TITITLE: REFORMS IN THE SOVIET/ RUSSIAN HEALTH INDUSTRY

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Economic Reform in the Soviet Health Industry—1

Soviet thinking on economic reform—and even the reform itself—have been moving forward with far greater speed than we have recognized.

Yet, as reform moves forward, Soviet radicals have moved toward dogmatic Friedmanism with even greater speed. They have embraced totally unrealistic plans such as the Shatalin 500-Day Plan that are vague and ambiguous on all key economic dilemmas—and that promise people the absence of all pain. They treat the "market" as some magical talisman.

Were that it were so simple. To understand the Soviet Union, we must look at real problems and real measures in real sectors of the economy. Only then will we be able to judge what is occurring in "economic reform" as a whole, and only then will business be able to judge its concrete opportunities.

We plan to explore the details of reform in a number of industries in addenda to this newsletter. We will begin in this issue with the health industry.

Hospital Beds, Clinic Visits, and Public Health Budgeting

One reason for the poor performance of the Soviet health industry is its relatively low level of funding—4.1 percent of the GPU by one fairly careful calculation. Yet, just as important—perhaps more important—is the way the health ruble is distributed. The Soviet Union has the most hospital beds and doctors per 10,000 population in the world—132.9 beds and 44.4 doctors compared with 53 and 20.5 in the United States—but far too little is spent on medicine, equipment, and even doctors' salaries. (The average doctor receives a lower salary than a skilled worker.)

This distribution of funds resulted from the planning and incentive system. The Soviet health system, except for some semi-legal private care in off hours, was completely nationalized. The Soviet people were provided with payment-free medical services (but not free medicine at the drug store), with most of the financing coming from Moscow. The basic supplies for Soviet hospitals—equipment, gauze, soap, electricity, medicine, food, everything—were allocated directly by chit. The hospitals had no freedom to change suppliers or buy goods on the market, only to try to persuade local factories and farms to give them extra supplies.

Nevertheless, Moscow still had to find a way to distribute supplies and money to the hospital level. In practice, money and supplies were—and still are—allocated by formula. Obviously big hospitals require more supplies than small ones, and the formulas were based on the number of hospital beds, patient visits to clinics, and medical personnel. A republic, a state, a city, a county, and a hospital respectively received the aggregate amount of supplies and funds that its number of beds, visits, and doctors warranted.

Anyone familiar with budgetary politics anywhere in the world knows the result: hospital and provincial officials all tried to multiply the number of their hospital beds, patient visits, and doctors so that they could get more money and supplies.

Of course, planning officials understood this point very well, and they refused to authorize unneeded hospital beds. If beds were not filled 320 days a year, then new ones were not allowed and supplies could be cut.

And, of course, if beds had to be filled, then they were filled. The clinics were judged by the number of patient visits, and hence they referred patients to hospitals as quickly as possible. The hospital doctors in turn kept the patients as long as possible. In 1989, the average hospital stay of a patient in the Russian republic was 16.2 days, compared with 7 in the U.S. A woman with a normal delivery and a healthy baby usually stayed in the maternity hospital for two weeks.

As a result, it was extremely difficult to get into a hospital, and beds were crowded into wards and sometimes even into the corridors. Clearly more hospital beds were needed. Although America is said to have too many hospital beds, (and their numbers per 10,000 population has fallen from 79 in 1970 and 60 in 1980 to 53 in 1987), the number in the Soviet Union continues to rise: 124.9 in 1980, 129.6 in 1985, and 132.9 in
Hospitals, however, are inherently dangerous places, and this is especially so if sanitation is less than perfect. The prolonged periods of hospitalization in overcrowded conditions must be one of the factors leading to health problems in the Soviet Union.

The obstacles to change are, however, enormous. The financial needs are huge, and most new money will have to go to salaries, in a time of inflation. The incentive systems of the hospitals and the suppliers will both have to be changed gradually. One cannot simply close hospitals and spend the money for medicine and instruments that have not been produced. Health personnel will lose jobs. And any change will take place amidst the suspicion that the system of free medical care is being dismantled and that the poor will be left in the cold.

**Insured Medicine**

The most publicized organizational solution to the problems of the health industry is “insured medicine” (strakhovaia meditsina). Endorsed in principle in a 1989 Council of Ministers decision, it was laid out in a 1990 draft law essentially written by the Ministry of Health, “The Bases of Legislation in the USSR and the Union Republics on the Financing of Public Health,” and published on October 16, 1990. The detailed subjects and documents filled six volumes.1

The 1990 draft law specified that the state and the place of employment would pay an insurance institution and that citizens would receive an insurance card that could be used at any health institution, “independent of its form of property.” Enterprises could pay a higher insurance payment for their employees if they wanted to obtain “services not in the list of services provided by obligatory insurance, or to increase the norms of expenditures on the acquisition of medicines in medical institutions, or the right to obtain medicine by ambulatory patients.” If patients go to an institution or doctor that charges more than the established price, then they have to pay the difference themselves.

The first major purpose of the legislation was to find additional funding to supplement the state budget. In 1990 the average wage in the branch (administrators, doctors, nurses, staff, and drug store employees) was 178 rubles a month, 43 percent of the national average,4 and shortages of medicines and equipment were growing. The huge budgetary deficits made it very difficult to increase health expenditures, and the health establishment was trying to find a way to tap the funds of employers and citizens.

