

HUMAN RESOURCES OF THE COMMUNIST WORLD

15 November 1957

CONTENTS

	<u>Page</u>
INTRODUCTION--Mr. M. S. Poluhoff, Member of the Faculty, ICAF.....	1
SPEAKER--Mr. Leonard R. Linsenmayer, Associate Director, Office of International Labor Affairs, U. S. Depart- ment of Labor.....	1
GENERAL DISCUSSION.....	30

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MR. POLUHOFF: General Mundy, Admiral Clark, Gentlemen of the College: This morning our speaker will talk to us about the factors which both detract from and add to the human resources potential of the Communist bloc.

The warning we have received from Sputnik I and Sputnik II highlights the importance of this area, and any information that our speaker can give to us in this area will be of great assistance to the committees.

Mr. Leonard R. Linsenmayer has been Chief of the Division of Foreign Labor Conditions of the Bureau of Labor Statistics, for some years, and is now Associate Director of the Office of International Labor Affairs of the Department of Labor.

Mr. Edmund C. Nash, one of his associates, will be with us in the question period.

Mr. Linsenmayer will now talk to us about the "Human Resources of the Communist World." Mr. Linsenmayer.

MR. LINSENMAYER: Thank you, Mr. Poluhoff. Gentlemen: It is a pleasure to come here this morning and to talk about this subject, which has quite suddenly become, in my view, much more important than I thought it would be when I first discussed the question of coming over here. I would like to say a few words by way of introduction to set the stage for this lecture. I would like to lay some ground rules for this lecture, partly because of the tremendous scope of the subject, and partly because I realize there are many aspects of this problem that I couldn't possibly cover, even if I were qualified to do so, in the time that is available.

I think, by and large, it is fair to say that the lecture is intended not to give a carefully balanced picture of this problem of human resources of the Communist world so much as to put before you a few figures and facts which I hope will provoke some thoughts and some further consideration. I do not intend to draw any profound conclusions, and I strongly suspect that in many instances I will be telling you things

that you already know, but perhaps I will be giving these things an emphasis that we in the Department of Labor think is rather important at this time.

Secondly, I would like to point out that, while we do have, as an agency of the Federal Government, access to some classified information, we don't have access to all of it, and there may be things that some of you know that I don't know. In any case, most of the material that I am going to cover this morning is unclassified.

Much of the research that is done by experts around the Government concerns itself with examining Russian documents, and in this connection I am very deeply indebted primarily to Ed Nash, who, as Mr. Poluhoff said, is here to help me in the questioning period.

Many of the figures that I will be using this morning came from the Bureau of the Census, and I am indebted to Norman Lawrence, Paul Myers, and Dr. Shimkin, some of whom I understand are going to be with various groups at different times in these studies.

Finally, I would like to put in a commercial, before I forget it, in behalf of the Department of Labor. We do have a number of research operations in the Department of Labor, and the people who work in these operations are there to help you people and others to the extent that facts regarding labor situations in other countries can be helpful. I particularly would like to point out in this connection some of the work that Edmund Nash has done. I have, for example, three publications that he has prepared. One is a basic document, Labor Conditions in the Soviet Union; another is Forced Labor in the USSR; another is Soviet Attitudes and Policies Toward Increasing Output of Workers. Then, Mr. Hoover, in the Division of Foreign Labor Conditions, has recently prepared a delightful little paper which I think you might find of interest, Labor Pains in Red China. Finally, Dr. Arnold Steinbach of the Office of International Labor Affairs and his staff have issued a series of information papers on International Trade Union Organizations. The one that I particularly call your attention to this morning is the Directory of the World Federation of Trade Unions, which, of course, is a Communist dominated International Trade Union Organization. So much for the commercial.

In attacking this topic of human resources in the Communist countries, I thought that I would roughly divide the presentation into the statistics, and the social and economic factors affecting the utilization of manpower resources.

In dealing with the statistics, I think it is interesting and useful to lead off with the basic population facts. I think the basic fact that highlights and underlies this whole business is the fact that in the world today, slightly more than one out of every three persons lives in a country that is dominated and ruled by a Communist type of government. The population of the world is about 2.7 billion; and we think that well over 900 million people live in the Communist dominated countries. This figure of perhaps 920 million people in Communist dominated countries breaks down, roughly, about as follows: About 203 million in the Soviet Union; close to 100 million, perhaps about 96 million, in the European Communist dominated satellites; and somewhere around 620 million in Communist China.

The comparative breakdown between the United States and the USSR by age groups is rather interesting. In the Soviet Union and in the United States, the percentage of total population under 15 is about the same--28 percent in the Soviet Union and 29.5 in the United States. In the working age group, if you consider that as being 15 to 59, the percentage of the Soviet population is 63 percent, and in the United States it is 58 percent. However, in the older age group, we have about 12.6 percent of our population in the age 60 and over group, and they have only 8.8 percent. You can draw your own conclusions as to whether we work less and can live longer, or we have better medical facilities, or what other factors apply. But, in any case, percentagewise they have the edge in the working age group, but we seem to live a little longer.

When it comes to labor force, there are some interesting comparisons between the United States and the Communist dominated countries. The economically active population in the Communist dominated countries works out about like this: About 100 million, maybe a little more, in the USSR. This is roughly 50 percent of the population. In the United States our labor force is closer to 40 percent of the population. In the European Soviet bloc there are about 47 million in the labor force, and in China, I don't suppose anybody really knows, but it is probably about half the population, or about 300 million.

Now, perhaps the difference in percentage of the labor force to population is largely accounted for by the role of women. In the United

States, of our labor force, only 27 percent are women. In the Western European countries, women account for 31 percent of the labor force. In the Soviet bloc in Europe, as a whole, women account for 44 percent of the labor force, and in the Soviet Union itself about half of the labor force is composed of women. So you can see that the extent to which women are pressed into service in various occupations is much greater in the Communist countries than in the United States.

Unemployment--there is, of course, no unemployment in a Communist country. It's just against the rules to have any unemployment. So we have no unemployment statistics in the Communist countries, and we suspect that, as far as the Soviet Union is concerned, this is probably true. They do have full employment, one way or another. There have been some evidences of unemployment problems in some of the European satellites.

In China, however, the story is different. There the regime, which has encouraged a degree of free speech, has had to counter criticisms against it because of unemployment and underemployment. So they have indicated that all of the facilities in agriculture and handicraft industries have to be put to work to take up this slack in employment. The Shanghai Radio found great cause for rejoicing in the fact that during the first eight months of 1957 the Government had helped 14,000 unemployed to earn a livelihood. "Most of them," said the broadcast, "glean and sell cattle fodder to farmers, pick up broken crates in warehouses, or service temporary pier workers. The people must help the Government solve the unemployment problem . . . ," presumably by sharing the work with idle relatives; and, by inference, of course, the economic planning has failed to do this. Of course the obvious fact is that, with such a tremendous population as Red China, there is a tremendous growth in addition to the labor force every year, and any kind of economic planning that they have simply cannot cope with it.

One of the interesting things that have developed, which is a tacit admission for the first time, perhaps, that China has an overpopulation problem, is a pronouncement recently made by the president of Peking University, stating that the biggest contradiction in China is between overpopulation and poor capital supply. He sharply criticized the earlier official line of minimizing the population problem and he recommended propaganda for birth control and later marriage age, and, if the propaganda proved insufficient, an eventual upward revision of the legal ages for marriage, supplemented, if necessary, by "more severe and more effective administrative force." I don't know just how you do

that, but anyway this is the problem as put forth to the Chinese people by this university professor.

Now, I would like to turn primarily to some population statistics, both current and projected, regarding the Soviet Union and the United States. Here again I offer these not as conclusive but as food for thought.

Chart 1, page 6. --This is a chart showing the comparative birth-rates of the USSR and the United States. You will note that in the forties the USSR birthrate went away down to where it actually fell to a point close to that of the United States for a short period of time. Now their births are running a little over 5 million per year, while ours are a little over 4 million.

Now I think we can go on to the next chart.

Chart 2, page 7. --Here we are going to deal in some projections for the future with charts made in the Department of Labor based on statistics given to us by the Bureau of the Census. You will note that the population in the USSR fell in the forties and got back to something like prewar levels in 1955. It is estimated that in 1960 it will be 213 million, and in 1965, 231 million. Most of the experts around the United States had estimated the Russian population too high for a number of years. So, when the Russians produced an official statistic along about 1956, most of the experts here found that they were about 20 million too high. But this chart is based on the revised new estimates.

Chart 3, page 8. --This is a chart that attempts to predict what is going to happen between now and 1965 with reference to age groups in the Soviet Union. This points up certain problems that the Soviet Union will have as a result of these changes. You will note that in both males and females there is going to be a tremendous increase in the next eight years in the number of people under 15. This of course will put great stresses on their educational system. However, in this young worker group, for both male and female, there will be a substantial decrease. There will be about 2 million less in this young worker group over the 8-year period. This of course reflects the low birthrate in the forties, which we saw illustrated a moment ago. There will be a very, very large increase in the male workers, 30 to 44, which of course is still a pretty good working age for effective industrial production.

