

COMPETITIVE FREEDOM VERSUS NATIONAL SECURITY REGULATION



Manley Rutherford Irwin

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QUORUM BOOKS

New York • Westport, Connecticut • London

Library of Congress Cataloging-in-Publication Data

Irwin, Manley Rutherford.

Competitive freedom versus national security regulation / Manley Rutherford Irwin.

p. cm.

Includes index.

ISBN 0-89930-233-5 (lib. bdg. : alk. paper)

1. Industrial laws and legislation—United States. 2. Trade regulation—United States. 3. United States—National security—Law and legislation. I. Title.

KF1600.I79 1989

343.73 '08—dc19

[347.3038] 88-18254

British Library Cataloguing in Publication Data is available.

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Library of Congress Catalog Card Number: 88-18254

ISBN: 0-89930-233-5

First published in 1989 by Quorum Books

Greenwood Press, Inc.

88 Post Road West, Westport, Connecticut 06881

Printed in the United States of America



The paper used in this book complies with the Permanent Paper Standard issued by the National Information Standards Organization (Z39.48-1984).

10 9 8 7 6 5 4 3 2 1

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Abbreviations

AT&T	American Telephone and Telegraph
BSPPD	Bell Systems Purchase Product Division
BTL	Bell Telephone Laboratories
CCEP	Commercial Communications Endorsement Program
CEO	Chief Executive Officer
CGCT	Compagnie Générale d'Electricité
COCOM	Coordinating Committee for Multilateral Export Control
CWA	Communications Workers of America
DEC	Digital Equipment Corporation
DES	Data Encryption Standard
DOD	Department of Defense
DRE	Office of Defense Research and Engineering
DTIS	Defense Technical Information Service
EDI	Electronic Data Interexchange
ELV	Expendable Launch Vehicles
EOSAT	Earth Observation Satellite Co.
FCC	Federal Communications Commission
GAO	General Accounting Office
GM	General Motors, Inc.
GNP	Gross National Product

HUD	Housing and Urban Development
IC	Integrated Circuit
ISDN	Integrated Services Digital Network
ISP	International Security Policy (Department of Defense)
ITAR	International Trade and Arms Regulation
MCTL	Military Critical Technologies List
NASA	National Aeronautics and Space Administration
NOAA	National Oceanic and Atmospheric Administration
NSA	National Security Agency
NSC	National Security Council
NSDD	National Security Decision Directive
NTIA	National Telecommunications and Information Agency
NTIS	National Technical Information Service
OTA	Office of Technology Assessment
PPG	Pittsburgh Plate and Glass
PTTs	Postal, Telephone, and Telegraph Agencies
RBOCs	Regional Bell Operating Companies
R&D	Research and Development
RTDNA	Radio/Television News Directors Association
VANS	Value-added Network Services
VSATs	very small aperture terminals

Preface

Every study has its roots in the past and this one is no exception. In 1972, the Federal Communications Commission (FCC) found itself engaged in a formal investigation of the American Telephone and Telegraph Company (AT&T) otherwise known as the Bell System. Some twenty-three affiliated Bell operating companies purchased the bulk of their telephone equipment from Western Electric, AT&T's manufacturing subsidiary. AT&T justified those purchases on economic grounds; Western Electric prices were low, its product quality unsurpassed, its technology without rival. According to Bell, the Manufacturing monopoly insured the telephone user of the best equipment and the best service at the lowest possible price.

To examine the premise and validity of Western Electric's performance, the Commission formed an AT&T Trial Staff. As Chief of the Western Electric Group, AT&T Trial Staff, I participated in that endeavor. The trial staff engaged in discovery, assembled evidence, and presented recommendations of fact and findings to an FCC administrative law judge. I testified on behalf of the trial staff and I recommended that the FCC adopt a policy of divestiture and competition in telecommunications manufacturing. All testimony is subject to vigorous cross-examination and my testimony was no exception. All told, I was on the stand for a week.

AT&T opposed a policy of competitive entry, a position that was both long-standing and predictable. But the Bell System was not alone in defending the monopoly. AT&T was joined by the Department of Defense. Defense not only rejected competition in the manufacturing sector of the economy, the department recommended that the FCC regulate the profits of Western Electric. As a policy option, the Department of Defense embraced commission regulation and rejected market competition.