To some extent, the country’s health system was already being funded by sources other than the Ministry of Health. In 1989, a careful and authoritative scholar estimated that health expenditures (excluding those of the Ministry of Defense, the KGB, and the MVD) included 24.6 billion rubles from the state budget, 6.4 billion rubles from the enterprises and collective farms, 2.8 billion rubles by citizens purchasing medicine, etc., at the drug store, 2.7 billion rubles for sanitoria, rest homes, and the like, and 1.5 billion rubles miscellaneous (including 530 million for cooperative and private care).7 These figures totalled 38 billion rubles, with 65 percent on budget, 72 percent if the sanitoria and rest homes were included.

The new balance of health expenditures apparently was to be 50-55 percent from the state budget, and 40-45 percent from other sources.9 When the Russian republic issued its draft law “About the Medical Insurance of Citizens,” the state expenditures were estimated to be 115 rubles per person and the insurance payments 89 rubles—an additional 12 billion rubles in the Russian republic alone.10 It was frankly admitted that there was no hope of obtaining the necessary outside funding and that the draft law was “still-born” on publication.9

**Large Scale Industry as a Health Provider**

Why was such an unrealistic program proposed? First, the dismantlement of the old socialist system, will mean that Soviet citizens will receive higher wages and have to pay for more services that they now obtain free. The insurance draft laws were an attempt to have something ready just in case.

Second, and of more immediate importance for Western business, the health establishment was worried about preserving the existing off-budget income. Some of the 6.4 billion rubles allocated by enterprises and collective farms went fairly directly to hospitals for their own employees, but some was a “voluntary” contribution to institutions that served a broader public. Part of the former expenditures came from ministerial budgets, while much of the “voluntary” contributions resulted from pressure by local party organs. With the ministerial financial power threatened and the party committees becoming impotent well before the party’s dissolution, there was real worry that these funds would disappear.

Hence health strategists in the top institute on health economics (the Semashko Institute) saw the insurance program being introduced in two stages. In the first stage, and it might last for a long time, they saw the system being introduced only for the very largest enterprises—that is, those that in practice had already played a major role in health financing.10 Indeed, a form of this system was already developing rapidly, as local hospitals were signing agreements with industrial and other enterprises to provide “above-
norm medical care," even in republics such as Kazakhstan.\textsuperscript{11}

Obviously the system as it began to evolve in 1991 was fraught with political danger. Market economies have two sides. One is the rationing of scarce resources to those with an ability to pay. The other is the stimulation of increased production of items in greatest demand. If the supply system is frozen, let alone in decline, a shift from more or less egalitarian rationing to rationing by ability to pay has little to recommend it politically and even morally. If the strong industrial enterprises and those able to afford private care are able to corner a significantly larger proportion of scarce medicine and equipment whose availability is in decline, less would be available for the general hospital and political protest would soar.

One obvious solution is to increase the supply of medicine and medical equipment by having large enterprises obtain it abroad with foreign currency that they themselves earn. Indeed, this was a conscious goal of the laws that gave enterprises the right to dispose of part of the currency they were earning.\textsuperscript{12} As the Soviet Union becomes more export oriented, this will offer increasing opportunities to American business. It should be possible to institute "counter-trade" arrangements on a much narrower and more advantageous basis than sought by the Soviet Union in the past. As large American corporations in the health sphere purchase supplies for themselves in the Soviet Union, they should be able to pressure their Soviet counterpart to take part of the payment in kind or to earmark some of the foreign currency earned for purchase of the corporation’s own products.

**Changes in the Medical Equipment and Pharmaceutical Industries**

The creation of incentives to reduce the length of hospitalization is not difficult if the savings are used in significant part to raise doctors’ salaries. (In essence, that is being tried in the Voronezh experiment, which will be discussed in a subsequent newsletter.) However, a transfer of resources to the purchase of medicine and equipment is totally impossible unless changes are introduced in the industrial planning and supply system to permit the pharmaceutical and medical equipment industries to expand and respond to new demand.

Both industries have undergone reorganization. In May 1991 the pharmaceutical ministry—the Ministry of the Medical Industry—was abolished, and a state “corporation” (korporatsiia) named “Pharmindustr\textsuperscript{ia}” was formed to replace it. Since the old first deputy minister of the medical industry, Vladimir S. Markaryants (a friend of Gorbachev from Stavropol and then premier of Armenia) was named its president,\textsuperscript{13} it remains to be seen whether the change is more than one in name.

Officially “the corporation has been created on a voluntary basis to unite state, rental, stock, and joint enterprises, concerns, cooperatives, and other institutions and organizations. The goal of its activity is to provide medical institutions and the population—and also the economy—with pharmaceutical and profilet means, with medical items, and with perfumes and cosmetics.”\textsuperscript{14} Presumably the 150,000 persons employed in the pharmaceutical plants of the Ministry of the Medical Industry were intended to be transferred to the new state corporation,\textsuperscript{15} but its relationship to joint ventures and cooperatives was unclear even before recent political events.

