

Praise for Russia in the 21st Century

"In this timely and important work, Steven Rosefielde, a foremost expert on Russia, underlines the extent to which Russia's past is part of the present, and sets its conditions on the future. The result is a disturbing picture, conveying neither the end of history nor Russia as a normal state."

- Pekka Sutela, Bank of Finland and the Helsinki School of Economics

"This is an important book that effectively challenges much of the conventional thinking about Russia and the path it will take. Professor Rosefielde has been ahead of Western intelligence communities on the USSR and now Russia for many years, and I believe he continues to be ahead with this book. Many of its conclusions are chilling. The author argues persuasively that Russia will be less inclined to follow the liberal and globalist ideas of the West and far more challenging to the West than commonly expected. Moreover, Russia's military-industrial complex is dormant but not gone and Russia has the resources – and plan – to resurrect itself as a great military power. Such conclusions are based upon extensive original research in Russian as well as English sources, keen analysis, and nearly unassailable logic."

- William Van Cleave, Southwest Missouri State University



RUSSIA IN THE 21ST CENTURY

This book demonstrates that Russia intends to reemerge as a full-fledged superpower before 2010, challenging America and China and potentially threatening a new arms race. Contrary to conventional wisdom, this goal is easily within the Kremlin's grasp, but the cost to the Russian people and global security would be immense. A sophisticated strategy is proposed to dissuade President Vladimir Putin from pursuing this destabilizing course. The book also explains why the Soviet Union imploded, why Western experts missed the signs of the collapse, and how Russia has metamorphosed into an authoritarian regime instead of pursuing a transition to fully democratic free enterprise. It demonstrates that the Soviet Union was "structurally militarized" and that Russia's military-industrial complex is intact. The Cold War image of the Soviet Union as a westernizing, mass consumption society committed to "peaceful coexistence" is exposed as a statistical illusion. A critique of American foreign policy making is also provided that emphasizes the confusion caused by tampering with evidence to conform with public expectations and the damage to the national interest caused by attempting to satisfy a consensus of particular special interests.

Steven Rosefielde is Professor of Economics at the University of North Carolina, Chapel Hill, and Adjunct Professor of Defense and Strategic Studies, Center for Defense and Strategic Studies, Southwest Missouri State University, Springfield. The author or editor of eleven books on Russia and the Soviet Union, he has also published more than a hundred articles in journals such as the *American Economic Review, European Economic Review, Economica, Soviet Studies*, and *Europe-Asia Studies*. Professor Rosefielde is a member of the Russian Academy of Natural Science and was a Fellow of the Carnegie Corporation of New York from 2000 to 2003. He has served as a consultant to the Office of the Secretary of Defense as well as advised several directors of the U.S. Central Intelligence Agency and the U.S. National Intelligence Council. Professor Rosefielde has also worked continuously with the Swedish Defense Agency and the Central Economics and Mathematics Institute (Moscow) for more than a quarter century and with the Center for Defense and Foreign Policy (Moscow) for more than a decade.



RUSSIA IN THE 21ST CENTURY

The Prodigal Superpower

STEVEN ROSEFIELDE

University of North Carolina, Chapel Hill





PUBLISHED BY THE PRESS SYNDICATE OF THE UNIVERSITY OF CAMBRIDGE The Pitt Building, Trumpington Street, Cambridge, United Kingdom

CAMBRIDGE UNIVERSITY PRESS

The Edinburgh Building, Cambridge CB2 2RU, UK 40 West 20th Street, New York, NY 10011-4211, USA 477 Williamstown Road, Port Melbourne, VIC 3207, Australia Ruiz de Alarcón 13, 28014 Madrid, Spain Dock House, The Waterfront, Cape Town 8001, South Africa

http://www.cambridge.org

© Steven Rosefielde 2005

This book is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press.

First published 2005

Printed in the United States of America

Typeface Times Ten 10/13.5 pt. System LATEX 2_{ε} [TB]

A catalog record for this book is available from the British Library.

Library of Congress Cataloging in Publication Data Rosefielde, Steven.

Russia in the 21st century: the prodigal superpower / Steven Rosefielde.

p. cm.