That position provided the genesis of this book—national security as a new rationale for economic regulation. As this study suggests, national security as a justification for government intervention in the private sector is now generic—no longer confined to the Department of Defense alone. Other federal agencies have invoked national security as a policy rationale.

The draft of the manuscript was completed during a sabbatical from the University of New Hampshire in 1986-87. During that period and after, I received support from both Dean Carole Aldrich and Dean Kenneth Rothwell of the Whittemore School of Business and Economics. To them I express my appreciation. Nor would this study have been possible without the typing, editing, and patience of Maddy Piper, who was assisted by Sinthy Khounrasaphiphak. To both, my thanks and gratitude. Through it all, my wife stood by my side. To her, the book is dedicated.

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Contents

<i>Abbreviations</i>	ix
<i>Preface</i>	xi
1. Introduction	1
2. Telecommunications Services	7
3. Telecommunications Equipment	19
4. Networks as Corporate Strategy	25
5. Firm Entry as a Process	35
6. Telecommunications Services and Manufacturing	47
7. Jurisdictional Gridlock	59
8. Regulation versus the Private Sector	71
9. The Double Squeeze	91
10. Issues and Options	99
<i>Appendices</i>	
A. Department of Commerce, International Trade Administration, January 19, 1984	113
B. Department of Commerce, International Trade Administration, September 12, 1984	123

C. Department of Commerce, International Trade Administration, March 15, 1985	143
D. Land Remote Sensing Act, July 17, 1984	153
E. Department of Commerce, National Oceanic and Atmospheric Administration, July 10, 1987	173
F. Department of Defense Directive, International Transfers of Technology, Goods, Services, and Munitions, January 17, 1984	185
<i>Index</i>	195

Introduction

The central policy issue of U.S. national security regulation is control versus freedom. Can national security be achieved through a policy of government control over private products? Or can national security be attained through a policy of competitive freedom?

This study attempts to grapple with two opposing forces confronting the U.S. economy today. On one hand, information technology is softening industry boundaries, diffusing across national borders, multiplying the number of competitive players, accelerating the rate of product introduction, contracting the rate of development cycles, and increasing the pace of product obsolescence.

On the other hand, the national security argument is regulating more and more private firms, commercial products, and international competitors. The national security argument regulates U.S. export of products and services, and U.S. imports of goods and resources. The rationale for such regulation is that technology transfer aids and abets our adversaries, the Soviet bloc. Consider recent competitive trends.

Technology is migrating and diffusing across more and more industries within the United States. The explosion of knowledge is such that no one industry possesses the exclusive hold of technology whether in genetic engineering, semiconductors, robotics, or fiber optics.

In addition, the market entry process introduces more competitors and more players into a given market or industry. Market entry is driven by a coalescence of telecommunications and computer industries as market boundaries intersect and overlap—pitting distant rivals into direct competitors.

Furthermore, the intensity of competition impels more firms to seize

the corporate network as a competitive response—a strategy that proceeds in incremental steps. The firm may secure the components of a telecommunications network as a cost-saving exercise. Next, the firm resells excess capacity on its network to outside users and clients. Finally, the firm leverages the network to introduce value-added services to both existing customers as a means to tap new markets. In doing so, the firm crosses industry boundary lines and subtly redefines itself, its markets, its customers, and its rivals. The corporate network today represents still another dimension of the entry process.

Moreover, as technology integrates markets globally an internationalization of the entry process takes place. Geography no longer serves to protect or insulate the firm. A global constituency of players thus multiplies and increases, and places a premium on competitive flexibility, efficiency, and innovation. Whether measured by domestic or international standards, corporate performance assumes a new dimension of market assessment.

And finally, international rivalry activates and hastens product and service development. Today product life cycles of twenty to thirty years are an anachronism. Rather, global competition has expedited the rate of product introduction and the pace of product obsolescence. As one observer put it, "If you celebrate a new product announcement, you fall fifteen minutes behind your rival."

In sum, today's U.S. firm encounters global technological diffusion, global market entry, global market softening, spatial erosion, a multiplication of rivals and competitors, a quickening of product development, a contraction of product life cycles, and an acceleration of product obsolescence. It is in this global environment that we expect U.S. firms to not only compete, but to acquit themselves effectively on both price and non-price dimensions of corporate conduct.

NATIONAL SECURITY REGULATION

Against this trend stands national security regulation. The invocation of unilateral federal oversight of private products in a world of competitive substitutes proceeds on the premise of static rather than dynamic change. Consequently, regulation ignores the fact that market entry is an ongoing process, both at home and abroad.