The medical equipment industry is also undergoing interesting change. Formerly medical equipment was produced by 24 ministries, but 60 percent of the 1 billion ruble annual production of the industry came from the 34 plants of the Ministry of the Medical Industry in 1985. In that year, medical equipment plants were transferred to the Ministry of Instruments, Means of Automation, and Systems of Administration (Minpribor). Then at the end of 1989 the medical equipment industry was transferred to the Ministry of General Machine Building—essentially the ministry for rocket production.\textsuperscript{16}

The production of strategic rockets was being reduced by 2.4 times between 1988 and 1991,\textsuperscript{17} and the ministry clearly had highly skilled personnel and technologies to apply to civilian tasks. It was planned that the medical equipment plants under the Ministry of General Machine Building would increase their production 2.5 times to 3.8 rubles in 1995.\textsuperscript{18}

In addition, other defense industries enterprises were encouraged to convert, and it is claimed that the production of these other plants, if I understand correctly, would rise from 152 million rubles in 1990 to 350 million rubles in 1991.\textsuperscript{19} For example, the scientific production firm “Polius” had essentially been the monopoly producer of laser technology for medical needs. By October 1990, however, it was reported that dozens of military enterprises were offering their services to the Ministry of Health to produce such equipment.\textsuperscript{20}

Thus far, the press has been filled only with complaints. It was promised that $257 million rubles would be allocated to the development of new technology in 1991, but only 50 million appeared, none from the Ministry of Health.\textsuperscript{21} The military plants prefer to produce big ticket items, not scalpels.\textsuperscript{22} And so on and so forth. However, as supply ties become marketized, plants that are losing defense business will be eager to find civilian business of any type.
The Problems of Foreign Trade

Any serious discussion of foreign trade will be postponed to the next newsletter, but several preliminary points can be made.

First, the transfer of Soviet-East European trade to a hard currency basis on January 1st was not good for the pharmaceutical and medical equipment industries. Eastern Europe had apparently been called upon to specialize on pharmaceuticals within Comecon, and not a single new pharmaceutical plant was built in the Soviet Union in the last decade. It is claimed that 70-80 percent of the basic equipment is worn out and that the “greens” are calling for the closing of many old plants.23

Second, the demand of hard currency from East European suppliers should provide a major opportunity for other hard currency producers, but the shortage of hard currency hit even a long time supplier such as Yugoslavia. At the end of 1990 the Soviet Union was 120 million dollars in arrears to Yugoslavia.24

The problem threatens to worsen. The new president of “Pharmindustria” says that imported drugs cost the country 40 percent of the rubles it pays for medicine, but that they constitute only 11 percent of the total measure in concrete terms.25

If, as the USSR Cabinet decided on June 15, 1991, the auction price of the ruble is introduced for payment on January 1, 1992, the Ministry of Finances estimates that the amount of medicine purchased abroad this year would cost 90 billion rubles. A medical item that now costs less than a ruble would cost 50 rubles.26 Obviously there are still many changes to come.

The Ministry of General Machine Building wants to earn hard currency abroad by selling medical instruments—and presumably would use much of the hard currency to buy new technology. However, the Ministry of Health refuses. “The deputy minister of health, V. V. Gromyko, thinks that we cannot sell medical equipment abroad until the domestic market is saturated. Without a license from this ministry, not one deal can be made.”27

Even aside from a potential explosion in the price of imported goods, the rise of wholesale prices on January 1st and the freezing of the retail prices made the drug store network deeply unprofitable. The Ministry of Health estimates that a normal supply of medicine at current prices would require a state subsidy of 15.8 billion rubles—approximately half the state budget for health this year.28 And so we are back at the problems of financing on which the debate on insured medicine floundered.

In conclusion it might be noted that the control of the Ministry of General Machine Building over the medical equipment industry presents an interesting prospects for American industry. Once the United States has accepted the need for helping military conversion and has relaxed technology controls, American industry will have the opportunity to work with very unexpected partners—partners with a very skilled worker and engineering force. Think of the counter-trade possibilities. SS-25 mobile missiles might sell very well on the world market.

In subsequent issues we will continue to discuss the evolving reform of the Soviet health industry with ever increasing sublety. We would be grateful for criticism and new information from our readers. We would like this to become the most sophisticated source of information available on the reform of the Soviet health industry.

Researched and written by Jerry F. Hough

NOTES

3 Meditsinskaia gazeta, August 9, 1991, p. 5.
7 Meditsinskaia gazeta, September 12, 1990, p. 2.
10 Meditsinskaia gazeta, December 5, 1990, p. 2.
14 Meditsinskaia gazeta, May 17, 1991, p. 3.
17 TASS, August 6, 1991. Cited in *FBIS, Daily Report—Soviet Union*, August 7, 1991, p. 33. The production of tanks is down 2.1 times in that period; ammunition 2.8 times, artillery 2.9 times, and personnel carriers 4.2 times.
21 Meditsinskaia gazeta, April 12, 1991, p. 4.
26 Meditsinskaia gazeta, August 2, 1991, p. 5.
27 Meditsinskaia gazeta, April 12, 1991, p. 4.
Reform in the Health Industry—2

As discussed in our previous newsletter on health industry reform, the incentives built into the public health system led to an excessive number of hospital beds and doctors and too little medicine and medical equipment. To compensate, the government emphasized the production of these items in Communist Eastern Europe in the 1970s and 1980s as part of the division of labor within Comecon. The East European countries built new plants, exported their products to the Soviet Union, and received petroleum and natural gas in return. (Immunological products—vaccines, serums, blood products, cultural media, and anti-allergy medicines—were an exception. All such items were produced domestically, presumably because of the comparative advantage of the Soviet Union in military bacteriological research and its fear of dependence on foreign countries in case of epidemics.)

Concentration of the production of medicine in Eastern Europe made sense because of the high quality of work in those countries, but the collapse of Communism meant that goods which had been easily obtainable without hard currency suddenly could not be purchased without it. As Soviet oil production began to decline and the Soviet Union partially lost control over its remaining foreign currency earnings, the government felt compelled to sharply cut back the importation of medicines—by one estimate, from 1.5 billion dollars in 1990 to 500 million in 1991.