Includes bibliographical references and index. ISBN 0-521-83678-6 – ISBN 0-521-54529-3 (pbk.)

1. National security – Economic aspects – Russia (Federation)

2. Military-industrial complex – Russia (Federation)

3. Russia (Federation) - Military policy.

4. Security, International. I. Title: Russia in the twenty-first century. II. Title.

HC340.12.Z9D4453 2004 338.4'7355'00947 – dc22 2004045110

> ISBN 0 521 83678 6 hardback ISBN 0 521 54529 3 paperback



In memory of David Rosefielde, Bill Lee, and Robert Levy



CONTENTS

List of Figures and Tables		page ix
Lis	st of Acronyms	xi
Preface		xiii
Acknowledgments		xvii
Introduction		1
1	After "The End of History"	11
2	Prodigal Superpower	21
3	Structural Militarization	33
4	What Could Have Been Done?	58
5	Muscovite Metamorphosis	68
6	Military-Industrial Reform	86
7	National Vulnerabilities	101
8	The Miasma of Global Engagement	112
9	Putin's Choice	117
10	Candor	123
Conclusion		131
Glossary		137
Notes		147
Selected Bibliography		219
Index		235

vii



FIGURES AND TABLES

FIGURES

2.1	USSR: Trends in GNP and industrial and agricultural	
	output, 1950–87	22
2.2	Growth rates of national income in the USSR over	
	five-year periods, 1966–2000	28
3.1	Cost of U.S. and Soviet defense activities, 1966–87	43
3.2	Soviet procurement as measured in two types of	
	constant rubles	46
3.3	Estimates of Soviet military procurement by CIA and Lee	46
5.1	Russia's hyperdepression in the years 1989–2003	80
7.1	American mobilization capacity: Tank production 1954–88	109
	TABLES	
I.1	Soviet defense burden 1928–90: Defense spending as a	
	percentage of GNP	5
2.1	Average annual rate of growth of National Product for	
	selected OECD countries (GDP) and the USSR (GNP),	
	1951–79	23
2.2	Average annual rate of growth of per capita consumption	
	in selected OECD countries and the USSR, 1951-79	23
2.3	Soviet economic growth by sector of origin (CIA	
	estimates: ruble price weights)	25
2.4	USSR: Comparison of CIA estimates of industrial growth	
	with official Soviet statistics, 1961–81, percent	26
3.1	CIA and Goskomstat estimates of total Soviet defense	
	spending 1960–75 (billions of rubles)	35

ix



X	Figures and Tables	
3.2	CIA prerevision estimates of the structure of Soviet	
	defense activities 1970 (billions of rubles)	36
3.3	Soviet defense expenditures as a share of GNP (ruble	
	estimates: percentage)	37
3.4	Soviet military procurement 1976–84 (billions of 1970	
	rubles)	38
3.5	Soviet defense activities 1976–84, including military	
	pensions and RDT&E (valued in billions of 1970 rubles)	39
3.6	Soviet and American defense activities 1976–84, excluding	
	military pensions and RDT&E (valued in billions of 1978	
	dollars)	42
3.7	Soviet military procurement 1960–75 (billions of 1970	
	rubles)	47
3.8	CIA estimates of Soviet weapons procurements 1980–9	
	(1982 ruble prices: billions)	48
3.9	Soviet munitions spending	49
3.10	Soviet defense spending	50
4.1	Real gross industrial output of the Russian Federation	
	1991–2000	64
4.2	Russian and U.S. military equipment arsenals, 1998	65
6.1	Defense industrial organization: The scheme for 2005–6	93
6.2	Official Russian defense budgetary statistics, 1992–2001	97
6.3	1 8	98
6.4	Russian defense spending in 2000 (CIA, 1978 dollars)	99
7.1	Growth projections 1995–2025	106



ACRONYMS

ACW advanced conventional weapon

ALCM air-launched cruise missile

CER cost-estimating relationship

CBW chemical-biological warfare

CFE Conventional Forces in Europe treaty

CIA Central Intelligence Agency

DIA Defense Intelligence Agency

DOD Department of Defense

GDP gross domestic product

Genshtab general staff

GNP gross national product

Goskomstat Soviet state statistical agency

Gosplan Soviet state central planning agency

Gossnabsbyt' Soviet state wholesale allocation system

GRU Main intelligence administration of the Russian general staff (Glavnoe Razvedovatel'noe Upravlenie)