BIRTHS, 1940-1955

Chart 1

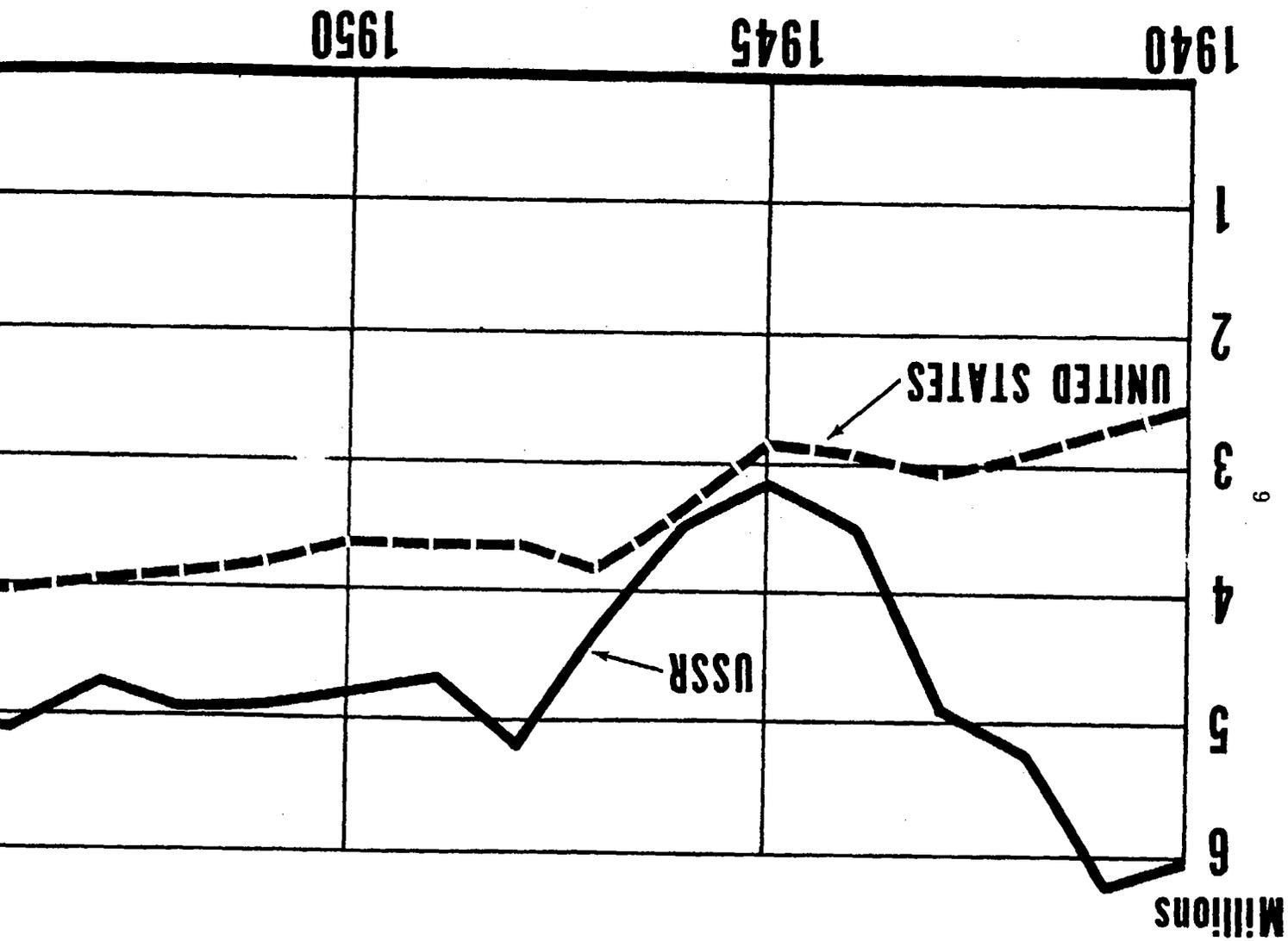


Chart 2

TOTAL POPULATION - USSR 1930 - 1965

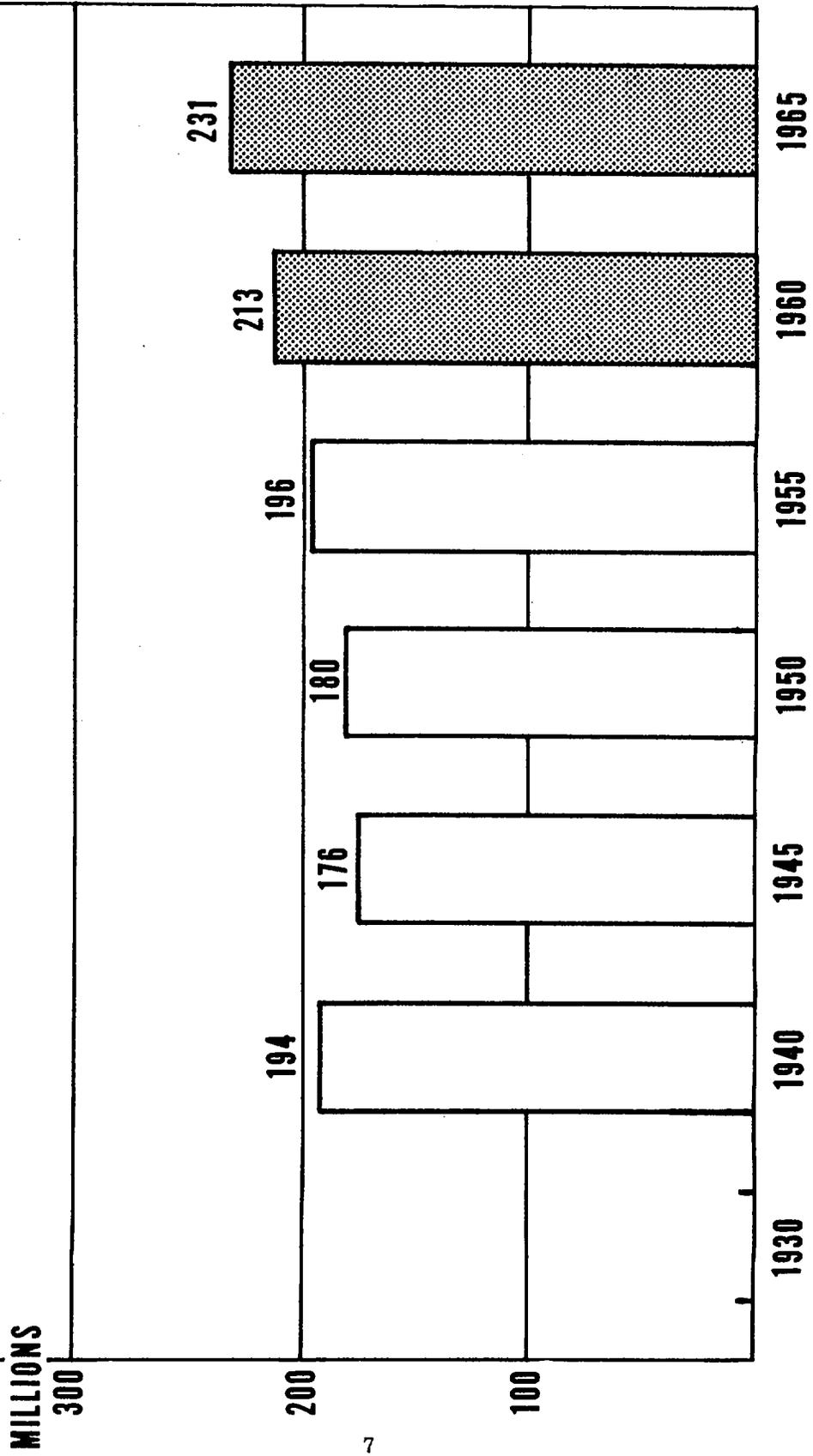


Chart 3

POPULATION OF THE USSR

Change in size of Age Groups - 1955-65

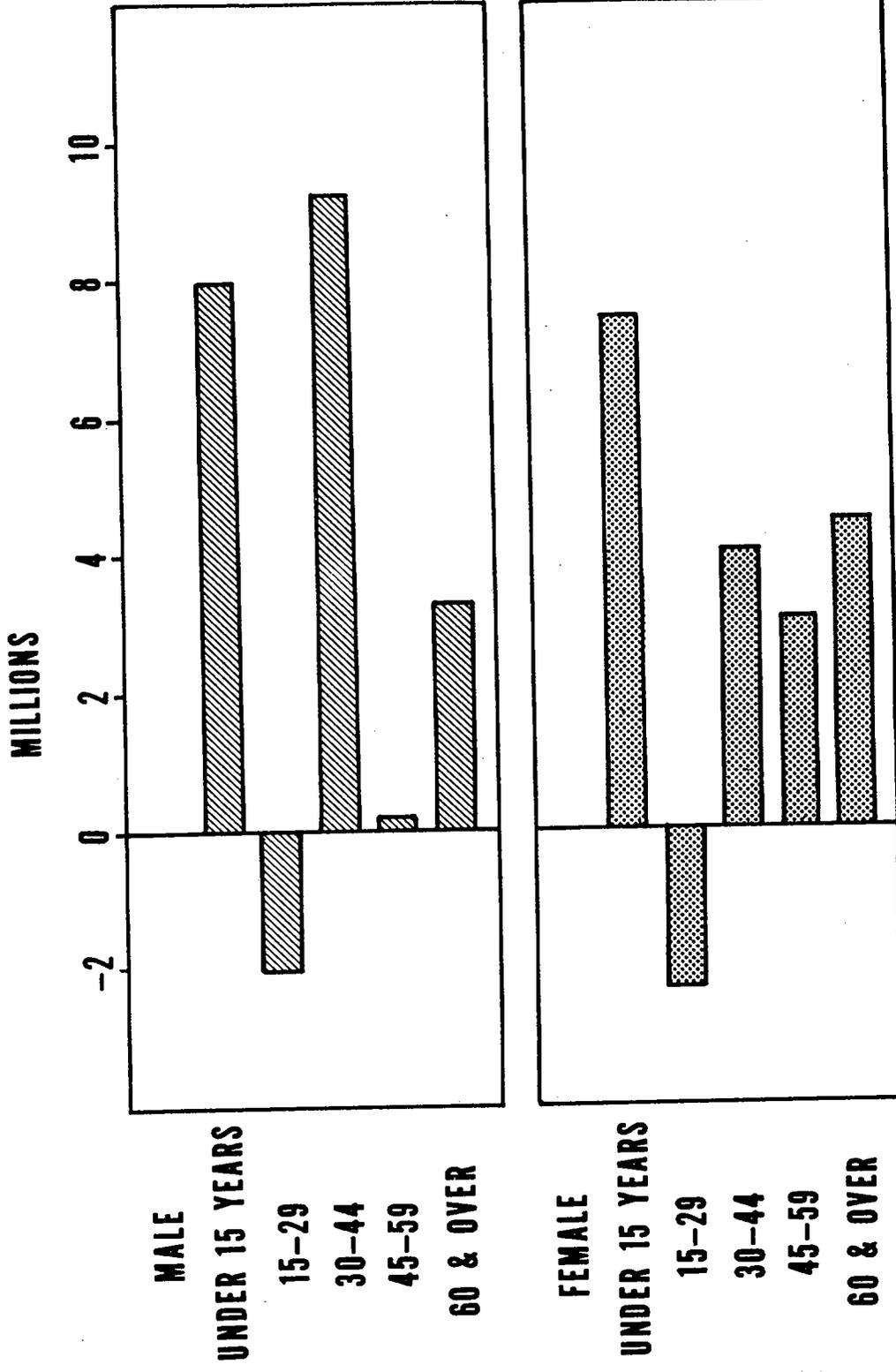


Chart 4, page 10. --This is a chart that compares the male population of the United States and the USSR in 1955. The principal thing to be noted in this chart is that in 1955 the Soviet Union had a tremendous advantage over us in the young worker group.

Chart 5, page 11. --This chart shows the same thing with reference to total population in 1955. It shows the same advantage in the young worker group. Of course we have already seen that they use women to a much greater extent than we do. This advantage holds up even more when you consider that this is the total population.

We are going to see four more charts, with an attempt to show these same relationships for 1965 and then for 1975.

Chart 6, page 12. --You see, by 1965 in the young worker group we will have a leveling off, with the Soviet Union not quite as far ahead of us in the working age groups as it was in 1955.

Chart 7, page 13. --The Russians are also ahead in the working age groups in total population, but by a smaller margin than in 1955.

Chart 8, page 14. --This chart is 1975. In this chart there has been a more or less leveling off in the comparative figures, with the Russian superiority in the male population really pronounced only in this middle age worker group, 30 to 44.

