and own computations. Involving prospective imports, as the proposed level cannot be met at the present due to existing economy measures.

The listed values show differences between the proposed and current volume of importation of the specified products. Worth of note is the considerably high requirement of importation of citrus fruit. That is so because from the viewpoint of nutritional policy it holds a priority position among noncompetitive foods as an important source of vitamin C, since its consumption can be oriented into the period of lowest supply of vegetables and fruit (winter and spring months).

Optimization of different variants of the model from the viewpoint of the requisite volume of production of products meeting nutritional needs was undertaken with the use of production economy indicators corresponding to the socialist form of mass production. This involves, e.g., pork and lard, eggs, potatoes and many types of fruit and vegetables where small producers figure significantly in their share of total production. By analogy, it is envisioned that all the included products are fully covered by domestic production, because economic attributes of products partially covered by imports are not adequate to those of domestic used in optimization.

The model for production of raw materials for food is constituted by the following input data:

--a matrix of coefficients characterizing the nutritional value of included products at the level of the produced raw material. The used values make it possible for the entire nutritive potential to be included into the solution,

\*Suggested nutritional formulations in the model were reduced by the nutritive value of foods not included in the model.

because a part of the nutritional value of some raw materials that has not been used directly in human nutrition must be regarded as an unused resource which will become utilized in varying measure through research and development;

--nutritional requirements--represented as a biological zone with delineated upper and lower limits--which are formed by letting the recommended nutritional dose for an average CSSR inhabitant vary in energy, proteins, fats-lipides and saccharides by plus or minus 5 percent. In the case of vitamins and minerals the lower limit was formed by decreasing the recommended nutritional dose by 10 percent, while the upper limit was shifted on the basis of balancing calculations so as not to complicate optimization computations (their higher intake is not harmful to human health);

--the range of the volume of production of raw materials for food, formulated in four variants (preferred production of animals for slaughter, milk, a wide range of food production and a range drived from prognosis of food consumption in the CSSR until the year 2000);

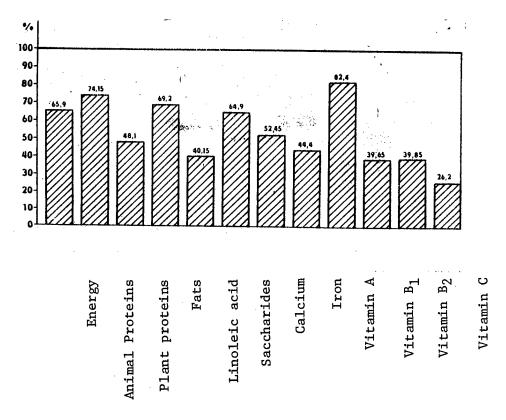
--coefficients of utility function expressing the input of social labor needed for generating 1 kg of product. These data were computed on the basis of the volume of production and costs for 1980 and transformed to the envisioned level of 1982 (including pricing and other than pricing instruments). This means that the starting point for our computations were the "Measures in the System of Economic Instruments in Agriculture for 1982 and Subsequent Years of the Seventh 5-Year Plan." This synthetic indicator can be substituted by additional partial indicators, such as direct labor input, investments, capital requirements, foreign exchange resources, energy, acreage and optimizing the requisite inputs from the viewpoint of these criteria.

Requirements on the recommended nutritional doses were expressed at a level to which the nutritional contribution from foods during their final consumption corresponds. The calculations included weight and nutritional losses and reserves found in the process of renewed providing of nutrition, i.e., between the nutritive value of raw materials and the nutritive contribution from foods during their final consumption.

For that reason, the nutritional requirements were increased by the determined values expressing the nutritive potential of the produced raw materials for foods (Graph 3), to bring them into conformance with the resultant nutritive value of the optimized variants of the model.

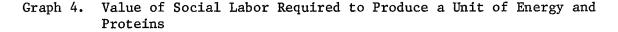
From the viewpoint of socially desirable reducing of existing losses and unused resources, attention must be paid primarily to the so-called threshold shortage factors, which include vitamin C, proteins of plant origin and, primarily, animal proteins which constitute the most expensive factor. From overall losses, e.g., in animal proteins, one-third accrues to losses occurring between purchase in retail and final consumption. The remaining two-thirds are formed by losses and unused potential between production and the market sphere; in addition to actual losses, they are constituted by feeding of milk and fodder mixtures including milk (25 percent of generated lactic protein), low share of using blood in human nutrition (3 percent), etc. A study dealing with key directions for optimal utilization of raw materials of animal origin and utilization of plant proteins construed a balance of the production of animal proteins in agricultural primary production (average for 1977-79). Annual production of proteins in the CSSR from products used for human and animal nutrition amounts to approximately 3.2 million tons, of which 390,000 tons, i.e., 11.9 percent, represent proteins of animal origin suitable for human nutrition. This amount represents a value by means of which it would be possible to meet the recommended dose of proteins for almost 17 million inhabitants (reflecting inclusion of losses incurred in the retail-final consumption sector).

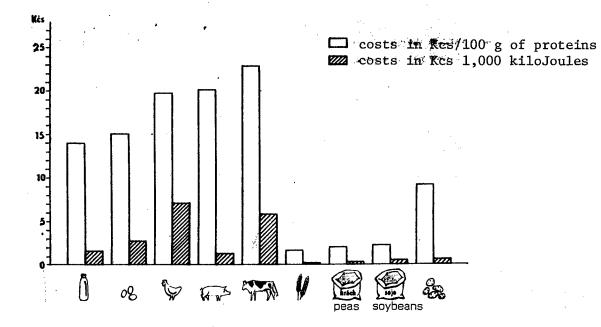
Graph 3: Utilization of the Nutritive Potential of Agricultural Products Used as Nutrition for the Populace (primary production  $\rightarrow$  final consumption)



Modern computer technology makes it possible to optimize in a short time calculations for a practically unlimited number of variously differing inputs (structure of production and nutritional level), from which it is possible to select the most suitable solutions not only from the viewpoint of economically as well as nutritionally viable directions for providing nutrition, but also with regard to requirements for achieving an optimum level of consumption for individual foodstuffs. Assessment of the optimized variants showed the decisive effect of the anticipated level of animal products generation and that of their structure on the demand posed on the economy by the resultant solutions. Generation of animal products ties up more then 75 percent of the total input of social labor. Animal proteins belong among the most expensive of all and constitute together with plant proteins the so-called threshold shortage factors, in which meeting of their recommended intake for humans meets the requirement for most nutrients. Production of 1 gram per inhabitant per day (recommended dose for an average inhabitant is 53 grams per day) calls in the case of 15.5 million inhabitants for an annual input of social labor in an amount of approximately Kcs 1 billion. It is therefore of great importance to determine differences in the demands posed on the economy by production of animal proteins in individual types of farm animals. The demand posed on the economy by production of energy and proteins of animal and plant origin for selected products is shown in Graph 4. Production of animal proteins in recomputation to a unit of weight is, on the average, almost six times more expensive than that of plant proteins. In the same vein, animal products are an approximately 11 times more expensive as a source of energy in comparison to products of plant origin suitable for human nutrition.

If we judge the feasibility of protein production within the entire sector of horned cattle keeping, then the average value of social labor required for producing 100 grams of protein (shared in by milk with approximately 73 percent and by beef with 27 percent) places horned cattle keeping in second place (behind protein production in eggs).





The unequivocally highest economic demand is posed by a solution which calls for a high share of production of animals for slaughter and, conversely, the cheapest are variants preferring production of milk with equal production of proteins of animal origin.

19

The unequivocally highest economic demand is posed by a solution which calls for a high share of production of animals for slaughter and, conversely, the cheapest are variants preferring production of milk with equal production of proteins of animal origin.

### Differences in Animal Products Generation

In connection with the economic demands posed by generation of animal products, which tie up more than three-fourths of social labor input required to provide nourishment for the populace, an analysis was undertaken of the fodder base from the viewpoint of its utilization and productive effects in the socialist sector, which pointed out:

---the relations in conversion of energy and proteins from fodders into individual animal products;

--the need for acreage in generation of animal products and, by inference, for production of individual types of animal proteins;

-- the dependence of animal products generation on imports of fodders.

Among other things, the analysis for 1965-1978 dealt on the balance level with relations between the total input of energy and proteins from fodders and the total production of energy and proteins contained in animal products. In view of the fact that utilization of the fodder base is negatively affected by an error due to shifts in time, we balanced them by computation of regression curves for the value obtained in individual years. The results showed that the development of the relation between the input and yield of energies and proteins deteriorated in the specified period, meaning that effectiveness in the use of the fodder balance is deteriorating. Computation of values for the decade (1969-1978) shows that energy from fodders is converted into animal products in a ratio of 7.2:1. Digestible nitric substances (SNL) contained in fodders are converted into proteins contained in animal products in a ratio of 6:1. More detailed computations of the studied conversions, which formed the subject of an analysis of the fodder base utilized in 1980 and 1981, were to reveal the differences in the level of conversion during generation of individual animal products. These data are understandably of much higher importance to decisionmaking regarding the structure of generation of individual animal products providing nutrition for the populace.

Basic information regarding consumption of fodders was taken over from report Zem  $V_2-O_4$ . The accounted-for volume of consumed fodders was expressed as fodder consumption in the following arrangement of groups of farm animals:

1. cows,

2. fattening of horned cattle and other horned cattle,

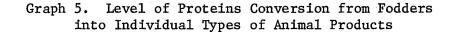
3. hogs,

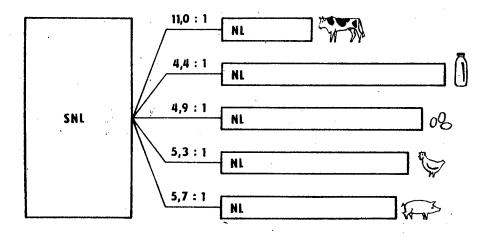
4. hens,

5. broilers, other fattening and other poultry.

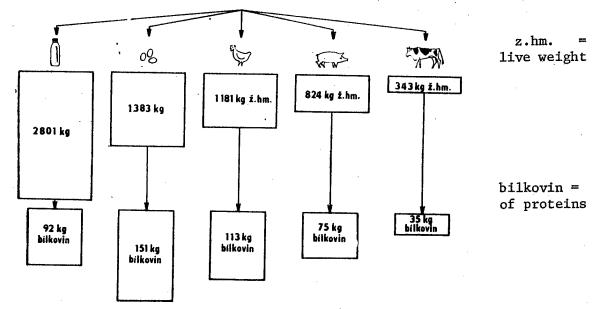
Further undertaken was a detailed differentiation of fodders, including individual components entering fodder mixes for individual animals as well as their classification for individual types of animals, particularly the analysis of the consumed fodders for the obtained ratio meat:milk in cows and meat:eggs in hens.

Conversion of SNL into proteins contained in animal products is shown in Graph 5. It shows absolute coincidence with the economic demands posed by production of animal proteins as shown in Graph 4. Of no less importance is information regarding knowledge of the difference in volumes of animal products and proteins that can be produced from 1 hectare of farm land, as shown in Graph 6.





Graph 6. 1 Hectare of Acreage in the CSSR Yields



21

Average yields per hectare in the Sixth 5-Year Plan were taken into consideration in recomputation of the volume of fodders consumed (to include storage losses) by individual groups of farm animals per acreage of farm land. In quantification of soil needs in relation to imported fertilizers, sugar was used as the reciprocal export commodity: i.e., the sugarbeet acreage required to produce the volume of sugar that would be equal in value to that of imported fertilizers. In view of the relatively high foreign exchange effect from 1 hectare of sugarbeet, the used reciprocity overvalues to a certain extent products where imported concentrated fodders are represented in the fodder base. The reduced advantage offered by milk production in comparison to the preceding graphs is constituted by considerable losses in bulk fodders and, further, by poor utilization of the productive potential of available grassland.

The soil acreage used for production of fodders for feeding of farm animals in the socialist sector amounts to 73 percent of all farm land.

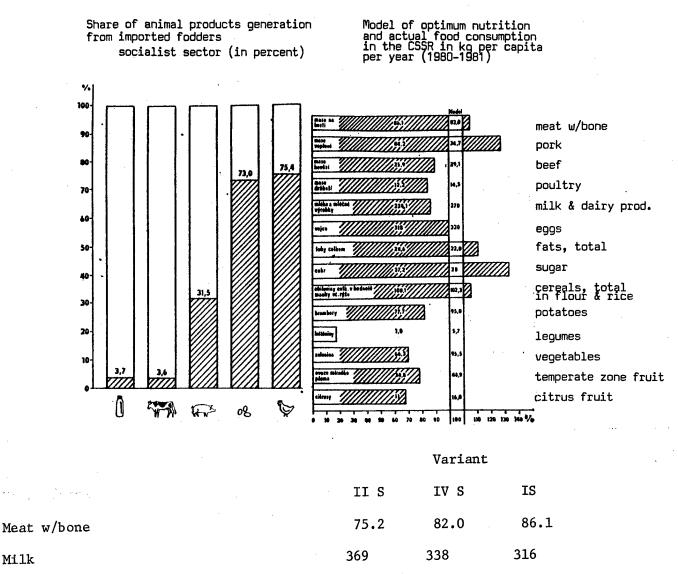
Detailed differentiation of fodders also made it possible to quantify the share of animal products produced from imported fodders. In view of the fact that this involves fodders which significantly affect the utilitarian value of farm animals and are the primary source of proteins, we used as an indicator of SNL in imported fodders, or the share of SNL in total SNL balance, those fodders for which we took into consideration the full amount of the accounted-for consumed volume of soy oil cakes and meals, fish meals with a 38 percent share of other oil cakes and meals (computation based on data from the general management of the fats industry and deliveries of extracted meals) and, further, the computed share of imported cereals in their total domestic production. The values arrived at show that the share of SNL from imported fodders in the overall balance of SNL in consumed fodders amounts in milk production to 3.7 percent, in beef to 3.6 percent, in pork to 31.5 percent, in eggs to 73 percent and in poultry meat to 75.4 percent (Graph 7). If we relate the determined shares to the volume of generation of animal products in the socialist sector (average for 1980-1981), then recomputation per capita per year shows that the following amounts were produced from imported fodders:

milk	13.21	
beef (with bone)	1,1 kg	
pork (with bone)	13.8 kg	total for meats= 23.6 kg,
poultry meat (with bone)	8.7 kg	i.e., 27.6 percent of total meat
eggs	7.7 kg	consumption in 1980

The differences in the required input of social labor and soil for three optimized variants at an equal level of animal proteins production from the viewpoint of varying structure of animal products generation is shown in Graph 8.

Its quantification took into consideration the following production volumes in kg per capita per year:

Graph 7.



17.3

18.4

17.8

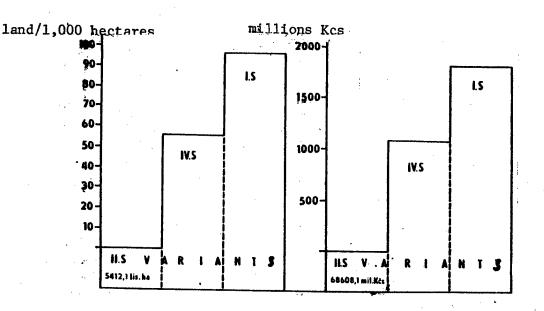
Eggs

Proposed Basic Variant for Agricultural Products Generation Meeting Nutritional Needs

The optimized variants of production were used, after assessment from the viewpoint of production, nutritional economy and consumption, to propose the basic variant (IV S), which with respect to the development of external and internal economic relations strives to provide for an economically more effective meeting of the nutrirional needs of the populace of the CSSR while tending to balance the foreign exchange surplus within ZPoK [extension unknown]. In comparison with the attained level (Graph 9 [not provided]) it envisions an

23

overall decrease in consumption of meat, particularly pork, and a moderate preference given to beef, poultry and fish.



Graph 8. Demands on Social Labor and Acreage at Differing Structure of Animal Products Generation (for a population of 15.5 million inhabitants)

Variants provide for identical level of animal proteins production

In addition to nutritional quality, increased production of beef (which is economically demanding) is viewed as part of the envisioned expansion of horned cattle keeping, as it promotes better utilization of the domestic fodder base and enhances efforts to improve the fertility of soil (e.g., an increase in the number of cattle to 0.9 heads per 1 hectare of farm land and/or just the economic effect of improved soil sorption makes it possible to reduce the dosage of industrial fertilizers to an extent which would cover 40-50 percent of the investments required for expansion of the capacity of stables). It increases demand on the volume of production of milk, legumes, high-quality potatoes for the market, vegetables and fruit. On the other hand, it calls for consumption of cereals and animal fats. The requisite reduction in consumption of both animal and plant fats can be achieved primarily by introduction of lowenergy types of products (reduced share of added fats).

In the structure of oleaginous plants production provisions must be made for obtaining at least 25 percent of sunflower or soybean oil. In case of imports, importation of soya beans appears to be economically more effective. In connection with the proposed variant it ought to be pointed out that routine planning makes use of the basic model of recommended dosage of foods per average inhabitant that was approved in 1975 and applies to the CSSR as well as to both national republics. In addition, values of the minimalization and the maximalization model are used as auxiliary indicators for forming the so-called range of optimum food consumption.

In addition to nutritional requirements, selection and approval of the model respected the consumption aspects of the then prognostic considerations oriented toward achieving for meat with bone a consumption level of 100 kg and more per capita per annum. In selection of the most suitable variant, consideration must be given to the national economy viewpoint, with emphasis on continued upgrading of the degree of self-sufficiency in food production. For that reason it is also proposed to change the structure of agricultural production, which in comparison with the basic model means reduced production of animals for slaughter (variants preferring production of animals for slaughter turned out unequivocally as being most expensive, as one-fourth of total meat consumption derives from production based on imported fodders) and providing for a higher level of consumption of the group of foods based on milk to achieve an adequate level of nutrition.

