

Japanese Defence Production, National Security and Alliance Relations in the 21st Century

Department of Politics and International Relations, Leicester University.

2014

Gavan Patrick Gray

Abstract

Japanese Defence Production, National Security and Alliance Relations in the 21st Century

Gavan Patrick Gray

As a result of constitutional restrictions on its use of military force, Japan has long held a reputation as a pacifist state. Yet, for more than twenty years, it has been undergoing a steady process of normalization that has seen these restrictions gradually removed or bypassed. At a time when Japan is moving toward a more proactive security policy this thesis examines the important effect procurement choices have upon both its strategic options and its regional relations. This study examines the development and structure of Japan's defence industry, assesses the threats it is required to address, and gauges the impact of domestic and foreign influence upon security policy.

In addition, it raises important questions regarding the nature of Japan's strategic direction and the lack of open discussion of areas of significance. In particular, it looks at the failure of weapon choices to become more than an economic issue, despite the far broader impact of the choices made. It also considers the extent to which the threats faced by Japan have been accurately assessed, and the possible implications of narrow adherence to the US-Japan security alliance. Finally the thesis helps to address a long-standing gulf in Japan's academic community which has seen liberal academics largely standing removed from discussion of security policy on ideologically pacifist grounds. By showing that the possible choices in security policy are far broader than commonly perceived, this thesis allows and encourages a more open and active debate on Japan's future role, both in East Asia and internationally.

Acknowledgements

I am incredibly grateful to my supervisor, Mark Phythian, for his support, encouragement and invaluable critical guidance throughout the development of this thesis. I would also like to thank Tara McCormack, Laura Brace and Sally Mallet at Leicester University who each provided great assistance during the course of the work.

Finally, I wish to offer sincere appreciation for the support of family and friends in both Europe and Japan over the past years, particularly Kumiko, Cassidy and Liannon, without whom this thesis would not have been possible.

Gavan Gray

Conventions

This thesis uses the modified Hepburn system of romanization for Japanese written characters. Where both Family and First names are used for Japanese, Chinese and Korean individuals, the Asian system of Family name followed by First name is preserved. Where they are writing in English for an international audience, references instead use the Western system of First name followed by Family name.

Table of Contents

ABSTRACT.....	2
ACKNOWLEDGEMENTS.....	3
CONVENTIONS.....	3
TABLE OF CONTENTS.....	4
TABLES.....	7
FIGURES.....	9
ABBREVIATIONS.....	10
CHAPTER 1: INTRODUCTION.....	12
THE NEED FOR THIS STUDY.....	13
Domestic and regional volatility	15
Alliance and Regional Diplomatic Relations.....	17
AIMS OF THE STUDY.	19
Core Thesis.....	19
Secondary Arguments.	19
FOUNDATIONS OF THE STUDY.	20
Existing literature.....	22
METHODOLOGY.....	25
Documents and Records	25
Media Accounts	26
Interviews.....	26
SUMMARY OF CONTENTS	27
CHAPTER 2: DEVELOPMENT AND STRUCTURE OF DEFENCE INDUSTRY	30
THE HISTORICAL ROLE OF JAPAN'S DEFENCE INDUSTRY	30
The Meiji Era	30
Japan during the World Wars.....	37
The post-war period	39
THE CORE STRUCTURE OF JAPAN'S DEFENCE INDUSTRIAL SYSTEM	53
Military structure.....	59
Bureaucratic Structure	67
Weakness of the procurement system.....	69
Reform efforts.....	73
Industrial Structure	74
Function of the Industry.	75
Types of Company.	75
Types of Procurement.	78
Weaknesses of the Industrial Sector	79
Major Defence Contractors.....	80
Industrial Trends	83
Innovation	84
Consolidation	86
Joint Development.	87
Long-term Planning	88
Supply Chain Risk Management	91
CONCLUSIONS.....	92
CHAPTER 3: INFLUENCES ON DEFENCE POLICY.....	94
INTRODUCTION	94
DOMESTIC FACTORS.....	95

The Governmental Level.....	95
The Cabinet Affairs Office (Naikaku-fu).....	96
The Security Secretariat.....	98
The Cabinet Legislation Bureau (CLB).....	99
The Ministries.....	100
Ministry of Foreign Affairs.....	103
The Bureaucracy.....	104
The Organizational Level.....	105
Political Parties.....	106
Think Tanks.....	107
Business and Industry.....	108
Unions.....	110
The Japan Self Defence Forces (JSDF).....	111
The Public.....	113
The Ideological Level.....	116
Defensive-Realism.....	118
Leadership Ideology.....	120
Normal Nationalism and Resurgent Militarism.....	121
The Normative Level.....	122
A Dearth of Pacifist Policy.....	124
Anti-Radicalism.....	126
The Fear Factor.....	129
Maximizing 'Face'.....	132
EXTERNAL INFLUENCES.....	136
Response to External Threats.....	136
The International Community.....	138
Regional Pressure.....	140
Pressure from the US.....	143
Impact of Gaiatsu.....	148
Alliance Management.....	156
Divergence and Dominance.....	159
Impact on Defence Issues.....	162
CONCLUSIONS.....	166
CHAPTER 4: EXISTENTIAL THREATS.....	171
INTRODUCTION.....	171
RUSSIA.....	172
History.....	176
Threat Evaluation.....	176
The Real Danger.....	180
What to do?.....	181
CHINA.....	182
Control of the Senkakus.....	182
The Threat of Conflict.....	184
Chinese Strategy.....	186
Military Capability.....	190
China at War.....	194
How likely is Sino-Japanese conflict?.....	196
Downgrading China's Threat.....	200
REGIONAL STABILITY.....	201
Ongoing Disputes.....	202
SEA LINES OF COMMUNICATION (SLOC).....	205
HUMANITARIAN ASSISTANCE AND DISASTER RELIEF (HADR).....	209
Threat of Future Disaster.....	210
Regional HADR.....	214
CONCLUSIONS.....	216
CHAPTER 5: JAPAN'S STRATEGIC GOALS.....	219

INTRODUCTION	219
JAPAN'S GRAND STRATEGY.....	220
US STRATEGY	225
The Deficits of a Conjoined Strategy.....	228
THE ALLIANCE'S 'SHARP SWORD'	233
JAPAN'S DETERRENCE STRATEGY	235
CONCLUSIONS.....	252
CHAPTER 6: THE PRACTICAL VALUE OF JAPAN'S WEAPON SYSTEMS	254
THE IMPACT OF WEAPON SYSTEM SELECTION	254
CASE STUDIES	258
CASE STUDY #1: The F-35	260
Cost	265
Technical Issues	267
Japan's options.....	270
CASE STUDY #2: The ATD-X Shinshin (F-3)	273
CASE STUDY #3: Ballistic Missile Defence (BMD).....	275
Reliability of BMD	282
What should Japan do?.....	285
CASE STUDY #4: Izumo-class destroyer.....	288
The Impact of the Izumo-class	289
CASE STUDY #5: Type-12 Surface to Ship Missile.....	291
Other Systems.....	296
Evaluation.....	301
Strategic Needs	302
Return on Investment.....	303
Industrial Production.....	305
New Technology	306
STATE OF PUBLIC DISCOURSE.....	312
CONCLUSIONS.....	316
CHAPTER 7: CONCLUSION	318
KEY ARGUMENTS REVISITED.....	322
RECENT EVENTS	324
FUTURE PROSPECTS.....	325
BIBLIOGRAPHY.....	328
GOVERNMENT PUBLICATIONS AND SOURCES	328
POLITICAL PARTY MANIFESTOS	333
INDUSTRY REPORTS	333
BOOKS	334
JOURNAL ARTICLES.....	347
NEWSPAPER AND MAGAZINES ARTICLES, AND POLICY PAPERS.....	360

Tables

CHAPTER 2:	30
2.1 DEVELOPMENTS IN JAPANESE DEFENCE POLICY	49
2.2 DEFENSE EXPENDITURE 1950-2012 (%)	49
2.3 DEFENSE EXPENDITURE 1950-2012 (GDP)	50
2.4 EQUIPMENT AND R&D BUDGET 1972-2010	51
2.5 NUMBER EMPLOYED IN DEFENCE INDUSTRY 1990-2005	51
2.6 DEFENCE SYSTEM CORE ELEMENTS	53
2.7 JAPAN'S NATIONAL DEFENCE POLICY OUTLINE	55
2.8 DEFENCE PRODUCTION STUDY GROUP MEMBERS	56
2.9 MINISTRIES WITH DEFENCE INFLUENCE	57
2.10 DEFENCE VIEWS OF POLITICAL PARTIES	58
2.11 MILITARY PERSONNEL	59
2.12 JSDF WEAPON SYSTEMS	59
2.13 COMPARATIVE MILITARY SIZE	60
2.14 ANNUAL DEFENCE EXPENDITURE	60
2.15 CHANGE IN DEFENCE EXPENDITURE 2006-2013	61
2.16 MILITARY BUDGET BREAKDOWN	61
2.17 GSDF WEAPON SYSTEMS	62
2.18 ASDF WEAPON SYSTEMS	63
2.19 MSDF WEAPON SYSTEMS	65
2.20 PROCUREMENT METHODS	68
2.21 PROCUREMENT PROCESS	69
2.22 USE OF INCENTIVE CONTRACTS	70
2.23 DEFENCE SECTOR CORRUPTION	72
2.24 DEFENCE IMPORTS	74
2.25 DEFENCE EXPORTS	75
2.26 CONTRACTOR TYPES	76
2.27 PROCUREMENT TYPE COMPARISON	78
2.28 DECLINE IN DEFENCE PRODUCTION 1990-2009	80
2.29 TOP DEFENCE MANUFACTURERS	81
2.30 TOP DEFENCE CONTRACTORS	82
2.31 COMPARATIVE R&D EXPENDITURE	84
2.32 DEFENCE TECHNOLOGY COMPARISON	85
2.33 LCC PROJECTIONS	90

CHAPTER 3:	94
3.1 POST RETIREMENT EMPLOYMENT OF MILITARY	110
3.2 PUBLIC OPINION OF JSDF 1962-2012	112
3.3 PUBLIC OPINION OF DEFENCE POLICY 2002-2012	115
3.4 PUBLIC PRIORITIZATION OF DEFENCE 2001-2012	116
3.5 IDEOLOGICAL FACTIONS	117
3.6 PUBLIC VIEW ON DEFENCE SPENDING 1962-2012	128
CHAPTER 4:	171
4.1 NORTH KOREAN MISSILE DEVELOPMENT	177
4.2 CHINA'S MARITIME BODIES	184
4.3 JAPAN'S DEPENDENCY ON SLOC	209
4.4 NATURAL DISASTERS IN ASIA	215
CHAPTER 5:	219
5.1 IMPACT OF NORMALIZATION ON ALLIANCE TIES	224
CHAPTER 6:	254
6.1 RATIO OF MAINTENANCE AND PROCUREMENT COSTS 1989-2010	257
6.2 MOST EXPENSIVE MILITARY SYSTEMS 2012	259
6.3 F-35 PROCUREMENT COSTS	260
6.4 JAPANESE FIGHTER PRODUCTION 1960-2030	263
6.5 ATD-X PROCUREMENT COSTS	273
6.6 BMD PROCUREMENT COSTS	275
6.7 DEPLOYMENT OF BMD IN JAPAN (UNITS)	276
6.8 MISSILE DEVELOPMENT BUDGET 1991-2011	278
6.9 IZUMO CLASS PROCUREMENT COSTS	288
6.10 TYPE 12 PROCUREMENT COSTS	292
6.11 MAJOR SYSTEMS PROCUREMENT 2010-2015	296
6.12 SUPPLEMENTARY DEFENCE BUDGET 2013	297
6.13 TRDI MAJOR RESEARCH PROJECTS 2010-2013	299
6.14 EVALUATION OF SYSTEM EFFICIENCY	307
6.15 COMPARISON OF F35 MEDIA COVERAGE	313
6.16 COVERAGE OF KEY SYSTEMS BY NIHON KEIZAI SHIMBUN	314
6.17 COVERAGE OF F35 BY THINK TANKS	316

Figures

CHAPTER 3:	94
3.1 CABINET SECRETARIAT	98
3.2 CABINET LEGISLATION BUREAU	100
3.3 MINISTRY OF DEFENCE.....	102
3.4 MINISTRY OF FOREIGN AFFAIRS	103
3.5 PACE OF DEFENCE REFORM.....	131
3.6 DOMESTIC INFLUENCES ON DEFENCE POLICY	135
3.7 DIRECT AND INDIRECT VECTORS OF US PRESSURE.....	148
3.8 SIMPLIFIED HIERARCHY OF SECURITY INFLUENCE.....	167
CHAPTER 4:	171
4.1 THE ISLAND CHAINS	188
4.2 RECENT CHINESE NAVAL ACTIVITY	189
4.3 JAPAN'S SHIPPING LANES	208
CHAPTER 5:	219
5.1 DIFFUSION OF STATE MOTIVATION IN FOREIGN POLICY	238
5.2 MODEL OF TRILATERAL COMPETITION IN NORTHEAST ASIA	243
5.3 MILITARY BASES IN JAPAN	249
CHAPTER 6:	254
6.1 DEPLOYMENT OF BMD IN JAPAN (LOCATION)	277

Abbreviations

DPJ	The Democratic Party of Japan (<i>Minshutō</i>)
LDP	The Liberal Democrat Party (<i>Jimintō</i>)
SDP	Social Democratic Party (<i>Shakai Minshutō</i>)
MITI	Ministry of International Trade and Industry (<i>Tsūshō-sangyōshō</i>)
MOFA	Ministry of Foreign Affairs (<i>Gaimushō</i>)
MOD	Ministry of Defence (<i>Bōeishō</i>)
MinF	Ministry of Finance (<i>Zaimushō</i>)
TRDI	Technical Research and Development Institute (<i>Bōeishō-gijyū-kenkyū-honbu</i>)
EPCO	Equipment Procurement and Construction Office (<i>Bōeishō-soubi-shisetsu-honbu</i>)
JSDF	Japan Self Defence Force (<i>Jieitai</i>)
ASDF	Air Self Defence Force (<i>Kōkū Jieitai</i>)
MSDF	Marine Self Defence Force (<i>Kaijō Jieitai</i>)
GSDF	Ground Self Defence (<i>Rikujō Jieitai</i>)
JCG	Japan Coast Guard (<i>Kaijō Hoan-chō</i>)
NDPO	National Defence Program Outline
NDPG	National Defence Program Guidelines

MTDP	Mid-term Defence Plan
IHI	Ishikawajima-harima Heavy Industries (<i>Kabushiki-gaisha IHI</i>)
MHI	Mitsubishi Heavy Industries (<i>Mitsubishi Jūkōgyō Kabushiki-kaisha</i>)
KHI	Kawasaki Heavy Industries (<i>Kawasaki Jūkōgyō Kabushiki-gaisha</i>)
BMD	Ballistic Missile Defence

CHAPTER 1: Introduction

Japan's defence industry is centuries old and has one of the world's highest levels of military spending. Nonetheless, in the post-war period Japan conducted almost no export of arms due to long-standing prohibitions adopted by the government to reflect the pacifist ideals expressed within its post-World War Two constitution. As a result, the defence industry has been in stagnation for decades, with the lack of exports creating poor economy of scale for domestic manufacturers whose sole customer has been the Japanese Self Defence Forces (JSDF). Recently, however, these restrictions have been eased considerably as part of an ongoing process of normalization, the gradual loosening of the constitutional restraints placed upon Japan's ability to exercise military force as a tool of statecraft.

It remains to be seen whether access to export markets will be enough to revitalize the industry though at the very least it seems likely to stave off further stagnation. In either case, the choices Japan makes regarding its weapon procurement programs, and any future weapons trade it engages in, will have significant impact, not only on the state's economic welfare but also on regional security and Japan's role in international affairs.

This thesis seeks to examine the choices available to Japan, both strategically and in terms of specific procurement options, the factors influencing these choices, and the possible impact such choices may have on Japanese and regional security. To do so it will use a holistic approach looking at the historical development of the defence industry, its current structure, the domestic and foreign elements that exert influence upon it, the threats to security the industry is required to address, and the Japanese

government's strategy for promoting national security in the coming decades. Finally, it uses several case studies of weapon systems in use or development by Japan as examples to highlight the strengths and weaknesses inherent within Japan's defence policy as it relates to industrial defence systems.

The Need for this Study

Japan is one of the very few countries in the world to include an explicit renunciation of military force as a cornerstone of its constitution. The section of the Japanese constitution in question is Article 9, which states:

Aspiring sincerely to an international peace based on justice and order, the Japanese people forever renounce war as a sovereign right of the nation and the threat or use of force as means of settling international disputes. To accomplish this aim....land, sea, and air forces, as well as other war potential, will never be maintained. The right of belligerency of the state will not be recognized.¹

In line with these stated beliefs, for most of the post-war era Japan adhered to what became known as the Yoshida Doctrine, an acceptance of US military basing in Japan in return for a guarantee of protection which would allow Japan to reduce its own military spending in favour of economic investment. This policy also involved a significant transfer of defence technology from the US to Japan, something which allowed Japan to generate dual-use technology faster, cheaper and at higher quality than Western nations, without having to make a comparable investment in scientific research, a core factor in Japan's dynamic post-war economic growth.²

¹ http://www.kantei.go.jp/foreign/constitution_and_government_of_japan/constitution_e.html

² Jay Stowsky, 'From spin-off to spin-on: Redefining the military's role in technology development', *Berkeley Roundtable on the International Economy*, Berkeley: US Berkeley, 2005.

Yet, over the past twenty years Japan has progressed considerably toward ‘normalization’, the return to military self-sufficiency that Preble calls the ability of the nation to be “responsible for its own security and capable of assuming a wider strategic role in East Asia.”³ It is now possible to imagine this occurring within the following decade and Madsen and Samuels foresee three likely paths such normalization might take: following Britain’s path and staying tightly bound to the US at the expense of regional ties, one similar to France with greater independence from the US but requiring a strong military might, or closer to Germany with a lower security profile and greater regional integration.⁴

The constitutional support for pacifist ideals has, however, helped create a social and political aversion to the subject of military affairs unique to Japan. Rather than fostering deeply embedded pacifist beliefs it has instead resulted in a low prioritization of military affairs and a remarkably subdued level of public, political and academic interest in the particulars of defence policy. This has resulted in little public debate into the strategic options available to Japan, with the exception of cases in which they become an economic concern. It has also led to a strong ideological division regarding the academic study of security issues in Japan with Liberals of the Peace Studies sphere facing off against Realist counterparts in the field of Security Studies. The two groups opposing stances have polarized over the years leaving little common ground or room for interaction, with the result that both have lost access to valuable counterbalancing viewpoints. This has left Peace Studies lacking in a practical awareness of the necessities of defence spending, and Security Studies with a constrained view of the full range of diplomatic and strategic options available to it.

³ Christopher Preble, ‘A plea for normalcy: US-Japan relations after Koizumi’, *The National Interest*, 1st September 2006.

⁴ Robert Madsen and Richard J. Samuels, ‘Japan, LLP’, *The National Interest*, 107, May/June 2010.

The political impact of this split has been the centralization of defence policy-making and analysis within a tightly focused hub of political and bureaucratic activity, with advisory input from a very limited pool of academic specialists. By highlighting the wider variety of options available, and the potential dangers of failing to recognise them, this thesis encourages an open debate upon defence policy among a far more diverse section of the Japanese and international academic community than has previously been the case.

Such a debate is more important than ever given Japan's central role in increasingly tense regional security dynamics involving both China and North Korea. While some have suggested the possibility of Japan once again rising to its 1980s stature as a potential rival to US influence in the region,⁵ the majority of analysts would consider this highly unlikely. What is certain is that the strategic posture Japan adopts in coming years, and the extent to which it creates room for strategic manoeuvre independent of its alliance ties, will have long-term consequences for Japan's national security. There is also a finite limit on the time Japan has to make this choice as, should regional tensions move from the diplomatic stage to actual military conflict, Japan may find that its choices have been made for it.

Domestic and regional volatility

The underlying nature of Japanese politics provides ample evidence that reversals of policy, or sudden political change can occur in response to unexpected events of many different kinds and it is common for ripple effects from a crisis in one area to extend

⁵ George Friedman, *The Next 100 Years: A Forecast for the 21st Century*, New York: Anchor, 2009.

into superficially unrelated areas. Without an understanding of the different levels on which defence policy is formed, or of the various factions exerting influence therein, it becomes impossible to understand how and why responses to unexpected events are formed. An example of this can be found in attempts to overturn export prohibitions in 2010. Until the end of November revisions had been considered a certainty due to a sense of national shock following clashes with China over the sovereignty of Japan's Senkaku Islands. The incident underscored Japan's security vulnerability and generated a brief surge in support for increased military strength.⁶ Declining government popularity had, however, left them politically vulnerable and needing support from junior coalition members to pass a contested budget.⁷ The price for this support was a veto on arms exports which saw the government's official policy on the matter reverse itself overnight.⁸ Within weeks the government restated its desire to pursue revisions,⁹ but it would be another year before they were politically secure enough to succeed.

Apart from such everyday deal-brokering, Japanese politics is also prone to significant incidence of scandals that can deeply compromise political affairs. Recent administrations have seen Justice Ministers resign after verbal gaffes,¹⁰ Chief Cabinet Secretaries chastised for referring to the JSDF as "an instrument of violence" and some of the most influential politicians embroiled in major legal scandals.¹¹ While incidents might be minor in their own right, in sum they significantly undercut the central authority of the government to commit to new policies, especially where, in the case of the defence industry, they may be controversial.

⁶ 'Japan ruling party calls for weapon export ban easing' *Kyōdō News*, 30th November 2010.

⁷ 'Japan PM courts former ally to pass budget', *Kyōdō News*, 6th December 2010.

⁸ 'Kan gives up idea of lifting weapons export ban', *Kyōdō News*, 7th December 2010.

⁹ 'Defence outline to look at possible lifting of arms export ban', *Kyōdō News*, 16th December 2010.

¹⁰ 'Justice Minister resigns' *Asahi Shimbun*, 22nd November 2010.

¹¹ 'Kan cabinet support falls to record 25%', *Yomiuri Shimbun*, 7th December 2010.

The regional political situation is, day by day, just as unpredictable as domestic politics. The 2010 furore over the Senkaku Islands began with the arrest of a single fishing boat but soon spiralled out of control, with mass protests in both China and Japan, riots and flag-burning in China, an embargo on shipments of rare metals to Japan, the arrest of Japanese citizens by China and a military build-up in the disputed zone.¹² The shock felt in Japan was arguably greater than that of the 1971 ‘Nixon shock’ when the then US President unilaterally normalized relations with China.¹³ The impact was heightened by a renewal of disputes with Russia over contested territory in the Kuril Islands.¹⁴ Added to this is the general instability of North Korea, where both internal collapse and the state’s ongoing testing of nuclear weapons and ballistic missiles are potential security threats. Finally, natural disasters such as the 2011 Tohoku earthquake and tsunami can be as devastating to the state as any military attack and are one of the few threats almost certain to occur in coming decades. In looking at defence industrial policy it is, therefore, important to understand the full range of the threats Japan faces, and the manner in which Japanese politics reacts to such sudden crises.

Alliance and Regional Diplomatic Relations

The choices made in defence procurement also play a key role in Japan’s relations with its regional allies and its primary security partner, the US. The ability for Japan to engage with neighbours in joint military development offers a new way of establishing bilateral security ties, as does the increasing likelihood of Japan engaging in direct military sales. Japan’s choice of weapon systems, meanwhile opens specific strategic

¹² John M. Glionna, ‘Tensions between China, Japan escalate’, *The LA Times*, 23rd September 2010.

¹³ Funabashi Yōichi, ‘Japan-China relations stand at ground-zero’, *Asahi Shimbun*, 20th October 2010.

¹⁴ Seima Ōki and Kyokō Yamaguchi, ‘China, Russia team-up on territorial claims’, *Yomiuri Shimbun*, 29th September 2010.

paths along which it can act in the future, and closes off others. Given the long-term nature of defence production such choices need to be made well ahead of planned deployment and thus have long-lasting impact on security policy. Especially regarding alliance relations with the US, Japan's choices in weapon production and procurement influence both its role within the alliance and its ability to negotiate the terms of the alliance. A commitment to a specific weapon system has the potential to either increase or decrease Japan's commitment to a US-led security policy or its dependency on the US for its defence needs. Conversely, these choices, and any military sales by Japan, will also send signals to Japan's neighbours, particularly China, regarding Japan's long-term security strategy and through this can have strong influence upon Japan's diplomatic relations. As a result, even if the systems in question never see use, their production, procurement or sale are, in themselves, elements of statecraft whose implications need to be carefully assessed.

Japan's defence industry is thus both influenced by and exerts influence upon, a number of diverse areas yet, despite a recent increase in interest regarding the subject, there has been no significant study that takes a holistic approach to the analysis of these relationships. The economic cost of defence procurement and the perceived threats of China and North Korea are the only topics receiving significant coverage and those working on them generally represent only a small segment of the academic community whose fields of interest are directly affected by the security issues. As a result, important topics, such as the impact of normative values, the influence of political agendas and foreign pressure, and the role of defence production as an element of grand strategy, have been badly neglected. By more carefully examining these aspects this study will offer a unique perspective for those interested in the Japanese defence

industry, Japan's alliance ties to the US, and Japan's diplomatic and security relations with its regional neighbours.

Aims of the Study.

Like all dynamic institutions Japan's defence system does not exist in isolation but rather sits within an interconnected web of alliances, influence and rivalry that bind the social, political, security and business arenas. Without factoring in social and political influence it is impossible to predict, or to even understand, how the industry may develop in the future or what dangers it may face. As such, this study examines both a core thesis and several secondary arguments related to the broader institutional structures that support, control and influence the industry.

Core Thesis

Japan's national security has been weakened and its strategic choices limited by a failure to engage in broader debate on the strategic and diplomatic impact of choices made in weapons procurement, an area in which it can be shown that previous choices to procure systems of excessive cost and unproven technical capability have exacerbated rather than reduced weaknesses in Japan's defences and regional security tensions, and have also acted to significantly limit Japan's long-term strategic freedom.

Secondary Arguments.

- ♦ Japan's normative pacifism has little impact on security policy, which has instead followed a gradual path of incremental progress toward 'normalization', a process that steadily approaches completion.

- ♦ The dominant Japanese security norm is instead ‘anti-radicalism’, an aversion to major change that is only overridden in response to unexpected threats, during which sudden change is permitted to the extent that it helps re-establish the status quo.
- ♦ Many of the threats facing Japan, particularly that of North Korea, have been inflated to engender a sense of existential threat, in order to advance the normalization process.
- ♦ This process is driven largely by ‘gaiatsu’, external foreign pressure to follow a specific policy. However, this is employed just as much by domestic political actors who use the existence of such pressure to justify overriding opposition to private agendas.
- ♦ Japan’s defence industry has played an important role in the growth of the modern Japanese state, spurring economic growth and diffusion of advanced technology. In coming decades, joint development programs and international sales offer significant economic opportunities, however, unresolved institutional problems could compromise the overall health of the industry.

Foundations of the study.

Many past studies of Japan have taken carefully framed instances as examples of particular theories. Too often they have, as with Vogel’s proclamation of Japan’s rise as the leading power of the 1980s,¹⁵ overlooked the fragility of the structures involved in favour of more dramatic, but temporary, extrapolations. In comparing the relative naval power of 19th century Japan and Britain the Meiji scholar Fukuzawa Yukichi highlighted the dependency of military strength on a broad and deeply-rooted network

¹⁵ Ezra F. Vogel, ‘Pax Nipponica?’, *Foreign Affairs*, 64, 1986, 4.

of academic, legal and business structures.¹⁶ This study will consider the impact of Japan's defence industry in such a holistic fashion, adopting elements of the 'English School' insofar as it supports the importance of historical and normative placement of the subject. It also takes into consideration several of the ideas of the 'Copenhagen School' of International Security, including Waever's concept of 'securitization' as applied to Japan's pacifist constitution, and Buzan's 'deepening' and 'widening' of security considerations to consider both economic and humanitarian elements of security policy.¹⁷ It considers too, the influence of Japan's political system and contrasts it with the ideas laid out by Allison and Halperin in their seminal study of bureaucratic models, particularly regarding the factionalism and competing cliques which make broad analysis such a necessity.¹⁸

In its examination of Japan's current security environment and strategic options, a number of views on deterrence theory, particularly regarding missile defence, are examined and compared to Japan's role in the regional arms build-up. In doing so it questions the validity of positivist methods of analysis, such as those of Zagare,¹⁹ in dealing with complex systems of this scale and considers the ideas of Gray regarding the utility of weapon systems in the formation of national security policy.²⁰

¹⁶ Samuels, 44.

¹⁷ Barry Buzan, Ole Waever, and Jaap de Wilde, *Security: A New Framework for Analysis*, Boulder: Lynne Rienner Publishers, 1998, 25.

¹⁸ Graham T. Allison and Morton H. Halperin, 'Bureaucratic Politics: A Paradigm and Some Policy Implications', *World Politics*, 24, Spring, 1972. 40-79.

¹⁹ Frank C Zagare, 'Reconciling Rationality with Deterrence', *Journal of Theoretical Politics*, 16 (2), 2004.

²⁰ Colin S. Gray, *Weapons don't make war*, Kansas: Kansas University Press, 1993.

Existing literature

Japan's domestic and foreign policies receive intermittent coverage from western writers, generally in accordance with the peaks and troughs of its economic performance. The area of security studies is dominated by a focus on Japan's alliance relationship with the US and, to a lesser extent, on its remilitarization as a 'normal' international power. The defence industry itself is an area of significant dereliction of attention given the size of its armed forces and Japan's status as a leading industrial power in a region containing major security flashpoints.

The majority of the works referencing the industry do so only as a secondary concern in relation to a broader focus on remilitarization. Japan's economic rise in the late 1980s prompted Drifte's examination of its 'spin-on' civilian to military technology development.²¹ Following the end of the Cold War American analysts began to focus on fears that Japan might become a near-future rival to the US. This concern that economic strength might soon be turned into military might drove the first proper examination of the industry by Alexander in 1993,²² followed by a much deeper analysis of the industry's history and internal workings by Samuels in 1994.²³ Samuel's work was adapted to consider a possible breach in the US-Japan alliance by Renwick in 1995.²⁴ Other writers such as Hanami²⁵ continued to focus on the military threat while Green, in

²¹ Reinhard Drifte, *Arms production in Japan: the military applications of civilian technology*, Boulder: Westview Press, 1986.

²² Arthur Alexander, *Of tanks and Toyotas, an assessment of Japan's Defence industry*, Santa Monica: Rand, 1993.

²³ Richard J. Samuels, *Rich nation, strong Army: National security and the technological transformation of Japan*, Ithaca: Cornell University Press, 1994.

²⁴ Neil Renwick, *Japan's alliance politics and defence production*, Oxford: Macmillan, 1995.

²⁵ Andrew K. Hanami, *The military might of modern Japan*, Dubuque: Kendall, 1995.

1998, analyzed the decision-making process involved in defence projects of the post-war period.²⁶

In the post-9/11 era, efforts by the US to encourage Japanese participation in the war on terror led many to identify a new round of Japanese remilitarization, one which has yet to come to pass to the extent predicted by Pyle²⁷ and Samuels.²⁸ While these recent works focused on remilitarization in terms of Japan's 'grand strategy', Hughes, in 2009, focused to a greater extent on production capabilities.²⁹ All, however, painted an image of a robust and increasingly influential defence industry rather than one in crisis and thus failed to take account of the serious danger of industrial collapse that had become apparent by 2010 and was then averted by the relaxation of export prohibitions which began in 2011.

In the past decade only Oros has presented a significant study of the domestic factors which shape security policy, yet he overstates his point, arguing that Japan would be fully constrained from military growth by these domestic norms.³⁰ This is clearly untrue and recent developments see Japan firmly on the path to full normalization in the coming decade. This study's development has bridged this period of potential decline and burgeoning recovery and is thus well aware that the industrial base is far from robust and, while strengthened by recent policy changes, remains in danger of poor performance or sudden external crises, negating its recent growth.

²⁶ Michael Green, *Arming Japan*, New York: Columbia University Press, 1998.

²⁷ Kenneth B. Pyle, *Japan Rising*, Cambridge: Public Affairs, 2007.

²⁸ Richard J. Samuels, *Securing Japan*, New York: Cornell University Press, 2007.

²⁹ Christopher W. Hughes, *Japan's Remilitarization*, (London: Routledge, 2009).

³⁰ Andrew L. Oros, *Normalizing Japan*, Stanford: Stanford University Press, 2008.

In Japan there is a relative lack of discussion of the defence industry from Japanese sources. As previously mentioned, this stems from intense polarization in views on military affairs which has left much of left-wing or liberal academia removed from any form of military or strategic debate. Those who do take an interest tend to focus upon domestic attitudes to possible remilitarization.³¹ On the other side of the academic gulf, the majority of Security Studies specialists who write in English do so for American audiences, with a focus on broader security strategy and alliance relationships. Their works are often supported by US think tanks such as the Brookings Institute and the Henry L. Stimson Center.³² Others do look beyond bilateral ties though, often focusing on the regional dynamics of North and Southeast Asia.³³

Those who address the defence industry directly, however, tend to do so only in very narrow terms, as with Takahashi³⁴ and Kubota.³⁵ Japanese language works are, surprisingly, even rarer in their treatment of the subject, a problem highlighted by Sakurabayashi's 2010 work 'Daremo kattaranakatta bōei sangyō' ('The defence industry nobody mentions').³⁶ A deeper institutional failure to highlight defence matters

³¹ For examples see Mari Yamamoto, *Grassroots pacifism in post-war Japan the rebirth of a nation*, London: Routledge, 2004, Miki Ishida, *Toward peace: war responsibility, postwar compensation, and peace movements and education in Japan*, New York: iUniverse, 2005; and Natsuyo Ishibashi, "The Dispatch of Japan's Self-Defence Forces to Iraq: Public Opinion, Elections, and Foreign Policy", *Asian Survey*, 47 (5), (Sep. - Oct., 2007), 766-789.

³² Good examples of such works include, Yuki Tatsumi, *Japan's National Security Policy Infrastructure: Can Tokyo Meet Washington's Expectation?* Washington DC: Henry L. Stimson Center, 2008; and Yutaka Kawashima, *Japanese foreign policy at the crossroads*, Washington DC: The Brookings Institute, 2005.

³³ For example, Takeshi Yuzawa, *Japan's security policy and the ASEAN Regional Forum: the search for multilateral security in the Asia-Pacific*, (Routledge, London, 2007).

³⁴ Sugio Takahashi, 'Transformation of Japan's defence Industry? Assessing the Impact of the Revolution in Military Affairs' *Security Challenges*, 4 (4) (Summer 2008), 101-115.

³⁵ Yukari Kubota, 'Japan's New Strategy as an Arms Exporter', *RIPS Policy Perspectives* 7, 2008.

³⁶ Sakurabayashi Misa, *Daremo Kattaranakatta Bōei Sangyō*, Tokyo: Namiki Shōbō, 2010.

for public discussion is addressed by Ogawa in ‘Jū-yon-sai kara no riaru bōei-ron’ (‘From fourteen years of age, the real defence discussion’).³⁷

Overall, the work that exists on the subject of Japan’s defence industry, is limited, frequently out of date and invariably limited in scope, focusing on specifics such as the role of alliance relationships, grand strategy or the domestic peace movement, rather than bringing together the diverse elements to create a more nuanced understanding. The works also neglect the key question of this study, i.e. the role defence procurement and choice of weapon systems plays in establishing strategic options for broader Japanese defence policy and the failure to engage in wider discussion of these subjects by a broader segment of the academic community.

Methodology.

In taking a holistic approach to its analysis, the study seeks to first identify the Japanese defence system in terms of its historical roots and its existing structure, both elements requiring extensive use of historical and official government documentation. Later elements address the vectors of influence exerted by and upon the system and make greater use of qualitative assessments of the importance and nature of various relationships. Finally, in studying the current policies and products of the system a greater amount of quantitative data is used in assessing and comparing values. The study utilizes a mixture of Japanese and international sources of the following types.

Documents and Records

These include:

³⁷ Ogawa Kazuhisa, *Jū-yon-sai Kara no Riaru Bōei-ron*, Tokyo: PHP Kengyūjo, 2010.

- ♦ Government and Ministerial Publications (MoD, MoFA, MITI, etc.).
- ♦ The statistical reports of the Japanese Cabinet Office.
- ♦ Political Party Reports and Manifestos.
- ♦ Reports by NGOs and Specialized Agencies (SIPRI, UN, etc.).
- ♦ Academic literature.
- ♦ Industrial reports.

Media Accounts

It has been recognized that Japan does not have the type of academic policy think tanks that hold influence in many Western states. Instead its academics of influence frequently use journalistic outlets to voice their opinions and policy advice.³⁸ As such, media analysis from a wide array of Japanese newspapers and periodicals is used for both factual data and analysis of public and private views as well as ensuring awareness of ongoing developments. These papers and magazines include:

- ♦ The Yomiuri Shimbun.
- ♦ The Asahi Shimbun.
- ♦ The Nikkei Shimbun.
- ♦ The Mainichi Shimbun.

Additionally, a wide array of international sources including:

- ♦ Major newspapers and periodicals.
- ♦ Specialist industry magazines.
- ♦ Specialist books.

Interviews

³⁸ Takeshi Inoguchi, 'Are there any theories of international relations in Japan?', *International Relations of the Asia Pacific*, 7 (3), 2007. 369-390.

Though interviews, with industry, academic and political figures, would have offered valuable insight into perspectives on the issues involved, numerous early efforts to establish contact with such individuals proved fruitless. A combination of traditional Japanese reticence at sharing strong opinions with strangers, the normative taboo on discussion of military affairs and the typical reluctance found in any state regarding the sharing of information on matters of national security, revealed that potential sources were unlikely in the extreme to reveal any information which was not already publicly documented and thus far easier to locate in the latter format.

Summary of Contents

The main body, of the work is split into five key chapters. Chapter two establishes the historical development and current structure of Japan's industrial defence system. The first section examines how the industry reacted to various domestic and international pressures, how it contributed to national security, and the impact specific weapons systems had. The second section looks at the structures of the industry itself and the institutions most closely tied to it. These include the Japanese military, the bureaucracy responsible for military contracts, the major industrial manufacturers and Japan's political system.

Chapter three looks at the forces which exert influence upon the defence system, both domestically and internationally. Domestically, it examines structures and actors involved at four distinct levels: the governmental, organizational, ideological, and normative. It then looks at the impact of the international community and regional pressure, and the influence of the US-Japan alliance.

Chapter four looks at the major security threats facing Japan and assesses the level of actual threat in comparison to the perceived threat as relayed by typical media coverage. The areas addressed are: Russia, North Korea, China, Regional Stability, Sea Lines of Communication (SLoC), and Humanitarian Assistance and Disaster Relief (HADR). In each case it considers what might be required from the defence system to address the threats in question.

Chapter five examines Japan's national defence strategy and compares it to the grand strategy of the US to determine where convergence and divergence occur, specifically in relation to the stance adopted by each state regarding China. It then assesses the extent to which alliance ties compromise Japan's ability to focus solely on its own threats rather than separate alliance goals and the impact of these competing strategies upon the regional security dilemma and efforts to establish a credible deterrent threat.

Chapter six looks at specific examples of current procurement to assess their suitability in addressing Japan's core defence needs. The systems chosen (the F-35, BMD, 22-DDH, ATD-X and Type-12 SSM) represent specific areas of concern regarding the choices made in Japanese weapons procurement and highlight areas where a failure to engage in deeper debate regarding the strategic implications of these choices might have acted to limit, rather than enhance, specific areas of Japan's security.

The study concludes by bringing together the key data and conclusions from the previous sections to show how the study has supported and explored its key arguments, and makes a final recommendation on how the findings can be used to improve both

Japan's defence policy itself and the nature of academic discussion on, and analysis of, this important field.

CHAPTER 2: The Development and Structure of Japan's Defence Industry

The Historical Role of Japan's Defence Industry

In the medieval period Japan was the world's largest arms exporter, supplying much of Asia with high quality steel weapons.¹ The foundations of the modern arms industry can, however, be traced to the introduction of the arquebuse in 1543. Japanese artisans soon duplicated and mass produced the European technology,² with use of the new weapons accompanied by other military technology, such as armoured warships.³ However, civil unrest in the 17th century saw Japan's leaders reject the spread of Western influence with the implementation of the Sakoku (closed country) policy preventing any contact with the outside world apart from a small number of trading ports. While this introduced 250 years of relative freedom from internal conflict, Japan's technology levels stagnated, remaining at an agrarian level while the West underwent the industrial revolution.⁴

The Meiji Era

Some Japanese leaders were aware of the dangers of this policy and in the 1780's, Hayashi Shihei, highlighted the inability of the nation to produce gunpowder and urged the government to pursue foreign technology, especially maritime defence.⁵ The lack of naval power restricted Japan to a static defence that was unable to prevent Western

¹ Noel Perrin, *Giving up the gun: Japan's reversion to the sword, 1543-1879*, Boston: Godine, 1979. 10

² John R. Robertson, *Japan meets the world: The birth of a superpower*, Connecticut: Millbrook Press, 1996. 9.

³ See, Kenneth Chase, *Firearms: A Global History to 1700*, Cambridge University press, New York, 2008; and Perrin. *Op cit.* 4.

⁴ Tashiro Kazui, 'Foreign Relations During the Edo Period: Sakoku Reexamined', *Journal of Japanese Studies*. 8 (2), Summer 1982.

⁵ Hayashi outlined his views in the 16 volume work titled 'A Discussion of the Military Problems of a Maritime Country' (*Kaikoku Heidan*) published in 1787.

powers forcing entry into Japanese markets via the Treaty of Kanagawa in 1854. Many felt this rendered the nation a semi-colonial state and there was an explosion of militant nationalism.⁶ The technological deficit Japan suffered soon became apparent though and it was clear that without addressing the problem Japan would never escape Western dominance.⁷ This led to the Meiji Revolution a period of social, political and technological change that saw Japan turn from feudal to industrial in the space of a single generation. It also gave rise to the modern Japanese defence industry, the major developments of which are summarized in Table 2.1.

During the Meiji period the aim was to raise Japan to a level of technological parity with the great powers under the slogan of *Wakon Yōsai* (Japanese spirit, Western technology).⁸ The introduction and indigenous duplication of Western technology, gave rise to another phrase, *Ichigō yunyū, Nigō kokusan* (First time import, second time produce locally).⁹ This industrial dependency led Japan to seek strong ties to the countries she believed most worthy of emulation. In military affairs, first France and then Germany were chosen, while for the Navy, Britain was seen as preeminent. The latter thus became the key supplier for the first Naval expansion program in 1882, which acquired 48 vessels over 8 years, focusing on light cruisers and torpedo boats rather than heavy armour-clads.¹⁰ By 1886 Japan was beginning to import military systems with specific foes in mind. Itself resource poor, Japan hoped to expand into Manchuria to secure sources of fuel and raw materials, yet had been frustrated by Russian expansion in the region. As such, while initial focus was placed on the Korean

⁶ W.G. Beasley, *Japanese Imperialism 1894-1945*, Oxford: Oxford University press, 1991. 6.

⁷ Conrad Tutman, 'Bakufu Policy 1853-1868', in Najita Tetsuo and J Victor Koschman (eds), *Conflict in modern Japanese history*, Princeton: Princeton University Press, 1982. 87.

⁸ Robertson, Op cit. 3.

⁹ Samuels, Op cit. 45.

¹⁰ Grant, Op cit. 136.

Table 2.1

Overview of Developments in Japanese Defense Policy (1854-2013)

Period	Major Events	Defense Trends	Pressure Points
Late Tokugawa (~1854)	Treaty of Kanagawa (1854)	A reliance on existing technology is proven to be futile.	Threat from Imperial powers sets defense agenda. Humiliation over the 'unequal treaties' leads to increased militarism.
Early Meiji (1868-1884)	Meiji Restoration (1868)	Widespread importation and reverse engineering of Western technology. Most production is through government arsenals.	Threat from Imperial powers sets defense agenda. Scholars such as <i>Hayashi Shōmei</i> , <i>Fukuzawa Yukichi</i> and <i>Dazai Shundai</i> help shape underlying techno-nationalist policy which was implemented by key political figures such as <i>Ito Hirobumi</i> .
Mid-Meiji (1884-1904)	Jingo Incident (1882) Sino-Japanese War (1894-95)	Push for independent local production (<i>kokusanka</i>). Arsenal technology levels develop rapidly and most are privatized (roots of today's largest defense contractors).	Threat from China to control of Korean peninsula sets defense agenda. Humiliation over ineffectual response to Jingo Incident overturns fiscal retrenchment that had stymied military growth. <i>Finance Minister Matsukata</i> uses fiscal policy to influence both military and industrial development. Humiliation over the Triple Intervention drives militarism.
Late Meiji (1904-1912)	Russo-Japanese War (1904-05) Imperial Defense Plan (1907) Assassination of PM Hirobumi (1909) Death of the Emperor (1912)	Increased imports to boost military strength. Spread of technology from arsenals to civilian industry. Navy increases its influence. Post-WWI industrial policy recognizes an 'harmonious relationship' between military production and heavy industrial growth.	Threat from Russia changes focus of defense agenda from control of Korea to regional dominance. <i>Korekiyo Takahashi</i> proves instrumental in securing loans to finance pre-1904 military expansion. Humiliation over Treaty of Portsmouth sustains militarism. Assassination of <i>Hirobumi</i> increases militarism. Death of the <i>Meiji Emperor</i> increases military political influence.
Early Taisho (1912-20)	WWI (1914-18) Twenty-One Demands (1915) Treaty of Versailles (1919)	Massive increase of Naval power. Sides with Britain in War. Humiliated at Versailles.	Foreign Minister <i>Katou Takaki</i> is pivotal in setting Japan's WWI role. Humiliation at Versailles drives militarism.

Late Taisho (1920-26)	Washington Conference (1921-22)	Naval	Limits on Naval production turn the defense industry toward aviation. Army size reduced although political influence increases.	Fiscal retrenchment under <i>Finance Minister Inoue Junnosuke</i> limits defense growth.
Early Showa (1926-36)	Great Depression (1929-) Important Industries Control Law (1931) Military Suppliers Company Law (1933)		Unprecedented military build-up, Japan becomes largest military spender. Defense industries closely bound to government oversight. Foundations of the modern bidding and subcontracting systems are established.	<i>Finance Minister Korekiyo Takahashi</i> reverses the military cuts of 1929 and authorizes major military expansion while also curbing the even more excessive demands of the military. Threats from Russia and the USA split defense agenda. Assassinations remove key opponents of militarism but leads to backlash against Army and acceptance of Naval policy.
WWII (1936-45)	Second Sino-Japanese War. (1937-45) The Pacific War (1941-45)		Full wartime economy. Imperial Naval College produces the future business leaders and top researchers of post-war era.	Myriad factors lead to Japan's defeat in the Pacific War. High among them the failure of Japan to cripple the US war machine at an early stage, before the latter's vast dominance in industrial production could make itself evident.
GHQ Occupation (1945-52)	Constitution of Japan (1947) Korean War (1950-53) US-Japan Security Treaty (1952) National Aircraft Manufacturing Law (1952) Weapons Production Law (1953)		Complete demilitarization of the nation. In practice more political and psychological than industrial. Korean War sees rapid reindustrialization of defense sectors.	Defense policy is in transition as numerous factional elements seek to direct the course of the new Japanese State. DPC efforts to boost production blocked by Ministries of Finance, Foreign Affairs and MITI.
1 st Build-up Plan (1958-60)	US-Japan Treaty of Mutual Security and Cooperation (1960)		Rebuilding of the new JSDF with the aim is to create a defensive force against possible Russia aggression.	Ministry of Finance instrumental in establishing <i>Yoshida Shigeru's</i> 'doctrine'.
2 nd Build-up Plan (1962-66)	Beginning of US involvement in Vietnam War (1963-)		Highlights need for domestic R&D and development.	Threat of Cold War/Communist expansion drives defense Agenda.

3 rd Build-up Plan (1967-71)	Export introduced (1967)	Prohibitions	Promotes increased koukusanka. TRDI established.	Humiliation over support of Vietnam War leads to export prohibitions.
4 th Build-up Plan (1972-76)	Nixon Shocks (1971) Oil shock (1973)		Goal of total industrial Koukusanka crippled by budgetary restrictions. 'Comprehensive Security' advocated though force structures remain same.	Threat of abandonment following US pull-out from Vietnam boost defense agenda but fiscal retrenchment as a result of the 70s 'Shocks' severely limits defense growth.
1976 NDPO	US pull-out from Vietnam (1975)		'Basic Defense Force' concept establishes a shift from quantitative to qualitative defense.	Threat of technological cut-off boosts Koukusanka but mishandling of FS-X and threat of trade-war leads <i>Nakasone</i> , under pressure from Ministries to advocate joint development.
1995 NDPO	North Korean Missile Tests (1994 & 1998) 9/11 Attacks (2001)		Defense mandate increased to "areas surrounding Japan". Peacekeeping highlighted as an area of special interest. BMD embraced as a key program for joint development, receives waiver from export prohibitions in 2004.	Humiliation over failure to contribute to Gulf War leads to easing on overseas deployment of JSDF. Threat of Korean missile tests sets Defense agenda. Under strong government of <i>Koizumi Junichiro</i> (2001-2006) the view of a 'remilitarizing Japan' becomes common.
2005 NDPG	North Korea develops and tests nuclear weapons (2003-06)		China and North Korea classed as threats. Peacekeeping and counterterrorism primary aims with BMD and anti-guerilla secondary. Force reduction favors rapid-response capability and naval and air power.	A succession of <i>Prime Ministers</i> advocate reform of both Constitution and Export laws but positions are too weak to carry the policies through.
2010 NDPO	Senkaku Incident (2010) Sendai Tsunami (2011)		Shift to 'Flexible Defense' concept, greater focus on protection of maritime territory and Sea Lanes of Communication (SLOC). End of blanket ban on arms exports (2011)	Threat from China and Russia sets Defense agenda. Disaster relief operations considerably raise JSDF public profile. The US Asian Pivot and the concept of ' Air/Sea Battle ' set the strategic policy of Japan's premier ally for the foreseeable future.

peninsula, Russia was seen as the long-term threat (a pattern repeating today with short-term targeting of North Korea used to justify long-term build-up against China).¹¹

Public perception of military weakness supported a major defence build-up and military spending rose from 19% of government expenditure in 1880 to 31% in 1890.¹² Whereas, military production had initially been controlled solely by government arsenals, a first wave of privatisations had taken place during the 1870s, establishing the modern conglomerates of Mitsubishi, Kawasaki and Ishikawajima-Harima (now IHI). The new military surge of the 1880s allowed these companies to diversify their holdings into defence related fields such as transport, mining and steel production, and solidify their control of Japanese industry. The superior level of Japanese industrial production was a vital element of Japan's decisive victory during its first post-industrial conflict, the First Sino-Japanese War (1894-95).¹³

The War ended with the Treaty of Shimonoseki, yet the concessions won by Japan were overturned by the intervention of France, Germany and Russia, who forced Japan to relinquish most of its gains.¹⁴ This loss of face resulted in a surge of nationalist sentiment which supported even higher levels of military expenditure.¹⁵ Japan now faced a choice between continuing its military build-up and remaining dependent on imports, or developing a stronger domestic industrial capacity but forsaking short-term military growth. It chose the former, yet the domestic production facilities which did

¹¹ Grant, 12.

