

er. For example, "we haven't reached any understanding as to the reason for rising prices." There is "no basis for predicting unemployment." He said, "the problem of convertibility of the military complex [to consumer ends] is very poorly thought out." And "we have not thought through raising the interest on savings" to bring interest rates above the 10% inflation rate. A program for selling stocks and bonds to the population has "not really been thought through."

Concluded Shatalin, "without help from the West, we will not be successful in establishing an effective system."



Derek Bok

End of Bok Era

Derek C. Bok will leave the presidency of Harvard University next spring after 20 years in the post.

Bok has presided over a period of sustained growth and change at Harvard, which has included development of a core curriculum, creation of the John F. Kennedy School of Government, and an increase in the university's endowment from \$1 billion to nearly \$5 billion.

Bok, 60, said one reason he is leaving now is that Harvard is about to begin a long-term \$2-billion fund-raising campaign that "calls for continuity."

Among those mentioned as possible successors is the Kennedy School's dean Robert D. Putnam. Harry Rosovsky, former dean of arts and sciences who will become acting dean this summer, was in the lead until he took himself out of the running.

Harvard officials said a search committee will be formed shortly.

Repression in Sudan

The two-man delegation sent by the AAAS and several medical organizations to investigate jailings of scientists by the Sudanese government is back. And they report that, although many of detainees have been released, the overall situation has not improved. Nearly 80 scientists, engineers, academics,

	Japan		European Community	
	R&D	Product Introduction	R&D	Product Introduction
Advanced Materials	● ▼	— ▼	+	● ▼
Advanced Semiconductor Devices	● ▼	— ▼	+	● ▼
Artificial Intelligence	+	+	+	+
Biotechnology	+	+	+	+
Digital Imaging Technology	● ▼	— ▼	● ▼	— ▼
Flexible Computer-Integrated Manufacturing	+	● ▼	+	— ▼
High-Density Data Storage	● ▼	— ▼	+	● ▼
High-Performance Computing	+	+	+	+
Medical Devices and Diagnostics	+	+	+	+
Optoelectronics	● ▼	— ▼	● ▼	+
Sensor Technology	+	● ▼	+	● ▼
Superconductors	● ▼	● ▼	● ▼	● ▼

Current status: + = U.S. Ahead
● = U.S. Even
— = U.S. Behind

Trend: ▲ = U.S. Gaining
◄ = U.S. Holding
▼ = U.S. Losing

Bad news from the competitiveness front. A Department of Commerce survey* has identified 12 emerging technologies that together could account for annual worldwide sales of \$1 trillion by 2000. Though the United States is now at least on a par with Japan in R&D in each technology, the above chart indicates Japan is ahead in introducing products in five areas and is starting to pull ahead in several others. The European Community is also catching up fast in some areas. Says the report: "Before the year 2000, the United States will lag behind Japan in most emerging technologies and will trail [Europe] in several of them."

*Emerging Technologies: A Survey of Technical and Economic Opportunities (Technology Administration, U.S. Department of Commerce, spring 1990).

and health professionals have been locked up since a fundamentalist Islamic military government took over last June.

Eric Stover of the AAAS and Chicago physician Quentin Young were particularly con-

cerned about the fate of Sudanese Medical Union official Mamoun Mohamed Hussein, who was sentenced to death for protesting the arrest of colleagues. Another physician, Sayed Mohammed Abdallah, was sentenced to 15 years in prison. Groups from around the world have been pressuring the government on behalf of the prisoners. Sudanese physicians at the Ministry of Health staged a work slowdown in April, and last month a group met with the Sudanese president to appeal for the release of Mamoun and Sayed.

Days later, just before the visitors' arrival, both were released. A number of other professionals have been freed—including University of Khartoum biologist Farouk Mohammed Ibrahim (see *Science*, 13 April, p. 167). But Stover says the situation is a "revolving door." Four more doctors were put behind bars during his visit.

Questions about perestroika show the public is divided about economic reforms, said Zaslavskaya. With regard to social issues, 28% thought social justice had diminished in 1989. Over half the respondents predicted that inter-ethnic hostilities would continue to increase. Growing social instability is reflected by the greatly increased fear of unemployment and the perception of a widening gap between rich and poor that occurred between last summer and this spring. "The 5 years of perestroika have clearly demonstrated that not only the command-administrative system of economic control, but the entire social system should be dismantled," said Zaslavskaya.

She said the past 70 years have left a legacy of cynicism and alienation from authority that threaten current reform efforts. Only about one-third of the respondents had confidence in the country's ruling councils, and there has been a "precipitous fall" in the prestige of the Communist party—only

19% now have "complete confidence" in it while 30% have none at all. About 20% had become "completely disappointed" in Socialist ideas.

Zaslavskaya said the polls demonstrate that there is a growing "moral and spiritual vacuum" that is being filled with nationalist, religious, and mystical preoccupations. She said there is a widespread "loss . . . of most elementary moral criteria," as shown in high tolerance for swindling and theft. Disillusionment with ideals comes through in responses to a question on "for whom and in what relations our country can serve as an example": 55% replied "for no one and in nothing."

Overall, in Zaslavskaya's analysis, public consciousness in the Soviet Union is marked by "instability, morbid sensibility, and explosiveness" as well as "rising polarization." There is "continuing growth of pessimism, disappointment, and indifference to current events, including the fate of perestroika itself."