Providing a certain level of structure in this area relates to the state of the overall economic potential of a given country, applying in particular to foods the production of which is economically most demanding. In addition to the existing natural conditions, the level of agricultural production is closely connected not only with the degree of its development, but at constantly higher inputs also the level of some other sectors of the national economy, where the volume and quality of deliveries decides the effectiveness of total inputs of social labor. For example, the VUZU in Bratislava came up with a study (1982) dealing with the relation between the development and level of the generated gross national product per capita with the achieved degree of meeting the individual needs of the populace. A regression analysis for the period 1960-1980, including 19 selected countries, showed that specifically the sphere of food consumption in comparison to the attained value of gross national product in the CSSR belongs from the quantitative viewpoint to the relatively most developed, where, e.g., the currently achieved value of the selected criterion would be commensurate to providing a meat consumption level of approximately 75 kg per capita per annum, recomputed to meat on bone value. Implementation of the proposed basic variant calls for the following changes in comparison with the current level of consumption (1980-81 average) and the basic model of recommended doses of nutrients (in kg/per capita/per year):

Indicator	Consumption 1980-1981	Basic <u>Model</u>
Meat in meat on bone value	-4.0	-8.0
of which: pork	-9.5	-4.4
beef and veal	+2.5	-4.8
poultry	+2.5	+1.5
mutton	+0.3	+0.3

Eggs	-	_
Milk in liquid milk value (without butter)	+36	+19.0
Total fats	-2.4	+2.0
of which: animal fats	-1.8	+3.0
plant fats	-0.6	-1.0
Sugar (without consumption for alcoholic beverages)	-7.3	<del>~~</del>
Cereals (in flour value, including rice)	-5.8	+11.3
Legumes	+4.6	+2.9
Potatoes	+17.3	-1.0
Vegetables	+31.5	-5.5
Temperate zone fruit	+12.5	-7.5

The changes mentioned show considerably higher demands on the production of milk, legumes, fruit and vegetables. That also means increased pressure on the processing sphere, specifically the dairy industry (development of production of cheese and other dairy products) and the canning industry (higher production of fruit and vegetable produce). In connection with higher production of fruit and vegetables, it is imperative to create more suitable consumption conditions; otherwise, problems could develop in the area of marketing. Considerable opportunities exist primarily in communal boarding (vegetables and fruit should become a daily part of the menu). There is also a need for enriching the assortment of industrial goods by products facilitating easy and expedient finishing, particularly of fresh vegetables. The decisive requirement is a more even distribution of the fresh fruit and vegetables supply in the course of a year. That also makes it necessary to have available considerable capacities for their longer-term storage which offers substantial economic advantages in comparison with production of fast-ripening greenhouse vegetables. The following needs for storage capacities (in 1,000 tons) were quantified on the basis of a worked out proposal for a more even distribution of the fruit and vegetables supply in the CSSR during the course of a year:

Indicator	Fruit	<u>Vegetables</u>	Total	
Airconditioned storage facilities	59.2	21.1	80.3	
Refrigerated storage facilities	62.8	112.1	174.9	
Storages with suitable ventilation and				
humidity	51.6	123.6	175.2	
Total	173.6	256.8	430.4	

If we quantify the changes in the proposed variant vis-a-vis the current level of consumption, then the proposed variant requires for a population of 15.5 million inhabitants an input of social labor into agricultural production higher by Kcs 2.42 billion annually, i.e., approximately 2.5 percent, of which Kcs 2.25 billion accrue to plant production (higher demand for legumes, fruit and vegetables) and Kcs 0.17 billion to animal production. However, it is cheaper by Kcs 2.3 billion than the basic model.

On the other hand, it must be taken into consideration that implementation of this variant translates into improved nutrition for the populace and an improved structure of nutrition. It meets all health standards and is unequivocally a societal goal relevant to providing a high standard of living for the populace.\*

Transformation of nutritional requirements into production by the means envisaged in the model and its optimization is based on the current level of utilization of the produced raw materials, eventually that part of them intended for direct consumption by the populace. Utilization of existing hidden resources and reduction of losses will become reflected in lower demands on the volume of generating agricultural products. The key task forming the current subject of research (primarily from the viewpoint of utilizing the existing unused resources in proteins of animal origin) is the application of contemporary processing technologies that show promise for the future. The point is to optimize (or minimize) the requisite volume of resources of animal origin in nutrition for farm animals (milk plasma, blood) and increase the share of raw materials as a component enriching products of animal origin while reducing the demand on the basic raw material (meat products). This prevents recurrent conversion of a biologically valuable raw material already produced before.

In raw materials of plant origin this involves orientations making use of proteins of rape, soybeans, waste generated from potatoes in the production of starch, etc. These fractions can be used to enrich products of both animal and plant origin.

Attainment of the proposed level of consumption should become part of a longerterm concept which takes into consideration the production potential of Czechoslovak agriculture and, in this context should actively influence the development of consumer, demand by economic measures (price relations), advertising and health promotion campaigns. In case of increasing volumes of agricultural production, we should abstain from projecting them directly into food consumption, but generate, on the one hand, reserves that would be adequate for spanning annual fluctuations in agricultural production and, on the other hand, orient their structure to products that prove economically effective in exports and create in this manner the prerequisites for balancing the foreign trade surplus within ZPoK.

The increasing buying power of the populace can be tapped in this area by means of other than material improvements in food products (maximum effective utilization of processed raw materials, increasing the value added in generated food products, i.e., increasing their utilitarian value) and primarily by providing an adequate and attractive supply of industrial goods and services which should reduce the existing high share of foodstuffs in the total retail turnover.

· · · · ·

\*In the GDR, e.g., economic losses caused by obesity alone were estimated at 0.9 percent of the national income. Similarly, computations in Canada showed that implementation of adequate nutrition would reduce current expenditures and losses caused by improper nutrition by approximately one-third (approx. 2.5 billion of Canadian dollars).

Attainment of healthy nourishment for all members of our society must be viewed as purposeful, economically effective management of the entire process of primary production, processing and circulation of foodstuffs meeting the given conditions of the national economy as well as those of their final use in households and communal boarding. Only this comprehensive concept can meet the basic requirements stipulated in party resolutions, i.e., provide from both the quantitative and primarily qualitative viewpoint the requisite level of nourishment for the people while continuously improving the level of selfsufficiency in food production and in generation of the requisite stockpiles.

8204 CSO: 2400/155

#### GERMAN DEMOCRATIC REPUBLIC

# WEST CHARGED WITH 'CREDIT WAR' AGAINST SOCIALIST COUNTRIES

Leipzig LEIPZIGER VOLKSZEITUNG in German 27 Dec 83 p 3

/Article by Dr. G. Noetzold, director, and Dr. D. Bakkour, member, Working Group for World Economics, Section Economic Sciences, Karl-Marx-University, Leipzig: "Who Promotes or Hampers Credit TransactionssingWorld Trade?"]

[Text] At the recent meeting of the Working Group for World Economics of the Karl-Marx-University, it was stated that the share of world trade which is financed by credits has rapidly expanded as a result of the scientific-technological revolution. In addition, because of the scientific-technological revolution, countries must use their capabilities and resources more efficiently and strengthen their participation in the international division of labor since the scientific-technological advances are increasing the value of many internationally traded commodities and are leading to changes in price structures in international markets. Among the three types of international credits, i.e.,

-- credits extended by countries or international organizations, -- interbank loans, and

-- commercial credits,

interbank loans, in particular, have rapidly increased in importance.

While in the case with commercial loans, the seller grants the buyer a repayment deadline, interbank credits are instruments of the international credit markets (among them the Eurocredit market), which are primarily extended for medium and long-term purposes, are usually for larger objects and have no repayment deadline. In recent years, changes in international loan transactions have unfortunately deemphasized the fact that both creditors and borrowers benefit from such credits. The creditor earns profits through interests. Extending credits, therefore, must in no way be considered a "good Samaritan" deed. For the debtor, it is advantageous in international trade to import in excess of his own financial capabilities so long as the imports enable him to expand his production or services to an extent that not only guarantees the repayment of the debt plus interest but, beyond that, credits mean additional funds for the national economy.

#### Capitalist Crisis Causes Loan Fund Shortage

When increasing amounts of capital poured into international credit markets, credit terms were favorable. The large supply of funds kept interest rates relatively low, and repayment terms were generous. However, this unfortunately did not continue in recent years. Loan funds have become scarce. This is a result of the serious economic crisis the capitalist world is going through, which has

- -- led to heavy borrowing by capitalist countries to finance their national deficits,
- -- caused export difficulties and hence balance-of-payments deficits in a great many capitalist countries,
- -- brought about a substantial disequilibrium between the amount of money in circulation and the quantity of goods being produced and, therefore, has led to a decrease in the value of money, and
- -- finally, exacerbated the rapidly increasing difficulties among the capitalist countries which led to attempts to pass their problems on to other countries.

The absurd escalation of arms expenditures intensifies the demand for credit funds. In 1981, some \$133 billion were available in European credit markets. By 1982, that amount had shrunk to \$86 billion and, according to recent estimates, the 1983 volume of credits is more than 20 percent lower than in the preceding year. There are hardly any U.S. banks that are making international loans anymore. The small fund of available loan money goes primarily to Latin America (Brazil, Argentina, Mexico).

The result are high interest rates, shorter maturities and higher collateral requirements. Particularly problematic is the fact that loans extended in periods of better economic health are also affected by this development. Interest rates are usually adjusted to prevailing market rates, in accordance with an agreed system.

The developing countries are especially hard hit by these difficulties. In 80 of these countries, old loans must be rescheduled, i.e., new loans are necessary to pay interest and repay old loans.

"Credit War" against Socialist Countries

The confrontation strategists--especially in the U.S.--have used the unfavorable developments in the international credit markets to push the socialist countries out of the international credit business and to conduct a "credit war" against the socialist countries, including the termination of existing loans.

The assumption is that the denial and termination of loans will

-- undermine the ability of the socialist countries to make the payments,

-- restrict peaceful trade between the two world systems, and

-- permit the use of political pressure in addition to economic pressure.

The changes in, and less favorable nature of, international credit terms are posing difficult problems for the socialist countries. It also has become more difficult to earn foreign exchange because of the crisis conditions in the capitalist markets. However, despite their stated intentions, the aggressive forces have not been able to push the GDR into payment difficulties. It has been possible to achieve a positive international trade balance. That shows that the economy can be adjusted to changing conditions within a relatively short period of time and that all loan obligations can be met on time. The item "Foreign Exchange Earnings" is, therefore, an important priority in our economic management and planning system, especially in the combines.

The demonstration of the advantages of socialism is a great political success and, as the recent past has shown, has shaken the effectiveness of the U.S.imposed credit embargo.

7821 CSO: 2300/231

HUNGARY

## NEW CHANGES IN WAGE PAYMENTS, SCALES EXAMINED

Budapest MAGYARORSZAG in Hungarian 1 Jan 84 pp 24-25

[Article by Endre Varkonyi: "Wage Transfusions--Today's Problems"]

[Text] The 12 November issue of MAGYAR KOZLONY appeared in 80 pages and most of this volume of official texts dealt with wage affairs. It is not surprising that greater than ordinary interest has been shown in the series of orders that are to be found there. They include council of minister, deputy prime minister, ministerial and state secretary decrees.

Their essence is wages in respect to which many classifications have been changed. But first let us quote from the article which Albert Racz, state secretary and chairman of the State Wage and Labor Office, wrote on this subject: "The change in wage grades is not a general wage policy measure. That is, it does not mean that we should raise the wage of every worker independently of the quantity and quality of his work."

#### Point System

It means to work according to qualifications, while according to job requirements five grades were established on 1 January 1984 by orders on manual workers. The unification of the two kinds of classification gives the entry categories, while the grades give the wage that may or must be paid, or the upper and lower limits. (All this is rather complicated, and it has given workers who deal with wage matters tasks that will take some months to do.)

True, there is time for carrying it out, for the application of the lower wage levels now established is compulsory only in about 3 years, or on 31 December 1986. But the review of the classification and the necessary corrections must be finished within a year--states the decree by the deputy prime minister of the council of ministers.

According to qualifications, classification begins "at the very bottom," that is, with unskilled workers. Here no qualifications are necessary, the worker who is hired may be put immediately on the job, and the training may require at the most 1 month. Included are cleaning personnel, office helpers, messengers and doormen. (Of course, this does not include hotel receptionists, who must be highly qualified.) For the performance of simple semiskilled work 6 month of training is needed at the most--this is the second grade. Where the training time is longer, the job is to be classified as more complex semiskilled work and belongs in the third step together with simple skilled work. Included in the latter are jobs that can be performed by a skilled workers with less than 1 year's training. For skilled workers--depending on the complexity of the job--a grade of three plus one is established.

The fourth grade is for skilled work. Here "it is necessary to know the various procedures related to the occupation and technology, to have judgment and the combining and organizing capability necessary to carry out the work." Complex skilled work requires even more skilled ability than average, and its performance requires at least 5 years of occupational training.

Especially complex skilled work may be performed by even more qualified skilled workers. In general more than 10 years of occupational practice, the finishing of special courses or the possession of special personal qualifications are needed for someone to be placed in grade six. And finally, the outstanding skilled workers grade may include "the skilled worker with exceptional technical knowledge and long trade practice in various lines of skilled work."

Ceiling Exceeded

It is much more complicated to calculate work-condition grades. Nine factors and three kinds of classification grades give the various point numbers, and these determine into which work-condition grade among five the worker must be placed. The nine factors are: dynamic and static load, monotony, concentrated attention, danger, unpleasant factors, climate, noise and vibration, and finally chemical and dust detriments and lighting. (Actually there are 12 factors because noise and vibration and others count as separate factors.)

In all these, there are no points for "normal" grades; in the "medium unfavorable," that is, in grade two the values vary between 2 to 6 points, while in grade three which is "intensely unfavorable" the points vary between 4 to 12. (The extreme values: in the medium unfavorable grade of unfavorable factors 2-2 points, and in the dynamic load of intensely unfavorable 12 points). If no particular mathematical knowledge is needed to total the points it is unconditionally necessary to do addition and multiplication. It is in this way that it can be established where to place the worker in question among the five work-condition grades. Eleven or fewer points are needed for placement in grade one, and 35-54 points in grade five.

In theory the highest wages for manual work is five times greater than the lowest. In qualification one and work-condition one the lowest hourly wage is 11 forints while the highest for an outstanding skilled worker is 55 forints. The same is true for monthly wages: the lowest is 2,000 forints, the highest 10,000 forints. Although monthly wages are calculated on a 42 hour work week and as of 1 January industry and the construction industry in most places converted to a 40 hour work week, the 2,000 forint minimum must still be realized. On January this became the lowest monthly wage in Hungary, as set forth in a special decree.

An important difference is that five standards are being considered in the wage schedule now being followed with 2-2 grades in each, whereas in the new schedule nine factors individually in three grades are to be taken into account. For example, monotony which is very characteristic of the modern era was not previously taken into account among the unfavorable factors. Noise, chemicals and dust, vibration, lighting and concentrated attention were only considered under the comprehensive term "health disadvantages."

Even from this much it is obvious that the rearrangement of wage classifications was very timely. This is all the more supported by the fact that in most factories and plants, wages in recent years have been rising although in a limited way, and more and more workers reached or approached the "ceiling" which was previously established. Assuming that we have the money, it was the upper limits that prevented further increases in the wage categories: primarily that often mentioned but less often realized differentiation--the highest pay for the best workers.

Now hourly and monthly wages may rise once more--and again we must add if there is money for it. The lowest wage limits are on the average 10 percent higher and the highest limits 25 percent higher than in the schedule now used. However, wherever the "ceiling" is unjustifiably low, or in plants where it is in the national interest to keep the manpower requirements at a constant level, the upper limit may in some places even attain a growth of 58 percent.

The new wage schedule exerts incentive primarily in two directions: on one hand toward the acquisition of higher qualifications (although in most categories, the earnings of those who perform complicated skilled tasks is only two to three times as great as that of unskilled workers, and it would be well to widen this gap), and on the other hand, toward rewarding materially those who are willing to do difficult work, or work performed under "unfavorable conditions." (It is a well-known fact, for example, that in public sanitation, sewer cleaning, slaughter houses and many other places where it is in the nature of the tasks that the work is dirty, there are bad odors, and so-forth and that manpower, here, is always in shortage. It may be hoped that the possibility for higher wages will help.)

### Special A and B

All this refers to basic wages. As until now, enterprises may increase wages according to achievement in other ways as well. Personnel savings may give the basis for a differentiated increase in mobile wages. If an enterprise conducts its work with fewer workers and production does not decline as a result, 30 to 60 percent remains from the released wage, that is, may be used for wage increases.

Emphasis is again placed on differentiation. There is no central decree--and certainly there will be none--which would prescribe the ratio in which out-

standing workers should share in wage increases. But certainly it is impossible for the enterprise and the plant to pay adequately for particularly important and useful work only within the framework of the wage classification system. It is, however, a common feature of this and of differentiated bonus payments and awards that the enterprise must "manage out" (to use an ungainly and official term) in both.

Similarly changes are taking place in the pay of those with managerial assignments. When the new wage system comes into force, the number of enterprise categories will be reduced: up to now there were only four and thereafter there will be three.

In the special A and B categories, enterprises are classified according to annual production, number of personnel, and the value of their fixed assets. A new standard is export revenue. Sales revenue deriving from 2.5 billion forints' worth of export is enough to place an enterprise into the "special" category, 1 billion forints into the A category.

This is a matter of great importance to the enterprise leadership. The managing director of a "special" category enterprise can have a minimum pay of 9,500 forints after the new schedule is in effect, with a maximum that is twice as big; in the A enterprises the scale is from 7,500 forints to 17,500 forints, and in B enterprises from 5,700 forints to 15,500 forints. In the case of the fulfillment of certain indexes, the supervisory minister may even classify an enterprise in one category higher. In fact, in agreement with the chairman of the State Wage and Labor Office and SZOT [National Council of Trade Unions] he may even advance an enterprise by two categories. But he may also lower an enterprise by one.