¹² Robertson, Op cit. 97; Peter Duus, *The abacus and the sword: The Japanese penetration of Korea 1895-1910*, Los Angeles, University of California Press, 1995. 62

¹³ S.C.M. Paine, *The Sino-Japanese War of 1894-1895: Perception, Power, and Primacy*. Cambridge: Cambridge University Press, 2005.

¹⁴ Robertson, Op cit. 99.

¹⁵ Quoted in John Albert White, *The Diplomacy of the Russo-Japanese War*, Princeton: Princeton University Press, 1964. 135.

exist were lauded by Western observers as being equal, if not superior, to Western models:

No European or American gunpowder plant is as complete, on as grand a scale, as thoroughly up to date, as convenient and practical as the Japanese Government Plant at Meguro....Military precision reigns supreme; and....there has never yet been an untoward explosion or fatality, such as blurs the records of many a similar institution under Caucasian management.¹⁶

Competing claims to control of Manchuria led to the Russo-Japanese War (1904-1905) in which Japan's costly torpedo boats performed far more ineffectually than had been predicted.¹⁷ In contrast, the naval mine delivered results far beyond expectations.¹⁸ Due to its paucity of vessels, Japan was limited throughout to cautious tactics yet emerged victorious. Perhaps the most significant strategic effect was that success at the Battle of Tsushima reinforced adherence to the Mahanian concept of the 'decisive battle', embedding a doctrinal inflexibility that would have serious repercussions during the Pacific War.

The Russo-Japanese War was far greater in scale than the war with China and military demand saw the major defence contractors outsourcing production to civilian firms, leading to a wave of diffusion of both technology and machinery.¹⁹

"Because of the war the importance of the domestic production of machine tools was realized for the first time.....To encourage domestic production the navy chose to buy

¹⁶ William. H. Blumenstein, 'Arms and Ammunition in Japan', *The North American Review*, 179 (572), July 1904. 55-64.

¹⁷ J.N. Westwood, *Russia against Japan 1904-05*, London: MacMillan, 1986. 39.

¹⁸ David C. Evans and Mark R. Peattie, *Kaigun: Strategy, Tactics and Technology of the Imperial Japanese Navy 1887-1941*. Annapolis: Naval Institute Press, 1997. 101, 128.

¹⁹ Kōzō Yamamura, 'Success illgotten? The role of Meiji militarism in Japan's technological progress', *The Journal of Economic History*, 37 (1), March 1977. 122.

some types of domestically produced machine tools. Aided by such active assistance, what could be called a 'machine tool' industry gradually emerged."²⁰

From 1905 Japan began to export military products, one of the first instances being the sale to China of vessels for a new modernized navy.²¹ Japan's own naval production also surged, seeing imports drop to only 13% by 1918.²² The Army was also growing, rising to 250,000 standing troops by 1912.²³ Industrial production continued to match the trend of the defence sector. Grant notes that,

Although in world history it is common to focus on Japan's methodical development of domestic industry as the key to its rising power, native industry alone could not have made it possible. The arms trade figured more prominently in the short run and proved an essential element for Japan to become a 1st tier power.²⁴

Japan during the World Wars

During the First World War Japanese munitions, little used in the Pacific, were exported to resource depleted allies in Europe.²⁵ Seeing how important economic capability was to military success Japan set about overhauling its industrial structure in what Dower called a "second industrial revolution".²⁶ The 1918 Hara cabinet justified further build-up of the armed forces as mutually supportive of the shift from light to heavy industry and the dissemination of the new technologies that had been developed during the course of the war.²⁷

²⁰ Nihon no kikai kōgyō: Sono seichō to kōzo', The Heavy Industries Bureau, Ministry of International Trade and Industry, Tokyo, 1960. 36.

²¹ Marius B. Jansen, *The Making of Modern Japan*, Boston: Belknap Press, 2002. 436.

²² J. Charles Schencking *Making Waves: Politics, Propaganda, and the Emergence of the Imperial Japanese Navy, 1868-1922*. Stanford: Stanford University Press, 2005. 3-5.

²³ Samuels, *Op cit.* 28

²⁴ Jonathan A. Grant, *Rulers, Guns and Money*, Cambridge, Harvard University Press, 2007. 241.

²⁵ Tsuchiya Takao, Sangyōshi, *Gendai Nihon Bunmeishi*, 8, 1937. 395.

²⁶ John W. Dower, 'The useful war, Showa: The Japan of Hirohito', *Daedalus*, 119, Summer 1990. 93.

²⁷ Shin'ichi Kitaoka, "Army as Bureaucracy: Japanese Militarism Revisited," *Journal of Military History*, 57, October 1993. 75.

Japan made modest territorial gains during the war but her growth made Western powers wary and the 1921 Washington Disarmament Conference sought to limit her naval power to 60% that of the US, placing a 10 year moratorium on the construction of new vessels. In response the Navy focused on aircraft technology during the early 1930's, resulting in a dramatic increase in production from 400 aircraft during the 1920s to over 5000 during the 1930s.²⁸ Defence spending soared during this period and was a key factor in Japan becoming the first major power to recover from the Great Depression.²⁹ By this stage Japan could boast the largest military budget in the world and the second largest navy, after the US.³⁰

A split between Army and Navy officers over whether Russia or the US posed the greater threat was decided by political events during the 1930s that led to a purge of leading Army figures and the dominance of naval doctrine.³¹ The bitter rivalry between the two factions led, however, to a failure to share technology and many instances of replication of effort in the development of weapon systems. A greater problem was a lack of strategic flexibility. Still enamoured with 'decisive battle', Japan's navy was focused purely on winning individual engagements rather than a war. Japan had far less industrial capability to sustain extended operations at long-distance than the US. In addition, the US made far better use of submarines and its anti-convoy operations crippled Japan's supply lines, something made far easier by Japan's failure to develop anti-submarine warfare (ASW) capability.³² This was especially short-sighted given that

²⁸ Samuels, Op cit.118.

²⁹ G.C. Allen, *A short economic history of modern Japan*, London: Macmillan, 1981. 173-4. See also Benson, Op cit.106.

³⁰ Samuels, Op cit.97.

³¹ Mikiso Hane, *Modern Japan: A Historical Survey*. New York: Westview Press, 2001. p. 282.

³² Evans, Op cit. 494-498, 513.

Japan was the most advanced producer of torpedoes in the world.³³ In the end, Japan's major failing was an inability to recognize its own geostrategic strengths and weaknesses and choose weapon systems and strategies that played to them (whether this might be reoccurring in the present day is examined in Chapters 5 and 6).

The war, nonetheless, provided opportunities for industry and technological developments in naval and air systems that allowed Japanese firms to gain strong footholds in these fields in the post-war years. A large proportion of the leaders and top researchers of these companies would come from a shared background at the Imperial Naval Research Institute, which had produced a variety of technical breakthroughs, such as the 'Zero' fighter and the 'Long lance' torpedo.³⁴

The post-war period

By 1945 Japan's industrial facilities had been completely devastated, while the US policy of pacification culminated in the US-drafted 1947 Constitution, with Article 9 stating:

Aspiring sincerely to an international peace based on justice and order, the Japanese people forever renounce war as a sovereign right of the nation and the threat or use of force as means of settling international disputes. To accomplish the aim of the preceding paragraph, land, sea, and air forces, as well as other war potential, will never be maintained. The right of belligerency of the state will not be recognized.

The constitution was preceded by a purge nationalists and militarists from positions of influence, with over 200,000 proscribed from employment and replaced with officials

³³ Paul Kennedy, *The Rise and Fall of the Great Powers*, New York: Random House, 1987. 300-302.

³⁴ Samuels, *Op cit.*50.

more supportive of the new US-Japan relationship.³⁵ These two factors would lay the roots both for Japan's pacifist norms and the deep level of political influence the US would manage to exert in coming decades (see Chapter 3).

While Article 9, if strictly interpreted, prohibited the existence of any armed force it was soon broadened to allow the gradual reintroduction of military capability.³⁶ The 1950 redeployment of US troops to the Korean War led to the creation of a National Police Reserve to maintain law and order. In 1951 this was followed by the creation of the National Safety Force, essentially a civil guard.³⁷ The US-Japan Economic Discussion Group was formed with the aim of promoting Japanese rearmament while the Keidanren (Japan Business Federation) formed a Defence Production Committee (DPC) to oversee resumption of military industrial production. The demilitarization of Japan proved far more psychological than industrial though, and from the early 1950s Japan was producing munitions and small arms for US forces in Korea.³⁸ By 1952 more than 850 industrial plants had been returned to private control for defence-related production and the same year Komatsu began to produce Japan's first post-War artillery. By 1954 even the shipyards of Nagasaki, site of the second atomic bombing, had begun production of naval weaponry.³⁹ Throughout the 1950s and 1960s Japan would be an exporter of small arms and ammunition to the US, South Vietnam, Indonesia, Brazil, Thailand, Burma and Taiwan.⁴⁰

³⁵ 'Politico-military problems in the Far East: United States initial post-defeat policy for Japan', Memorandum for the Secretary of State, The State-War-Navy Coordinating Committee, Washington DC. 6th September 1945; Benson, 220.

³⁶ James E. Auer, "Article Nine of Japan's Constitution: From Renunciation of Armed Force 'Forever' to the Third Largest defence Budget in the World," *Law and Contemporary Problems* 53 (1990).

³⁷ Samuels, Op cit. 136.

³⁸ Laura Hein, *Fueling Growth: The Energy revolution and Economic Policy in Postwar Japan*, Cambridge: Harvard East Asian Monographs, 1990. 217.

³⁹ Asai Heigo, 'Bōei seisan keikaku o suishin suru mono', *Chūō Kōron*, April 1953. 109.

⁴⁰ Takahashi, Op cit. 101-115.

Japan's air industry received a seven year moratorium from 1945 which saw its engineers diversify into other industrial areas while also maintaining ongoing research into engine and aircraft design, as well as providing repair services for US planes involved in the Korean War. As a result, by the mid-1950s Japanese firms were able to quickly re-enter the aeronautics industry producing American planes such as the F-86 Sabre as well as domestic Japanese designs such as the Tachikawa R-52 and R-53.⁴¹

In 1951 the DPC produced a preliminary plan for national rearmament with goals of; a 300,000 man army, 1,800 plane air-force and 300,000 ton navy, to be achieved by 1960. Prime Minister Yoshida Shigeru urged greater patience in attempting to implement this,⁴² but the DPC, confident that US pressure would aid them, instead increased the number of planes to 3000, called for a 3.6% defence budget and named it a '3-3-3' Defence Plan.⁴³ The plan was massively rejected by the government, in particular the Ministries of Industry, Finance and Foreign Affairs, and a consortium of proponents of light rather than heavy industry.⁴⁴ The National Aircraft Manufacturing Law (1952) and the Weapons Production Law (1953) created strict government regulation of the developmental direction of defence production.⁴⁵ Particular opposition came from the Ministry of Foreign Affairs who feared that increased independent production would reduce the resilience of the alliance with the US.

⁴¹ Samuels, Op cit.201.

⁴² Asai, Op cit.110.

⁴³ Samuels, Op cit. 142.

⁴⁴ Thomas Berger, 'America's reluctant allies: The genesis of the political military cultures of Japan and West Germany', PhD Dissertation, Department of Political Science, MIT, 1991. 116

⁴⁵ Michael J. Green, *Arming Japan: defence production, alliance politics and the postwar search for autonomy*, New York: Colombia University Press, 35-36.

It was the Ministry of Finance though, that held the lion's share of influence by virtue of its control of the budget.⁴⁶ Finance Minister, Ikeda Hayato, suggested the US be allowed basing rights in Japan in return for US investment in Japanese industry.⁴⁷ This resulted in the 1952 'Security Treaty Between the US and Japan' establishing the 'Yoshida Doctrine': supporting US forces in Japan for external defence, allowing Japan to focus on economic recovery. Condemnation of the treaty, from both the left and right, eventually resulted in Yoshida's resignation (and would generate an even more immediate backlash against Prime Minister Kishi when he ratified a revised version of the treaty in 1960 that formally committed the US to defence of Japan).⁴⁸ As a result of this furore the Ministry of Finance won acceptance of a policy of 'minimum necessary defence' and the 1953 Arms Production Law that signalled that the defence industry would receive no special government subsidy. The DPC supported pro-defence political candidates but this proved fruitless when perceptions of defence as a controversial issue saw these politicians refusing to take proactive action.⁴⁹

Assistance for the industry came with the 1954 'Mutual Security Assistance Agreement' which allowed Japan to import US defence-related technology. The definition of 'defence related' proved to be quite broad and was used to convince major firms to maintain an investment in defence research. As a result, while actual levels of defence production fluctuated greatly over the following decades, these companies maintained a relatively cheap method of maintaining their technological edge by incorporating advances from a variety of US systems including heavy machinery, power plants and

⁴⁶ Samuels, Op cit.147.

⁴⁷ Robert D. Eldridge and Ayako Kusonoki, 'To base or not to base? Yoshida Shigeru, the Ikeda mission and post-Treaty Japanese security conceptions', *The Kobe Law Review*, 33. 1999.

⁴⁸ Bert Edstrom, 'Japans foreign policy and the Yoshida legacy revisited', in Bert Edstrom (ed), *Turning points in Japanese history*, Avon: Routledge-Curzon, 2002. p. 218.

⁴⁹ Samuels, Op cit. 148-149.

aircraft engines. One example is seen in the brake systems of the Shinkansen bullet trains which were based on those used in the US F-104 Starfighter.⁵⁰ In return defence production capability was maintained by 'embedding' its core technologies and production processes in a wide variety of other industries.

In 1954 the National Safety Agency became the Japanese Defence Agency (JDA) and the National Security Force became the Japan Self Defence Force (JSDF). In 1958 the Technology Research and Development Institute (TRDI) was established to promote R&D and the 1st Defence Build-up Plan was produced, which outlined areas for future military expansion. The main focus of this initial plan was possible invasion by the USSR. It included procurement plans for 300 F-86 jet fighters, a contract which saw MHI assume leadership of both the jet industry and the DPC itself.⁵¹ The major impact of the plan was, however, ensuring the ongoing diffusion of US technology into Japan.

The shipbuilding industry was one of the first beneficiaries of this process and by 1968 practically all manufacturing equipment in the industry was dual-use, capable of producing military vessels as easily as civilian ones. The industry rose to become the world's largest with over 50% of global market share (Germany was second with less than 10%).⁵² This marked the rise of Japanese 'spin-on' technology, with the shipping industry providing a backflow of cutting edge technology to the Japanese Marine Self Defence Force (MSDF). The shipbuilding industry was followed by the electronics industry and the aeronautics industry in making use of this 'jump-start' to acquire cheap access to foreign technology that allowed them to become top manufacturers in their

⁵⁰ Green, *Op cit.* 14.

⁵¹ *Ibid.*, 40.

⁵² Tuvia Blumenthal, 'The Japanese shipbuilding industry', in H. Patrick (ed.), *Japanese Industrialization and its Social Consequences*, Berkeley: University of California Press, 1976. 129-130.

fields. Between 1951 and 1984 more than 40,000 separate contracts for foreign technology were signed by Japanese firms at a cost of \$17 billion, only small a fraction of the *annual* R&D costs of the US companies involved. The knowledge acquired would become, in Samuels words, “the technological basis for nearly all of Japan’s modern industries.”⁵³

In 1962 the Second Defence Build-up Plan established longer-term planning cycles and reimbursement for research costs and was followed by an equally ambitious Third Defence Build-up Plan in 1966 that hoped for even greater levels of domestic production.⁵⁴ This honeymoon period came to an end, however, in 1967 when accusations of profiteering from the Vietnam War saw the director of the DPC labelled a ‘merchant of death’. The government introduced prohibitions against exporting defence systems to any country under UN embargo, engaged in conflict, or a Communist state.⁵⁵ This backlash continued into the 1970s when Japan’s defence policy embraced the concept of Comprehensive Security, with issues such as social welfare and national prestige treated as aspects of national security.⁵⁶

Despite this, military levels steadily grew, with troops rising from 165,000 in 1954 to 235,000 in 1972 and the defence budget climbing from \$509 million in 1961 to \$3 billion in 1974. Support for defence build-up was bolstered by concerns over Japan’s vulnerability following the US pull-out from Vietnam and the efforts of hawkish JDA head, Nakasone Yasuhiro, who was a strong advocate of domestic production.⁵⁷ Under

⁵³ Richard J. Samuels, ‘Reinventing security: Japan since Meiji’, *Daedalus*, 120 (4), Fall 1991. 54.

⁵⁴ Takahashi, *Op cit.* 101.

⁵⁵ Three Principles on Arms Exports, Japanese Ministry of Foreign Affairs, 1967. Referenced at <http://www.mofa.go.jp/policy/un/disarmament/policy/index.html>

⁵⁶ Tsuneo Akaha, ‘Japan's Comprehensive Security Policy: A New East Asian Environment’, *Asian Survey*, 31 (4), 1991. 324-325.

⁵⁷ Beasely, *Op cit.* 273.

his guidance the 4th Defence Build-up plan aimed to further increase levels of indigenization and promote Japan's areas of technical expertise. Unfortunately, the 1973 Oil Crisis compromised the government's ability to finance the plan. Additionally, both MITI and the Ministry of Finance were opposed to any increases as the 1971 Nixon Shock had considerably reduced the cost of foreign imports and the subsequent US-Chinese rapprochement had eased regional threat levels. As a result the defence budget was heavily cut, setting a new limit of 1% of GDP, and the new 1976 National Defence Program Outline (NDPO) planned for qualitative rather than quantitative increases in capability.⁵⁸

In 1976 export prohibitions received a blanket ban, reducing potential clients for the industry to a single customer, the JSDF. This was a serious blow for proponents of domestic production but they rallied following the 1978 'US-Japan Guidelines for Defence Cooperation' and the 1980 'US-Japan Systems and Technology Forum' (S&TF). These redrew the framework for technology exchange, refusing Japan the technology transfers it had taken for granted.⁵⁹ With Japan reaching preeminence in many fields the US had grown tired of non-reciprocal exchanges. Japan would have to either pay for US weapons without receiving any technology, or transfer its own technology due to an inability to sell comparable indigenous systems. To offset this, a new push for domestic production was initiated that would allow more even exchanges.

By 1980 public opinion had shifted from anti-militarism to a general acceptance of the need for defence forces and Prime Minister Suzuki Zenkou, broke a constitutional taboo by being the first to openly comment on the US-Japan alliance. His successor was the

⁵⁸ Christopher W. Hughes, *Japan's Remilitarisation*, New York: Routledge, 2009. p. 25.

⁵⁹ Green, *Op cit.* 82-83.

pro-domestic production Nakasone Yasuhiro, yet defence was still regarded as an unstable area for investment and with US pressure for reciprocity of Japanese technology he instead introduced a new policy of joint production with the US.⁶⁰ The test case was the FS-X next generation fighter, initially intended for indigenous production but switched, due to pressure from Japan's major ministries, to be a joint development project.⁶¹ This was assisted by the 1981 'Report on Arms Exports to the United States' which ruled that technology exports to the US did not fall under the export prohibitions, leading to a number of joint projects beginning with the Badge Air Defence System in 1982 (interlocking radar installations which remain the primary Japanese air defence system).

The rewards of this development pattern, technological gain and potentially high sales, attracted Japanese contractors, leading to the 'Agreement Concerning Japanese Participation in Research for the Strategic Defence Initiative' in 1987, with Japanese firms primarily involved in researching Theatre Missile Defence. The same year saw the start of the FS-X and eight other separate joint development projects.⁶² Despite the lack of indigenous projects defence was suddenly a boom industry again and distinct defence divisions, which had been subsumed within civilian production during the 1960s, began to reappear within major manufacturers.⁶³

Japanese defence policy during this period was based upon 'static defence' against Russian invasion, prioritizing systems such as anti-tank weaponry, artillery and anti-submarine capabilities. With the end of the Cold War greater acceptance of the idea of

⁶⁰ Beasley, Op cit.273.

⁶¹ Green, Op cit. 86-107, provides an in-depth examination of the back and forth debate and myriad miscommunications involved in the troubled project.

⁶² Samuels, 1996, 179-181.

⁶³ Ibid. 183.

Comprehensive Security required the Defence Agency to find new justifications for its budget requests. Unwillingness to contribute more than financial support to the Gulf War, and the protracted debate surrounding this, showed that proactive use of the military remained far off.⁶⁴ In 1992 the Peace Cooperation Law allowed JSDF personnel to participate in non-combat United Nations missions yet the numbers dispatched never rose above a miniscule fraction of what was possible.⁶⁵ The following year ballistic missile tests by North Korea raised anxiety in Japan and saw the 1995 Near-Term Defence Policy Outline broadening its focus to include the maritime areas surrounding Japan's mainland.⁶⁶ In industry terms this led to increased participation in Ballistic Missile Defence (BMD) with the US.⁶⁷ Further North Korean missile tests in 1998 would eventually lead, in 2004, to the first of a series of case-by-case waivers of export prohibitions that allowed results of the development to be sold to third parties on the international market.⁶⁸ The new NDPO also led to a revised view on the use of the Japanese Coast Guard, which would come to be a practical second navy whose total tonnage increased from 97,000 tons in 1988 to 126,000 in 2007, including 'Shikishima' patrol vessels, which, at 6,500 tons, are larger than the MSDF's 'Kongo' destroyers.⁶⁹

Following 9/11 new laws loosened the strict controls upon the JSDF and raised alarm over a possible 'remilitarization' of Japan.⁷⁰ The 2001 Anti-Terrorism and Special Measures Law dispatched MSDF vessels to support US operations in the Indian Ocean

⁶⁴ 'Walking on eggs: Japan's financial and military contributions to the Persian Gulf War', *The Economist*, 2nd March 1991.

⁶⁵ As of November 2013 Japan ranks 55th worldwide in personnel contributed, with only 196 from a force of 240,000. www.un.org.

⁶⁶ David E. Sanger, "Missile is Tested by North Koreans", *New York Times*, June 12, 1993.

⁶⁷ Takahashi. Op cit.110-114.

⁶⁸ Hughes, Op cit.86.

⁶⁹ Ibid

⁷⁰ See, Michael J. Green in 'Japan Is Back: Why Tokyo's New Assertiveness Is Good for Washington', *Foreign Affairs*, March 2007, Kenneth Pyle, in *Japan Rising*, Cambridge: Public Affairs, 2007, Samuels, in *Securing Japan*, and Hughes in *Japan's Remilitarization*.

and the 2004 Iraq Reconstruction Law allowed GSDF and ASDF personnel to participate in engineering projects in Iraq.⁷¹ The 2004 NDPG revised defence priorities to focus on threats from ballistic missiles, guerrilla forces and incursions into Maritime territory. With the JCG now responsible for near-area white-water policing the MSDF was allowed to roam further afield, conducting major operations in response to the 2005 Indonesian Tsunami and 2013 Philippines Hurricane, receiving authorization under the 2009 Anti-Piracy law to conduct joint operations off Somalia and establish Japan's first overseas military base since WWII in Djibouti.⁷²

Tensions with China over the Senkakus saw the 2010 National Defence Program Guidelines produce a shift in policy from 'Basic Defence' to 'Dynamic Defence', essentially shifting the focus of the JSDF from the North to the South-West.⁷³ This policy has dovetailed with the US 'pivot to Asia', a refocusing of US military capabilities that seems designed to counterbalance China's growing strength.⁷⁴ Japan's commitment to US grand strategy has been enhanced by both the recent choice of the F-35 fighter as Japan's next major air system and increased investment in Ballistic Missile Defence, a system developed jointly with the US that also leaves Japan highly reliant on American surveillance systems.

In 2011 the prohibitions on weapons exports were finally revised to allow sales to other countries on the condition that goods were for peacekeeping purposes only and that no resale would be made.⁷⁵ The revision has led to several joint development projects (see

⁷¹ Hughes, Op cit.11.

⁷² 'Japan to build own housing, plane tarmac in Djibouti for military patrols', *Japan Times*, 31st July 2009.

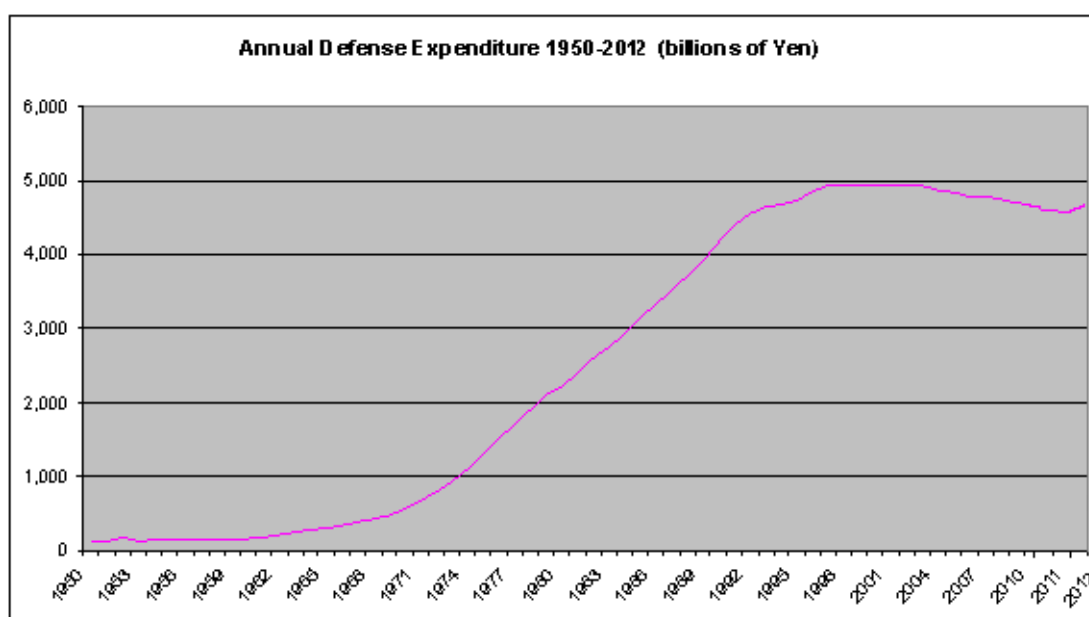
⁷³ http://www.kantei.go.jp/foreign/kakugikettei/2010/summary_ndpg_e.pdf

⁷⁴ 'Japan's 2010 National defence Program guidelines – Reading the tea leaves', *Asia Pacific Bulletin*, 89, 22nd December 2010.

⁷⁵ Mari Yamaguchi, 'Japan weapons ban eased', *Huffington Post*, 27th December 2011.

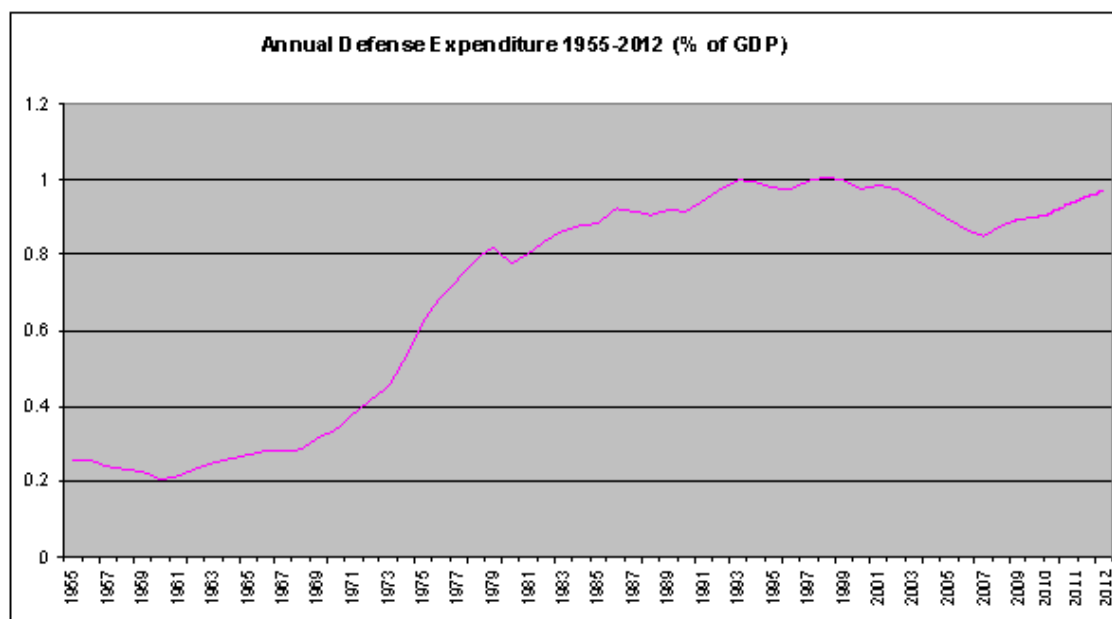
Chapter 6 for details) though it remains to be seen if this will be capable of revitalizing the industry. Despite possessing the world's fifth largest defence budget, Japan's fell for ten straight years with a 6% decline since 2002 (see Table 2.2). In 2012 the budget increased for the first time this century, yet it was only a 0.8% rise (to ¥4.68 trillion) and even this may turn out to be an anomaly, despite predictions by the MoD that the 2014 budget will increase a further 5% by 2019.⁷⁶ The higher budget still remains only 1% of GDP (see Table 2.3) and thus reflects general economic buoyancy rather than increased military investment.

Table 2.2



Source: Raw data from: Japanese Ministry of Defence White Papers (various editions).

⁷⁶ Justin McCurry, 'Japan increases defence budget amid tensions with China', *Guardian*, 17th December 2013.

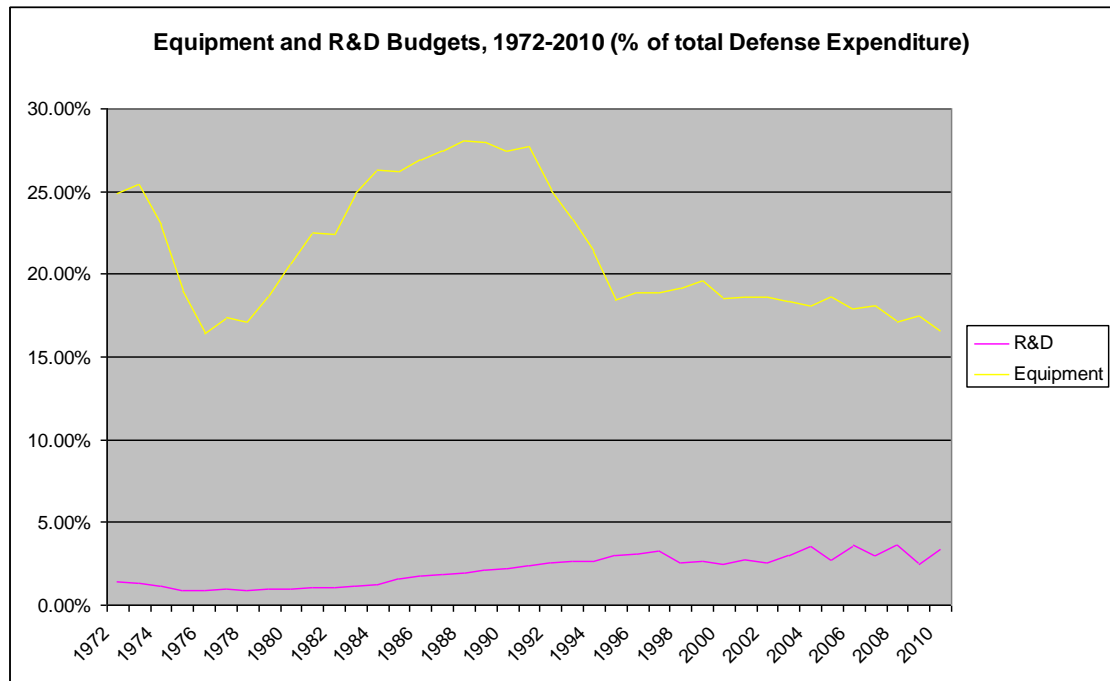
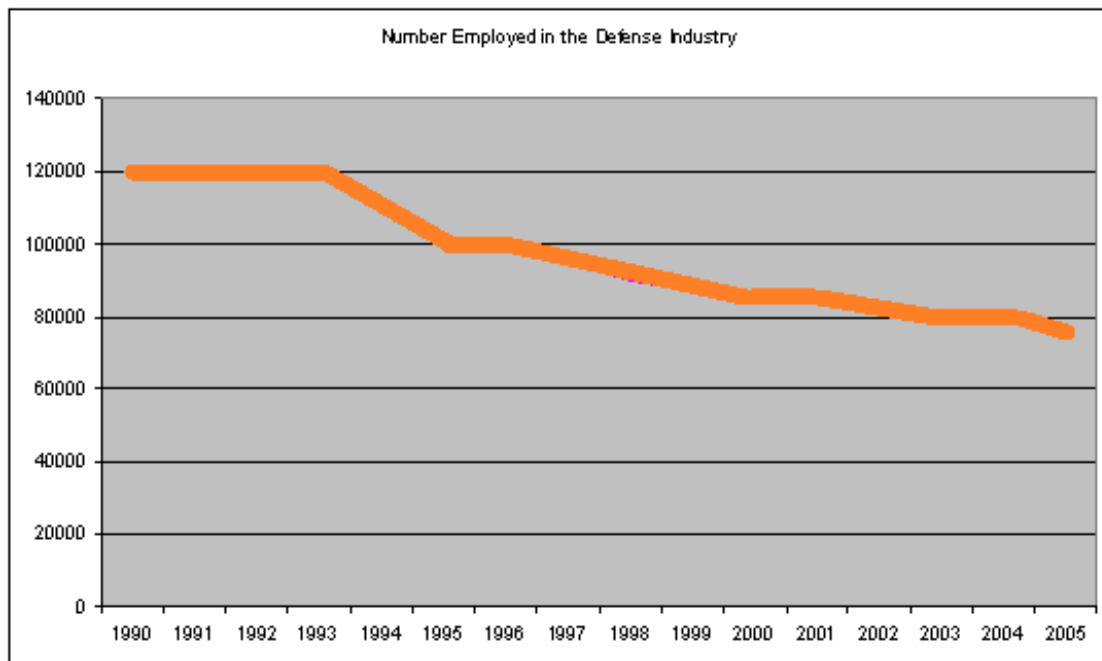
Table 2.3

Source: Raw data from Japanese Ministry of Defence and Ministry of Finance White Papers (various editions).

A more significant change can be seen in the level of equipment procured (see Table 2.4). While this averaged nearly 25% of total budget during the 1980s and early 1990s, over the past decade it has stood at an average of 18%. As such, while the budget itself remains steady in GDP terms, how it is being used has changed considerably and it remains far below previous levels of investment.

The major impact of budgetary shortfalls and the slow pace of export reform has been an increase in the number of companies withdrawing from defence production and the overall number employed within the defence sector (see Table 2.5). Within the past decade 20 aerospace firms, including major companies such as Sumitomo Electric, have opted to leave the defence sector.⁷⁷

⁷⁷ Yukari Kubota, 'Japan's defence industrial base in danger of collapse', *Japan Institute of International Affairs*, 20th May 2010.

Table 2.4**Table 2.5**

In 2009 Fuji Heavy Industries went so far as to bring a civil suit against the government for cancellation of an order for 62 AH-64D Apache helicopters.⁷⁸ The problem for many companies is that the prohibitive costs of Japanese defence production can be born only by the largest firms, such as Mitsubishi and Fuji, for whom the majority of their business lies in other areas. Smaller, more specialized companies do not have the financial weight necessary to survive on an increasingly limited number of contracts within which they are likely to be a junior partner to one of the major firms and thus the first to suffer should cancellations occur.

Revision of the export prohibitions will allow greater participation in joint development programs, yet policies such as the choice of the F-35 over the Eurofighter Typhoon, where the latter's technology would have been available to Japan's engineers while the former's will not, suggests the MoD is more concerned with maintaining alliance ties than promoting industrial growth.⁷⁹

A secondary issue is the areas within which Japan will focus its technological development during the 21st century. During the periods in which military research helped to promote Japan's basic economic vitality, an ability to remain at the forefront of innovation was vital. Apart from its more traditional capability in frontline military systems, Japan currently has considerable expertise in fields such as electronics, robotics and nanotechnology.⁸⁰ Support from the government for intensified research in these sectors might offer one path for broader military spending to be reduced while still retaining the ability to cross-pollinate technological breakthroughs throughout the civilian sector.

⁷⁸ Ibid.

⁷⁹ Richard Aboulafia, 'Japan's military aircraft slump', *Aerospace America*, August 2006.

⁸⁰ P.W. Singer, *Wired for War*, New York: Penguin Press, 2009. 241-243.

The Core Structure of Japan's Defence Industrial System

Heidenkamp refers to a 'defence ecosystem' as the interdependent set of structural elements, comprising social, industrial and military bodies which impose specific push and pull forces on one another that include commercial, financial, legal, cultural, ethical and scientific factors.⁸¹ Examining the Japanese defence system it becomes clear that political factors are just as important in developing a full understanding and therefore they are added here to the military, bureaucratic and industrial bodies responsible for formulating and implementing defence industrial policy in the country. It is also important to realise that the 'defence system' is not a single entity but rather a loose affiliation of distinct structures that interact only in very specific and limited ways (see Table 3.1 below). Only by understanding how these interact can specific points be identified where pressure exerted by domestic and foreign actors (which will be examined in Chapter 3) influences either national security policy in general or defence industrial policy in particular.

Table 2.6

Japan's Industrial Defence System – Core Elements and Responsibilities			
POLITICAL	MILITARY	BUREAUCRATIC	INDUSTRIAL
Determine national defence policy and set budget limitations	Assess materiel requirements necessary for implementation of defence policy	Establish guidelines for the design manufacture and testing of suitable weapon systems.	Develop and produce final systems.

⁸¹ Henrik Heidenkamp, John Louth and Trevor Taylor, *The Defence Industrial Ecosystem*, (London: RUSI, 2011).

Political Structure

Determination of Japan's overall Security Policy rests with the Security Council of Japan (*Anzen Hoshō Kaigi*), a group that contains the Prime Minister, Foreign Minister, Finance Minister, Defence Minister, Chief Cabinet Secretary, Chairman of the National Public Safety Commission and Director of the Economic Planning Agency. Its Chairman also has the right to invite the Chairman of the Joint Staff Council (JSDF commanding officer) or other relevant Ministers to attend. In December 2013 legislation was introduced which streamlined the functioning of the group. The core now became the 'four Minister-Meeting' (4MM, comprising: PM, Chief Cabinet Secretary, Foreign Minister and Defence Minister) which allows sharper focus and more direct Prime Ministerial control than the previous group, which will continue to meet as a form of civilian oversight for the 4MM (see Figure 3.1 for more details). It also established the National Security Secretariat, responsible for coordinating and implementing policy decisions made by the 4MM, and led to the release of the first National Security Strategy, a new document outlining Japan's strategic goals. The key features of the new document were a focus on the need for Japan to make a 'proactive contribution to peace' (seen as a call for formal adoption of collective security), highlighting of the nuclear threat posed by North Korean and Iranian research programs, the danger of terrorism, and the need to boost defence ties with South Korea, Australia, India and ASEAN.⁸²

When strategic concerns warrant it the Security Council conducts a review and revision of defence policy, publishing their results as the National Defence Policy Outline (NDPO), so far Japan has released four versions of the NDPO, summarized in Table 2.7.

⁸² National Security Strategy, 17th December 2013, Office of the Prime Minister of Japan.

Table 2.7

Japan's National Defence Policy Outline (NDPO)			
Year	Background	Major Changes in Focus	Impact on Defence Industry
1976	Cold War threat from Russia and China.	Establishing 'basic defence capability' (kibanteki boei-yoku), i.e. the ability for Japan to defend itself against major threats.	Boost for major systems such as: tanks, artillery and fighter jets.
1995	Post-Cold War need to justify military upkeep.	Developing greater capability for peace-keeping and disaster relief operations.	Increased demand for transport capability. Reduction of major systems.
2004	Korean missile testing and 9/11.	Aimed at allowing a more flexible response to a wider variety of threats, such as terrorism, missile attacks, WMDs and piracy.	Boost for Ballistic Missile defence (BMD). Further reduction of major systems.
2010	Senkaku Incident.	Refocusing defence on Japan's south-west islands and surrounding territorial waters.	Reduce ground systems, boost naval and air systems.

The Security Council also produce a Mid-Term Defence Program (MTDP), which lays out more concrete defence build-up policy for consecutive five-year periods, and an annual defence White Paper. The NDPO and MTDP are typically based largely on the advice of government-commissioned reports from panels of academic and industry experts. In 2013 the latest of these groups released an advisory report on defence industrial policy. Its members are listed in Table 2.8.

Table 2.8

Membership of the Defence Production and Technology Base Study Group 2013	
EXPERTS	Dean of Meiji University Graduate School of Business
	Dean of Dōshisha University Graduate School of Business
	President of the National Graduate Institute for Policy Studies
	Misa Sakurabayashi (A journalist specializing in defence issues)
	Special Advisor from Hitachi, Ltd.
	Special Advisor from Kawasaki Heavy Industries.
	Special Advisor from Mitsubishi Heavy Industries.
	Chairman of Joint Systems Service (An IT consultancy firm)
CONCERNED BODIES	Representative of Federation of Economic Organizations
	Representative of Aeronautical and Space Industries Association
	Representative of Defense Equipment Manufacturers Association
	Representative of Shipbuilding Industry Association

Source: Report of the Defense Production and Technology Base Study Group, Ministry of Defence, 2013.

The next level of political influence is that of politically appointed Ministers with defence related agenda. The four key ministries are Foreign Affairs, Defence, Enterprise, Trade and Industry, and Finance (see Table 2.9).

Table 2.9

Japanese Ministries with Defence Influence		
Ministry	Influence on Defence	Driving Focus
Ministry of Foreign Affairs (MoFa) [Gaimushō]	The primary influence on setting external defence policy and security relations.	Supporting the US-Japan alliance.
The Ministry of Defence (Mod) [Bōeishō]	Responsible for implementing defence policy.	Increased military capability.
Ministry of Enterprise, Trade & Industry (METI) [Keizai-sangyōshō]	Overseas industrial production and foreign trade.	Profitable industry coupled with increased R&D.
The Ministry of Finance (MinFin) [Zaimushō]	Set budgetary limits on defence spending	Reduced spending and a stable economy.

While the ministries represent the key areas of government influence over defence policy, the short-term politically appointed Ministers often find themselves in conflict with the long-term bureaucrats who make up each ministry. Additionally, Ministers themselves need not necessarily be members of the ruling party and in some cases (such as former Defence Minister, Morimoto Satoshi) may be non-politicians.

The final level of political influence lies in the two houses of the Diet. The 2012 election saw a huge swing from previous DPJ dominance and a return to power for the LDP. This is likely to favour increased investment in defence, though even small parties with anti-militarist platforms can use their influence to block such efforts, as was seen in the SDP's ability to prevent changes to defence export policy in 2010.⁸³ Given that even high-ranking politicians have lost their posts over defence-related gaffs⁸⁴ and a recent Prime Minister fell from favour largely because of an inability to deliver on promises of defence reduction, it has been rare for politicians to take strong positions on

⁸³ "Japan gives up on easing weapons export ban", *Reuters*, 9 December 2010.

⁸⁴ See, Nicole Gaouette, 'In Japan loose lips on nukes lose politician his job', *Christian Science Monitor*, 26 October 1999. and "A-bombings couldn't be helped: Kyuma", *Japan Times*, 1 July 2007.

defence issues. Though the Abe cabinet is seen as particularly hawkish,⁸⁵ leaders generally leave the creation of policy to the aforementioned advisory commissions. These panels are, however, selected largely on the compatibility of their views with the incumbent political leadership.

In terms of security policy the US-Japan alliance remains the cornerstone of Japanese security policy for the leading political parties. The LDP, DPJ, Restoration Party and New Komeito, who between them control 90% of the Lower House and 83% of the Upper House (see Table 2.10), all seek to deepen the US-Japan security relationship. Of the other minor parties, only the Communist Party is outspoken in its opposition to a US-led security policy, yet they control only 1.6% of the Lower House and 4.5% of the Upper House.⁸⁶

Table 2.10

Defence Views of Japan's Political Parties 2013			
Party	Defence Policy	Lower House	Upper House
Liberal Democratic Party (LDP) (<i>Jimintō</i>)	Deepening of US-Japan alliance, increased defence spending.	294	114
Democratic Party of Japan (DPJ) (<i>Minshutō</i>)	Deepening of US-Japan alliance, closer ties with Asian neighbors, maintain current defence levels.	56	58
Restoration Party (<i>Isshin no Kai</i>)	Deepening of US-Japan alliance, increased defence spending	53	9
New Komeitō	Deepening of US-Japan alliance, Reduced defence spending.	31	20
Your Party (<i>Minna no tō</i>)	No significant defence policy stance but supports increased free market trade.	18	18
Japan Communist Party (<i>Nihon Kyouseitō</i>)	Major defence cuts, withdrawal of all overseas deployments, end US-Japan alliance.	8	11
Others	n/a	20	12

Source: www.jimin.jp

Military structure

The Japan Self Defence Force (JSDF), or '*Jietai*', is the primary customer for 99% of Japan's defence production. Though only 24th worldwide in terms of size (Table 2.11),⁸⁷ it is 5th in terms of expenditure, providing ample demand for military systems (Table 2.12).⁸⁸

Table 2.11

Japan's Military Personnel		
Branch	Personnel	Defence Budget (%)
Ground Self defence Force (GSDF)	160,121	37.2
Marine Self defence Force (MSDF)	45,518	22.5
Air Self defence Force (ASDF)	47,211	23.2
Joint Units	1,227	17.1%
Joint Staff Office	364	
Defence Intelligence Headquarters	1,911	
TOTAL	247,933	100%

Source: Defence of Japan 2012.

Table 2.12

JSDF Major Weapon Systems	
AH-1S Anti-tank Helicopters	73
AH-64D Combat Helicopters	10
Utility Helicopters	487
Tanks	760
Armoured Vehicles	980
Field Artillery	520
Recoilless Guns	2,710
Combat Aircraft	361
Utility Aircraft	186
Destroyers	48
Submarines	16
Utility Naval Vessels	79

Source: Defence of Japan 2012.

⁸⁷ James Hackett (ed.), *The Military Balance 2010*, Institute for Strategic Studies, London: Routledge, 2010.

⁸⁸ Sipri Military Expenditure Database, Accessed 7th September 2011, at <http://milexdata.sipri.org/>

Japanese forces are easily the equivalent of more militarily-active nations such as the UK (see Table 2.13) and technically its forces remain more advanced than those of China, Russia or either of the Koreas.

Table 2.13

Comparative Military Size				
	Army (1000s troops)	Navy (1000 tons)	Navy (ships)	Airpower (Combat craft)
China	1,600	1,352	1,088	2,074
USA	640	6,402	1,075	3,497
North Korea	1,020	-	-	603
South Korea	520	192	193	614
Russia	310	2,047	980	1,944
UK	180	669	217	397
Japan	140	451	143	420

Source: Defence of Japan 2012.

Japan's defence budget, however, exists under a soft-cap of 1% of GDP. As such, despite its high ranking Japan's expenditure falls far short of other countries when considered in terms of population and national wealth (see Table 2.14).

Table 2.14

Annual Defence Expenditure of Japan			
Country	Expenditure (\$ billions)	\$ per capita	% GDP
Japan	47.8	320	0.98
United Kingdom	62.2	946	2.4
United States of America	594	1890	4.1

Source: Defence of Japan 2012.

This gap is highlighted by the lack of growth. While Japan's allies and potential foes have seen double digit growth over the past decade, Japan's own spending has dropped (see Table 2.15).

Table 2.15

Change in Defence Expenditure 2006-2013	
Country	Growth %
Russia	+177%
China	+131%
USA	+37%
UK	+14%
Germany	+14%
Japan	-3.3%
Source: Defence of Japan 2010, 2011, 2012	

Japan's neighbours are also closing the technology gap, something that could see Japanese production decline in comparative efficiency and market share. Despite this TRDI, the MoD's research branch, saw its budget recently fall from ¥170 billion to ¥105 billion (a 38% loss). Overall procurement of weapon systems makes up only 16.5% of the budget (Table 2.16), yet remains roughly equivalent to that of the US, which allocated 18.8% of its total budget to procurement in 2013.⁸⁹

Table 2.16

Japan's Military Budget 2011			
Expense	%	Branch	%
Personnel and Provisions	44.6	GSDF	38.1
Maintenance	23	ASDF	23.6
Procurement	16.3	MSDF	22.8
Basing Costs	9.5	Internal Bureau	10.4
Additional Facilities	2.1	TRDI	2.2
R&D	2	Defence Intelligence	1.1
Other	2.5	Other	1.4

Source: Defence of Japan, 2012

⁸⁹ US DoD, Budget Request 2014.

A small handful of major manufacturers produce the bulk of each service's weapon systems. There are also a few additional companies, for example, Howa and Japan Steel, who specialize in very narrow areas. Several of the companies also work with foreign manufacturers to produce domestic versions of foreign systems (see Table 2.17). Lockheed Martin's collaboration with MHI on the F-35 is one example. Such licensed production is now increasingly likely to become joint development as firms use it as an avenue to escape the poor economy of scale which troubles the industry (both joint development and the F-35 in particular will be examined in detail in Chapter 6).

Table 2.17

Current GSDF Main Weapon Systems		
System	Introduced	Manufacturer
Type 73 Armoured Personnel Carrier	1973	Mitsubishi Heavy Industries (MHI)
Type 73 Jeep	1973	
Type 74 Main Battle Tank	1975	
Type 75 155mm Howitzer	1975	
Type 79 Anti-tank Missile	1979	
Type 87 Anti-Tank Missile	1987	
Type 87 AA Self-propelled Gun	1987	
Type 88 Surface to Ship Missile System	1988	
Type 12 Surface to Ship Missile System	2012	
Type 90 Main Battle Tank	1990	
Type 99 155mm Self-propelled Howitzer	1999	
Type 03 Surface to Air Missile System	2003	
Type 10 main Battle Tank	2010	
UH-64 Black Hawk	n/a	Sikorsky/MHI**
Type 89 Infantry Vehicle	1989	MHI & Komatsu

Komatsu Light Armored Vehicle	2002	
UH-1 Utility Helicopter	1959	Bell/Fuji Heavy Industries (FHI)*
AH-1 Cobra Attack Helicopter	1984	
AH-64 Apache Attack helicopter	2009	Boeing/FHI*
Type 87 Anti-Tank Missile	1987	Kawasaki Heavy Industries (KHI)
Type 96 Multi-Point Missile System	1996	
Type 01 Anti-Tank Missile	2001	
KH-500E Light Utility Helicopter	n/a	McDonnell Douglas/KHI*

CH-47 Chinook Transport Helicopter	1985	Boeing/Kawasaki Aerospace Company
OH-1 Reconnaissance Helicopter	2000	McDonnell Douglas/Kawasaki Aero.
Type 81 Surface-to-Air Missile System	1981	Toshiba Heavy Industries (THI)
Type 93 Surface-to-Air Missile	1993	
Type 91 Surface-to-Air Missile	1994	
Type 64 Rifle	1964	Howa
Type 89 Assault Rifle	1989	
Type 96 Grenade Launcher	1996	
84mm Recoilless Rifle	n/a	Saab Bofors/Howa*
Minebea 9mm Machine Pistol	1990	Minebea
P220 9mm Pistol	1975	Sig Sauer/Minebea*
Type 62 Machine Gun	1962	Sumitomo Heavy Industries (SHI)
M2 Heavy Machine Gun	1962	General Dynamics/SHI*
Turrets and Barrels for Armored Vehicles	n/a	Japan Steel Works
L16 81mm Mortar	n/a	Vickers/Japan Steel Works*
M270 Rocket Launcher	n/a	Lockheed Martin**
M110-A2 Howitzer	n/a	Pacific Car and Foundry Co.**

Source: *Defence of Japan 2013*

*Produced under license locally in Japan based on foreign design.

