## I VOIE WORTHY

## **Guns and Butter**



An increase in the production of defense-related goods and services must necessarily draw resources away from the production of other goods — more guns mean less butter at the national level.

Editor's Note: We introduce "Research Spotlight" on page 11 of this issue. This department discusses an important scholarly economics article in a nontechnical way. Let us know what you think about the department and Region Focus by sending an e-mail to: rich.regionfocus@ rich.frb.org.

conomics is all about trade-offs. Most textdbooks introduce the student to the idea of tradeoffs with a diagram called a "Production Possibilities Frontier." This graphic device considers the hypothetical case of an economy in which only two goods are produced and shows the combinations of the two goods that are technically feasible, given the economy's resources and know-how. It demonstrates the fact that you can't get more of one good without giving up some of the other. At least since Paul Samuelson first published his famous, standard-setting textbook in 1948, it has been popular to label the two goods in question "Guns" and "Butter." This dichotomy, which probably has its origins in political discussions about the costs of military build-ups prior to the First World War, captures the very real trade-off societies typically face in the allocation of resources between national defense and private consumption goods. This same basic trade-off applies to all goods and services produced by the government.

While choices about military spending are made through the political process at the national level, such decisions can have significant effects on local economies. This issue's cover story details the military's economic impact on Fifth District communities, as well as the economic drain those communities feel when large numbers of troops are deployed overseas. The boost that a military presence gives

to a local economy may create the impression that a simultaneous increase in both guns and butter is possible, contrary to the trade-off posed in textbooks. This impression would be mistaken and would result from a failure to distinguish local from aggregate effects. More military spending—more guns at the national level—can certainly mean a stronger local economy-more butter-for regions with relatively high concentrations of military facilities. At the aggregate level, however, the economy has only a limited amount of resources available for the production of all goods. An increase in the production of defense-related goods and services must necessarily draw resources away from the production of other goods-more guns mean less butter at the national level.

A production possibilities frontier represents the set of choices available to an economy. While resources and technology determine this set, the actual choice to be made depends on the relative value that society as a whole places on alternative combinations of guns and butter. This sort of decision problem is easy to describe in terms of economic theory, but, in practice, the social value of increased spending on defense can be hard to pin down in precise quantitative terms. Most goods are allocated by markets, and individuals buy the amount they want, based on their private valuations. There is typically no need for society to make a conscious, collective determination of value. But national defense comes as close as any good or service to what economists call a "pure public good." The benefits of a dollar spent on defense are shared by all citizens. Individuals cannot make their own independent decisions about how much defense to buy.

The public-good nature of defense necessarily makes military spending a political decision. As such, and especially in times of war or international crisis, we sometimes overlook or set aside the economic aspects of this decision. And while the cost (in butter) of more guns cannot be avoided, it can be delayed through government borrowing. Since borrowed funds will need to be repaid in the future, the choice is actually between taxation now and taxation in the future. Even beyond the issue of financing defense expenditures, the issue of taxation and government deficits has been much in the news recently, as discussed in our Legislative Update feature. As that piece makes clear, economists continue to debate the effects of deficit spending on economic performance. One thing, however, is certain. Public expenditures must be paid for, regardless of one's beliefs about the effects of government deficits or the efficacy of government spending. Sooner or later, more guns (or interstate highways, or cancer research, for that matter) mean less butter.

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