It points in a good direction that one of the determining factors is the value of export achievement. It is less encouraging, however, that personnel still has a role (although its importance is diminishing) for it is a well known fact that for this very reason some enterprises inflated their nonproductive departments through many years. It should also be weighed where and to what extent it is desirable to maintain producer personnel at a high level.

#### Young Graduates

Personnel has remained among the indexes determining enterprise category because to a certain degree it gives information: how big of a factory or plant are we speaking of? But life has passed up this concept, for in many places personnel is being reduced and still not only quantitative but also qualitative conceptions are being fulfilled, although by means of emergency reorganization and rationalization. On the other hand there are medium-size plants which by their nature are "export oriented" and with significantly fewer personnel than higher category enterprises earn more foreign exchange (often at less cost).

Many statistical reports have brought it to our attention recently that the wage ratio between responsible managers and subordinate workers has declined greatly. The present classification system is designed to correct this--and let us state again--by December 1986. Clearly, however, the present economic

situation, to put it plainly the lack of money, is also evident here. This means that the differences in earning can be realized only within very narrow limits. For example, under medium difficult conditions the monthly wage of a department chief at an A category enterprise may receive for complex skilled work 4,090 to 7,830 forints, and an independent division manager may receive between 5,700 and 13,000 forints. That is, if both reach the "ceiling" the difference will hardly come to more than 50 percent.

Naturally, office personnel will not be left out of the modifications in the basic wage system. It is a very important change that hereafter no one can become an office clerk without qualifications. (Up to now this job definition could cover, and in fact did cover up, many things. Not least of all the fact that someone wanted a job but did not know anything).

Now, however, recently graduated skilled persons will have a greater opportunity to find a job suitable for their qualifications. The lowest pay here, too, is 2,000 forints, the minimum for managers with 0 to 3 years of practical and basic qualifications. In practice, when the decree comes into effect, no office clerk will have this minimum pay because beginning on 1 January 1984 no new worker will receive such a job who has only "basic training" (plainly speaking 8 years of general school).

The lowest pay for young graduates is 3,700 forints, which may rise to 5,900 forints by the end of the third year on the job. Thereafter, too, it will be the degree of training and the number of years spent at work that will determine the minimum pay, that is, the practice will result in automatic pay increases, with the exception of certain sedentary jobs.

The economic-technical advisor status will be eliminated (which according to the practice of many years the preretirement predecessor filled at the side of the new director, often in such a way, to put it nicely, that he did not have to strain himself). But there will be "senior staff members." This "classification category" was created for professional people who perform outstanding work in natural or social sciences as related to the development of the enterprise. The basic pay of the senior staff members may be at least 6,600 forints and at the most 13,000 forints.

# Without Promotion by Seniority

In part, the modification of the basic wage system seeks to stimulate the acquisition of more practice, but even more to see to it that university and college graduates should find work in enterprises. To put it more exactly, that it should be worthwhile for them to accept work there. That they should be able to rise more rapidly and receive higher pay than those with less schooling. In the third wage group (8-15 years) it is possible with a university or college degree to reach the upper limit, which is 10,500 forints, while those with a medium level diploma can make only 8,800 forints after 20 years.

The reorganization of basic wages for clerical workers also seeks to solve existing tensions. At present it is only the number of years worked that counts

for establishing pay. (This used to be called the "donkey ladder" or promotion by seniority.)

The new basic wage system is also substantially more flexible in this area. In the first two categories--that is, between 0 and 10 years--the number of years worked remains the decisive factor; the pay will be between 2,000 and 3,200 forints for less than 5 years of experience, and between 2,100 and 3,200 forints if the clerical worker has been at the job for 5 to 10 years. Above this, however, the "ceiling" is the same although it can hardly be called high: 6,300 forints for the less qualified and 6,700 forints for university and college graduates. (For completeness, it should be added that rarely does a clerical worker sit at a desk for more than a decade without being promoted at least to head of section.)

Thus the possibility exists for young, well-qualified persons to advance more rapidly in pay without climbing the "seniority ladder" from one end to the other. It is shown by the new classification that the job is not a very attractive one. According to this, clerical workers must be placed in one of two classes: in Class II those who have the schooling necessary for doing the job and who also perform clerical type tasks. All others belong to Class I. The modification of the wage grades does not extend to all jobs in the country--in certain areas it has been put or will be put into effect around now. At first glance it appears we have plenty of time, for only the minimum wage of 2,000 forints is obligatory as of 1 January 1984, the lower limit of every other basic wage category must be attained within 3 years. The rest depends on the exterprises affected--naturally as a consequence of the positive and/or negative effect of a whole host of factors.

### 310 Forints Instead of 290

Independently of the foregoing, wage changes were built into the wage system-but since we are speaking of wages here, too, let us speak briefly about it. For years every worker and pensioner has been receiving 290 forints aimed at countering one of the price increases that occurred during the previous year. Until now this separate entry appeared at the end of the wage or payment statement, and in no way was counted as part of wage or pay. The enterprises, too, handled this separately: it was not counted on the wage level, the workers' average earnings, or withdrawals charged to wages, and the sum was exempt from social security payments.

As of 1 January the workers will receive 310 forints instead of 290, except for the members of agricultural producer cooperatives, who received 200 forints and will now receive 210. It is a big difference as compared to the past that the sum will be "built into" the wage system, which means that it will be a part of the obligatory pension contribution earnings. At the same time "bracket limits" will be raised by 300 forints, that is, the vast majority of workers will be making the same pension contributions as before.

Pensioners and mothers on child care assistance will continue to receive the 290 forints as a price leveller---and hereafter it will be called a wage

supplement, which makes a difference only in enterprise accounting practice. From the workers' point of view it differs from other wage-type incomes in that it is also applied to sick benefit time, but does not form sick benefit funds. Wage payments form a complicated and intricate complex of questions. They affect and interest everyone personally, as demonstrated by nothing else than it is already known throughout the country that in the sense of the December resolution of the MSZMP Central Committee the average earnings of workers, employees and producer cooperative workers must increase by 4 to 4.5 percent in 1984.

Within this, too, it will be necessary better to differentiate the work according to volume and quality. That is--and we are not merely playing with words--a wage transfusion is vitally necessary. And also that we must constantly follow to what extent we are using wage possibilities profitably and in the common interest. That is, the "control of wage-pressure." Let us quote here the recent statement by Tamas Kolosi, scientific department chief of the MSZMP Social Science Institute: "An unconditionally necessary change in our personnel and wage management and the further development of our socio-political system are not a short term task, and we can best solve our inequality problems if over the long run we end the devaluation of live work and raise average earnings. A change like this--among other things-will reduce the waste of human resources and give better incentive to technical development."

The orders which appeared at the end of 1983 provide the basis for enterprises participating in execution to take the first steps on this path. But how long the path will be, when and by how much the waste of manpower will decline, how the conditions for making better use of technology will arrive--all this depends not only on money and the often mentioned difficult economic situation of the country.

Before and above everything else, it depends on the well-considered plans of competent people. And on execution.

6691 CSO: 2500/153

## MODIFICATIONS IN INCOME TAX STRUCTURE EXPLAINED

Budapest NEPSZABADSAG in Hungarian 21 Dec 83 p 4

[Interview with Vilmos Cserveny, main department head in the Ministry of Finance, by Sandor Palko: "Incomes and Tax Rate Keys"]

[Text] About the Statute in Effect as of 1 January

A new chapter will go into effect as of January, in taxing incomes. The 10-year-old regulation will be modified: the new regulation will not make a sharp distinction between judging incomes derived from the various activities on the basis of whether their source is intellectual or physical, industrial or commercial work. Taxes will have to be paid on the basis of standardized viewpoints. We talked about the changes with Vilmos Cserveny, head of the appropriate main department in the Ministry of Finance.

[Question] What justifies the modifications?

Why Changes Had To Be Made

[Answer] Life required them. The circle of those has expanded in recent years who, in order to improve their standard of living, are earning some type of a secondary income by using their free time, or are conducting private activity in harmony with the public's needs. Private taxis, contract-based stores, restaurants and small enterprises have appeared. That is, the picture has become more colorful. The old regulation had to be constantly expanded, amended. In the meanwhile the prices and the value relationships also changed. This also had to be taken into consideration, for example, in judging costs. Calculating taxes was also becoming more and more difficult, because not only the size of the income had to be taken into consideration to start with but also what type of work, which trade, profession was the source of the given income. At times even within one trade several differentiations were in effect. Such differentiation of the tax system increasingly hindered implementation of the principle of proportionate bearing of the public burden.

[Question] So, from now on the size of the tax will be determined uniformly by the size of the income?

[Answer] This is not exactly accurate this way. It is true that the same tax must be levied on identical-sized taxable incomes. But even in the future we cannot ignore the varying conditions, expenses of obtaining the incomes, the characteristics of the given work. The change is in that in the future we will be taking these circumstances into consideration in forming the taxable base, avoiding the excessive differentiations.

# Based on Standardized Tabulation

[Question] What concrete changes should the tax payers expect?

[Answer] Let's begin with the most important one: instead of the many different kinds of tax rate tables the incomes will be taxed by one single progressive table. As far as content differences are concerned, in the past the scale of income tax rates ran from six to 75 percent, and maximum withholding went into effect at 200,000 forints. In the future the minimum tax will be lowered to two percent, and the maximum to 65 precent. But this maximum rate will apply only to incomes in excess of 600,000 forints.

The numbers speak for themselves: the new table is very advantageous for people with low incomes. By setting the minimum rates we want to encourage the service, repairs, and other auxiliary activities which are useful to everyone. Of course, that intent is also hidden behind this measure that it should not be worth it to anyone--to those who until now have been working without reporting their incomes--to conceal their real incomes, and take the risk of being caught. And as far as the larger incomes are concerned, well, the lack of sufficient interest has been a pressing problem here for a long time. I am referring mainly to the small craftsmen who work with larger deals and who also have employees, who, let's say, by September or October have approached that critical limit over which the tax would have taken three-fourths of the income. Therefore they would rather discontinue or cut down production, even though their work would have been needed. And others either did not render bills, or much smaller than the realistic sums were put down on paper, so that they would get into the higher category as late as possible. Thus when we made the decision about the new tax tables, we took into consideration the changes which took place in the interest and value systems.

[Question] And the state's income?

[Answer] We are not expecting less taxes, mainly because of the expected effects of the more favorable progression. That is, it will be worth it to work more, to realistically report the incomes, and the greater desire to produce exerts its effect by its volume in the direction of increasing the tax income.

From now on, incomes derived from different sources will be taxed together. By doing this we wish to resolve an old contradiction which caused many arguments. In some cases the old statute made it possible for the tax office to treat separately from each other the incomes derived from different sources. If, let's say, the same person paid taxes after intellectual and also nonintellectual activities, for example, if he contracted designing as well as construction projects, these incomes were not combined at the end of the year but were considered separately.

The situation is similar if the musician is a composer as well as performer in the same person. Also in the case of authors, for example, small advertising copy production, short stories, and creations classified as work of several years were separated from other literary activity. Those who had the opportunity to do this enjoyed advantages in comparison with those whose income, because of their trade, usually derived from one source. Why are these advantages difficult to justify? Well, it is easy to see that if someone had 50,000 forints of income each from three different sources, from the taxation viewpoint came out better than the person who earned 150,000 forints from one and the same activity. That is, in the latter case a significantly higher tax rate applied in the past than if the tax was determined piecemeal, source-by-source.

[Question] According to this, the new situation disfavors some professions?

[Answer] The majority, as we have already said it, comes out ahead. And the modification will not significantly influence the financial situation of others, even for those who in the past enjoyed advantages and who now would be disadvantageously affected by combining their various incomes. That is, most of the disadvantage is counterbalanced by the rate of taxation not rising as steeply as before. The difference will be smaller between the various occupations. On the other hand we have also moved downward in setting the tax bases, and in general increased the tax-free portion.

We wanted to take into consideration the characteristics of occupations, the realistic costs. I do not, of course, even need to mention how difficult it is to compare the expenses of, let us say, a sculptor, a movie producer, and an advertising specialist. We did request therefore the opinions of the interest representation organs and of the speciality ministries. But this is a fact: for a narrower stratum of those with high incomes the tax burden will increase.

[Question] What other new elements are contained in the regulation?

[Answer] In order to promote housing construction from private resources, the earlier high taxing of incomes derived from the sale of land or housing real estate acquired within the last ten years will decrease. Here, too, the uniform table became the standard. Taxing incomes derived from leasing out real estate will also change: in the past the foreign tourism enterprises which maintained contact with the owners of rooms or apartments paid these taxes to the central budget. In the future these will increase the incomes of the local councils, thus also increasing somewhat their economic independence and interest. The council executive committees have been authorized to decrease the annual taxable income of small craftsmen and private store owners by a sum of up to 50,000 forints inasmuch as those significantly contribute to the development of the local industry or commerce--for example, by implementing communal or landmark preservation tasks which would perhaps cost much more to do if done in other ways.

## Responsibility of the Local Councils

We are simplifying with several measures the process of setting taxes. For example, in the future it will not be tied to a value limit who may pay their taxes in lump sum. Those may be considered in whose income there are no large fluctuations from one year to the next, and who employ a maximum of two employees. I will observe here that for the very reason of making things so much easier the new statute will punish much more severely any false reporting and concealment of incomes, and the checking of incomes will also receive a greater role.

[Question] The development of some incomes can be followed down to the last forint, such as for example is the case with honoraria paid to authors, but in other cases calculations can be based only on reporting or on estimates. How can it be checked reliably that the tax return reflects the actual income?

[Answer] Checking this will be one of the main tasks of the tax authorities. They will have to systematically check the books, to see if every item is reported in them, and that they reflect the actual prices. But information must also be gathered in other ways as to whether the tax return corresponds with the records. There will also be cases when the investigation will extend to interviewing the clients. All this, of course, since important public interests are involved, will mean much more and indispensible work in the future for those who work in the administration.

8584 CSO: 2500/144

POLAND

# ECONOMISTS CONFER ON GAPS BETWEEN ECONOMIC POLICY, REFORM PRINCIPLES

Warsaw RZECZPOSPOLITA in Polish 11 Jan 84 p 2

[Text] A 2-day scholarly conference called to discuss the lessons and problems of the economic reform on the eve of the 3d year of its implementation opened in Warsaw on 10 January with approximately 150 academic and professional economists in attendance. As was the case last year, when the initial phase of the economy's performance under revamped rules was subjected to an analysis, this year's conference was organized by the Institute of Business Administration and Advanced Professional Training.

The primary objective set by the participants in this meeting, whose proceedings were presided over by the government deputy commissioner for economic reform, Professor Zdzislaw Sadowski, was to come up with an analysis of the reasons for the emergence of inconsistencies between the theoretical principles and institutional machinery of the economic reform and current official economic policies. The plenary proceedings and the work that was done in the four working groups was preceded by a panel discussion, which was opened by Professor Jan Pajestka.

In the course of outlining the key objectives of economic equilibrium. The absence of economic equilibrium not only disrupts the continuity of socioeconomic processes, but also diminishes the effectiveness of the economic management levers introduced by the reform. It is also urgently necessary that action should be taken to settle the problem of Poland's foreign debt.

Changes in the way our economic system operates are contingent upon the improved coordination of day-to-day economic policies with the dictates and groundrules of the economic reform. Docent Henryk Sadownik commented on this subject. The development of sound economic policies is out of the question unless the apparatus of the executive and central government agencies responsible for the formulation of these policies spell out in clear and precise terms the rules governing allocation of decisionmaking powers so that economic policy will constitute a coherent whole.

The charge is being levelled against the economic reform more and more often to the effect that its institutional machinery is not conducive to the optimization of employment patterns and that it represents one of the biggest barriers to economic growth. These opinions have been followed up with demands for administrative interventions in the employment policy area. Taking issue with these views, Professor Henryk Krol said, inter alia, that this claim is valid only in reference to some business enterprises. In many cases, however, references to manpower problems as a barrier to increased output amount to nothing more than management's making excuses for its own incompetence and failure to make changes in the way its runs its operations.

Professor Kazimierz Doktor then went on to call attention to the correlation between socioeconomic policies and the economic reform. In order to restore equilibrium between supply and demand in the market place and combat inflationary pressures which are still strong economic policymakers must pay more attention to the other causes of inflation, and not just those in business enterprises. Professor Czeslaw Bobrowski, among others, also raised this problem, pointing out that one of the other causes of inflation is the overextended capital investment front.

CSO: 2600/563

# ZYCIE GOSPODARCZE EDITOR RATES RECORD OF 14TH PLENUM

Warsaw ZYCIE GOSPODARCZE in Polish No 48, 27 Nov 83 pp 1, 4

[Article by Karol Szwarc: "Difficult Tasks"]

[Text] The debates which took place at the 14th Plenum of the Central Committee of the PZPR have made it obvious that politics as well as economics are an integral part of the sphere of the party's activities. Whenever "purely" economic problems were touched upon, social and political problems immediately emerged. This is not surprising at all, because class and group interests are best exposed through economic interests, which are the realistic source of peoples' activities.

Everything that takes place in the economic area--what is being produced and for whom, decisions about investments, price changes for food or gasoline-does not identically effect the economic interests of the different social groups, the interests of the workers or peasants, and therefore their mutual relations. In this way there is nothing more political than changes in the area of economy. It is impossible to separate politics from economics, which also means party politics from economic politics.

This is the reason why the party always was and is deeply interested in the economic situation, in charting the direction of its development, and also in total reorganization of the system of the economy's functioning.

It is also the duty and task of the party to form the economic process in such manner as best to serve the interests of the working class and peasantry as much as possible. Our own Polishh experience tells us that whenever class criteria were not sufficiently taken into consideration in economic life, and economics was treated exclusively in a technocratic manner, conflict and stoppage of economic growth were caused. Therefore, all economic decisions based on the criteria of effectiveness must be constantly verified by the following questions: whom and what classes and groups will they serve?