Now the economic chaos produced by the breakup of the Soviet Union, administrative disorder, and the inflation of 1992 makes the situation even more complicated. If industrial production falls precipitously, the medical industry will not be spared. Moreover, the medical system remains nationalized, and the price of medicines highly subsidized. With the loss of administrative control, the center finds it difficult to prevent large-scale corruption and diversion of medicines into illegal channels. Already President Yeltsin has issued a decree affecting the private sale of medicines, but its practical meaning is as unclear as that of the vast majority of decrees today.

Organization of the Pharmaceutical Industry

The supervision of the Soviet pharmaceutical industry has varied over time. At times the industry was integrated within the Ministry of Health, although subordinated to a separate first deputy minister. At other times, most of it was administered by a separate Ministry of the Medical Industry, although biologically-based medicines as well as some traditional ones based on grasses and herbs were produced by other institutions.

In 1991 ministries were scheduled to be abolished, and a new corporation, "Farmindustriia," was formed to replace the Ministry of the Medical Industry. The first deputy minister, Vladimir S. Markarians became the chairman of the new corporation, and it had the look and internal structure of a new ministry. However, the size of its apparatus is only 250 persons, compared with 1400 persons in the Ministry of the Medical Industry. It plays more of an intermediary trading and coordinating role than a direct administrative one, as it did in the past. The plants, which had been on its budget, now work on the basis of contracts.

The charter of Farmindustriia gave it the right to admit and form cooperatives, joint ventures, and other non-traditional enterprises, but it retained control over the distribution of state-supplied materials. Some 40 percent of the supplies to the industry go through the corporation, while 60 percent are based on direct ties between plants. Hence the power of the corporation over its plants remains considerable.

When Farmindustriia was formed, the Soviet Union still existed, and the corporation included plants from all over the country. Even the immunology plants and laboratories that had been administratively independent of the Ministry of Medical Industry joined the new corporation, at least formally. With the breakup of the Soviet Union, however, a process of disintegration began. The plants in other republics generally became independent, but, except for those in Ukraine, they began returning to the fold, at least informally.

(cont. p. 2)
So long as Farmindustriia had vital supplies at its control, it filled a critical function for plants throughout the former Soviet Union.

But because the immunology industry (named Immunogen) had its own supplies allocated by the government, Farmindustriia had little to offer it, and Immunogen has once more declared its independence. (The 51-year-old head of Immunogen, Valery P. Ganzenko, is a doctor who rose in the epidemiological system of Rostov and Moscow and entered the bureau for vaccine production of the USSR Ministry of Health in 1977, rising to head the chief administration of the ministry.) Thirty-three small plants that process herbs and grasses to produce more traditional medicines, generally of a non-prescription nature, are also independent of Farmindustriia and retain their traditional subordination to the Ministry of Health.

The Ministry of Health remains the institution that administers both the hospitals and the drugstores. However, republican bodies that once were purely administrative agencies carrying out higher policy now must make it themselves. The Russian ministry hired a number of specialists from the USSR Ministry, but ministries in other new states are quite unprepared for their new duties.1

The unit within the Russian ministry that receives the medicines from the pharmaceutical industry (and from foreign purchases by Pharmimex) and distributes them among the drugstores and hospitals is now called Rosfarmatsiia. It is headed by Inna N. Laskina. Although the name of the new organization implies that it may become an independent purchasing and distribution agency, its building still retains the old sign—The Chief Administration of Drugstores of the Ministry of Health—and this reflects the current administrative reality.

At its upper level, the Ministry of Health seems to be undergoing two major changes. One involves the loss of a function—that of setting standards and approving new drugs. By all indications, this responsibility will be entrusted to a new Pharmaceutical Committee, likely subordinated directly to the president, but essentially modelled on the Food and Drug Administration in the United States. It may also have the responsibilities of licensing pharmacists, etc., that are carried out at the state level in the United States. Until such a regulatory agency is established, Laskina indicates, little privatization of drugstores is likely to take place.

The second change in the Ministry of Health involves the creation of a new Committee for the Development of the Medical Industry, headed by a new deputy minister, Aleksei E. Vilken. The Committee is so new that no one seems to know exactly what it will do, but it has the appearance of the pharmaceutical industry’s representative in the ministry. Vilken was first deputy chairman of Farmindustriia before his new appointment, and the chairman of Farmindustriia speaks of sending him to the ministry. The Committee surely will push for investment and supplies needed for the production of medicines the ministry sees in especially short supply. But if the Committee begins to allocate governmental money for investment in the pharmaceutical industry, then the relationship of this investment to equity-ownership of plants will become a lively question.

The Finances of the Pharmaceutical Industry

Unfortunately, the financial situation of the pharmaceutical industry in Russia is easy to describe: it is very bad. The reasons, however, are quite complex, and the solutions difficult to see.

The first problem is the familiar one of the availability of hard currency. Yeltsin has signed a decree

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1 See Meditsinskaia gazeta, February 19, 1992, p. 2.
allocating 1.35 billion hard-currency rubles for medicines and medical equipment. However, with petroleum production continuing to drop and the center having weak control over currency transfers, only about one-third of the interest due on the foreign debt is being paid. What will or will not actually be available to the Ministry of Health is a very open question. The Ministry clearly faces a major problem in obtaining the currency to bring medical imports back to 1989 levels, let alone to increase them.

