

THE CONCEPT OF A PEACE DIVIDEND

Michael D. Intriligator

Professor of Economics, University of California at Los Angeles, USA

Keywords: peace dividend, defense spending, defense conversion, investment process, conversion costs, market mechanism

Contents

1. Introduction: Reduced Defense Budgets and the Arms Race
2. The Problem of Defense Conversion
3. Reduced Defense Spending as an Investment Process
4. Arms Exports
5. Conclusion: Policy Implications of the Investment Interpretation

Glossary

Bibliography

Biographical Sketch

Summary

The “peace dividend” is a concept that has been used to refer to the benefits derived from lower defense spending and the conversion of military production into civilian production. This paper treats this concept from an economic point of view. From this point of view, the effect of reduced defense budgets is interpreted as a type of *investment process*. In such a process the immediate effects are costs, in the form of unemployment of resources and various conversion costs, while the ultimate effects are benefits, as the unemployed resources are reemployed using the market mechanism, to produce civilian goods. With this interpretation, the peace dividend is only a myth if it refers to immediate benefits derived without cost from reduced defense budgets, but it is a reality if it refers to the ultimate benefits from using markets to convert military production to civilian production.

1. Introduction: Reduced Defense Budgets and the Arms Race

The end of the Cold War has led to reductions in the defense budgets of the United States, of most of its allies in NATO, and of the successor states of the Soviet Union and most of its allies in the former Warsaw Pact. The end of the East-West arms race by no means, however, implies that the arms race as a phenomenon has come to an end.

Several regional arms races remain active, while others could develop in various areas of tension and conflict. In particular, high defense budgets are common in regions of conflict and warfare. Probably the biggest increases in defense budgets, however, involve those in East and Southeast Asia, including China, Korea, Taiwan, and Malaysia. Thus, while defense budgets are shrinking in those countries that had been major participants in the Cold War, they are stable or even increasing in certain other parts of the world.

2. The Problem of Defense Conversion

The problem of *defense conversion* is that of shifting defense production into non-defense civilian production. The process of conversion is that of shifting labor and capital from military production to civilian production. Labor, in the form of armed forces personnel and defense plant workers, must be redirected through labor markets to produce civilian goods. At the same time, capital, including both military bases and plant and equipment producing military goods and services must be transformed through capital markets so as to be able to produce civilian goods. In a modern market economy, these changes are made through a combination of government actions and market mechanisms.

This problem of defense conversion is an economic one of reallocation of real resources in the economy. Converting from military to civilian production is not simply a matter of shifting funds from one category of social spending to another, as suggested by some political leaders and commentators. Rather, the process of conversion involves using markets to achieve a fundamental transformation of resources in the economy so as to develop the capability to produce non-defense goods and services. Thus, defense conversion involves a shift in the guns-butter mix in the economy, transforming labor, capital, and other real resources in the economy from the military to the defense sectors of the economy. Such a shift is helped by market mechanisms that facilitate such reallocation by using factor markets to reallocate these resources. Thus, labor that is discharged from the defense sector will find alternative employment through labor markets in the economy. As to capital, reductions in interest rates due to cutbacks in defense spending can lead to the reallocation of capital from the public to the private sector and thus to civilian production.

The real benefit of reduced defense spending stems from the possibility of redirecting resources, from arms acquisitions to other potential uses. For labor there is the real benefit of reemploying workers who had been building weapons or serving in the armed services in other socially valuable tasks. For skilled labor, particularly scientists and engineers, there is the real benefit of using such specialized personnel in civilian research and development or other socially useful employment. For capital there is the physical conversion of military bases or plants into civilian plants and/or the formation and utilization of plant and equipment for civilian purposes. These and other inputs into the military production process must be reallocated, using market mechanisms, to non-military or civilian uses.

There are potentially major gains from reduced defense spending, particularly over the long term, but in the short term defense cuts typically lead to the unemployment or underemployment of labor, capital, and other resources. Policies to deal with the economic aspects of reduced defense spending should focus on the efficient transformation of defense production into civilian production, using the market to reallocate resources that had been devoted to an arms race to other uses in the economy.

The basic economic opportunity stemming from reduced defense budgets comes from the substantial real economic benefits derived from the use of resources for civilian purposes. Reduced defense spending typically results in the short run in the release of

resources. These resources are then redirected in the long run via markets to produce civilian goods.

It would be a mistake to ignore the short-term adjustment costs of reduced defense spending, especially the likelihood of unemployment or underemployment of labor, capital, and other resources caused by defense cuts. The basic economic danger stemming from reduced defense budgets is that it could result in reductions in output, income, and employment as resources of labor and capital are released from military production. A particularly important consequence is the social and economic disruption stemming from the unemployment of former military officers, soldiers, and defense plant workers in regions heavily impacted by military bases or defense plants. It would also be a mistake, however, to ignore the long-term benefits of increased output as these freed resources use the market to find employment in the civilian sector.

-
-
-

TO ACCESS ALL THE 8 PAGES OF THIS CHAPTER,
Visit: <http://www.eolss.net/Eolss-sampleAllChapter.aspx>

Bibliography

Adams F.G. ed. (1992). *The Macroeconomic Dimensions of Arms Reduction*. Boulder: Westview Press. [Studies of the impacts of reduced defense spending on macroeconomic activity in the U.S. and other nations.]

Adams G. and Schmidt C. (1992). *The Elusive Peace Dividend*. Washington, D.C.: Defense Budget Project. [Study of the lack of the peace dividend in the United States.]

BICC: Bonn International Center for Conversion (1996). *Conversion Survey, 1996: Global Disarmament, Demilitarization, and Demobilization*, by Michael Brzoska and others. New York: Oxford University Press. [Survey, as well as some in-depth case studies that assess what has happened to the savings in military expenditure.]