Chart 9, page 15. --This chart shows the same thing for the total population.

The charts that we have seen thus far show what kind of work-force problems the Soviet Union will have in their industrial production planning in the next few years. I think this problem emphasizes the prospect of deficiencies in certain age groups that will spur them on to even more technological progress in order to do things by automation rather than by manpower.

Chart 10, page 16. --This chart shows simply a comparison of Russia and the United States from 1940 to 1975. It shows that we closed the gap percentagewise somewhat, but that the differences numerically are expected to be about the same, with perhaps a greater relative increase in population on the part of the United States than Russia by 1975.

Chart 4
MALE POPULATION - USSR AND UNITED STATES - 1955

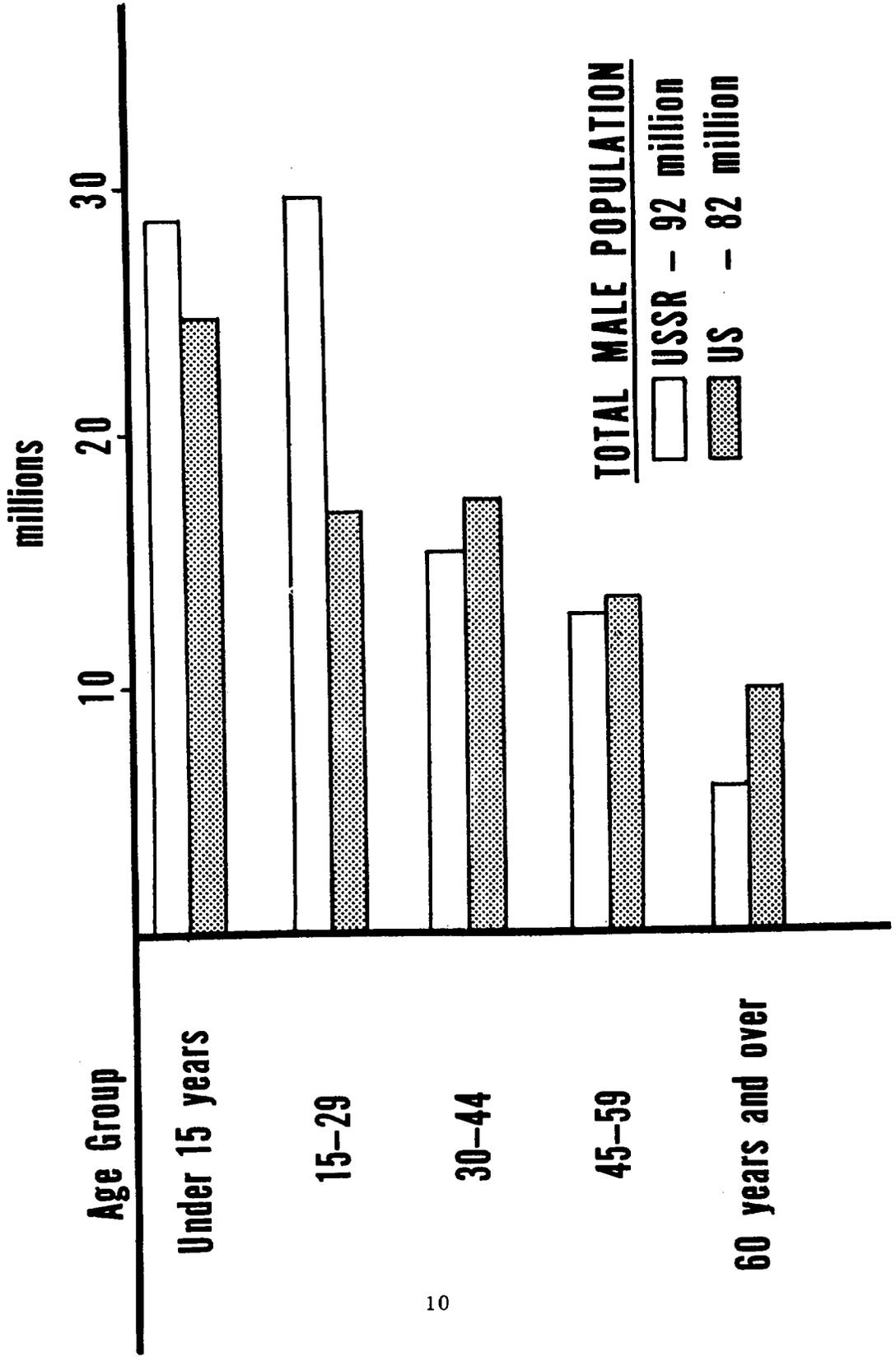