### Social Awareness

In times like the ones we are going through right now, the ties between politics and economics must be especially strong. We have behind us the first unusually difficult period of overcoming our economic crisis. It had to cause the lowering of our standard of living and many annoyances of everyday existence.

At about the middle of last year the decline impproduction was halted, as well as the decrease in consumption. That halting of the decline of our standard of living is not very evident to the social realization. The general belief is that the standard of living keeps on falling. The reason for this conviction is first of all the fact that with a 20 percent hike in prices, realistically, there is not much factual increase in pay. In such a situation the increase in prices cancels the increase in pay. The higher level of inflation makes itself felt strongly as well. It causes a significant and clear diversity in the level of income. There are numerous groups of workers--especially in the nonproduction sector with families with many children--who are experiencing a factual decrease of their income. Finally, the feeling of the people is influenced by the fact that the relatively high increase in prices is still accompanied by a serious lack of many goods, among them some very important for family life.

Still, in spite of the appearance of the first signs of economic growth, a quick improvement of the standard of living is impossible, first of all because of the necessity of repaying the old debts. The national income for distribution already is, and will be for some years to come, smaller than the produced national income. In our commercial deals with the capitalist countries our import was 2 billion larger than our export already in 1979. For the first 10 months of 1983 our export is already 1.1 billion dollars higher than our import, which must effect the industry as well as the market. The losses are caused by the economic sanctions. Since 1979 the number of Polish citizens has grown by 1.5 million, which means that the diminished amount of products has to be divided among a larger number of people.

In this situation especially important is the policy which decides which classes and social groups should suffer the biggest burdens and largest costs connected with coming out of the crisis, and which groups will be able to satisfy their needs with relatively greater ease. First of all, it is the duty of the party to protect the economically weakest classes, which should express itself mainly in the increase of production of goods satisfying the basic needs of the people. Help for consumption industries and agriculture must necessarily come from the central and regional authorities--which was pointed out many times at the plenum. Prompt delivery of supplies and investments for this branch of production, as well as increased employment in industries producing for the market, must get decisive social priority. This priority should also be taken into consideration in all the mechanics of the reform.

### A Sensitive Point

Price policy is an area where social sensitivity is especially fine. Here, many mistakes were made in the past. As a result of this, and also as a result of not following the principle of tying together pay and productivity and economic effects, we are now facing a market in disarray, rationing, cases of speculation, which are seriously threatening the ethical values of our society. An unbalanced market also favors irregularities in the social sector.

In order to counteract these phenomena in the economic area, and not only in the monetary and legal ones, we must mainly strive to increase our production. Still, given a short time in the face of our economic situation, trying to increase the supply does not solve completely the problem of balancing the market. It will also be necessary to raise prices.

Prices are not only an economic, but also a social matter. Namely, they are the main factor in establishing the real income of the population's various groups and classes. The standard of living does not depend on prices, but on how much and what do we produce. Prices, though, are influential in the distribution of that part of our national income which is designated for consumption.

This year we were not able to follow the directives of the plan in the area of wages, price increases, and people's income. There were many reasons for this. One of them was the pressure to raise wages exerted by the crews on the managements of the enterprises and also those cases where tax reductions were given, creating additional opportunities for raising pay.

This is a phenomenon which should be fought, but which is not surprising. From the point of view of the workers, the data of the past three quarters of the year does not point in reality to excessive pay for the increase in labor productivity. An additional factor in creating inflation was the structure of improving production. Market production grew half as fast as general industrial production. But every increase in production has to be paid for, even though only the increase in market production provides the means of covering the additional demand power.

In this situation next year a further hike in prices will also be necessary. But the increase in prices of basic necessities must be minimal, gaining the necessary means through a larger increase in prices of articles of secondary importance. The unavoidable increase in the prices of food products, the proposals of which were recently given under social consultation, should be confronted not only in relation to the increase in the cost of production, but they must also be relevant to that part of the budget which is assigned for food expenses by families of low and middle income, which means mainly workers. Means for balancing these goods can be obtained by raising the prices of articles of consumption which are enjoyed by families with high incomes. It is difficult to explain the rise of the price of bread and milk or meat while the price of gasoline remains intact.

### Counting on Structure

In the near future the tempo of production growth cannot be too fast. This is the result of many internal and external conditions. For that reason, if we want to satisfy social needs better, we shall have to enforce the dynamics in some areas above the general tempo, thereby causing others to grow more slowly. In the policy of structural changes, we have at this time only limited opportunities. This is evident mainly in the fact that we do not have sufficient means to start new investments. Those available are necessary first of all for keeping our machinery in good condition, for its modernization. It was decided at the plenum that just this action should take priority. In practice this means the necessity of enterprises putting more into the global investments fund.

This direction of investment, under the slogan "modernization," is especially beneficial because it allows the acceleration of new technology, which on one hand serves the fuller utilization of material resources and on the other helps the problems of employment. It is not a secret any more than complaints about the lack of people to fill jobs in certain enterprises stem from the fact that almost our entire industrial technical structure was built in a situation in which we had a relative surplus of workers. Therefore, today's call of plants for workers will not be helped other than through the introduction of new labor-saving technology and also by relating the present production process to the present situation on the labor market. This cannot be solved by wage competition between the enterprises.

The plenum has also shown--which was supported by some of the participants in the debates--that we are still suffering from an abundance of justifiable goals. Therefore, it is progressively more imperative to work out a long-term program of structural reforms, which was emphasized in the report of the Politburo. On the basis of that program it would be possible to make decisions about the directions and ways of investments, clearly define the course of technological progress and also broaden international cooperation. It was decided at the plenum that the program of structural changes should be worked out within such a time limit as to allow it to become an integral part of the 5-year plan for the years 1986-1990.

The merchanics of the reform should also serve this purpose. In the eyes of the people the reform does not yet bring fully satisfying results. The analysis of the reasons for this varies. It was pointed out first of all that it contains many weak points in the area of strengthening the system as well as in the area of realization. The main criticism was directed to the "centrum," which does not adapt itself to the outline of the proposed reform. But there were also voices pointing out the fact that managements of the enterprises do not take advantage in the areas where opportunities for indpendence are existing already. It was also noted that the people's participation in the management of our economy, which expresses itself mainly in a striving for autonomy, continues to be limited.

In connection with this strong emphasis was put on the necessity of creating strong economic directives through the mechanism of reforms. There were too many enterprises which improved their financial situation not as a result of their good work, but by taking advantage of instrumental weaknesses. According to the majority of the speakers, there is a need to establish rules of the game which will prevent the failing of an enterprise to be just a slogan. This is the way to eliminate sources of lack of results and at the same time to cause beneficial structural changes which will be expressed first of all in better organizational changes, changes in the structure of employment, and careful utilization of materials.

The 14th Plenum of the Central Committee of the PZPR has proven that the party is facing difficult tasks: overcoming the crisis, making the reform function, fighting inflation--all this has to be done through the introduction of a strict economic regime. There is simply no other way.

The introduction of economic regulations must be done under the party's control. Strict economic measures will require a bigger effort. The party then has to watch for the effort to be really better rewarded and at the same time to eliminate for good the principle of paying for just a signature on the list of those "present." Creating such systems of motivation is not possible through mere administrative force. This is first of all a social process.

This battle will find its social resonance only if the party will continue to take care of the interests of the basic classes and groups of the population, mainly the working class. This finds its expression in taking care of the interests of the economically weakest people, as well as in fighting parasites and speculation. We don't have in mind here cheap popularity, "catching the thief," fighting results, but the elimination of the economic reasons for those phenomena.

Even at a time of economic difficulty the party cannot lose its sense of perspective. And here the choice is difficult: between current consumption and investments, between protection of the environment and taxation of communal consumption, etc. At this time we do not have the means to fight the technological gap or the danger to the environment. Still, while making current decisions we have to remember those problems in order not to make the unfavorable situations even worse, and also in order to prepare the ground for future successful actions.

12470 CSOC 2600/447

POLAND

## BAKA SUMMONS FIRM EXECS FOR NEW TAX RATE BRIEFING

Warsaw ZYCIE GOSPODARCZE in Polish No 50, 11 Dec 83 p 2

Article by Urszula Zatorska: "More Questions Than Answers"

(Text) According to a representative of consulting firms on reforms, the government will present the Sejm with an amendment concerning new tax rates. The amendment will allow for an increase of from 40 to 45 percent, allowing for an eventual tax base of 60 percent.

After a 6-month break, this meeting of Wladyslaw Baka with the representatives of the consulting firms had a character different from previous meetings. Previously, a minister held a meeting with directors to listen to their opinions and criticisms. This time the directors listened to a representative of the central administration. The answers and explanations regarding what is new in the implementation of reform were very long. There was not enough time nor enough preparation for a frank discussion and exchange of views. There were a lot of questions but few answers. The directors of the enterprises returned to their places of work more confused than they had been previously.

The new rates for enterprises were supposed to have been published in late October, but the new rates for this year have not yet appeared. A few proposals have appeared, but several important documents are lacking. For example, the proposal for a salary experiment is missing. Likewise missing is the Council of Ministers decree on the new tax rate for the FAZ <u>(Nocational</u> Activation Fund) and income tax relief, information that is of special interest to the enterprises. But how can these acts be enforced when most proposals for tax issues are just now coming before the Sejm (see ZYCIE GOSPODARCZE No 47/1983)?

Nothing is changing despite the earlier announcement about a formula for measuring net sold production. "We wanted to simplify the measurement before reducing the scope of price calculations," stated Professor Zdzislaw Sadowski. "The price movement continues to be large, however, and change in the method of calculation could be manipulated. We therefore propose to change nothing for the time being. But the issue is not exaggerated."

As is known, the fundamental measurement is net production. However, there are areas where the measurement is sold production (gross). As was stated

by Baka and later by Sadowski, there has been a wide range existing between net production and sold production One can suspect that these differences have resulted not from greater efficiency but rather from manipulations evident only in more in-depth analysis. This is why in 1984 a greater than five-point difference between both factors should act as a signal for control before moving the salary mechanisms. "With such a range, an enterprise will be under suspicion," stated a representative. As a protest, Professor Sadowski stated that sanctions would not be imposed, but rather an investigation would be started.

Who could have suspected that the first subject to cause controvery between the enterprises and the authorities would be the decision concerning PFAZ <u>(State Vocational Activation Fund</u>). The formula basing a portion of this year's (1983) salary structure on a base in 1984, adopted by FAZ, shocked the enterprises and presented them with a fait accompli. If they had known about the modification earlier, then another salary policy could have been used.

"Today we should know the reasons for creating the base for 1984 to 1985, and not learn about it in the year of operation," stated Zremb representative Karolina Russ.

"If the proposal is to become actual, then it should not be before 1985," demanded a representative from MZK <u>(Municipal Transportation Plants</u>) in Warsaw.

"The base for next year should be, if we accept the proposed principle for its creation, not at the FAZ zero level but at the 40-60 percent level," stated others.

There were also questions about what will come of FAZ in subsidized enterprises. Will free Saturdays enter the picture "without being FAZ'ed" to the base? Are the authorities aware of the situation existing in enterprises where production has not fallen in previous years?

Minister Baka responded, "It would have been better if information on FAZ calculation principles had appeared in February of this year and been submitted to the enterprises by September, but not in November or December." It appears from the comments that no one was convinced by this line of reasoning.

The representative from the Ministry of Labor, Wages and Social Affairs, responding to some of the questions, confirmed that it was most likely that the scale of obligations for FAZ would be sharpened. It is planned that certain branches defined in the Central Annual Plan would benefit from a raised correcting coefficient. Quotas resulting from relief to recognized enterprises will go into the base for next year and relief granted during the course of the year probably would strengthen the base after calculating the results for the entire year. Additional quotas free from tax obligations will be sent next year to the enterprises that have small possibilities for growth in production. These decisions will belong to the Ministry of Labor, Wages and Social Affairs. A mechanism for equalizing the disproportion in salaries is not foreseen, however.

The principles of the salary experiment were discussed by Minister Baka. The experiment will not be a modification of resolution 135/1982, as was thought earlier. It will bring completely new conditions for shaping salaries. The enterprise will receive a set of defined standard minimal salaries from the authorities (upper levels will not be restricted), and on the basis of knowledge of one's own structure, the enterprise will set its own salary structure. Self-government, the director and trade unions are to participate in this procedure.

Another issue was the taxing of enterprises. It appears from the questions that the principle of going from a progressive tax to a flat-rate tax is acceptable. The only ones who are most concerned are those who will have to pay more next year. From where was the 60-percent tax rate derived? Minister Cias explained this by stating that based upon the current progressive tax structure, enterprises pay approximately 62 percent of their profit quota. This is why the flat-rate tax is set at 60 percent--it is the minimum that will guarantee the budget at a minimum level.

So as to avoid financial problems, enterprises now paying a smaller tax will be allowed to reach the new level by stages. The amendment discussed earlier in this article deals with this issue for these enterprises now paying the lower tax.

The last subject of criticism was the numerous relief mechanisms in the income tax. The excessive number of preferences destroyed the principle of relief as a practical possibility for action by enterprises. Minister Cias responded that in 1984 there are only 5-7 relief articles anticipated, i.e., relief for enterprises undergoing modernization investments or investments in the area of environmental protection or export. The latter should be especially desirous.

The responsible corrections and modifications, in the view of Minister Baka, have to strengthen the stimuli to encourage the enterprises to expand needed production for consumers, reduce unused raw materials surpluses, increase employment and create conditions to enter the next phase of reform in 1984. "Will it happen?" This was the question circulating among the meeting's attendees. After all, modifications for 1983 were designed to accomplish the same goals.

9807 CSO: 2600/449 MEMOIR BY FORMER GIEREK ECONOMIC ADVISER REVIEWED

Warsaw PRZEGLAD TECHNICZNY in Polish No 1, 1 Jan 84 pp 27,28

[Review by Andrzej K. Wroblewski of book "Marzenia i rzeczywistosc czyli anatomia polskiego kryzysu" [The Dreams and the Reality or an Anatomy of the Polish Crisis] by Pawel Bozyk, Panstwowy Instytut Wydawniczy, Warsaw, 1983, 20,000 copies, 322 pages]

> [Text] The book by Gierek's adviser, at the time considered the power behind the throne, is such a sensational event that it is worth writing about even a few months after its appearance on the market. Had it been the sort of market that Bozyk and other economists dream about, the fifth edition already would have come out. Tens of thousands of Poles that are unable to buy kielbasa, a television or a ticket to Greece, at any rate, would like to buy the book that would tell them whom they have to thank for this.

Will their curiosity be sated if they read the book? Yes and no. Bozyk writes drily but competently and, in my judgment, accurately. And I am in a position to judge, for I too yielded to the great hopes of the 1970's and I saw, if from a greater distance, what was happening. Moreover, I knew the author and heard his assessments of reality before the great seal of secrecy cracked and everybody began to show off how perceptive they were.

And so, the reader learns from his book what was the economic reality and what were the dreams of the ruling team--in other words, what the author promised in the title and delivered. On the other hand, he will not find out who supported whom and who opposed whom, what were the horizons of the people that determined our lives and whether they were overcome by moral reflection and were tormented by the burden of responsibility when the roads of what was planned and real life diverged more and more greatly. He will not even find out how and why Bozyk was made an adviser and secretary! In my opinion this is an issue of prime importance, not so much with regard to political significance as the reader's credibility. That is why this is the first question I put to Pawel Bozyk during what was probably our last interview.

POLAND

That interview was so unique that I would like to spend more time on it. In September 1980, Poland was a completely different country than it had been a month earlier. The name of Bozyk is frequently mentioned as the person that pushed Gierek to make crazier and crazier investment decisions, toward power politics and toward getting into debt. I had known him for a number of years and while I knew what he thought, I did not know whether he told Gierek what he had told me. I asked him whether he would give an interview and I heard that he would when his request to resign (submitted to Kania, since Gierek was already out) would be considered.

That happened at the beginning of November. A problem arose concerning where we would hold our interview, since Bozyk no longer had his own office and he carried around the materials that were formerly in a safe in his briefcase. Thus, we agreed to meet at my home. This divested the interview of its formality, and immediately I asked him how one becomes the adviser to the first secretary. He replied that he received a phone call from Gierek's office requesting that he come for an interview. Previously he had been the director of the Institute of Trends and Prices and an SGPiS [Main School of Planning and Statistics] scientific employee. The secretary proposed that he come to work for him, stressing that he was not seeking applause but critical assessments. Later he always listened to such assessments and did not cut them off. At most, he stressed their positive aspects.

Today, however, from the perspective of time, it is not this part of the interview held as we sat on my sofa that seems to me to be the most important. Allow me to quote an entire section of the interview that was later published (POLITYKA No 29, November 1980):

[Question] "Did you become bored with wasting your breath? Were you never tempted to leave? Did you not fear that if the catastrophe that you predicted came, you would not wriggle out of the responsibility for it?

[Answer] One member of our team, Prof Janusz Beksiak, proposed leaving the party last year and then us after this. I believed that for me to leave would be a capitulation. Why should I capitulate if I was right? I wanted to struggle to avert a catastrophe.

[Question] But how could you believe that this struggle would do any good?

[Answer] To tell you the truth, before the Eighth Party Congress, I told Gierek that I wanted to leave. Jarosiewicz's resignation stopped me. At the first meeting with the team following the congress, Gierek said: 'We ought to have done that 2 years ago.' Moreover, I was able to get a paragraph on economic reform put into the text of the congress resolution. In a word, there was some hope."

And so, the moral qualms--to be or not to be--that are eternally present and are debated so much today are really absent from the book. Bozyk mentions Beksiak's departure, but he does not write what he felt or thought then. He did not even add what he had told me 2 years before. The weights and measures that are an engineer's or an economist's tools are not enough for the solution of the dilemma that he and dozens of others in the establishment faced and still face today: to be inside is to share in the burden of responsibility; to be outside is to surrender one's influence upon the course of events.