The second financial problem is budgetary stringency. The pharmaceutical industry has thus far increased prices for its goods by ten times, and the hospital budgets must keep pace if their purchases are to remain at the same level. The price of food, energy, and every other kind of supply keeps increasing on a weekly basis. The first quarter budget was being expended well before the end of the quarter.2

The population must pay for its medicines in the Ministry of Health’s drugstores. The prices in the state stores have risen sharply, but, on the average, only by four times. Even this increase produced a 30 percent decline in the volume of purchases by the population in January, and the regional administrations in direct charge of the drugstore network are apparently not always remitting the funds they obtain. With hospital budgets overextended and revenues from the drugstores down, Laskina simply does not have the money to purchase what is being produced. The vaccine industry delivers its products because they would spoil (but is cutting down on new cultures), but the goods of the pharmaceutical industry have been piling up in the warehouses.3

The third financial problem in the Soviet health system stems from the black market in medicines, especially imported ones. Even domestically-produced medicines are sold well below cost, but imported medicines are currently sold at an exchange rate of 4-5 rubles to the dollar, compared with an official rate closer to 100 to 1. The sharp increase in the private or cooperative sector creates a great demand for medicine, and the underpayment of persons in the health industry, coupled with the inflation and laxity of administrative controls, creates enormous temptation for corruption.

The immediate question is whether this problem will lead to a serious crackdown on the private medical system. On March 9th President Yeltsin issued a decree to curtail the black market in medicines. Laskina interprets the decree as a complete prohibition of sales outside the state system, while Markarians thinks it applies only to illegal diversion. Laskina’s interests as state distributor are different than Markarians’ as payer, and an outsider cannot judge who will be proved right. It is, however, clear that authorities who are really frustrated in their efforts to keep a dwindling amount of medicine flowing into the state system will eventually be tempted to move against the private and cooperative doctors.

The Problem of Production

Much of the pain currently being experienced in the health system is inevitable and even desirable. The old system had very fundamental problems, and financial shock may be necessary to attack them. The production system was relatively rigid, and the hospitals and drugstores had little ability to change the mix they received. With supplies centrally allocated and essentially costless, these institutions had every incentive to seek as much as they could from higher authorities and no incentive to return surpluses of any excess items. In addition, the incentive of hospitals to prolong hospital stays beyond reason led to an excessive use of supplies there.

Severe financial pressure could be a crucial step in breaking the decades-old psychological attitudes of the health administrators. If the price of medicine becomes very expensive in relation to resources, administrators hopefully will become much more selective in what they order. If medicines begin piling up in the warehouses, then hopefully the manufacturers will become more selective in what they produce, and will reduce the production of those items that have less demand. Hopefully if prices are too high, the manufacturers will be driven to cut prices. Similarly, the hospital administrators may economize by reducing the length of hospital stays.4 As the budgetary crisis eases, hopefully the hospital administrators will retain their new-found sensitivity to economic factors.

The real question is whether the pharmaceutical industry can respond. Ganzenko of the immunology branch of the industry professes relative lack of concern. His plants do not need supplies from outside Russia (except for the small vaccine boxes which are produced in Ukraine and not being delivered), and his production is more demand-driven than supply-driven. If the demand dries up, fewer cultures will be started. He predicts a 33 percent drop in production this year, but says the industry will survive. Whether this is a realistic prediction or a warning to the government is an open question.

Judging both from interviews and newspaper reports, the basic pharmaceutical industry is in a much more precarious position. The inability of plants to allocate 1.35 billion hard-currency rubles for medicines and medical equipment. However, with petroleum production continuing to drop and the center having weak control over currency transfers, only about one-third of the interest due on the foreign debt is being paid. What will or will not actually be available to the Ministry of Health is a very open question. The Ministry clearly faces a major problem in obtaining the currency to bring medical imports back to 1989 levels, let alone to increase them.

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2 See, for example, Meditsinskaia gazeta, February 14, 1992, p. 6 and February 21, 1992, p. 5.
4 This is, indeed, the explicit hope and plan of the new minister of health. See Meditsinskaia gazeta, January 24, 1992, p. 4.
sell much of their production puts them very close to bankruptcy, but at least this problem can be solved through budgetary subsidies in one form or another.\(^5\) The potentially more serious problem is the highly integrated nature of the supply system. Primary components of a drug, it is said, are often produced in one former republic or republics, the assembly of intermediary products in another, and the final product in yet another. There is great monopolization at each stage. If the supply system within the Commonwealth begins to break down, as is quite possible if present policy is continued, the pharmaceutical industry will be one of the first victims.

**Financing and Investment**

The fundamental long-term problem of the pharmaceutical industry is that it produced only half of the country's medicines—and at a time when use was too low. Moreover, with new investment concentrated in Eastern Europe, the Soviet plants were not the most modern. Now a major expansion of the industry is needed, but there are few investment funds. For example, a large new hospital supplies plant was scheduled to open in Syzran on the Volga River in the spring of this year, but because of lack of money for equipment, its completion has been postponed until at least the first half of 1993.\(^6\)

Clearly Russian authorities are looking for foreign investment, and Markariants reports the intention to compel such investment through a link with imports. He talks about five-year contracts in which the company will agree to gradually replace its imports of year one by comparable amounts produced inside Russia through its investments. Markariants himself does not have control over import purchases, and he does not have the authority to institute the policy he described. However, with his former first deputy heading the new Committee for the Development of the Health Industry, it is quite possible that he is accurately reporting the policy to be followed.