Chart 5
POPULATION - USSR and UNITED STATES - 1955

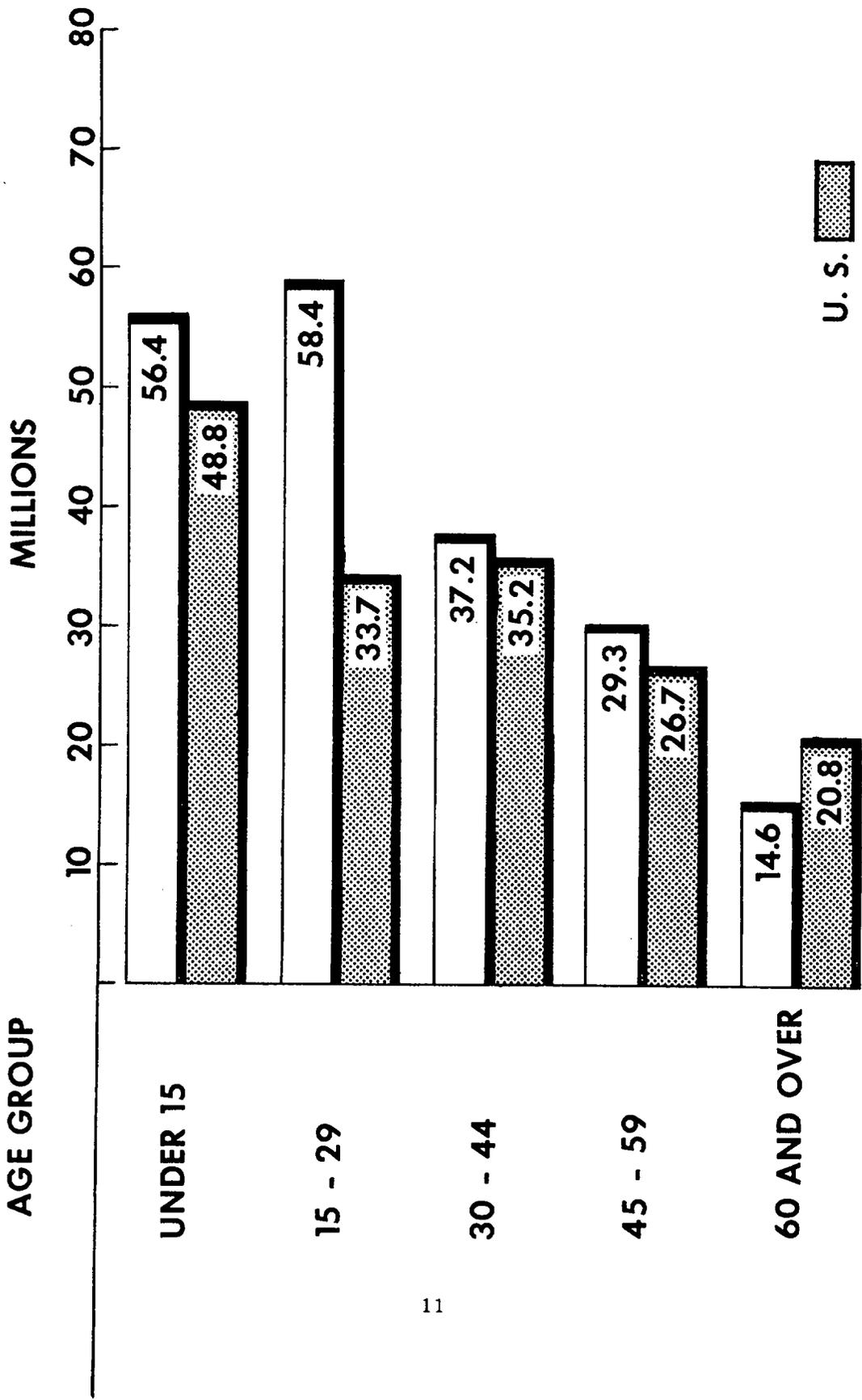


Chart 6

MALE POPULATION - USSR & UNITED STATES - 1965

MILLIONS

30
20
10

AGE GROUP

UNDER 15 YEARS

15 - 29

30 - 44

45 - 59

60 & OVER

RUSSIA
UNITED STATES

TOTAL MALE POPULATION

USSR - 110 MILLION

US - 95 MILLION

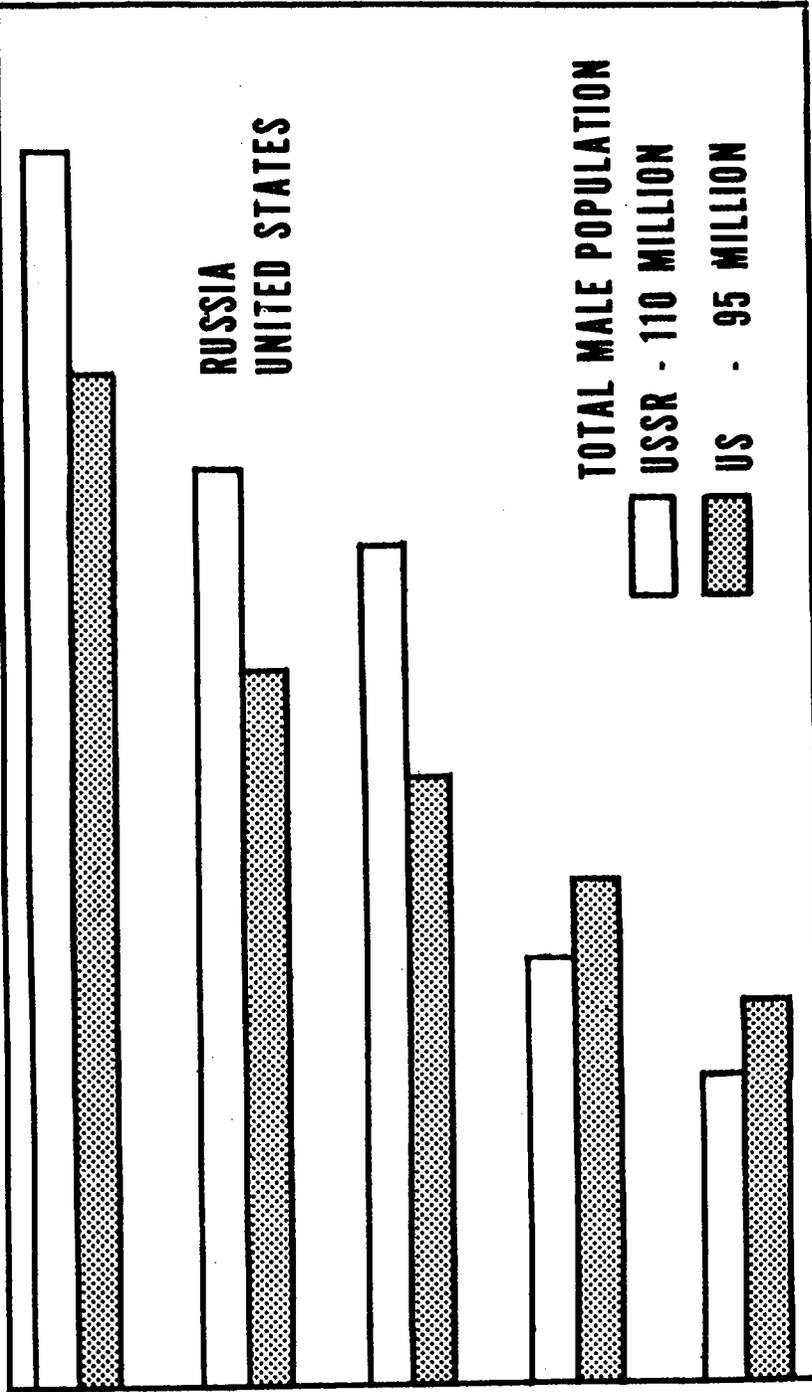


Chart 7
POPULATION - USSR and UNITED STATES - 1965

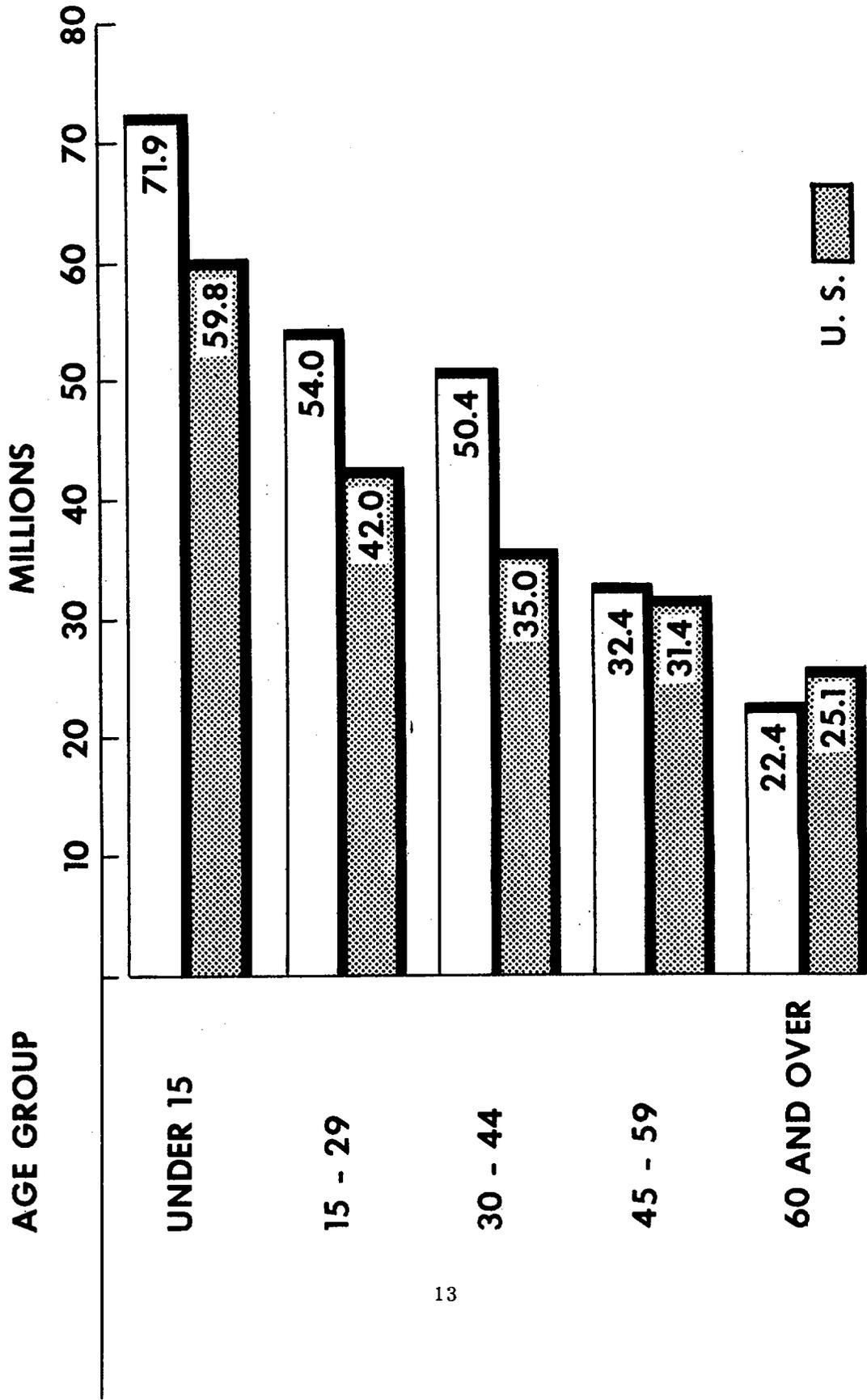


Chart 8

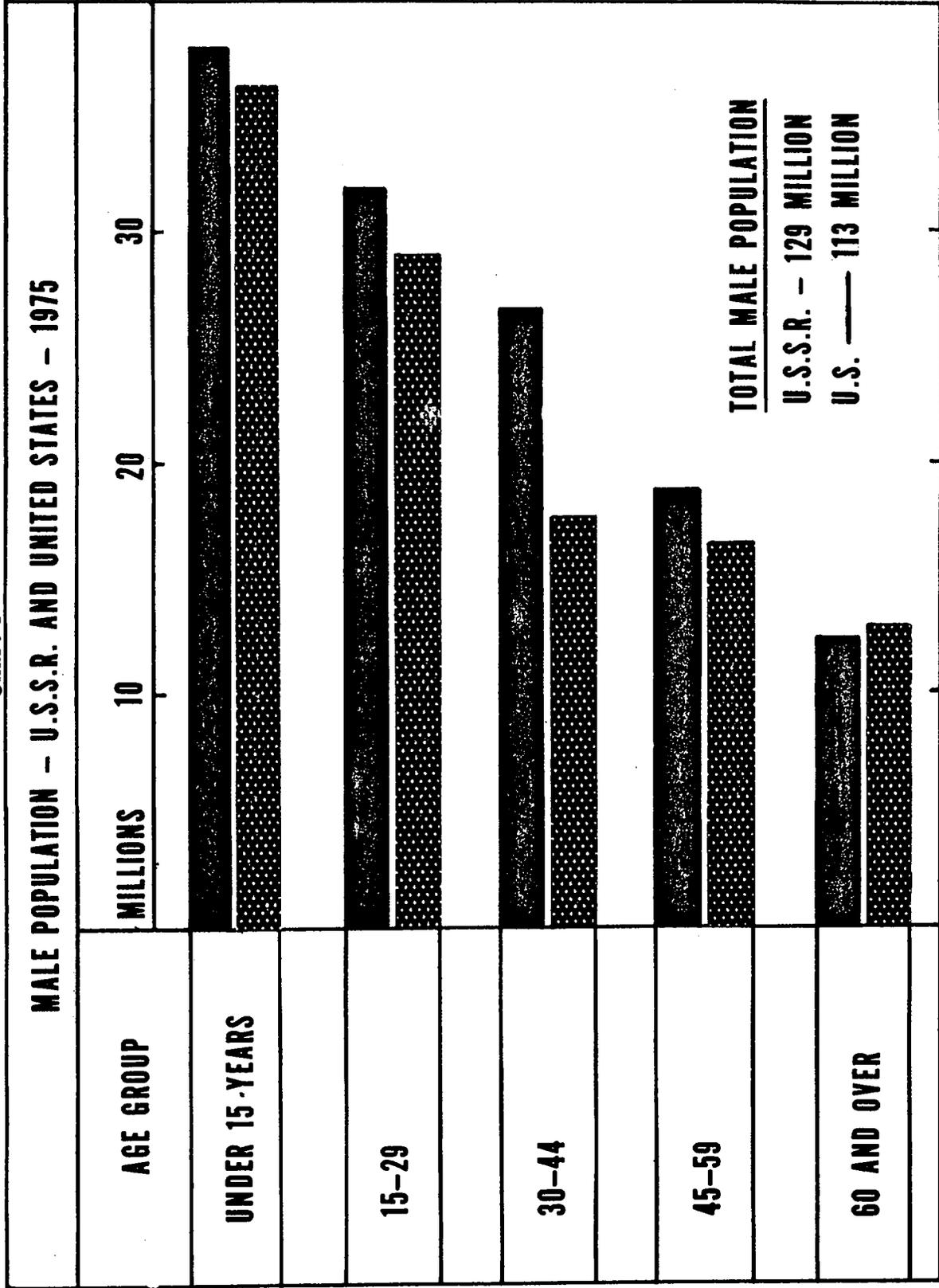


Chart 9
POPULATION - USSR and UNITED STATES - 1975

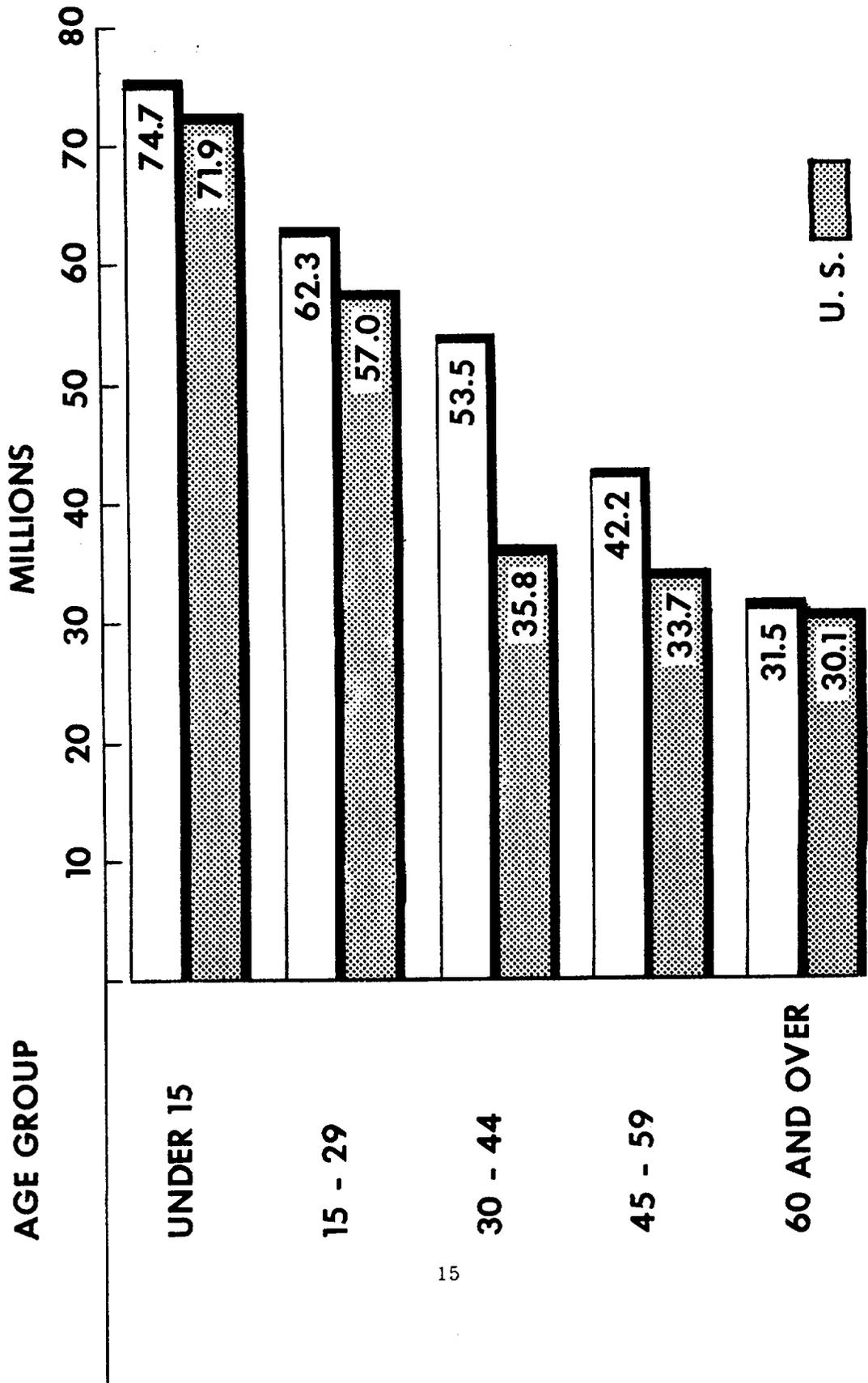
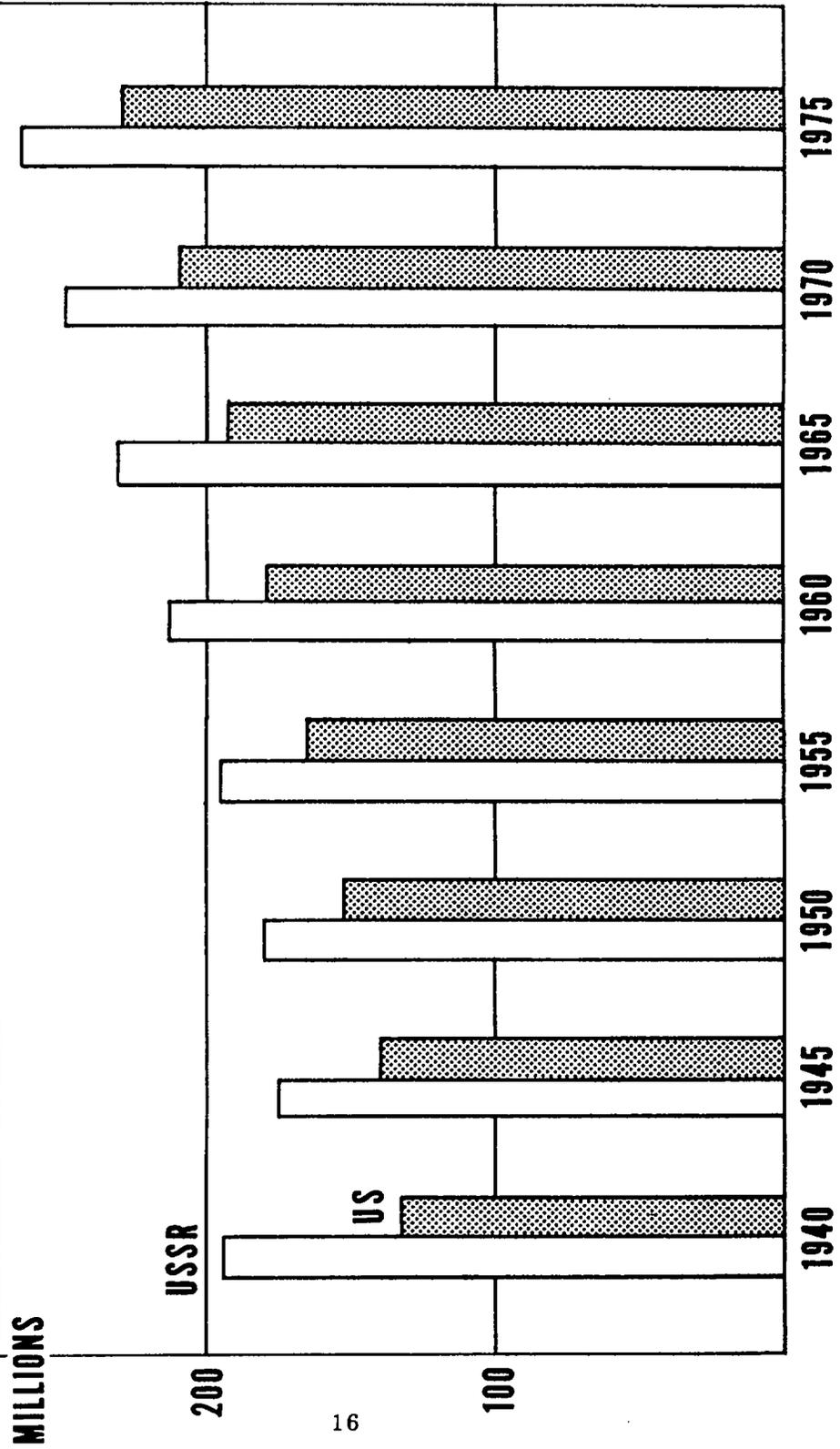


Chart 10

TOTAL POPULATION USSR and UNITED STATES 1940 - 1975



As I say, all of these charts were made up by the Department of Labor from statistics and projections made in the Bureau of the Census.

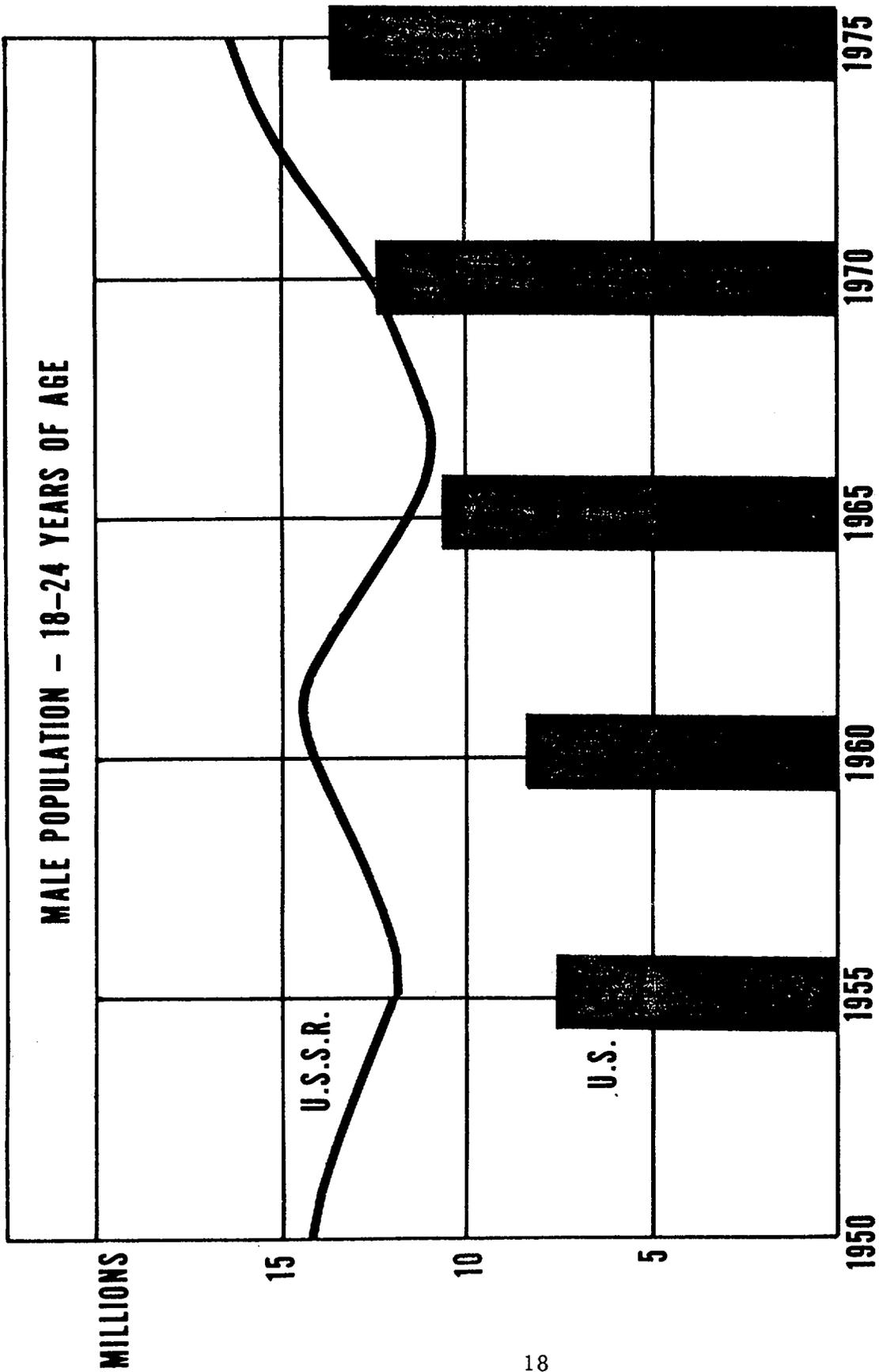
Chart 11, page 18.--Finally, this chart, I think, is rather startling. It shows the military age group, that is, the limited military age group of 18 to 24, in the Soviet Union and in the United States. This of course reflects the effect of periods of low birthrates, so that the Russian supply of male military age group will fluctuate greatly. As a matter of fact, in 1970, despite their greater population, it will be just about the same as ours; but it will pull away by 1975.

Those are some of the figures. I think these charts have shown by and large that the Communist world has a pretty good supply of manpower, although there will be problems of a spotty nature that will highlight education and industrial production problems. And of course, basically, we have to always keep in mind that one out of every three persons on this globe lives in the Communist world today.