**Direct Foreign Military Sales (FMS).

Table 2.18

Current ASDF Main Weapon Systems			
Aircraft	Introduced	No. in Service	Manufacturer
F-4EJ	1972	67	McDonnell Douglas/MHI*
RF-4E Reconnaissance Jet	1972	26	McDonnell Douglas/MHI*
F-15J Fighter	1981	157	McDonnell Douglas/MHI*
F-15DJ Reconnaissance Jet	1981	45	McDonnell Douglas/MHI*
H-60 Search and Rescue Helicopter	1991	32	Sikorsky/MHI*
Hawker 400 Trainer	1992	13	MHI/Beechcraft**
F-2A Fighter	2000	44	Lockheed Martin/MHI*
F-2B Fighter/Trainer	2000	33	Lockheed Martin/MHI*
ATD-X Stealth Fighter Prototype	2014 (planned)	n/a	MHI
F-35 Fighter	2017 (planned)	42 (planned)	Lockheed Martin/MHI*
C-1A transport	1974	25	KHI
EC-1 Electronic Warfare Plane	1974	1	KHI
CH-47J Transport Helicopter	1986	15	Boeing/KHI*
T-4 Trainer	1988	208	KHI
C-2 Transport	2010	40 (planned)	KHI
YS-11 Transport	1965	13	NAMC
T-7 Trainer	2002	49	Fuji Heavy Industries
BAe 125 Search and Rescue Plane	1977	32	British Aerospace***
C-130 Hercules Transport	1984	15	Lockheed Martin***
E-2 Hawkeye Airborne Warning Plane	1987	13	Northrop Grumman
747-400 VIP Transport	1991	2	Boeing***
U-4 VIP Transport	2000	5	Gulfstream***
Boeing E-767 Airborne Warning Plane	2000	4	Boeing***
KC-767J Airborne Refueling Plane	2008	4	Boeing***

Source: *Defence of Japan 2013*

* Licensed local Japanese production and minor systems development based on pre-existing models.

** Japanese design licensed for foreign (non-military) production.

*** Foreign Military Sales

The dominance of the major defence firms is especially apparent in aeronautics sector with a high level of licensed production and Foreign Military Sales (FMS) has been

required to meet the needs of the ASDF. The costs and technology for jet fighters or helicopters are far greater than those required for armoured vehicles or small arms.

Table 2.19

Current MSDF Main Weapon Systems				
Vessel	Tons (Std)	Introduced	No.	Manufacturer
Hatakaze Guided Missile Destroyer	4,600	1986	2	MHI
Shirane Destroyer	5,200	1990	2	
Hayabusa Patrol Boat	200	2002	6	
Takanami Frigate	4,650	2003	5	
Atego Guided Missile Destroyer	7,700	2007	2	
Akizuki Escort Destroyer	5,000	2010	2	
Sōryū Submarine	2,900	2009	5	MHI/KHI
Ōyashio	2,750	1998	11	
Kongō Guided Missile Destroyer	7,500	1990	4	
Hatsuyuki Frigate	2,950	1982	5	IHI
Asagin Frigate	3,500	1986	8	
Murasame frigate	4,550	1996	9	
Hyūga Helicopter Carrier-Destroyer	13,950	2009	2	
Izumo Helicopter Carrier/Destroyer	19,500	2014	1	
Abukuma Escort Frigate	2,000	1989	6	Mitsui/Sumitomo
Ōsumi Amphibious Landing Craft	8,900	1998	3	Mitsui

Source: *Defence of Japan 2013*

Japan's Naval Industry is both more localized (with the exception of support systems such as aircraft, which follow a similar pattern to the MSDF, i.e. primarily licensed local production combined with FMS) and more heavily dominated by a small group of giants.

Current procurement policies are being modified to reflect the latest NDPO, i.e. smaller force size, complimented by cutting edge technology allowing flexibility of operation. Cold War legacy systems, such as tanks and artillery, will be reduced in favour of stronger air and naval assets. Many systems are functionally obsolete, for example the Type-90 MBT, which was world-class twenty years ago, but lacks any capability to share battlefield data. Though due to be replaced by the new Type-10 MBT, only 13 of the desired 58 vehicles had been procured by 2013. The GSDF also continues to make widespread use of the M110 Howitzer, an artillery piece retired from service by the US in 1991. The ASDF faces similar problems with its 1970s era fleet of F-4 Phantoms. Though due for replacement by F-35s, selection and production delays have seen their service life extended far beyond ideal limits.

The MSDF is the one branch where technical development and procurement are keeping pace with global standards but even here underfunding has introduced cost-cutting measures, leading to cannibalization of equipment for parts, strict rationing of fuel and limitations on supplies of basic materials such as food, stationary and even toilet paper.⁹⁰ Deployment of the JSDF during the 2011 Tohoku disaster has had a profound effect upon public and political perceptions of the military, however, and combined with the strength of the 2013 LDP government may lead to increased levels of procurement.⁹¹ This makes reformation of the procurement system itself all-the-more important.

⁹⁰ Misa Sakurabayashi, "Ragtag military left to defend Japan on a shoestring budget", *Shūkan Shinchō*, 8 April 2010.

⁹¹ Kazuyo Katō, "When the going gets tough...", *Centre for Strategic and International Studies*, 25 March 2011.

Bureaucratic Structure

Among Japan's bureaucracy, one of the most influential bodies is the Cabinet Legislation Bureau (*Naikaku-hōsei-kyoku*) which advises the cabinet on the constitutional legitimacy of new legislation. As such, it has considerable power to veto or alter new laws related to Japan's defence systems.⁹²

The day-to-day running of defence affairs is carried out by the staff of the Ministry of Defence (MoD), although there is regular interaction with other Ministries, particularly the Ministry of Enterprise Trade and Industry (METI), and its Aerospace and Defence Industry Division. It is assisted by the Security Export Control Policy Division, which oversees arms export control. Efforts by these groups to promote defence trade have traditionally been counter-balanced by the Ministry of Finance which regarded defence as inherently unstable and, given Japan's unique circumstances, a financially unrewarding market and thus a low priority for government investment.⁹³ In 2012, however, the hawkish former LDP Prime Minister, Asō Tarō, was appointed as Finance Minister and has since attended JSDF events and spoken openly of a need to boost the Defence Budget, a stance which marks a significant change from previous Ministers' reluctance to support military expansion

In relation to the defence industry the bureaucracy's key role lies in the procurement of military equipment. There are four variants available (as shown in Table 2.20). These are domestic production, either of indigenous designs or licensed production of foreign systems, and import, which can either be Foreign Military Sales (FMS) received from another state or general imports bought on the open market from manufacturers.

⁹² Cabinet Legislation Bureau, Accessed on 19th September at <http://www.clb.go.jp/english/process.html>

⁹³ Alexander Neill, Jonathan Eyal and John Hemmings, *Delivering defence Industrial Change*, (London: RUSI, 2008). 25-26.

Table 2.20

Procurement Methods of Military Systems	
Internal Production	1. Domestic development and production.
	2. Licensed local production of foreign systems.
External production	3. Foreign Military Sales imports.
	4. General imports.

METI and the MoD typically favour the first two as they help industry maintain its technological edge. The Ministry of Finance prefers the latter pair as they are invariably cheaper than local development. For the past 15 years Japan has maintained a level of 90% internal production though economic frailty makes it increasingly difficult to justify the high costs.

The actual process of commissioning systems is handled by the Equipment Procurement and Construction Office (EPCO) and begins with a proposal drafted by members of the JSDF (under civilian oversight) outlining their operational requirements which is then funnelled through various bureaucratic departments before being offered to industry as a pending contract (see Table 2.21).

Table 2.21

EQUIPMENT PROCUREMENT AND CONTRACT PROCESS ⁹⁴	
1	At the MoD, the Director of one of the Staff Offices (Air, Ground, Maritime) commissions a report on operational concepts and requirements for new materiel.
2	This is submitted to the Director of the Technology, Policy Planning Division of the Ministry's Bureau of Finance and Equipment, where the performance requirements and technical details of the proposal are outlined in more detail.
3	It is passed to the Director of the Logistics Department who issues a Request for Proposals (RFP).
4	Companies interested in competing for development of the system submit their proposals.
5	The Director of the defence Department creates teams to evaluate the proposals and select the best.
6	The Chief of the Bureau of Finance and Equipment submits a budget request to EPCO.
7	The Director of EPCO's Planning and Coordination Division compiles a list of companies considered suitable for manufacturing such a system.
8	These companies are surveyed as to their ability to meet requirements.
9	A contract type and a budget for the project is set, including maximum and estimated costs.
10	Bidding is initiated and reviewed and a selection made.
11	EPCO finalizes the contract details.
12	Development and manufacturing takes place during which EPCO audits the process and inspects the equipment produced.
13	Following delivery to its end recipient the goods are inspected and verified.
14	Once satisfied that the contract has been completed successfully EPCO sends a request for payment to the relevant disbursing Officer in the Account Center of the Ministry of Finance, who authorizes final payment to the contractor.

Source: Equipment Procurement and Construction Office, Japan Ministry of Defence.
<http://www.mod.go.jp/epco/en/overview/>

Weakness of the procurement system

A number of issues hamper the efficiency of this process. One is that the most important contracts are either non-competitive (80%) or selectively limited (9%), i.e. restricted to the most reliable companies.⁹⁴ As such, smaller firms, regardless of their skill are restricted from contracts they may be capable of fulfilling. On top of this, selection on

⁹⁴ *Japanese Governmental Procurement Guidelines*, Accessed on 7th September 2011 at <http://www.chotatujoho.go.jp/va/com/kouji.html>

open contracts must use price for at least 50% of its evaluation, something which means technically superior proposals can lose out to inferior goods simply due to pricing. At the same time, initial price proposals are far from reliable with cost overrun a frequent problem.⁹⁵ In cases where costs do increase substantially or where a project is cancelled, Japanese contractors have typically borne all the costs (unlike both the US and UK where losses are split between government and contractor) making them highly risk adverse. In the past decade the government has modified its contract process, however, to introduce new 'price adjusted' and 'cost reimbursed' options to reduce some of the burden, as well as an 'incentive contract' that allows manufacturers to retain 80-90% of any savings they make on the initial price. These contracts have been used in only a very limited number of cases, as can be seen in Table 2.22.

Table 2.22

Use of Incentive Type Contracts by Year					
Year	2007	2008	2009	2010	2011
Number	1	4	6	5	4

Source: Japanese Ministry of Defence, EPCO 2013

Another area of concern is corruption within the Defence Ministry, particularly in regard to bid-rigging or the padding of contracts. In 1998 a major scandal erupted when prime contractor NEC colluded with government officials in bill-padding.⁹⁶ In 2001, two Fuji executives were involved in a bribery scandal which led to the suicide of the Defence Agency's Parliamentary Vice Minister (the highest ranking defence bureaucrat).⁹⁷ In 2003 the Yamada Corporation was involved in bid-padding and

⁹⁵ Ogawa, op cit. 13.

⁹⁶ Kōichirō Takano and Tomohiro Ōzeki, "Weapons procurement process open to abuse", *Yomiuri Shimbun*, 30 November 2007.

⁹⁷ Paul Thompson, "Vast budget fuels arms industry", *Japan Times*, 20 June 2004.

bribery of another Vice Minister who was eventually sentenced to two and a half years in jail.⁹⁸ These and other scandals have badly damaged the public perception of Ministry officials. Recent efforts to combat such abuse have shown returns, with Japan's 'corruption index', climbing from Band C to Band B (See Table 2.23). Nonetheless, scandals can still have disproportionate impact on government stability and the accepted rate of normalization (see Chapter 3). At present seven defence contractors are being examined for habitual overcharging, with Mitsubishi Electric reportedly responsible for ¥248 billion in excess charges since 1970.⁹⁹ While Japan scores relatively well overall in a comparative analysis of international defence corruption and the Board of Audit conducts regular examination of defence spending (though without any assessment of strategic issues),¹⁰⁰ many areas can still be improved.

⁹⁸ 'Moirya lists Yamada freebies', *Japan Times*, 30 October 2007.

⁹⁹ Mitsubishidenki-tō ni yoru kadai seikyū jian no gaiyō oyobi saiatsu bōshi-saku ni tsuite, Ministry of Defence, 21st December 2012. 3.

¹⁰⁰ The most recent report can be found at <http://www.jbaudit.go.jp/report/new/summary24/index.html>

Table 2.23

Defence Sector Corruption 2013						
	Japan	US	UK	France	South Korea	Russia
Governmental Anti-Corruption Capability	C	B	B	C	B	D-
Parliamentary Corruption Risk	B	B	A	B	B	D
Budget Oversight and Debate	75	67	83	67	67	33
Budget Transparency	88	88	100	100	88	25
Policy Oversight and Debate	80	85	95	90	69	45
Oversight of Secret Budgets	81	75	81	63	56	25
Oversight of Procurement	80	85	95	90	69	45
Overall	B	B	A	B	B	D

Source: Transparency International, 2013 Government Defence Anti-Corruption Index.

One impact of earlier scandals during the 1980s was an increase in the influence of military officers within the Defence Agency, whose presence some believed would reduce corruption and enhance accountability.¹⁰¹ Infighting between civilian and military personnel has continued ever since and in recent years uniformed officers have gained the authority to give advice directly to senior politicians, bypassing a pre-existing need for a bureaucratic intermediary.¹⁰² Other changes include direct military control over the Joint Staff Office and vice-administrative positions for military officers in ministry bureaus. The result is that ministerial infighting now has three potential

¹⁰¹ Keiichirō Kuboniwa, 'Civilian control of military shaken by uniformed leaders', *Japan Economic Journal*, 31 May 1986.

¹⁰² 'Defence Agency to boost uniformed officers authority', *Japan Economic Newswire*, 25 November 2005.

factions, even if the military have only limited opportunity to exert pressure (see Chapter 3). The issues most in need of attention, however, are the closed nature of the contracting system, greater support for small and medium enterprises and addressing cost overrun and bill-padding.

Reform efforts

Previous reform had often been directed at the prevention of scandals by enforcing officer discretion and punitive actions rather than promoting cost reduction. In 2008 the Defence Ministry responded by strengthening its Life-Cycle Cost (LCC) management program, encouraging greater outsourcing of non-sensitive service contracts, restructuring several departments within EPCO and establishing a new Technology Evaluation Committee to analyse developing trends in the marketplace. Many of the changes were superficial though, with emphasis placed on increased fines for overcharging on contracts and the creation of an Import Procurement Division to forestall a repeat of the 2003 Yamada scandal, in other words, a continuing focus on avoiding scandal without introducing any major change to the industry itself.¹⁰³

Even so, efforts to reduce costs have saved the Ministry an average of 10% of its budget in recent years, through a combination of: outsourcing, streamlining of maintenance, use of commercial items, bulk purchase for multiple branches and short-term intensive purchasing rather than multi-year orders.¹⁰⁴ While such initiatives help stretch the Ministry's meagre budget a little further, they have little impact upon the profitability of defence contractors themselves. Additionally, the previously mentioned independent audits carried out by the Audit Board are purely logistical in nature, ensuring that every

¹⁰³ *Defence of Japan 2010*, Part 3, Chapter 5.

¹⁰⁴ *Ibid*, Reference 31.

nut and bolt charged has been accounted for, and offer no assessment of whether systems chosen offer return on investment in strategic terms, a policy which leaves no independent oversight of the weapons selection process itself.

Industrial Structure

Defence in Japan remains largely unconnected to the wider international defence sector, as can be seen in the limited amount of imports and exports it engages in (see Table 2.24 and 2.25). Nonetheless, some commonality with the international market exists, including the impact of a global recession which places increased restrictions on public spending and raises the threat of short-term reactive responses that might run counter to long-term industrial strategy.¹⁰⁵ Japan remains distinct from national industries though due to the high level of internal social and political resistance to the development of defence systems.¹⁰⁶

Table 2.24

Japanese Defence Imports (US\$ millions)						
	2009	2010	2011	2012e	2013f	2014f
Small Arms / Ammo	299.0	308.7	318.0	327.5	337.4	347.5
Weapon Systems	133.5	133.5	133.5	133.5	133.5	133.5
Munitions	223.0	135.8	135.8	135.8	679.0	135.8
Total	655	578	587.2	596.7	1149.9	616.8

e/f = estimate/forecast. Source: Business Monitor International, Japan Defence & Security Report Q3 2013

¹⁰⁵ Robbin F. Laird, 'American and European Defence Industries: Future Trends and Challenges', *RUSI defence Systems*, Summer 2006. 98.

¹⁰⁶ Heidenkamp, Op cit. 3.

Table 2.25

Japanese Defence Exports (US\$ millions)						
	2009	2010	2011	2012e	2013f	2014f
Small Arms / Ammo	55	80	80	80	100	60
Weapon Systems	0.3	0.3	0.3	10.1	0.3	0.3
Munitions	3.5	1.8	1.8	1.8	1.8	75.1
Total	58.8	82.1	82.1	91.9	102.1	135.4

e/f = estimate/forecast. Source: Business Monitor International, Japan Defence & Security Report Q3 2013

Function of the Industry.

In Heidenkamp's view defence industries serve four primary functions:

1. To supply the armed forces with required equipment.
2. To provide surge capability.
3. To offer specialist knowledge.
4. To address new and emerging threats.¹⁰⁷

A robust defence industry is thus a significant force multiplier in terms of safeguarding national security. The alternative, dependence upon external sources for military supplies, leaves countries vulnerable to outside pressure and constrained in their strategic options. As such, the industry's value cannot be measured in purely financial terms as its primary aim is not the provision of profit but of security.¹⁰⁸

Types of Company.

Roughly 1,200 companies in Japan have contracts with the jet-fighter industry, 1,300 have connections to military ground vehicles and some 2,500 have ties to naval construction (see Table 2.26).¹⁰⁹ In contract terms, these companies are said to be 'Primary' if they are the Lead Systems Integrator (LSI) for a system, or 'Secondary' if they provide key components for the LSI to assemble. Beneath these are the

¹⁰⁷ Heidenkamp, Op cit. 9.

¹⁰⁸ M. Anagboso and A. Spence, 'Measuring defence', *Economic and Labour Market Review*, Vol. 3. No 1, January 2009. 47.

¹⁰⁹ "Proposal for the new national defence program guidelines", *Nippon Keidanren*, 20 July 2010.

‘Subcontractors’ who may be Original Equipment Manufacturers (OEMs), who produce individual parts, or Vendors, who arrange the shipment, import or export of parts. The latter firms are usually Small and Medium Enterprises (SMEs).¹¹⁰

Table 2.26

Contractors Involved in JSDF Weapon System Procurement

	MSDF Destroyer	GSDF Main Battle Tank	ASDF F-15 Fighter
Primary Contractor	MHI/Mitsui	MHI	MHI
Secondary Contractors	72	52	13
Primary Subcontractors	1378	842	530
Secondary Subcontractors	1078	568	593

Source: Boei sangyo no genjo, Keidanren, 1st December 2010. 11.

Within the defence industry it is common for companies to operate on many different levels and within any given project they may fill several roles.¹¹¹ Nonetheless, the majority of contracting companies are only minimally invested in the defence sector, the average being 4% of overall production. Surprisingly, the biggest contractors are among those making the smallest proportional investment while the meagre 8.4% of firms who invest 90% or more in defence tend to be small businesses which rarely make major sales or employ a significant number of staff.¹¹²

The industry itself is an oligopoly wherein the 10 largest companies hold over 60% of all contracts. Yet, between the companies themselves there tends to be a relatively low level of rivalry. Concentration Ratio (CR) shows the percentage of a market controlled by a certain number of the top companies (CR_x), and is used by economists to determine the level of rivalry within markets. The global defence market has a CR₁₀ of

¹¹⁰ Christopher W. Hughes, 'The Slow Death of Japanese techno-nationalism? Emerging comparative lesson's for China's defence production', *The Journal of Strategic Studies*, 34 (3) June 2011. 456.

¹¹¹ Laird, Op cit. p. 14.

¹¹² Ministry of Defence, Equipment Policy Division Survey, 2011.

62%, meaning 62% of contracts are controlled by the top 10 countries.¹¹³ This is quite similar to Japan's internal CR10 of 60%, however, competition within the Japanese market is far less intense than the global standard.¹¹⁴ This is due primarily to the established nature of the contract system, which tends to see the same firms awarded recurring contracts for specific sectors and systems and, where competition does take place, the loser invariably receives some form of compensation as a subcontractor on the project, a process known as 'sumiwake'.¹¹⁵ As a result, the choice of what systems to develop and who will be the primary contractor does not have as much impact on the major defence firms as it does on SMEs. For the latter, government choices can be a matter of financial life or death and this has seen a major drop in the number of such business involved in defence production. Alongside relaxation of export controls, a review of the competitive bidding system has long been a key request of the industry.¹¹⁶

The rise of joint development, however, will mean that international alternatives to local SMEs will become increasingly available. The government has also attempted to address the problem by promoting consolidation, yet the dual-use aspect of Japanese systems has made this difficult. While this provides strong surge capacity (by turning civilian production facilities to military use) it also hampers the consolidation process due to the difficulty of disentangling military production lines from areas in which they also serve civilian purposes.¹¹⁷

¹¹³ "Concentration in the arms industry", *SIPRI*. Accessed on 30 September 2011 at http://www.sipri.org/research/armaments/production/researchissues/concentration_aprod

¹¹⁴ Gen Yamamoto, 'Japan: Government and the defence Industry', *RUSI defence Systems*, Autumn 2004. 22.

¹¹⁵ Hughes, Op cit. 457.

¹¹⁶ Ministry of Defence, Equipment Policy Division Survey, 2011.

¹¹⁷ Hughes, Op cit. 473-474.

Types of Procurement.

The method of procurement of course is a fundamental element of the extent to which Japanese firms will be involved in the production process. For domestic firms the ideal type is indigenous production, in which both design and manufacturing of systems are conducted locally. Failing this, licensed production allows foreign designs to be built locally, giving access to new technology and allowing some ongoing industrial activity. The alternatives are to simply purchase systems, which can either be done on the international market, which provides better value, or from a friendly government, which enhances diplomatic relations but raises the danger of dependency (See Table 2.27).

Table 2.27

	Benefits	Disadvantages
Foreign Military Sales	Fast. No R&D costs. Can strengthen diplomatic ties	Creates dependence upon supplier nation. Stagnation of technical skills.
Commercial Off the Shelf (COTS)	Fast No R&D costs Can seek the most economical options	Stagnation of technical skills
Licensed Production	Fast acquisition of technology. Low R&D Costs. Can innovate based upon basic model. Provides some learning opportunities for engineers and designers.	Higher Costs. May not be cutting-edge technology. Learning Opportunities limited.
Indigenous Production	Maintain local employment. Maximum opportunity for developing technical capabilities. Greater independence of military policy.	High R&D costs and risks. Very high capital cost.

In the case of Foreign Military Sales a small number of large firms, such as Itoh and Sumitomo, generally act as brokers for imports. In 2008 FMS made up 36% of imports, with the US accounting for 95% of all exchanges.¹¹⁸ It is licensed production, however, which has been the most common and larger companies such as MHI and KHI, typically do a mixture of both. Samuels said of the Japanese Aerospace Industry, “it has

¹¹⁸ Defence Industry and Technology Base, Ministry of Defence, March 2010. 21.

succeeded without really flying”;¹¹⁹ the same could be said for current levels of indigenous production, i.e. existing at a sustenance level yet in danger of failing and far from maximizing its potential.

Weaknesses of the Industrial Sector

Japanese manufacturing in general has seen increased resistance to entry by new companies. In 1969 new manufacturers accounted for over 6% of companies while only 3% ended their production. In 2006 the number of new firms was only 3.4% while those ending production had grown to over 5%.¹²⁰ Furthermore, defence typically has higher costs of entry stemming from increased levels of government regulation, high level of technology and technical skills, high capital costs and market inelasticity, i.e. "Entrants cannot rely upon an expansion of the market to accommodate them.....but are likely to have fight and replace incumbents".¹²¹ The most significant issue however is the underlying poor economy of scale resulting from having only the JSDF as a customer.

As can be seen in Table 2.28, the change in defence production over the past two decades has been severe. While the major drop occurred in the wake of the end of the Cold War there has been an ongoing steady decline that has yet to reverse itself. In the 1960s defence products accounted for 90% of all aerospace sales but by 2004 had dropped to 62% and in 2011 stood at only 41%.¹²² Defence equipment contracts were at their highest in 1990 at ¥1.07 trillion, and have since fallen to ¥700 billion in 2012.¹²³

¹¹⁹ Richard Samuels, "How to Succeed without Really Flying: The Japanese Aircraft Industry and Japan's Technology Ideology" in Jeffrey Frankel and Miles Kahler (eds.) *Regionalism and Rivalry: Japan and the United States in Pacific Asia*, (Chicago: The University of Chicago Press, 1993).

¹²⁰ *Japan Small Business Research Institute White Paper 2010*, (Tōkyō: METI, 2010).

¹²¹ J. Dunne, "The defence industrial base", in K. Hartley, *Handbook of defence economics*, Elviesier Science B.V. 1995, 399.

¹²² Japan Aerospace Industry 2013, Society of Japanese Aerospace Companies, 2013

¹²³ Proposal for the National Defence Program Guidelines, Keidanren, 14 May 2013.

In 2013 the Defence budget did receive its first increase since 2002 and is set to enjoy greater gains in 2014, yet despite an increased political focus on military issues the industry itself is a long way from a full recovery and remains vulnerable to any economic or political setbacks.

Table 2.28

Decline in Defence Production 1990-2009 (¥ billion)			
	1990	2009	Change
Jet Engines	52.5	15	-71%
Tanks	70	25	-65%
Ships	225	175	-22%
Total Equipment Contracts	1072	625	-41%

Source: Current state of the defense industry, December 1, 2010, Nippon Keidamen Defense Production Committee. 4-5.

Major Defence Contractors

As mentioned above, for most of the major manufacturers defence is usually an area of limited investment. In addition, their defence projects are usually housed within other divisions such as aerospace or shipping in general. This makes detailed analysis of the companies defence portfolio difficult, a problem exacerbated by the reluctance of many of the firms to draw attention to their defence production. Mitsubishi Heavy Industries (MHI), for example, dedicate only two-thirds of a page in their 168 page Corporate Social Responsibility Report to their defence projects.¹²⁴ The recent push to revitalize defence production in Japan is bringing changes, however, and MHI announced in 2012

¹²⁴ MHI, *Corporate Social Responsibility (CSR) Report for 2013*. MHI: Tokyo, 2013.

that it would consolidate its defence production within a new ‘Integrated Defence and Space Systems Department’.¹²⁵

In 2012 Japan’s top defence manufacturers were MHI, Kawasaki Heavy Industries (KHI), Mitsubishi Electric (M. Elec.), NEC and Fujitsu (see Table 2.29).

Table 2.29

Japan’s Top Defence Manufacturers									
	Rank		Sector	Def. Sales 2010	Def. Sales 2011	Total Sales 2011	Defence Focus	Annual Profits 2011	Employees
	Jpn	Int.							
MHI	1	23	Aircraft, Vehicles, Missiles, Ships	2960	3620	35347	10%	307	68890
KHI	2	38	Aircraft, Engines, Missiles, Ships	1020	2630	16337	16%	292	33270
M. Elec	3	57	Electronics, Missiles	1160	1440	45603	3%	1404	117310
NEC	4	58	Electronics	980	1440	38052	4%	-1382	109100
Fujitsu	5	98	Electronics	660	490	55980	1%	535	173160

All monetary values = US\$ millions. Source: SIPRI Database 2013.

These refer purely to military goods and services, however, and are not the same as the top ranking defence contractors, which also include foreign companies, as well as contracts for non-military services and supplies (see Table 2.30).

¹²⁵ Mitsubishi Heavy Industries, Press Release, No. 1608, 19th December 2012.

Table 2.30

Japan's Top Defence Contractors 2012										
Rank	Company	Contracts	Value	Market Share	Goods	Past Rank				
						2011	2010	2009	2008	2007
1	Mitsubishi Heavy Industries	225	240.3	15.7%	Aircraft, Vehicles, Missiles	1	1	1	1	1
2	NEC	246	163.2	10.7%	Comms.	4	4	4	4	3
3	Kawasaki Heavy Industries	120	148	9.7%	Aircraft, Missiles	2	3	3	3	4
4	Mitsubishi Electric	115	124	8.1%	Electronics, Missiles	3	2	2	2	2
5	DSN	2	122.1	8.0%	X-Band Radar	-	-	-	-	-
6	Marine United	3	74	4.8%	Escort Ship	-	5	68	476	-
7	Toshiba	73	50.3	3.3%	Electronics	6	11	9	8	5
8	Fujitsu	111	30	2.0%	Electronics	5	6	5	5	6
9	IHI	31	27.7	1.8%	Ships, Engines	7	9	14	6	9
10	Komatsu	31	26.7	1.7%	Vehicles, Artillery	8	7	6	7	8
11	JX Nippon	129	24.4	1.6%	Aviation Fuel	9	10	-	-	-
12	Hitachi	64	21.9	1.4%	Electronics, Software	10	12	8	11	12
13	Cosmo Oil	125	17.7	1.2%	Fuel	11	13	15	12	14
14	Daikin	39	14.5	0.9%	Bullets, Shells	12	14	16	13	16
15	IHI Aerospace	32	13.6	0.9%	Rockets	22	16	19	18	18
16	Ok Electric	34	12.6	0.8%	Electronics	15	20	18	20	17
17	Nakagawa Bussan	95	12	0.8%	Ship Fuel	13	17	11	9	11
18	Fuji Heavy Industries	30	11.9	0.8%	Aircraft	18	18	20	15	7
19	Showa Shell Sekiyu	92	11	0.7%	Ship and Aviation Fuel	16	21	25	16	23
20	Isuzu	72	10	0.7%	Vehicles	17	25	17	31	29

All monetary values = ¥billions.

Source: Heisei 24-nendo sōbi shisetsu honbu chōtatsu jisshi gaikyō, Japan Ministry of Defence, 2013

Industrial Trends

Although Japan remains largely excluded from international sales, it is still influenced by developments within the global industry, which had sales of \$1.7 trillion in 2012.¹²⁶ However, despite larger returns international companies are experiencing similar economic limitations to the Japanese industry and budget-trimming is forcing change upon longstanding practices.¹²⁷

The major impact is that Cold War procurement models, producing big ticket items in large numbers at a glacial pace, have changed to follow civilian purchasing patterns, focusing on innovation and fast response to changing needs.¹²⁸ This model values simpler, less hi-tech, equipment that can be produced at high volume and low cost through economies of scale (whether Japan adheres to such principles will be examined in Chapter 5).¹²⁹ Contractors are being urged to ask customers, not what they need but “what are you trying to do?”¹³⁰ As Levitt said, customers do not shop for a 1/4 inch drill, they shop for a 1/4 inch hole.¹³¹ Demand has become the cornerstone of future capability needs, in turn defining the necessary technology, and thus the required industrial capability. Innovation and the ability to react quickly to needs are key aspects of business strategy. Companies are placing greater focus on market research, unit pricing, scale efficiencies and replication of effort.¹³²

¹²⁶ SIPRI, Military Expenditure Database 2013.

¹²⁷ For an appraisal of US defence industrial stability see, *The Aerospace and Defense Industry in the US: A financial and economic impact study*, Deloitte, March 2012.

¹²⁸ Mark W. Johnson, ‘No more blank checks, the defence Department must innovate’, *Washington Post*, 12 June 2011.

¹²⁹ Ibid.

¹³⁰ Johnson, Op cit.

¹³¹ Clayton M. Christensen, Michael E. Raynor, *The innovator's solution: creating and sustaining successful growth*, (Boston: Harvard Business School Publishing Corporation, 2003). 99.

¹³² Johnson, Op cit.

Innovation

In terms of innovation, Japan remains a world leader in scientific research, though most is supported by private industry with the government supplying only 20% of research funding. This compares with 30% in the UK and the US, and 40% in France. The defence sector receives even less, a meagre 3.7% of government research assistance, compared to more than 50% in the US, a 14 to 1 imbalance in favour of the US which worsens to 25 to 1 in per capita terms and 30 to 1 in GDP terms (see Table 2.31).

Table 2.31

Comparative Defence R&D Expenditure (2009)			
	% of overall R&D	¥ per capita	% of GDP
USA	51.4	20,625	0.7
UK	18	3,375	0.12
South Korea	16.7	2,135	0.16
EU	9.6	1,885	0.07
Japan	3.7	822	0.02
US : Japan Ratio	14.1	25:1	35:1

Source: Eurostat, European Commission Science and Technology Database.

In Japan the majority of defence firms (51.9%) spend less than ¥20 million on independent R&D,¹³³ instead the majority of research is overseen by the Technical Research Development Institute (TRDI) who set guidelines, monitor progress and promote the diffusion of any breakthroughs.¹³⁴ A recent Keidanren report highlighted a need for far greater and more focused investment in R&D, particularly regarding dual-use technology, cutting-edge components and systems integration.¹³⁵

¹³³ Ministry of Defence, Equipment Policy Division Survey, 2011.

¹³⁴ Technical Research and Development Institute. Accessed on 30 September 2012 at http://www.mod.go.jp/trdi/en/about/about_trdi.html

¹³⁵ “Proposal for the new national defence program guidelines”, *Nippon Keidanren*, 20 July 2010.

In 1999 Japan unseated the US as the world leader in innovative capacity.¹³⁶ This has fallen considerably though. While a recent study by the Martin Prosperity Institute placed Japan 3rd in the world in terms of pure technological R&D,¹³⁷ another, by the Boston Consulting Group ranked Japan lower, at 9th worldwide in terms of general support for innovation through government policies, business performance and education.¹³⁸ A more comprehensive study by INSEAD ranked Japan 7th in terms of pure R&D, 14th in Business Sophistication, 19th in Market Sophistication, 35th in Innovation Linkages, 60th in Third-level Education, 65th in Creative Output and 69th in Business Environment.¹³⁹ Even the 7th place ranking for R&D is hardly impressive given that Japan has the world's 3rd largest economy. The effects of this can be seen in an assessment by the Ministry of Defence of its own technical ability compared to that of the US and European defence industries (see Table 2.32). Across the board Japan ranks consistently weaker in each major sector.

Table 2.32

Defence Technological Strength Comparison (out of 100)			
	JAPAN	USA	EU
Fighters	56	81	71
Ships	46	62	53
Missiles	50	81	56
Combat Vehicles	59	68	62
Unmanned Aircraft	62	71	59
Unmanned Land Systems	40	92	42
ICT Systems	55	95	70
Information Warfare	54	83	70

Source: Japan Defense Production and Technology Base, Ministry of Defence, March 2010

Defence contractors can no longer afford to maintain armies of private scientists, requiring closer ties with the academic research community and specialists in SMEs, two areas where Japan's defence industry has weaknesses. SMEs especially, often

¹³⁶ Terence Roth, 'US expected to lose innovation crown to Japan', *Wall Street Journal*, 3 February 1999.

¹³⁷ *Creativity and Prosperity: The Global Creativity Index*, (Toronto: Martin Prosperity Institute, 2011).

¹³⁸ *The World's most Innovation-friendly Countries*, (Boston: Boston Consulting Group, 2009).

¹³⁹ *Global Innovation Index 2011*, (New York: INSEAD, 2011).

produce innovative products through an ability to make rapid leaps, take bigger chances and maintain a corporate culture more conducive to free thinking.¹⁴⁰ These smaller companies are also more attractive to gifted younger workers and often act as a proving ground for the feasibility of revolutionary ideas.

EADS (the youngest of the new aerospace giants) has created a new research organization, the 'Innovation Works', with branches in China, India, Russia and Singapore where it works with regional SME'S to harvest the brightest local talent and ideas.¹⁴¹ Alongside decentralization of operation, R&D divisions are also beginning to outsource much of their testing on the basis that the people doing the testing and evaluation of projects should be independent of those who have done the technical research and development.¹⁴² The importance of the latter functions is evident in the increasingly common use of RDT&E (Research, development, testing and evaluation) as a replacement for R&D. Japan is lagging behind in this area though. Apart from its low levels of basic defence research its primary centre for development, TRDI, operates from centralized facilities that conduct all stages of development.

Consolidation

Japan was largely unaffected by the consolidations, driven by economic factors rather than defence policy, that swept the defence industry after the Cold War.¹⁴³ Unlike Western firms, Japanese firms' smaller defence portfolios enabled them to survive on

¹⁴⁰ Adam Ramsey, 'Cutting edge companies', *Daily Telegraph*, 20 January 2010.

¹⁴¹ 'Aviation and aerospace innovation invigorating industry, survey finds', *Aviation Daily*, 27 October 2009.

¹⁴² Don Turnbull, "Management of Defence: International Comparisons", *RUSI Defence Systems*, October 2009.

¹⁴³ Ryan R. Brady and Victoria Greenfield, "Competing explanations of US defence Industry Consolidation in the 1990s and their policy implications", *Contemporary Economic Policy*, 28 (2), April 2010.

their civilian sectors during lean periods of defence production.¹⁴⁴ Ironically, it is only now that the Japanese model of heightened dual-use capability is becoming more widely accepted that Japan seems on the verge of a series of consolidations.¹⁴⁵ This is in line with a new wave of mergers and acquisitions expected to impact Western industries, with 72% of US aerospace and defence executives predicting that their firms will be involved in consolidation during the next two years and that acquisitions and joint ventures will act as the top drivers for growth.¹⁴⁶

For Japan the first step must be for wider internal consolidation of defence holdings, bringing each firms weapon development programs into a single division, a step that Mitsubishi's new Integrated Defence Division should act as a model for. Broader consolidation might be successful should it focus on combining the defence holdings of larger firms but doing so with SMEs includes a danger of robbing them of the independence and creativity that they can help foster.

Joint Development.

SMEs are also at risk from the growing trend toward joint development, wherein rather than maintaining the capability to produce all elements of a given system locally, companies now favour multinational development, increasing the pool of contractors available and speeding the diffusion of technology and management techniques. This also leads to complimentary specialization among alliance states, allowing for reduction of replicated effort. It forces smaller firms to compete on the international market though and Japanese firms, insulated from this type of competition for decades, may

¹⁴⁴ Takahashi, Op cit. 101-115.

¹⁴⁵ Paul Kallender-Umezu, 'Japan Strives To Overcome defence Industrial Base 'Crisis'', Defence News, 24 June 2012.

¹⁴⁶ Aerospace and Defence 2012 Industry Outlook Survey, KPMG, 2013.

struggle to find a foothold. Many also feel that the economic strength of the US would make it the dominant partner in any project and prone to accepting the influence of other states only where it had no strong preference of its own.¹⁴⁷

For Japan, development of the F-X fighter with the US became a case study in the problems of joint development.¹⁴⁸ This has been off-set somewhat by recent success in BMD systems and Japanese management patterns and their emphasis on group harmony and integration of small project teams, have been highlighted as particularly suitable for joint development projects.¹⁴⁹ The UK in particular views Japan as an attractive potential partner and might act as a bridge to future connections with the industrial base of Australia, India or Singapore.¹⁵⁰ Japan would have much to offer if it were to embrace a policy of national specialization within a broader alliance structure, possessing top-level capabilities in systems integration, component materials, nanotechnology, communications, electronics and robotics. The greater freedom which this would provide could also act as political leverage both within and without the US-Japan alliance itself.

Long-term Planning

Innovation and dynamic change must be balanced against stability and the use of long-term strategy is vital. Soviet-era defence planners were criticized for spending every last ruble of annual budgets rather than committing them to future investment, yet this problem is now endemic. Government institutions paid from set budgets rather than consumer-based results are notoriously lax in managing funds effectively, focusing on

¹⁴⁷ Alexander, Op cit.

¹⁴⁸ Gregg A. Rubenstein, 'Comments on cooperative acquisition', Speech at Forum for Diversifying Japan's Security: A Wider Partnership for defence capabilities, British Embassy, Tokyo, 12 May 2010.

¹⁴⁹ Neill, Op cit.

¹⁵⁰ Ibid.

year-to-year costs that prioritize immediate needs over efficiency. The defence industry has begun to address this issue via the use of Life Cycle Cost (LCC) Management and extended industrial production strategies.

Japan has recently introduced LCC management in its procurement office though the effectiveness of its implementation remains to be seen. Only a limited number of weapon systems have thus far been had LCC calculations applied to them and the estimates seem far from reliable. The F-35 is a particular example in that its schedule fails to reflect recent developments, laying out a 6 year period for mass production from 2012 to 2018 that has already been compromised by delays and announcements that Japan is likely to spread its purchases over a far longer period (See Table 2.33).¹⁵¹ The ¥695 billion allocated for this production window is also highly unlikely to suffice given the cost overruns that continue to plague the project (see Chapter 6 for more details). As it stands the LCC program seems to be merely an optimistic assessment reflecting hopes rather than reality or probability.

¹⁵¹ Paul Kallender Umezu, 'Japan might delay F-35 purchase', Defence News, 10 July 2013.

Table 2.33

LCC of Japanese Weapon Systems – 2013 (% of total)						
System	Concept	Design	Production	Operation	Disposal	Total Cost (¥ billion)
C-2 Plane	(1993-00) 0	(2001-08) 14.1	(2011-18) 27.9	(2015-58) 58.0	(-) 0	1449
P-1 Plane	(1992-07) 2.4	(2001-12) 10.8	(2008-18) 39.1	(2011-48) 47.7	(2028-) 0	2285
US-2 Plane	(1993-94) -	(1996-06) 35.4	(2005-08) 21.1	(2007-28) 43.5	(2018-) -	265
F-2 Fighter	(1978-89) 0.5	(1988-00) 10.6	(1996-98) 31	(1995-38) 57.8	(2028-) 0.2	3393
F-35 Fighter	(2009-11) -	(-) -	(2012-18) 36.4	(2018-48) 63.6	(2038-) -	1919
Type-3 Medium Range SAM	(1985-98) 4.9	(1999-02) 27.8	(2003-08) 36.7	(2005-38) 30.4	(2028-) 0.1	496
Type-11 Short-Range SAM	(-) -	(2005-09) 6.8	(2011-28) 44.1	(2014-48) 48.9	(2028-) 0.3	207
Base Air-Defence SAM	(-) 0	(2005-09) 11.3	(2011-28) 48.6	(2010-48) 40.1	(2038-) -	111
Type 12 Missile	(1999-00) 1.2	(2003-11) 19.6	(2012-18) 34.8	(2012-48) 44.4	(2028-) -	174
New Ship-to-Ship Missile	(2008-12) 15.3	(2013-17) 54.7	(2018-28) 8	(2020-58) 22	(2048-) -	15
Type-23 Submarine	(2005) 0	(2006-10) 0	(2011-15) 65.3	(2016-28) 34.7	(2028) -	89
Type-20 Minesweeper	(2002-05) 1.7	(2005-07) 0.9	(2008-11) 55.5	(2012-38) 42.4	(2038-) 0.3	36
Type-25 Minesweeper	(-) -	(2005-12) 1	(2013-16) 55.7	(2017-38) 42.9	(2038-) 0.5	40
Type-25 Escort Ship	(-) -	(2010-13) 0.1	(2013-17) 44.1	(2018-48) 55.8	(2048) 0.1	175
MCH-101 Helicopter	(-) -	(-) -	(2003-08) 72.9	(2005-28) 27.1	(2018-) -	114
TH-480B Helicopter	(-) -	(-) -	(2009-18) 43.5	(2009-28) 56.5	(2028-) -	179
TH-135 Helicopter	(-) -	(-) -	(2008) 51.3	(2009-28) 48.7	(-) -	15
UH-60J Helicopter	(-) -	(-) -	(2011-28) 53.9	(2014-48) 46.1	(2028-) -	220
SH-60K Helicopter	(1992-97) 0.7	(1997-04) 5.5	(2002-18) 66.5	(2005-28) 27.3	(2018-) -	776
155mm Howitzer	(2010-12) -	(2013-16) 10.1	(2017-18) 55.3	(2015-48) 34.1	(2048-) 0.4	168
Type 10 Tank	(1996-01) 1.3	(2002-09) 9.1	(2010-38) 47.5	(2012-68) 42	(2038-) 0.1	780
NBC Systems	(2001-04) 1.2	(2005-09) 10.9	(2010-18) 58.5	(2012-58) 29.3	(2038-) -	553

Source: *Heisei 24-nendo Raifusaikurukosuto Kanri Nenji Hōkoku-sho*, Ministry of Defense Equipment Facility Headquarters, 21st March 2013.

In terms of long-term planning the MTDP lays out regular procurement guidelines although its overall industrial strategy is only reviewed with the less frequent NDPOs. The annual defence budget remains, however, structured by conventional heads such as pay, repairs, etc. rather than the grouping of costs by military function that would allow for better appraisal of the merits of individual systems.¹⁵² France and the UK offer alternative long-term production strategies, where, in an effort to break the ‘feast and famine’ approach that deprives contractors of certainty of demand, they are clarifying individual areas of national focus for a number of long-term joint development projects.¹⁵³ Such long-term commitments do have a strategic importance, however, which will be examined in Chapter 5.

Supply Chain Risk Management

A final trend is the increasing awareness of threats to the supply of defence materiel. These include electronic attacks capable of derailing high-tech production lines, something both Lockheed Martin and MHI experienced in 2011 alone.¹⁵⁴ Part of this stems from the long developmental cycle of systems which frequently means safeguards fall far behind current levels of software development. Another weakness is that not only manufacturing but also transport networks must be able to meet demands. Recently, US troops in Afghanistan found they were arriving in-theatre faster than their basic equipment could be produced and delivered.¹⁵⁵ Japan’s vulnerability to natural disasters (see Chapter 4) makes this an especially serious issue. It only requires a single vital

¹⁵² Ibid.

¹⁵³ Sion Barry, ‘Change needed in governments buying methods’, *The Western Mail*, 29 August 2007.

¹⁵⁴ Hiroko Tabuchi, ‘US expresses concern over cyberattacks in Japan’, *New York Times*, 21 September 2011.

¹⁵⁵ Ann Scott Tyson, ‘Marines waiting for basic supplies’, *Washington Post*, 16 July 2009.

component or stage of the delivery chain to be compromised to cripple even the most expensive of defence systems.

Conclusions

Throughout the history of the modern Japanese state military production has, at key points, been the primary driver of economic growth and innovation. While more typically reactive, following procedures and patterns established by Western states, in moments of existential threat it has historically displayed an ability to surge production dramatically and introduce innovative designs and strategies of its own. Historical precedent has shown that choice of weapons does not itself set strategy but it does limit it. Poor choice of systems, such as the high level of investment in Torpedo boats in the late 19th century, may offer far less return on investment than less vaunted yet more practical alternatives (in the former case the naval mine was far less costly yet far more efficient). Other choices, such as the failure to invest in submarine and anti-submarine systems during the Pacific War, or the decision to focus on capital ships rather than carriers, greatly restricted the effectiveness of particular strategies leaving a Hobson's choice of following a poor, yet well-supported strategy or a more sensible, yet poorly supported one. A key flaw behind this was failure to align Japan's strategy with its geostrategic realities.

The modern system remains vulnerable to the same underlying dangers but there are additional hazards tied to the inherent structure of the existing defence-industrial system. A key flaw is that military input is found only at the initial proposal stage of procurement, after which political and bureaucratic forces dominate, with the result that

choices are swayed far more by separate political influence (which will be examined more closely in the following Chapter) and economic factors than by any appraisal of overall strategic merit in promoting long-term security. Oversight of the process exists, yet only in an economic sense without any evaluation of the diplomatic or military impact of the choices made.

The industry itself has been in decline for more than a decade and it is unclear whether recent changes will be enough to reinvigorate it. Many areas still require significant reform, including: greater support for SMEs, revision of the contract system to allow broader and more competitive participation, greater investment in R&D and a higher focus on innovation relative to other states. Many recent reforms, such as anti-corruption measures and the introduction of Life-Cycle Management also appear to be superficial in nature, offering little practical return. Positive steps are occurring however, such as the consolidation of defence production into clear, stand-alone divisions.

The industry remains frail, however, and whether current and future reforms can have lasting impact will depend a great deal upon the economic choices made regarding which systems to pursue. Such systems must be either economically rewarding or, failing this, offer a clear strategic value capable of offsetting any economic loss. While this might appear self-evident there are other forces at play which influence the decision process in directions that serve private political agendas rather than purely economic or strategic logic.

CHAPTER 3: Influences on Defence Policy

Introduction

While the defence industry in Japan may be entering a period of renewed growth, neither heightened production nor financial success is a guarantee that it will fulfil its primary goal of safeguarding Japanese security. Doing so requires producing the systems most suitable for addressing the specific threats Japan faces and the strategic goals it wishes to pursue. Yet, military strategy is not the primary driver of procurement choices. Certainly it is listed by Suchman and Eyre, in their analysis of procurement rationales, as one of four possible drivers, alongside: internal factors, geopolitical factors and global structuralism.¹ Betts, however, raised the idea that military strategy is akin to the ‘Random Walk’ model of the stock market, where success is merely after-the-fact praise for good-fortune.² R.C. Gray found that procurement choices are far more a result of socio-political factors internal to each nation,³ a view supported by Agnell who found military doctrine itself to be more a product of historical process and internal power games than grand strategy.⁴ C.S. Gray in turn viewed the process as one in which politicians invariably treat defence astrategically, as “opportunity-cost matters of scarce resource allocation”, and that policy drove procurement rather than vice versa

¹ Mark Suchman and Dana Eyre ‘Military Procurement as Rational Myth’, *Sociological Forum*, 7 (1), 1992. 140.

² Richard K. Betts, Is strategy an Illusion? *International Security*, 25 (2), 2000. p. 19.

³ Robert C. Gray, Learning from History: Case studies of the weapons acquisition process, *World Politics*, 31 (3) 1979. pp. 457-470.

⁴ William Agnell, Offensive versus defensive: Military strategy and alternate defence, *Journal of Peace Research*, 24 (1), 1987. p. 84.

(the impact of procurement upon policy will be discussed in Chapter 6).⁵ This chapter argues that, in the case of Japan, both internal and external political factors guide the process and offers a broad analysis of the elements impacting Japan's defence system.

Domestically, Lieberman suggested three levels of analysis for political systems; the government itself, organizations formed by the citizenry and the ideologies and cultural factors that influence them.⁶ The examination of Japan's internal influences requires a further level which separates 'ideologies' and 'norms' into distinct groups, on the basis that the former represents competing political views while the latter will refer to broader societal values that encompass and influence (to varying degrees) all other elements of the system. Following this, the impact of regional neighbours, the international community and Japan's primary defence ally, will be similarly assessed to show the extent of their impact upon defence policy.

Domestic Factors

The Governmental Level

In recent years Japan's executive branch has sought to exert a more forceful security policy.⁷ Nonetheless, and despite incremental growth in the military's freedom of action, its efforts have been labeled as unfocused and lacklustre.⁸ This can be attributed to three aspects of Japan's political system. First, what Curtis calls 'linkage', the use of informal institutions to circumvent the constraints of formal governmental structures, and the role

⁵ Gray, Colin. Op cit. pp. 2,11.

⁶ Robert C. Lieberman, 'Ideas, Institutions and Political Order: Explaining Political Change', *American Political Science Review*, 96 (4), December 2002. 697-712.

⁷ For example, 'Japan PM wants more assertive foreign policy,' *BBC News*, 21 January, 2011.