Domestic investment and ownership of the pharmaceutical industry seems to remain an open question, but the key actors are obviously positioning themselves. The present situation is very peculiar: the plants are still state property, but there seems to be no "state" that owns and runs them. The plant managers seem to have real autonomy, and in some sense are acting almost as the owners of the plant. However, they are in a bargaining relationship with the corporation Farmindustriaia, other supplier plants, the banks, and various governmental institutions, including, of course, the Ministry of Health. They are currently very dependent upon Farmindustriaia for supplies and on the banks and, ultimately, the government for money, but no one knows how supplies will be allocated next year and what the structure of incentives will be.

The question is the extent to which the various actors will be able to translate their current influence and/or the current debts they are accumulating into equity ownership. If the government decides to invest directly in the pharmaceutical industry—or to assume some of the debts of the industry—will it use this as a means to acquire substantial equity interest in firms, perhaps as much as 51 percent?

Clearly a large number of top officials are thinking in very entrepreneurial terms. They well understand from their reading of Lenin that great fortunes are built in the West through the creation of great corporations, and they all want to be part of that process. Markariants thinks of his corporation in substantial part as a trading company, and he hopes to use the profits generated in this process for investment in his plants including outside Russia. Ganzenko of Immunogen is thinking in similar terms.

These men know that governmental subsidies are necessary in a system of socialized medicine, but they want the subsidies to be given to the "customer"—the Ministry of Health—rather than to industry itself. No doubt, they fear that direct governmental subsidy to industry would be associated with governmental control and ownership, or at least would be of a "non-profit" character. But their current dependence on the government to provide them with the supplies they distribute makes them vulnerable. They also know, however, that governmental officials do not want to be bureaucrats and want to move into the private sector institutions that they have the power to create.

It is a very interesting time, and with a relatively small amount of dollars translating into a very large amount of rubles, foreign firms will be among the important actors.

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\(^5\) See the discussion in Izvestia, March 21, 1992, p. 1.  
\(^6\) Meditsinskaia gazeta, January 24, 1992, p. 4.
"1991 began on April 1st." So said the new deputy minister of health of the Russian Federation, Aleksei E. Vilken. Ostensibly he was referring to the supposed end of the financial chaos, as an annual budget was finally being drafted and hopefully approved in May. In reality, Vilken meant to imply that his appointment as deputy minister in March had for the first time introduced some administrative order into the purchase and distribution of medicine and medical equipment in Russia and into the establishment of an investment policy. He was right.

When top health officials were visited in March, the administrative system they described made no sense. The main production unit, Farmindustriia (headed by Vladimir Ya. Markariants), was distributing state supplies to the country's pharmaceutical plants, but it seemed suspiciously independent. Why was the state giving it supplies to distribute? The main domestic distribution agency, Rosfarmatsia (headed by Inna N. Laskina), and the main purchaser of foreign medicines, Pharminex (headed by Aleksandr D. Apasov), were subordinated to the Ministry of Health, but their activities seemed uncoordinated. And although the purchase of medicines abroad was to be conditioned on the willingness of sellers to invest, the purchasing agent, Pharminex, had little visible interest in an import substitution policy.

Now it is all clear. In March, Vladimir Markariants talked vaguely about the creation of a Committee of the Medical Industry within the Ministry of Health. The committee was to be headed by a deputy minister, Aleksei Vilken, his former first deputy chairman in Farmindustriia. Although Markariants spoke as if he had sent his deputy to the ministry as his point man, an interview with Vilken on May 5th made it obvious that the situation is far, far different. As chairman of the Committee of the Medical Industry, Vilken is not Markariants' point man, but his direct boss. He also supervises the medical equipment industry (Ros-optimized) and assorted smaller production units. The downgrading of the 57-year-old Markariants and the promotion of his 43-year-old first deputy is

Aleksei Yevgen'evich Vilken

Aleksei Vilken was born in 1949 in Riga, Latvia. He graduated in 1972 from the chemistry department of Riga Polytechnical Institute. From 1972 to 1981 he worked at the Chemical-Pharmaceutical Works in Olainsk just outside Riga, rising from engineer to head of the production department of the works. In 1981 he moved to the Ministry of the Medical Industry in Moscow to become chief engineer of its chief administrative unit supervising plants producing medicines through chemical synthesis (Soiuzlekarsyntesis). In 1985 he became head of the production administration of the Ministry of Medical and Microbiology Industry. In 1989 he was promoted into the Council of Ministers, becoming head of the section for the entire pharmaceutical and microbiological industry. (The section was within the Bureau of the Chemical Industry, headed by deputy premier, Vladimir Gusev. Vilken and his office were, in effect, Gusev's chief staff assistants on pharmaceutical questions, including the drafting of decrees.) In 1991, when the ministries were collapsing, Vilken became first deputy chairman of Farmindustriia under Vladimir Markariants. (See the April 1 addendum on health industry reform for Markariants' biography and a discussion of Farmindustriia.) This year Vilken was named deputy minister of health of the Russian Federation and chairman of the ministry's Committee of the Medical Industry.

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part of a general policy. Yeltsin thinks—and correctly so—that only men and women of Vilken's generation have the flexibility and sophistication needed to introduce a new economic system and develop a new economic relationship with the West.

Vilken is, however, much more than Markariants' supervisor. In addition to two departments that oversee the pharmaceutical and medical equipment industries respectively, the Committee of the Medical Industry has a science department that deals with science policy in the industry, a finance department, and an economics department that as one of its duties is drafting the plans for privatization of the medical industry. (Its target date is January 1, 1993, but even if that date is met, the result may be companies with 51 percent government ownership of the stock.)