Let's take a look, for the remainder of this presentation; at a number of the social, political, and economic factors that have an effect on the mobilization of human resources, because I think that in any consideration of human resources the figures and the statistics serve only as a starting point. It doesn't do a lot of good to have a great mass of population if you can't organize that population to do the job that as a state you want to have done. There are certain characteristics that influence and determine the utilization of these human resources which I would like to outline. I certainly am not going to mention all of them, but I am going to put emphasis on some that are of particular interest in the kind of studies and the kind of work that we in the Department of Labor do.

First I would like to point out that the USSR itself is a multi-national state. So are we, for that matter, because we are made up of immigrants from all parts of the world. But the big difference between the USSR and the United States is that we are a melting pot and they are not. In contrast to our facility for making Americans out of all the people that come, especially after one or two generations, the USSR has 177 minority groups, speaking more than 125 languages and dialects, worshipping in some 40 different religions. These people have lived side by side--and have not migrated--for thousands of years, and all the while they have struggled to maintain ethnic unity, clinging to tribal customs and national traditions. The Soviet Union, as you know, is a union of 15--formerly 16--Soviet Social Republics.

Chart 11



It is true that about half of the people in the Soviet Union live in the Russian Republic; but even in the Russian Republic there is a whole host of minority ethnic groups. There are 15 official languages in the Soviet Union, with each republic retaining its official language, and thus far the efforts to make Russian the official language for the whole Soviet Union have not succeeded. Furthermore, these ethnic groups range from people who are typically European to people who are typically Asian--Mongolian types and so forth.

This has all kinds of implications, on many of which we can only speculate. One example of the kind of problem this creates, I think, is the utilization of troops in the subjugation of Hungary. The Soviets found that they had to pull out of Hungary the Eastern European Soviet Union troops. The Ukrainians and the troops that had come from Byelorussia were simply too sympathetic. That is perhaps expressing it too strongly, but you get what I mean. They weren't tough enough on the Hungarians. So they were pulled out, and the tough, sturdy Uzbeks, who speak no known language, were brought in. They of course were impervious to the plight of the Hungarians and they did a better job.

I had not intended to pose today as an expert on education. In fact I hope that I am not posing today as an expert on anything. I am simply trying to bring to your attention an assortment of facts and ideas. However, I think that Sputniks I and II have certainly set loose a flood of comment and the need to study further the problem of education in the United States and to know more about education in the Soviet Union. So I have just a few highlight facts.

Obviously those sputniks wouldn't be up there, if they hadn't had some pretty effective educational facilities.

They have this system in the Soviet Union: They start to school at 7; they finish elementary school at 14; and then, on a selective basis, with a whole rigmarole that is worked out, they proceed either to further academic education or to a combination of vocational school classes plus on-the-job training. Then, finally, those who have gone on to further education at the technical or special or secondary schools, some of them, are selected for so-called higher education.

How many are they turning out from this higher educational process? I had the impression that they were turning out many more than we, but this is not true. In 1955 we turned out 2.379 million college graduates as against almost 1.9 million in the Soviet Union.

However, the contrast between graduates from higher education in the Eastern European countries and the Soviet Union together, and Western Europe, is pretty sharp. While in the total the European Soviet bloc, including the Soviet Union, there were about 2.250 million graduates from higher schools, in the non-Soviet European countries combined, all of them, the countries that have these great traditions of culture and education, fewer than a million were turned out from these higher schools. As a matter of fact, the figure was 820,000. So, as far as the European countries are concerned, the Soviet Union and the bloc were ahead of the non-Soviet countries by almost 3 to 1. Of course they are ahead in population, too, but in terms of primary school the comparative figures are about 37 million to 32 million, which surprise me a little bit, because it shows that more people in the Soviet Union and in the Eastern European satellites go on to higher education than in the non-Communist Western European countries. This to me was an astonishing fact.

Of course I said a moment ago that we turned out more college graduates than they did. But when it comes to engineers the story is different. Of course there is a lot of talk about engineers these days. In 1955 the Soviet Union graduated about 65,000 engineers from their higher education schools. We think this is probably the equivalent of a bachelor's degree. They graduated 165,000 engineering technicians from these trade-type schools. In contrast, in 1955, which was a poor year for us, we turned out 22,600, as compared with their 65,000 graduates with bachelor degrees in engineering.

There is the story in a nutshell. Furthermore--I shouldn't beat the obvious to death, I suppose--when the Soviet Union turns out an engineer it knows pretty much what he is going to do. When we turn out an engineer he may design a new swept-wing fin, he may design a better pop-up toaster, or he may do something in the interests of national defense. So, if you take the end uses of engineers into account, then this comparison of 65,000 in the Soviet Union to 22,600 for us becomes even more dismal in terms of our total technological defense effort.

I don't want to make this picture entirely bad. It so happens that the figure I had for the Soviet Union was 1955, and that was a poor year for us. In the immediate postwar years, while many were going under the educational provisions of the GI bill, we were turning out 45,000, 52,000, 40,000 a year. Then it dropped to about 22,000 to 25,000 a year in the last few years, but it is going up now. In 1956 we turned out

26,000 engineers, and the projections that I have show that this will go up rather drastically; but still, by 1966 it will be only about 57,000. Of course if there are new measures to encourage such education, these projections could be too low.

So of course education is a great factor in how you mobilize human resources.

Now I would like to turn to some other political and social factors, and again, at the risk of stating the obvious, I would make the simple statement that in a Soviet Communist type of country all of the resources of the state are mobilized for a single purpose. One price we pay for democracy is that all the resources of our state are not mobilized for a single purpose. The Soviet Union, it is estimated, is devoting more than a quarter of its gross national product to capital investment, with striking emphasis on heavy industry. In order to do this they encourage all these technological advancements to the point where there is almost a deification of technology in the Soviet Union.

In order to do this, obviously the price is what happens to the day-to-day well-being of the ordinary common man, and so the problem the Soviet masters face is how to organize and regiment the working force and the whole population to accomplish this singleness of purpose of producing goods for heavy industry. I am going to suggest several things that they do and talk briefly about them.

First of all, of course, there is forced labor. Forced labor is a matter of taking either political offenders or people who offend against economic and work regulations and forcing them to do certain types of work in certain places. International observers have charged that there are two kinds of forced labor in the Soviet Union: First, labor performed by free persons on pain of imprisonment for nonperformance, and second, labor performed by persons deprived of freedom by courts or administrative bodies usually the secret police.

This forced-labor issue was brought to the court of world public opinion by the American trade-union movement, and I want to pay a tribute to the service the AFL-CIO people have performed by hammering away at this evil for upwards of 10 years. We don't know how many people are in forced-labor camps or under forced-labor conditions in the Soviet Union. It has been variously estimated at 2 million to 20 million. Probably it is now perhaps something under 5 million.

The Chinese Communists have forced-labor conditions, and recently they have added a new gimmick to it. In addition to just having situations of forced labor for people who have been convicted of something, they now have what they call a system of labor custody, which they put into effect 1 August 1957, in which they take into custody people who don't seem to have any intention of conforming to the regime. For their own good, they put them through a rehabilitation process, because they feel that these people who fool around "in such activities that sabotage the social order, flirt with women, swindle people of their money, and encroach upon the interests of the people" should have the benefit of this disciplinary measure known as labor custody. It is just a form of forced labor.

For what they are worth, here are some estimates that have been made, chiefly by international agency sources, such as the ad hoc United Nations ILO Committee and other groups, on the extent of forced labor. In Albania there are probably 10,000 to 15,000; in China there are 25 million; in Czechoslovakia there are probably 240,000 to 350,000; in Hungary there are 250,000 to 300,000; in Poland there are 150,000 to 170,000; in Rumania there are 500,000. In the Soviet Union, as I said before, the figure probably approaches 5 million.

Now I want to make a final observation of forced labor. I said before that it has come before the court of world opinion. The United Nations and the ILO have done a great job in exposing this evil, and the ILO adopted a convention at its June Conference which called upon every member nation which ratifies the convention to outlaw forced labor forever. One of the chief proponents of this convention to outlaw forced labor was the Soviet Union. They voted for it. They say they have no forced labor, so they could vote for it with a clear conscience. Parenthetically, we in the United States, who have never had forced labor, had a real problem as to whether we could vote for the convention or not, because the question of international treaties is a sensitive political question in this country at the present time. But we did vote for this particular convention.

Then last month the governing body of the ILO continued its fact-finding committee for another couple of years to expose to world opinion any evidence of forced labor that it can ferret out.

So the first thing that the Soviets do in regimenting the population is this system of forced labor.

The second thing that I would like to point out is what I call the degradation of women. I said a while ago that women are used extensively in the labor force, but that is only part of the story. They are used in heavy, miserable, degrading work, as well as in occupations that are normally thought of as being suitable for women's work. Even though the Constitution of the Soviet Union, Article 12, says, "Women in the USSR are accorded equal rights with men in all spheres of economic, government, cultural, political, or other public activity," to prepare the population for the use of women in these degrading activities, the so-called trade-union movement has tried to glorify the use of women in these menial jobs. One woman member of the trade union said, for example, "Socialist industrialization and the collective farm system guarantee women complete actual equality with men in work. Soviet women, inspired by the spirit of socialist labor, have demonstrated that there are no jobs which they cannot handle." The fact that they are handling these tough jobs was confirmed by no less an observer than Pearl Mesta, who, when she visited the Soviet Union, said that women were given the dirtiest and the heaviest jobs to do, such as lifting back-breaking pieces of metal. We know this is true, because the Soviet Union has some regulations regarding the number of pounds of heavy metal and heavy things that women can wheel around in wheelbarrows and lift, and so on. We do know that they work in the mines and on other heavy, dirty jobs.

You would think, with this alleged equality of women, that they would have high political office. Some of them do, and some of them go to international meetings. I remember in 1955, when I was at the ILO, I thought some of these women were the most unglamorous characters I ever saw. I had a better appreciation of the personnel of the Department of Labor after I got back. But they don't have high political office, by and large, or high bureaucratic office.

Probably the most important thing the Soviets do to mobilize human resources is their productivity drive. They do this in a great many ways, and they have done it for many, many years. They make a fetish out of more production, out of exceeding norms. One system that they used for many, many years, and probably still do to a certain extent, was to hold over workers the threat of penal sanction, depriving them of a degree of liberty or rights, for failing to be to work on time, and that sort of thing. In 1955, when I was at the ILO, this problem of penal sanctions for violations of employment contracts was up for discussion, and the speakers from the Soviet Union--government, management, and so-called labor--all said, "We don't have such a thing in any

of the Communist dominated countries." Therefore I was astonished in 1956 when the regime of the Soviet Union announced that on such and such a date they were abolishing this thing which they didn't have in the first place.