And Bozyk crossed this boundary. Once a politician, he is now a private citizen. Once unshakably a believer in the principles of the system, today he asks questions publicly that were formerly considered revisionistic: can a planned economy function effectively, can the market operate under a monopolistic production structure, were the authorities right where contemporary Poland is concerned (for it is easier to quarrel with the past), can the reform succeed given the conservatism of part of the administration? He is a different person now. Like many of us, he found things turned around in his head at the beginning of the 1980's. Bozyk appears to believe (although he does not say this outright in his work) that socialism ought to prove daily that it is the right system for Poland and should not accept this once and for all as a tenet of faith.

Perhaps I am not overly perceptive as a psychologist, but I received the impression that Bozyk sat down to write his book intending it to be apolitical. He quotes a great deal of statistical data (perhaps too much) and many articles written by others, clearly refraining from hearsay and subjective judgments, so that someone that would really like to read the book to find out what actually went on might be disappointed. What's more, except for the names of Gierek and Jaroszewicz, he mentions no one else. He writes only of the impersonal "lobby," the pressure groups, with a single exception--the minister of the machine engineering industry, for whom he has such an intense antipathy that he could not help himself. But this part of the book is not the meat of the book.

Only later does the author warm up to his subject. He seems to conclude just as he is writing that effective economic reform is impossible without political reform. We see a broader background, we read fragments of official pronouncements, but we also read the writings of "independent economists" and other groups that are clearly disturbed by the continuing crisis.

Today we know that they were right, and Bozyk quotes their words manifesting greater belief in them than in official pronouncements. It is striking that he does not seize the opportunity to clear himself and the other advisers, quoting reports submitted to Gierek. Of course, he does quote fragments of these reports, but not too liberally. If I remember correctly from my reading of these reports in their entirety, they contained more material that would have served in his defense.

Perhaps the author realizes that in a game for such high stakes, or rather where responsibility for a crisis of such proportions is concerned, it is not enough to prop oneself up with the words "I wrote thus and so." And although in general the reviews of this book charged Bozyk with allegiance to the throne, I have a better opinion of him.

One more comment about the antipathy to the minister of the machine engineering industry, Tadeusz Wrzaszczyk, that was mentioned previously (an antipathy that was mutual). I knew him personally as well, but this is not the place

for a character analysis, which is not the reason for the antipathy. Wrzaszczyk was a typical representative of the engineering-managerial mode of thought. He was not interested in how much something cost, but in whether it could be done technically. Once when I was in his ministerial office, our conversation was accompanied by a loud pounding on the walls. The minister explained that they were putting in a modern computer system that would tell him at the touch of a button everything that was going on in his plants. I asked where the money was coming from for this.

[He replied:] "I appropriated a little from each of my associations. It had been earmarked for other purposes, it is true, but I appropriated the monies brutally." Bozyk writes about this and other information systems born of the brutal, helter-skelter appropriation of monies. These systems were supplied by foreign firms that split the ministries of the Polish government among themselves: IBM sold to the machine engineering industry ministry, ICL supplied the mining ministry, Singer sold to the ministry of communications and the like. An enormous sum of money was laid out unnecessarily. Nowhere else in the book is there expressed so graphically as in this statement the basic thesis of Marxism that new tools of production (and what else are computers?) require a new organization of production forces, or to use more modern language, a new organization of the economic, the state and the party apparatus. The antipathy of the two former state employees is the antipathy of two views, the engineer's and the economist's. There is no question but what the economist's view takes precedence.

Bozyk writes, unfortunately too late, about how the other viewpoint predominated. He writes how Gierek received the news of our growing debt with similar indifference, believing that things somehow would work out. He writes how the great miracle play of Polish technology was played out and how the authorities and society were shown foreign products installed in Poland as proof that Poland could manage. He writes how new rail lines were built and new automobiles were produced, replacing an improvement in the organization of the existing network and transport fleet.

Obviously, the phrase "too late" does not belong here. The reports destined for Gierek and the other Politburo members were not handled with kid gloves, although at the time Bozyk did not write as openly as he now writes for the general public. At that time, during the 1970's, could anyone have imagined such a book or even a short article of this sort in official circulation? While honesty in assessing our national economic disaster has come to a sharp halt recently, the very fact that this assessment of dreams and reality has come out in 20,000 copies and has not remained strictly a secret intraparty document makes one guardedly optimistic.

8536 CSO: 2600/529 AGRICULTURAL PLANS FOR 1984 ANNOUNCED

### Planting of Crops

Warsaw GROMADA-ROLNIK POLSKI in Polish 10 Nov 83 p 1

[Text] The year 1984 will be the first in which the agricultural and food industry will realize its development program up to 1990. The plan is to increase the grain growing area to no less than about 57 percent of the crop structure, which together with the plan for higher harvests should ensure a higher field than that in the year 1983 and therefore also a further decrease in imports.

At the same time, steps have been taken for the expansion of the growing area for oil plants to 348,000 ha and that of the edible podbearing plants to 38,000 ha, whereas the sugar beet production is supposed to be maintained at the 1983 level and that of potatoes to be increased to about .. [?] million tons, which is fully realistic given better conditions for their cultivation than in the years 1982 and 1983. The harvest of grain and other cultivated plants that was good in 1983 provides favorable starting conditions for achieving a further improvement in vegetable production in 1984.

On the other hand, in animal production, after an enormous decrease in the number of farm animals, especially in that of hogs at the end of 1982 and in the first three quarters of 1983, one cannot expect any tangible improvement in the situation.

It is being assumed therefore that the main task is to prevent a further decline in the number of livestock, stabilization of animal husbandry, and creation of conditions for systematic development in the raising of farm animals in the next years. It is also assumed there will be a slight increase in the number of hogs, chiefly toward the end of 1984, maintenance of the 1983 level of the number of cattle and a further increase in the number of sheep to at least 188,000.

As a result of various measures already undertaken in 1983, aimed at the increase in the poultry production, an appreciable increase in slaughter poultry deliveries is expected in 1984. This will not compensate, however, for diminished meat deliveries resulting from a decline in the number of hogs and young slaughter cattle, but thanks to the accumulated reserves and supplemental

POLAND

imports of meat, it is expected that the regulated norms of supplying the population with meat can be maintained.

By comparison with 1983, there will be an improvement in the market supply of fats as a result of a 20 percent or higher increase in vegetable oil deliveries which is being planned. At the same time, to supplement animal protein, deliveries of comestible eggs will be increased by at least 3 percent, that of food milk by over 3 percent, of dairy products by over 2 percent and maybe more.

The good vegetable crops of 1983 provide conditions for a better market supply in 1984 in foodstuffs other than meat and for the lifting of controls on grain products. To cover the eventual increased demand for grain products, after suppressing the control of their sale, it will be possible to increase the flour supply by 188,000 tons, groats by over 88,000 tons, and that of macaroni by more than ten thousand tons.

Considering the limited possibilities of wheat imports there will be less wheat bread, whereas there will be a considerable increase in the production and supply of rye and mixed bread with considerable content of wheat flour and rye whose purchase in 1983 was considerably higher than the planned one. The prospects of supplying the market with fruit and fruit-and-vegetable products are also good.

A good 1983 harvest of the sugar beet guarantees that the sugar production will be maintained at its high 1982 level, and therefore it will be possible to increase deliveries of sugar to the market by more than ten thousand tons in 1984. On the other hand, the deliveries of chocolate products, because of limited possibilities for cocoa bean imports will be maintained at the 1983 level.

The requirements for tobacco and spirits will be fully covered.

Raising of Livestock

Warsaw GROMADA-ROLNIK POLSKI in Polish 20 Dec 83 p 1

[Text] At a press conference held at the Government Press Office with the participation of Stanislaw Zieba, Minister of Agriculture and the Food Industry, an appraisal of the current situation in agriculture was made and against this background the ministry's plans for 1984 were outlined.

The 1983 harvest of agricultural products points to a favorable tendency in the vegetable production. Considerably worse is the situation in raising livestock. As is well known, the census of animals of June 1983 has shown a decline in the number of hogs by 20 percent and that of cattle by 5.4 percent. Also, it is not much of a reassurance that in recent months we have entered--as defined by the Ministry of Agriculture--"the phase of a delayed restoration of the number of hogs." On the other hand it is gratifying that there has been an increase in the impregnation of gilts and in prices of piglets in the turnover among farmers. There has also been a decrease in the offer of slaughter calves

for procurement. The farmers have decided to raise calves selected for slaughter and procurement by POZH.

Of paramount importance in raising the number of animals to previous levels will be a development of the fodder base, especially an efficient use of the available feed grain concentrates and components with high protein content. It is of great importance, for in 1983, compared to 1980, the import of those feeds declined from 9 million tons to 3.7 million tons.

It is expected that in 1984 the purchase of slaughter hogs will decrease by 105,000 tons, and there will likewise be less slaughter beef offered for sale. To maintain the current norms for meat, steps were taken toward increasing the production of broilers as a result of which there will be 90,000 tons more poultry on the market.

The Ministry of Agriculture is taking multidirectional measures to bolster livestock raising. What, then, can the farmers expect to be done?

As of 1 Jan 1984 subsidies for animal breeding stock for cattle, hogs and sheep are being resumed. Budgetary subsidies can also include the production of pod-bearing plants, sets, and grain for a planned renewal. These decisions are a result of the appraisal by the Government Presidium of the Council of Ministers resolution on the support of the biological progress in agriculture.

Envisaged is an increase in the supply of the concentrated feeds by one million tons, which will permit the increase of their allotments not only for porkers but also for gilts and piglets.

It is intended to develop the production of domestic plants with high protein content, chiefly pod-bearing plants. In the production of concentrated feeds the surplus of defatted powdered milk will be used to a greater extent than before as well as protein from fodder yeast and casein and slaughter waste from the meat industry.

The production of mixtures with medium protein content for grain delivered by the farmers will be expanded. Mixtures from the service production are to be sold to farmers at official current prices. At the same time the subsidizing of concentrated feeds sold by the State is being maintained despite the fact that the cost of their production--as is expected--will continue to increase.

There will be available the easy credit terms for the purchase of piglets, shoats, young gilts, heifers, and similar breeding stock for the animal production. This means the availability of a 5 percent credit, i.e. low cost credit to all breeders.

The previous classification principles of slaughter hogs for procurement is being maintained. The thing is that, given the small number of piglets and greater amounts of potatoes, one should not punish the breeders for higher weights of porkers.

The allotment of coal per porker is being increased from 200 to 350 kg. Farmers that would not purchase their due amount of coal will receive an equivalent value of 600 zlotys per ton.

1015 CSO: 2600/474 SPECIAL LEGISLATION BRINGS REFORM TO LOT AIRLINES

Warsaw TRYBUNA LUDU in Polish 23 Dec 83 p 4

[Article by Andrzej Kozminski]

[Excerpts] A bill on the state-owned LOT Polish Airlines will soon be submitted to the Sejm. By defining the legal principles of this enterprise's activity, the new law will fill one more gap in the laws pertaining to economic reform.

It should be kept in mind that the laws on state enterprises and self-management do not apply to LOT, just as they do not apply to such enterprises as, for example, Polish State Railways or Polish Post, Telegraph and Telephone.

This does not mean, however, the LOT has been totally exempted from the economic reform's regulations, as other laws concerning state enterprises-for example, those on socio-economic planning, finance or state statistics-are binding for.

Work on the first bill on LOT began as early as in 1981, under pressure of the battle over filling the vacant post of LOT's managing director, which was waged by the Solidarity-dominated Conference of Workers' Self-Management which then operated at the company. The torrent of demagogic slogans and demands included charges that LOT's economic system was bad, and that the enterprise was facing bankruptcy. None of these charges were true.

In reality, since 1977 LOT had been governed by an economic system generally similar to the canons of the present economic reform. The enterprise prepared its annual and five-year plans independently, guided only by a longterm plan worked out jointly with the Ministry of Transportation. This independent planning was an instrument of effective management.

LOT was no longer bound by mandatory performance indicators imposed from above. Nobody forced on LOT any plans regarding profit, volume of transportation, employment or wage funds... The only exceptions were investment limits concerning imports and crucial tasks. Directive indicators were replaced by norms such as those tying the volume of the wage fund to the enterprise's economic results.

60

a de la companya de l La companya de la comp POLAND

Never, not even now when fuel prices and airport charges have increased beyond measure, has LOT faced bankruptcy. What is more, LOT is the only carrier subordinated to the Transportation Ministry which is not subsidized by the state. [...]

LOT's exclusion from the fundamental laws on the economic reform, i.e., those on state enterprises and on workers' self-management, is dictated by this enterprise's specificity, which is so greatly different from other, more typical ones that it requires a separate legal regulation.

LOT operates not only inside Poland but also on routes reaching far beyond the Polish borders, to four continents. It carries passengers and cargo within the world aviation system, which means it has competition and must abide by rules laid down in multilateral and bilateral international agreements. At the same time, LOT is part of the domestic transportation system, which is centrally coordinated and supervised, and which serves the transportation needs of the national economy and the public. Last but not least, as an air transport enterprise, it is important to the country's defense.

Therefore, LOT requires a specific organization of management and special state supervision in order to secure flight safety as well as reliability to meet the needs of society, the economy and defense, as well as to honor international agreements and commitments.

Yet, this does not rule out application of all those legal provisions on state enterprise and workers' self-management which are not in conflict with the legal regulations dictated by LOT's specific nature. The new bill on LOT complies with this idea.

Under the law, LOT will be an independent, self-managed and self-financing enterprise, with those limitations on its independence and self-management which are dictated by its specificity and the role assigned to it in the national transportation system. As in any other enterprise, the organs of its authority will be the managing director and the assembly of delegates and workers' council which constitute a two-level workers' self-management body.

For the above reasons, however, the state must have special powers of control over LOT's operations and development. On behalf of the state, this role will be fulfilled by the parent body, i.e., the Minister of Transportation. He will be entitled to approve of the enterprise's statutes, and to assign to it tasks dictated by the country's defense needs, by natural disaster or by international commitments. The Transportation Minister will also have authority to hire and fire the managing director, upon consulting with the workers' council; possible candidates for hire must go through a competitive selection procedure.

Still, in compliance with the principles of economic reform, the minister will be allowed to interfere in LOT's affairs only to the extent envisaged

by appropriate laws or international agreements. LOT will be entitled to indemnity for losses incurred due to the minister's decisions. In case of a dispute, LOT will be allowed to sue the minister.

In its present version, the bill also extends the scope of LOT operations. Along with transporting passengers, luggage, goods and mail on its own regular or charter domestic and foreign flights, servicing foreign aircraft arriving in Poland, and supplying meals or bus services between the city and the airport, LOT will also be free to organize holiday excursions. It will also be allowed to engage in other forms of activity that would raise the effectiveness and standard of its air services and comprise servicing, commercial and production tasks.

The bill on the state enterprise LOT, while meeting demands due to its specific conditions, does not exempt it from the requirements of the nationwide economic reform. LOT will fulfill its tasks as an air carrier while engaging in suitable additional activities, albeit controlled by somewhat different instruments than other enterprises, and with certain powers retained by the state authorities, but still in agreement with the principles of economic reform.

CSO: 2600/554

POLAND

SMALL, PRIVATE TRADES-CRAFTS SUSPICIOUS OF GOVERNMENT INTENTIONS Warsaw PRZEGLAD TECHNICZNY in Polish No 50, 11 Dec 83 p 15

[Article by Agnieszka Wroblewska]

[Text] "There are regulations, there are possibilities, what is missing is initiative," declared [Reform] Minister Wladyslaw Baka to a gathering of the Economic Reform Commission's working group for small-businesses and private trades. "It is obvious that formal incentives aren't enough," he went on, "we have to find people who are prepared to take on difficulties and overcome them."

But where are these people to be found? "We have to draw on the sociological factor," said the minister.

During the discussion, Jan Wejchert, who has considerable experience of involvement with Polonian companies, returned to the subject that had caused the minister to voice his concern. "Achieving success is a risky business here in Poland," Wejchert observed. "Success is viewed with suspicion. So why should we expect people to show initiative? The various difficulties have made people tired."

Generally speaking, the situation is not disastrous. Favorable legislation and appropriate incentives have revitalized small businesses. The statistics indicate that market deliveries have increased by well over ten percent, but much more important than this is what everyone can see with his own eyes. The overwhelming majority of manufactured goods in the shops come from either small public-sector factories or from the private sector. If one day this small-scale production suddenly vanished, the only thing Polish shops would have to offer would be their floor space. Polish consumers know that largescale industry has been developed in this country, they often see it on TV or read about it in the newspapers, but they seldom find its products in the shops.

The crisis has provided small businesses with a great opportunity. The difficulties have released people's initiative. The effects of this are visible but this still isn't the pace of development that the exhausted nation is waiting for. Progress is too slow--everything is too scarce, too expensive, and of poor quality as well. The regulations we have are favorable, claims Minister Baka, demand is enormous, there's no lack of people wanting to make money, so why are people unwilling to show initiative? Recently there has even been talk of stagnation or decline in this sector of the economy.

First there is the problem of raw materials. It is difficult to sustain dynamic development when raw materials are scarce. Small businesses take between 1 and 20 percent of the total national supply of raw materials, which in theory is a substantial amount.

In practice, however, some branches of production are dying out. For example, out of the 11 million liters of fuel needed by private trades, they receive a mere 3 million. So private tradesmen have to obtain additional materials from the public sector, sometimes resorting to dubious methods in doing so, as miracles such as the changing of water into wine only happen in the Scriptures. In theory, all sectors of the economy are to have equal access to supplies--everyone has an equal right to submit tenders for them. Manufacturers say that, in practice, it's easier to purchase sheet metal or timber for hard currency in the West than to get these things in the country. Little progress has been made in recycling raw materials or regenerating old equipment.