Khozraschyot economic cost accounting

IW information warfare

KGB Komitet Gosudarstvennoi Bezopasnosti (Soviet Committee on State Security)

MBMW machine building and metalworking

MEAC Military-Economic Analysis Center (CIA)

MEAP Military-Economic Analysis Panel (CIA)

Minatom Ministry of Atomic Energy



xii

Acronyms

MIRV multiple independently targetable reentry vehicle

MOD Russian Ministry of Defense

MVD Ministerstvo vnutrennikh del (Ministry of Internal Affairs)

NATO North Atlantic Treaty Organization

NMD national missile defense

OPK oboronnyi-promyshennyi kompleks (defense-industrial complex)

OSD Office of the Secretary of Defense

PGM precision guided munitions

RDT&E research, development, testing, and evaluation

RMA revolution in military affairs

Roskomstat Russian statistical agency

Rosvooruzhenie Russian arms export agency

SORT Strategic Offensive Arms Reduction Treaty

START Strategic Arms Reduction Talks

SNA System of National Accounts

TNC tactical nuclear weapon for conventional war fighting

TNW tactical nuclear weapon

TVD teatry voennykh destvii (theaters of military operations)

UAV unmanned aerial vehicle

VPK voennyi promyshlennyi kompleks (military-industrial complex)



PREFACE

Specialists and amateurs alike frequently hold strong views about Soviet and Russian military-economic potential, but their attitudes are seldom consistent. During the Cold War, it was fashionable to speculate that the East and West were converging, that systems were becoming mixed, that both sides shared a common interest in peace and would gradually reduce their military forces. Accordingly, analysts like Franklyn Holzman argued that the Soviets spent less on defense than America and inter alia that the healthy economic growth indicated by Goskomstat and CIA statistics was primarily attributable to the workability of the "reformed" command system. But in the aftermath of the Soviet collapse, it has become just as fashionable to blame the USSR's demise on its excessive defense burden and the deficiencies of central planning. And, of course, transitologists and now the European Union have officially proclaimed Russia a "market economy," suggesting "blue skies" ahead, without a military cloud in the sky, since the contemporary defense burden is said to be half and the absolute dollar value less then a tenth the American level. Western economic and security advice to the Kremlin follows this script, stressing further liberalization without the slightest recognition that Russia's defenseindustrial complex is just as large as ever and that Russia's economic and security drift is against the "globalist" tide. It is easy to understand the diverse partisan interests shaping these "approved" contradictions and even to sympathize in some regards with the disingenuousness, but insofar as policymakers believe what they say, their happy talk obstructs the resolution of serious problems vital to both Russia and the West. It is in our mutual interest to see Russia scrap "structural militarization" in favor of an "optimal" security strategy and to substitute "economic liberty" for the system of authoritarian economic sovereignty and privilege seeking



xiv Preface

installed by Boris Yeltsin and rationalized by Vladimir Putin. This book constructs an analytic foundation for such an initiative by explaining why Russia will ensnare itself in a Soviet-style quagmire unless it structurally demilitarizes and westernizes its political economy. It isn't enough to offer the counsel of perfection and for Putin to say amen. The bear has to be genetically recoded.

METHODOLOGY

This book employs "standard" western economic theory and quantitative methods to analyze Soviet and Russian civilian and military-industrial potential and performance. It relies on the microeconomic utility-optimizing principles of Adam Smith and his modern mathematical successors, especially Vilfredo Pareto, to establish a benchmark for evaluating Soviet and Russian possibilities. Following Abram Bergson's precepts on welfare economics, this book employs the familiar Pareto standard as a handy and widely understood referent, not as a uniquely valid ideal.