Vilken's important post, however, is not chairman of the Committee of the Medical Industry, but deputy minister. He was not given this latter post because he is committee chairman, but the chairmanship of the committee is simply one of his responsibilities as deputy minister. In the latter role, Vilken is not only the direct superior of Markariants and the other industrialists in the pharmaceutical and medical equipment industry, but also the direct superior of Apasov, head of foreign trade, and Laskina, head of the internal distribution system.

Thus, Vilken is the crucial missing link in the system. In the administrative chaos of last year, a number of institutions such as Farmindustriia were, indeed, permitted a great deal of freedom, but now Vilken can coordinate purchases of medicines and equipment abroad, domestic distribution, imports and foreign investment, and so forth. And as the direct supervisor of industry, he will have a key role in deciding the partners for Western investors.

Without any question, Vilken is the man any serious foreign firm should see. Although Markariants says foreign firms should come to him with joint venture projects, Vilken curtly dismisses this idea. Markariants will carry out projects that have been negotiated in the Committee of Industry, Vilken says, not negotiate them. So long as the state controls pharmaceutical plants, Vilken is surely right.

From the perspective of foreign investors, the importance of Vilken's appointment cannot be exaggerated. One of the major obstacles to foreign investment in the Soviet Union was the lack of a partner with both the power and self-interest to cut a deal. The USSR ministerial officials knew that their ministries were to be dismantled, and they had no interest in complicating their life with foreign investment. The plant managers, who had the self-interest to attract investment, had no authority to make agreements.

The lines of authority are now crystal-clear, and Vilken's span of control is sufficiently broad. Moreover, Vilken's two years as head of the pharmaceutical sector of the Council of Ministers give him the breadth of vision about health and industrial problems needed for the job. At the same time Vilken has every bureaucratic interest to maximize investment and to make the purchase of medicines conditional upon investment agreements. Money for capital investment and capital repair has been cut way back. Much came from the profits of the plants, which are all going deeply in debt simply to pay wages. (See the discussion in the May 15th newsletter.) The ministerial funds for 1992 investment, Vilken reports, were not actually cut, but were in 1991 rubles. Rampant inflation means those rubles will buy virtually nothing now, and the funds allocated have been only slightly increased.

Thus, Vilken desperately needs foreign capital to keep the pharmaceutical industry afloat, let alone growing. (He reports a 95 percent drop in production in the first quarter, and a continuation of that trend in April.) He clearly is determined to use his power over pharmaceutical purchases to obtain this investment. He has the authority over Apasov and Pharmine to make the policy stick.

Vilken wants long-term contracts, in which the importation of finished medicines is made conditional on investment, that permit the replacement of these imports by those of specialized supplies. No doubt, in the second stage, investment to produce those specialized supplies will be demanded. "We are making our concrete position clear to each firm in our conversations with it," Vilken says.

If the pharmaceutical industry is truly privatized by January 1, 1993, then these rules of the game will change. However, a January timetable seems highly unlikely. This year 80 percent of medical industry supplies are being distributed in a centralized way, and with medicines being both scarce and subsidized in price, it would be surprising if the government trusted the market fully in the next few years.

Today, Vilken's instincts are those of a ministerial official. State funds are being allocated for medical expenditures, including the purchase of medicines abroad, and Vilken sees no excuse for them to be distributed without control or coordination. Yet, in the long run, a 43-year-old with Vilken's skills and knowledge can scarcely see himself serving 25 years as deputy minister. He must know that over a five, ten, twenty-year period Russia will develop the kind of great corporations found in the West. He must realize that he would be a natural CEO for one of them and that his long-term personal interest lies in creating the conditions under which such corporations eventually develop. He certainly is in a position to further that process.
The Health System As Viewed From Yaroslavl

In the swirl of rumors, anecdotal evidence, and dubious statistics, it is very hard to know what is going on within the Russian, let alone the non-Russian, health system. Horror stories abound about shortages of the most basic supplies, but we don’t know whether they are isolated exceptions or the rule.

Often some things are viewed more clearly from the bottom of an administrative system than the top. In late April, I was in the provincial city of Yaroslavl, 250 miles north of Moscow, and was able to interview the head of the city health department and the head of the regional system for distribution of pharmaceuticals. These officials clarified several key issues about the distribution and budgeting system.

Problems in the Distribution of Medicines

The distribution of medicine has had a range of problems. As discussed in the last addendum of this newsletter, medicines were piling up in the factory warehouses because the regional offices could not pay. Inna Laskina, the head of the Russian distribution system, Rosfarmatsiiia, complained that customers did not have the money to purchase medicines in the store and reported a 30 percent decline in sales in January.

Interviews in April remind us that difficulties can be temporary and exaggerated in the press for political effect. Thus, deputy minister Vilken reports that medicines are now flowing from the plants to the warehouse distributors and have been since the problem was discussed in Izvestiiia. And Leonid Bredinin, the head of the Yaroslavl regional pharmaceutical administration (his business card still has the old name “drugstore administration”), smiled when asked about the January sales drop. The drugstores, it turns out, had closed for five days in January to change prices and to take inventory. This had a major impact on turnover that month.

In addition, the distribution system can be quite inflexible on the local level. Temporary shortages arise that will last only a couple of days. These can be quite painful, but the officials affected can report the pain to the press without mentioning that supplies are on the way. We are left with the impression that the shortage is long term.

Bredinin had attended the Pfizer Inc. seminar for Soviet health officials in Brussels, and the mechanized warehouses he had seen seemed like something from Mars. His own distribution system is extremely backward. Yaroslavl has a population of 650,000 and is the capital of a region the size of Holland with a total population of 1.5 million persons. The region has a single wholesale base to distribute all medicines going to its 200 drugstores and to its hospitals and clinics. The base is not mechanized, and it has only 10 trucks.