Then there is the problem of taxes. The country is in the grip of a crisis, and the authorities are only too eager to tax those who are better-off. It's very easy to bend the stick too far here, i.e., to become the victim of one's own greed. We already have the first example of this--instead of increasing services, the new tax system is producing a drastic reduction in them. Society is too poor to pay any more for services, so they seem set to become the preserve of the financial elite. Services are too cheap for those who offer them and too expensive for those who need them. Given that when equipment breaks down there is nothing to replace it with, that there is a shortage of clothes and so old ones have to be altered, that shoes have to be mended and houses repaired, how are we going to get by without services?

The Guma cooperative in Lodz, which reconditions tires and enjoys an insatiable demand on its services, has had to cut back production to one shift, because three-shift working would mean all its profits were lost in taxes. Representatives of Polonian companies anticipate that the recent tax changes will make exports decline so rapidly that there will be no export revenue allowances to share out. Making profits won't be a paying proposition either, so next year Polonian companies will probably pay the Treasury less in tax than they did this year. Who is going to benefit from this?

"Don't bleed with taxes those who don't show a profit yet are investing," appealed Jerzy Strzelec from the Kielce cooperative movement. "We aren't demanding any subsidies, but please don't take away so much of what we work so hard to earn," said a representative of the Katowice cooperative movement.

The project to replace the present progressive tax with a proportional one aroused fierce controversy. The poorer and less resourceful will have to pay more, while those who are capable of producing more will not be penalized by heavier taxes. This is in keeping with the spirit of the reform, because it encourages people to mobilize their energies. If this went hand in hand with adequate supplies of materials, and if other restrictions on the use of premises and on employment didn't hold back development, then one might really be inclined to believe that the new tax system would introduce a process of natural selection among manufacturers. But in the present circumstances, there are good grounds to fear that those who will come out on top are not those who are really better, but those who are capable of using devious methods and personal contacts to set themselves up in better conditions of development.

And last but not least, the political climate. Are we really certain and serious about our readiness to pay people according to their work and abilities? At this national conference, representatives of small business, voiced their concern at the avalanche of amendments to the reform, suggesting that the original principles of the reform were now under threat. "If the patient has been making good progress why do we want to operate on him?," asked Jaroslaw Korusiewicz, a private tradesman. He quoted three official statements which quite unambiguously expressed a desire to suffocate private trades with taxes.

Later on, the chairman of the conference said that people were overreacting to these statements. Maybe they are. After all, everybody has a right to say what he thinks, so these three statements can be treated as an expression of personal views, which are in no way binding. Except that the experience of the last few decades shows us that personal initiative has often been stifled. So perhaps these misgivings are exaggerated, but there is certainly no lack of justification for them. Deputy Prime Minister Edward Kowalczyk told the conference that small businesses should be regarded as an integral part of the socialist system; meanwhile, small businessmen study official statements and speak of historical experience.

The conference of small businessmen was to have a consultative character. Small businessmen and government representatives were to meet together and discuss the future of the reform. However, there is no full unity of interests. The audience was in an attacking mood, sensing that its positions were in jeopardy; they loudly proclaimed their lack of faith in the good intentions of the authorities. It was apparent that they are suspicious of any changes to the current regulations. The feelings of this sector should not be disregarded.

The Economic Reform Commission has no easy task ahead of it. When representatives of big industry gather in this same government conference room, they defend their reputations and attack small businessmen for their greater profits and privileges. More often than not, these privileges are nothing other than the effects produced by the laws of economics. Small businessmen are better at gearing production to meet current demand, and thus achieve a quicker return on investment. Big industry, unable to compete against them, then starts crying out for protection. However, if we are to achieve a genuine reform, not just a superficial one, all sectors of the economy have to be given equal rights and equal opportunities.

Eager to find some cure for the situation, the chair proposed that a chamber for small businesses be established. But the audience wasn't taken with the idea. "We don't need another official institution. What we need are conditions that will let us function normally."

CSO: 2600/553

POLAND

## HARD CURRENCY DEPOSITS UP FOR 'PKO' SAVINGS BANK

Warsaw TRYBUNA LUDU in Polish 30 Dec 83 p 8

[Article by Zofia Skowron]

[Text] The new hard-currency law passed by the Sejm a few weeks ago preserves citizens' full right to keep and dispose of hard currency assets in bank accounts. Pertinent implementing regulations are currently being introduced.

The law has aroused considerable public interest. When implemented, this law may help increase public confidence in the Pekao [PKO--General Savings Bank] Bank which, among other things, keeps Polish citizens' foreign-currency accounts in Poland. The law should also spur Pekao's activities to the benefit of citizens and the state alike.

Early in 1983, as rules for keeping hard-currency bank accounts gradually liberalized, deposits increased substantially (by about 50 million dollars).

Also during this year, an upward trend has been observed in hard-currency acquisition abroad. Money acquired this way was intended to finance what are called "internal exports" [sales for hard currency inside Poland] via the Pekao Trading Corporation (of which the Pekao Bank is one shareholder).

This can be confirmed by the corporation's performance in the United States, where it has been operating since 1948; in New York and Chicago--two cities with large Polish communities--it operates two offices with some 280 brokers.

The now guaranteed legal security of hard-currency accounts in Poland is expected to increase indirectly hard-currency acquisition by the Pekao Corporation abroad.

Its acquisition record was broken in the years 1979-81. The situation that ensued in Poland, including a blocking of private hard-currency accounts, was of course bound to affect adversely the corporation's foreign operations. The 1982 acquisition volume dropped below its 1981 level.

However, one propitious sign for the corporation's present and future is that, despite particularly unfavorable circumstances, the 1982 acquisition figure was 25 percent above the 1978 one. Acquisition tended to go up, as shown by sums collected in 1983 when, despite the corporation's complex situation, it was gradually recapturing the market. Pekao's difficulties stem, on the one hand, from the Reagan administration's unfriendly policy toward Poland and, on the other, from Polish producers' inability to offer a wide enough range of goods to prospective buyers.

According to President K. Latopolski of Pekao's New York branch, for hardcurrency benefits to the state treasury it is extremely important to expand the range of goods sold by Pewex and Polmot, and to speed up handling of the corporation's orders by Polish producers. Latopolski suggests that a special state-owned firm should be founded for handling Pekao orders and for taking over profits on behalf of the treasury.

An example of Pekao's competitors--Polonian firms which took over Pekao's licence for order handling--shows that in this field too greater efficiency is possible (e.g., they deliver goods to the addressee's home, take care of transportation in cases of complaints and guaranteed repairs, etc.). Polish state-owned firms specializing in delivering goods ordered by Pekao could operate as effectively to the advantage of the treasury.

CSO: 2600/551

## DEMOGRAPHIC ANALYST COMMENTS ON RECENT BABY BOOM

Warsaw ZYCIE WARSZAWY in Polish 16 Dec 83 p 3

[Interview with Dr. Wladyslaw Konrad, acting director of the Department of Demographic Studies at the Central Statistical Office [GUS], by Krystyna Lubelska]

[Text] [Question] Doctor, did demographers foresee the baby boom of the last two years?

[Answer] The population forecast made by GUS anticipated a high number of births, although it must be said that we underestimated this number. For instance, we had forecast that 675,000 children would be born in 1982, when in actual fact 702,000 were born. Unfortunately, the error in predictions for 1983 was more serious. We expected the number of births to fall by 8,000 as compared to 1982, but in fact 720,000 babies will be born this year, a difference of 50,000; this is almost as much as a small town, so the error was quite large.

[Question] Despite this error, the present baby boom hasn't surprised people at GUS, has it?

[Answer] No, it hasn't surprised them, nor any other demographers. Demography is ruled by one simple law--one baby boom produces another. Since the beginning of the 1970's, i.e., since the children of the post-war baby boom began their adult life, we have been witnessing an increase in the birthrate. This is the result of the law I mentioned.

[Question] So why so much concern over the figure of 700,000?

[Answer] I think that at a time of balanced development there would be no problem with an increase in the birthrate of several tens of thousands. However, at the present moment, this constitutes a heavy burden for the country. Right from the start, the newborns have to be provided with appropriate health care, baby clothes, diapers, baby food, and, in the long run, nurseries, kindergartens, schools, textbooks, qualified teaching staff, etc.

[Question] What should the level of national income be for the state to cope with this increase?

POLAND

[Answer] Professor Rajkiewicz formulated the thesis that a one percent increase in the population requires annual two percent growth in national income.

There is no doubt that the high birthrate in the 1970's and at present will create many difficulties for the Polish economy. For example, according to estimates, Poland's workforce will grow by 1 million in the present decade. In 1976 prices, every new job costs about half a million zloty. To be sure, in the years 1971-75, the number of people of an employable age grew by 1.7 million, and jobs were found for every one of them, but that was a time of economic prosperity.

At the same time, in this decade primary schools will have to accommodate a million more children. In the 1960's, in a similar situation, Poland launched a "Thousand New Schools for the Thousandth Anniversary" campaign. It seems that now we shall resort to another solution, namely a shift system in schools.

[Question] Doctor, why is it that more children are born in of years of hardship? Apparently in 1955, when 800,000 babies were born, the economic situation was also bad and people were poor.

[Answer] The baby boom of the 1950's was a reaction to World War II. At that time, compensatory tendencies appeared, in the form of so-called postponed births. This was followed by the so-called process of demographic transformation which consisted of limiting the average number of children in a family. For example, a family with two children became the established pattern in the 1960's.

[Question] Has the average number of children in the family grown recently?

[Answer] Statistically, urban families stick to two children. In rural families, there is, on the average, one more child. This has been the case for many years.

There are more births in Poland because there are many young women of reproductive age, whereas the family pattern does not change.

[Question] In Boland, there is a whole system of privileges related to motherhood. What influence do you think it has on the decision to bear children?

[Answer] I believe that childcare leaves, and especially childcare benefits, induced people to have children earlier and, in particular, they resulted in shorter intervals between children. Polish women are among Europe's most active professionally and they are unwilling to give up work, both for financial reasons as well as ones dictated by ambition. That is why, with the tendency to have two children, it pays to have them quickly and then return to work quickly. I must warn people: the shortening of so-called intergenetic intervals can later contribute to a rapid decline in birth rates.

Our figures indicate that the population increase in the countryside last year was bigger than in towns. This year the situation has changed. This corroborates the thesis that this is the effect of childcare benefits. The latter is particularly effective in low-income families, where the difference between the wage and the benefit is not that great. Meanwhile, the countryside has not been included in the system of benefits.

[Question] Doctor, Polish society, which was once one of Europe's youngest, has been slowly growing old; many people retire early, the number of pensioners has been growing. In this situation, is the large number of births a real calamity?

[Answer] From the point of view of the economic situation of the coming years, such a large number of children is, as I said, a considerable burden for society. One might say that it impoverishes the society as the national income, which is insufficient anyway, has to be distributed among an increasingly large number of statistical heads. However, in the late 1990's, we will certainly face a better demographic situation than many other European countries, such as, for example, West Germany, Denmark or Hungary. Then Poles will be a younger society than the others, with 56 percent of the population of an employable age.

[Question] In that case, don't you think that the current tendency to have children should not be opposed?

[Answer] In my opinion, any resistance to natural tendencies can have a harmful effect in the future and lead to a rapid decline in the birth rate. Decisions to have a child are made at the family level and, together with the growing number of children, the family, just like the state, will get poorer. That is life. To some extent, the present situation has been an outcome of psychological factors, such as a return toward family life, a return to permanent values and ties. I believe, however, that this is merely a temporary reaction, because I think that material conditions will be a serious barrier to further family growth.

[Question] What are the GUS forecasts regarding births in the years ahead?

[Answer] We expect that the number will be declining and, after 1990, will settle at around 600,000 a year.

[Question] From what you have said, I infer that you consider the present demographic situation to be perfectly normal, or, at any rate, one that gives no ground for anxiety.

[Answer] If we were a society with as many older people as in West Germany or in Sweden, then, obviously, considerably fewer children would have been born in Poland. In the majority of European countries, the overall population growth is either negative or zero. Currently, there are somewhat more people being born than are dying here. The present natural increase rate is 10 per 1,000, which puts Poland at the top in Europe. Only Albania, Ireland and Iceland are ahead of Poland. Still, I find the present demographic situation normal because it assures a steady growth of the population of an employable age.

Generally, I think we should not discuss how many children there should be in the country, but how many children there should be in the family. Are two children in the family too many or too few?

[Question] Thank you for the interview.

CSO: 2600/552

RESULTS OF JUNE LIVESTOCK INVENTORY CONSIDERED UNFAVORABLE

#### Inventory Results

Warsaw RADA NARODOWA GOSPODARKA ADMINISTRACJA in Polish No 19, 19 Sep 83 pp 24-26

[Article by Krystyna Szelenbaum: "Tendencies in Livestock Breeding Against the Background of the June 1983 Agricultural Inventory"]

> [Text] The results of the June 1983 agricultural inventory survey are unfavorable. The cattle herd was 11.3 million head, lower than in June of 1982 by 0.6 million head. Hogs numbered 15.6 million, a 3.9 million decrease, i.e., 20 percent compared to the preceding year. Compared with the mean livestock figures for the three years of 1978-80, the current numbers are lower: for cattle by 12.9 percent, hogs by 27.9 percent and sheep by 3.1 percent.

The planned targets for 1983 (which were described as pessimistic by some) envisaged that in June 1983 the cattle herd would be 11.9 million head, and the kogs' herd, 16.5 million. The results of the June 1983 agricultural inventory survey proved to be worse than these predictions: the cattle herd was smaller than the planned figure by almost 0.7 million head (i.e., by 5.7 percent) and hogs by 0.9 million (i.e., by 5.6 percent).

Compared to the preceding year, there were also changes in the structure of the cattle and hog herds. They were particularly notable in the private sector, where there was an increase in the proportion of cows and a great increase in the share of feeder cattle and a slight increase in the number of breeding sows in the hog herd at the expense of a decreased proportion in younger age groups.

This structure of livestock herd in June 1983, especially the sharp drop in the number of hogs, is an inevitable result of tendencies that set in around the years 1980-81 and continued through 1981-82 in the development of hog breeding. Among other things, this was due to the long-term decline of piglet prices on the free market in 1982, dropping below the lower limit of profitability of breeding them, cuts in the number of breeder sows, because of increased input for slaughtering, a diminished number of gilts being brought to fertilization stations and low supply of industrially concentrated fodder, as well as high fodder prices on the free market. (These trends are illustrated in the table.)

	1981			1982				1983		
	Quarter			Quarter				Quarter		
Item	I	II	III	IV	I	II	III	IV	I	II
Free-market price, zlotys:										•
piglet, 1 animal	1254	2008	2188	3021	3147	2212	1707	1725	2717	3733
rye, 1 centner	873	1095	1293	1985	2838	3101	2842	2721	2594	2160
potatoes, 1 centner	868	887	763	628	939	1292	1903	1289	1277	953
Ration of pro- curement pur- chase price of 1 kg of slaugh- ter hogs ex- pressed in kg* of fodder	6.7	10.0	10.7	13.9	10.4	8.6	6.7	8.8	8.9	11.4
composition** Purchase of sows, thou-										103.0
sand head As percentage of herd at the beginning of the quarter	8.9				9.2					
Free market price of pig- let expressed in kg of slau- ghter hogs as procurement price	22.4	23.4	25.4	27.5	26.1	17.4	13.5	13.6	21.4	29.4

Table

\*\*According to national average contract prices for pork-bacon hogs. \*\*Composition fodder includes: 0.8 kg potatoes, 1 kg rye, according to free market prices--or 1 kg of "T" mix according to fixed prices.

### Cattle

The decrease in June 1983 of the cattle herd by 0.6 million head (5.4 percent) for the entire agricultural sector versus preceding year was due to the following factors: reduction of the cattle herd in private farming by 0.4 million head (4.1 percent) and an even greater decrease of cattle herds in socialized farming by 0.3 million head (9.9 percent).

In the second quarter of 1983, the cattle herd displayed a much lower seasonal growth of less than 0.2 percent, compared to the average seasonal growth in that period over the last five years equal to 3.8 percent.

The number of cows in June was 1 percent smaller than a year before because of the reduction of this number both in socialized farming, by 2.4 percent, and on private farms, by 0.8 percent.

The status of the cattle herd in June 1983 by sectors is illustrated by the table on the third cover page.

The proportion of cows in both sectors of farming was higher than in June of the previous year, and much higher than the average for past inventories of June 1978-80; this was due to a decreased share of young animals among breeder and feeder cattle. The cows accounted for 51 percent in June of 1983, while in 1982 their share was 49 percent, compared with 46 percent average for 1978-80.

For comparison, in other socialist countries (Hungary, Bulgaria, GDR, Rumania, USSR and Czechoslavakia), where the reproductive capacities of the cattle herd are used in a much more rational fashion, calves are not slaughtered but saved for further breeding, the number of cows in the cattle herd accounts for 37-40 percent.

The unfavorable changes in the structure of the cattle herd in Poland are empiric evidence that the existing proportions in the butcher cattle prices compared to slaughter hogs and dairy products place the feeder cattle breeders at a disadvantage. These proportions are 1:1.3:5.35. As of July 1, 1983, new average procurement prices have been introduced: slaughter cattle (from 91 to 101 zlotys per 1 kg), slaughter hogs (from 127 to 140 zlotys per 1 kg) and milk (from 17 to 18.30 zlotys per 1 liter); the new proportion 1:1.39:5.5 reproduces the previous ratio and does not seem to be an incentive to change that would bring farmers to breed more slaughter cattle.

As far as dairy cattle is concerned, despite a minor decrease (about 1 percent) in the number of cows shown by the June inventory compared with a similar period of the previous year, the basis stabilization is observed. This is confirmed by unchanged levels of prices for cows, heifers on the free market. In the first six months of 1983, the market paid on average 47,000-48,000 zlotys for a milk cow and 25,000-26,000 zlotys for a oneyear heifer; compared to prices from the same season of the previous year, thus, they were even lower by 5,600 zlotys (that is, by 11 percent) for a cow and by 1,600 zlotys (6.1 percent) for a heifer (taking into account the continuing market stabilization and the recovering value of money).