Regulation also tends to ignore the coalescence of markets, an environment of dissolving market distinctions between products, services, and industries. Market coalescence constitutes another form of market entry.

In addition, national security regulation often misperceives the global

pervasiveness of technical know-how and expertise—from West to East, from developed to lesser developed nations. Brazil manufactures telephones, South Korea exports IC chips, India sells software, Peru manufactures personal computers, and China hoists satellites.

Also consider that security oversight usually prefers the monopoly solution to the competitive solution in U.S. telecommunications. The national security argument defends the incentives of cost-plus, monopoly in research, monopoly in manufacturing, and monopoly in service. In doing so, the national security argument opposes market diversity, market innovation, and market efficiency.

Furthermore, national security regulation has erupted as internecine warfare within the federal establishment over jurisdictional control of private corporations. The struggle over turf broke out first within the Department of Defense; it then proceeded between Defense and Commerce, Commerce and Customs, State and Defense, Commerce and State, the National Security Agency and the National Bureau of Standards, and so forth. In the world of integrated global markets, turbulent domestic restructuring, and international rivalry, Washington D.C. leisurely indulged in a civil war as each federal agency sought to out Pentagon the Pentagon. To a GS-15, time is a free good.

U.S. firms also witnessed more and more federal agencies demanding control, sanction, clearance, and enforcement over management's decisions to buy, sell, invest, or innovate. U.S. corporations found themselves attempting to resist micromanaging by the Department of Defense, the Department of State, the Department of Commerce, the National Technical Information Services, the National Oceanic and Aerospace Agency, and the Federal Communications Commission with little success.

In addition, export regulations continued to mount and pile up unilaterally. U.S. firms were told to monitor the sales of their overseas customers, the Department of Commerce was told to audit private firms and commercial sales, the Department of Defense was instructed to audit the Department of Commerce—all participants encircling one another as the U.S. high technology trade moved from surplus to deficit.

Recognizing that unilateral national security regulation penalized the competitive stature of U.S. firms, the federal government is nevertheless reluctant to abolish export or import controls. Rather, in the name of national security, the U.S. government elects to extend regulation to America's competitors—NATO countries; free world non-NATO nations; and now the newly industrialized nations of Taiwan, Singapore, South Korea, and Hong Kong. The United States is in the unseemly

position of sponsoring, running, and policing an internationalized technological cartel among rivals and competitors.

As the government gained control over the managerial prerogatives of the private firm, corporations became subject to cost-price squeeze. Firms found that regulation diminished their exports as free-world customers “de-Americanized” their products. Firms found that the compliance cost of regulation privatized government regulation and put upward pressures on total costs. Dampened total revenues, inflated total costs, and squeezed earning threatened to curtail resources for future product development. As federal regulation of private products increased, European rivals marveled over what they perceived as the second coming of the Marshall Plan.

Moreover, federal agencies, witnessing the erosion of U.S. global positions in key products, elected to help U.S. firms through subsidies, consortiums, and the largess of the federal establishment. In the name of national security, major industries are invited to become wards of a beneficent state.

Finally, a policy that rewards our competitors at the expense of U.S. firms is grounded on political consensus. The political right favors export control, whereas the political left supports import control. The United States has fashioned a national security policy that serves to punish the U.S. firm in an environment of increased global risk, competition, and rivalry.

And what commercial products qualify as endowed with a national security component? Telephone equipment, telecommunications software, IC circuits, kidney dialysis equipment, rodent laboratory devices, and butcher gloves. In the future, a U.S. auto embedded with one thousand dollars worth of electronic equipment may very well qualify as a sensitive export product.

And what services merit national security oversight? The FBI recently interviewed public librarians in New York City and found that commercial on-line data bases of magazines apparently qualify as sensitive information. All of these policies proceed on the premise that national security interests of the United States can be found in control, audit, surveillance, enforcement, punishment, fines, and sanctions of private sector business.

A mixture of economics and armaments in public policy tends to be incompatible. Any policy that conditions export trade with Soviet conduct—linkage—is self-defeating and counterproductive. Better to have sent Stinger missiles to the Afghans in December 1979 than reward Komatsu pipelaying tractors at the expense of Caterpillar.

It is the thesis of this book that, in the long run, the answer to national