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High prices of supplies drain cash from poorer nations' labs

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While researchers in the West bemoan budget cuts and funding constraints, their colleagues outside this wealthy enclave are struggling to pay frequently inflated prices for lab equipment and materials.

Scientists in these poorer countries have to pay up to 70% more than their wealthier colleagues for identical supplies, a survey by *Nature* has revealed.

In Poland, for example, researchers pay two-thirds more for an EPS 601 power supply for gel separation manufactured by Amersham Biosciences than their neighbours over the border in Germany (see Table). And in Brazil, a kilogram of yeast extract produced by Sigma-Aldrich of St Louis, Missouri, costs at least US\$340 — 70% more than the price listed in the United States.

For a bench-top 5415 D centrifuge made by Eppendorf in Hamburg, Germany — a typical piece of equipment for life-sciences labs — Brazilians have to pay US\$3,110, almost 60% more than their US colleagues.

Suppliers point out that they do not have control of prices in individual countries, which are set by local distributors. The discrepancies are explained by market conditions, the suppliers note — in particular, the higher costs of doing business in smaller, less-established markets.

"Price differences can exist for certain products due to many factors," says Ron Hutton, treasurer of equipment supplier Bio-Rad Laboratories of Hercules, California, "including differences in support provided, quantities, shipping costs, currency values and local competitive pressures." Jörn Peplow, a spokesman for Eppendorf, says that pricing "depends on the distribution channel". Mike Hogan, chief financial officer of Sigma-Aldrich, adds: "It's the cost of doing business."

But disadvantaged researchers take a less sanguine view. "It is a big problem, everything is so much more expensive in Poland," says Jan Potempa, a microbiologist with positions at both Jagiellonian University in Kraków and the University of Georgia, Athens, in the United States. "We just need two-thirds more money."

Nature's survey was triggered by private

Uneven spread: the cost of lab equipment and materials (US\$)				
	Germany	Poland	United States	Brazil
Eppendorf Centrifuge 5415 D	\$1,780	\$1,960	\$1,950	\$3,110
Bio-Rad Laboratories Mini-PROTEAN 3 cell kit	\$1,210	\$990	\$510	\$670
Amersham Biosciences EPS 601 power supply	\$1,030	\$1,720	\$960	\$1,420
Amersham Biosciences Ultrospec 3300 pro spectrometer	\$10,420	\$16,780	\$12,190	\$16,000
Promega Taq DNA polymerase (100 units)	\$54	\$72	\$25	\$39
Promega Sodium chloride (molecular grade, 1 kg)	\$64	\$71	\$38	\$35
Sigma-Aldrich Yeast extract (1 kg)	\$360	\$480	\$202	\$340

complaints about the pricing structure from researchers in Brazil and elsewhere. Four countries were surveyed: Poland, a major market in eastern Europe, was compared with its neighbour Germany; and Brazil, the largest Latin American market was matched against the United States. An individual scientist in each of the countries was asked to report on prices for 18 different commodities and instruments offered by local distributors for eight leading suppliers.

The survey revealed a few exceptions to the trend that scientists in poorer countries pay more. For example, a kilogram of sodium chloride from Promega in Madison, Wisconsin, cost slightly less in Brazil than in the United States. But overall, prices were higher in Poland than in Germany for 16 out of 18 products; and 11 out of the 12 products for which prices were obtained in the Americas were cheaper in the United States than in Brazil.

According to Maciej Nalecz, a molecular biologist who used to run a lab for the Nencki Institute of Experimental Biology in Warsaw and is now head of basic research at the United Nations Educational, Scientific and Cultural Organization (UNESCO) in Paris, prices are higher in Poland because fewer suppliers are actively competing to sell products there.

It is a badly kept secret that many scientists bring in supplies themselves from the West. "I know many good Polish scientists who always return from the United States with suitcases full of supplies and scientific devices," says Potempa. "I take things from there myself, every time I travel."

Researchers in eight eastern European countries can look forward to some price relief when they join the European Union (EU) on 1 May. After then, they can complain to the European Commission if they are restricted from shopping around other EU countries to get the best price.

For the rest of the world, there is little relief in sight. The situation continues to frustrate researchers. Stevens Rehen, a neuroscientist with positions at both the Scripps Research Institute at La Jolla, California, and the Federal University of Rio de Janeiro, for example, would like to set up a new lab in Brazil. But with pricing as it stands, he says, "it is almost impossible to establish research in Brazil".

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