Between January and June of 1983, about 330,000 cows were brought to procurement stations, that is, 2.7 percent less than in the comparable period of the previous year, and 10.3 percent less than the average procurement for 1976-80.

In the first six months of 1983, the procurement of slaughter cattle was 1,240,000, that is, 6.6 percent less than in the first half year of 1982 and 20.9 percent wolf the average for 1976-80.

Analysis of the findings of the June inventory, including the structure of the cattle herd and tendencies in its turnover, indicate that procurement of butcher cattle in 1982-83 economic year could be lower by more than 10 percent.

In the territorial aspect, the decline in the number of cattle towards the end of the first half of the year was observed throughout the nation and was the greatest--8 percent and more--in provinces: Bielsko, Kielce, Krosno, Legnica, Nowy Sacz, Radom, Tarnobrzeg, Wroclaw and Zielona Gora.

Hogs

The decrease in the number of hogs for the entire agricultural sector was 3.9 million head (that is, 20 percent) in June 1983 compared to June of the previous year; it resulted from

--a deep decline in the number of hogs--by 3.4 million (23.7 percent) in the private economy--following a major season drop in the second quarter of 1983; --a smaller reduction in the number of hogs at socialized farms--a drop of 0.4 million head (8.8 percent).

The situation with the number of hogs in June 1984 by sectors of the economy is described by the table on the fourth cover.

A deep decline in the number of hogs in the 1982-83 economic year was a consequence of negative tendencies in livestock that were already seen in 1981, and especially the drop in supply of concentrated fodders from state reserves. In the 1982-83 economic year, private farmers purchased from state reserves some 1.8 million tons of fodder, i.e., more than 2.5 times less (almost 3 million tons) than the average for the period before the crisis, that is, 1978-79--1979-80.

The general decrease in the number of hogs in the entire agricultural sector was also a result of: decreased number of farrows from 3 to 6 months old by 31.5 percent, piglets under three months by 25.9 percent and breeding gilts by 17.8 percent. In the group of feeder hogs, an increase of 8.4 percent, however, was observed, mainly as a result of increased numbers of feeder hogs in private farms--by 13.2 percent. The

raise in procurement prices for agricultural products, planned a year ago and introduced on July 1, 1983, including the prices for butcher hogs (from 127 zlotys per 1 kg to 140 zlotys) could have slightly affected the keeping of some feeder hogs--in the last few months--on the farms, thus increasing the share of feeder hogs as registered by the June inventory. This is confirmed by data on the procurement of slaughter hogs in the early days of July--namely, while the average daily delivery of pork-bacon hogs in June 1983 was 3,600 tons, from July 1 to 6, the daily average was 9,800 tons.

The decline in the number of farrows resulted from a deep decrease in the number of piglets (by 31.3 percent) at the end of the first quarter of 1983, as against the comparable period of the previous year.

The low number of piglets resulted from unfavorable tendencies in the breeding of hogs, especially a reduction of the basic herd of gilts.

At the turn of 1982-83, the first positive symptoms were seen among the factors affecting the development of the hog breeding--namely: increased prices for piglets and reduction of fodder costs on the free market, and improved indicators of the dynamics of gilt covering, initiating the rebuilding of the number of sows and increased tendency of private farmers for hog breeding (see table).

Free market prices of grain, beginning from January 1983, showed a regular seasonal decline, and in June were in the range of 2260 zlotys per 1 centner, lower by 1100 zlotys (33 percent) than in June of the previous year. Compared to the new prices of government procurement of grain, the average free market price since June 1983 was over 400 zlotys per 1 centner, i.e., 23 percent higher; the structure of specific prices (rye, millet, oats, barley) on the free market was similar to the ratios of the newly introduced procurement rates:

--free market prices had the ratio of 1:1.23:1:04:1.09; and

--suggested government ratios were 1:1.14:1:1.06.

The differentials in grain prices on the free market for several months remained at a similar level. In June 1983, for one centner of rye the average national price was 2100 zlotys, oats 2200 zlotys, barley 2300 zlotys and millet 2600 zlotys.

Under the territorial aspect, the lowest grain prices were registered in the following provinces: Bialystok, Chelm, Ciechanow, Lomza, Suwalki, Wloclawek and Zamosc, where farmers paid per one centner 1700 to 1800 zlotys, barley and oats 1700 to 2000 zlotys and millet 2000 to 2300 zlotys. The highest prices were in the following provinces: Bielsko, Katowice, Krosno and Nowy Sacz, where the prices per centner were 2500 to 3100 zlotys for rye, 2700 to 3400 zlotys for barley and oats, and 3000 to 3600 zlotys for millet. In June 1983, slight seasonal decline in national average free market price of potatoes was observed (the mean price was less than 850 zlotys per one centner), and in some localmarkets it fell to 300-400 zlotys per centner. The lowest potato prices were in the following central and eastern provinces: Biala Podlaska, Bialystok, Kielce, Lublin, Lomza, Siedlce, Skierniewice and Zamosc, where the price per centner was 500-560 zlotys. The highest prices were in the following provinces: Bielsko, Opole and Poznan--1500 to 1600 zlotys per centner.

The decline of free market prices of grain and potatoes improved profitability of hog breeding, as expressed in the ratio of butcher hog procurement prices to fodder prices. In June of 1983, the price of one kg of butcher hog was equivalent to 12.3 kg of fodder, compared to 8.5 kg in January and 7.8 kg in the previous June.

The growth of piglet prices observed since December 1982 has recently slowed down, which indicates an equilibrium between demand and supply on the free market. While in December of 1982 the price for piglets was very low, 1840 zlotys per piglet, in March farmers already were paying 3000, and in May and June, 3,900, per piglet. The free market price of piglets was equivalent to 30.3 kg of slaughter hog expressed in government procurement prices, and this ratio was by nearly 15 kg higher than in June of the previous year, indicating the new profitability of feeding piglets for breeding and market sales. In the unfavorable period of production conditions (fall 1982), the price of a piglet was equivalent to 12-13 kg of slaughter hog, expressed in procurement prices, and was near the weight limit of piglets sold on the market, i.e., 10-12 kg.

The continuing profitability of piglet feeding is confirmed by the current ratio of free market piglet prices in local markets compared to government procurement prices: 130 zlotys per kg, i.e., 1800 zlotys per 14-kg piglet in the case of a forced sale. Free market price of a piglet is almost double that of government procurement, which in principle ensures a minimal profitability of pig feeding. Currently certain changes in the structure of the hog herd are seen--a decreased proportion of piglets and farrows, accompanied by an unusual increase in the proportion of slaughter hogs and a small improvement in the share of breeder gilts.

Details on the changes of the structure of the hog herd in June of 1983 compared to June of 1982 and--compared to average numbers for June inventories from 1978-80--are given in Table 2 on the third cover.

It should be noted that the high share of slaughter hogs seen in the table and not observed in previous years is an ultimate result of breeding efforts of farmers in 1981-82, after an earlier turnover of the hog herd.

The higher proportion of slaughter hogs will provide in the third quarter of 1983 an increased supply of slaughter hogs for government procurement at a relatively higher level than in the comparable period of 1982. On the other hand, the level of supply starting from the fourth quarter of 1983 will be lower than in the previous year.

In the regional aspect, the decline of the number of hogs in June compared to the previous year was observed in all provinces, with the most unfavorable changes, such as a reduction of 25 percent and more, observed in the provinces: Chelm, Kielce, urban Krakow, Krosno, Lublin, urban Lodz, Nowy Sacz, Piotrkow, Plock, Przemysl, Radom, Rzeszow, Sieradz, Tarnobrzeg and Zamosc. Provinces with the smallest decline were those where the size of the hog herd is the lowest in the nation: Nowy Sacz, 30.9 animals per 100 ha of usable farm land; Krosno, 32.1; Zielona Gora, 47.2; Chelm, 51.7; Kielce, 53.0; Tarnobrzeg, 54.2; Przemysl, 55.4; Zamosc, 56.2; Rzeszow, 67.6; Radom, 58.3; and Sieradz, 69.3.

The break in the negative trends in hog breeding suggested by the symptoms observed in the last few years reported here and the beginnings of a gradual process of rebuilding of the hog herd, even given favorable weather conditions and output expectations, will not yield tangible production effects before the second half of 1984, as determined by the length of the swine reproduction cycle. The current minor raises of the procurement prices introduced on July 1, 1983, are offset by an equivalent sizable growth in prices for machinery and farm implements (by 20 to 30 percent). They do not fulfill farmers' expectations and fail to provide additional motivation for intensified livestock breeding.

#### General Livestock Situation

Warsaw RADA NARODOWA GOSPODARKA ADMINISTRACJA in Polish No 19, 19 Sep 83 pp 20-23

[Article by Jozef Luchowiec: "Livestock Breeding: Status, Proposals, Actions"]

[Text] Since 1979, a decline has been observed in the number of cattle and hogs, leading to reduced production and procurement of slaughter cattle and hogs, with major consequences for market supplies. This situation, besides the political, social and economic crisis, was created by unfavorable weather conditions for several years, poor harvests of grain and fodder crops and reductions (starting from 1980) of supplies of concentrated fodder to farmers from government reserves caused initially by currency shortages and subsequently enhanced by Western economic sanctions.

Between 1979 and 1982, the cattle herd decreased by 8.7 percent, including the reduction of the number of cows by 3.5 percent; the government procurement of slaughter cattle fell 12.9 percent.

A much greater reduction in those years was seen in the procurement of butcher hogs, which dropped by 27 percent, i.e., 531,000 tons. The number of hogs declined by 8.3 percent, including gilts by 15.2 percent. Counting also the need to reduce the production of poultry, mainly slaughter chickens, from 452,200 tons to 158,400 tons, the total amount of slaughter livestock and socialized procurement converted to meat between 1979 and 1982 dropped by as much as 752,200 tons. The supply of slaughter livestock in terms of meat per resident in Poland decreased from 72.8 kg to 52.4 kg. This resulted in disruptions in supply of meat and--as is well known--the necessity to introduce rationing of meat sales.

The inventory in June 1983 unfortunately indicated continuing decline of the cattle herd by 5.4 percent and the number of cows by 1 percent. Disturbing facts include the reduction in the number of young animals by 9.6 percent that had already been indicated by regular quarterly inventories. This shows continuing tendencies for reduction of the number of young bulls and heifers. The reduction in the number of young animals, which are the base for slaughter cattle production, will reduce the amount available for procurement in 1984.

A major reduction was registered--according to the June inventory--in the number of hogs, by as much as 20 percent, with the greatest cuts of 31.5 percent observed in number of young boars and 25.9 percent in the number of piglets. A decline in the number of hogs was observed in all provinces, without any major variations.

Based on the inventory and the market and production data, the situation with hog breeding suggests that, in contrast to earlier expectations, the decline in the number of animals has not stopped but has been slowing down, although as yet no symptoms of recovery of the number of herds are observed. The dynamics of gilt covering (May 83.3, June 90.2 and July 97.7 percent) and the low number of gilts in farrow remain unsatisfactory, although in June and July there were major declines of prices in grain trade among farmers (a drop to about 63 percent compared to the previous year) and potato prices (83 percent), as well as the more than doubling of piglet prices (211.8 percent).

The production situation in these two main livestock categories does not threaten the fulfillment of targets of the central annual plan for 1983, but it does affect the procurement amount for 1984.

The Fodder Situation and Its Projections

The number of livestock registered by the June inventory and the expected production effects had been influenced by the fodder situation during the economic year 1982-83. The volumes of fodder reserves were 15 percent below the amount in the previous year, with a much better quality of hay and silage. Favorable winter and earlier pasturing offset the results of reduced fodder reserves.

Potato crops were below the amount of the previous year by some 25 percent. The unstable situation with procurement and prices of potatos in the fall of 1982 limited potato supplies in the fall procurement and caused the producers to hold onto part of their potato reserves in expectation of higher spring prices; these were not included in the fodder circulation. Among other things, this caused a delay in decisions concerning the production of hogs. Procurement of grain below expectations resulted in reserves forming at farms which were not completely utilized in livestock feeding, in particular because of continuing high prices in the free market turnover through the spring of 1983.

Fodder supplies from government reserves amounted to some 3.5 million tons, that is, some 1.4 million tons (nearly 30 percent) below the figure for 1981-82. Supplies of high-protein concentrates dropped in the meantime from 800,000 to 600,000 tons (by about 25 percent) as a result of underfulfillment of the import plan. The market of concentrated fodder was mainly stabilized because of a regulated fodder sale program. There were, however, nomenclature shortages affecting particularly the livestock breeding effectiveness (fodder concentrate and mix for piglets and calves).

As seen from the foregoing, the basic traits of the fodder production situation in 1982-83 were negative effects of the economic conditions on utilization of the fodder reserves and shortage of factors influencing the efficiency of livestock breeding.

At this point, we do not possess adequate data for complete prediction of the fodder situation in the economic year 1983-84. The initial vegetation period was favorable, enabling earlier beginning of pasturing. Gathering of hay from first mowing was good (an increase of 15 percent), as well as the harvest of winter fodder crops and aftercrops. Currently, the conditions of vegetation are unfavorable. In particular, pastures are drying out, leading to consumption of winter hay reserves for current feeding. The amount of fodder reserves for the winter will depend on the course of vegetation. The amount of grain for livestock feeding in agriculture can be estimated as approximately equal to last year's figures.

Fodder supply from government reserves is now estimated with a short lead because of the uncertainty with import of fodder materials and grain. In view of this, the norms of supply of fodder to farms for the economic year 1983-84 are assumed at a lower level than in 1982-83, with an increase in the norm of sale of concentrated fodders for hog breeding under contracts after the abandonment of the practice of linking sales to procurement of grain.

Discussions of the fodder situation often mention fears that the favorable procurement of grain this year may threaten livestock production.

From cumulative data for 1970-83--taking into account the grain harvest decreased by procurement and increased by the sale of concentrates and fodder from government reserves--it follows, however, that the availability of concentrated fodder to farmers per hog, even if the plan of grain procurement is overfulfilled by one million tons, will be the highest in 1983. The figure will be around 1330 kg, whereas, during the 13 years analyzed, the highest amount per hog was in 1971, when it was 1230 kg. Thus, there is no threat of a shortage of concentrated fodder. The matter is for the farmers to want to utilize these reserves--their own grain--for livestock production, and if we could increase the amount of protein fodder sold linked to the purchase of livestock to the level stipulated by zootechnical norms, i.e., to 70 kg, that would greatly improve the utilization of farmers' own fodder and grain.

The government is making efforts to meet the planned targets for 1983 as regards the import of protein fodder and fodder grain to increase the quotas of fodder sale from government reserves--especially concentrated feed.

## Remedial Measures

The situation calls for measures to counteract the results of the decline in livestock production and increase the supply of slaughter livestock for government procurement. Over the past three years, the purchase of slaughter hogs per statistical head of hog decreased from 92.6 kg to 73.7 kg. This can be attributed partially to increased production cycle because of shortage of fodder and worsening fodder quality, but the main reason is increased consumption of meat in villages and its sale outside the socialized sector.

The remedial measures could include, among other things:

▲ Since July 1, 1983, the principles of the sale of fodder have been changed, and their sale has been linked again, as in previous years, with the commodity production of livestock, as a factor of outside prices, providing incentive for slaughter livestock sale to socialized sector. The quota of high-protein concentrate sales per feeder hog under contract has been increased from 40 to 50 kg (and from October 1 up to 60 kg), creating, although incomplete, possibility for increasing the daily increment and stepping up the turnover of the hog herd.

▲ Also for more effective utilization of fodder, in view of the fact that the consumption per kg of meat increases progressively with increasing animal weight, the lower limit of feeder hog weight purchased in the first class is to be lowered from 100 kg to 90 kg, effective January 1, 1984, and the upper limit has again been reintroduced to 120 kg. This will increase requirements for piglets and thus lead to better utilization of the herd of breeding gilts. So, conditions have been created for complete utilization of the reproductive capacity of hog breeding farms, with industrial technology that will increase supply of slaughter hogs to procurement by some 50,000 tons in 1984.

▲ Authorization to purchase 800 kg of concentrate per breeding sow and 600 kg per reproductive sow--conditional on breeding two litters from each annually, of which for subsequent sale the farmer is required to breed eight female and four male piglets for breeding, and also the proposal of contracts to be concluded between meat industry enterprises and farms having such sows; these contracts should be for several years, stipulating the supply of piglets and boar cubs, and will become factors promoting the upkeep of breeding animals, even despite temporary shortages in buyers of breeding material.

▲ In order to improve the production of slaughter cattle, actions are taken with participation of the Union of Cattle Breeders and Producers aimed at breeding calves of heavier weight and selecting calves for export. The possibility has also been introduced for providing for each kilogram of reserved young slaughter cattle for export 0.3 kg of concentrated fodder, not to mention that the procurement price for export is higher.

▲ An incentive for inreasing the number of heifers being raised should be the initiation of heifer export this year, that in 1981-82 declined, and the prospects of an annual increase starting from 1984. This should also be a factor in stopping the discontinuation by farmers of milk productivity evaluation of cows.

▲ The base of rabbit breeding and feeding on a scale that would enable all those interested to obtain valuable breeding material for household feeding or market production has been developed.

▲ In the pond fisheries, an impasse with the shortage of fry has been surmounted. Currently, fry production has been increased to provide for the greater demands and creates full capacity for efficient use of ponds and fish breeding in open reservoirs.

▲ The sheep herd has been growing, with increases of the purchases of wool, skins and of slaughter sheep; activities of the Association of the Unions of Sheep Breeders gives hopes that this trend will continue, and the export of slaughter sheep will rise.