⁸ See: 'Kans political instability forces japan foreign affairs to stall,' *Jiji*, February 1, 2011, and, Allen Choate, 'Japan Gets New Prime Minister, but Same Foreign Policy Challenges Remain', In Asia, *The Asia Foundation*, 9 June, 2010.

of the formal ones in rubber-stamping the arrangements made via the former.⁹ The second is the 'bottom-up' system of policy-making that sees policy set at the bureau level of ministries, before being passed up the chain to see if decisions are acceptable, what Mulgan calls the 'UnWestminster' system, in that the executive is largely left out of the fundamental creation of policy.¹⁰ The third element is the influence of societal norms upon the executive, which prioritizes maintenance of the status quo and punishes leaders who fail to do so.

The Cabinet Affairs Office (Naikaku-fu)

While Japan's Prime Ministers occasionally deliver strongly worded speeches the actual implementation of any resulting policy, directed to the various ministries via the Cabinet Affairs Office, has generally been far more hesitant,¹¹ such that the elected leadership are considered quite weak in comparison to European and American counterparts.¹² The main avenue of influence for the Prime Minister has been the Security Council (as detailed on p. 55) and it remains to be seen how the recent changes will impact the role of the central leadership on policy-making. In the past it has been the bureaucracy who draft the Prime Minister's policy speeches and, while some leaders try to override this with their own individuality, any premier who steps too far out of line will be corrected.¹³ Edstrom notes that, particularly in foreign policy, Prime Ministers have been "extraordinarily cautious in stating their views on the general rules guiding international relations. Their enunciated view can best be described as a

⁹ Gerald L. Curtis, *The Logic of Japanese Politics*, (New York: Colombia University press, 1999). 4

¹⁰ Aurelia George Mulgan, 'Japan's 'UnWestminster' System,' *Government and Opposition*, 38 (1), January 2003. 77.

¹¹ Curtis, Op cit. 236.

¹² Robert Angel, 'Prime Ministerial leadership in Japan: Recent Changes in personal style and Administrative Organization', *Pacific Affairs*, 61 (4), Winter 1989. pp. 583-602, and, Duncan McCargo, *Contemporary Japan*, (New York: Palgrave, 2004). 94.

¹³ Bert Edstrom, 'The Yoshida Doctrine and the unipolar world', in Christopher P. Hood (ed.), *The Politics of Modern Japan*, (New York: Routledge, 2008). 7.

collective silence."¹⁴ Additionally, due to the bottom-up nature of the system, any policy developed by the Cabinet Affairs Office has to first pass down the chain of command and then back up once-again, enduring modification, or derailment, from dissenting voices within both the bureaucracy and the ruling party, with success often won at the cost of radical alteration.¹⁵

Previous efforts by governments to wrest power back from the bureaucracy met with only limited success.¹⁶ Resistance to sudden, unilateral decision-making is anchored deep within Japanese society and its political institutions, and leaders who attempt to make a case for urgent or drastic change are rarely successful in attracting support.¹⁷ The exception is in cases of clear and imminent danger, yet even in such scenarios caution will often win out, as evidenced by the failure of the Kan administration to declare a formal 'state of emergency' in the wake of the Tohoku and Fukushima disasters.¹⁸ A similar excess of caution was shown in the 2012 delay in announcing the launch of a North Korean missile, which sparked outcry from the public over government hesitation.¹⁹ In the past, the Cabinet Secretariat had some impact on defence policy but this role has now been assumed by the new National Security Secretariat. Other than this the Cabinet Legislation Bureau is also capable of having direct impact on policy matters.

¹⁴ Bert Edstrom, *Japan's evolving foreign policy doctrine: from Yoshida to Miyazawa*, (London: Macmillan, 1999) 160.

¹⁵ Tomohito Shinoda, 'Japan's top-down policy process to dispatch the SDF to Iraq', in Christopher P. Hood (ed.), *The Politics of Modern Japan*, (New York: Routledge, 2008). 52

¹⁶ Shinoda Tomohito, *Kantei Gaiko: Seiji Ridaashippu no Yuku*, (Tōkyō: Asahi Shinbunsha, 2004); Gilbert Rozman, "Japan's North Korea Initiative and US-Japanese Relations", *Orbis*, Foreign Policy Research Institute, Spring 2003; Also, David Potter and Sudo Suetō, 'Japanese Foreign policy: No longer reactive?' *Political Studies Review* 1:3; September (2003), 317-332; Hasegawa Yukihiro, *Nipponkoku no Shōtai*, (Tōkyō: Kōdansha, 2009).

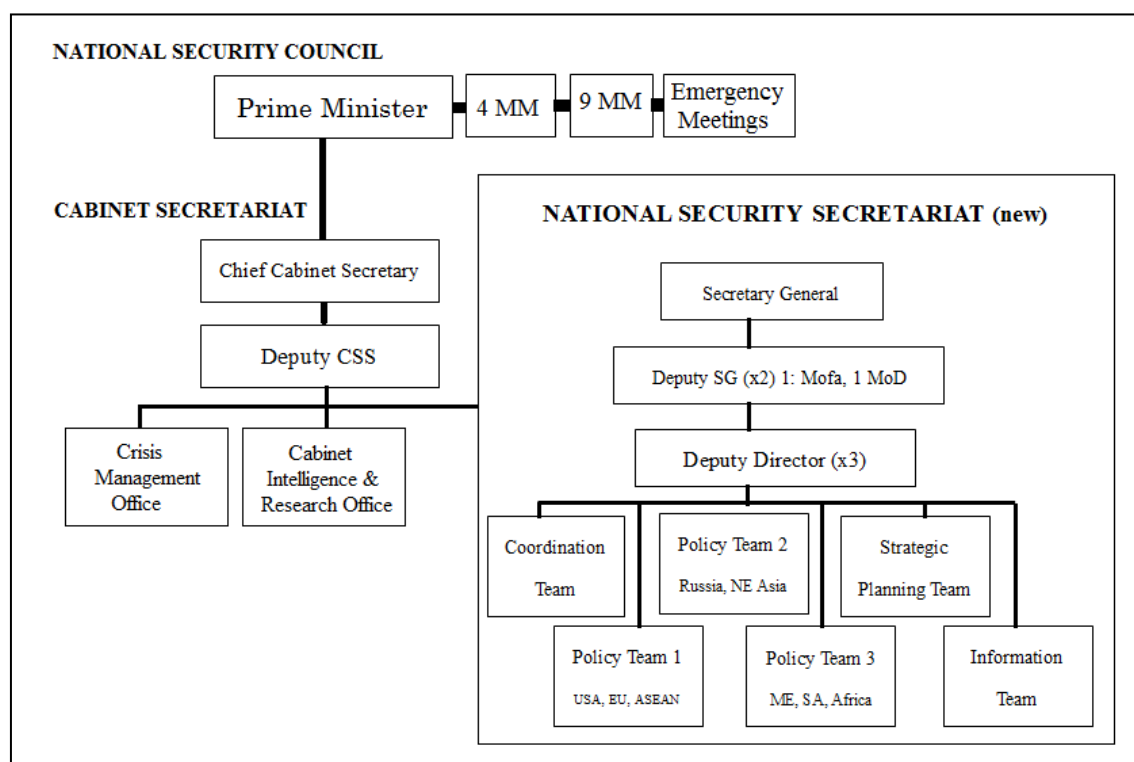
¹⁷ Curtis, Op cit. 19.

¹⁸ Shuichi Wada, 'Operation Tomodachi in Miyagi Prefecture: Success and Homework', *CSIS*, 23 December 2011.

¹⁹ 'Japan embarrassed again over N. Korean launch', *Asahi Shimbun*, 14 April 2002.

The Security Secretariat.

Where previously the Cabinet Secretariat contained a variety overlapping positions with poorly defined roles in security policy implementation, the new structure has pared down Security Council set the agenda which is then carried out by a Security Secretariat that exists within the broader Cabinet Secretariat. Two other elements of the Cabinet Secretariat, the Crisis Management Office and the Cabinet Intelligence and Research Office are also closely linked to security matters and liase closly with the Security Secretariat. Within the latter body there are six working teams responsible for specific areas, namely: Team 1-Central Coordination, Team 2–USA, EU & ASEAN, Team 3–Russia and NE Asia, Team 4–Middle East, South America & Africa, Team 5–Strategic Planning, Team 6–Information Management (See Figure 3.1).

Figure 3.1

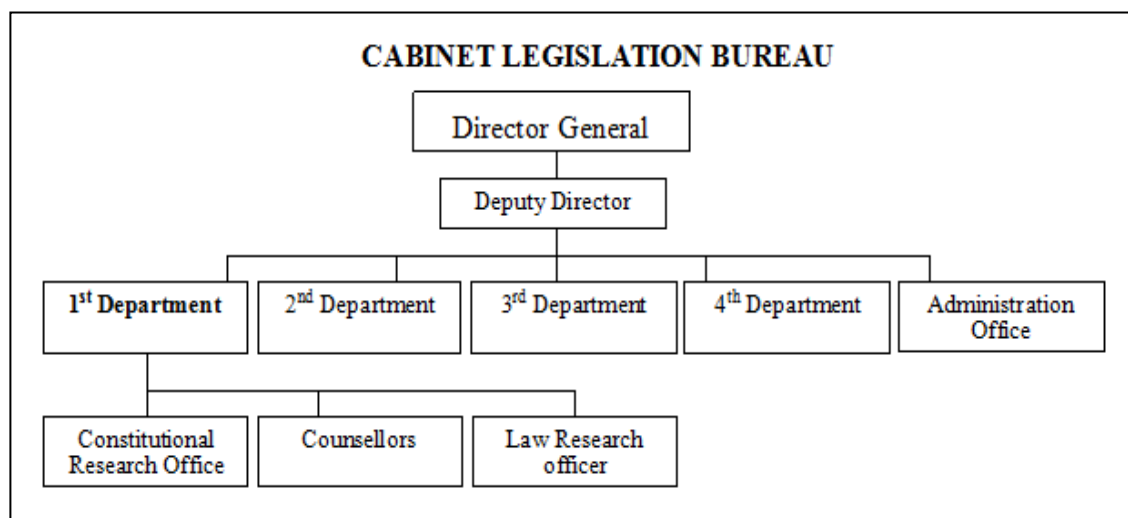
The Cabinet Legislation Bureau (CLB).

This office exercises responsibility for the legal interpretation of government directives and is made up of four departments (see Figure 3.2). The 1st Department advises the government on interpretation of current and pending laws. While not determining legality (this is done by the courts), their interpretations can create significant 'wiggle room'. The 2nd, 3rd and 4th Departments in turn interpret laws for each of the Ministries and government agencies, with the MoD handled by the 2nd Department.

The 1st Department in particular is important for defence policy in that it is responsible for interpreting constitutional limitations regarding the use of military force and drafting any proposed revisions to the constitution. Senior members, however, are seconded from the Ministries, especially Justice and Finance, and thus have stronger loyalty to their ministerial doctrines than central political authority. Additionally, the passage of any revision requires a two thirds vote in both houses of the Diet and a majority in a national referendum. As a result, while the Prime Minister does have influence over the form any revision might take, actually putting it into law requires the full support of (at the very least) his own party, a trade-off that inevitably results in a watering down of any individual decisions.²⁰ Public support for change has been increasing, with 54% now in favour of revisions,²¹ yet revisions have been predicted numerous times in the past only for the status quo to prove stronger.

²⁰ Tomohiko Taniguchi, 'Wither Japan? New constitution and defence build-up', *Brookings Institution*, May 2005.

²¹ *Asahi Shimbun*, 3 May 2011.

Figure 3.2

The Ministries

In efforts to increase politicians power, reforms in 2001 saw the previous 23 ministries consolidated in 13 core ministries, and the establishment of politically chosen 'vice-ministers' who would try to increase central authority within each ministry.

The primary ministries influencing defence policy are the Ministry of Foreign Affairs (MoFa), which handles international relations and the US-Japan Security Treaty; the Ministry of Enterprise, Trade and Industry (METI), which oversees defence exports; the Ministry of Finance (MinFin), which determines budgetary issues; and, of course, the Ministry of Defence (MoD), which oversees the JSDF and defence production. While the MoD is clearly the core, it is heavily influenced by MoFa, which supplanted MinFin in the 1980s as primary author of security policy,²² and has only grudgingly relinquished decision-making power to the MoD since its establishment in 2007.

²² Takao Sebata, *Japan's Defence Policy and Bureaucratic Politics, 1976-2007* (New York: University Press of America, 2010). 1.

The power of Ministers is severely hampered by a high turnover rate that sees few serve even two years before replacement. In the past 30 years, MoFa has had 27 different Ministers, MinFin has had 24 and the MoD (and the previous defence Agency) has had 41. Leadership of the MoD in particular has been viewed as a low-prestige position with the high turnover attributed to a desire to prevent contamination of civilian leaders by the military.

Ministers are also highly vulnerable to scandals, whether their own or simply occurring within their Ministry and requiring them to 'fall on their sword'. Personal problems led to the resignation in 2011 of Foreign Minister Maehara,²³ the same year comments by a bureaucratic defence deputy led to calls for resignation of the Minister himself,²⁴ while a series of gaffes saw the replacement of two Defence Ministers, Ichikawa Yasuo and Tanaka Naoki, in 2012.²⁵ Each such event weakens the direct political control over the Ministry, thus forestalling any major change of policy. As a result, the power of Ministers to exert dominance over their underlings is weak, leaving the senior bureaucrats of each Ministry (Administrative Vice Ministers and Bureau Director Generals) as the de facto orchestrators of policy.

The Ministry of Defence

The central policy-making organ of the ministry is the 'Defence Policy Bureau', which coordinates interaction with friendly international forces (see Figure 3.3). Its 'Defence Planning Division' coordinates with the JSDF regarding the acquisition of military systems, while the 'Strategic Planning Office' acts as the MoD's source of input for

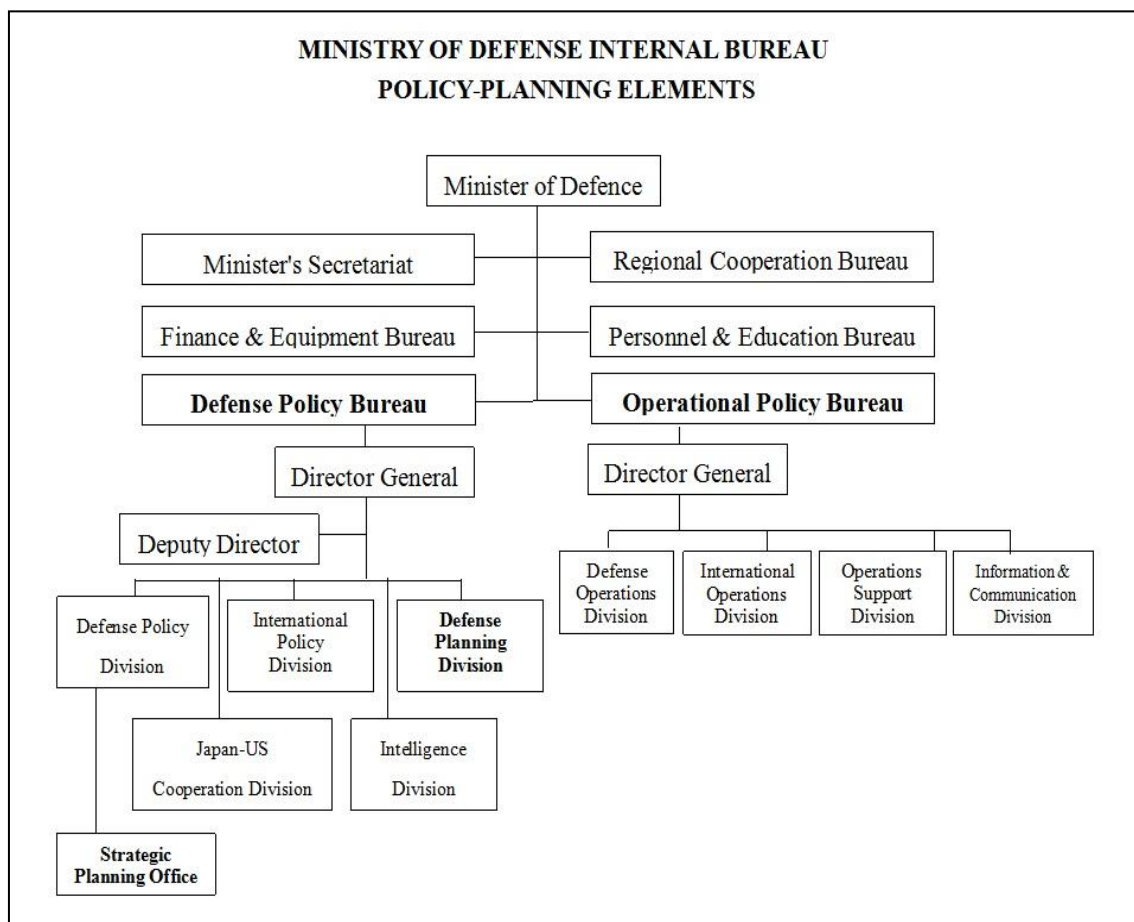
²³ See: Justin McCurry, 'Japan foreign minister resigns over illegal donations,' *The Guardian*, March 7, 2011, and Sachiko Sakamaki, 'Kan says he plans to resign after passage of Japan's quake, energy bills,' *Bloomberg*, June 14, 2011.

²⁴ Takashi Hirokawa, 'Noda Ally Calls on Japan defence Chief to Resign', *Bloomberg*, 6 December 2011.

²⁵ 'Noda gets rid of censured Cabinet Ministers', *Asahi Shimbun*, 4 June 2012.

overall national defence strategy, however its influence is "far from sufficient to offer long-term strategic views that win the ears of senior MOD officials, let alone across the government."²⁶ A 2008 Advisory Council on MOD reform suggested that too much time was spent restructuring the MOD and not enough ensuring it was productive.²⁷ Consequently, despite its key role in implementing defence policy, the MoD does not play a large part in formulating it.

Figure 3.3



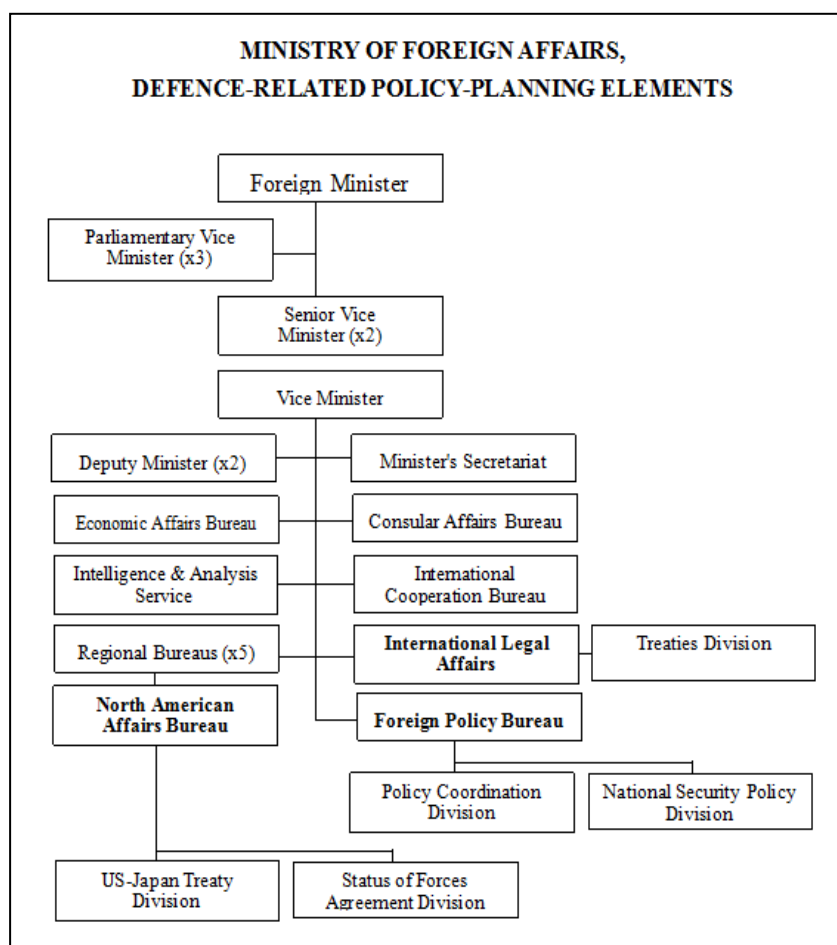
²⁶ Yuki Tatsumi, *Japan's National Security Policy Infrastructure*, (Washington DC: Henry L Stimson Center, 2008). 50

²⁷ 'Bōeishō ni okeru Soshiki Kaikaku ni kansaru Kihon Hōshin', Japan Ministry of Defence, 27 August 2008.

Ministry of Foreign Affairs

In the Post-war era MoFa acted as the connection between US rule and the new Japanese government, playing the role of "traditional steward of alliance".²⁸ Following the Cold War fighting broke out between three factions within the ministry: pro-US, pro-US/China and pro-US/China/Russia. After years of political infighting the pro-US faction achieved political dominance and members of the other factions were purged from senior ministry positions.²⁹ Even so, the North American Bureau, home of the US-faction and formerly the key security-related bureau, lost considerable influence to the Foreign Policy Bureau. The International Legal Affairs Division has also increased its stature and is responsible for security treaties with non-US countries (see Figure 3.4).

Figure 3.4



²⁸ Tatsumi, Op cit. 34.

²⁹ Satō Masaru, *Kokka no Wana*, (Tōkyō: Shinchōsha, 2005).

The Bureaucracy

The bureaucracy consolidated its power in the Occupation period, when a politically-purged elite worked with US authorities to rebuild the Japanese state.³⁰ Due to the bottom-up nature of the resulting system, it is the deputy directors of Ministerial subdivisions (*ka*) who make the key decisions on policy. These men are “expected to be able to finalize policy” as a prerequisite for their position.³¹ Their decisions are then shared at working groups that include members of the Ministry’s other divisions. If accepted they are passed up to a new meeting including representatives from other Ministries. The final stage is being passed up for political acknowledgement. This process of informal consultation (*nemawashi*) can also include political groups, either opposition parties or factions within the government who might oppose leadership policy. By doing this, the bureaucrats can frequently bypass or overrule any political directives from above that they disagree with. This does not mean, however, that the bureaucracy is a unified whole, rather its disparate elements will frequently vie for control with each other as much as with their elected supervisors.³²

Of course, bureaucrats everywhere are prone to territoriality over their particular ministerial fiefdoms, Curtis quotes a prominent British MP as saying, “whatever you try to do that breaks with precedent the bureaucracy will try to sabotage it.”³³ This is especially true in Japan with examples to be found in the rebellion by MoD bureaucrats against the leadership of Tanaka Makiko, which forced her resignation in 2003 and, more recently and explicitly, in the clash between Prime Minister Hatoyama and the US

³⁰ See, Chalmers Johnson, *Who Governs Japan: The Rise of the Development State*, (New York: W.W. Norton and Company, 1995). 115-140, and Harold Kerbo and John A. McKinstry, *Who Rules Japan: The Inner Circles of Economic and Political Power*, (New York: Praeger, 1995).

³¹ Shinoda 2008, Op cit. 52.

³² Graham T. Allison and Morton H. Halperin, ‘Bureaucratic Politics: A Paradigm and Some Policy Implications’, *World Politics*, 24, Spring 1972. pp. 48-49.

³³ Curtis, Op cit. 7.

over Okinawan basing.³⁴ In that case MoFa went against the will of both the Prime Minister and Foreign Minister to advise the US government on how best to negotiate in order to get Hatoyama to capitulate, urging the US to “stand firm” and describing Hatoyama as “inexperienced”, “stupid” and “weak when speaking with strong individuals”.³⁵ This strong American influence over the bureaucracy has been evident throughout the post-war era, in the earliest years of which the Ministries were purged of militarists and stocked with pro-US administrators.³⁶

An additional curb on the policy-making ability of the elected government is that, while the constitution places authority firmly in political hands the ability to provide expert opinion is generally restricted to specialists within Ministry bureaus. Political parties themselves rarely develop research capability and Think Tanks, of the type found in the US and Europe, are less common in Japan and far less involved in the political process.

The Organizational Level

This level is a complex web of ties between politicians and bureaucrats, bureaucrats and business, politicians and unions, etc. Before policy is determined many things must be considered: tolerance for or opposition to desired changes, the likelihood of political backlash and the levels of concession that might be required in other areas to forestall this. ‘Negotiation’ and ‘compromise’, thus become keywords.

³⁴ Eric Heginbotham, 'Raising the bar on the military: Is Japan ready?', *International Herald Tribune*, 19 December 2003

³⁵ Gavan McCormack, 'Deception and Diplomacy: The US, Japan, and Okinawa', *The Asia-Pacific Journal* Vol 9, 21(1), May 23, 2011

³⁶ S. Javed Maswood, *Japanese Defence: The search for political power*, (Singapore, Institute of Southwest Asian Studies, 1990). 19.

Political Parties

Though nominally expected to represent the electorate's will, Japan's political parties favour the common cartel system of politics in which the successful contenders for office work together to maximize their own gain and lock out potential competitors.³⁷ Informal systems of negotiation between political parties and the bureaucracy create subsurface ties that allow alliances to exist beyond the bounds of party loyalty alone.

Like the bureaucracy, political parties have subdivisions which focus on particular policy issues. The LDP itself has 17 subcommittees and 30 research commissions that study subjects such as defence, education, construction, etc.³⁸ Politicians in these policy tribes (*zoku*) can frequently act against party doctrine to promote personal or issue-driven goals.³⁹ They may also belong to more than one *zoku*, meaning they can find themselves forced to sacrifice the interests of one in order to further the goals of another. The net effect of this bargaining and compromise is to reduce the political process to a lethargic series of multiple rounds of negotiation.⁴⁰

Defence in particular, is seen as a weak generator of pork barrel projects and thus not an issue of major concern for politicians or their constituents.⁴¹ Ishibashi found it to be a minor issue, used primarily to score political points rather than to advance ideological beliefs.⁴² This pragmatism can be seen in the support by supposedly pacifist New Komeito for the dispatch of troops to Iraq in 2004, and advocacy from the previously

³⁷ Curtis, Op cit, 53

³⁸ Shinoda, Op cit. 55.

³⁹ Curtis, Op cit. 230.

⁴⁰ Caroline Rose, 'The textbook issue: Domestic sources of Japan's foreign policy,' in Christopher P. Hood (ed.), *The Politics of Modern Japan*, (New York: Routledge, 2008). 166

⁴¹ Kent E. Calder, *Crisis and Compensation: Public Policy and Political Stability in Japan 1946-86*, (Princeton: Princeton University Press, 1988). pp. 421-427.

⁴² Ishibashi, Op cit. 766-789.

anti-militarist DPJ for increased weapons exports in 2010. This extends to infighting within parties, where defence is often used as a political tool rather than addressed as a security concern. During Koizumi's push for JSDF deployment to Iraq, anti-Koizumi factions within the LDP used the policy to attack the Prime Minister, while members of the Senate delayed the proposed legislation merely to bolster their own election campaigns.⁴³ The impact of this factionalism is downplayed by constructivists such as Oros, Midford and Katzenstein who ascribe the hesitant, step-by-step approach to policy promotion, to fear of public discontent and a desire to achieve consensus. There are, however, numerous examples of parties which, in gaining positions of strength, have pushed through strongly opposed policies by sheer force of numbers. This is something that can be seen in government's annual reaffirmation of the US-Japan alliance as the key element of Japan's security. In 2010 only 19% of the population believed the alliance should be the basis for Japan's security (with 55% preferring a regional framework focused on Asian neighbours), and only 12% saw US military deterrence as the best solution to tensions with China (23% preferred enhancing diplomacy with China).⁴⁴ Rather than Katzenstein's idea of a cooperative "non-majoritarian community",⁴⁵ Japan is a highly-fractured political network within which achieving a majority is a time-consuming process filled with compromise. This compromise is purely political though and by no means reflects a desire of the government to adhere to popular opinion.

Think Tanks

Japan's Think Tank system has generally played a more reactive role than those of the US and Europe and are largely commissioned by the government, political parties or

⁴³ Shinoda, Op cit. 62-63.

⁴⁴ NHK Opinion Poll, November 2010.

⁴⁵ Katzenstein, 1996. 32.

other groups to conduct research on specific topics (often with a predetermined policy objective in mind). In both number and quality they rank far behind the USA, which has 1815 established Think Tanks compared to Japan's 103, with 10 American groups appearing in the world's top thirty and none from Japan.⁴⁶ Think tanks also play a key role in US policy formation, with 17% of speakers at US government hearings being members. In contrast representatives of Japan's Think Tanks never appear at such hearings.⁴⁷ In 2012 the Japanese government has slashed funding for the major foreign policy Think Tanks suggesting that their low influence is set to decline even further.⁴⁸

Business and Industry

Throughout Japan's history the defence industry has had considerable influence over scientific and economic development. The political influence of such companies peaked, however, in the late 1980s, a time when some suggested that a new military-industrial complex was emerging. This never occurred and instead defence sales plummeted, creating disillusionment with the defence sector. The major firms shifted their capital investment to more lucrative areas such as engineering and transport and maintained defence projects only where they could be supported within these other divisions.

At present, defence accounts for only 0.8% of industrial output and while this seems stable, major growth is unlikely.⁴⁹ Military systems are often built on a replacement basis and given projections for a 0.5% economic contraction in Japan over the next

⁴⁶ 2012 *Global Go To Think Tank Index*, (Philadelphia: University of Pennsylvania, 2013)

⁴⁷ Seiki Kageura, 'Japan's Defence Policy: The view from Washington DC,' The Brookings Institute, 21st Century Defence Initiative Policy Paper, 13 August 2012. 28.

⁴⁸ Toshihiro Nakayama, 'How to Enliven Japan's Think Tanks', *Nippon.com*, 16 August 2012.

⁴⁹ Takashi Shiraishi, 'Looking ahead in promoting free trade and sustaining Japan's defence industry', *Nippon.com*, 21 June 2012.

decade, producers are likely to continue to focus on defence primarily as a source of potential spin-off technology.⁵⁰

Even so, a large number of companies have developed linkages with the defence bureaucracy by hiring retired bureaucrats for lucrative positions in their company. This process, known as *amukadari* ('descent from heaven') is similar to the 'revolving door' seen in the US and Europe, though the Japanese version is unidirectional.⁵¹ Senior bureaucrats, forced to compete for a decreasing number of top positions, can instead opt for a highly-paid position at a company closely tied to the Ministry where they effectively function as lobbyists.⁵² The same applies to senior military officers, the majority of whom find employment with defence related firms (see Table 3.1). In the past this gives rise to scandals involving bid-rigging and bribery, with a recent case involving the ASDF described by the Defence Minister as a textbook case of bid-rigging led by government officials.⁵³

⁵⁰ Naoki Abe, 'Japan's shrinking economy', *The Brookings Institute*, 12 January 2010.

⁵¹ Richard A Colignon and Chikako Usui, *Amukadari: The Hidden fabric of Japan's Economy*, (London: ILR Press, 2003). 2-4.

⁵² Hiroki Ogawa, 'The problem with Amakudari', *The Diplomat*, 23 March 2011.

⁵³ 'Bid-rigging at the ASDF', *Asahi Shimbun*, 27 March 2010.

Table 3.1

Post Retirement Employment of Military Personnel 2011-12				
	Total	In Defence Related Firms	Senior Officers	In Defence Related Firms
Total Retirees	177	94 (53%)	36	21 (57%)
Consultants	43	28 (65%)	29	17 (58%)
Advisors	6	2 (33%)	2	2 (100%)

Source: *Jiei-kan no sai shūshoku jōkyō no kōhyō ni tsuite*, Ministry of Defense, 7th September 2012.

Several distinct lobbying groups, the Japan Defence Industry Association, the Japanese Aircraft and Space Industry Association, the Japanese Shipbuilding Industry Association, and Keidanren, also lobby for increased investment in defence. Yet, the fact that since the early 1980s they consistently pushed, without success, for relaxation of the export prohibitions suggests that the influence of business over actual policy is not particularly strong.

Unions

The major representative of Japanese workers is the Japanese Trade Union Confederation (Nihon Rōdōkumiai Sōrengōkai), commonly known as Rengo. With 6.8 million voting members it was a key factor in helping the DPJ oust the LDP in 2010.⁵⁴ Although nominally left-wing and pacifist, its interests are in economic and social issues rather than defence and dissatisfaction with DPJ policy saw their support shift to the LDP,⁵⁵ suggesting higher interest in pragmatism than ideology.

⁵⁴ Keiko Izuka, 'Three Keys to Understanding Japan's New Diplomacy', *Brookings Institution*, 16 October 2009

⁵⁵ 'Rengo may rethink support for DPJ', *Yomiuri Shimbun*, 4 July 2012.

The Japan Self Defence Forces (JSDF)

In the aftermath of World War Two Japan's politicians shifted blame for the war from themselves to the military, ensuring strict civilian control of the military would thereafter be enforced.⁵⁶ In 1978 General Kurisu was dismissed simply for calling for the JDA to be raised to Ministry status.⁵⁷ The military's ability to participate in policy-making has increased since, though their influence is still carefully monitored, with the DPJ's Chief Cabinet Secretary, referring to them in 2010 as "an instrument of violence", and giving instructions that politicians should not attend JSDF events.⁵⁸ JSDF officers voicing opinions on political issues remains a contentious area, with General Tamogami, Chief of Staff of the ASDF, fired in 2008 after writing an article challenging perceptions of World War Two.⁵⁹ The major effect of such scandals lies in how they hamper implementation of defence policy by lowering the threshold of what the public and neighbouring states are willing to accept in terms of military 'normalization'.

Offsetting this is the positive response to JSDF participation in disaster management. While long considered the most suitable role for the JSDF, the Tohoku disaster constituted its first major deployment since the end of World War Two and their tireless work earned substantial public goodwill.⁶⁰ Since then further relief operations have made the military more widely-appreciated than ever to other JSDF activities, with 87% supporting overseas deployments, including peacekeeping, anti-piracy and humanitarian operations (see Table 3.2).

⁵⁶ Thomas U. Berger, "From sword to Chrysanthemum: Japan's culture of Anti-militarism", *International Security*, 17 (4), Spring 1993. 119-150.

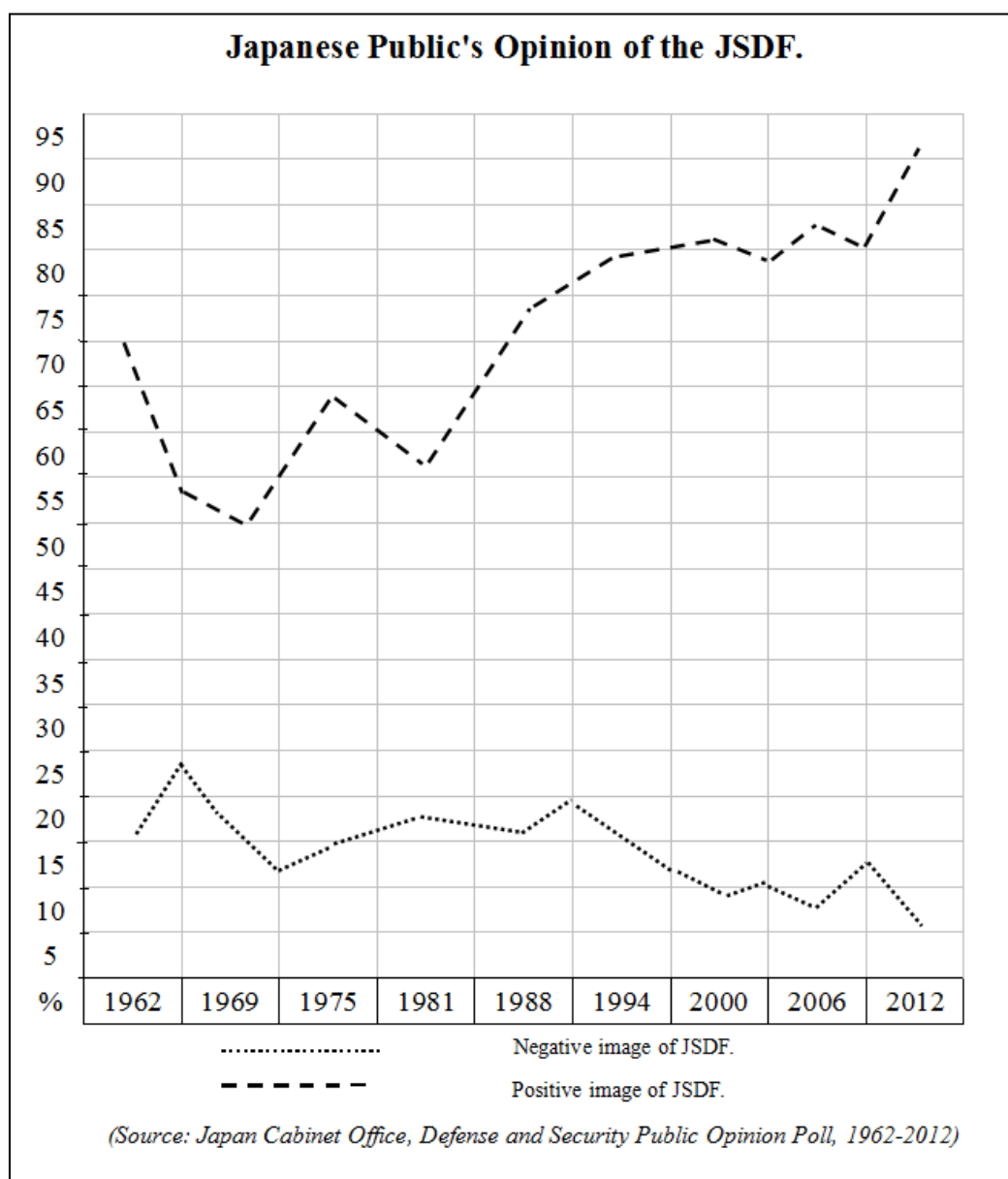
⁵⁷ John Welfield, *An empire in Eclipse: Japan in the postwar American alliance system*, (London: The Athlone Press, 1988). P. 404

⁵⁸ 'Sengoku: SDF events not for open candor,' *Kyōdō News*, November 19, 2010,

⁵⁹ Hiroko Willcock, 'The political dissent of a senior General: Tamogami Toshio's nationalist thought and a history controversy', *Asia Politics and Policy*, Vol. 3, No. 1, 2011. 29-47.

⁶⁰ Kazuyo Kato, "The Response to Japan's March 11 Disaster: When the Going Gets Tough...", Japan Chair Platform, *Center for Strategic and International Studies*, Washington DC, 25 March 2011.

Table 3.2



JSDF members themselves value this appreciation and place a high priority on relief operations. Nonetheless, they also greatly admire the way US forces are perceived by their public and many feel this is the model to which they should aspire.⁶¹ While the broader roles of the US are in conflict with what Japan's public might prefer, it seems likely that should politicians push the JSDF toward a more aggressively militaristic role,

⁶¹ Sabine Fruhstuck, and Eyal Ben-Ari, "Now we show it all! Normalization and the management of violence in Japan's armed forces", *Journal of Japanese Studies*, 28 (1), Winter 2002, 1-39.

the military itself would willingly acquiesce. At present though, they have a very limited range of influence upon procurement, with responsibility only for the initial speculative proposal regarding strategic requirements (step 1 on Table 2.21).

The Public

Analysts of Japanese defence frequently attribute strong influence to public will. Constructivists such as Katzenstein, Berger and Chai, argue that it constrains defence spending, leaving the state only weakly autonomous from public opinion.⁶² Oros suggests that the public are not concerned with defence spending per se, but nonetheless prevent the government from going above the informal limit of 1% of GDP. This limit, however, has been upheld not through an objection to military growth but rather due to higher prioritization of other areas (and its use in abetting a 'pass the buck' strategy).

Those who suggest the government is 'constrained' by public discontent fail to account for repeated cases in which the government acted against the dominant civil view. The US-Japan Security Treaty was forced through the Diet despite the majority of the public being opposed.⁶³ In 1965 a clear majority was against Japan supporting US operations in Vietnam, the same again regarding support for the Afghanistan Invasion in 2001, once more for support of the Iraq invasion in 2003 and again for deployment of troops to Iraq in 2004.⁶⁴ Where the passage of security policy becomes bogged down by

⁶² Thomas U. Berger, "From sword to chrysanthemum: Japan's culture of anti-militarism", *International Security*, 17 (4), 1993. Sun-ki Chai, 'Entrenching the Yoshida doctrine: Three techniques for institutionalization', *International Organization*, 51 (3), Summer 1997. Peter J. Katzenstein, *Cultural norms and national security: Police and military in postwar Japan*, (Ithaca: Cornell University Press, 1996).

⁶³; Paul Midford, *Rethinking Japanese public opinion and security*, (Stanford: Stanford University Press, 2011). 51.

⁶⁴ Ibid. 126.

negotiation and debate it is inevitably a result of the need for compromise between political parties and the bureaucracy rather than considerations of public opinion.

Regarding the Iraq Invasion Koizumi stated, "there are times when we can make mistakes by following public opinion",⁶⁵ and that "people who were once against the US-Japan Security Treaty and UN peacekeeping operations, are now for them. Iraq will be just the same."⁶⁶ Later he would tell his successors "don't worry about the cabinet's public support rates.....it is important to have insensitivity in such things."⁶⁷ This is further displayed in the fact that the security policy stances of the major parties (as previously stated in Chapter 2) strongly support deepening the US-Japan alliance, a position at odds with public sentiment (as shown on p. 108).

Political leaders feel comfortable ignoring such views due to what Havens calls the public's "ingrained resistance to becoming politically committed."⁶⁸ This lack of interest in matters of foreign and security policy has been widely recognised, with Kyogoku arguing that "the Japanese find the complexities of the international system beyond their control."⁶⁹ While they do have preferences, the vast majority lack strong opinions, positive or negative, on issues of defence and national security (though a spike in negative opinions followed the 2010 Senkaku Incident (see Table 3.3).

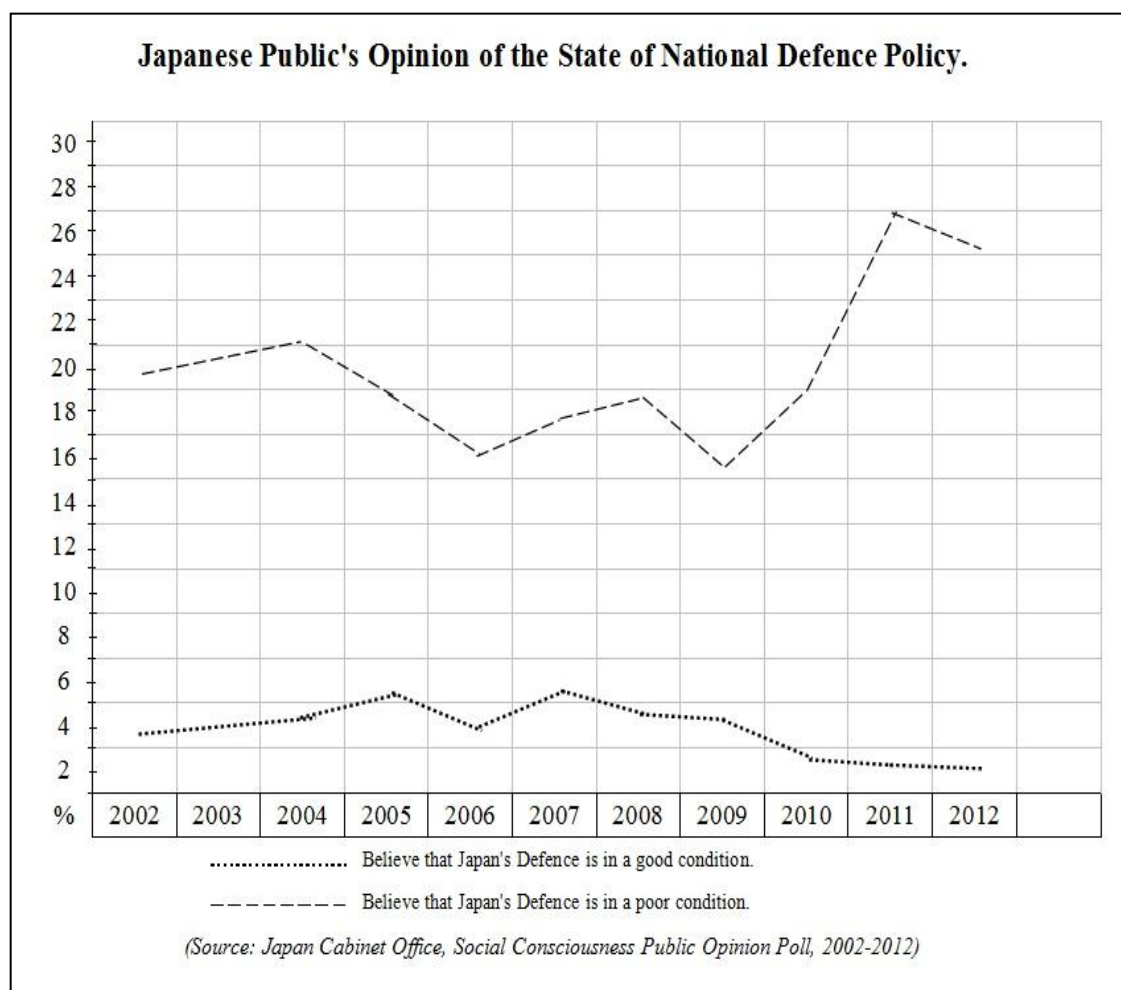
⁶⁵ Axel Berkofsky, 'Koizumi: US ties beat out public opinion', *Asia Times*, 20 March 2003.

⁶⁶ *Asahi Shimbun*, 20 January 2004.

⁶⁷ 'Koizumi tells Abe cabinet 'be insensitive'', *Asahi Shimbun*, 22 February 2007.

⁶⁸ Thomas Havens, *Fire Across the Sea and the Vietnam War, 1965-1975*, (Princeton: Princeton University press, 1987). 51.

⁶⁹ Kyogoku Jun'ichi, *Gendai Minshusei to seijigaku*, (Tōkyō: Iwanami Shoten, 1969), 170.

Table 3.3

More importantly, while public interest in defence has climbed in the past decade, these issues consistently receive an extremely low level of prioritization, featuring among the top ten most important issues only once in the past 12 years. The public are more concerned with issues of social welfare, economic growth, declining population and at least a half-dozen other areas that outrank defence (See Table 3.4).

Table 3.4**Placement of 'Defense and National Security' among 'Issues the Government should focus on'**

(plus, Percentage of people who see it as an important issue)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Rank	13 th	14 th	10 th	11 th	12 th	11 th	11 th	16 th	13 th	13 th	13 th	11 th
%	17.2	16.2	22.4	22.6	19.7	30.3	25.6	21.0	23.9	25.2	27.3	30.5

(Source: Japan Cabinet Office, Citizen's Lifestyles Public Opinion Poll, 2001-2012)

As a result of this, elections never hinge upon defence as a key factor of voter support and the government knows that public opinion is not a relevant factor in policy consideration.

The Ideological Level

Since the end of World War Two, Japan has employed a variety of security strategies. None have been universally accepted and the adherents of each view compete for dominance within both the government and the aforementioned power groups. Samuels identified nine distinct groups he believed had major influence,⁷⁰ yet significant overlap existed and a more balanced summary of current views might be as shown in Table 3.5.

In Japan politicians have a track record of holding short-term positions that can easily be overturned by scandals, public gaffes or a negative public reaction to any form of crisis. This means that they tend to have very little impact individually. Instead, it is their factional alignment that determines the course of national politics and to bring about change invariably requires the faction, rather than a specific figure, to retain their hold on power for an extended period so that new ideas can be introduced and progressed in an incremental manner that will not unsettle the citizenry.

⁷⁰ Samuels 2007, Op cit. p14

Table 3.5

FACTION	STRATEGY	ADHERENTS
Normal Nationalists	Seeking a militarily strong, independent Japan with Great Power status	Internationalists such as Ozawa Ichiro, and 'neo-nationalists' such as Tamogami Toshio and Ishihara Shintaro
US-aligned Realists	Adhering to the US-Japan alliance through shared ideals and a 'sword and shield' military strategy	Abe Shintaro, Koizumi Junichiro, Nakasone Yasuhiro
Pass-the-buck Realists	Making use of the alliance as a means of defence cost reduction, though sacrificing independence in foreign policy	Yoshida Shigeru
Trilateral Balancing Realists	Favoring a 'Goldilocks' equal relationship with both the USA and China	Advocated by security analysts such as Richard Samuels and Tanaka Akihiko
East-Asian Liberalists	Seeking an EU-style East Asian Community	Hatoyama Yukio
International Mercantile Liberalists	Accepting a Middle Power role with trade as a defence balancer	Advocated by politicians such as Kono Yohei and Kato Koichi and academics such as Soeya Yoshihide
Pacifists	Eschewing military power entirely and favoring diplomacy as a defence balancer	The Social Democrat Party, the Communist Party

The early 1960s was marked by a clash between the Normal Nationalists and advocates of US alignment, in the aftermath the Yoshida doctrine saw the Pass-the-buck strategy settling into place as the dominant paradigm. Since then there have been shifts, moving between Normal Nationalism and US-Aligned under Koizumi and his successors, and flirting with Trilateral realism and East Asian liberalism under the DPJ, but none have been able to overcome the factional nature of Japanese politics which ensures that necessary compromises will water down ideological elements of policy until a final version, acceptable to all, has become emblematic of its hybrid polity. That said, the government itself has remained consistently realist since the 1960s, with 'defensive realism' (comprising the aforementioned US-Aligned, Pass-the-Buck, and Trilateral Balancing schools of thought) providing the strongest influence on security policy.

Defensive-Realism

Izumikawa argued that Japan's post-World War Two security policy has been considered an anomaly from a realist perspective,⁷¹ yet this overlooks several studies which have shown a strong correlation between Japan's long-term security strategy and various strands of realist thought. Certainly it has long-abandoned any pacifist sentiment as, had such values been widely held by politicians, they would have prevented the development of any major military force and limited security activities to purely defensive roles. There would also have been a gradual distancing from the militarily aggressive policies of the US and a purely neutral stance in conflicts on the international stage. By 1976, however, the adoption of the first National Defence Policy Outline signalled a definite shift to self-serving realism. While some have argued that antimilitarism heavily influenced this document, studies of the relevant policy papers conclude that realism was the dominant influence with anti-militarist factors marginal at best.⁷² Since then, Japan's military build-up has perfectly matched what realist policies would suggest, including a post-Cold War downgrading of conventional forces and refocusing on ballistic missile technology,⁷³ while the country's nuclear policy provides what Levite calls "the most salient example of nuclear hedging to date".⁷⁴ As such, Japan's security policy is perfectly consistent with Twomey's view of the country as defensive realist.⁷⁵ Such states believe in the necessity of maintaining a robust defence

⁷¹ Yasuhiro Izumikawa, 'Normative and realist constraints on Japan's security policy', *International Security*, Vol. 35, No. 2, Fall 2010, pp. 123-160.

⁷² Tsuyoshi Kawasaki, 'Postclassical realism and Japanese security policy', *Pacific Review*, 14 (2), June 2001.

⁷³ Jennifer M. Lind, 'Pacifism or passing the buck? Testing theories of Japanese security policy', *International Security*, 29 (1), Summer 2004. 109-110.

⁷⁴ Ariel Levite, 'Never say never again: Nuclear reversal revisited', *International Security*, 27 (3), Winter 2002. 71.