They seem, however, to have resorted more to incentives and encouragement than to penal sanctions in recent years. One of the things they do, of course, is push the incentive system which started away back in the early thirties, when they took a big, strapping miner, named Stakhanov, and fed him well, and then set up a series of ideal conditions for an 8-hour period. Then he went to town. He mined more coal in eight hours than anybody had ever mined before. So that became the standard, you see, and people who were able to approach that standard in later years were known as Stakhanovites, and were given medals, because they were heroic industrial figures.

The emphasis has shifted a little bit from individual to group effort, but there still is this drive, drive, drive to produce more. This is done by mass-training measures for production, by pay incentives, by so-called socialist emulation, such as, "my group can beat your group on this 8-hour shift," by an elaborate system of awards, honors, medals, vacation privileges, and all that sort of thing, and by shop conferences and other conferences on how to produce.

Of course, back of all of this effort is a constant beating of the drums. Every time a Soviet official makes a speech, you see, he talks about how people must produce more for the glory of the Soviet Union. Typical is the lecturer who said, "The realization during the sixth Five-Year Plan of the rate and extent of economic and cultural growth is unthinkable without a serious increase in the technical level of production and improvement in the volume of work, continuous improvement in the methods of economic management, and a maximum development of the initiative of the masses. This struggle for a systematic increase in labor productivity has been and is the foundation of foundations in the economic policy of the Communist Party and the Soviet Union."

You would think with all this pressure that they would have tremendous results, and, as a matter of fact, they have increased their productivity. But an interesting footnote, perhaps, is that they did admit in 1956 in Pravda that they were still lagging behind the United States.

They said, right out in print, "At the present time, labor productivity in industry is about two and one-half times higher in the United States than in the USSR."

Now I come to the role of trade unions, which are not trade unions at all, but which in the Soviet Union have about 40 million members. A trade union in the Soviet Union is an arm of the state, and I think I can best illustrate this by quoting from an ILO report on trade-union structure around the world. This is what the ILO has to say about the Soviet Union. This is not an American propagandist talking: "Under their constitutions it is the role of the trade unions to unite the workers around the Party and exercise their authority under its direction. The Party maintains at all levels of the trade-union hierarchy organized cells with the duty of orienting and directing union activity in accordance with official policy. The trade unions are directly associated with the management of public affairs." Then this ILO document goes on to quote the resolution at the Soviet Trade-Union Congress in 1935, in which the trade unions themselves said that the noblest objective of the trade-union movement was to fulfill the production aims of the state.

However, this trade-union movement is a pretty large organization. In the Soviet Union it has about 40 million members. The Soviet so-called trade-union movement is the spearhead of the World Federation of Trade Unions. I would like to make a little digression on this topic. Here we have a case where they work through trade-union movements in other countries, even in the countries of the free world. Here is their strength, so far as we know: The WFTU has about 80 million members. About half of them are in the Soviet Union. True, 91 percent are in Communist countries. But the other 9 percent, about 7 million trade unionists, are spread around 40 countries of the free world. You can see the kind of infiltration in organizations of which the Communists are capable. They can get in a lot of effective licks in 40 countries. They are numerically strongest in Italy, where the leading trade union is Communist dominated, with about 3.7 million claimed members, and in France, with about 1.2 million. Thank goodness, we have no affiliate of the WFTU in the United States.

These four devices are merely four of many by which the Soviets try to mobilize and direct human resources toward their overall objective. The price of this has been a poor standard of living. I would like to say a word or two about that.

Chart 12, page 27. --This chart is a comparison that Mr. Nash worked out, regarding the standard of living in the Soviet Union and in the United States, based on the number of hours you have to work to buy a particular article of food, clothing, or something like a radio. Take the top line--sugar. The shaded area is the number of hours a worker in New York has to work to buy a pound of sugar. The white area is the number of hours above and beyond that which the Russian worker must work to buy a pound of sugar. Take eggs--he still has to work much longer to buy a dozen eggs than the American worker does. So it goes with shirts, clothing, and almost any article that you can name.

This of course is simply illustrating the obvious. We know that we have a higher standard of living than the Russian worker, but I think it is rather startling to see that in common, ordinary commodities the difference is so great.

Chart 13, page 28. --This chart shows that the Soviet Union itself has gone backward in this business of the standard of living. This is a comparison of the number of hours a Soviet worker, worked in 1954, when this chart was made up, with the number of hours his father had to work in 1928 to buy the same things. Nineteen twenty-eight was selected because that was the year in which we had the New Economic Plan with some degree of individual initiative. But you will notice that in these seven foods combined the 1954 Soviet worker had to work almost 50 percent longer to buy them than did the Soviet worker in 1928. So over this long period his standard of living has deteriorated.

I could say a lot more about the standard of living, not only in the Soviet Union but in the other Communist countries, especially in China, where it is particularly deplorable, but I think it is quite obvious that the price of this intense concentration on production to make the country strong militarily has been a deteriorated standard of living.

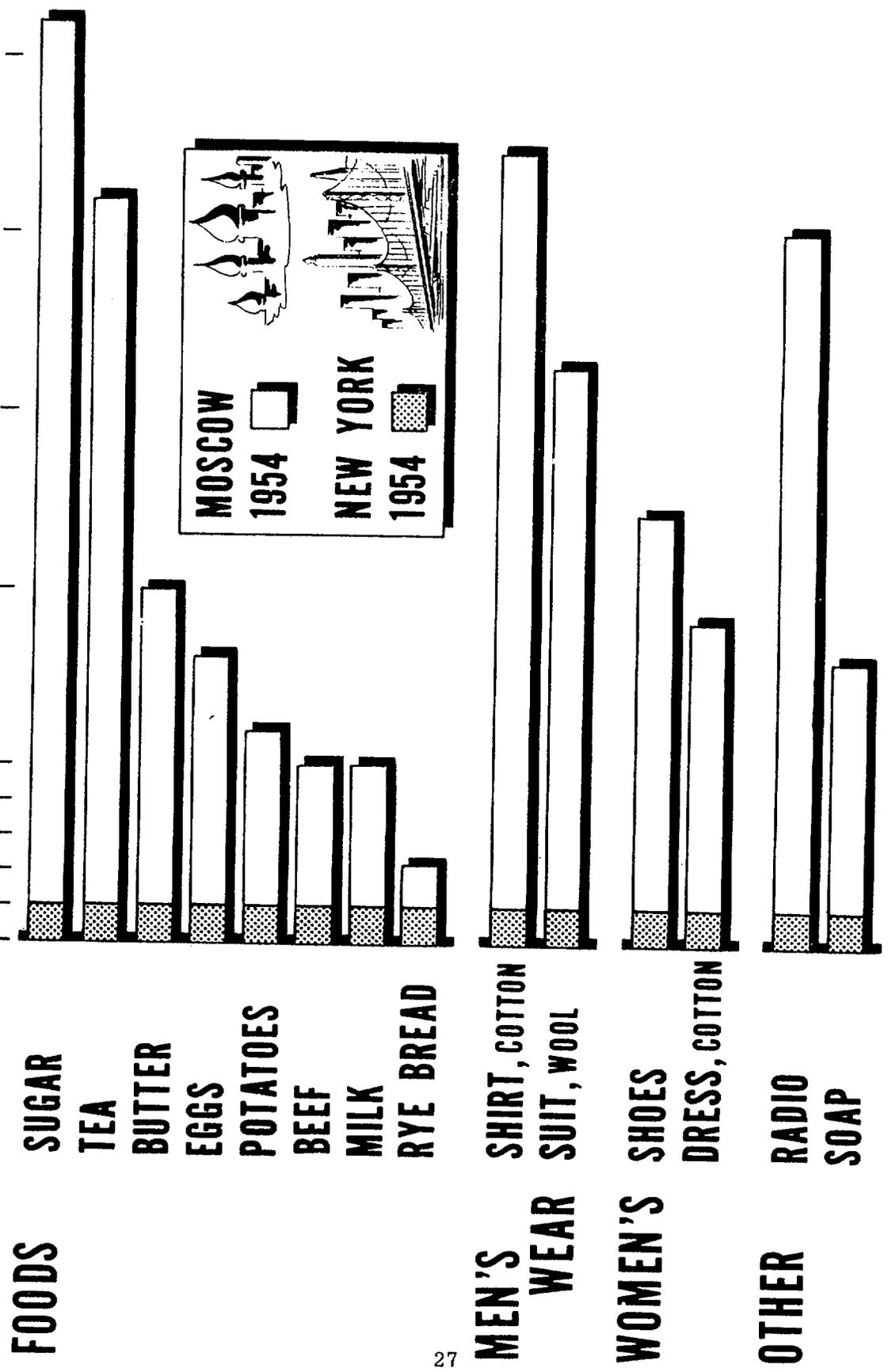
Now the question is, given all this: What of the future? Can the Communist bloc countries mobilize their human resources so that they continue to meet their objectives, or will the people become restless and will they overthrow the regime? Of course a lot of people are guessing on this subject. I am going to make a kind of guess, but my guess is no better than anybody else's. I hear that there is a lot of complaining in the Soviet Union.