# Opportunities for Chicken Breeding

The shortage in the procurement of slaughter hogs and cattle expected in 1984 may be partially offset by output of meat poultry, given that the principles of agricultural plans for 1984 will be fulfilled as regards fodder supply. Based on the existing reproductive capacities, it is possible to recover the output of meat poultry, raising it to about 140,000 tons, while increasing the purchase of water fowl and noncontract chickens and hens. At the same time, integrated quotas of feed utilization per endproduct has been introduced that encompass both producers and socialized organizing agencies of poultry production. Producers using more than the quota amount will lose their right for purchase of fodder from government reserves.

A program of production base has been developed that allows to increase the procurement of eggs from private farms in view of limited fodder capacities for their production on farms, and it has been allowed--on the principles of equitable partnership--that besides the poultry industry, it cover production cooperatives, state farm enterprises and the Union of Poultry Breeders, thus eliminating the monopoly in this area that existed previously and creating conditions for economic and management competitiveness that is bound to lead to improved supply of eggs to the markets.

Talking about poultry, it is important to comment on the view--frequently mentioned in the past and also by some investigators -- that the production of meat chickens could be reconstructed on the basis of domestic grain and protein feed. We do not have such capacities currently and will not have them in the next few years. The major cause of this is our negative balance of commodity grain. To cover even all the market needs we would have to procure at least 6 to 6.5 million tons of grain of given categories. In the meantime, as is well known, grain purchases never exceeded 4 million tons in the last few years. In addition, about 60 percent of this grain is rye, which is totally unsuitable as chicken feed. Millet and barley are in short supply, and studies show that using them as feed without additives increases the amount of fodder per kg of poultry meat by some 20 percent, which means a greater use of concentrated fodder, by 0.6 kg to produce 1 kg of slaughter meat and 0.9 kg to produce 1 kg of poultry meat. Even if we succeeded in mastering the technology of industrial enrichment of poultry fodder and had the fat that is necessary for this purpose that we now do not have, we would still have our current shortage of millet that is likely to be with us for years to come. On the other hand, rebuilding the production of slaughter poultry to previous levels using imported grain (corn) and protein materials involves additional outlays of \$0.71 per each kilogram of broiler meat.

#### Genetics: An Important Issue

Progress in science and technology has produced changes, ensuring advances in production due to genetics. These changes mainly came from achievements of popular genetics and the techniques of collection and conservation of male sperm. The possibility of increasing the offspring of one male many hundred times, the reproduction and genetic progress occurs mainly along the "sire-offspring" line. In the case of cattle, this permitted reducing the number of males by almost 40 times, as compared to the number needed for natural insemination, and in this manner it was possible to use for reproduction only the best males in terms of genetic features.

Reproduction by artificial insemination has become the main tool in basic cattle growth, implementing the programs of cattle raising and genetic improvement, and also allowed to eliminate the spread of diseases during the mating. In the meantime, the past four years witnessed a sharp decline in the number of inseminated cows and heifers, which between 1981 and 1982 was 830,000 head. Although the causes are numerous and complex, the basic factor is loosening of breeding and production discipline. Regulations on animal breeding are not complied with, and appropriate measures are not taken against farmers who use uncertified bulls. Attempts at introducing--on the request of farmers--natural insemination at mating stations produced no effect. There are no farmers willing to keep bulls, and the frequency of use of existing mating stations is just 20 percent. As a result, almost 1.5 million cows are outside the scope of so-called organized reproduction.

To counter these negative phenomena, it is above all necessary to conduct intensive propaganda work, telling the farmers about the benefits of insemination, to achieve in the shortest possible time conscious cooperation of farmers as partners in implementing the cattle breeding programs and general genetic improvement. The newly introduced strict measures concerning the period authorizing the keeping of bulls for slaughter without license can only be a supportive measure, but is no substitute for propaganda among farmers. Reliability, time limits and quality of insemination services and the fact that they are provided right on the farm, should be their competitive edge compared to mating stations, as well as the use of uncertified animals. The newly prepared draft statute on livestock feeding, breeding and reproduction includes provisions for penalties exacted not only from the owner of the uncertified bull, but also from the owner of the female animals. This is a basic change compared to existing regulations, because it allows control in all cases and does not require the proof that an uncertified bull was used.

Evaluation of Animal Productivity

Similar negative phenomena are also observed in the area of evaluation of milk productivity of cows, which is a basis for all breeding and selection work. Without knowledge of the productivity of animals, this work is unfeasible. There is a common view that the goal of breeding is the sale of animals. This fails to consider the basic goal, which is the improvement of production quality in the economy, its enhanced efficiency and improved economics of production. This goal is mainly served by work involving improvement of farm animals. Animal raising should not be an art for its own sake but should produce specific economic effects.

A basic cause of the fact that many farmers no longer estimate the milk productivity of cows is the changed system of payment rather than changed service prices. Until 1981, payment for evaluation was taken at sale of feeder animals, that is, when the breeder received the profits. Currently, the payment is exacted as per each evaluated animal. This payment converted to worth of milk in prices before July raise was lower than in 1958-78 and much lower than in other European countries. Likewise, insemination fees --related to the value of milk--is much lower than in earlier years and in other countries.

Obviously, the payments for the services do not cover their costs, and the breeding and insemination stations receive subsidies to cover the differential between their costs and revenues. The yearly amount of this subsidy is over 2 billion zlotys. In order to create favorable economic conditions for biological improvement, a draft legislative act has been prepared to provide the necessary budget allocations for this purpose. This involves partial or complete financing of the costs of evaluation of animal productivity and their regular appraisal, insemination using the material positively evaluated in the offspring and supply and purchase of breeding animals, etc.

In the current situation, outlined above, it is necessary to undertake steps--at all organizational units in the sphere of livestock production, breeding, contract assignment and practice, and supply of means of production to farmers, especially fodder--to ensure quality service to producers and radical improvement of service quality.

Administrative Tasks

The important tasks of local administration in livestock breeding are:

• establishing, if possible, in all parishes the position of parish zootechnician to coordinate all matters involved in livestock production, especially supply of breeding and useful animals for farms, contracts for livestock procurement and--according to the competence of local people's councils--supervise the reproduction and observance of livestock breeding regulations;

• intensifying surveillance of animal and milk purchase stations in terms of proper selection of products, their classification and application of adequate prices to ensure full use of the raised purchase price as an incentive to livestock production;

• assistance with interregional exchange of piglets and boar cubs (maintaining the veterinary requirements) for better meeting the demand in areas where there is a shortage and reducing the regional price differentials for piglets and boar cubs;

• parish councils should establish contacts with meat industry enterprises to conduct long-term action in concluding contracts for supply of piglets and boar cubs at farms raising breeding gilts, and reproduction centers.

• on a national scale, control of reproduction should be enforced to stop by administrative means the use of uncertified animals for reproduction;

• in provinces where, by the order of the Minister of Agriculture, keeping slaughter bulls is not allowed without special licenses, it is necessary to issue such licenses to farms authorized to keep bulls and conduct consistent gelding of all bulls in those farms which have no such licenses, ensuring the proper course of the procedures, including veterinary care, and appropriate indemnification in the case of loss due to gelding.

In the area of fodder production, the following steps are necessary:

• observing strictly the regulations on sale of fodder to enable all authorized individuals to purchase the quotas of concentrated fodder;

• ensuring that trade agencies order increased amounts of mineral mixes and food additives from industry and active sale of these products, which are crucial for effective utilization of fodder by animals;

• using the services of provincial centers of agricultural consultation that would have a positive influence on proper action in the fall to harvest and conserve fodder crops;

• in view of the expected relatively high reserves of potatoes compared to the number of hogs and good supplies of coal--ensuring that the service units fully use the feed steamer plants to improve the quality of preserved potatoes.

We should bear in mind that besides the economic conditions stimulating the production, quality and quantity, the so-called extra-economic sphere plays an invaluable role, which is determined by the proper function and work of government and all economic agencies in cooperation with producers.

9922 CSO: 2600/476

ROMANIA

### BRIEFS

SILVICULTURE COUNCIL PLENUM--Bucharest 19 Jan (AGERPRES)--Over January 18 and 19 Bucharest hosted an enlarged plenary meeting of the Council of Silviculture, a managing body of a representative nature, founded in 1983. The participants analyzed the 1983 achievements of this important sector of the national economy and the measures to be taken for best implementation of the tasks incumbent on silviculture in 1984 as resulting from the state plan and the national programme for conservation and development of the forest stock over the 1976-2010 period, and from other programmes meant to lead to enhancement of the economic efficiency of the forest stock. At the conclusion of proceedings a telegram was endorsed, to be addressed to President Nicolae Ceausescu. [Text] [AU191918 Bucharest AGERPRES in English 1830 GMT 19 Jan 84]

CSO:2020/63

YUGOSLAVIA

**OIL REFINERY PRODUCTION IN 1983** 

Belgrade PRIVREDNI PREGLED in Serbo-Croatian 4 Jan 84 p 4

[Article by V. Subic: "Under the Shadow of Financial Rescue"]

[Text] Difficulties in supplying the market with petroleum products are continuing even now because of insufficient petroleum for refining. It is estimated that by the end of the year Yugoslav refineries refined a total of only 12.5 million tons of crude petroleum, which is 17.8 percent less than the plan contained in the energy balance for 1983. The principal reason lies in the shortage of foreign exchange to import petroleum from the convertible payment area. Half as much petroleum was imported from this area, and this was reflected in the difficulties in supplying the market with petroleum products, since the quantities produced could not satisfy the demand. In certain parts of the country there is a great shortage of petroleum products. The shortage, especially of residual fuel oil, has also had a large impact on the business operation of the economy, which is unable to ensure normal operation with the present supply.

Refining by INA [Industrija nafte--Zagreb] Down Nearly 21 Percent

The consequences of the disrupted imports of petroleum are being especially felt in INA, the largest supplier of petroleum products to the market, which again in 1983 fulfilled the plan for refining of crude petroleum at a level of only 79.4 percent. The shortfall of last year's refining plan for INA was about 20 percent at the Rijeka refinery, 28.7 percent at the Sisak refinery and 36.6 percent at the Lendava refinery because of reduced imports of petroleum from the convertible payments area. The reduced refining of petroleum is being sorely felt on the market, which not only has been inadequately supplied with petroleum products, but often is unable to meet even the most minimum needs. This especially applies to December, when in spite of the appreciably larger consumption of petroleum products, INA refineries refined at best only about 523,500 tons. These quantities of domestic and imported petroleum, say the people at INA, were not sufficient to meet the needs of the market, as indeed can already be felt. In the season of peak consumption of petroleum products there is a shortage of residual fuel oil, heating oil, jet fuel, liquefied gas, diesel fuel, and indeed even gasoline, which is why consumption has dropped to the lowest possible level.

The difficulties in supplying the market with petroleum products are only a continuation of the identical situation from November 1983, when INA refineries refined still less petroleum--only 455,000 tons instead of the planned 458,500 tons. That is why there was a shortage of all petroleum products on the market except heating oil.

Smaller Production of Domestic Petroleum and Gas

The situation with the supply of petroleum products in Croatia has become all the more difficult because 80,000 tons of residual fuel oil had to be urgently imported, which is now being done, because of the difficult situation in the republic's electric power system.

It is significant that domestic production of petroleum and gas has also dropped off. In November INA-Naftaplin produced 216,160 tons, which is 12.6 percent below the plan, so that for the first 11 months of 1983 production was off 3.6 percent. Instead of the planned 2,720,215 tons of petroleum, 2,623,000 tons were produced. The output of natural gas in INA has also dropped off. Output in November was 165.89 million cubic meters, or 1,421 million tons less than the plan. Up to the beginning of November total gas production was 1,663,400 cubic meters, or 10.7 percent below the plan. Because of the smaller production of natural gas, there has also been a drop in the production of liquefied gases. Output in November was 8,261 tons, or 21.7 percent less, and for the first 11 months it was 109,505 tons, or 3,500 tons less than the plan.

Because of the gas shortage in Croatia many large factories of great importance to the entire economy have become idle, such as: the new fertilizer plant at Kutina, all the ceramic tile and lime plants, and the brickyards, while the cement plant and plants of "Pliva," "Polikem," "OKI," "Jugovinil" and others are operating at reduced capacity.

The situation is becoming very serious, since the shortage of sources of energy, through reduced output of most factories or the more frequent shutdowns, is causing great damage with exports. That is why people at INA say that foreign exchange should be furnished to import 10.6 million tons of crude petroleum in 1984, which would at least in part meet the increased needs of the petrochemical industry for the gasoline which is its raw material.

Total Yugoslav needs for this basic raw material of the petrochemical industry are estimated at 2 million tons; in 1983 barely 750,000 tons were furnished with the greatest effort, which is why there have been serious stoppages in heavy petrochemical production.

The petroleum industry cannot assume the obligation of regular supply of the market, say the people at INA, if the proposal for importing only 9.5 million tons of petroleum in 1984 is insisted on. It would be impossible to produce the necessary quantities of petroleum products with quantities of imported petroleum smaller than in 1983, so that invigoration of the economy and larger industrial output for the sake of greater exports, which is the basic goal, would not be made possible.

The people in the petroleum industry favor establishment of a specific mechanism to assemble the funds to cover the expenses of foreign credits for importation of petroleum and adoption of an automatic mechanism in setting the prices of petroleum products. The petroleum industry, that is, cannot take new credits for the importation of petroleum unless a financial package is completed at the same time for meeting the obligations that arise out of those credits with respect to differences in rates of exchange.

Nor are the petroleum industry people satisfied with the present correction of refinery prices by only 8 percent, instead of the 13.2 percent the domestic petroleum industry applied for back in October, because of the losses which are growing dizzily in the refineries because of the steady drop in the value of the dinar. The petroleum industry people, that is, estimate that the domestic refineries will end this past year with losses amounting to 22 billion dinars.

It is not very likely that the petroleum industry can make up for that kind of loss with financial rescue programs. That is, if the refineries show present losses in their year-end statements, and the present correction of refinery prices will have only an insignificant effect for them, it is obvious that they would be threatened with bankruptcy under the law, and the losses indicated in 1983 would have to be carried over to this year. The petroleum industry people want the counts to be as clear as possible in the refining of petroleum and production of petroleum products, and that is possible if price correction is steady and regular and if the highest possible level of petroleum refining is ensured.

7045 CSO: 2800/144

YUGOSLAVIA

DATA ON LIQUIDITY, BANK CREDIT, JANUARY-OCTOBER 1983 Belgrade PRIVREDNI PREGLED in Serbo-Croatian 23 Dec 83 p 8 [Article by D. Brdar: "Unplanned Restrictions and Traps"]

[Text] Unfavorable trends in social reproduction this year, in particular the high rise of prices and inflation, have given to credit-monetary flows a considerably more restrictive form than that envisaged at the beginning of the year. However, instead of operating toward reduced inflation and stabilization of monetary movements, the greater than planned restrictiveness of credit-monetary flows has brought about a spread of illiquidity of the economy and the banks, an increase of mutual credit financing, a slackening of financial discipline and the cutting off of already disrupted commodity-money flows. The slower growth of monetary aggregates, especially the very restricted growth of bank lendings, have also brought about a reduction of support for development priorities.

According to the figures of the Association of Yugoslav Banks, in the period January-October the money supply increased by 93 billion dinars, or 12.7 percent. Relative to the amended projection of credit-monetary policy, this is within the planned growth of the money supply, which is 95 billion dinars. As for the composition of the growth of the money supply, there have been evident trends toward improvement for OUR's [organization of associated labor] in the economy, but the growth still tends to be to the advantage of other users in society. Personal money assets increased by 32 billion dinars, which mainly refers to the growth of cash in circulation.

Bank Lendings, in billions

Indicator	Anticipated Growth	Actual Growth	Index
Total bank lendings Breakdown	260.0	189.4	72.7
Foreign exchange credits Dinar lendings	65.0 195.0	-22.0 211.4	 108.4

Table (continued)

Indicator	As of 31 Dec 82	Changes Jan-Sep 83	As of 30 Sep 83	Index
Short-term credits	660.9	134.1	795.0	120.3
Long-term credits	1,844.5	78.7	1,923.2	104.3
Total credits	2,505.4	212.8	2,718.2	108.5
Securities	136.3	-23.4	112.9	82.8
Total lendings	2,641.7	189.4	2,831.1	107.2
Dinar lendings	2,079.7	211.4	2,291.1	110.2
Foreign exchange lendings	562.0	-22.0	540.0	96.1

The newly introduced monetary aggregates have grown considerably less than anticipated. Net domestic assets increased 103.9 billion dinars, which is only 45 percent of the projection. The reason for this lies in the considerable deviations in foreign exchange transactions with foreign countries, that is, an appreciable tardiness in the use of foreign credits, which has caused more dinar money to be withdrawn on this basis.

The prediction that the anticipated growth of bank lendings would occur within the framework of the net domestic assets were not borne out. That is, they increased by only 189.4 billion dinars (benefits resulting from differences in rates of exchange were omitted from the calculation), whereas the plan envisaged 260.5 billion dinars. Other net domestic assets dropped 85.5 billion dinars, which, given the very moderate bank lendings, had a bearing on the smaller growth of net domestic assets.

The growth of primary note issue over the first 9 months was 42 billion dinars, or 10.4 percent against the end of last year. Moreover, the issue of bank notes for credit financing of selective purposes increased by 50.3 billion dinars, and the portion intended for monetization of securities dropped 12.2 billion dinars. The growth of note issue was rather uneven in the course of the year--in the first half of the year it was only 11.9 billion, but from July to mid-October it was 26.2 billion dinars. These flows have restricted the ability of the banks to support priority purposes in the economy.

With these developments in view the executive board of the Association of Yugoslav Banks recently warned that a serious reassessment needs to be made of the degree of restrictiveness of credit-monetary policy and of the realism of the planned development parameters, which were decisive to the quantitative amounts of the basic monetary aggregates. In addition, the executive board advocated more flexible conduct of the policy of slower growth of the money supply and bank lendings as well as more resolute and complete support of the established priorities and more effective resolution of the problem of bank liquidity.

7045 CSO: 2800/144