⁷⁵ Christopher P. Twomey, 'Japan a circumscribed balancer: Building on defensive realism to make predictions about East Asian security', *Security Studies*, 9 (4), Summer 2000. 167-205.

but view expansionism as counterproductive.⁷⁶

At the same time Japan has engaged in 'bandwagoning' with the US, a state that is much more willing to make use of force in an offensive manner. Bandwagoning occurs when a weaker state realises it is incapable of opposing the will of a stronger state and instead allies with it so that it may gain some benefit from the stronger state's power.⁷⁷ In this manner Japan's moral and material support for numerous aggressive US wars against Iraq, Yugoslavia, Somalia, Afghanistan, Libya and others,⁷⁸ might easily be taken as bandwagoning. However, this passive support for aggression fits better with Lind's assessment of Japan's dominant strategy being one of 'passing the buck'.⁷⁹ This gives lip-service to being a pacifist state in order to let allies do all the heavy military lifting, yet requires maintenance of a minimum level of military power so that it might quickly respond itself should its ally fail to address a significant threat.⁸⁰ Historically this would lead to a pattern of Japanese military expansion any time the US failed to respond to regional threats, a pattern which Lind shows has been ongoing for several decades. Such buck-passing is the most cost-effective way of promoting defence and, as we saw in the post-World War Two development of the defence industry, Japan effectively used it to boost its domestic economy. Despite its low prioritization of domestic military strength, the crucial point is that buck-passing states are prepared to significantly boost their military capability should any vulnerability become apparent.

⁷⁶ Theories advocated by, Kenneth N. Waltz, *Theory of International Politics*, (Reading: Addison-Wesley, 1979), and Charles L. Glaser, "Realists as optimists: Cooperation as self-help", *International Security*, 19 (3), Winter 1994. 50-90.

⁷⁷ Randall L. Schweller, 'Bandwagoning for Profit: Bringing the revisionist state back in', *International Security*, 19 (1), Summer 1994. 72-107.

⁷⁸ Gavan Gray, 'Japan's passive support for US Wars: Examining the case for humanitarian intervention in Libya and Syria', *Ritsumeikan International Affairs*, 10, November 2011.

⁷⁹ Lind, *Op cit.* 92-121.

⁸⁰ Thomas J. Christensen and Jack Snyder, 'Chain gangs and passed bucks: Predicting Alliance', *International Security*, 9 (1). 104.

Kawasaki disagrees with Lind's assessment, arguing that Japan is instead a 'postclassical realist' whose "overall strategic goal is to reduce the intensity of the security dilemma in Northeast Asia", i.e. military power itself might be relinquished if this serves to reduce local tensions and safeguard economic interests.⁸¹ This would only be the case if, in periods of heightened tension, Japan consistently reduced its own capabilities as a placating gesture. As we will see below, the opposite is in fact the case and Japan responds to crisis by relaxing its opposition to change in order to expand its capacity for military action, clearly marking it as a reactive 'defensive realist'.

Leadership Ideology

Even Hatoyama's stand against the US on the Futenma basing issue,⁸² one of the few cases where the Japanese government could be argued to have taken an antimilitarist stand, is, when historical patterns are considered, closer to an example of realist 'balancing' as described by Walt, in which Japan seeks to act as a fulcrum between US and Chinese power.⁸³ This was also an example of the impact of individual leaders, with Hatoyama attempting to create a shift in defence policy based around his 'Yuai' philosophy of Asian fellowship.⁸⁴ That this failed was a result of failure to accommodate bureaucratic and alliance factors, rather than Hatoyama's political or public standing. The importance of support from these groups was evident in Prime Minister Noda's rejection of the East Asian Community idea in favor of a return to realist goals and support of the US-Japan alliance.⁸⁵ That Noda himself was a Normal

⁸¹ Kawasaki, Op cit., 221-40

⁸² David A. Fulhum, "Japan juggles on", *Aviation Week and Space Technology*, 172 (22), July 2010.

⁸³ Stephen M. Walt, *The Origin of Alliances*, (Ithaca: Cornell University Press, 1987).

⁸⁴ 'Yuai' can be translated as 'fraternal love' and in Hatoyama's interpretation would be aimed at Japan taking a leading moral role in international affairs. See, Keiko Izuka, 'Three Keys to Understanding Japan's New Diplomacy', *Brookings*, 16 October 2009, and Devin T. Stewart, 'Raising Japan's Profile', *The Daily Beast*, 5 November 2009.

⁸⁵ Shin Kawashima, 'The importance of Maritime Security', *Nippon.com*, 7 November 2011.

Nationalist, suggests a realization on his part that personal beliefs could only expect to progress if they first accommodated the elements which Hatoyama neglected.

More recently leadership ideology supplanting national interest has been exhibited in the Defence White Paper with the 2013 edition explicitly stating (in three separate places) that the fundamental values of the international community include not only democracy, the rule of law and respect for human rights but also support for “a capitalist economy”.⁸⁶ As an element of security policy this is something that the 10% of voters who supported the Communist Party in the 2013 election might find contentious and unrepresentative of a purely national interest.

Normal Nationalism and Resurgent Militarism

Many scholars have highlighted a resurgence of Japanese militarism over the past decade.⁸⁷ Ozawa Ichirō is only one of many prominent figures who have expressed humiliation over Japan's proscribed military power and called for a return to the status of a 'normal' nation.⁸⁸ Such figures have helped drive the incremental reclamation of military capability: the dispatch of troops to Iraq, refueling operations in the Indian Ocean, export of jointly-developed weapons to the US, the export of unarmed military vessels and the upgrading of the Defence Agency to a full Ministry.⁸⁹ More recently warships have been dispatched to Somalia's coastal waters, an overseas MSDF base was built in Djibouti and Japan has supported the concept of aggressive humanitarian intervention in conflict zones such as Libya, with defence analysts seeing Japan taking

⁸⁶ *Defence of Japan 2013*, 153, 154, 257.

⁸⁷ For in-depth reviews see, David Arase, 'Japan, the Active State? Security Policy after 9/11', *Asian Survey*, 47 (4), July 2007. 560-583, and Kersten Rikki, 'Japanese Security Policy formation: assessing the Koizumi revolution', *Australian Journal of International Affairs*, February 2011, 65 (1). 5-23.

⁸⁸ Jeff Kingston, 'Grand security plans for a stronger Japan', *Japan Times*, 18 November 2007.

⁸⁹ Norimitsu Onishi, 'Japan military recalibrates its definition of pacifism', *International Herald Tribune*, 23 July 2007.

an even larger role on the international stage in coming years.⁹⁰ As we shall see in Chapter 5 though, the direction this role is taking, is adhering very closely to US grand-strategy rather than any independent Japanese design. In the 1990s Green argued that this desire for 'normalization' was tied, not to defence concerns, but rather an underlying urge to be seen as an influential state.⁹¹ These normative desires, alongside the influence of the US, have had far more impact upon defence policy than the ideologies of political parties or their individual leaders.

The Normative Level

Katzenstein was one of the strongest advocates of the power of pacifist norms to constrain Japan's militarism,⁹² yet, by 2004 he had set aside such constructivist views to embrace an 'analytical eclecticism' which evaluated Japan's security from a more holistic perspective.⁹³ By 2008 he had moved even further to focus primarily upon the manner in which "Asia is tethered in both its security and economic relations to the American imperium."⁹⁴ Despite his change in trajectory the dominance of pacifist norms continues to be championed by others.⁹⁵

⁹⁰ Eric Talmadge, 'Japanese military assumes more global role', *AP*, 22 March 2009.

⁹¹ Green, 1998, 13.

⁹² In, Peter J. Katzenstein, *Japan's National Security: Structures, Norms and Policy Responses in a Changing World* (Ithaca: Cornell University, East Asia Program, Cornell East Asia Series, 1993), and Peter J. Katzenstein, *Cultural Norms and National Security: Police and Military in Postwar Japan* (Ithaca: Cornell University Press, 1996).

⁹³ Peter J. Katzenstein and Rudra Sil, 'Rethinking Asian Security: A Case for Analytical Eclecticism,' in J.J. Suh, Peter J. Katzenstein, and Allen Carlson (eds.), *Rethinking Security in East Asia: Identity, Power and Efficiency*, (Stanford, Ca.: Stanford University Press, 2004). pp. 1-33

⁹⁴ Peter J. Katzenstein, *Rethinking Japanese Security, Internal and external dimensions*, (New York: Routledge, 2008)

⁹⁵ Oros, *Op cit.*

Berger saw the roots of this norm as lying in a post-World War Two stigmatization of the populace,⁹⁶ while Hook spoke of the "persistent strength of anti-militaristic attitudes in Japan" including "resistance to a major build-up in the military",⁹⁷ yet such views are irreconcilable with the rapid accumulation of military technology and materiel that Japan experienced in both the pre and post-War years. Soeya had gone so far as to argue that, "No responsible decision maker in postwar Japan has ever attempted to convert accumulated economic wealth into military might,"⁹⁸ and yet the country had somehow come to possess one of the world's most powerful military forces. Despite this, many still adhere to the view that pacifism in Japan is both vibrant and highly influential,⁹⁹ and that it has been pacifist political ideology, rather than the nature of Japanese political compromise coupled with the low prioritization of security issues, which has forestalled constitutional reform.¹⁰⁰

Oros predicts that Japan will remain tightly bound by these constraints for the foreseeable future, based upon three "core tenets" of Japanese anti-militarism: no traditional armed forces, no use of force except in self-defence, no participation in foreign wars.¹⁰¹ The first is almost certain to be set aside in the near future, as the required change, simply renaming the Jietai (Self-defence force) as the Jiegun (Self-defence military) will be a minor step compared to the changes that have already occurred in the past decade. Panton has shown that the constitution has been undergoing

⁹⁶ Thomas U. Berger, *Cultures of Antimilitarism: National Security in Germany and Japan*, (Baltimore: John Hopkins University Press, 1998), 15.

⁹⁷ Glen D. Hook, *Militarization and demilitarization in contemporary Japan*, (London: Routledge, 1996), 8.

⁹⁸ Yoshihide Soeya, 'Japan: Normative constraints versus structural imperatives', in Muthiah Alagappa, (ed.), *Asian Security practice: Material and Ideational Influences*, (Stanford: Stanford University Press, 1998), 198-233.

⁹⁹ For examples see Yamamoto, 2004, Op cit. and Ishida, Op cit.

¹⁰⁰ Daniel A. Metraux, 'Religion, politics and constitutional reform in Japan: How the Soka Gakkai and Komeito have thwarted conservative attempts to revise the 1947 constitution', *Southeast Review of Asian Studies*, No. 1, January 2007.

¹⁰¹ Oros, Op cit. 34-39.

constant reinterpretation since its very inception, and that this process of revision has only gathered pace in recent years such that a full-scale revision of Article 9 itself is increasingly likely.¹⁰² The second and third tenets will almost certainly be broken at the same time and it is not improbable, given recent calls for Japan to play a part in an Asian NATO and the Japanese government's support for US policy on Syria, that Japan might engage in R2P operations similar to those carried out in Libya.¹⁰³ Moves toward such participation would raise immediate and lengthy debate in Japan's Diet over whether they constituted a breach, yet it is clear that if Japan was truly influenced by pacifism such debate would never be an eventuality.

A Dearth of Pacifist Policy

Katzenstein argued that Japan's anti-military norms remained remarkably stable in the post-Cold War period.¹⁰⁴ This is true only insofar as they remained consistently weak and ineffectual. After providing direct support to US operations in the Korean War and the Vietnam War, Japan continued to stand firmly behind US militarism during the 1991 Gulf War, in which Japan provided \$13 billion in material aid to the combatant forces.¹⁰⁵ Again during the 1999 NATO bombing of Yugoslavia, Japan stated that it understood the "necessity of the violence" in preventing a humanitarian catastrophe despite considerable evidence that this was not the case.¹⁰⁶ Vocal support for such "illegitimate measures" was still not enough for her allies, however, and the US pushed

¹⁰² See, Michael A. Panton, 'Politics Practice and pacifism: Revising Article 9 of the Japanese constitution', *Asian-Pacific Law and Policy Journal*, 11 (2), 2010. 163-218.

¹⁰³ See Chapter 5.

¹⁰⁴ Katzenstein, 1996. 116.

¹⁰⁵ Balbina Hwang, 'Japan's Troop Dispatch to Iraq: The End of Checkbook Diplomacy,' Heritage Foundation, Last modified February 9, 2004, <http://www.heritage.org/Research/Reports/2004/02/Japans-Troop-Dispatch-to-Iraq-The-End-of-Checkbook-Diplomacy>

¹⁰⁶ 'Japan says it 'understands' use of force,' *Japan Times*, March 25, 1999. See later in this article for analysis of the legitimacy of the bombings.

Japan to adopt a more forceful role as the “Britain of the Far East”.¹⁰⁷ When the invasion of Afghanistan began Japan was, once again, eager to offer support despite ample evidence that the protracted conflict was not only against the basic principles of Article 9,¹⁰⁸ but also of questionable international legality.¹⁰⁹ Similarly, the 2003 Invasion of Iraq was declared by Japan to have had a valid mandate,¹¹⁰ with Prime Minister Koizumi stating that Japanese financial support would extend to “everything”.¹¹¹

In Japan the comforting illusion is frequently embraced that purely monetary or material contributions are somehow ‘non-military’ and thus abrogate any responsibility for violence. Yet, it is axiomatic that there can be no non-military contribution to a war, aid of any form shares an overarching purpose that makes it an interchangeable military tool. By donating money, Japan allows the purchase of greater numbers of bombs and bullets, or the payment of the salary of soldiers for longer durations. By offering fuel Japan allows the US to divert its own budget into the similar areas. The same applies to ODA offered to Afghanistan in the place of JSDF participation, reducing the share the US must pay for stabilizing the civil sector allows it to bolster its military commitment.

The failure of Japan’s military to develop to the extent predicted by Pyle¹¹² and Samuels,¹¹³ can be put down to three factors; political happenstance leading to a series

¹⁰⁷ Institute for National Strategic Studies, *The United States and Japan: Advancing toward a Mature Partnership*, (Washington, National defence University, 2000).

¹⁰⁸ For a detailed breakdown of the argument against Japan’s Afghanistan policy see Gavan McCormack, ‘Japan’s Afghan Expedition’, *Eureka Street*, last modified December 2001, <http://www.iwanami.co.jp/jpworld/text/Afghanexpedition01.html>

¹⁰⁹ For extensive critiques of the legal justification for the war see Michael Mandel, ‘Say what you want, but this war is illegal,’ *Toronto Globe and Mail*, October 9, 2001. and Stephen R. Shalom, ‘A Just War? A critique of Richard Falk,’ *ZNet*, October 22, 2001.

¹¹⁰ ‘Attack mandate valid,’ *Japan Times*, March 18, 2003.

¹¹¹ McCormack, Op Cit.

¹¹² Kenneth B. Pyle, *Japan Rising*, (Cambridge: Public Affairs, 2007).

of weak leaders, successive rounds of horse-trading in which defence was a minor factor, and the continued benefit of a pass-the-buck strategy that uses pacifist opposition as an excuse to avoid increases in defence spending. Yasuo found that pacifist norms have no “independent causal effect” on defence spending, which instead requires institutional motives and other material factors for politicians to take an interest.¹¹⁴

Anti-Radicalism

The reality is that true pacifism and anti-militarism have not been widely held values in Japan since the early 1970s. During this period, the idea of ‘peace’ became subsumed into the concept of family well-being and economic security. In an analysis of Prime Ministerial speeches, Edstrom found that by the 1990s a focus on ‘peace’ was being replaced with an equivalent focus on ‘prosperity’.¹¹⁵ Japan had, by virtue of Article 9, come to regard itself as inherently peaceful and the promotion of peace came to mean a maintenance of the status quo.¹¹⁶ Defence issues were effectively ‘desecuritized’, seen as something that should not, regardless of actual capabilities, be publicly advanced, altered or advocated in any form. Japan developed a reputation as a “defence allergic nation” within which politicians, businessmen and academics were hesitant to establish connections with military affairs.¹¹⁷

Since then, what has frequently been portrayed as ‘Anti-Militarism’ is in fact Anti-Radicalism, a fear of sudden, unexpected or unplanned for change. As Hagstrom and

¹¹³ Samuels, 2007. Op cit.

¹¹⁴ Takao Yasuo, “Democratic representation in Japanese defence spending: Does public sentiment really matter?” *Asian Social Science*, 7 (3), March 2011. 3-25.

¹¹⁵ Bert Edstrom, ‘The Yoshida Doctrine and the unipolar world’, in Christopher P. Hood (ed.), *The Politics of Modern Japan*, (New York: Routledge, 2008). 14.

¹¹⁶ Simon Andrew Avenell, *Making Japanese Citizens: Civil Society and the Mythology of the Shimin in PostWar Japan*, (Berkeley: University of California Press, 2010). 143.

¹¹⁷ Yamamoto, Op cit. 22.

Williamson show, despite the incremental advances in defence policy in recent years Japan is not set to become aggressively militaristic,¹¹⁸ not because it eschews militarism but because doing so too rapidly would upset the status quo. Even Katzenstein now recognizes that “the overwhelming majority of the Japanese are sceptical about any departure from the status quo,”¹¹⁹ while Midford reveals this is not a new phenomenon and that, even prior to the weakening of dedicated pacifism in the 1970s, the vast majority of the public had long tended to favour the status quo.¹²⁰ In fact, regular polls of public opinion have shown that while support for and opposition to change in defence size fluctuate a great deal, they are minor forces and the great majority of people prefer, especially after 1975, that there is no change to current defence capabilities (see Table 3.6). Politicians can thus be sure that, whatever choice they make, extreme views at both ends will balance one another out and the non-committal middle will, providing no immediate ill effects or dangers arise, soon come to accept any minor modification as part of the new status quo.¹²¹

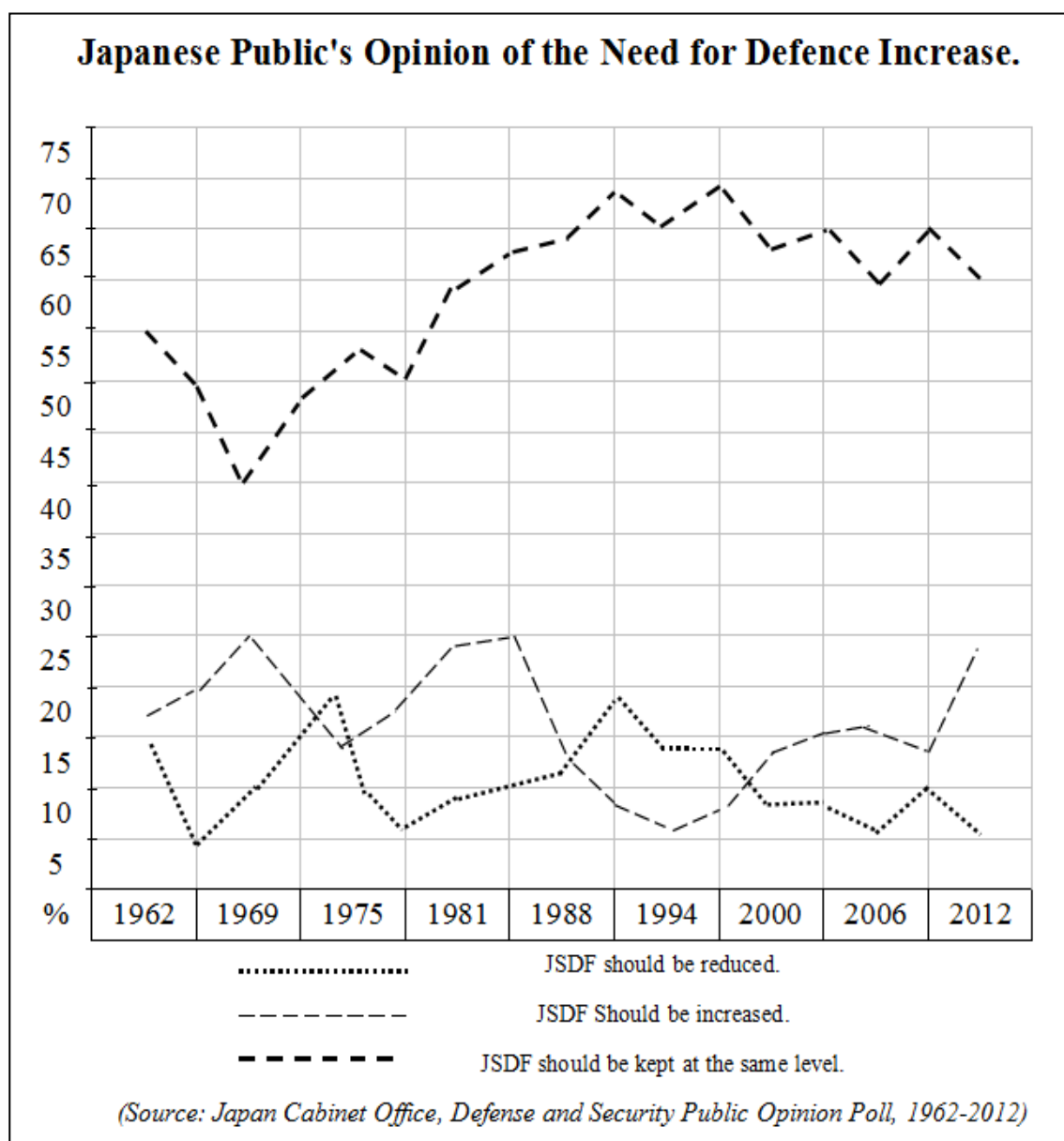
¹¹⁸ Linus Hagström and Jon Williamsson, “Remilitarization,” Really? Assessing Change in Japanese Foreign Security Policy’, *Asian Security*, 5 (3), 2009.

¹¹⁹ Katzenstein, 2008. 67.

¹²⁰ Midford, *Op cit.* 60.

¹²¹ *Ibid.* 18.

Table 3.6



A key element of the status quo is the US-Japan alliance, with support for the alliance not necessarily indicating love of the US as much as fear of the effect alliance renunciation might bring.¹²² Ironically, it is fear itself which is the major driver of change, in that while it favours consistency the public's greatest fear is sudden crisis and

¹²² John Welfield, *An empire in Eclipse: Japan in the postwar American alliance system*, (London: The Athlone Press, 1988). 413

thus “accepts change to the extent that it maintains the status quo,”¹²³ i.e. as a preemptive response to threats and dangers to stability.

The Fear Factor

As previously stated, the Japanese public has comparatively little interest in foreign affairs. Stewart refers to it as the 'Galapagos Syndrome', an insular and inward-looking tendency that rejects the external world as having little bearing on day-to-day Japanese issues.¹²⁴ The most common descriptor used in Prime Ministerial speeches to refer to the international system is 'change' or 'changing', bringing with it the threat of disruption of the status quo.¹²⁵ Drifte described Japan as a nation whose security policy is dominated by a “cult of vulnerability”,¹²⁶ something evident in the two major surges of defence-related legislation in the past 20 years. The first, following the 1991 Gulf War, and the second in the late 1990s. This second surge was driven by a series of shocks that threatened Japan's stability: the 1995 Kobe earthquake, 1995 Aum sarin attack in Tokyo, 1996 Japan embassy hostage crisis in Peru and 1998 North Korean missile tests.

These events created a profound sense of vulnerability and widespread dissatisfaction with the government's perceived inability to respond to sudden crises.¹²⁷ Later events which sustained this fear driven impetus to relax defence restrictions included: the 2002 Admission of abductions by North Korea, 2006 North Korean missile tests, 2009 North Korean underground nuclear tests, 2010 Senkaku Incident, 2011 Tohoku and Fukushima disasters and renewed Senkaku and Takeshima tensions in 2012.

¹²³ Curtis, Op cit. 28.

¹²⁴ Devin Stewart, 'Slowing Japan's Galapagos syndrome', *Huffington Post*, 29 April 2010.

¹²⁵ Edstrom, Op cit. 10.

¹²⁶ Reinhard Drifte, J.W.M. Chapman and Ian T.M. Gow, *Japan's quest for comprehensive security: defence, diplomacy, dependence*, (New York: St. Martin's Press, 1982). 92-93.

¹²⁷ Oros, Op cit. 73.

In each case the public were quick to support new legislation ostensibly aimed at reducing the extant threat. Miyashita has shown how public acceptance of defence reform is always far more permissive in periods with a clear external threat, while during periods of regional stability and peace they become increasingly resistant.¹²⁸

Politicians are happy to use such leeway to promote long-lasting change in security legislation, a tendency Curtis called 'refractive legislation', a response to public requests for change, but altered to suit the politicians' ends. In defence policy, by breaking small taboos and allowing for a period of adjustment to allow the changes to become accepted, the pro-normalization elements have been able to steadily push the envelope on the remaining security restrictions (see Figure 3.5).¹²⁹

Public reaction to threats is, however, not at all rational. Following 9/11, polls found that 41% of the public suddenly felt that counter-terrorism should be the JSDF's primary role, a suggestion entirely detached from Japan's actual security needs.¹³⁰ The backlash in response to any negative effects of change can also be disproportionate. Following the death of a policeman during Cambodian PKO operations in 1993, there was a huge public outcry. Prime Minister Miyazawa said at the time:

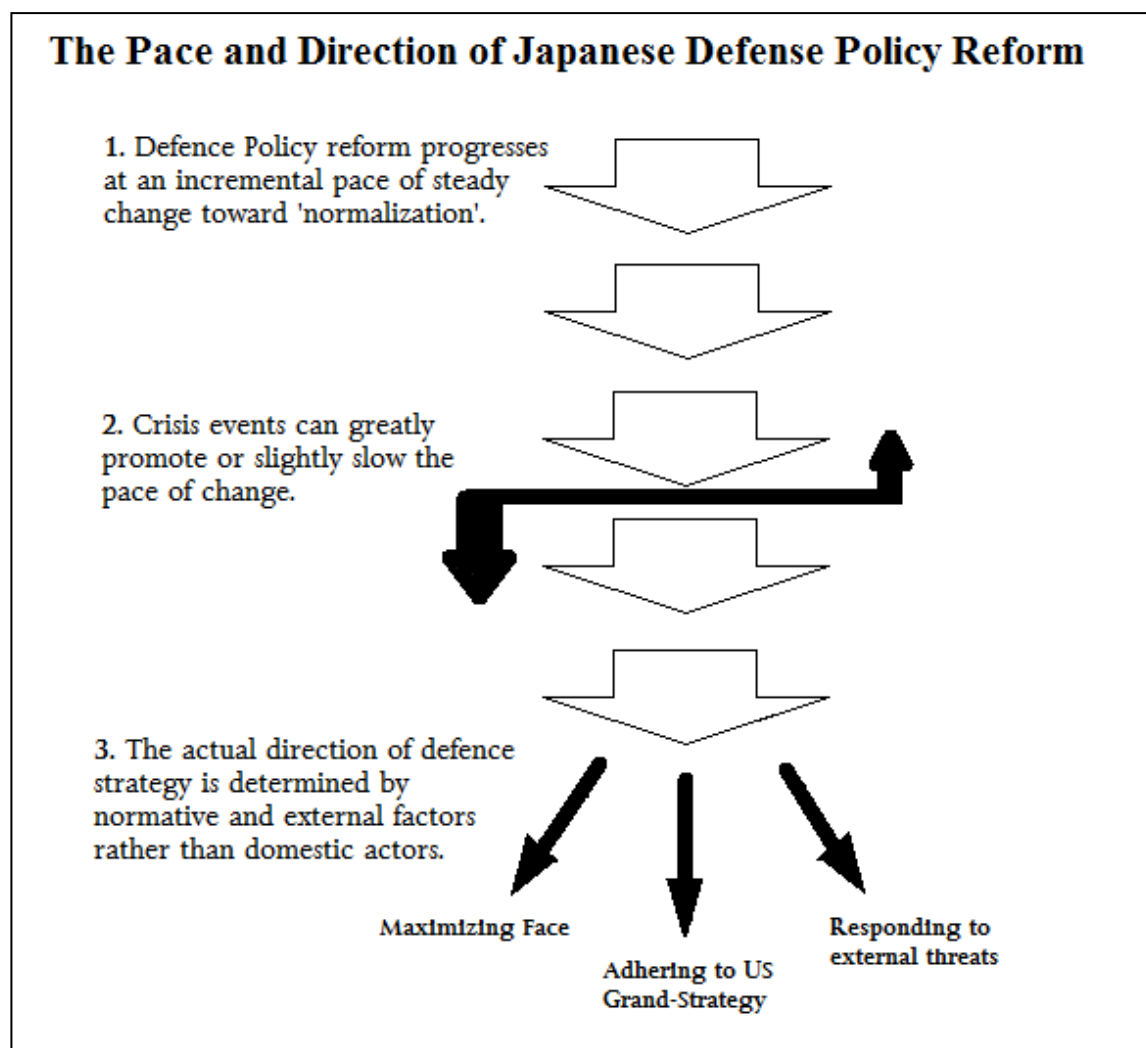
Public opinion subsided quickly because there was only one victim. But perhaps if two or three had died I would not have been able to stick it out. Public opinion is that kind of dangerous, fragile thing. I learned to my core the terrible aspect of public opinion that can turn so easily.¹³¹

¹²⁸ Akihiro Miyashita, 'Where do Norms come from?' in Yoichiro Satō and Keiko Hirata (eds.) *Norms, Interests and Power in Japanese Foreign Policy*, (New York: Palgrave-MacMillan, 2008), 21-45.

¹²⁹ Midford, Op cit. 146.

¹³⁰ *Yomiuri Shimbun*, 31 October 2001

¹³¹ Quoted in Midford, Op cit. 93.

Figure 3.5

In this way, while the government can benefit from crisis events that promote incremental change, it is also vulnerable to any events which show the risks of change. It should be noted, however, that such dangers represents only possible speed-bumps on the road toward normalization, i.e. they may slow the rate of normalization but do not stop it. In 2003, when two Japanese diplomats were killed in Iraq, public support for the dispatch of troops dramatically decreased based upon a perceived increase in danger.¹³² Later polling found that 65% of people would support an immediate pull out from Iraq

¹³² Shinoda, 2004. Op cit.. 65.

if any troops were killed or even wounded.¹³³ Further polling conducted the same year found that this opposition was based far more upon the danger to the Japanese citizens involved than any pacifist sentiment.¹³⁴ In contrast, the government was surprised to find the public largely supportive of a decision to dispatch minesweepers to the Gulf in 1991. The reason for this was that the action involved negligible risk and served to raise Japan's 'face' her public level of prestige and appreciation, among the international community.¹³⁵ This desire to maximize international face is the other key driver of public acceptance for defence reform.

Maximizing 'Face'

The first push for normalization occurred during the Gulf War in 1991, when Japan was lambasted for 'checkbook diplomacy'. Despite having paid \$13 billion to support military operations in the Gulf, Japan was disparaged for failing to make a troop commitment and this loss of public face struck both the public and the government very forcefully.

Whereas Western powers have long competed to see who would be 'first among equals'; for more than a century Japan has instead been driven by the desire to simply reach the status of equality. Beginning with the shock of the Black Ships' forced opening of Japan's markets, through the shame of the Triple Intervention, to the failure to win a racial equality clause at the League of Nations, Japan has repeatedly been rebuffed by the West. The Occupation-era saw Japan robbed of sovereignty and left with conflicting shames of a militant war past and an enforced pacifist status. Despite its economic strength, its foreign policy was frequently characterized as ill-conceived and

¹³³ *Kyōdō News*, 12 January 2005.

¹³⁴ *Asahi Shimbun*, 4 July 2003

¹³⁵ Midford, *Op cit.* 79-80.

ineffectual,¹³⁶ with numerous minor humiliations damaging the nation's need for public 'face'.¹³⁷

In response to the Gulf War criticisms the Foreign Ministry urged military personnel contributions to peace-keeping operations (PKO), while Prime Minister Miyazawa suggested that Japan was relying too much on a "lavish scattering-around of aid".¹³⁸ Public opinion had shifted as well with the 22% who supported PKO troop dispatch in 1988 climbing to 67.8% after the Gulf War.¹³⁹ In 1992 the International Peace Cooperation Bill finally permitted Japanese military PKO participation, marking the beginning of calls for 'normalization', that would continue throughout the decade.¹⁴⁰ Even when opposition arose, such as following the 1993 death of a Japanese United Nations peacekeeper in Cambodia, it was still consideration of public face, specifically the fear of being mocked if they pulled out their troops, that ensured Japan's continuation of the mission.¹⁴¹ Similarly, widespread opposition to the deployment of troops to Iraq in 2004, reduced dramatically when no immediate injuries were suffered and Western nations applauded Japan's actions.¹⁴²

There are times, however, when Japanese actions can seem to be driven by a desire to adopt the international consensus and yet the underlying drivers instead stem from alliance pressure. A good example is Japan supporting calls for Iran to end its nuclear

¹³⁶ For analysis of both ends of Japanese Foreign Policy in the last decade of the 20th century see: 'Shadow Boxing: Japanese Foreign Policy,' *The Economist* (US), June 4, 1988, and Gilbert Rozman, 'Japan's quest for great power identity,' *Orbis*, December 22, 2001.

¹³⁷ Maswood. Op cit. 16.

¹³⁸ Mainichi Shimbun, 20 October 1991.

¹³⁹ Ishikuza Katsumi, 'Japan and UN peace operations', in Christopher P. Hood (ed.), *The Politics of Modern Japan*, (New York: Routledge, 2008). 30

¹⁴⁰ Ichirō Ozawa, *Blueprint for a New Japan: the Rethinking of a Nation*, (Tōkyō: Kōdansha International, 1994), p 95; Hiro Katsumata and Mingjiang Li, 'China wary of a normal Japan', *Asian Times*, 7 August 2008.

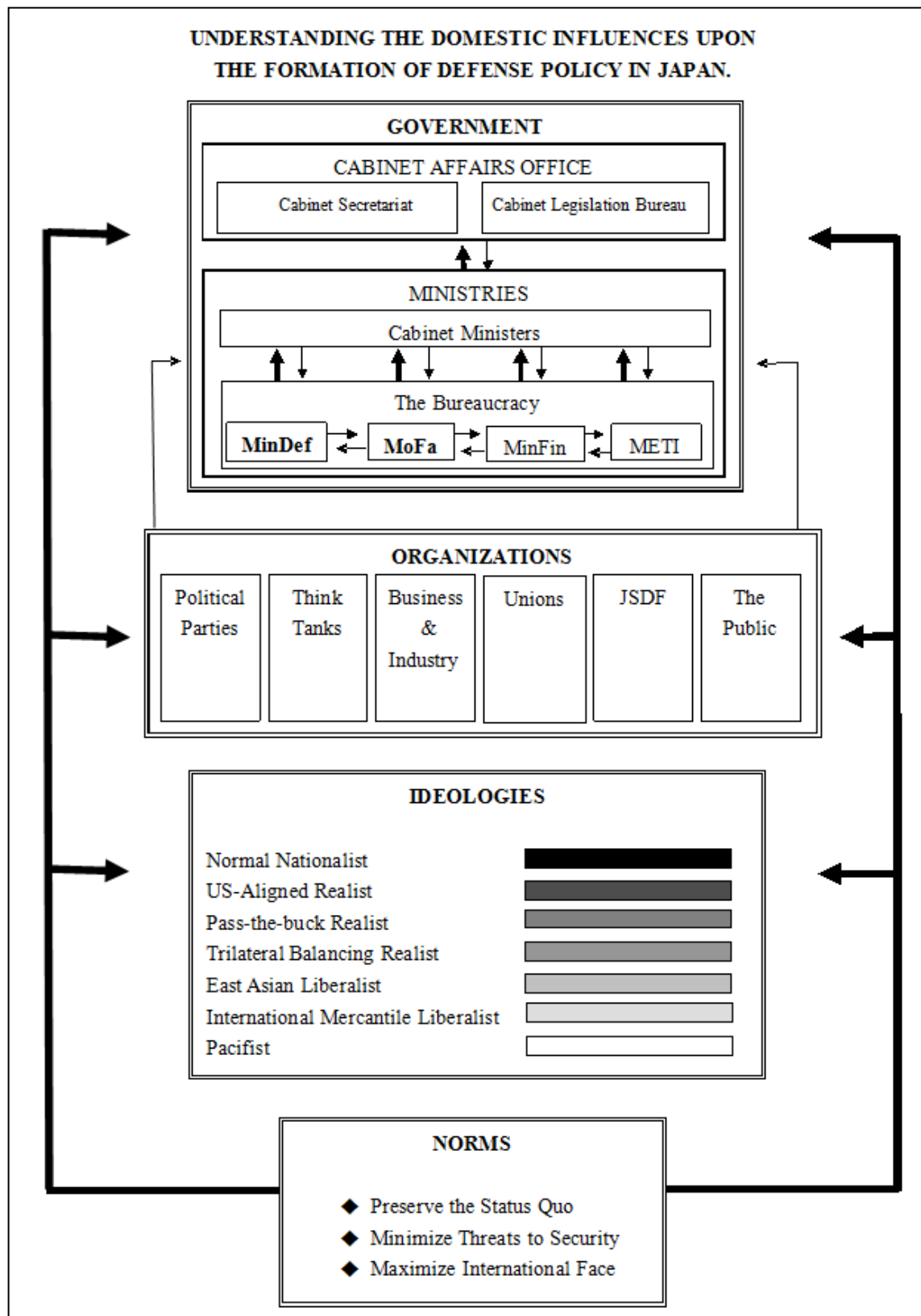
¹⁴¹ Katsumata, Op cit. 37.

¹⁴² Oros, Op cit. 217.

research. Applying sanctions against Iran and reducing oil exports was against Japanese strategic interests and offered little in return, yet might have been seen as a desire to uphold international anti-proliferation policies. The campaign against Iran was not, however, an international consensus; the Non-Aligned Movement publically supported Iran's right to peaceful nuclear research (i.e. more than 120 of the world's 196 states were opposed to punishing Iran),¹⁴³ suggesting that in this instance Japan's policy was driven neither by self-interest nor international face-saving, but by complying with external alliance pressure. While the internal influences upon security policy are clearly quite numerous (see Figure 3.6) and act upon each other in a variety of ways, it is equally important to understand the role of such external factors.

¹⁴³ Thomas Erdbrink, 'Nonaligned Nations Back Iran's Nuclear Bid, but Not Syria', *New York Times*, 31 August 2012.

Figure 3.6



External Influences

Analysts argue over whether Japan follows a reactive, adaptive or proactive pattern of policy-making. While the latter two might be possible in domestic issues, as far as foreign policy is concerned internal factors merely set the pace of change while the actual direction is invariably a response to external threats and outside influence. In the words of Sato, "Japan pursues its own interest within the given room for manoeuvring", i.e. within the constraints of alliance politics and where no major force is opposed.¹⁴⁴ This passivity is frequently confused with Japan's avowed pacifism. Tamamoto sees Japanese policy as a "culturally derived form of diplomacy based on the pursuit of harmony and conflict avoidance".¹⁴⁵ Yet, Japan is capable of responding quickly to unexpected threats with little concern for regional harmony. Altogether, the lack of domestic political investment in foreign affairs, the deep-rooted influence of the US within Japan's bureaucracy and the use, by both sides, of external diplomatic pressure (gaiatsu) have left the implementation of Japanese security policy adhering to American strategic requirements, even when this has conflicted with Japan's own security and national interests.

Response to External Threats

Marra analyzed how US defence spending rose in response to the increasing threat level of neighbouring states, a Cold-War pattern that seems to be recurring in current Sino-US relations.¹⁴⁶ Eichenberg, meanwhile, suggested that it was further influenced by the

¹⁴⁴ Akitoshi Miyashita and Yōichiro Satō, *Japanese Foreign Policy in the Asia Pacific*, (New York, Palgrave MacMillan, 2001). 199.

¹⁴⁵ M. Connors, 'The Asian Economic miracle and its unmaking' in M. Connors (ed) *The New Global Politics of the Asia Pacific*, (Abingdon: Routledge Curzon, 2004). 35.

¹⁴⁶ Marra R.F. And Ostrom C.W. Jr., 'Issues in defence Spending: Plausability and Choice in Soviet Estimates', in A. Mintz (ed), *The Political Economy of Military Spending in the United States*, (New York, Routledge, 1992). 261-81.

level of involvement of the state and its allies in conflict.¹⁴⁷ In Japan's case, however, defence spending has remained level for several decades and instead, threats have provided the impetus for normalization. Sudden security threats, playing on fears of instability, allow for sudden change insofar as it helps reestablish 'stability'. Frequently, however, such changes do not deal with the generative threat but rather serve alternative national or alliance aims.

Modern Japan's earliest threat was the outbreak of the Korean War, yet the revisions caused, which allowed renewed military production, addressed not an existential danger to Japan but rather US needs and entrenchment against the spread of Communism.¹⁴⁸ During the 1970s the US withdrawal from Vietnam and the Oil Crisis generated a sense of intense vulnerability in Japan that gave rise to scepticism over deeper military commitment to the alliance.¹⁴⁹ The invasion of Afghanistan by the Soviets in 1979 reinvigorated fear of Russia, however, and saw Japan pledging its commitment to patrol sea lanes out to 1000 miles.¹⁵⁰ Nye acknowledged that Japan's military growth during the 1980s was, "in part a result of American prodding."¹⁵¹ Clearly, this growth served US strategic interests as much, if not more, than it did Japan's own.

Japan became so closely bound to the Cold War structures of bipolarity that it was slow to adapt to the post-Cold War era. Where the Cold War had seen it guided by US grand strategy, its early 1990s foreign policy was unfocused, with a half-hearted commitment

¹⁴⁷ Eichenberg R.C. and Stoll R.J. 'Representing defence: Democratic control of the defence budget in the United States and Western Europe', *Journal of Conflict Resolution*, 47 (4), 2003. 399-422.

¹⁴⁸ Kawashima, Op cit. 23.

¹⁴⁹ Ibid.

¹⁵⁰ Connors, Op cit. 39.

¹⁵¹ Joseph Nye, *Bound to lead: the Changing nature of American power*, (New York: Basic Books, 1990). 161.

to PKO and an outdated military posture of ground defence.¹⁵² North Korea's 1994 nuclear tests revitalized the security agenda and the 1996 Taiwan Straits Crisis brought revision of the NDPG and an expansion of security focus to the "areas surrounding Japan", while 1998 North Korean ballistic missile tests generated approval for participation in BMD research.¹⁵³ More recent expansion of activities: fuel supply in the Indian Ocean, deployment to Iraq and participation in anti-piracy operations; have all been a response to US pressure to participate more directly in alliance operations.¹⁵⁴ Meanwhile, fears of North Korea,¹⁵⁵ and a rising China, continue to be stoked by the mass media and politicians.¹⁵⁶ The net result has been a steady increase of the Japanese public's perception of threat.¹⁵⁷ Recent clashes with China over the Senkaku islands produced an atypical rise in public interest in security issues,¹⁵⁸ but prioritization of security remains low and such threats are far more significant for the manner in which they are used to direct normalization. Chapters 4 and 5 will examine these threats in more detail and consider whether Japan's defence base is working to address these issues or in response to other sources of pressure.

The International Community

As previously mentioned, despite proclamations of pacifism, Japan has consistently supported military action involving the US. Very frequently, this has been counter to the

¹⁵² H. Dobson, *Japan and United Nations Peacekeeping: New Pressures, New Responses*, (London: Routledge Curzon, 2003). 20.

¹⁵³ 'Effective Measures Must Be Taken', *Sankei Shimbun*, 2 September 1998; 'Japan Must Speed Up Theater Missile defence Research', *Yomiuri Shimbun*, 2 September 1998.

¹⁵⁴ Christopher Hughes, *Japan's re-emergence as a 'normal military power*, (Abingdon: Routledge, 2005). 47.

¹⁵⁵ Christopher Hughes, 'Super-sizing the DPRK threat: Japan's evolving military posture and North Korea', *Asian Survey*, 49 (2), 2009. p. 5.

¹⁵⁶ P. Meeks, 'Soft power interests and identity: The future of the US-Japan alliance', in David Arase (ed) *The US-Japan Alliance: Balancing soft and hard power in East Asia* (Abingdon: Routledge, 2010). 32

¹⁵⁷ Paul Midford, *Japanese public opinion and the War on Terrorism: Implications for Japan's security strategy*, (Washington DC, East West Center, 2006). 175.

¹⁵⁸ As shown by the sudden spike of interest during 2010 found on the graphs of pages 192, 195 and 210.

international consensus, a clear sign that while Japan values international acceptance, supporting the USA is a stronger motivation.

In 1983 the UN General Assembly declared the US invasion of Grenada a "deplorable and flagrant violation of international law",¹⁵⁹ yet Japan merely found the situation "regrettable", was confident that the US had done everything it could to avoid military action and suggested that the US was acting only to protect its civilians.¹⁶⁰ The 1986 US bombing of Libya, which killed numerous civilians, was condemned by the vast majority of states and the UN General Assembly.¹⁶¹ Japan again sided with the US, signing a statement charging Libya with sponsorship of terrorism, a move some suggest Japanese PM Nakasone was "bullied" into by the US, and which seriously damaged Japanese relations with the Middle East.¹⁶² After the 1989 US invasion of Panama, Japan once more 'regretted' the events and offered staunch support for the US position,¹⁶³ despite condemnation by the UN General Assembly that the action was a clear violation of international law.¹⁶⁴

This is the default position for Japan's assessment of US military action. 'Regret' over any violence while 'understanding' the need for the violence. Similar sentiments followed the, possibly illegal,¹⁶⁵ US 1998 cruise missile strikes on Sudan, which Japan 'regretted but understood'.¹⁶⁶

¹⁵⁹ United Nations General Assembly Resolution 38/7, 43rd Plenary Meeting of the United Nations, 2 November 1983.

¹⁶⁰ 'Ministry official regrets US troop sending to Grenada', *Japan Economic Newswire*, 26 October 1983.

¹⁶¹ United Nations General Assembly Resolution: 41/38, 78th Plenary Meeting of the United Nations, 20 November 1986.

¹⁶² Ronald E. Yates, 'Nakasone star dims in the land of the rising sun', *Chicago Tribune*, 18 May 1986.

¹⁶³ 'Japan 'understands' US actions in Panama', *Japan Economic newswire*, 21 December 1989.

¹⁶⁴ Don Shannon, 'U.N. Assembly Condemns U.S. Invasion', *Los Angeles Times*, 30 December 1989.

¹⁶⁵ Myin Zan, 'US attacks may be illegal', *Japan Times*, 26 August 1998

¹⁶⁶ 'Fight terrorism together', *Daily Yomiuri*, 22 August 1998

The invasions of Afghanistan and Iraq also received immediate support. While reactions to Afghanistan were mixed, international opposition to the invasion of Iraq was far clearer.¹⁶⁷ Since then Japan has supported US military action in Somalia, Sudan, Libya and Yemen. Most recently, Japan has complied with US demands to impose sanctions upon Iran, despite the fact that the majority of the world's nations support Iran's right to peaceful nuclear research,¹⁶⁸ and that Japan has considerable economic ties to Iran.¹⁶⁹

Japan has also made little effort to involve itself in international security issues via peacekeeping. While Japan is the second biggest financier of UN PKO, after the US, it still ranks 82nd in terms of actual manpower contributed.¹⁷⁰ While international opinion can act as a conformative norm influencing the pace of Japan's military reform, and occasionally its direction, it only does so insofar as it includes the US. Where a divergence exists between US and international views, Japan will consistently support the former. Altogether, the level of pressure the international community exerts on Japan is minimal, ranking a very low third, behind regional and alliance pressure.

Regional Pressure

Asian nations have often used Japan's war past as a reason to limit the Japanese role to a purely economic one with no involvement in the political and security affairs of representative bodies such as ASEAN.¹⁷¹ Even adherence to the Yoshida doctrine was scorned by many as an attempt to dominate Asia economically rather than militarily.

¹⁶⁷ Ishann Tharoor, 'Why Was the Biggest Protest in World History Ignored?', *Time Magazine*, 15 February 2013.

¹⁶⁸ Thomas Erdbrink, 'Nonaligned Nations Back Iran's Nuclear Bid, but Not Syria,' *New York Times*, 31 August 2012.

¹⁶⁹ 'US presses on Iranian sanctions', *Kyōdō News*, 19 January 2012.

¹⁷⁰ Frank A. Stengle, 'The reluctant peacekeeper: Japan's ambivalent stance on UN peace operations', *Japan Aktuell*, No. 1, 2008.

¹⁷¹ Bhubbinder Singh, 'Asean's perception of Japan: Change and continuity', *Asian Survey*, 42 (2), March 2002. p. 276

In 1990 regional reactions to calls within Japan for 'normalization' were entirely negative, yet Japan's participation in PKO was a turning point, showing Japan could use its military in a cooperative and limited fashion. Concerns eased gradually with the turn of the century showing a significant reduction in opposition to remilitarization.¹⁷²

Since then, a decade of responsible PKO participation has reassured Japan's Asian neighbours of its benign regional intentions.¹⁷³ In fact, China's rise and willingness to use the threat of force in regional disputes has seen many states approach Japan as a defence ally. Recently Japan and India have begun conducting joint naval military exercises, with the prospect of a more formal defence agreement.¹⁷⁴ This would likely be similar to the existing Australia-Japan Acquisition and Cross Servicing Agreement, which has opened up new opportunities for military interoperability between the two states.¹⁷⁵ While Australia said it would remain neutral in any dispute between Japan and China, it supports an increased Japanese military presence in the region.¹⁷⁶ India's ties, on the other hand, are specifically understood to be a hedge against Chinese expansion, something other states are considering.

Vietnam, which has had open conflict with China over the Paracel Islands, has taken steps to foster closer defence connections,¹⁷⁷ while the Philippines is engaged in disputes over the Spratley Islands and recently signed its own agreement on defence

¹⁷² Paul Midford, 'Japan's response to terror: Dispatching the SDF to the Arabian Sea', *Asian Survey*, 43 (2), 2003. 341.

¹⁷³ Ibid. 341-345.

¹⁷⁴ Aari Betigeri, 'As China Eyes Indian Ocean, Japan and India Pair Up on defence', *New York Times*, 27 July 2012.

¹⁷⁵ 'Australia, Japan sign military agreement', *Sydney Morning Herald*, 20 May 2010.

¹⁷⁶ 'Japan to boost defence ties with Australia', *Jiji Press*, 26 September 2012.

¹⁷⁷ Nanae Kurashige, 'Japan, Vietnam agree on defence cooperation', *Asahi Shimbun*, 25 October 2011.

cooperation with Japan.¹⁷⁸ Even South Korea, which remains a hotbed of anti-Japanese sentiment, was recently on the verge of signing its own defence agreement with Japan. Domestic politics derailed the plan, yet it seems very likely that the agreement will be finalized in the near future.¹⁷⁹

The perceived dangers of North Korean unpredictability and China's bellicose rise to power have seen Asia's nations reassess Japan's military growth as a much smaller, if not negligible, danger, with many nations promoting a greater Japanese military role in the region. Many of these nations have growing appetites for maritime defence equipment, something that offers lucrative export opportunities for Japan's world-class maritime defence manufacturers (see Chapter 5 for more details).¹⁸⁰ The same fears also open up new doors for Japan's participation in regional forums such as ASEAN, where members increasingly favour Japan's desire to resolve territorial issues via international courts of justice.¹⁸¹

China is generally opposed to Japanese military reform, with developments frequently perceived as specifically targeting China itself. Criticism includes: any deepening of the US-Japan alliance, investment in BMD and the most recent NDPG's naming of China as a danger to regional peace. Even so, China has taken part with Japan in joint anti-piracy naval exercises off the coast of Somalia, a development that would have seemed highly unlikely only a decade ago.