Best Sovietological practices, including adjusted factor costing where applicable, are applied throughout to handle the special problems posed by Soviet institutions, Soviet accounting, and Marxist price fixing. My approach differs from Bergson's and the CIA's here in only one regard. Like Bergson, for the years after 1963 I reject the claim that ruble values measure consumers' or planners' utilities (marginal rates of product substitution), but I go further, denying that they reflect "production potential," that is, marginal rates of enterprise product transformation "on average." This means that, whereas most Sovietologists seem to believe that Soviet ruble factor cost or adjusted ruble factor cost tells us something important about Soviet neoclassical supply-side possibilities, I insist that such statistics are opaque indicators of both demand and supply. The nuance matters because if Bergson is right, western and Soviet growth statistics can be validly compared as oranges and oranges on the supply side. If he is wrong, comparisons of these statistics are inherently ambiguous, providing only an illusion of comparability.²

My standard of verification also departs significantly from Bergson's. Dating as early as 1953, he argued that Soviet data were "reliable and usable," including subaggregates, except in infrequent cases where there was strong evidence of doctoring. This attitude, adopted before he



Preface xv

recomputed his famous GNP growth series to assess Soviet data reliability, might be likened to a qualified auditor's report that acknowledges improprieties but judges the overall result satisfactory. As guides to Soviet performance, properly computed output and combined factor productivity growth series were considered ipso facto reliable in precisely the same degree as the underlying data. This turned out to mean in practice that Bergson's perception of Soviet performance was exactly what he computed. Although he considered other viewpoints, he never gave any ground regarding the possibility that his capital series were overstated by hidden inflation or that his dollar estimates of comparative Soviet size were too high. Nor did the Soviet collapse give him pause. He acted as if his axioms were sufficient to gauge the truth and were unfalsifiable, unlike Enron's auditors in similar circumstances, who amended their appraisals. Bergson's method consequently was conviction driven and therefore unscientific judged from the strict requirements of the hard sciences. The CIA acted differently. It possessed a lax attitude toward what constituted compelling evidence of falsification, and it freely adjusted official data to suit its presumptions. This elastic interpretation of Soviet data "reliability" enabled it to craft reality to its liking while claiming that it was rigorously adhering to Bergson's strictures. This book, by contrast, takes the position that blind faith in the "usability" of Soviet subaggregates and undisciplined data manipulation are both unwarranted in the wake of the Soviet disunion. Bergson and the CIA should have amended their analyses after the events of 1991 but didn't. This book doesn't repeat their mistakes.

Relatedly, it was also discovered that the convictions shaping Sovieto-logical attitudes and the CIA's manipulation of Soviet data were governed by "public culture" – socially approved ideas about what the world ought to be. These "idols," as Francis Bacon observed centuries ago, turn science into sophistry and garble public discourse. Therefore, pains have been taken to explain not only how flaws in Bergson's and the CIA's axiologies caused them to get the Soviet Union and Russia wrong but why these errors occurred. My method in its entirety thus begins with scientifically tested, improved axiologies of markets and plans and then moves ahead to an examination of the principles, values, and convictions determining initial axiomatic choice and policy perceptions to prevent preconceptions from biasing results and conclusions.



ACKNOWLEDGMENTS

Work on this text began in 1987 after completion of the second edition of False Science: Underestimating the Soviet Arms Buildup. The Earhardt Foundation provided initial funding, but the collapse of the Soviet Union raised too many uncertainties to permit finishing the project. Research continued sporadically thereafter. For a time it seemed as if Russia might dismantle its military-industrial complex and structurally demilitarize, but by 2000 the momentum shifted, and I once again began a comprehensive assessment of the possibility that Russia was heading back to the future.

Financial and moral support for the undertaking was generously provided by the Carnegie Foundation of New York, under the Carnegie Scholars Program (Carnegie Scholar 2000), International Peace and Security division, established by President Vartan Gregorian in 1999. I am indebted to it and the Earhardt Foundation for their kind assistance. Some of my ideas were also developed under a grant from the University of North Carolina Institute for the Arts and the Humanities. Special thanks goes to Patricia Rosenfield, chair, Carnegie Scholars Program, and special advisor to the vice president and director for strategic planning and program coordination, for her constant encouragement and for organizing two Carnegie Scholars Program colloquia. The Bank of Finland Institute for Economics in Transition provided me with valuable research support during the spring of 2004.