Chart 12

NEW YORK WORKTIME = 100%

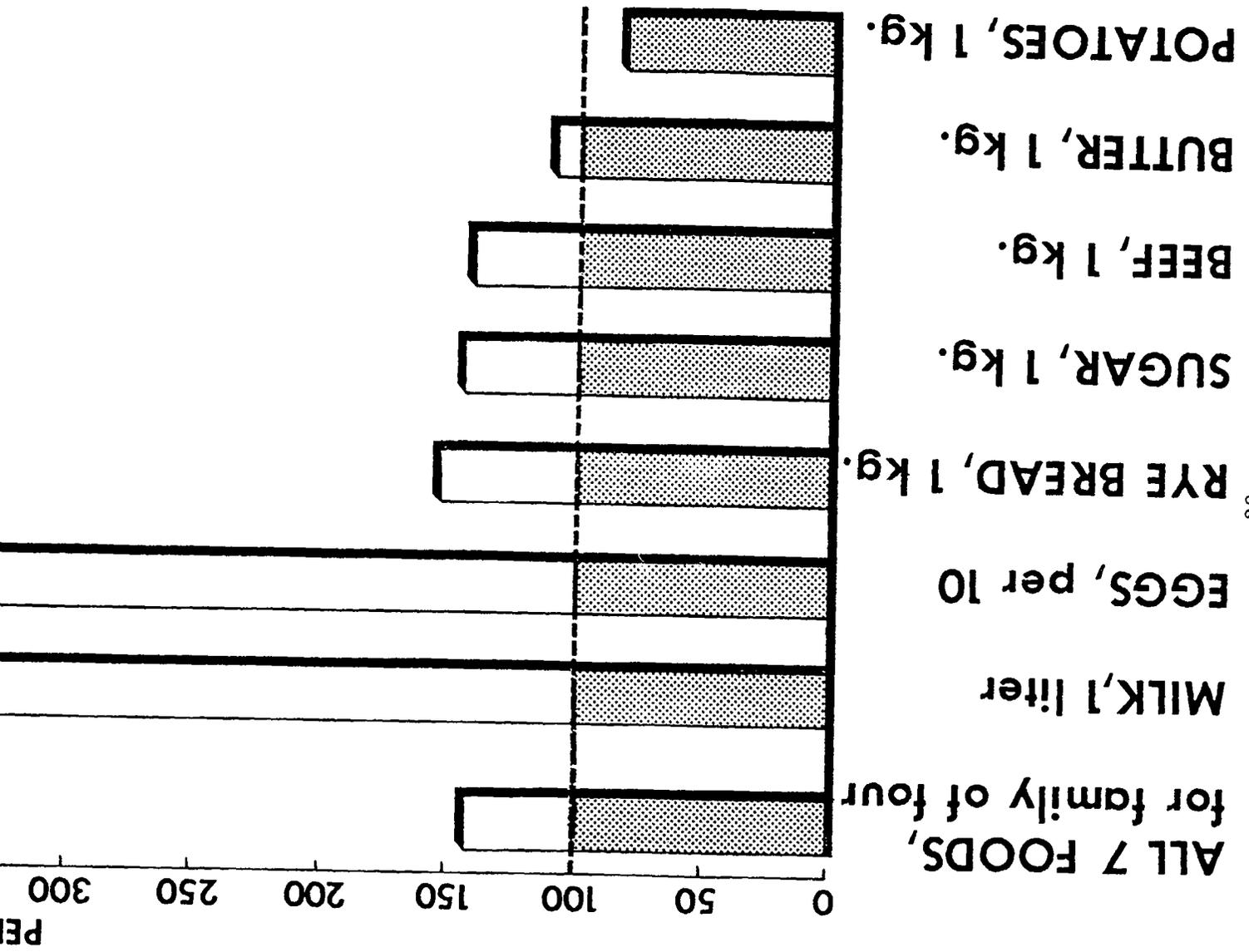
PERCENT

COMMODITY



MOSCOW WORKTIME FOR 1928 = 100

Chart 13



I understand that in the Paris papers, after sputnik with the dog went up, they said that the Soviets are complaining, the common people, "Yeah, we can shoot a globe around the world, but we can't get a seat on a train." Or they say, "Yeah, that dog has an air-conditioned cabin, but we have to put two families in one room." And of course we do hear stories of humorous taunts at the regime, and all that. Then, I have no less an authority than the butcher who supplies meat to one of our colleagues in the office, but who happens to be a refugee, who says quite frankly that the Soviet people are very bitter, and that the only reason they don't revolt is that they are held under such rigid control.

Certainly it is true that the Soviets do and must keep people under control, but I think the rulers recognize that they've got a problem, because they have made concessions within the last year or two in this business of standards of living. They are offering a shorter workweek; they are trying to work out a better wage system; they are trying to do something about housing. It seems to me that they are trying to do enough to blunt the sharp edges of dissatisfaction. For what it is worth, one of our columnists, recently said, "As a matter of fact they did shoot off Sputnik II a few days early because they felt the need of getting people to think about something else other than Zhukov." So certainly they have been offering some concessions. Then they have been doing some other things to make the people feel a little more satisfied. They certainly have been trying to instill national pride. They have invented everything. They've got the best ballet in the world. They've got the best olympic team in the world. They are going to be the champions of everything. It would seem that the regime is recognizing the fact that people might complain and might get dissatisfied enough to take action; at least to the extent that they are offering some concessions and that they are trying to counteract this sort of thing.

However, against the fact that the people complain and may continue to be dissatisfied are two, it seems to me, compelling and overriding facts. One is that the rule is complete, and it would be very difficult in a Communist state to start an uprising when the controls are as rigid as they are. The other fact, which I think not many people give enough weight to, is this ethnic problem. With 177 different nationality groups, it is going to be awfully hard to mobilize that heterogeneous mass against the very, very strong leadership of the regime.

I did not intend to draw any conclusions for this lecture, but for what they are worth, here are three concluding observations:

First, it would seem to me that there will be a continued concentration on heavy industry and on technological progress, and on mobilizing human resources for that purpose.

Secondly, I think the people are going to have to pay for this in a continued low standard of living, which will be offset somewhat by some really meaningless concessions, but concessions that can be highly publicized and glossed over as meaning something, together with appeals to national pride.

Finally, I think this total mobilization of human resources of which they are capable makes them clearly a formidable adversary.

To use an expression that I sometimes see in the sports pages about football teams, (although I don't quite know why) it looks to me like they have the horses for the long race. The question is: Can they drive them? I think they can.

COLONEL COOPER: Gentlemen, Mr. Linsenmayer is ready for your questions.

QUESTION: We had a recent speaker who said that in the Western World the agricultural revolution came before the Industrial Revolution, and therefore we were able to sustain the Industrial Revolution. It looks as though the Russians have reversed this. They have been trying to have the industrial revolution before the agricultural revolution. Do you see any evidence that they will take up agriculture in any reasonable length of time and increase it?

MR. LINSENMYER: I will let Mr. Nash answer this one.

MR. NASH: As you know, the Soviet leaders have tried to bring about a revolutionary expansion of agriculture by instituting the collective farms. By making farms to resemble factories, where the workers are drawn from the former class of independent farmers, they thought they could supply these collective farms with large-scale agricultural machinery, tractors, and modern chemical fertilizers, and thus jump into a modern phase of agriculture. You probably have heard about the hundreds of thousands of tractors and trucks that have been produced for Soviet agriculture within recent years. In this way the Soviet leaders are trying to solve the problem that you raise.

QUESTION: Sir, I saw a statement recently with regard to the slave labor in Russia. It was that the cost of feeding and clothing the people and the cost of administering the slave labor camps more than offset the productivity they got from them. So that the slave labor was really a drain, rather than a help. Do you have any information on that?

MR. NASH: Economically speaking, what you say is true. We should have this clear in mind, that slave labor in the Soviet Union is not an economically efficient institution. It is an institution which has risen from the Communists' desire to liquidate their political opposition. After many of the opponents of communism were imprisoned, it was decided to put them to work, especially on arduous jobs avoided by ordinary workers. To give an example, there are some coal mines in the cold, northern part of the Soviet Union. Normally no free worker wants to go there, and those who do go are given higher wages and certain special benefits. It was an easy decision to send political prisoners to mine coal.

Another example is that of the digging of their canals. You have heard of the big canals they have dug, like the one connecting Moscow with the Volga River and the one connecting the White Sea with the Volga. There they used forced labor especially for the jobs of digging and moving dirt, jobs for which they could not pay much, but which had to be done.

Many books have been written by former forced or slave laborers about their hardships in Soviet coal mines, canals, and in other forced work. The main goad to work was hunger. Workers who fulfilled the fixed production quotas were given barely enough food to subsist on; those who produced above their fixed quotas were given extra food allowances; those who failed to produce their fixed quotas received correspondingly less food. Under such a system, many died.

QUESTION: I will have to preface my question sir. I have trouble with statistics. My question deals with your comparison of education. It seems to me, if I read Newsweek and other magazines correctly, that the average tenth grader in Russia is the equivalent of probably a college graduate in the United States in mathematics, physics, and critical subjects, such as engineering. If this is true, then comparing grade levels, eighth-grade graduates or high school graduates, is not meaningful at all, because actually your high school graduate in Russia may be the equivalent of a college graduate in the United States, which means that their college man is really doing graduate work and is far superior to our college man. Is this true?

MR. NASH: First, it is not true that their tenth-grade education is the equal of our college education. You just can't produce a Soviet man who is superior to a man anywhere else. In the Soviet Union they do have their problem of students who flunk out. It is a serious problem. They discuss it. They say, for example, "How come, such and such a percent of our school children flunk grade 5?" You can't force the mind of a school child to do more than it can do, and no scientist will admit that the Russian mind is superior to the American mind, at the same age level.

To speak concretely--and it is true that they put their grade-school pupils on a more rigorous schedule than we do--these pupils can reach only certain heights. When it comes to mathematics they can give them only the beginnings of calculus in the last year of high school. You know that the beginnings of calculus won't get you anywhere. It is a sort of introduction to the ideas of calculus. Then you have to go on to the university and take regular courses in differential and integral calculus.

It is true that Soviet education is highly utilitarian, with an eye toward professional use. One of the big programs in Soviet high schools now is what they call polytechnical training or giving students a theoretical preparation which would qualify them to enter any of a number of professions when they get through high school.

STUDENT: If I may follow it up a moment, it seems to me you are bearing out my point. They spur their people at a much earlier age, even if they give them four years of physics and five years of math up to the tenth grade. It seems to me it is impossible to compare statistics on equal grade levels, if at this level the people who go to college, particularly in the engineering field, are better qualified.

MR. NASH: First, let's get it straight that they start their children one year later than we do, so they are a little older. They start them at seven, whereas we start them at six. So they graduate them from the 10-year school at 17, and we graduate them from our high school at 18. So there is one year of difference. As I said, IQ's don't differ in different countries. But there is that factor of special training that you suggest, starting earlier with chemistry and physics. It is true that they do get a start and they do get directed into special scientific fields. In this country students who graduate from high school and go to college take, as a rule, a year or two of introductory general studies; whereas in the Soviet Union, university students begin their intensive professional training immediately.

MR. LINSENMEYER: I would like to add something that I think has bearing on this, although it is not a specific item of information about the Soviet Union. These differences in educational systems, as you suggest, are certainly not reflected in the statistics.

I spent some time in Greece, and there, in the early stages, the American dependent children went to the British military schools. I was astonished at my sixth and seventh grade sons taking algebra, Latin, French, and so on at that age, whereas here they don't get it until two or three years later. The difference, as we found after we went into it, and in conversation with the British teachers, is that at that age they get a smattering of each of a great many subjects, whereas we have a tendency to concentrate on fewer subjects.

I am not arguing the British educational system versus ours. I am simply trying to point out the fact that if a certain subject is given at a more tender age it does not necessarily mean that at the end of the education period there is more mastery of a particular subject. These people, after they understood our system, had a tendency to agree.

Of course in some of those systems there is much more attention on what we call formal academic training than in our system. That's another story.

The other thing I wanted to say, and I meant to say this in the lecture, is that the Secretary of Health, Education, and Welfare, Mr. Folsom, announced at a meeting in our Department the other day the existence of a new book, just released last Saturday, entitled Education in the USSR. The book is going to be available in a fair quantity, I am told, sometime next week. I had a copy for a while yesterday, and I was impressed with the tremendous amount of detailed information in that book on just the kind of questions you are raising on the Soviet Union, detailed information as to curriculum by age levels, as to the nature of the training of teachers, and so on. I think, for those of you who wish to go into this educational problem further, that that book would be an excellent source.

COLONEL COOPER: No further questions for the discussion period. We are running close. Mr. Linsenmayer and Mr. Nash, I would like to thank you for your time and effort in giving such a nice presentation. The Industrial College appreciates it very much. Thank you.

(15 May 1958--4, 100)O/bn:sgb