¹⁷⁸ Yoree Koh, 'Tokyo and Manila Strengthen defence Ties With an Eye Toward China', *Wall Street Journal*, 28 September 2011.

¹⁷⁹ Evan Ramstead, 'Japan, South Korea Close to defence Pacts', *Wall Street Journal*, 8 May 2012.

¹⁸⁰ John O'Callaghan, 'Southeast Asia splashes out on defence, mostly maritime', *Reuters*, 8 October 2012.

¹⁸¹ Sanchita Basu Das, 'ASEA: A united front to tackle the South China Sea issue', *East Asian Forum*, 13 May 2012.

Thus, in terms of regional pressure, the general consensus is a cautious acceptance of Japan's domestic push for 'normalization' and a greater role in regional security affairs. Fear of China also ensures that Japanese defence production for export markets will be positively welcomed by smaller nations eager to bolster their maritime defences. In fact, a vacuum exists within regional security relations that Japan can easily fill and which offers potential new directions in which a remilitarized Japan might act.

Pressure from the US

Doi finds that Japanese foreign policy efforts frequently include statements that “this is for Japan’s own interests”, to offset concerns that the issues in question might be driven by US interests instead.¹⁸² Yet, repetition of the claim only highlights US ‘guidance’ of Japanese foreign policy, such that, whenever 'gaiatsu' (foreign pressure) is referred to it invariably means the USA.

Such pressure is not simply an external force, it has roots deep within the Japanese state. The early Occupation government abolished all Japanese political organizations and purged all right-wingers and militarists from political or bureaucratic office. This did not, however, include industrial leaders, who were needed to support the resuscitation of Japan's economy and thus lower occupation costs. The business and political leadership were thus selected to ensure Japan's development as an Asian analogue to US free-market capitalism.¹⁸³ The US Ambassador to Japan told General MacArthur on his entry to GHQ, "forget about what the mass public tells you in opinion polls, because the men

¹⁸² Ayako Doi, 'Japan's Emerging Security Role in East Asia', Panel Discussion at The Brookings Institution, 14 June 2005.

¹⁸³ Hans Baerwald, 'The Occupation of Japan as an exercise in regime change: Reflections after fifty years by a participant', *PRI Occasional Paper* 29, February 2003.

in Japan who really count are all on our side."¹⁸⁴ Through the following decades, bilateral ties were maintained via think-tanks, universities and government funded exchanges which ensured that Japan's leadership would receive in-depth exposure to America's cultural and political values.¹⁸⁵ This was reinforced during the 1960s and 70s by the CIA who funneled millions of dollars toward 'friendly' politicians in Japan (primarily the LDP), while also conducting operations to undermine left-wing groups.¹⁸⁶ After revelation of the activities generated a scandal in the 1980s such blatantly overt influence peddling halted.

The US exerts more subtle pressure upon Japan in a wide variety of areas, however, and a common factor is that the pressure is never from a single clear source but rather along multiple, superficially unrelated lines. Over time these vectors become established, often mutually beneficial, relationships to the extent that the participants may lose sight of the fact that they are from separate states with quite distinct and occasionally incompatible national interests, and instead embrace the concept of 'common' or 'shared interests'.

At the highest level, political matters between Japan and the US are handled formally by institutions such as the Security Consultative Committee (SCC), in which the Japanese Minister of Foreign Affairs and Minister of defence meet with the US Secretary of State and Secretary of defence (also known as the 2+2 meetings). These meetings may in turn spawn sub-groups for more specialized development of security policy, such as the

¹⁸⁴ Michael H. Armacost, *Friends or Rivals? The Insider's Account of US-Japan Relations*, (New York: Colombia University Press, 1996). 64.

¹⁸⁵ Peter J Katzenstein, *Rethinking Japanese Security, Internal and external dimensions*, (New York: Routledge, 2008). 41.

¹⁸⁶ Walter LaFeber, *The Clash*, New York: Norton, 1997. 326, 336.

Security Subcommittee (SSC) and the Defence Policy Review Initiative.¹⁸⁷

Beneath this, however, a deeper and far more subtle layer of informal interaction ensures that current and future participants in these more public formalizations already share common bonds. For senior figures the 'US-Japan Parliamentary Exchange Program' offers a chance for Japanese politicians to experience time in the US and develop a better working relationships with counterparts, and vice versa.¹⁸⁸ The 'Baker-Kato Exchange Program' does the same for diplomatic staff, primarily Japan's Ministry of Foreign Affairs and the US State Department. Other programs include: the US Congressional Staff Exchange Program, the U.S.-Japan Young Political Leaders Exchange Program, the Japan Travel Program for US Future Leaders, the US-Japan Network for the Future, and the Japanese-American Leadership Delegation Program. All are specifically aimed at reinforcing the US-Japan alliance and promoting leaders who will sustain the bilateral relationship.

Similar patterns exist in military relations, where a public level of formal interaction is also supported by a deeper level of relationship building with an eye to alliance maintenance. Regular military exercises ensure that the two countries military personnel are capable of working and interacting comfortably together and include the annual Northwind, Yama Sakura, Orient Shield, Rising Warrior, Keen Edge and Keen Sword events. Each of the events also includes considerable social bonding and interaction that includes home visits and cultural exchanges that foster long-term relationships between the servicemen of both countries.

¹⁸⁷ <http://www.stimson.org/summaries/the-defence-policy-review-initiative-a-reflection/>

¹⁸⁸ <http://www.jcie.or.jp/pep/exchange/index.html>

The US also uses non-governmental groups such as the American Chamber of Commerce in Japan, to influence Japanese Defence Production policy. In 2012 the group's Aerospace and Defence Committee worked with the Keidanren to produce policy recommendations on how Japan's defence industry should respond to the US 'Asian Pivot'.¹⁸⁹

American influence over such 'policy recommendation' has increased with the recent weakening of Japan's own academic organizations and international relations think tanks.¹⁹⁰ Gordon Flake, Director of the Mansfield Foundation, declared that Japan did not have any think tank competent enough to engage in high-level international projects.¹⁹¹ His own organization runs the 'U.S.-Japan Network for the Future' which seeks to develop the next generation of Japanese policy specialists. Japan's own security specialists are, meanwhile, assisted by the 'RIPS-CGP Security Studies Fellowship Program' which is jointly run by Japanese and US institutions and promotes 'shared' interests. Japan's government has already begun using American think tanks to formulate policy recommendation on areas of security relevance,¹⁹² and it may not be long before similar advice is solicited for purely defence-related issues.

Japanese academics, politicians and journalists, are also targeted by 'The International Leadership Program', which takes over fifty of Japan's 'rising stars' to the US each year for extended stays, during which they are encouraged to adopt American perspectives

¹⁸⁹ 'Joint Statement on Defence Industry Cooperation between Japan and the United State', *Keidanren*, 17 July 2012.

¹⁹⁰ Toshihiro Nakayama, 'How to Enliven Japan's Foreign Policy Think Tanks', *Nippon.com*, 7 September 2012.

¹⁹¹ Gordon Flake, speaking at the 'Soft Power in East Asia' seminar at The Brookings Institution in Washington DC, 17 June 2008.

¹⁹² For an example see, The RAND Corporation, *Japanese Science and Technology Capacity: Expert Opinions and Recommendations*, RAND, Santa Monica, 2010.

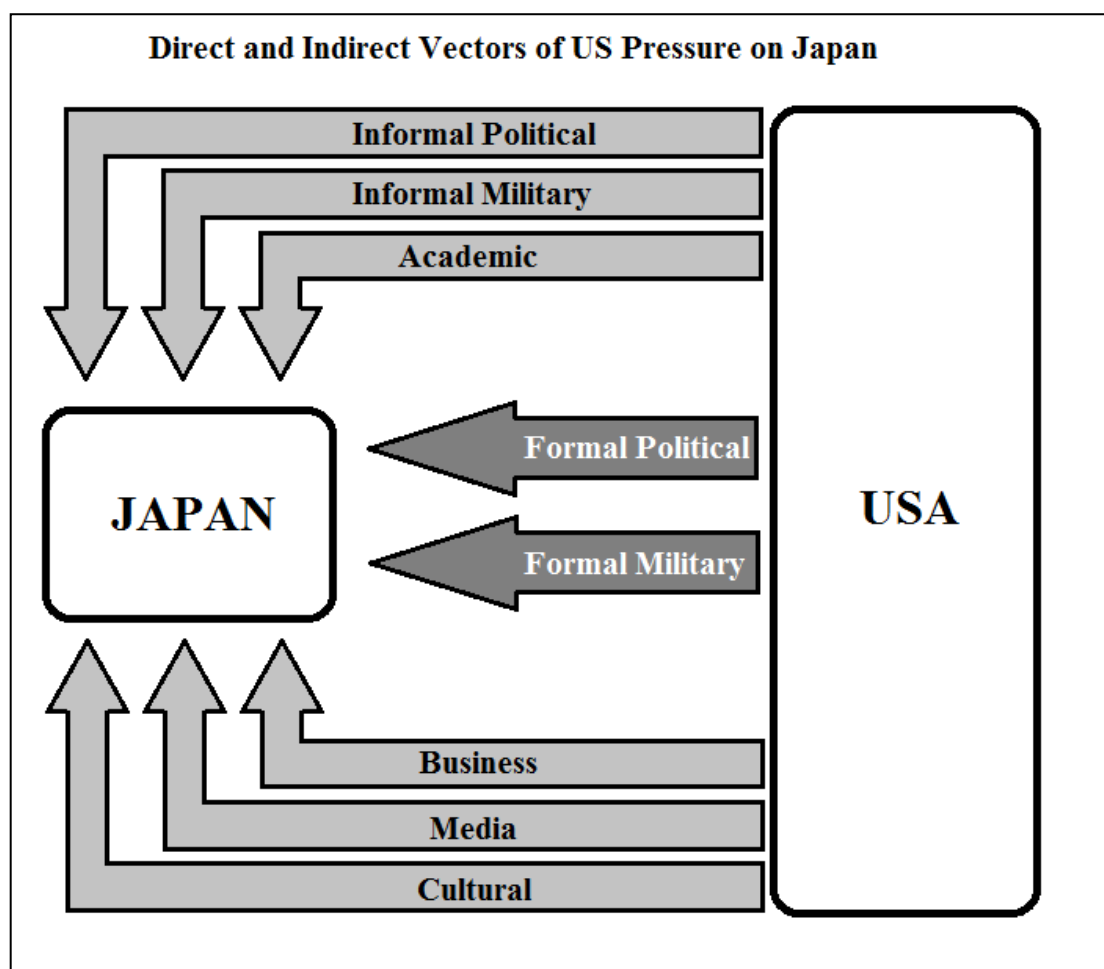
on important issues. While such programs were originally framed purely as a cultural bridge they have increasingly become a tool of explicit political advocacy.¹⁹³ The 'Abe Fellowship Program for Journalists' is another that caters exclusively to media members, while the 'Emerging Leaders Program' does the same for cultural and business figures. Overseeing many of these projects is the US-Japan Conference on Cultural and Educational Interchange (CULCON), a binational advisory group which, for fifty years, has acted to promote closer cultural, educational and intellectual activity. The US military even makes use of children's comics in targeting the next generation of young Japanese with the message of the importance of the bilateral alliance.¹⁹⁴

The web of ties is thus far more diverse and complex than a single conduit from the American to Japanese government (see Figure 3.7). Japanese domestic politics is extremely factional, with influence emerging from many different areas, within which the broad US-Japan network of ties between figures of political, military, media and academic importance, allows pressure to be directed in subtle ways that the US calls diplomatic “participation expansion”, i.e. increasing the number of local allies it has who can influence key decision makers.¹⁹⁵ Identifying where this pressure is being exerted as a result of American efforts rather than sincere and independent Japanese views can be difficult, but, given the considerable effort made by the US in fostering such ties it is clear that significant political value is attached to them.

¹⁹³ William G. Crowell, 'Official Soft Power in Practice: U.S. Public Diplomacy in Japan', in Yasushi Watanabe and David McConnell (eds), *Soft Power Superpowers: Cultural and National Assets of Japan and the United States*, New York, M.E. Sharpe, 2008. 207-222.

¹⁹⁴ 'Manga to promote US-Japan military alliance', *BBC News*, 10 August 2010.

¹⁹⁵ Leonard J. Schoppa, 'Two level games and bargaining outcomes', *International Organization*, 47 (3), Summer 1993. 377.

Figure 3.7

Impact of Gaiatsu

It is clear that over the past fifty years Japan has become increasingly entangled in the US alliance, something seen in the increased attention given to the alliance in successive NDPGs. In 1976 it was mentioned only a single time and was such a taboo subject that the Foreign Minister was forced to resign in 1981 for making public reference to its existence.¹⁹⁶ By 1995 public acceptance saw the NDPG mention it 13 separate times.¹⁹⁷ Top-level ties solidified under Koizumi, who Uchiyama characterized as, “having a short-sighted loyalty to Bush's military ventures that went even beyond

¹⁹⁶ Oros, *Op cit.* 64.

¹⁹⁷ Noboru Yamaguchi, 'Redefining the Japan-US alliance', *Nippon.com*, 11 May 2012.

that of Tony Blair.”¹⁹⁸ For many within Japan, such as Kawashima, the alliance was based upon an apparently sincere belief that the two countries shared common values that were under attack from existential threats,¹⁹⁹ a sentiment echoed by American counterparts Mochizuki and O’Hanlon, who see the alliance as “principle based” in the same manner as the “special relationship of the US and UK”.²⁰⁰

Yet, while US presidents frequently offer platitudes such as Carter’s claim that “human rights are the soul of our foreign policy”, real-world analysis, such as Power’s Pulitzer Prize-winning study of US policy during the Rwanda genocide or Kaplan’s more recent assessment, have shown that realpolitik consistently trumps any nominal commitment on the part of the US to moral causes.²⁰¹ In fact, the state of war itself offers both political and economic benefits that the US has frequently embraced.²⁰² This is not to say that US policy is amoral, Cingranelli’s analysis shows that in past decades there has been a clear shift away from more direct military engagement toward nation-building and developmental aid. Rather, it suggests that where the US national interest is threatened ‘common values’ are likely to carry little weight and that war is not an option the US is likely to find unacceptable. There is a very real security threat, therefore, in the surprisingly common assumption that “what is good for the US, is good for Japan.”²⁰³

¹⁹⁸ Y. Uchiyama, *Koizumi and Japanese Politics: Reform strategies and leadership style*, (London: Routledge, 2010). 94.

¹⁹⁹ Kawashima, Op cit. 54.

²⁰⁰ M. Mochizuki and M. O’Hanlon, ‘A Liberal Vision for the U.S.-Japanese Alliance’, *Survival: Global Politics and Strategy*, 40 (2), 1998. 127.

²⁰¹ Samantha Power, *A problem from hell: America and the age of Genocide*, New York: Basic Books, 2002. Robert D. Kaplan, ‘The tragedy of American foreign policy’, *The National Interest*, 1 August 2013. For an analysis of Carter’s specific role in the promotion of such principles see, Jeff Cohen and Norman Solomon, ‘Jimmy Carter And Human Rights: Behind The Media Myth’, *FAIR*, 21 September 1994.

²⁰² David Keen, *Useful enemies: When waging war is more important than winning*, New Haven: Yale University Press, 2012. 92-115.

²⁰³ Kevin J. Cooney, ‘Nissan Syndrome and Structural reform in Japan’ *Asian Perspective*, 28 (2), 2004. 30

Some Japanese analysts have, however, criticized this concept. Terashima Jitsuo, president of the Mitsui Global Strategic Studies Institute, stated, “A country that believes unquestioningly in the US-led cause of 'democracy and freedom', while lacking any sense of their own subjective national interest, cannot be recognized by the world as an 'adult' country”.²⁰⁴ This is certainly closer to the US own pragmatic worldview, which George Washington framed as, “There can be no greater error than to expect or calculate upon real favours from nation to nation.”²⁰⁵ Nonetheless, when US Presidents claim, as Obama did in April 2012 when welcoming Prime Minister Noda to the US, that “Our joint vision reaffirms our role as global partners bound by shared values and committed to international peace, security and human rights,”²⁰⁶ the comments are frequently taken at face value in Japan and lauded as evidence of a connection that goes beyond mere self-interest.²⁰⁷ Some even argue that such shared values will “naturally make for similar foreign policy”,²⁰⁸ and that the alliance is not simply for the promotion of US-Japan interests, but rather for the benefit of the entire Asian region.²⁰⁹ While such views might echo Japan's justifications for its World War Two-era 'Greater East Asian Co-prosperity Sphere', in this case it is very much the US in the driving seat. Nakane suggests that, “the Japanese way of thinking depends on the situation rather than the principle...except for a few rightists or leftists, we have no dogma and don't ourselves

²⁰⁴ Terashima Jitsuro, 'Sekaishi no shinsō teiryū wa nanika', *Chūō Kōron*, November 2001. 142-149.

²⁰⁵ George Washington, 'Farewell address to the nation', (speech September 17, 1796), quoted in Joseph J. Ellis, *His excellency George Washington*, (New York: Vintage, 2005). 232-239.

²⁰⁶ 'Remarks by President Obama and Prime Minister Noda of Japan at Joint Press Conference', Office of the Press Secretary, The White House, 30 April 2012.

²⁰⁷ For example, 'U.S.-Japan alliance a cornerstone in a complex world', *Asahi Shimbun*, 16 July 2010, and, Leone Panetta, 'The United States and Japan: An enduring 21st century alliance', *Yomiuri Shimbun*, 24 October 2011.

²⁰⁸ M. Doyle, 'Liberalism and Foreign Policy', in S. Smith (ed.), *Foreign Policy: Theories, Actors, Cases*, (Oxford: Oxford University Press, 2008). 50.

²⁰⁹ Ota F., *The US-Japan Alliance in the 21st century*, Folkenstone: Global Oriental, 2006. 15.

know where we are going".²¹⁰ Such a view would lead to the conclusion that Japanese claims for shared values instead represent an adoptive support for 'US values' in lieu of domestic alternatives, and in practical terms refer to support for US foreign policy goals rather than any underlying 'Japanese' principles.

Existence of 'shared values' does not stop the US from attempting to impose its own aims upon Japanese foreign policy. At times this pressure can be quite direct, such as the 1990 threat by Congress to begin withdrawing troops unless Japan increased burden-sharing.²¹¹ At others it amounts to little more than public hectoring, an attack on Japan's 'face', such as US Deputy Secretary of State Armitage's calls for Japan to "quit paying to see the game and get down on the baseball diamond".²¹² He did, however, also link Japan's efforts in these areas to the likelihood of receiving US support for Japan's campaign for a permanent UN Security Council seat.²¹³ Secretary of State Powell made the same suggestion,²¹⁴ while Secretary of State Baker, offered the infamous critique that Japan's "checkbook diplomacy, like our dollar diplomacy of an earlier era, is clearly too narrow."²¹⁵

This pressure often has a quick and clear impact, as with the response to 'checkbook diplomacy'. Efforts are not always direct though, and the US frequently uses Japanese politicians and journalists to apply pressure on the bureaucrats who make the decisions

²¹⁰ Kenneth Pyle, *The Japanese Question: Power and Purpose in a new era*, (Washington: AEI Press, 1996). 15.

²¹¹ Midford, Op cit, 334.

²¹² Gavin McCormack, 'Koizumi's Japan in Bush's world: After 9/11', The Nautilus Institute, *PFO 0-46A*, 8 November 2004. 3.

²¹³ Yasuaki C, 'Insights into US-Japan relations on the eve of the Iraq War: Dilemmas over showing the flag', *Asian Survey*, 45 (6), 2005. 849.

²¹⁴ David Arase, 'Japan the active state? Security Policy after 9/11', *Asian Survey*, 47 (4), 2007. 572.

²¹⁵ Thomas L. Friedman, 'Baker asks Japan to broaden role', *New York Times*, 12 November 1991.

that matter.²¹⁶ Working through this elite has allowed the US to effectively manage Japan's foreign policy with little interference from public opinion.²¹⁷ In many cases pressure is unnecessary as large swathes of Japan's bureaucracy have adopted the view that the alliance is the cornerstone of Japanese security and whatever the US wishes to pursue is therefore good for Japan.

This specifically US-oriented form of *gaiatsu*, known as 'datsubei nyo' (out of the US into Asia) has become more noticeable since the late 1990s. Before this Japan's foreign affairs bureaucracy was split into three factions. The first saw relations with the US as vital, a second considered balancing between the US and China was more pragmatic, while a third supported stronger ties with Russia to counterbalance the US and China. Political infighting saw the pro-US faction triumph, with the pro-Chinese group sidelined and the pro-Russia group completely purged.²¹⁸ As a result, Prime Ministerial statements, drafted by pro-US bureaucrats, often seek to remind the Japanese people of how much they owe the US. An example is Koizumi's 2003 speech in which he reminded the nation that, "The US is the only country that states that an attack on Japan would be considered as an attack on the US. The people of Japan should not forget this."²¹⁹ Such sentiments are bolstered every time a threat emerges and the US military presence is highlighted, as was the case with 'Operation Tomodachi' (the Japanese for 'friend') which saw US troops in Japan mobilized for relief efforts following the Tohoku crisis. While the vast majority of actual relief work was done by Japan's own JSDF the US contributions were repeatedly highlighted by news stations and grateful

²¹⁶ Armacost, Op cit. 68.

²¹⁷ Pyle, 2007. Op cit. 59.

²¹⁸ Satō, Op cit..

²¹⁹ Prime Minister's Statement, Office of the Prime Minister of Japan, March 20 2003

politicians.²²⁰

This common belief in the benevolence of a US foreign policy keyed to the welfare of Japan has led to a form of implicit pressure, wherein the US often does not have to tell Japan to do something, rather Japan will anticipate what the US would like and carry it out without waiting for a request to be made. This process, known as 'the rule of anticipated reactions', is quite common in dependent relationships and is just as important as explicit attempts at influence.²²¹ The results are often seen in statements by high-ranking politicians or officials such as, "at a time when close cooperation with Washington is vital in dealing with North Korea, diplomatic wisdom dictates Japan should not do anything that would unsettle its relations with the US".²²² Or in the case of the US request for Japan to suspend aid to Iran during the 1980s, a move that would have serious economic repercussion for Japan, yet which Foreign Ministry officials agreed to on the basis that, "we don't want to create any unnecessary strains in US-Japan relations".²²³ Then Prime Minister, Ōhira Masayoshi stated, "We have to buckle down to the task, even if it means considerable sacrifices for Japan".²²⁴ It also has great impact upon Japanese foreign aid, a process Katada described as schizophrenic in its multitude of competing motivations.²²⁵ In analyzing the factors influencing how such aid was used, Tuman found that US security interests consistently carried greater

²²⁰ For examples see, 'Operation Tomodachi a huge success, but was it a once off?', *Japan Times*, 3 March 2012, and 'Operation Tomodachi continues to help', *Daily Yomiuri*, 4 December 2011.

²²¹ Akitoshi Miyashita, 'Gaiatus and Japan's foreign aid: Rethinking the reactive-Proactive debate', *International Studies Quarterly*, Vol. 43, No. 4, Decemer 1999. 704.

²²² J.M. Grieco, 'Realism and regionalism: American power and German and Japanese institutional strategies during and after the Cold War', *Paper for the Annual meeting of the International Studies Association*, San Diego, April 17 1996. 6.

²²³ *Daily Yomiuri*, 10 May 1995.

²²⁴ 'W. European and Japanese reactions to US pressure', *BBC World*, 15 April 1980.

²²⁵ S.N. Katada, 'Two Aid Hegemons', *World Development*, 25 (6), 1997. 931–945.

authority than Japanese economic ones.²²⁶

Of course, the extent to which this pressure can succeed depends upon domestic Japanese political conditions and regional relations. Factional infighting between Japanese political and bureaucratic cliques can also negatively impact the effectiveness of US gaiatsu.²²⁷ As a result, some feel that gaiatsu can only succeed while it has the support of core groups within Japan.²²⁸ Cooney argues that without this internal support the US cannot overcome domestic interests,²²⁹ yet, as previously shown, as a result of Japanese disinterest in foreign policy there is quite often no strong domestic interest to overcome, i.e. gaiatsu only experiences focused Japanese opposition in relation to domestic Japanese issues.

The flip side of the Gaiatsu coin is that many domestic groups have their own reasons for welcoming Gaiatsu. Putnam analyzed this as a two-level approach to bilateral diplomacy which balanced overt, high-level negotiations with manipulation of domestic factions holding self-serving reasons for supporting external agencies against their domestic opponents.²³⁰ Yet this is merely cross-border factional politics, a more meaningful use of Gaiatsu by Japanese groups is the manner in which they specifically create it to generate an illusion of 'external' pressure, which then acts as a smokescreen for advancing their personal agenda. In these cases they will decry the external force while using it as a justification to promote a change to which Japan's conservative

²²⁶ John P. Tuman, 'The disbursement pattern of Japanese foreign aid', *Journal of East Asian Studies*, Vol. 9, 2009,

²²⁷ Yumiko Mikanagi, *Japan's trade policy: Action or reaction?*, (London: Routledge, 1996). 2.

²²⁸ Naka Norio, *Predicting Outcomes in United States-Japan trade negotiations*, (New York, Praeger, 1996).

²²⁹ Cooney, Op cit. 28.

²³⁰ Scoppa, Op cit. 369.

structures might be resistant.²³¹ This is what Cooney calls “the devil made me do it” strategy, allowing domestic discontent to be directed away from Japanese politicians and toward heavy-handed US policy.²³² In these cases the external pressure may actually exist, yet it is only pressure to do something that Japan's internal leadership had already decided upon. It is a mirror-image of the long-standing use of Article 9 as justification for not making any direct military commitments. As Prime Minister Yoshida said, it was Japan's “heaven-bestowed good fortune that the Constitution bans arms. If the Americans complain the constitution gives us the perfect justification.”²³³ Similarly, politicians now wishing to revise the constitution can make use of US pressure to justify their policy.

This gives rise to the problem of determining whether policy changes are being driven by external US pressure or internal domestic agendas. In the end, however, this is immaterial as *gaiatsu* could not be employed without the seed of US pressure. In cases where it is used to redirect policy from what would be in the national interest it is irrelevant whether the alternate goal more fully serves goals of the US or individual Japanese politicians. This can be seen in cases where both bureaucratic and military staff have employed the ‘the devil made me do it’ gambit. The Ministry of Foreign Affairs was criticized for calling upon US allies to apply pressure against military basing proposals they were opposed to.²³⁴ Similarly, following 9/11 Japanese naval officers approached US counterparts with suggestions of demands they should make in order to boost Japanese military reform.²³⁵ Despite the fact that actual US pressure

²³¹ Curtis Johnson, *Japan - Who governs: The rise of the developmental state*, (New York: W.W. Norton and Co.) 1995. 304.

²³² Cooney, Op cit. 8.

²³³ Pyle, Op cit. 1996. 26.

²³⁴ ‘Japan sticks to postponement on US base issue despite pressure’, *Kyōdō News*, 23 December 2009.

²³⁵ Midford, Op cit. 336.

during this time was lower than it had been during the Gulf War,²³⁶ it was used to pass 'anti-terror' legislation that was actually aimed not at Islamic militants but rather Chinese smugglers and North Korean spy ships.²³⁷ That the US was not the initial source of such pressure does not negate the fact that gaiatsu is the use of perceived US discontent to override domestic Japanese desires, something which compromises the integrity of Japan's national security. A vital element in this use of gaiatsu is thus the balance of power between both parties of the alliance. The fundamental arbitrator of the level of gaiatsu that can be generated is the extent to which Japan accepts a second tier position in the relationship.

Alliance Management

A separate form of outside pressure is the long-standing US policy of alternating between 'embracing' and 'bypassing' Japan. This plays out in what Snyder calls the 'Alliance Theory Dilemma', whereby fear of abandonment by the dominant partner increases ties to the alliance while fear of entrapment weakens it.²³⁸ In the early post-War years it was the US, however, that feared abandonment, due to the possibility that Japan might turn to the left and become another Asian Communist state (Communist Party membership soared dramatically during both the immediate post-war period and again during the 1960s).²³⁹

As a result, the US reluctantly accepted the Yoshida Doctrine, a policy that

²³⁶ K. Sakai, 'Stories of our boys, but for whom? The Japanese media's coverage of the SDF in Iraq', *International Journal of Contemporary Iraq Studies*, 1 (3), 2007 333.

²³⁷ H.R. Friman, 'Immovable object? Japan's security policy in East Asia', in P Katzenstein (ed) *Rethinking Japanese Security*, (London: Routledge, 2008). 147.

²³⁸ Glenn Snyder, 'The Security Dilemma in alliance Politics', *World Politics*, 36 (4), 1984. 461-495.

²³⁹ Peter Berton, 'The Japanese Communist Party and its Transformations', *Japan Policy Research Institute*, May 2000; A. R. Swearingen, *Communist Strategy in Japan, 1945-1960*, (Santa Monica: RAND Corporation, 1965).

simultaneously bolstered the Japanese economy while contributing minimally to joint security. The US would eventually revise the Japan-US Security treaty to grant Japan more input, give Japan greater access to US markets and offer invaluable technology exchanges that played a key role in the nation's economic growth, all to ensure Japan remained within the alliance, providing the US with a vital foothold in Asia.²⁴⁰ This changed after Nixon's Guam doctrine called for a decrease in the US presence in Asia. Sino-US rapprochement in 1971 and the US withdrawal from Vietnam in 1975 also added to Japanese doubts over the reliability of US security guarantees and led to increased Japanese military expansion and a renewed commitment to playing their own defence role within the alliance.²⁴¹

The US has since used possible disengagement from the alliance, either in the form of a pull-back of troops from Asia or a shift of its primary ties to either South Korea or China, as a means of conditioning Japan's sense of dependence on US military protection. The result is that when conflict arises between what Japanese and US leaders want, Japan will rarely even challenge US direction on foreign policy or security issues. Yet, this is a flawed analysis on the part of Japan of just how vital it is to US grand strategy.

This was evident, during the Cold War, in the frequent sacrifice of US economic interests to promote deeper security ties with Japan.²⁴² Despite ample opportunity, the US consistently refused to use security issues as leverage in disputes over economic

²⁴⁰ Miyashita Op cit. 705.

²⁴¹ Ibid. 706.

²⁴² Cooney, Op cit. 29.

affairs.²⁴³ The importance of the relationship only increased with the USSR's collapse and, though the US 1993 military review urged a reduction of Asian deployments, the 1995 Nye report stressed the need for a strong US presence in the Pacific as a fundamental prerequisite for safeguarding American trade.²⁴⁴ The same year, Japan's NDPG called for closer ties to the US but appeared, to US analysts, to give higher priority to UN PKO commitments. Fearing that Japan was turning away from bilateral dependence to a multilateral view of its security role, Japan-analysts advised the US to reaffirm alliance ties and work to enmesh the two countries in lasting commitments, such as the BMD program.²⁴⁵ Japan has so far adopted these recommendations, with the 2004 and 2010 NDPGs placing increasingly greater focus on alliance cooperation, force interoperability and joint development, while in 2011 the 'Two plus Two' Security Consultative Committee Meeting agreed on shared goals for deeper integration. Nye recently reasserted his views on Japan's importance during the Futenma dispute, urging his government not to play hardball over an issue which was relatively minor in terms of US long-term strategy in Asia.²⁴⁶

Chapter 5 will examine in more detail Japan's role in long-term US geostrategy. Yet, the US past efforts to solidify the relationship, in and of itself, suggest that Japan has far more room for manoeuvre in negotiations than it generally makes use of.

²⁴³ Leonard T. Schoppa, *Bargaining with Japan: What American pressure can and cannot do*, (New York: Colombia University press, 1997). 282.

²⁴⁴ *The United States Security Strategy for the East Asia-Pacific Region*, (Washington DC: US Department of Defence, 1995).

²⁴⁵ Michael J. Green, Patrick M. Cronin (eds), *The U.S.-Japan alliance : past, present, and future*, (New York : Council on Foreign Relations Press, 1999).

²⁴⁶ Joseph Nye, 'An alliance larger than one issue', *New York Times*, 7 January 2010.

Divergence and Dominance

In an effort to determine to what extent Japan was independent from US guidance, Miyashita examined two instances of divergence in Japanese policy and US foreign policy preferences. He took the cases of Tianamen Square and Japan-Russia negotiations over the Northern Territories. With Tianamen, following the massacre in 1989 Japan wanted to maintain foreign aid to China as a means of improving relations. The US, however, was determined that its allies take tangible economic steps to express condemnation of the events. Japan was initially vocally opposed to this policy, something Yasutomo describes as a "rare aggressive stance" on the part of Japan,²⁴⁷ but defiance was purely superficial and its concrete actions closely followed those of the US. A \$5 billion aid package was suspended and only restarted when President Bush gave the green-light.²⁴⁸

In the case of Russia, the opposite situation existed. In the early 1990s Japan was determined to suspend its foreign aid to Russia to show displeasure over Russian claims of ownership of the Northern Islands.²⁴⁹ This time the US wanted Japan to continue its assistance as a means of bolstering the 'pro-Free Market' Yeltsin administration. Once again US pressure resulted in an about-face in Japan's foreign policy.²⁵⁰

During the Vietnam War the Japanese government strongly endorsed US policy, and US planes operated from Japanese bases on direct combat missions despite overwhelming public opposition to the war.²⁵¹ Following the war's end the US established an economic

²⁴⁷ D.T. Yasutomo, *Japanese Policymaking: The Politics behind Politics*, (Westport: Praeger, 1995). 74.

²⁴⁸ Miyashita, 1999. Op cit. 718.

²⁴⁹ Ibid. 724.

²⁵⁰ L.E. Carlisle, 'The changing political economy of Japan's economic relationship with Russia', *Pacific Affairs*, 67, 1994. 411-431.

²⁵¹ Schaller, Michael, *Altered States*, New York: Oxford University Press, 1997.192.

embargo of Vietnam. Japan opposed the sanctions due to its high volume of trade with Vietnam and the absence of any benefits from sanctions, nonetheless, it dutifully adhered to US guidance for over a decade until US support for the sanctions began to wane in the 1990s.²⁵² Japan finally ended its embargo in November 1992, a mere 14 months before the US ended its own 19 year embargo.²⁵³ In her study of Japan-Vietnam relations, Hirata concluded that while Japan was capable of proactive action that was independent of US policy, as soon as the US began to exert pressure Japan quickly reverted to passive obedience.²⁵⁴

In 2000 Japan was again pressured to suspend sanctions against North Korea that it had enacted in response to both missile tests in Japanese airspace and North Korean nuclear research.²⁵⁵ The sanctions and a hardline posture were incredibly popular with both the Japanese public and the major political parties and this case in particular was one in which Japan's security interests were clearly involved. Despite this, and even with numerous instances of provocative North Korean military behaviour, Japan followed its alliance instructions and restarted food aid and diplomatic negotiations.²⁵⁶ The above examples are merely part of a pattern which Katō Ryōsō, Director General of the Foreign Policy Bureau in the Ministry of Foreign Affairs, describes as "in times of conflict or opposing goals, Japan has given in 100% of the time to the US".²⁵⁷

²⁵² Miyashita Op cit..

²⁵³ See, Patrick Cockburn, 'US finally ends Vietnam embargo', *The Independent*, 4 February 1994, and Leslie Helm, 'Japan Close to Resuming Aid to Vietnam; Embargo Could Be Hurt', *LA Times*, 30 October 1992.

²⁵⁴ Keiko Hirata, 'Japan as a Reactive State?: Analyzing the Case of Japan-Vietnam Relations,' *Japanese Studies* 18: 2, (1998).

²⁵⁵ Akitoshi, Op cit. 2003.

²⁵⁶ Miyashita, 2001. Op cit. 39-40.

²⁵⁷ Cooney, Op cit. 29.

Katō's comment is without doubt an exaggeration, however, as Japan has frequently opposed US policy, particularly in economic affairs but also over issues such as the former's diplomatic relations with China, Vietnam and various Middle Eastern states. Hirata's comments regarding "passive obedience" are also unfair as opposition to US policy can be quite strongly based upon ideological principles. It might be more accurate to say that Japanese political factions which stand against strongly held US interests, generally find themselves unable to combat the pressure from both the US and that nation's political and bureaucratic allies within Japan.

The most recent example was the political fallout surrounding negotiations over the relocation of US Marines from their Futenma base in Okinawa. The base was highly unpopular with the local residents and Prime Minister Hatoyama Yukio had pledged that the base would be relocated outside Okinawa. This clashed with preexisting alliance agreements, however, and the ensuing battle for dominance was characterized in some Japanese quarters as "virtually collapsing the US-Japan alliance."²⁵⁸ This was clearly hyperbole aimed at, and succeeding in, generating public fear of the possible negative effects Japan might suffer from abandonment by the US. However, the Futenma issue had in actuality been characterized by American insiders as a "minor issue" in relation to the ongoing alliance and something that should not be allowed to interfere with long-term commitments. In military terms it impacted only US force projection in Asia rather than any aspect of Japan's own defence and American analysts highlighted the far greater importance of the Kadena Air Force base to long-term strategy, urging that Futenma be relinquished in order to avoid generating

²⁵⁸ 'Hatoyama's foolish trip to Iran hurt national interests', *Yomiuri Shimbun*, 10 April 2012.

dissatisfaction with Kadena.²⁵⁹ Even so, the Hataoyama administration's efforts at independent policy were easily overridden by the varied conduits of US Gaiatsu. In the end, Hatoyama himself would reverse his position on the issue, agreeing to the importance of the US point of view, a move that many saw as the key element in his loss of political leadership.²⁶⁰ The succeeding administration would later lay the blame for the divisive issue entirely upon Hatoyama, saying that his policies had been too inconsistent.²⁶¹ A more accurate assessment would be that Hatoyama's policy was perfectly workable but that he underestimated the sheer power of US gaiatsu. The result was that the major factional leaders were united, in some cases self-servingly, in sacrificing Hatoyama to preserve the status quo of the US alliance.²⁶²

Impact on Defence Issues

Accepting the existence of considerable US Gaiatsu on Japanese foreign and security policy, how does this explicitly impact upon defence? As mentioned above, while the US receives a strong intrinsic benefit simply from maintaining power projection capability in the Japanese archipelago, it has also attempted to promote the belief that Japan needs to be contributing a higher level of 'burden-sharing'.

In practice this equates to Japan bolstering US military capability, with Japan receiving (arguable) dividends from use of the ensuing military operations as a means of normalization. Yet as recently as the deployment of troops to Iraq, it has remained clear that while increased military normalcy might be a goal Japan's leaders share, the

²⁵⁹ Mike Mochizuki and Michael O'Hanlon, 'The unnecessary crisis', *The Oriental Economist*, January 2010.

²⁶⁰ Fergus Maguire, 'Hatoyama Approval Rating Drops to 24% Amid Futenma Dispute,' *Nikkei*, 26 April 2010.

²⁶¹ 'Hatoyama govt strayed', *Yomiuri Shimbun*, 16 May 2012.

²⁶² F.M. Rosenbluth, 'Messy Politics but Healthier Democracy', *Asian Survey*, 51 (1), January 2011. 43.

application of these changes in a real world context is being firmly directed by US strategic interests.²⁶³ The JSDF deployments to Iraq added little to US operational capability, and were of questionable value to reconstruction efforts, but they were very useful in legitimizing US actions as part of a multilateral task force.²⁶⁴ In terms of Japan's own security, the operations entailed an extremely high cost in financial terms, cost the government political leverage with minority parties and were extremely damaging to Japan's relations with other Middle Eastern states.²⁶⁵ Had the mission resulted in loss of life, it would have also severely damaged the normalization process itself. As previously mentioned, public sentiment alone would not have prevented further normalization, but it could have delayed it, making any gains the government hoped to achieve a gamble at best.

The key effect of such operations has instead been their 'alliance-strengthening', i.e. binding US and Japanese operational capabilities increasingly closer.²⁶⁶ The laws leading up to the dispatch set the stage by intertwining not just the JSDF but also local and prefectural governments with US forces, by establishing parameters that required them to cooperate during times of crisis.²⁶⁷ Japan's support for US basing realignment not only overrides local objections, but also ignores the fact that the resulting US presence is well beyond what is required for either Japanese homeland or regional protection.²⁶⁸ Under the US-Japan Acquisition and Cross-Servicing Agreement, Japan is also obliged to offer material support to US forces in "regional and international

²⁶³ Jack Edward Holden, 'What factors influenced Japan's decision to dispatch its self-defence forces to Iraq in 2004', *Polis*, 6, Winter 2011.

²⁶⁴ Hughes, *Op cit*, 2009. 81

²⁶⁵ K. Calder, *Pacific Alliance: Revising US-Japan relations*, (London: Yale University Press, 2009). 149.

²⁶⁶ Ōta, *Op cit*. 128.

²⁶⁷ Richard Tanter, 'With eyes wide shut: Japan, Heisei militarization and the Bush Doctrine', in Melvin Gurtov (ed.), *Confronting the Bush Doctrine: Critical Views from the Asia-Pacific*, (New York: RoutledgeCurzon, 2005), 153-180.

²⁶⁸ Katzenstein, *Op cit*. 2008. 15.

contingencies".²⁶⁹ While the Japanese government insists that the provision of support in a non-combat area does not equate to the 'use of force',²⁷⁰ this is hardly an argument likely to hold sway with any nation on the other side of a future US military engagement. This was shown to be the case when Japan's support for US actions in Afghanistan and Iraq made it a potential target for Al Qaeda attacks of the same kind that occurred in London and Madrid.²⁷¹

The 'War on Terror' was far from the first time that US pressure had influenced Japan's security policy. Japan's Cold War commitment to defend sea lanes out to one thousand nautical miles had little to do with Japan's defensive needs and far more with safeguarding sea lanes used by the US Navy.²⁷² For years the US pushed Japan to embrace its concept of regional ballistic missile defence and after the test firing of North Korea's Tapeodongs in 1998 Japan came fully aboard.²⁷³ However, while Japanese leaders have claimed that BMD is not an element of collective defence and that it is not aimed at China (something that will be examined in detail in Chapter 4 and 5) the US strategy that underpins the entire system is both specifically targeting China and dependent upon collective defence to make it work. Many academics within Japan already view existing policy on BMD as a clear exercise of collective defence,²⁷⁴ while participation is undeniably viewed as a threat by China. This perception is perhaps the only factor that really matters as fear of encirclement is in large part behind China's recent military push and, as such, BMD participation can arguably be seen as the

²⁶⁹ Aurelia George Mulgan, 'Japan's Defence Dilemma', *Security Challenges*, 1 (1), 2005.

²⁷⁰ Ibid.

²⁷¹ James Ferguson, 'Al Qaeda's Threat To Japan: Tokyo's Wake Up Call To The War On Terrorism', *Terrorism Monitor*, 2 (2), January 2004, and Guido Olimpo, 'Japan: A target for Al Qaeda?', *Terrorism Monitor*, 4 (5), March 2006.

²⁷² Michael Green, 'On the Armitage Nye Report', *METI*, Tokyo, 17 January 2001.

²⁷³ Oros, Op cit. 158.

²⁷⁴ Japan Forum for International Relations, *The 24th Policy Recommendations: New World Order of No-War Community and Future of Japan-US Alliance*, April 2004. 16

primary initiator of the regional security dilemma.

It is not, however, firepower but rather support capability where Japan can offer the US the greatest return on investment. As we shall see in more detail in Chapter 5, the greatest weakness of the US presence in Asia is its reliance upon extremely long and vulnerable supply lines. Secure basing and resupply in Japan mitigate the worst of this, making materiel and financial aid at least as important as Japan's military capabilities. In the 1970s US pressure was primarily focused on bringing about a basic increase in Japanese defence spending. In the 1980s this shifted to pressure for increased military capability and in the 1990s it turned to boosting the level of Japan's contributions to the basing of US troops.²⁷⁵ Yet, US influence over Japanese strategic thinking is such that some Japanese argue that forward basing is decreasing in importance to the US and that Japan thus needs to contribute more to the alliance.²⁷⁶ Nothing could be farther from the truth and only several decades of the US convincing Japan of their lack of importance allows such wild misconceptions to arise. This is part of a long-standing pattern of Japan left feeling 'in debt' for doing exactly what the US wants of it.

Japan's contribution to the Gulf War, the 'checkbook diplomacy' for which the country was internationally shamed, was, in the minds of some analysts such as Oros, exactly what the US wanted from Japan, i.e. a major financial contribution to the cost of operations rather than a token presence on the ground at the time of the invasion.²⁷⁷ As a result of these payments Japan was required to establish a special, highly unpopular,

²⁷⁵ Takao Sebata, *Japan's defence Policy and Bureaucratic Politics, 1976-2007* (New York, University Press of America, 2010). 2-3.

²⁷⁶ Ōta, Op cit. 155.

²⁷⁷ Oros, Op cit. 82

domestic tax.²⁷⁸ Despite this, both politicians and the Japanese public were left feeling that they somehow still owed their ally more in the future. The same occurred during the negotiations over Futenma's relocation, wherein the publicly divisive arguments over policy had in reality been settled behind the scenes so that Japan would leave the basing as the US desired for as long as the US publicly rejected alternate suggestions.²⁷⁹ The Japanese government also agreed to fudge the figures over the basing costs to make it seem as though the US was making a much higher contribution.²⁸⁰ The net result was that the US got what it wanted, Japan was made to seem in debt over the issue and public dissatisfaction over handling of the issue played a large part in removing the pro-China Hatoyama administration from power.

Basing is not the only support Japan is capable of providing though. Japan has already carried out long-range refueling operations for 'at war' US vessels and been called on to participate in non-combat areas such as cyberwarfare, PKO and intelligence gathering.²⁸¹ Regardless of their non-combat nature, the practical alliance effect of any such support is that it frees up more US budgetary funds, manpower and materiel for direct combat operations and, semantics over constitutional principles aside, the military outcome of any operations that are supported by Japan will be deemed by their targets as having being carried out by the alliance as a whole rather than whatever forces make up the sharp point of the spear.

Conclusions

²⁷⁸ Katsumi Ishikuza, 'Japan and UN peace operations', in Christopher P. Hood (ed.), *The Politics of Modern Japan*, (New York: Routledge, 2008). 30.

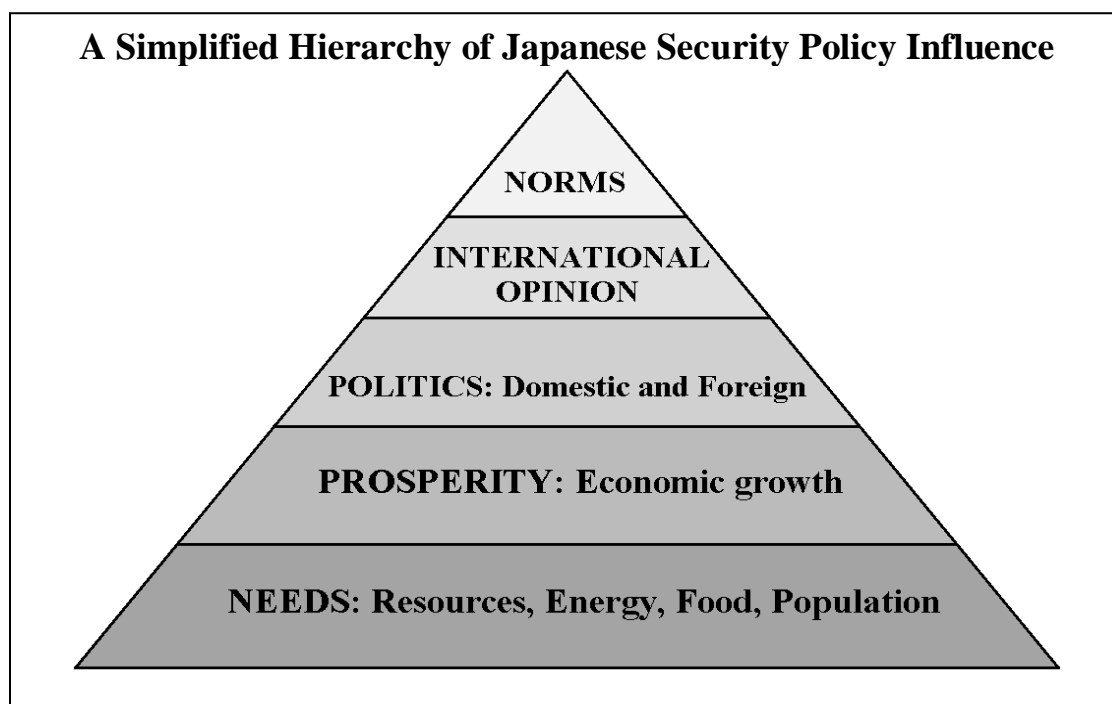
²⁷⁹ Chiyomi Sumida, 'Report: Japan never fully committed to moving Futenma off Okinawa', *Stars and Stripes*, 4 May 2011.

²⁸⁰ 'The truth behind Japan-US ties (3): Numbers inflated in Marine relocation plan to increase political impact', *Asahi Shimbun*, 4 May 2011.

²⁸¹ Green, Op cit.

In case studies, diagrams such as Figure 3.8 are occasionally used as visual aids for comprehension of complex fields. Yet, in cases such as this they are too simplistic. In the example here (based upon Maslow's hierarchy of psychological needs)²⁸² the dominant influence is the state's existential needs: energy, resources, food, etc. Secondary level influences would be a focus on economic prosperity, the key issue of both public and political interest. Security factors (other than purely existential ones) take a lesser place and are influenced by domestic and alliance agenda. Finally international opinion and normative values have much weaker influence. While broadly accurate, such illustrations are in danger of presenting as clearcut and static elements that are in reality both fluid and highly dynamic.

Figure 3.8



²⁸² A.H. Maslow, A.H. 'A theory of human motivation', *Psychological Review*, 50(4), 1943. 370–96.

Japan's defence policy is non-linear; it is neither proportional nor additive, in that sudden crisis events can have a major impact and its various elements cannot be dissected or understood outside their relation to the whole. These elements, on both the domestic and international level are constantly shifting in importance and might be far more accurately conceptualized as acting like a lava lamp. Like the wax blobs within the lamp, the elements exist in multiple dimensions exerting influence on social, political, economic and foreign affairs. The groups grow and decrease in strength, move in and out of public focus and split apart or merge together as they do so. As such the extent of any one element's influence is in constant flux and can never be explicitly stated. Instead, the framework must be viewed as a whole to try and grasp the dynamics at play.

Policy is set at the governmental level yet bureaucratic resistance to change, coupled with political infighting and compromise, has a tendency to water down initial proposals for defence reform, ensuring an incremental pace for change. Organizational level groups, meanwhile, have little power to steer policy but can promote or impede its progress, often using what influence they have to trade on this for concessions in other areas of politics. The low value attached to defence issues by the voting public ensures that the government is often willing to engage in such exchanges.

In terms of ideology, for several decades the dominant paradigm has been defensive realism supporting military normalization. Its adherents are, however, factional and prone to political infighting about how to implement security strategy. Individual Prime Ministers also have opportunities to exert ideological influence but the success of such

initiatives has been dependent upon their ability to accommodate bureaucratic and alliance concerns.

Japan's dominant norm is neither pacifism nor anti-militarism, but anti-radicalism: a deeply ingrained fear of sudden change that might disturb the status quo. Sudden crisis, or to a lesser extent the desire to maintain international standing, can, however, generate sufficient motive force for change to be embraced. This force acts as a depressant upon defence policy, particularly i.e. the normalization process, and acts to ensure reform is conducted at a steady, incremental pace. Additionally, as long as the US remains the global hegemon, the US-Japan alliance will thus be seen as a stable rock for Japan to anchor its security policy upon. Yet, as we shall see in Chapter 4, such policies include commitments that while superficially enhancing Japan's security through greater military strength, might in actually be detrimental to it by exacerbating regional tensions.