My intellectual debt is equally immense. I relied heavily on William Lee's deep knowledge of Soviet and Russian weapons systems and the inside machinations at the Central Intelligence Agency and the Defense Intelligence Agency. He knew the evasions and half-truths and guided me through the minefields. Vitaly Shlykov, former deputy chairman of the Russian Defense Council under President Boris Yeltsin and consummate

xvii



xviii

Acknowledgments

VPK and GRU insider, performed a role similar to that of Virgil, acting as guide to the Soviet/Russian perspective for more than a decade. We were introduced by Joseph Churba, president of the International Security Council, and have worked continuously with each other ever since, with the kind assistance of Jan Rylander, director of the Swedish Defense Agency (and chairman of WEAG Panel II, a nineteen-nation R&D cooperative organization). Lieutenant General Viktor Samoilov, former director of Rosvooruzhenie (Russian state arms sales agency, 1994), and Col. General Valery Mironov, Soviet commander in chief of the Northwestern TVD (1991) and former defense minister of Russia, also helped me with specifics.

William van Cleave, professor and department head, Defense and Strategic Studies Department, Southwest Missouri State University, and J. D. Crouch, associate professor, Defense and Strategic Studies Department, Southwest Missouri State University (and former assistant secretary of defense for International Security Policy), occasionally coached me on military developments, as did Stephen Blank, professor of national security studies, Strategic Studies Institute, U.S. Army War College, and Alexander Belkin, Center for Foreign and Defense Policy (Moscow).

Thanks too is due the Central Intelligence Agency for the fine quality of its documents, for its excellent conferences, and for debating with me over the years. James Noren's and Noel Firth's comments on my analysis were especially helpful, as were Abe Becker's critiques and contacts with CIA directors Stansfield Turner, Bill Casey, Robert Gates, Robert Inman, and James Schlesinger (also secretary of defense). Prior assistance by OSD Director of Net Assessment Andrew Marshall, Deputy Assistant Secretary for Intelligence Patrick Parker, Derk Swaine, and David Epstein provided an invaluable background. The Defense Intelligence Agency and the National Intelligence Council also helped in various ways.

My grasp of Russian economic realities leaned heavily on the contributions of others. Professors Abram Bergson, Alexander Gerschenkron, Anne Carter, and Wassily Leontief provided the basic training. Academician Yuri Yaremenko, director of the Institute for National Economic Forecasting; Academician Valery Makarov, director of the Central Economics and Mathematics Institute; Georgii Kleiner, deputy director of TsEMI; Emil Ershov, professor at the Higher School of Economics, Moscow, and former deputy director of the Institute for National Economic Forecasting and Goskomstat SSSR; Alexander Bulatov, professor



Acknowledgments

xix

at Moscow State University for International Relations; Aleksei Ponomarenko, professor at the Higher School of Economics, Moscow, and former deputy director of Goskomstat (RF); Kirill Bagrinovsky, professor at TsEMI and Moscow State University; Slava Danilin, head of laboratory, TsEMI; Maya Shukhgalter; and Evgeny Gavrilenkov, former director of the Higher School of Economics and now chief economist at Troika Dialog were but a few of the Russian colleagues who continuously informed and challenged my understanding of Russia's unfolding reality.