Brauer J. and Marlin J.T. (1992). Converting Resources from Military to Non-Military Uses, in *Journal of Economic Perspectives*, vol. 6, no. 4, pp. 145-164. [An economic perspective on the conversion of defense resources into civilian resources.]

Dumas L.J. ed. (1995). *The Socio-Economics of Conversion from War to Peace*. Armonk, NY: M. E. Sharpe. [Various studies of defense conversion.]

Gleditsch N.P., Bjerkholt O. and Smith R.P. eds. (1996). *The Peace Dividend*. Amsterdam: North-Holland. (Contributions to Economic Analysis, No. 235). [Studies of the peace dividend both conceptually and methodologically, with specific application to several national contexts: U.S, Canada, Japan, Germany, France, Greece, Turkey, etc.]

Gleditsch N.P., Cappelen A. and Bjerkholt O. (1994). *The Wages of Peace: Disarmament in a Small Industrialized Economy*. London: Sage Publications. [A case study of disarmament and conversion.]

Intriligator M.D. (1992) The Economics of Disarmament as an Investment Process, in *UNIDIR Newsletter*, United Nations Institute for Disarmament Research, 19 September, 1992. [An interpretation of disarmament and conversion as an investment process.]

Intriligator M.D. (1996). The Peace Dividend: Myth or Reality? in Gleditsch, Bjerkholt, and Smith eds. *The Peace Dividend*. Amsterdam: North-Holland (Contributions to Economic Analysis, No. 235). [A characterization of the peace dividend as both a myth in terms of immediate gains that can be spent but, at the same time, a reality in the long run if appropriate adjustments can be made.]

Intriligator M.D. and Brito D.L. (1990). A Possible Future for the Arms Race, in Gleditsch N.P. and Njølstad O. eds., *Arms Races: Technological and Political Dynamics*. London: Sage Publications. [An exploration of the possible future of the arms race.]

Kapstein E.B. ed. (1993). *Downsizing Defense*. Washington, D.C.: Congressional Quarterly. [A treatment of the effects of reduced defense budgets.]

Klein L.R. (1990). The Economics of Turning Swords into Ploughshares, in *Challenge*, March-April, pp. 18-26. [A discussion of the nature of conversion of military into civilian production.]

Lall B.G. and John Marlin J.T. (1992). *Building a Peace Economy: Opportunities and Problems of Post-Cold War Defense Cuts*. Boulder: Westview Press. [A study of the possible responses to reduced defense budgets.]

Markusen A.R. and Joel Yudken J. (1992). *Dismantling the Cold War Economy*. New York: Basic Books. [A treatment of the nature of conversion of military into civilian industry.]

Renner M. ed. (1992). *Economic Adjustment after the Cold War: Strategies for Conversion*. Geneva: United Nations Institute for Disarmament Research. [A treatment of possible approaches to defense conversion.]

UNIDIR: United Nations Institute for Disarmament Research (1993). *Economic Aspects of Disarmament: Disarmament as an Investment Process*, by Keith Hartley and others. New York: United Nations. [Report of an international group of economists on the economics of disarmament, treated as an investment process.]

U.S. Defense Conversion Commission (1992). *Adjusting to the Drawdown*. Report of the Defense Conversion Commission, December 31, 1992. [A study of defense conversion in the U.S. after the end of the Cold War.]

Biographical Sketch

Michael D. Intriligator is Professor of Economics at the University of California, Los Angeles (UCLA). He is also Professor of Political Science, Professor of Policy Studies in the School of Public Policy and Social Research, and Co-Director of the Jacob Marschak Interdisciplinary Colloquium on Mathematics in the Behavioral Sciences, all at UCLA. In addition he is a Senior Fellow of the Milken Institute in Santa Monica and the Gorbachev Foundation of North America in Boston. He has been a member of the UCLA faculty since 1963, teaching courses in economic theory, econometrics, mathematical economics, international relations, and health economics.

Intriligator is the author of more than 200 journal articles and other publications in the areas of economic theory and mathematical economics, econometrics, health economics, reform of the Russian economy, and strategy and arms control, his principal research fields. He is the author of *Mathematical Optimization and Economic Theory* (Prentice-Hall, 1971, also translated into Spanish and Russian) and of *Econometric Models, Techniques, and Applications* (Prentice-Hall, 1978, also translated into Greek and Spanish; second edition, with Ronald G. Bodkin and Cheng Hsiao, 1996) and co-author, with Donald E. Yett, Leonard Drabek and Larry J. Kimbell, of *A Forecasting and Policy Simulation Model of the Health Care Sector* (Lexington Books, 1978). He is coeditor, with Kenneth J. Arrow, of the *Handbook of Mathematical Economics* (North-Holland, 1981, 1982, 1985); coeditor, with Zvi Griliches, of the *Handbook of Econometrics* (North-Holland, 1982, 1983, 1986); coeditor, with Bernard Brodie and Roman Kolkowicz, of *National Security and International Stability* (Oelgeschlager, Gunn, and Hain, 1983); coeditor, with Dagobert L. Brito and Adele E. Wick, of *Strategies for Managing Nuclear Proliferation* (Lexington Books, 1983); and coeditor, with Urs Luterbacher, of *Cooperative Models in International Relations Research* (Kluwer, 1994). Dr. Intriligator is Vice Chair and a member of the Board of Directors of Economists Allied for Arms Reductions and was President of the Peace Science Society (International) in 1993. He is a Fellow of the Econometric Society and an elected member of the Council on Foreign Relations (New York) and the International Institute for Strategic Studies (London).

He was elected a foreign member of the Russian Academy of Sciences in 1999 and an AAAS Fellow of the American Association for the Advancement of Science in 2001.

UNESCO – EOLSS
SAMPLE CHAPTERS