In terms of external factors, international and regional views have relatively negligible impact upon defence policy, instead the dominant forces are threats to national security and the influence of the US. As previously stated, the former ease normative resistance to defence normalization. The latter, meanwhile, has broad influence over both Japanese foreign policy in general and defence policy in particular. Yet this process of *gaiatsu* is also employed by Japanese politicians as a justification for promoting their own agenda. Whether this pressure truly stems from the US or the politicians is, however, irrelevant if it is steering defence policy away from a neutral assessment of the threats Japan faces and the best response to them. Whether based upon the desire of Japanese politicians to achieve ideological goals, or that of the US to meet strategic goals serving US interests

ahead of Japanese ones, the use of gaiatsu to either exaggerate or downplay specific threats, or the importance of specific defence systems, is itself a threat to national security. Understanding to what extent this might be true requires deeper analysis of the dangers Japan faces.

CHAPTER 4: Existential Threats:

The Purpose of the Defence Industry

Introduction

Japan's geostrategic location presents it with a variety of unavoidable security problems that make the maintenance of a defence industry a necessary safeguard rather than either a simple luxury or a tool of influence. It is involved in unresolved territorial disputes with its immediate neighbours and its lack of resources makes it highly dependent on foreign sources of energy and raw materials; both of which make security of Sea Lines of Communication (SLOC) vital. Finally, it is highly vulnerable to natural disasters that regularly impact hundreds of thousands of citizens.

The 2010 NDPG saw a shift of focus from Russia, to a new 'dynamic' defence aimed at a wider variety of dangers. Foremost among these are 'gray zone disputes', conflicts over contested territory and resources. While a clear response to a rising China, there is room to question whether the strategy is driven by Japanese or US design. While some Japanese politicians have claimed that China's activities "pose a considerable threat" to Japan, the US 'pivot to Asia' has also placed increased importance on sustaining US preeminence in the region, accompanied by renewed calls for greater Japanese contributions to the military alliance.¹

¹ Matteo Dian, 'The transformation of the US Japan alliance and the pivot towards the Asia Pacific region', Paper at National Convention of International Relations of the Italian Society of Political Science, Trento, 13 July 2012

As the foremost partner in the US ‘hub and spokes’ system of bilateral ties and one of the oldest examples of the US ‘lily-pad’ strategy of forward basing,² not only would Japan be deeply affected by any conflict involving China, the mere possibility of such conflict has already impacted its defence policy in terms of system procurement. Even relatively minor events can create significant ripples, with nuclear tests by North Korea in 2013 prompting calls by Japan’s defence Minister for a preemptive strike capability.³ These sudden threats can spur the Japanese public to support breaks from the status quo and increased military normalization

Yet, whether such threats are justifiable is an important question in assessing to what extent the defence industry is producing solution and safeguards for real threats rather than expending large amounts of money merely to sustain politically expedient spectres. Looking at the major security threats reveals that not only have some been grossly inflated, far more significant issues have been relegated to a dangerously low priority in defence spending.

Russia

For almost a century, Russia was Japan’s *bête noir*, yet, following the Cold War the threat of conflict declined significantly, as such, it will be examined before the more serious dangers posed by North Korea and China.

² ‘Hubs and Spokes’ refers to a major regional ally surrounded by numerous smaller allies; the ‘Lily-pad’ system involves establishing minimally staffed contingency bases, with prepositioned weaponry and supplies, for potential future conflicts.

³ Kiyoshi Takenaka, ‘Japan has the right to develop preemptive strike capability: defence chief’, *Reuters*, 13 February 2013.

The major outstanding issue between Japan and Russia is the Kuril Isles (Hoppō Ryōdo), an island chain north of Hokkaido which Russia seized at the close of World War Two and of which Japan still claims partial ownership. Japan considers four of the islands to be Japanese territory and in 1956 Russia offered to return two of them. While Japan rejected the offer at the time, it seems increasingly likely that the same offer might be the key to resolution. Japan has hinted that it is now willing to accept such a compromise, however, nationalist elements in Russia are preventing a breakthrough.

The Kurils are incredibly valuable territory, holding an estimated 1,867 tons of gold, 9,284 tons of silver, and massive deposits of rhenium (used in jet engine creation) as well as deposits of natural gas and oil.⁴ Russia has suggested joint development with Japan but Japan insists on first settling the ownership question. This is complicated by the influence of the US, however, which strongly support Japan's claims. US relations with Russia are, in turn, significantly affected by Sino-Russian relations, such that the US is unlikely to support closer ties between Japan and Russia as long as Sino-Russian relations remain warm.⁵ Incremental progress is being made,⁶ though rising tensions in 2011 saw Russia increase its military presence on Iturup Island.

Russia is in the midst of drastic military cutbacks though (reducing ground and armor units by 60% since 2008) with a focus on modernization, a process that will take decades and will be seriously complicated by intractable bureaucratic and cultural

⁴ 'What makes Japan cling to Russia's Kuril Islands?' Pravda, 26 January 2012.

⁵ Paradorn Rangsimaporn, 'Russia's debate on military technological cooperation with China', *Asian Survey*, 46 (3), May 2006. 477-495.

⁶ 'Japan holds firm on disputed islands', *RIA Novosti*, 8 March 2012; 'Japan, Russia to peg fishing quota for 2013', *Jiji*, 2 November 2012.

problems.⁷ As such, they are unlikely to initiate any brinkmanship regarding the islands. Japan itself is even more averse to such destabilizing tactics, particularly given the fact that the US has explicitly stated that the Security Alliance does not extend to the Kurils.⁸

The solution would seem to rely upon diplomacy, something likely to move slowly given the investment by nationalists on both sides. Japan, however, is working within a limited timeframe. If Japanese companies do not commit to industrial development of the islands, Russia will extend offers to other Asia nations.⁹ Already South Korean firms have begun small projects on the islands, exacerbating tensions with Japan.¹⁰ In the end, resolution is largely in the hands of the Ministry of Foreign Affairs and is unlikely to have any impact on actual security in the near term, though it will certainly be used politically as a justification for increased military investment..

North Korea

Since the end of the Cold War, North Korea has been presented as a significant threat to Japan. Takesada Hideshi, director of the National Institute of Defence Studies, calls it an imminent threat, as opposed to China's medium-term threat.¹¹ The US also claims that North Korea has become a potential threat to continental America,¹² urging allies to enhance BMD systems and the international community to take 'firm action' against the

⁷ James R. Clapper, *Worldwide threat assessment of the US Intelligence Community*, (Washington DC: Director of National intelligence, January 2012).

⁸ J.E. Dyer, 'Peace in our time: Russian air defence to Kuril Islands', *Commentary*, 15 February 2011.

⁹ Victor Sukovitsyn, 'What makes Japan cling to Russia's Kuril Islands?', *Pravda*, 26 January 2012.

¹⁰ 'Japan protests over Korean builders on Kuril Islands', *Chosun Ilbo*, 1 June 2012.

¹¹ 'China's military a global concern: Japan', *India Today*, 17 December 2010.

¹² 'Gates: North Korea will pose direct threat to US', *AP*, 11 January 2011.

so-called rogue state.¹³ This longstanding threat helped deepen the US-Japan alliance by linking North Korea's nuclear program with the US hunt for WMDs in Iraq. Tenuous though it was, this was vital in securing support for deployment of Japanese troops to Iraq, while North Korea's missile program was the key justification for Japan's participation in BMD research.¹⁴

North Korea's actual capability has frequently been exaggerated, however, both by North Korea itself (for the purpose of diplomatic leverage) and by US and Japanese politicians (to legitimise increased militarization). In recent years American books, games and movies have all portrayed the fantasy scenario of a North Korean invasion of the US. More troubling are frequent media statements by political and military commentators, who suggest such scenarios might be plausible.¹⁵ Their latest bugbear is the danger of Electro-Magnetic Pulse (EMP) weapons that supposedly threaten America's entire electrical network, something the Director of the US Task Force on National and Homeland Security called "an EMP apocalypse".¹⁶ Requiring both advanced nuclear and ballistic missile programs, as well as cutting-edge research on EMP weaponization, such reports are far from credible considering the North's technological level.¹⁷

¹³ Bruce Klinger, 'North Korean missile defiance requires a stern response', *The Heritage Foundation*, 12 December 2012

¹⁴ Hughes, Op cit. 291-311.

¹⁵ Robert Farley, 'Neocons salivating over their next great exaggerated threat: electromagnetic pulse attack', *Alternet*, 22 October 2009.

¹⁶ Peter Vincent Pry, 'North Korea EMP attack could destroy U.S. - now', *Washington Times*, 19 December 2012.

¹⁷ Markus Schiller, *Characterizing the North Korean Nuclear Threat*, (Santa Monica: RAND, 2012); and Clapper, Op cit.

History

Relations between Japan and North Korea have been poor since the end of World War Two and official ties have never been formalized. Talks in 1991 to promote normalization stalled over the issue of reparations for Japan's annexation of Korea. The talks restarted in 1992 only to fail over North Korea's non-compliance with IAEA nuclear regulations. Further progress was again derailed in 1998 by North Korean missile tests. While North and South Korea improved ties following the South's 'sunshine policy', Japan supported the US designation of North Korea as part of an 'Axis of Evil', with tensions further escalating following the North's admission that it had abducted dozens of Japanese citizens in the 1980s.¹⁸ The hardline policy of the US effectively ended the Six Party talks,¹⁹ and the lack of progress led to further deterioration of North-South relations.²⁰ Since then, tensions have fluctuated greatly, often detrimentally affected by new developments in North Korea's missile and nuclear test programs (see Table 4.1 for a summary).

Threat Evaluation

North Korea has almost no heavy industrial production, no significant natural resources, has millions of starving people and is home to increasing numbers of homeless nomads and bandits.²¹ The country suffers from extremely poor electricity supply, insufficient food production, frequent major flooding and has a GDP that is less than half that of the

¹⁸ Marie Soderberg, 'Can Japanese foreign aid to North Korea create peace and stability', *Pacific Affairs*, 79 (3), Fall 2006. 433-454.

¹⁹ Anne Penketh, 'US exaggerating nuclear threat from North Korea', *The Independent*, 3 March 2008; Hyeong Jung Park, 'Diverging threat perceptions on North Korea', *Brookings Institution*. Available online at http://www.mansfieldfdn.org/programs/program_pdfs/rok_us_park.pdf

²⁰ Byong-chul Lee, 'The aims of North Korea's rocket rattling', *Asia Sentinel*, 17 December 2012.

²¹ Palash R. Ghosh, 'North Korea: Huge military, but small threat', *International Business Times*, 21 December 2011

city of Lisbon.²² Attempts to frame it as a major threat to international security would be laughable if they had not become so widespread.

Table 4.1

History of North Korean Missile Development	
1970s	Begin to develop a domestic version of Russia's Scud missile
1984	First missile tests
1987	New variant, Scud C, announced
1998	1 st tests of the new Taepodong-1 missile, which are fired over Japanese territory
1999	North Korea declares a moratorium on testing in return for foreign aid
2005	North Korea ends its moratorium, blaming the hostility of the Bush administration
2006	Tests 7 missiles, including the new Taepodong-2 which explodes on takeoff
2006	North Korea conducts its 1 st nuclear test
2009	New tests see another rocket fired over Japan, this is claimed to be a satellite test
2009	A second nuclear test takes place
2009	Test firing of 7 more missiles
2012	In April a new rocket test fails
2012	In December a further test of a multi-stage rocket succeeds
2013	In February, North Korea conducts its 3 rd nuclear test

Regarding North Korean missile development, David Albright, President of the Institute for Science and International Security, stated the exaggeration was "up there with the Iraqi nuclear assessment."²³ Other analysts suggest that tensions are unrelated to North Korea's development of nuclear weapons, which have yielded no more than 0.5-0.8

²² Lisbon's GDP = \$95 billion, North Korea's GDP = \$40 billion, from "Global city GDP 2011–2012", Brookings Institution, 2012; and the CIA World Factbook, 2012.

²³ Penketh, Op cit.

kilotons, a tiny fraction of the power of the oldest viable American weapons, but are instead due to intractability on the part of the US and presuppositions about the character and aims of the North Korean government.²⁴

Analysis of North Korea's missile program by RAND found that: much is merely outdated Russian technology, its long range missiles are extremely unreliable and inaccurate, its stockpile of precision missiles is extremely small, possibly non-existent, its handful of tests are not nearly enough to fine tune any of its missile systems, and its long range missiles are highly vulnerable to preemptive strikes. Most importantly, the study concluded that the tests occurrence at politically significant dates suggested that they served political rather than technological or military goals and that its weapon programs are bluffs designed to win international concessions.²⁵

In total, since the beginning of testing in 1984 North Korea has launched only 26 ballistic missiles. Of these 14 occurred on 2 dates, the 4th of July 2006 and the 4th of July 2009. Both clearly aimed at American audiences. The other three tests dates were in 1998 (heralding the consolidation of power of Kim Jong Il), in 2009 (at the time of a major National Assembly on Kim's birthday) and in 2012 (in celebration of Kim Jong Sung's 100th birthday). The lack of rigorous testing other than this is a clear sign that North Korea has little interest in their practical use as weapons.²⁶ This is not to say that North Korea does not have significant numbers of short-range missiles and, while inaccurate, these could be used as potential terror weapons against Japan. This is highly

²⁴ Wade L. Huntley, 'US policy toward North Korea in strategic context', *Asian Survey*, 47 (3), June 2007, 455-480.

²⁵ Schiller, *Op cit*

²⁶ *Ibid*

unlikely, however, as the unreliable nature of its larger missile systems means it would have no credible deterrence against a counter-strike.

Some Japanese analysts support this view that tests are purely a bargaining tool and suggest that claims about their capability are disseminated by American intelligence to foster a sense of threat in Japan.²⁷ Recently, even the US intelligence community admitted that the North's missiles would only be used in defence and then, only if North Korea was on the verge of a military defeat.²⁸ This merely echoes what North Korea has itself been stating for years, i.e. that its weapons are purely safeguards against the possibility of attack by Japan and the US.²⁹

Within North Korea there is evidence that domestic reform is taking place. Ri Yong-ho, a top general, was sacked for resisting plans to introduce major economic reforms,³⁰ the privileges of army commanders are being rolled back, and scholars have been sent to China to study that state's embrace of limited capitalism. While small, these changes are highly significant and suggest that diplomatic negotiation supporting such reforms could have considerable impact upon North Korea's future development.³¹ Of course, the country remains highly repressive and negotiations must consider humanitarian requirements, yet, there is little evidence that Japan will be required to field a military, rather than diplomatic or economic, response to North Korea.

²⁷ Hiroyuki Kōshōji, 'Analysis: North Korean threat to Japan', UPI, 19 March 2009

²⁸ Clapper, *Op cit.* p 6; Denny Roy, 'Parsing Pyongyang's strategy', *Survival*, 52 (2), February 2010. 111-136

²⁹ 'Japan preparing for external expansion with US support', *Korean Central News Agency*, 19 January 2012

³⁰ Justin McCurry, 'North Korean leader Kim Jong-un wrests economic control from military', *The Guardian*, 20 July 2012.

³¹ Blaine Harden, 'North Korea's extreme makeover', *Foreign Policy*, 26 July 2012.

The Real Danger

A more significant danger is the possibility of a sudden regime collapse. Various internal factors: a peasant uprising, major famine or military coup, could precipitate a sudden breakdown in governance leading to humanitarian disaster, civil war, massive refugee migration and/or proliferation of WMDs. In the event of such a collapse it is unlikely that the international community would bear the cost of rebuilding the North. Instead this burden would fall upon South Korea.³² In 1996 potential costs were estimated at \$754 billion, by 2000 the estimates had risen to \$2.2-3.9 trillion. Given South Korea's annual budget of \$250 billion it is clear that costs will be far beyond their capability.³³

Even in an ideal scenario (unification by joint consensus, something the North currently sees as a form of capitalism by osmosis) the vast cultural, economic and political differences would make stabilization of the North incredibly difficult. A sudden, violent collapse is seen as the most likely scenario, with troops needed for humanitarian assistance, border control, internal security, civil disarming and safeguarding WMDs.³⁴ Some estimate requiring over 400,000 troops for the various tasks, again well beyond the South's capabilities.³⁵ The US would eagerly embrace any role in reshaping its former foe but longstanding animosity would be likely to rule this out. While Japan also suffers a legacy of bad relations, its proximity, capabilities and need to improve relationships with both Koreas would require it to make some contribution. Regardless of any suggestions that Japan's participation would be "unlikely and undesirable" and

³² Andrew Bennett and Cory S. Julie, 'The US, China and preparing for North Korea's demise', *CSIS*, 31 January 2011.

³³ Jong-yun Bae, 'South Korean strategic thinking toward North Korea: The evolution of the engagement policy and its impact upon US-ROK relations', *Asian Survey*, 50 (2), March 2010. 345.

³⁴ Mark Fitzpatrick, 'North Korean Security Challenges: A net assessment', *ISIS*, 2011

³⁵ Bruce W. Bennett and Jennifer Lind, 'The collapse of North Korea: Military, missions and requirements', *International Security*, 36 (2), Fall 2011. 84-119.

that Japan should restrict itself to offering basing for US operations,³⁶ Japan needs to adopt a more independent and proactive policy, one for which the groundwork should already be underway.

What to do?

Any regime instability, be it food shortages, natural disaster or economic failure, is likely to push the North's leadership to higher levels of brinksmanship.³⁷ The application of sanctions, rather than resolving any problem, simply promotes higher levels of instability. It has also been shown that where Japan withholds aid, others step in to fill the gap, negating meaningful impact and making aid useful only as a reward for good behaviour rather than a punishment.³⁸

Given that North Korea's provocations are driven by perceived threats from the US, and to a lesser extent Japan, reducing these perceptions is clearly a vital element of stabilizing relations. Avoiding knee-jerk responses to North Korean saber-rattling and offering economic supports to internal reform are straightforward means of lowering the mutual threat level. The North has also shown interest in building ties with small and medium countries such as Mongolia, Canada and Australia and Japan should act as a facilitator in developing such ties.³⁹ Given that North Korea's military threat to Japan has been severely over-stated, the only real danger posed is that mishandling of diplomatic ties might increase the level of anti-Japanese sentiment in North Korea, the real problem at the heart of this aspect of Japanese insecurity.

³⁶ Bennett, Op cit.. 116.

³⁷ Yong Kwon, 'Food before politics on North Korea', *Asia Times*, 6 October 2011; and, Hughes, Op cit. 298.

³⁸ Soderberg, Op cit. 450.

³⁹ Migheddorj Batchimeg, 'Mongolia's DPRK Policy: Engaging North Korea', *Asian Survey*, 46 (2), March 2006, 275-297.

China

Sino-Japanese relations in 2013 began with Chinese ships placing radar-lock on Japanese counterparts in the East China Sea,⁴⁰ and Japan responding with a threat of firing warning shots at craft violating its territory.⁴¹ Though minor, such incidents are symptomatic of gradually escalating tensions between the two countries which have existed since a 2010 clash over ownership of the Senkaku Islands. This incident led to China being listed for the first time as a national threat in a new NDPG which highlighted China's growing military power.⁴² This merely echoes US rhetoric such as the Director of National Intelligence claiming that China poses the most serious "mortal threat" to the US,⁴³ or Donald Rumsfeld, former Secretary of Defence, disingenuously asking, "Since no nation threatens China, one must wonder: Why this growing investment? Why these continuing large and expanding arms purchases?"⁴⁴ The simple answer to this question is that China is at least as threatened by its neighbours as they are by China, a security dilemma that is exacerbated by numerous provocations from both sides, and which sees China and the US pressing against one another's boundaries in the opening stages of a competition that will determine control of the Pacific.⁴⁵

Control of the Senkakus

Sabre-rattling has done little to ameliorate concerns over future conflict. Japanese demagogue Ishihara Shintarō claimed the US would succumb in war as "China does not value human life at all and can start a war without any concerns,"⁴⁶ while Chinese

⁴⁰ Abe: China radar-lock on Japan ship 'dangerous', *AFP*, 6 February 2013.

⁴¹ Eric Talmadge, 'Japan talk of warning shots heats up China dispute', *AP*, 20 January 2013.

⁴² 'White paper rings alarm over China', *Yomiuri Shimbun*, 17 July 2012

⁴³ Eli Lake, 'China deemed biggest threat to US', *Washington Times*, 10 March 2011.

⁴⁴ Quoted in Charles Glaser, 'Will China's rise lead to war?' *Foreign Affairs*, March 2011.

⁴⁵ For provocations, see, Michael S. Chase, 'Chinese nuclear force modernization', *China Brief*, 12 (8), 12 April 2012.

⁴⁶ 'Ishihara: Life respecting US no match in war against China', *Asahi Shimbun*, ' 5 November 2005

Major General Luo Yuan called for artillery bombardments to be carried out against uninhabited Japanese areas.⁴⁷ The most recent source of tension is regarding control of the Senkakus. Halfway between Okinawa and the Chinese mainland (a 360km gulf) they are only 140km from Taiwan and also claimed by it. The surrounding waters total some 210,000 sq. km and the extent of each nation's Exclusive Economic Zone (EEZ) is also in contention. Typically running 200km from a state's coast, this would provide each state with a 160km area and a contested 40km stretch. The Senkakus are located in this specific stretch of water. Japan argues for a 180km:180km even split along the midpoint, while China insists its continental shelf means the division should instead be 340km:20km in China's favor. Chinese interest in the area only arose recently, however, following the discovery of substantial natural resources in the region. One of these, the 22,000 sq. km. Shirakaba field, was identified as a suitable area for joint development and a 2008 'Principle consensus on the East China Sea issue' was drafted to formalize what would have been a significant precedent.

Unfortunately, the 2010 dispute stalled negotiations and while efforts were made to restart them, the 2011 Tohoku disaster saw them postponed once more. During the interval public discontent over the government's weak stance gave Ishihara Shintaro, then Governor of Tokyo, the support to make a bid to formally purchase the Islands from their private Japanese owner. Hoping to remove the volatile Ishihara from the mix, the government of Japan decided to intervene and made the purchase directly.⁴⁸ The gesture has done little to bring the issue to a close, however, and tensions remain high. Including the People's Liberation Army Navy (PLAN) there are six separate organizations representing Chinese interests in the issue, and while several have

⁴⁷ 'China should establish Diaoyutai town: PLA Luo Yuan', *China Times*, 1 November 2012.

⁴⁸ Sheila A. Smith, 'Japan and the East China Sea dispute', *Foreign Policy Research Institute*, Summer 2012.

recently been merged into a single Coast Guard, the disparate chains of command make confusion, over both intentional policy and response to unanticipated events, a real danger and the lack of clear channels of communication in the event of a crisis raises the possibility of escalation (see Table 4.2). The reality is that, even with plans to add 36 new large patrol ships to the PLAN fleets,⁴⁹ China does not have the ability to properly police the areas it claims and it is in China's interests to decide upon a clear demarcation line wherein, even if it means relinquishing some claims, it can establish firm control of its territory in a stable and harmonious environment.

Table 4.2

China's Maritime Bodies

Maritime Organization		Responsible Government Body
PLAN		Central Military Commission
Maritime Surveillance	China Coast Guard	State Oceanic Administration
Maritime Police of Border Patrol		
Fisheries law Enforcement		
Anti-Smuggling Bureau		
Maritime Safety Administration		Ministry of Transport

The Threat of Conflict

Since the fall of global Communism the Chinese government has looked to nationalism to promote internal solidarity.⁵⁰ Coupled with the country's economic rise this has created a new sense of confidence and a widespread belief that China deserves to stand preeminent among Asian states. The volatile nature of its clashes with other states over control of islands in the South China Sea leaves Japan unsure how much of China's sabre-rattling is mere bluff and how much sincere threat.

⁴⁹ Masayuki Masuda, 'China's increasing 'rights defence' (weiquan) activities on the sea', *NIDS News*, March 2012.

⁵⁰ Lai-Yew Meng, 'Resurgent nationalism and changing security perceptions in contemporary Japan-China relations', *IPEDR*, 20, 2001. 115.

For China's part, their stated goal is to force Japan to acknowledge that the status of the Senkakus is disputed. This is a tactic that China is utilizing in other territorial disputes in the region, thus far with little success. Japan too, flatly rejects China's claims, insisting that the islands are unquestionably Japanese. However, even if Japan is in the right, moral authority will not dispel China's claims and the islands will remain disputed for the foreseeable future. A concession on Japan's part would likely see China request naval access to the area for People's Liberation Army Navy (PLAN) vessels, so that both states could alternate patrols.⁵¹ This in turn might allow for an even division of EEZ's along Japan's proposed 180:180 divide.

It is important to recognise though, that the key issue for China is not the territorial demarcation but the underlying issue of integrity of its sovereignty. China seeks to set clear boundaries against US/Japanese expansion, and unless this tension is resolved any temporary solution to territorial claims will do little to reduce the core security dilemma. Japan, in turn, fears that China will renege on agreements and continually push for more. With control currently in Japanese hands it is highly unlikely any concessions will be made as long as relations with China remain tense. An alternate path would be to unite with other regional states in an effort to press China to reach a resolution.

The longer the issue remains unresolved, however, the greater likelihood that some minor act of provocation will spiral out of control. Whether arising from a misunderstanding between naval captains or as a deliberate ploy on China's part, it is possible that China could attempt to seize some of the Senkaku Islands in a fait

⁵¹ Linda Jakobson, 'How Involved Is Xi Jinping in the Diaoyu Crisis?', *The Diplomat*, 8 February 2013.

accomplish land grab (much as South Korea did with the Takeshima Islands in 1952). There is also a smaller danger of the same tactic being used to capture some of the southern Okinawan islands, territory that would be strategically vital in any Chinese effort to invade or blockade Taiwan.⁵² According to Richard Fisher, senior analyst at CSIS, China definitely has strategies in place for these operations and as such the chance of their being implemented is "not zero".⁵³

The possibility of a clash has been increased even further by discoveries of major deposits of rare earth metals off Minamitorishima, an island 2000 km south east of Tokyo. The finds, estimated at over 6.8 million tonnes (enough to fuel 230 years of Japanese consumption) could free Japan from dependency on Chinese exports, an economic factor which had thus far helped prevent escalation.⁵⁴

Chinese Strategy

China's grand strategy can be summed up as 'sovereignty, stability and modernity'.⁵⁵ As long as its borders remain secure, the internal status quo persists and its industries progress toward a first-world level, the government will be content. However, Chinese government publications on national development have listed a number of 'core interests' which represent a threshold for military action. One is compromise of the state's capacity for sustainable economic and social development,⁵⁶ an uncomfortably

⁵² Sheila A. Smith, 'Japan and the East China Sea dispute', *Foreign Policy research Institute*, Summer 2012.

⁵³ 'Senkaku Naval battle: JSDFs secret simulation', *Shukan Bunshun*, October 4, 2012.

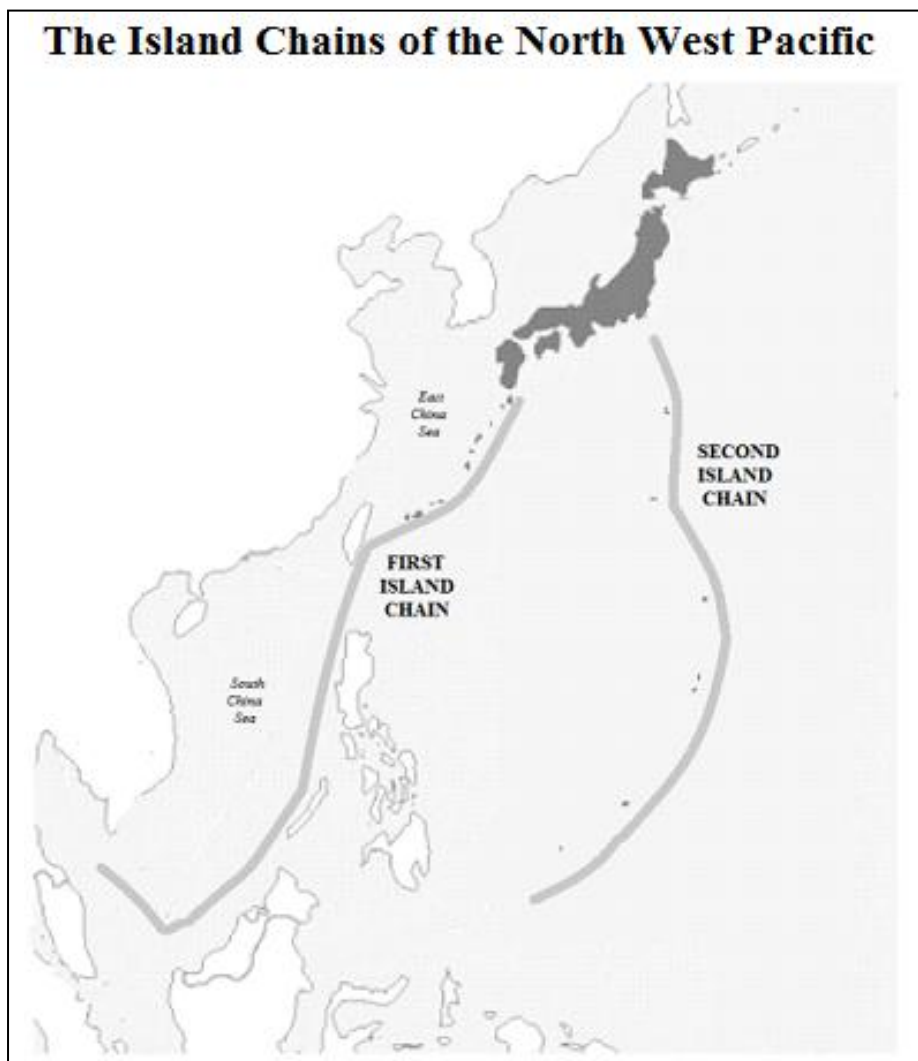
⁵⁴ 'Digging the right hole? Japan, China and rare earth metals', *Japan Foreign Policy Observatory*, 30 June 2012

⁵⁵ David M. Finkelstein, 'China's National Military Strategy', in James Mulvenon and Richard H. Yang (eds) *The People's Liberation Army in the Information Age*, (Santa Monica: RAND, 2000). 99-145.

⁵⁶ 'China's peaceful development', *Xinhua*, 6 September 2011.

open-ended phrase that leaves considerable room for interpretation, similar to the US stated willingness to use force to protect its 'vital interests'.

Essentially, China's long-term strategy seeks to claim complete control of regional waters up to the First Island Chain, littorals stretching from the West of Japan, through Okinawa, Taiwan and the Philippines, and to maintain a strong presence up to the Second Island Chain which stretches from the East of Japan down through the Mariana Islands (see Figure 4.1). The East China Sea and South China Sea have thus become the focus for the majority of Chinese naval expansion and the most likely security flashpoints (see Figure 4.2)

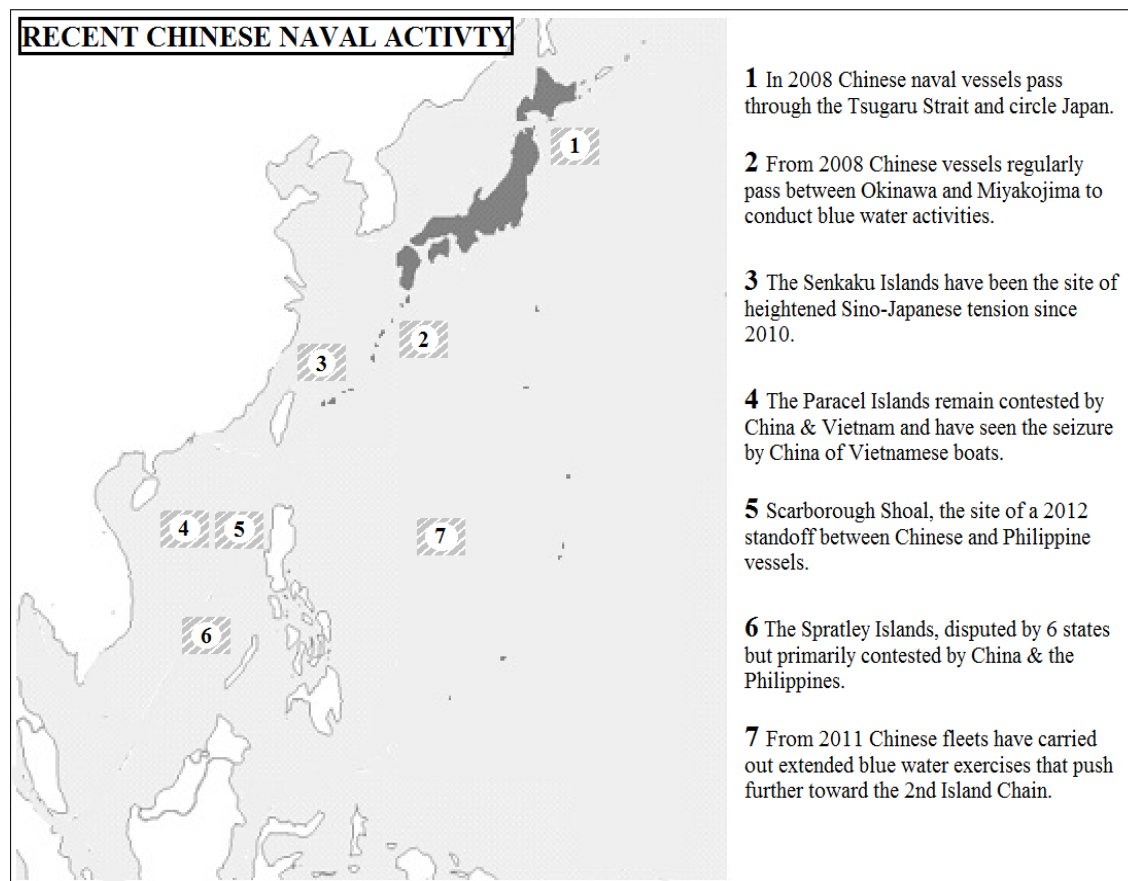
Figure 4.1

China's strategic analysts argue that their state's energy and trade security should not depend on the goodwill of the US in its self-appointed role as guardian of the high seas.⁵⁷ This is enhanced by perceptions that the US is pressuring regional states to act as its proxies in containing Chinese growth. China has attempted to side-step this by establishing what the US calls the 'string of pearls', a series of (non-military) ports stretching from the Straits of Malacca to the Horn of Africa. However, China still

⁵⁷ Toshi Yoshihara, 'Chinese Missile Strategy and the US Naval Presence in Japan', *Naval War College Review*, 63 (3), Summer 2010. 39-62

requires land and air infrastructure to make the ports fully accessible and they thus remain vulnerable to the threat of blockade.

Figure 4.2



Chinese military strategy is focused on developing the capacity to fight small-scale, defensive, local wars.⁵⁸ The US describes this as anti-access/area denial (A2/AD),⁵⁹ aimed at deterring, disrupting and slowing down the US ability to operate in China's regional waters. However, suggestions that the strategy is an "indirect, defensive, limited scope strategy," fail to appreciate Chinese military thought.⁶⁰ In Chinese texts the strategy is not described as A2/AD, instead it is a form of "offensive defence"

⁵⁸ Finkelstein, Op cit..

⁵⁹ *Annual Report to Congress: Military Power of the People's Republic of China*, (Washington DC: Office of the Secretary of Defence, 2010).

⁶⁰ Vitaliy O. Pradun, 'From Bottle Rockets to Lightning Bolts: China's missile revolution and the PLA strategy against US military intervention', *Naval War College Review*, 64 (2), Spring 2011. 7-8.

requiring proactive, even preemptive, action once conflict seems unavoidable.⁶¹ This is based upon recognition of US military and technological superiority and the need for China to make use of every advantage it can find to offset the disparity.⁶²

The US Congressional Research Centre argued that China was intent on creating a force capable of deterring or delaying the entry of US forces into the region.⁶³ Some, however, argue that rather than designing systems to fulfil specific goals, Chinese strategy is instead determined by the technology at their disposal.⁶⁴ This suggests that while in the future (China aims for full economic and military modernization by 2049) China's strategy might evolve into a more expansionist or aggressive form, current activities and responses will be constrained by the military capability it can field.

Military Capability

The US government recently claimed to have drastically underestimated the pace of Chinese military modernization.⁶⁵ This may be an exaggeration, however, as significant flaws in the Chinese industrial base remain: its inefficient central planning system, lack of competition, weak pricing systems and major bottlenecks in the diffusion of R&D innovation.⁶⁶ Many systems are still copied from Russian models and relations between the two states are not entirely stable.⁶⁷ China is also suffering the effects of two decades

⁶¹ Ibid. 9-10.

⁶² Roger Cliff et al. *Entering the Dragon's Lair: Chinese anti-access strategies and their implications for the United States* (Santa Monica: RAND, 2007).

⁶³ M. Taylor Fravel, 'China's search for military power', *Washington Quarterly*, 31 (3), Summer 2008. 131

⁶⁴ Wehan Zheng, *Categories of Military Science*, in *Chinese views of Future Warfare*, Michael Pilsbury, ed., Washington DC: National Defence UP, 1997). 212.

⁶⁵ For example, Richard C. Bush and Michael E. O'Hanlon, *A War like no Other: The truth about China's Challenge to America*, (Hoboken: Wiley, 2007).

⁶⁶ Tai Ming Cheung, 'Dragon on the horizon: Chinese defence industrial renaissance', *The Journal of Strategic Studies*, 32 (1), February 2009, 62-63.

⁶⁷ Stephen Blank, 'Turning a new leaf in relations: Russia's renewed arms sales to China', *China Brief*, 11 (2), 28 January 2011. 6-8.

of Western arms embargoes and has chosen to focus disproportionately on the development of new systems, leaving insufficient budgetary funding for mass production or ongoing support for existing systems.⁶⁸ The net result is that China is producing systems that are both suboptimal for its current needs and economically inefficient.

There are signs that these problems are being overcome. While China does not publish an annual national strategy white paper, greater transparency has made analysis of Chinese defence production much easier.⁶⁹ Aerospace, the leading field for civilian military linkages, has shown the highest level of innovation and ability to adapt to the international market. Technologically, it now equals Japan at the top level within Asia though it remains to be seen whether this can be replicated in other fields.⁷⁰

A recent trio of aircraft are likely to form the mainstay of China's airforce for several decades. The J20 is a heavy stealth fighter much like the US F-22 Raptor, designed for penetrating strikes. Just as the Raptor is supported by the F-35, China will also be using the J31, a multi-role fighter with limited stealth capability. Finally, the J15 is a much lighter fighter envisaged as a future carrier-based platform. China has also developed considerable air-lift capability, which was recently used to evacuate 35,000 Chinese citizens from Libya.⁷¹ With the number of overseas Chinese expected to grow to 100 million by 2020, and with many of them in politically unstable areas, such operations are likely to become more common.

⁶⁸ Yoram Evron, 'China's military procurement approach in the early 21st century', *The Journal of Strategic Studies*, 35 (1), February 2011. 84-853.

⁶⁹ Zhang Yunzhuang, 'China's military procurement and its operational implications: A response to Yoram Evron', *The Journal of Strategic Studies*, 35 (6), December 2012.

⁷⁰ Tai Ming Cheung, 'China's Emergence as a defence technological Power', *The Journal of Strategic Studies*, 34 (3), June 2011. 295-297.

⁷¹ 'The Dragon's new teeth', *The Economist*, 7 April 2012

In naval production China has focused on a series of short-run destroyers the latest of which is the Type 052D (Luyang) guided-missile destroyer. This 6,000 tons vessel, with 64 launch cells for missiles, is likely to enter a longer production run (currently 16) and become the core of China's future fleets.⁷² Specifically, they will act as air defence for the large Sovremenny-class hunter-killers and China's planned aircraft carriers. They can also provide coverage for the dozens of Type 022 (Houbei) missile attack boats that China can use to swarm targets.⁷³

At 60,000 tons and carrying 40 aircraft, the most significant addition to China's arsenal is the Liaoning aircraft carrier. Bought from the Ukraine and refitted, it is intended as a trainer and model for future Chinese indigenous production. Many, however, question its strategic value, writing it off as a concession to nationalist political sentiment rather than military doctrine.⁷⁴

China's carrier capability remains far behind that of the US, which has five 70,000 ton carriers in the Pacific (due for replacement with the 100,000 ton Ford-class). Each carrier-group operates with its own transport planes, AWACS capability, radar jamming planes and multi-role helicopters. The carriers themselves are guarded by a fully dedicated escort fleet, including at least one nuclear attack submarine. In comparison, China still lacks sufficient missile destroyers and submarines to safeguard any investment in future carriers. Even if produced, it would take years of exercise before they reached practical efficiency. The gap is narrowing though; in the coming decade

⁷² James Holmes and Toshi Yoshihara, 'The master plan: China's new guided-missile destroyer', *The Diplomat*, 4 September 2012

⁷³ Holmes, *Ibid*

⁷⁴ Robert S. Ross, 'China's Naval Nationalism: Sources, prospects and the US response', *International Security*, 34 (2), Fall 2009. 64-65

the US Pacific fleet will see modest growth from 101 to 106 surface vessels while China expands from 86 to 109. They also aim to have 72 submarines, compared to a projected 29 for the US and 22 for Japan.⁷⁵

Fleet comparisons may be a moot point though, considering China's investment in missile development and the hundreds, possibly thousands, of anti-ship missiles that can be produced for the price of a single major warship.⁷⁶ Missiles play a key role in Chinese strategic thought and, with stockpiles increasing each year, are already capable of dominating the US presence in the Taiwan Strait.⁷⁷

Current estimates suggest China possesses 1000+ Short Range Ballistic Missiles (SRBM), 75-100 Medium Range Ballistic Missiles (MRBM), and 20 Intercontinental Ballistic Missiles (ICBM). In addition it has 120+ Anti-ship Ballistic Missiles (ASBM) and 150-300 Land Attack Cruise Missiles. These systems, cheaper and easier to replace than naval vessels, are China's means of addressing the imbalance with the US.⁷⁸ The systems are, however, still untested in combat and are far from stand-alone weapons. In the case of an Anti-Ship Missile targeting an enemy vessel, it first has to detect the ship, acquire precise targeting data, monitor the ship's location and make mid-course adjustments during flight, achieve lock-on, bypass any counter-measures, and finally hit the target. Each stage of this process can be further complicated by the target's electronic counter-measures and without satellite technology and sufficient detection,

⁷⁵ Robert Haddick, 'This week at war: An arms race America can't win', *Foreign Policy*, 8 June 2012.

⁷⁶ Robert Haddick, 'Shipping out: Are aircraft carriers becoming obsolete', *Foreign Policy*, 31 August 2012

⁷⁷ David A Shlapak et al. *A Question of Balance: Political Context and Military aspects of the China Taiwan Dispute*, (Santa Monica: RAND, 2009). 126; and, Pradun, Op cit. 12.

⁷⁸ Connor Forman, 'China: A threat assessment through the lens of strategic missiles', *Global Security Studies*, 1 (3), Fall 2010.

data processing and communications systems, the missiles themselves are useless.⁷⁹ Until the missile's offensive capability is tested against a real target's defensive capability in actual conflict it is very hard to say which side has the advantage.

With this in mind, it is important to remember that despite the similarity in appearance of systems they use, the US still has a huge (by some estimates 20-30 years) technological advantage over China. Chinese hopes have, as a result, long focused on developing an 'assassin's mace', a single game-changing system that can deliver a knock-out blow to their opponent. At present, this is ASBM capability, but in the past other systems have been designated as potential assassin's maces and the viability of the latest is very much speculative. As such, some feel that without significant provocation China would be highly unlikely to use ASBM in a first strike capacity.⁸⁰

China at War

Should war occur Chinese strategy advocates 'Active strategic counterattacks', on exterior lines of operations' (what the US has labelled A2/AD). The key difference to 'A2/AD' is that this is not simply safeguarding a disputed zone, but also striking hard at the enemy's rear-areas, their second and third lines of deployment and logistical and support systems, to render operations in the contested zone unsustainable. Rather than missiles targeting enemy vessels in the East or South China Seas, they would strike distant air bases and naval ports (far easier targets than moving vessels), as well as Command, Control, Communications, Computers, Intelligence, Surveillance and

⁷⁹ Harry Kazianis, 'Behind the China missile hype', *The Diplomat*, 24 July 2012.

⁸⁰ Dennis J. Blasko, 'Technology determines tactics: The relationship between technology and doctrine in Chinese military thinking', *The Journal of Strategic Studies*, 34 (3), June 2011. 355-381.

Reconnaissance (C4ISR) capabilities. In alignment with this, China is hoping to develop a deep strike capability by 2020.⁸¹

Analysis suggests that strikes could devastate entire bases with massive volleys that the US has no practical defence against.⁸² This is important for Japan as, while the US is seen by China as the major threat, it is US bases in Japan that would be the primary targets of strikes. Chinese strategists believe this will dissuade Japan from supporting US military operations, though the risks of such hubris should be clear.⁸³

The PLA has special interest in Japan's naval bases: Yokosuka, Sasebo, Kure and Maizuru.⁸⁴ Yokosuka is the foremost target due to the US carriers stationed there and its control of the straits of Sōya, Tsugaru and Tsushima as well as sea and air routes into the Indian Ocean. It is the key link in the 'first island chain', and the only naval base west of Hawaii that can handle carrier repairs.⁸⁵ Disabling its operations would greatly restrict US power projection along the East Asian mainland. Sasebo, meanwhile, is the closest base to China, guards the entrance to the Korean Strait, and sits at the intersection of the Yellow Sea, East China Sea and Sea of Japan.⁸⁶ There are also numerous other US bases which, even if Japan was not directly involved, would become targets in any Sino-US clash (see Chapter 5).

⁸¹ Anton Lee Wishik, 'An antiaccess approximation: The PLA's active strategic counterattacks on exterior lines', *China Security*, Issue 19, 37-48.

⁸² Pradun, Op cit.

⁸³ Yoshihara, 2010. Op cit. 39-62

⁸⁴ Ibid.

⁸⁵ Ibid.

⁸⁶ Ibid.

How likely is Sino-Japanese conflict?

Despite the above dangers, any unprovoked attack by China on Japan (including conflict over the Senkakus) would see the US respond. Recent clarification by the US of this point was seen as an effort to use Japanese fears over the Senkakus to reinforce the latter's commitment to the US-Japan security alliance.⁸⁷ As such, it is important not to fall into the standard security dilemma of conflating capability with intent. Richard C. Bush cautions, "Most experts would define 'threat' to mean a combination of capability and intentions. There's no question that China is building up its capabilities, but China has displayed no intentions of using those capabilities against the United States."⁸⁸ While China has been far more aggressive in its stance against Japan, its sabre-rattling so far is consistent with it simply pushing boundaries to establish clear lines of demarcation and have served primarily to strengthen US-Japanese military ties. It is also likely that Chinese threat estimates have been influenced by the Pentagon's tendency to "always use a worst-case scenario when assessing the military threat from China".⁸⁹ Most independent analysts place China's actual defence budget at 40-100% higher than official figures; the Pentagon, however, usually estimates it at 100-350% higher.⁹⁰ This approach extends to US strategic planning, which always assumes a worst-case scenario, something which colours Japanese perceptions of the threat. In part this can be seen as a desire to justify long-term development of big-ticket weapon systems which might otherwise lack a believable threat.⁹¹

⁸⁷ Aurelia George Mulgan, 'US-Japan alliance the big winner from Senkaku dispute', East Asia Forum, 26th October 2010.

⁸⁸ Esther Pan, 'The scope of China's threat', *Council on Foreign Relations*, 2 June 2006

⁸⁹ Ted Galen Carpenter, 'The Pentagon's worried view of China', *CATO Commentary*, 30 August 2010.

⁹⁰ Pan, Op cit.

⁹¹ Thomas Barnett, *The Pentagon's New Map*, Berkley: Berkley Trade, 2005. 115, 143

China's actual military capability is still far below that of the US. Her military budget amounts to \$46,000 per soldier, compared to \$443,000 for the US, and as a percentage of GDP her budget is less than half the US amount. Similarly, US military stocks stand at roughly \$3 trillion, compared to only \$300 billion for China.⁹² In addition, the majority of Chinese military systems are still directed against Taiwan (all artillery, airborne and amphibious divisions, half of its ground forces and 80% of its naval forces). Recent easing of tensions with Taiwan also means there is less danger than ever of this standoff turning ugly. Unfortunately, this means that China's military leaders may exaggerate the threat from the US and Japan to justify higher budgets. Again, it is important not to mistake posturing for intent.⁹³

Although projections suggest China could be spending 6 times what Japan does on defence by 2020,⁹⁴ this is merely keeping pace with China's economic growth, and must be balanced against the state's external and internal threats. China is surrounded on all sides by potential enemies and engaged in territorial disputes with 8 separate states.⁹⁵ Economically, China is still highly dependent on exports and its access to the South and East China Seas is relatively easy to blockade in the event of conflict.

Internally, it is still a developing nation, ranked 94th for per capita GDP,⁹⁶ and poverty remains a major source of tension. The lesson of Mao's long March not forgotten by the country's leaders and their efforts to promote nationalism are aimed primarily at fostering internal solidarity rather than external expansion. Social problems include:

⁹² Michael E. O'Hanlon, 'Going beyond the air-sea battle in Asia and the Pacific,' *Washington Post*, 23 August 2012.

⁹³ Evron, Op cit..

⁹⁴ Ken Jimbo, 'Dynamics of Power Shift from U.S. to China--Asia-Pacific Security and Japan's Foreign Policy', *Japan Policy Forum*, March 2013.

⁹⁵ These are: India, Bhutan, South Korea, Malaysia, Philippines, Japan, Vietnam and Brunei.

⁹⁶ World Bank Development Indicators Database 2011.

ethnic separatism, uneven economic development, widespread corruption, a housing bubble, environmental pollution, health issues and unpopular land seizures.⁹⁷

The 2011 Arab Spring prompted China's harshest political crackdown in recent years.⁹⁸ China now dedicates over half its military budget toward internal security, particularly in the politically unstable areas of Xinjiang, Tibet and Inner Mongolia where ethnic minorities who make up just 8% of the population control 50% of China's land, including the most resource rich areas.⁹⁹ In the past 3 years over 100 Tibetans have self-immolated in protests,¹⁰⁰ while terrorism remains an ongoing problem in Xinjiang,¹⁰¹ one which Japan has been criticized for legitimizing.¹⁰² Even in central regions public unrest is increasing, with an estimated 90-100,000 mass protests occurring each year.¹⁰³ The danger posed can be seen in the concessions made following a recent protest in Wukan where, in response to villagers ousting allegedly corrupt government officials, the government permitted (for the first time ever) democratic elections using secret ballots to appoint replacements from among the protesters.¹⁰⁴

China's fragile domestic affairs show why it would be unlikely for China to initiate major conflict which might further destabilize the government's precarious hold on power. Instead, China's leadership have frequently stated their belief that US power is

⁹⁷ Douglas MacGregor and Young S. Kim, 'Without ground forces U.S. cannot counter Chinese aggression', *Armed Forces Journal*, April 2012.

⁹⁸ Clapper, Op cit

⁹⁹ MacGregor, Op cit.

¹⁰⁰ Didi Tang, 'Tibet Self-Immolation Convictions: China Finds 8 Guilty in Public Prosecution', *Huffington Post*, 31 January 2013.

¹⁰¹ For example, Tania Branigan, "China knife attack and explosions leave several dead" *The Guardian*, 31 July 2011, and, Kathrin Hille, "Tense mood prevails after Xinjiang attack", *Financial Times*, 21 July 2011.