Because of his small number of trucks, the head of the wholesale base believes that (except in emergencies) he can make only one delivery a month to each store and hospital. Bredinin, who thinks this is a hopeless way of doing business, has the power to remove the head of the warehouse base, but does not think another man could do much better with 10 trucks. But with such a system, drugstores or hospitals naturally run out of some items towards the end of the monthly cycle, independent of more permanent shortages.

Of course, there is another reason for shortages of scarce items. As reported in the last issue, medicines are sold at subsidized prices, imported medicines at the exchange rate of 5 rubles to 1 dollar. Friends in Yaroslavl report that scarce medicines unavailable in the drugstores often appear on the black market at high prices. Bredinin reports that the head of the wholesale base earns 2000 rubles a month, approximately the average wage, but well below the 15,000 rubles a month of a coal miner, the 6000 rubles of a Moscow subway train engineer, or the reported 15,000 rubles of the head of the dining hall system of the 50,000-employee Yaroslavl Diesel Motor Works. If the head of the base earns 2000 rubles, his subordinates earn correspondingly less. It seemed indelicate to ask Bredinin whether such salaries were not an invitation to corruption, but he would undoubtedly have agreed and rightly said that he does not have the authority or money to change things.

Fiddling With the Budget

After all the discussion about shortages of medicines and budgetary deficits, it was a real surprise to talk with the chairman of the Yaroslavl city soviet, Lev L. Kruglikov, and the head of the Yaroslavl city health department, Galina M. Morgunova. The former said that the city budget was in balance for the first four months—indeed, in surplus—and the latter said that the hospitals under her control were receiving as much medicine as last year—and as much food, fuel, and other materials necessary for operation.

What is the explanation? First, as already seen,
Russia is producing 95 percent of the medicine it did last year. The hospitals and drugstores should be receiving a like amount, and the hospitals in a regional capital are likely to do better than other claimants.

Second, when Morgunova was asked about other items in her budget, she painted a bleak picture. Wages had been raised 45 percent in February, and at the end of March a beginning doctor received only 600 rubles a month and an experienced one 1000 rubles—not a living wage with today's inflation. In April, wages were raised another 2.5 times to 1500 and 2500 rubles for beginning and experienced doctors respectively, but this too was grossly insufficient. When Morgunova left our interview, she was going to a strike meeting to support her employees' demands.

Moreover, long-term expenditures were being postponed. If subsidized medicine was costing the hospitals four times more than last year, the price of equipment was up 10 to 50 times. An X-ray machine that cost 80,000 rubles in 1991 was now 1 million rubles. The cost of a bed sheet rose from 4 rubles to 100. Little equipment was being bought. The capital repair budget had been cut to virtually nothing.

But where was the money coming from? The total 1991 budget of the city health department was 39 million rubles. In the first quarter of 1992 alone, the department spent 71 million, and its budget for the second quarter was 150 million. The third and fourth quarter budgets were supposed to be similar (an extremely unlikely prospect), and this would put the 1992 budget at 521 million rubles—11.3 times that of 1991. And almost nothing was being spent for equipment or capital repair.

The city health budget was being financed from higher new taxes, largely from industry. Tax collection was chaotic at first, and the large plants with better accounting departments were paying a disproportionate share. The large plants were also helping hospitals in their districts directly, sometimes paying for employee operations, sometimes for a private room rather than a ward bed, sometimes conducting repairs, and so forth. But the plants were all essentially bankrupt, paying taxes, wages, etc., out of government loans that can never be repaid in real terms.

The oblast pharmaceutical wholesale distribution office—a purely state institution—was also going into debt at a rapid pace. It was supposed to receive governmental subsidies to cover the difference between its purchase and sales prices. It had a debt of 3 million rubles on January 1st, of 17 million on April 1st, and 20 million on April 15th. The total budget for medicines for the Yaroslavl hospitals for the first quarter was 7 million rubles.

The Future

In one sense Russia's financial problems can be exaggerated. Governments often run deficits, and if Russia is running its deficit off-budget to make the IMF happy, who can begrudge people a little happiness? If industrial production ceases falling, if strikes don't spread, the problems of the winter and spring will have been quite helpful in adjusting price relations and in ensuring that the trade network and ultimately the consumer, not industry, decide which medicines are produced.

Never, however, have there been bigger "ifs". There is little reason to expect a turnaround in industry, and much reason to expect further decline unless policy is changed. One can print more money, but if fewer goods are produced, fewer will be distributed. Without capital investment and repair, an already decrepit medical system will deteriorate further.

The relations among former republics remain the real time bomb. Most aspirin and analgesics, The New York Times reports on May 9th, are produced in Ukraine and subject to cutoff. The non-Russian republics also may not have money to purchase Russian medicines. A source in Kazakhstan—not, to be sure, one with any particular reason to be knowledgeable on the subject—claims Kazakhstan is surviving by drawing down state reserves of medicines. If this is true, then a real crisis is looming, and the rise in oil prices will accelerate it. We cannot be sure.

And, the incentive system within the health system remains unreformed. The ministry is trying to force hospitals to reduce the level of hospitalization, and the head of the Yaroslavl city health department reports a decline in the length of hospitalization for a normal birth to 4-5 days. But the money for medicines and food is still being distributed by formula: so much for each day of hospitalization. If hospital administrators try to respond to financial stress by cutting back on length of hospitalization, they simply would receive less money for food and medicines.