Stefan Hedlund generously shared his works in progress and scrutinized my analysis. Those providing comments and criticisms included Jan Rylander; Jan Leijonhielm, Department Head, Swedish Defense Research Agency; Wilhelm Unge, senior researcher, Swedish Defense Research Agency; Professor Lennart Samuelson; Eugene Kogan, guest researcher, Stiftung Wissenschaft und Politik; Colonel Ret. Heikki Hult, Finnish National Defense College; Pekka Sutela, head, Bank of Finland Institute for Economies in Transition; Professor Julian Cooper, Centre for Russian and East European Studies, University of Birmingham; Professor Gertrude Schroeder, University of Virginia; Professor Franklin Holzman, Tufts University; Professor Peter Wiles, London University; Professor Mario Nuti, Comparative Economic Systems, University of Rome; Professor Sabrina Ramet, Trondheim University; Peter Havlik, deputy director, Wiener Institut fur Internationale Wirtschaftsvergleiche; Leon Podkaminer, staff economist, Weiner Institut fur Internationale Wirtschaftsvergleiche; Professor Jacques Sapir, Etudes en Sociales Responsible Russie ex-URSS, IRSES-MSH, Paris; Eric Brunat, deputy resident representative, United Nations Development Programme, Russian Federation, former executive director of the Russian European Center for Economic Policy in Russia and vice-president of the University of Savoie; Ivan Samson, professor of economics, PEPSE(lab) Espace Europe, UPMF, University of Grenoble; Professor Xavier Richet, University Sorbonne Nouvelle, Paris; Jean Francois Huchet, associate professor of economics, University of Rennes; Bruno Dallago, professor of economics, University of Trento; Professor Philippe Debroux, Soka University, Hachioji; Charles Wolf, Jr., senior economic advisor and corporate fellow, RAND; Igor Birman; Professor Murray Feshbach, George Washington University; Stuart Goldman, specialist in Russian and Eurasian Affairs, Congressional Research Service; John Hardt, senior specialist in post Soviet economics, Congressional Research Service,



XX

Acknowledgments

Library of Congress, and adjunct professor in economics, George Washington University; James Millar, professor of economics and international affairs, George Washington University; Anders Aslund, director, Russian and Eurasian Program, Carnegie Endowment for International Peace; Peter Reddaway, professor of political science, George Washington University; Nicholas Eberstadt, Henry Wendt Chair in Political Economy, American Enterprise Institute; Ted Karasik, RAND; Dan Goldberg, Department of Defense; Judith Shelton, adjunct professor; Ronald Childress, professor of law, University of South Carolina; Keith Bush, Director of Research at the U.S.–Russia Business Council; Professor Odelia Funke, University of Maryland; and John Wilhelm.

Japanese colleagues who offered comments and criticisms included Tad Sano, vice minister for international affaires, Ministry of Economy, Trade and Industry, Japan; Professor Masaaki Kuboniwa, Hitotsubashi University, Kunitachi; Professor Shinichiro Tabata, Hokkaido University; Masumi Hakogi, emeritus professor of Tohoku University (Graduate School of Cultural Studies) and professor of international economics, Hiroshima University of Economics; Professor Yoji Koyama, Niigata University; Professor Satoshi Mizobata, Kyoto University; Professor Ken Morita, Hiroshima University; Professor Kumiko Haba, Hosei University, Tokyo; and Aiko Tomiyama, lecturer, Niigata University; Kaoru Nakata, State Department, Tokyo.

Special thanks go to Professor Quinn Mills, Harvard University, and Professor Ralph William Pfouts, University of North Carolina, Chapel Hill, who regularly discussed most of the themes addressed in this volume with me over the years. Professor Robert Levy, University of California, San Diego, patiently schooled me in the psychological and anthropological aspects of public culture, power networking, and noneconomic behavior as these issues bore on Russia and western national security policy making. Professor Francis Fukuyama, School of International Political Economy, Johns Hopkins University, was kind enough to explain many subtle aspects of his "end of history" theory to me in Nanjing. Howard Stein, visiting professor of African and African American Studies, University of Michigan, Ann Arbor, improved my understanding of the Washington consensus and problematic aspects of G-7 misassistance to Russia. Associate Professor Janine Wedel, School of Public Policy, George Mason University, and Joseph Stiglitz shed further light on the problem.



Acknowledgments

xxi

Natalia Vennikova coauthored some of the underlying essays supporting this text and untiringly assisted me with Russian source materials. My graduate research assistants Yabin Sun and Xilong Chen, along with many undergraduate volunteers, including Lauren Ghiloni, did yeomen service, as did Nancy Kocher, who smiling endured typing seemingly endless textual revisions. My wife Susan and daughter Justine provided continuous encouragement, and my son David was a never-ending source of insight and inspiration. My gratitude to everyone is immense. I of course am solely responsible for the book's content.



RUSSIA IN THE 21ST CENTURY