¹⁰² 'China slams Japan over separatist meeting', *Xinhua*, 14 May, 2012.

¹⁰³ Matthew Robertson, 'Mass Protests in China Increasing and Inevitable, Panel Says', *Epoch Times*, 3 March 2011.

¹⁰⁴ Josh Chin, 'Wukan Elections the Spark to Set the Prairie Ablaze?' *Wall Street Journal*, 1 February 2012.

declining and China simply has to bide its time in order to rise.¹⁰⁵ Nonetheless, its numerous territorial disputes, coupled with a growing need for energy, makes the threat of small-scale wars (precisely what China has admitted preparing for) a real possibility. For Japan this suggests that planning for major conflict should be considered prohibitively expensive given the costs involved and lack of evidence for a probable threat. Regarding small-scale, limited conflict, there is a justifiable need to present deterrent force sufficient to dissuade military action from occurring or failing that to decrease the chance of escalation (something that will be examined in Chapter 6). At the same time, any military deterrent should be accompanied by diplomatic efforts to forestall conflict.

Downgrading China's Threat

While China is a potential threat to Japan, realistic analysis suggests only small-scale conflict (if any) is likely to occur, making it reasonable to categorize China as a minor threat. This danger can be further minimized through the use of diplomatic initiatives, yet, hard-balancing with the US is insufficient in that it promotes the instability of a unipolar order,¹⁰⁶ threatens Sino-Japanese economic ties and fails to counter China's soft power influence. One alternative is soft-balancing through the establishment of a regional community based on shared aims.¹⁰⁷ China itself has protested Japan's exclusion of both China and Russia from its security framework, with Fu Liquan of the China Strategy Culture Promotion Association accusing the US and its allies of

¹⁰⁵ Andrew Scobell, 'Discourse in 3D: The PLA's evolving doctrine, circa 2009', in Roy Kampenhausen et al (eds), *The PLA at Home and abroad: Assessing the operational capabilities of China's military*, (Carlisle: US Army War College, 2010). 71.

¹⁰⁶ If we agree with Waltz that this is the most insecure of international systems, in Kenneth Waltz, *Realism and International Politics*, (New York: Routledge, 2008). 214

¹⁰⁷ Yul Sohn, 'Japan's new regionalism: China shock, values and the East Asian Community', *Asian Survey*, 50 (3), May 2010. 497-519.

adhering to an “outdated zero-sum concept of security that rejects mutually beneficial results”.¹⁰⁸

If China’s comments are taken as sincere, there is considerable room for Japan to act as an intermediary in helping China integrate itself within regional frameworks. Japan’s military normalization is seeing growing acceptance,¹⁰⁹ while China is conducting military exercises with a growing number of states.¹¹⁰ Efforts by Japan to introduce similar trust-building exercises with China, and other states involved in her territorial disputes, could greatly reduce tensions among the naval forces involved. Such ties have already been established in limited form through joint operations in the Horn of Africa and merely need expansion.¹¹¹

There is also considerable room for cooperation in HADR activities. Following the 2004 Indonesian Tsunami, China received criticism for its weak response and so made significant efforts to boost future capability.¹¹² After the 2011 Tohoku Tsunami the 14,000 ton hospital ship Daishan Dao was among aid offered by China to Japan.¹¹³ This echoed the rapid response by Japan to the 2008 Shichuan earthquake.¹¹⁴ With China plagued by regular disasters of her own, the area of deeper HADR cooperation seems vital, both to address the specific threats and as a means of improving relations by breaking down artificially indoctrinated xenophobia and allowing for genuine displays

¹⁰⁸ Xiaokun Li, ‘Report fires back at military coverage’ *China Daily*, 6 June 2012.

¹⁰⁹ Martin Fackler, ‘In an answer to China in the Pacific, Japan flexes military muscle’, *New York Times*, 27 November 2012.

¹¹⁰ *Military and Security Developments involving the People’s Republic of China 2011*, (Washington DC: US Office of the Secretary of defence, 2011). 81.

¹¹¹ ‘China aligns with Japan on Piracy Patrols’, *AP*, 3 July 2012

¹¹² Yōji Kōda, ‘A Japanese perspective on China’s rise as a naval power’, *Australia Sea Power Center*, Working Paper 21, 2012.

¹¹³ Peter Ford, ‘China’s sympathetic response to Japan’s crisis eases tensions’, *Christian Science Monitor*, 4 April 2011.

¹¹⁴ Justin Bergman, ‘Setting Rivalry Aside: China Responds to Japan’s Plight’, *Time*, 14 March 2011.

of fraternity and humanity.¹¹⁵ Part of China's recent strategic change has been to develop its capability for 'Military Operations Other than War', which includes HADR, social stability, military diplomacy and cross training.¹¹⁶ Japan should likewise be encouraging further growth in such non-threatening areas.

In the past decade Sino-Japanese relations have fluctuated greatly, yet it was the current Prime Minister who laid out a blueprint for mutually beneficial ties in 2006.¹¹⁷ While this was derailed by the Senkaku issue, with Abe once again in power improved bilateral ties should be possible. Despite this, China's potential threat is real and as such it is not a question of whether a response is needed but what form it should take.

Regional Stability

Other than North Korea and China, regional dangers still exist for Japan. Rajan Menon has argued that the age of formal alliances in East Asia is coming to an end, with a more fluid dynamic of temporary alliances of convenience taking greater precedence.¹¹⁸ The region's most significant forum, ASEAN, has found its members being courted by four great or rising powers (Japan, the US, China and India).¹¹⁹ One direct result is the increased inability of the group to present a united front.¹²⁰ In ASEAN's relations with China, both Cambodia and Laos now block any decision contrary to the interests of

¹¹⁵ For an example see, <http://www.chinasmack.com/2011/pictures/chinese-netizens-admire-japanese-post-earthquake-behavior.html>

¹¹⁶ Scobell, Op cit. 76.

¹¹⁷ Sheila A. Smith, 'Japan and the East China Sea dispute', *Foreign Policy Research Institute*, Summer 2012.

¹¹⁸ William E. Rapp, 'Past its prime? The future of the US-Japan alliance', *Parameters*, Summer 2004. 104-120.

¹¹⁹ Jun Kurihara and James L. Schoff, 'For whom Japan's last dance is saved - China, The United States or Chimerica?', *Cambridge Gazette: Politico-Economic Commentaries* 4, March 2010. 4.

¹²⁰ Hugh White, 'As power shifts ASEAN stumbles', *The Lowy Interpreter*, 25 July 2012

their new trade partner, a weakness that may undo the political bond between the South East Asian states, leaving them to stand alone in territorial disputes.

Ongoing Disputes

Of such disputes, the two most likely to impact Japan are between China and Vietnam, and China and the Philippines respectively. In Vietnam's case, disputes over the Spratley and Paracel Islands (which Japan controlled during the pre and post-World War Two period) have existed for more than a century with direct conflict occurring in 1974. China currently has complete control of the Paracels and has established a new city on nearby Yongxing Island purely to boost its claim.¹²¹ Vietnam is unlikely to relinquish its interests, however, as oil from the South China Sea now constitutes a significant percentage of its GDP. In the past year, harassment of Vietnamese oil and gas survey ships by Chinese ships has increased the risk of conflict. In the case of the Spratley Islands, Vietnam controls the most (29), followed by China (8), the Philippines (8), Malaysia (5), Taiwan (2) and Brunei (1).

The Philippines is the other nation most likely to enter conflict in defence of its claims. Apart from the Spratleys it is also disputing Chinese control of the Scarborough Shoal and Macclesfield Bank. In 2011 Chinese vessels fired on Filipino fishing vessels in the area and in 2012 a one-month standoff began between the rival navies.¹²² The ongoing tension has been exacerbated by a US announcement that its security ties to the Philippines do not extend to the disputed territories.

¹²¹ Alexsa Olsen, 'China dubs tiny island new city in sea claim bid', *AP*, 24 July 2012.

¹²² 'China-Philippine confrontation a warning for Senkakus', *Daily Yomiuri*, 25 May 2012.

Other minor disputes of relevance to Japan are disputes between South Korea and China over Socotora Rock, a submerged reef in their overlapping EEZs, and Japan's own clash with South Korea over the Liancourt Rocks (Takeshima/Dokdo) which were unilaterally seized by South Korea in 1952. Japanese efforts to reclaim control have remained entirely focused on third-party arbitration under international law and thus there is little chance of direct conflict.

Finally, India has begun operations in the South China Sea in order to develop greater ties with South East Asia. One recent exercise saw several Indian ships receiving an unannounced 12 hour escort from a PLAN frigate which was described as friendly though it gave “the distinct impression that they were entering Chinese waters”.¹²³ Given the ongoing dispute between the two over the border between Xinjiang (China) and Jammu and Kashmir (India), the possibility of naval friction cannot be ruled out and, if it did develop, would become a serious problem.

At present China is gearing toward small-scale, local wars similar to the 1974 skirmish over the Paracel Islands. Such conflict might resemble the week-long Russia-Georgia conflict of 2008 in which fighting in South Ossetia resulted in the loss of 300 combatants and 400-600 civilian casualties. The threat of China engaging in what the Philippines have dubbed a “talk and grab” strategy (i.e. first establishing recognition of the existence of a dispute and then seizing territory by force) is a significant element in the acceptance of Japan’s increased military presence in the region.¹²⁴ The Philippines now holds an annual Political Military Dialogue with Japan that might act as a model

¹²³ Ananth Krishnan, 'In South China Sea, a surprise Chinese escort for Indian ships'. *The Hindu*. 21 June 2012.

¹²⁴ David J. Richardson, 'Us-Japan defence Cooperation: Possibilities for regional Stability', *Parameters*, Summer 2000, pp. 94-104.

for establishing security ties outside the US alliance, something that would allow greater freedom to negotiate with China from a position of strength while remaining somewhat independent of American steerage.¹²⁵

Regional Arms Race

The threat, of both conflict and its escalation, is heightened by increased arms acquisition that will soon see Asia surpass Europe as a military buyer.¹²⁶ South East Asian defence spending has increased 13.5% in the past year to \$25 billion, and is projected to reach \$40 billion by 2016. While Singapore remains the biggest spender, Vietnam, Thailand and Cambodia have all seen their military purchases increase by 50% over the past decade.¹²⁷ In Asia as a whole the big spenders are China, Japan, India, South Korea and Australia (accounting for more than 80%) of expenditure. Practically every country in the region has been making major investment in its air and sea capability, including big-ticket items such as aircraft carriers and submarines.¹²⁸

While the increased spending could create a destabilizing arms race, it also represents significant opportunities for Japanese industry. Like Japan, most Asian states adhere to techno-nationalist defence-industrial policies that are out of place in the globalized arms market.¹²⁹ Techno-nationalism emphasises autonomy from external supply and influence and, as exemplified by Japan, while this can help indigenize foreign technology and nurture domestic R&D, it creates dependency on state support that downplays market

¹²⁵ Renato Cruz de Castro, 'Exploring a 21st century Japan-Philippine security relationship', *Asian Survey*, 49 (4), July 2009. 715.

¹²⁶ 'South Korea spurs regional arms race headed by China', *Korea Times*, 16 October 2012.

¹²⁷ Lindsay Murdoch, 'Arms race explodes as neighbours try to counter China', *Sydney Morning Herald*, 19 September 2012.

¹²⁸ Michito Tsuroka, 'Japan-Europe Security Cooperation: How to use NATO and the EU', *Kenkyusho Kiyo*, Vol. 13, No. 1, October 2010.

¹²⁹ Richard A. Bitzinger, 'China's defence technology and industrial base in a regional context: arms manufacturing in Asia', *The Journal of Strategic Studies*, 34 (3), June 2011. 427.

forces and results in inefficient and vastly more expensive development cycles.¹³⁰ One effect is a tendency to focus on costly ‘prestige projects’ that overlook cheaper Commercial Off the Shelf alternatives, yet add nothing apart from a small amount of national pride. In many regional states, ambitious overreach and costly setbacks have forced governments to turn to foreign alternatives for failed systems. Meanwhile, their defence workforce and industrial capacity grow bloated far beyond the point of efficiency.¹³¹ This leaves considerable room for Japan to use its own world-class defence industry to bind other states to it, either as allies or simply dependent partners, through either arms sales or joint development projects (specific examples are provided in Chapter 6.).

Sea Lines of Communication (SLOC)

A state’s Sea Lines of Communication (SLOC) are the primary routes between both its own ports and those of other nations, which it uses for trade, logistics and naval security. Japan, an island nation reliant upon major imports of raw material and the export of manufactured goods, is utterly dependent on its SLOC for its economic security. Any events that might impede their free flow, whether intentional (e.g. piracy or terrorism), or the unintentional secondary effects of regional conflict or natural disaster, will have major impact upon Japan’s well-being.

The issue of piracy has been a driving force in normalizing the MSDF. The 2009 ‘Anti-Piracy Measures Law’ saw more than \$229 million expended upon operations near

¹³⁰ Samuels, 1996, Op cit. 42-56

¹³¹ Bitzinger, Op cit. 434.

Somalia, with two MSDF destroyers conducting 396 escort missions in the area.¹³² The threat of hijack is not particularly severe though (only 28 incidents worldwide in 2011) and unlikely to impact Japanese shipping. Maritime Terrorism is even less likely, though the political impact would be decidedly greater.¹³³ Thus with piracy a minor but constant irritant rather than a threat, and terrorism an unlikely yet politically influential risk that would have little impact upon actual security, where does the real danger to SLOC lie?

The actual threats are regional conflict and natural disasters. Should they occur anywhere along the SLOC they have the potential to shut down ports or channels that are vital to Japanese industry. Delays in supply, by as little as a week, would have a serious impact upon manufacturing. A global trend toward 'Just in Time' production, whereby raw materials and parts are not stored locally but rather shipped in precisely as they are need for manufacturing, has proven economically lucrative yet highly vulnerable to unexpected events. The 2011 Tohoku Tsunami showed the impact disasters can have on supply chains. Across the globe many factories dependent upon Japanese electronics, auto parts and other items, were forced to temporarily close down production and seek other sources of supply.¹³⁴ In the event of conflict Japan can also lose access to supplies of raw materials, food, energy or its export markets. The South China Sea is a nexus for many of these lines and due to its proximity and volatility is an area of particular concern (see Figure 4.3).

¹³² 'Japan's Actions against Piracy off the Coast of Somalia', Japan Ministry of Foreign Affairs, October 2012

¹³³ Euan Graham, *Japan's Sea Lane Security: A Matter of Life and Death?*, (London: Routledge, 2005). 235.

¹³⁴ Joe MacDonald, 'Japan quake stirs unease about global supply chain', *AP*, 30 March 2011.

The four specific dangers for Japan are imports of energy, raw materials and food, and the export of trade goods. Japan only has 4% energy self-sufficiency, with 83% of its supply coming from mineral fuels (oil, natural gas and coal) and the majority of this travelling from the Middle East through the Hormuz, Malacca and Luzon Straits. Supply lines for industrial raw materials are less vulnerable, as the main exporters (Australia, Brazil, Chile and Canada) have more stable routes through the Pacific. Even so, ensuring such routes remain open is a vital concern. Food is another area of extremely low self-sufficiency, with 60% of total supply imported. The top 10 exporters alone, account for 48% of all food consumed in the country. Finally, more than 50% of Japan's trade exports are to North and South-East Asia and must pass through the volatile East China and South China Seas (See Table 4.3). In the event of a serious conflict in either ocean, Japan's shipping, and thus her economic performance, could be seriously impacted.

While Japan cannot control its SLOC, it must be able to respond to incidents which threaten freedom of passage. Basing Japan's first overseas military base since World War Two in Djibouti, on top of Japan's furthest strategic chokepoint, is no coincidence. The tools for providing security for SLOC are already available to Japan, with the MSDF offering one of the world's best equipped and trained naval forces. As such, offsetting these security threats should merely be a matter of maintaining operational capability and engaging in regular exercises with regional neighbours and allies.

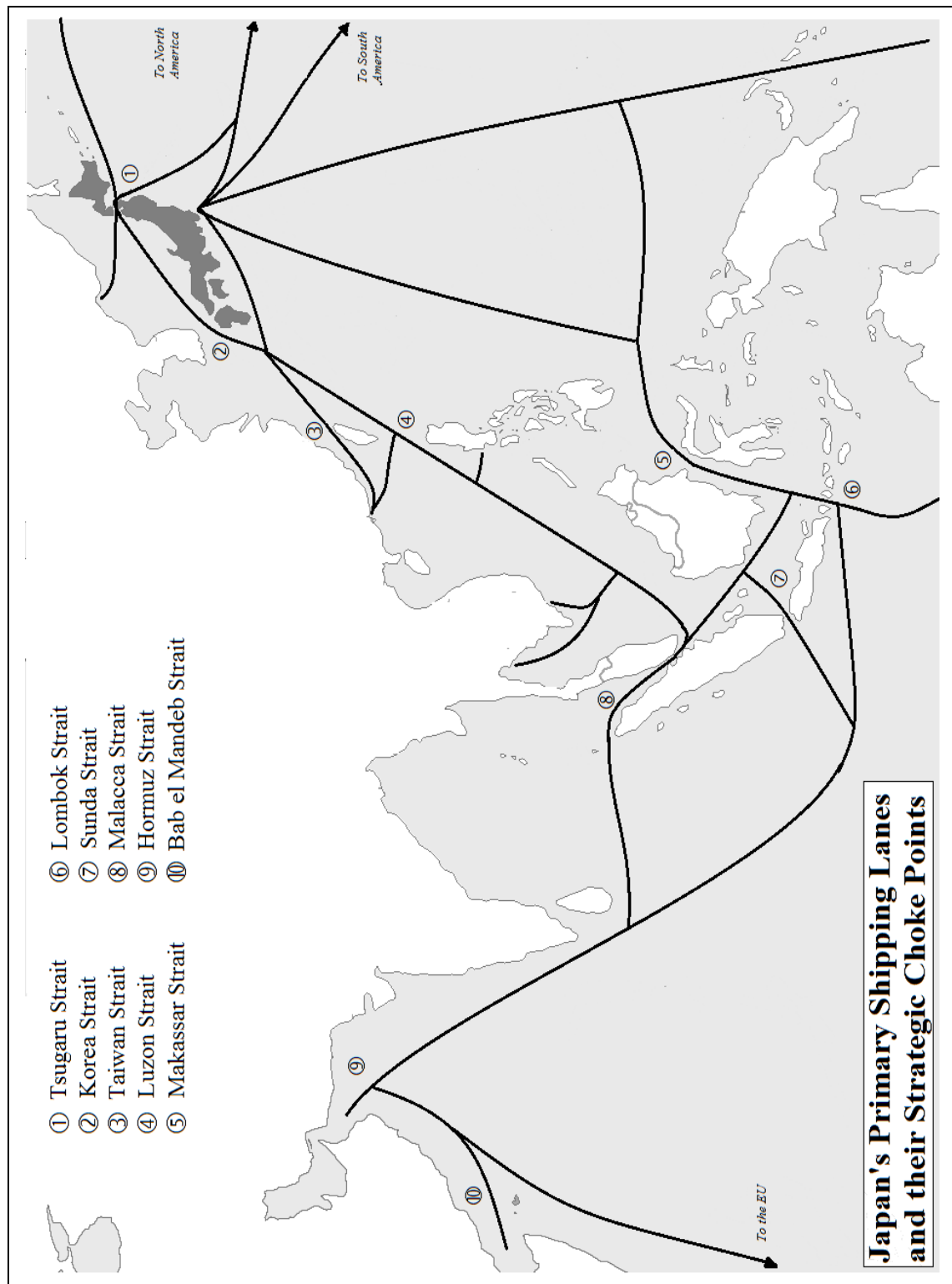
Figure 4.3

Table 4.3

Japan's Dependency on SLOC							
Food Source (% of Total Supply)		Raw Materials (% of Total Imports)		Mineral Fuels (% of Total Imports)		Trade Exports (% of Total)	
USA	13.6	Australia	23	Saudi Arabia	17.9	China	18
China	8.2	Brazil	11	U.A.E.	14.3	USA	17.5
EU	7.9	Chile	10	Qatar	11.8	EU	10.1
Australia	3.8	Canada	8	Australia	11.4	South Korea	7.7
Thailand	3.7	Indonesia	8	Malaysia	6.3	Taiwan	5.7
Canada	2.4	USA	6.9	Indonesia	5.7	Thailand	5.4
Brazil	2.3	China	3.9	Russia	5.3	Hong Kong	5.1
Netherlands	2.1	EU	3.6	Kuwait	5.0	Singapore	2.9
South Korea	1.8	Peru	2.6	South Korea	3.2	Indonesia	2.5
Chile	1.7	Malaysia	2.5	Iran	2.6	Australia	2.3

All data: Trade Statistics Bureau, Ministry of Finance, December 2012

Humanitarian Assistance and Disaster Relief (HADR)

Japan sits on the 'Ring of Fire', an arc of unstable seismic activity encircling the Pacific and plagued by major natural disasters, particularly earthquakes and tsunamis. The most recent was the 2011 Tohoku disaster in which 18,000 lives were lost and \$300 billion in damage inflicted.¹³⁵ The JSDF played a major role in the response to the disaster, one which raised their public acceptance, considerably.

Since then, the JSDF have been involved in numerous relief operations, such as flood relief in Kyushu,¹³⁶ just one of 586 disaster relief operations they carried out 2011. The

¹³⁵ Rie Ishiguro, 'Japan quakes economic impact worse than first feared', *Reuters*, 12 April 2011.

¹³⁶ SDF troops fly supplies to thousands cut off by floods in Kyūshū, *AFP*, 15 July 2012

vast majority of these (444) involved transporting emergency patients, and the remainder a mixture of firefighting and the delivery of emergency supplies.¹³⁷

The Ministry of Defence now embeds retired SDF officers within local government offices as coordinators for disaster preparation activities.¹³⁸ The fact that civilian liaisons are used rather than serving personnel is a concession to taboos regarding military influence over civilian structures, yet the role is a vital one as in the event of even minor disasters (small scale earthquakes or annual typhoons) the JSDF can be called upon to secure staging areas for evacuees, transport victims to hospital, transport supplies, and establish facilities for the central coordination of response. These are, however, merely the HADR responsibilities the JSDF must undertake in a standard year. Their real importance lies in responding to major events such as Tohoku, where almost 50% of the entire JSDF was deployed to the disaster area. Given that such disasters are the only major threat Japan is guaranteed to suffer, it is worth considering whether defence spending is allocated in proportion to the danger.

Threat of Future Disaster

Japan is crisscrossed by hundreds of fault lines and, while most of them are dormant, even old lines have been known to suddenly explode with violent force.¹³⁹ This danger has increased since 2011, with Tohoku reactivating many dormant lines.¹⁴⁰ The ability to predict such quakes is very low and one top American seismologist, Richard Kerr, predicted in 2007 that the chance of a major earthquake hitting Tokyo was only 0.55%

¹³⁷ Defence of Japan, 2012, 221.

¹³⁸ Ibid. 223.

¹³⁹ 'Rethinking megaquakes', *New Scientist*, 210 (2809), 23 April 2011.

¹⁴⁰ 'Japan's 2011 megaquake reactivated dormant faults', *New Scientist*, 24th February 2012; K.Z. Nanjo et al, 'Predictability study on the aftershock sequence following the 2011 Tohoku-Oki Japan earthquake: first results', *Geophysical Journal International*, 191, July 2012, 653-658.

over the following decades.¹⁴¹ While not impacting Tokyo directly the Tohoku quake was close enough to show the unreliability of this prediction and Kerr now concedes that the stresses on the Tokyo plate have increased the danger, revising his estimates to a 35-50% chance of a megaquake over the next 30 years.¹⁴²

The impact of such a disaster would be catastrophic, not simply in immediate effect but in the indirect harm it would do to Japan's economy and infrastructure. Predictions for a magnitude-7 quake estimate a potential \$1 trillion in damages, 11,000 deaths and as many as 850,000 buildings rendered unusable. It should be born in mind that this is not a worst-case scenario. The 1923 Great Tokyo Earthquake was magnitude-8 (32 times more powerful than magnitude 7).¹⁴³ It is also not a problem confined to Tokyo. Prior to the 1995 Kobe Earthquake (which killed 6,400 people) officials had little idea they were in danger, with lack of preparation a large factor in the death toll.¹⁴⁴ Numerous other cities across Japan have since been assessed to have a higher than 80% chance of a major earthquake over the next 30 years.¹⁴⁵

Unfortunately, Japan only monitors one area for seismic activity in any real depth, the Suruga Bay off Tokyo.¹⁴⁶ Many scientists think even this is of little value and that quakes are almost entirely random and beyond prediction. Others ascribe to a 'clustering' pattern but still feel that accurate predictions are impossible.¹⁴⁷ While some

¹⁴¹ Richard A. Kerr, 'The Earthquake that will eat Tokyo', *Science*, 315 (5808), January 2007. 37

¹⁴² Richard A. Kerr, 'Megaquake heightened the risk to Tokyo', *Science*, 334 (6063), 23 December 2011. 1617.

¹⁴³ '70% chance of big Tokyo earthquake within 4 years', *The Yomiuri Shimbun*, 24 January 2012.

¹⁴⁴ Yuriy Humber, 'Japan must stop forecasting big Tokyo quake as models flawed', *Bloomberg*, 14 April 2011

¹⁴⁵ 'Tokyo likely to be hit by major quakes in next 30 years', *Russia Today*, 21 December 2012.

¹⁴⁶ Humber, Op cit.

¹⁴⁷ Richard A. Kerr, 'More megaquakes on the way? That depends on your statistics', *Science*, 332 (6028), 22 April 2011. 411.

scientists believe that investment in further R&D can help improve prediction,¹⁴⁸ it seems clear that such disasters cannot be avoided and only through extensive preparation can their impact be reduced.

Already local governments across Japan conduct a wide variety of drills and it was these efforts that are credited with preventing the death toll from Tohoku being far higher. The JSDF also has a vital role in maintaining Japan's 'Internal Lines of Communication' (ILOC). Much like her searoutes, Japan depends upon an internal network of roads, trainlines and airways to ensure that domestic and foreign goods reach their intended destinations. There is little benefit in keeping SLOCs stable and open if the ILOCs are incapable of bridging the gap between destination/source and port. In times of major disaster the JSDF must frequently step in to provide emergency transport, as well as using its engineering teams to repair damaged or inaccessible transport hubs, something that requires extensive planning and preparation to be carried out efficiently.

Another important element of disaster preparation is 'pre-installation' of equipment in potential hazard zones. This includes medical and other supplies for evacuees and victims, but also vehicles such as four-wheel drive jeeps and trucks. In responding to the Tohoku disaster, medical teams had little transport of their own and none of it off-road capable. Although response time was considerably better than the Kobe earthquake, it still took 3 weeks for all medical personnel to be deployed.¹⁴⁹ Having JSDF vehicles ready to go would greatly expedite rapid deployment. In addition, the first responders

¹⁴⁸ Dennis Normile and Richard Kerr, 'A disaster and a warning - but of what?' *Science*, 334 (6063), 23 December 2011.

¹⁴⁹ Keishi Ono, 'Cooperation between the Self defence Forces and civil sector medical institutions - Lessons from the Great east Japan earthquake', *NIDS News*, July 2012.

also encountered problems that fell completely outside their expectations (for example, a higher incidence of infection and hypothermia victims). These two factors highlight the need for a greater level of coordination and drilling for possible future scenarios.

Reviews of the Tohoku response also highlighted the role hospital ships should play in coordinating activities. Japan, as a nation, has not built any new hospital ships in the past 66 years, a huge oversight given their practical value.¹⁵⁰ The ships help offset compromised ILOCs by moving medical facilities to the disaster zone. Unfortunately, many are poorly outfitted for modern relief operations. Following Tohoku, China immediately offered its hospital ship 'Peace Ark' for assistance, yet, lacking both a large helicopter compliment and a well-deck (a dry dock that allows the ship to offload hovercraft or landing boats that themselves contain trucks or other vehicles) it was deemed unsuitable for operations in favour of the Wasp-class amphibious assault ships deployed by the US Navy. Such vessels are ideal for disaster relief operations, while also serving a fully-functional military role. Japan's closest equivalents are the 14,000 ton Ōsumi-class Assault Ships (equipped with a well-deck and landing craft) and the 19,000 ton Hyūga-class helicopter carrier (which can support up to 11 helicopters). Unfortunately, there is no vessel combining the benefits of both, with the soon to be deployed Type 22-DDH likely to be merely an enlarged version of the Hyūga. The benefit of a new design offering wider capabilities is undeniable and would be particularly useful in supporting regional HADR operations.

¹⁵⁰ C.W. Nichol, 'Building hospital ships for disaster response', *Japan Times*, 24 April, 2011.

Regional HADR

As mentioned, the primary danger from North Korean is not missile attack but the threat of collapse. While long-standing diplomatic tensions might prevent Japan's military from taking an active part in internal operations, participation in humanitarian assistance would be both expected and a beneficial method of easing those same tensions. While American analysts have suggested that Japan should limit its involvement to providing forward basing for US operations,¹⁵¹ this would be a hugely underutilized opportunity to help bolster Japan's security by helping with humanitarian needs. The use of hospital/landing ships would also allow operations to be conducted from the shoreline without requiring any incendiary Japanese basing on North Korean soil. The effects of providing swift and decisive aid would thus work to improve ties with both the Koreas and help boost Japanese political influence in the region.

Of course, Southeast Asia is regularly beset by myriad other problems. The biggest regional disaster of recent years was the 2004 Asian tsunami, which killed over 230,000 and devastated the infrastructure of several countries. Since then, other incidents have shown how regularly Japan's HADR capabilities could be put to use to aid its neighbours (see Table 4.4).

¹⁵¹ Bennett Op cit. 116.

Table 4.4

Major Natural Disasters in East Asia 2006-2013		
YEAR	EVENT	DEATH TOLL
2006	Indonesian Earthquake	5,780
2008	Myanmar Cyclone	138,366
2008	Chinese Earthquake	87,000
2009	Indonesian Earthquake	1,117
2010	Chinese Earthquake	2,700
2010	Chinese Flooding	1072 dead, 15.2 million evacuated
2011	Philippine Floods	1,268
2011	SE Asian Floods	2,828
2013	Philippine Hurricane	6,340 dead (1061 missing)

It is also quite clear following the Tohoku Tsunami, that a disaster in any key location around the globe can affect worldwide production systems.¹⁵² Supplying HADR assistance even further afield may, therefore, also be in Japan's economic interests.

Finally, the example of China's evacuation of 36,000 of its civilians from Libya during the 2011 civil war, shows another way in which relief assets might be put to use (not necessarily solely for Japanese citizens).¹⁵³

That Japan is in constant danger from natural disasters is self-evident, however, a future earthquake on the same scale as Tohoku would have the power to devastate the country. North Korean collapse would have similarly huge implications for regional stability.

¹⁵² 'Japan earthquake exposes weakness in aerospace supply chain', *Aviation Week*, 25 March 2011.

¹⁵³ NIDS, *NIDS China Security Report*, (Tokyo, NIDS, December 2012). 24.

Maintaining a robust HADR capability for either eventuality should be considered a key element of national security, yet, the MoD assigns HADR a relatively low priority. While Tohoku saw significant funding for JSDF relief efforts in the region (¥237.5 billion in 2011 budgetary allocations), this appeared to be a special one-time dispensation and by 2012 the amount directed toward disaster response capability had dropped to a meager ¥9.7 billion.¹⁵⁴

Conclusions

It is clear that Japan faces a number of diverse threats that amply justify maintenance of a modern, well-equipped defence force, however, analysis suggests that some have been overblown and others understated.

North Korea has a deep emotional resonance with the general public, due to the fear evoked by missile tests and the animosity harboured since the North's kidnapping of Japanese citizens. Yet the military threat from this state has received excessive focus (enough to serve as the primary basis for investment in BMD), while the much more likely danger of humanitarian crisis or political chaos promoted by a regime collapse is given little attention. Top-level US assessments that North Korea is following a defensive strategy suggest that diplomatic rather than military tactics will serve Japan better in reducing this particular threat. HADR capable systems, such as helicopter carriers and assault ships would prove capable of offering support in the event of regime collapse. In the event of continued recalcitrance by the leadership, naval systems will also be useful in establishing blockades of the North's limited number of ports.

¹⁵⁴ Defence of Japan, 2012, 144.

China has also recently seen itself painted as a growing military threat, though in this case there is legitimate cause for concern. That said, the most probable contingency of a Sino-Japanese clash, ownership of the Senkakus, would be a relatively small-scale and limited affair and China will, in the near-term, be hopelessly outmatched by the US-Japan alliance. This, however, has done little to downgrade the dire warnings of military collision and the rising tensions that result bind Japan ever tighter to the US. In doing so it makes Japan more vulnerable in the event of a future Sino-US clash. In this area, Japan's strategic goals (littoral defence) and those of the US (control of the commons/regional hegemony) clearly diverge and call for procurement of very different military systems. Systems which mirror China's policy of minimum deterrence would both raise the cost of attacks on Japanese territory and also signal an absence of aggressive intent. More offensive procurements though, such as ground attack fighters equipped for long distance missions, or systems that increase Japan's dependency on the US, such as BMD, may suggest long-term support for US efforts at regional 'power projection.'

The dual issues of regional stability and the protection of SLOCs require a mixture of diplomatic finesse and maritime strength. Naval systems, both deployed by the MSDF or manufactured and sold to regional allies offer the key to offsetting these dangers.

Finally, HADR represents the only threat which is almost certain to occur in coming decades and the only one against which diplomacy and trade offer no safeguard. A wide variety of military systems can prove hugely important in such eventualities. Despite reductions in their number and the perceived importance of their military role, the GSDF are the key element of HADR operations and pre-instillation of suitable

equipment (jeeps, trucks, helicopters, medical supplies, etc.) could have a dramatic effect on how they respond to future disasters. Both the ASDF and MSDF also have important roles to play and expanding their lift capability with systems such as the C-2 transport plane and Type 22-DDH helicopter carrier would prove highly beneficial to Japan while also enabling greater participation in regional HADR efforts.

In considering how such security needs are being met by Japanese procurement choices it is important to consider the state's 'grand strategy.' Development and production of military systems can take decades and thus in order to follow a particular strategic course, the tools required must be decided upon well in advance. Making such long-term commitments allows great strength in specific areas of security but it also limits flexibility, closing off other areas of development that might offer different strategic options. The lasting repercussions of such choices require assessment of whether they fully serve the national interest rather than private political agendas, whether domestic or alliance-based.

CHAPTER 5: Japan's Strategic Goals

Introduction

Japan's dominant normative urge for the preservation of stability carries over into its two primary strategic goals: preservation of regional security and Japan's sovereignty, and providing support for the US-Japan alliance. However, if the US goal of preserving its hegemony does not always include the preservation of regional security, there may be a fundamental contradiction between the two. Furthermore, Japan's choice of major defence systems suggests that, in some areas, defence policy is more directed at building a tighter alliance with the US than it is addressing the specific threats to security that were raised in the previous chapter. Where they diverge there is a need to compare US and Japanese strategies to determine whether the alliance focuses on both equally or favours one to the detriment of the other.

While the threat of North Korea is still frequently raised in public discourse, the 2010 NDPG made clear that China was the threat driving the new 'dynamic' defence posture.¹ The document, however, makes no mention of 'A2/AD' (the US perception of China's threat) instead speaking of 'gray zone disputes', i.e. conflict more specifically focused on competing territorial claims. The fundamental difference between this and A2/AD suggests a clear split between US and Japanese strategic aims; the US is focused upon its ability to project force in the region, while Japan is more concerned with littoral defence.²

¹ Axel Berkofsky, 'Japanese defence and security policy and the national defence guidelines (NDPG): Radical change or business as usual', *ISPI Working Paper* 45, February 2012

² Yōichi Katō, 'Japan's response to the new US defence strategy: Welcome but...', *Asahi Shimbun*, 9 March 2012.

Japan's Grand Strategy

Regardless of which strategy will be followed, Japan has been expanding the force available to it along its Chinese border. An extra ASDF squadron has been deployed to Okinawa, 2 new Aegis destroyers have been commissioned and the submarine fleet will expand from 16 to 22 vessels. Such increases should be enough to supplement the deterrent threat provided by the US in the region. Despite frequent demands for Japan to shoulder more of the security burden, the US is in no danger of running short of funding for its military presence. While the Pentagon is undergoing severe financial restructuring in many areas, the overall budget still remains far above its pre-9/11 level and, as the US had been planning its current 'pivot to Asia' from this period (before being side-tracked into the 'war on terror'), it is unlikely it will ever need Japan to make up for a shortfall in their power projection capability.³ In concrete terms this will allow Japan to keep employing a pass-the-buck strategy for the near future.

The challenge, therefore, for Japan is not how it might meet alliance demands for increased militarization, but rather how it will balance its defensive goals against the US more clearly offensive ones.⁴ One option is to follow the so-called 'Goldilocks' strategy, which entails careful hedging between China and Japan to avoid both the dangers of entanglement and the uncertainty of abandonment.⁵ Ideally this would result in Japan acting as a bridge between the two other states, allowing for trilateral control of Asia.⁶

³ Sugio Takahashi, 'A time of change on the Korean peninsula: Japan's defence policy and the future of the US-Japan alliance', *Nippon.com*, 23 April 2012.

⁴ While US grand-strategy may be argued to be itself defensive, it is clearly at the very least a form of 'offensive defence'.

⁵ Richard J. Samuels, 'Japan's Goldilocks Strategy', *Washington Quarterly*, 29 (4), Autumn, 2006. 111-127.

⁶ Yoshihide Soeya, 'Diplomacy for Japan as a Middle Power', *JapanEcho*, 35 (2), April 2008.

Yet, the use of anti-Japanese sentiment by Chinese political leaders renders this an unreliable option. The more domestic unrest China encounters, the more it employs 'Japanese Imperialism' to redirect public discontent.⁷ Lind argues that there is still insufficient imperative for reconciliation between the two nations,⁸ a view which suggests that it might require a more serious threat to both nations security before the value of warmer ties is fully appreciated, i.e. an Asian Cuban Missile Crisis.

An alternative to hedging would be external balancing through a network of stronger regional ties. Keiro Kitagami, former security advisor to Prime Minister Noda, is one of a growing number who advocate this option, declaring, "During the Cold War, all Japan had to do was follow the US, with China it's different. Japan has to take a stand on its own." Yoshida Soeya, director of the Institute of East Asian Studies, agrees saying, "We want to build our own coalition of the willing in Asia to prevent China from just running over us."

All of these strategies, pass-the-buck, Goldilocks and external balancing, remain options. A key element uniting them is the benefit for regional security in having China play an active part in the formation of policy, preferably by inaugurating a trilateral US-China-Japan security dialogue that will allow for tension and threat perception to be reduced.⁹ While the current Japanese administration has made some effort at reducing tensions via diplomacy, its military procurements and deployments have had a contradictory effect by suggesting that Japan is willing to embrace a more aggressive security policy. Examples include the purchase of F-35 fighters, BMD technology and the development

⁷ Susan L. Shirk, *China: Fragile Superpower*, (New York: Oxford University Press, 2007). 114-146

⁸ Jennifer Lind, *Sorry States: Apologies in International politics*, (New York: Cornell University Press, 2008) 193

⁹ An option promoted by the Tokyo Foundation, 'Japan's security strategy toward China: Integration, balancing and deterrence in the era of power shift', *The Tokyo Foundation*, 31 October 2011

of carrier technology, any of which might facilitate what have become regular calls from the right for Japan to adoptive a ‘preemptive strike’ strategy.¹⁰ The GSDF has also been developing the capability to field marine divisions (generally more offensive than standard infantry) for use in littoral operations.¹¹ Meanwhile, the Algerian terrorist attack in 2013, which claimed over a dozen Japanese victims, fast-tracked efforts to form a new Security Council that would allow a faster response to crises.¹² The attacks also led to high-level calls for Japan to have access to the right to force in protecting its overseas civilians.¹³

While any sudden change of Japan’s military policy is highly unlikely, the danger lies in the fact that any increased perception of Japanese offensive intent (regardless of validity) will make China more risk-accepting, something that in turn will push Japan to further strengthen alliance military ties, establishing a cycle of escalation and increased tension.¹⁴ Breaking this cycle would require Japan to be capable of decoupling its military power from the US, i.e. to be capable of fielding its own credible deterrent threat without dependence on US support.

Ironically, developing its own nuclear weapon capability has been offered as one way in which Japan could reduce tension by increasing its independence. While once unthinkable, such arguments have become far more commonplace in recent years. Mataka Kamiya, of Japan’s National Defence Academy, once declared that “the idea

¹⁰ Some examples are JDA head Shigeru Ishiba quoted in the *Mainichi Shimbun*, 24 January 2003, and a member of the LDP National defence Subcommittee in, ‘Japan should have ability to strike enemy bases in defence’, *Reuters*, May 24, 2009

¹¹ Tomohiko Satake, ‘US rebalancing toward the Asia Pacific and the Japan-US dynamic defence cooperation’, *NIDS*, October 2012.

¹² ‘Abe proposes national security council to deal with crises’, *AFP*, 27 January 2013.

¹³ ‘Ishiba takes shot at SDF weapons curbs’, *Jiji*, 27 January 2013.

¹⁴ Institute for International Policy Studies, ‘A new phase for the US-Japan Alliance: The Japan US Alliance toward 2020’, *IIPS*, September 2009.

that Japan would build nukes any time soon is mistaken and based more on myths, misunderstandings and misrepresentations...than on empirical evidence.”¹⁵ Yet, influential politician Ozawa Ichirō felt publically comfortable, more than a decade ago, in stating that “If Japan wanted it could have thousands of nuclear warheads overnight”.¹⁶ His claim was certainly exaggerated, an introduction would take at least six months scientifically and several years of committed political effort, but it was publicly accepted with relatively little outcry and were Japan fully determined it would certainly be capable of producing advanced ‘4th generation’ nuclear weapons.¹⁷ LDP Secretary General Fukuda Yasuo declared in 2002 that there was no constitutional barrier to their possession (though their deterrent capability would seem at odds with the Constitution’s prohibitions against the “the threat or use of force”). Analysts in both the US and Japan have suggested that fielding a nuclear capability is the only realistic deterrent against increasing Chinese power.¹⁸

The alternative to developing a strong independent military capability is continuing the more gradual move to normalization, a process that instead binds Japan closer to American grand-strategy by integrating the JSDF into US operations in slow steady steps, leaving less and less room to refuse calls for greater security participation. The original Yoshida doctrine avoided this need to commit by promoting supposedly pacifist principles that were used primarily to excuse Japan’s buck-passing. Since then these normative barriers have been either partially or fully rescinded (see Table 5.1).

¹⁵ JR Nyquist, 'Japanese rearmament and the China threat', *Financial Sense*, 12 February 2005.

¹⁶ 'Japanese nukes could counter China – politician', *Reuters*, 6 April 2002.

¹⁷ Andre Gsponer and Jean Pierre Hurni, *ITER: The international thermonuclear experimental reactor and the nuclear weapons proliferation implications of thermonuclear fusion energy systems*, (Geneva: Independent Scientific research Institute, 2004)

¹⁸ “Senkaku Naval battle: JSDFs secret simulation”, *Shukan Bunshun*, October 4, 2012.

Table 5.1

Japan's Normalization & its Impact on Alliance Ties	
Preexisting Pacifist Principle	Current status
No dispatch of the JSDF abroad	Operating in PKO and anti-piracy operations
No sharing of military technology	Began with joint development of BMD
No exporting of arms	Policy overturned in 2011
No collective defense	BMD is an arguable breach of this
No power projection capability	The new Type 22DDH and F-35s are pushing these limits
1% of GDP limit on military spending	Likely to be overturned in the near future
No nuclear arms	Continues to utilize the US nuclear umbrella but unlikely to develop its own in the near future. Ironically, this would be the one element most likely to increase Japan's security independence.

Each step toward normalization undermines Japan's bargaining power and its capacity to withhold military support. Yet, it is 'normalizing on American terms' that is the real danger as binding Japan's weapon systems and industrial base to their American counterparts prevents the implementation (even where the capacity exists) of an independent military policy.

More nationalistic Japanese military figures have highlighted this threat, stating that overt dependence upon US weapon systems and R&D will prevent Japan from taking any stance that goes against US interests.¹⁹ A greater degree of indigenous production offers far more flexibility. In Dian's view this not only permits Japan to act independently of the alliance but also allows it to exert greater bargaining power within it.²⁰ Hiwatari Yumi, a Japanese security analyst at CIS, played an active role in the development of Japan's previous NDPG and has since complained of the lack of defence and military strategic analysis in Japan that greatly restricts the state's options for both procurement and strategic policy.²¹ In many ways, Japanese strategy has been aimed purely at supporting and facilitating US strategy. In addressing the question of

¹⁹ Tamogami Toshio, *Mizukara no mi wa kaerimizu*, (Tokyo: WAC, 2008). 11-16.

²⁰ Dian, Op cit. 28.

²¹ Yumi Hiwatari, 'Japanese defence strategy for the 21st Century', CIS, 19 October 2005.

whether Japan's security needs are being met, it therefore becomes important to consider how much US grand-strategy is likely to either safeguard or imperil Japan.

US Strategy

Over the past decade the US 'War on Terror' has claimed the lives of roughly 6,200 American troops and left another 46,000 injured, a stark example of the US willingness (relative to Japan) to accept the human cost of a militarily aggressive foreign policy. With the shift of US power to the Asia-Pacific region it is reasonable to wonder whether similar willingness to accept casualties for strategic gains will be exhibited and how much of that burden Japan might end up sharing.

The stated goal of US strategy is to maintain the free flow of trade, or more precisely "US commerce and US influence", in the region and to maintain a power projection capability that can "deter potential adversaries and prevent them achieving their objectives".²² In determining these potential adversaries Steven Hildreth, of the Congressional Research Institute, admitted that while "the focus of our rhetoric is North Korea, the reality is we're also looking in longer terms at the elephant in the room, which is China."²³ Initial steps have already seen the installation of a new X-band radar in Southern Japan and another planned for the Philippines. The latter will require the US to step up its patrols in the South China Sea, something which China will inevitably see as a provocation.²⁴

²² 'Sustaining Global Leadership: Priorities for 21st century defence', Department of Defence, January 2012. 2-4.

²³ Brendan Nicholson, 'Aussie role tipped for US missile system', *The Australian*, 24 August 2012

²⁴ 'US planning expansion of missile defence systems in Asia', *The Nation* (Thailand), 24 August 2012.

An alternative to such increased tension would be the pursuit of ‘off-shore balancing’ by the US, i.e. moving its main forces out of the Asian theatre and instead relying on its regional allies to balance China. This option, however, is a non-starter with US politicians and military leaders. US military commanders have declared their strategic goal to be preventing the rise of any hegemonic state that could threaten US interests by obstructing access or dominating the maritime domain. The US now seems to consider ‘threats’ not simply to be states who want to harm the US or its allies, but also any state that might surpass the US own level of regional influence.²⁵ Analysts, meanwhile, have cautioned that “the consequences of conflict with (China) are almost unthinkable and should be avoided to the greatest extent possible, *consistent with US interests*.” In other words, if US interests are better served by conflict with China, there is room allowed for engagement.²⁶

Perhaps the key element of US strategy is the concept of power projection. In simple terms this equates to the capability to bypass a potential enemies defences. While aggressive it is merely the inevitable outcome of zero-sum realpolitik. China responded with its deterrent tactics, and in return the US has adopted the concept of ‘Air Sea Battle’, using naval and air assets to conduct long-range strikes and maintain control of the maritime commons.

For Japan the ‘pivot’ has generated greater pressure to play a direct military role in alliance operations, under the assumption that they will participate in operations designed to counter, not the threat of direct attack, but the threat of America’s

²⁵ Barry Posen, ‘Command of the Commons, The military foundation of US Hegemony’, *International Security*, 28 (1), Summer 2003. 5-46.

²⁶ Michael Green, David Bertau et al, ‘US Force Posture Strategy in the Asia Pacific region’, *CSIS*, June 2012

displacement as regional hegemon.²⁷ For the time being, and as long as the US peacefully accepts China's rise, Japan still has the option to engage in dual hedging. Yet, if at any point either China or the US chooses to forcefully push back, Japan will find itself having to clearly commit to one side or another.²⁸ Present alliance ties and US gaiatsu make siding with China impossible and a Goldilocks strategy difficult.²⁹ If Japan waits until a choice is forced upon it, even these options will be further reduced.

Thus, by upholding its status quo strategy, Japan is in danger of committing by default to a long-term strategy designed for the benefit of states other than Japan. Perhaps more importantly, the strategy employed by the US is likely to be predicated on the need for establishing regional dominance rather than regional peace. As such, it can succeed (in US terms) yet still leave Asia in turmoil.

Even moderate US strategies seem expectant that some level of military force will be required. In advocating naval blockade as a 'more peaceful' alternative to Air-Sea Battle, Klein and Hughes suggest shock tactics such as the destruction of Chinese warships or submarines as less aggressive means of curbing China's expansion.³⁰ That this is the moderate option requires looking at the mindset of the US Office of Net Assessment, the bureau in which long-term strategic policy is developed and a group Posen describes as going "well beyond exploring the worst cases...they convince others that the worst cases are inevitable."³¹ Despite the fact that numerous alternatives exist (from a decline in Chinese power, to greater economic integration, to internal

²⁷ Dian, Op cit.

²⁸ Kurihara, Op cit.

²⁹ Ibid. p. 12.

³⁰ Jeffrey E. Kline and Wayne P. Hughes, 'Between peace and the air-sea battle', *Naval War College Review*, 65 (4), Autumn 2012.35-41.

³¹ Greg Jaffe, 'Model for future war fans tensions with China and inside Pentagon', *Washington Post*, 2 August 2012.

instability) the pessimistic form of realism, in which an increasingly powerful China decides to directly challenge the US, seems to hold sway.³²

In considering how this will actually unfold, Blasko describes the essential elements of US military doctrine as being to “find, fix and finish the enemy”.³³ The first step is easy as long as China’s reach is bound by the South and East China Seas. The second step is, in the view of Holmes, to secure the First Island Chain (several sections of which are Japanese territory) in a manner which will prevent China from bypassing it. China’s options will then be to either exhaust their materiel in attacking these locations (limited conflict) or concede to US superiority.³⁴ Looking at China’s potential options, Kurihara and Schoff decide that “no one takes seriously ‘preventative war’ like Japan’s miscalculated decision to opt for war with the United States in 1941”³⁵ Why this should be the case is unclear, however, as any decision by the US to limit Chinese expansion will reduce its options to either ‘submission’ or ‘challenge’ (as was the case with Japan 70 years ago).

The Deficits of a Conjoined Strategy

Given the historical precedent it is even more surprising that Japan is willing to commit itself to long-term US strategy. Chinese analysts such as Wang Fan, the Director of the Institute of International Relations at China Foreign Affairs University, see Japan as making use of a fabricated 'China threat' as grounds for regional expansion. He also believes this is simply Tokyo following Washington's lead and that, “Tokyo does not

³² Kurihara Op cit. 7.

³³ Blasko, Op cit. 356.

³⁴ James R. Holmes and Toshi Yoshihara, ‘Asymmetric Warfare, American Style’, *Proceedings*, April 2012

³⁵ Kurihara Op cit. 8.

have an independent defence strategy.”³⁶ Chen Jian, the former Chinese ambassador to Japan, agrees and sees the US pressuring Japan to take a more hardline position that will isolate China. Yan Xuetong, one of China's leading foreign policy strategists says this pattern can be broken only by Japan or China making some major concession to the other, but neither are currently willing.³⁷

This is the critical flaw of what has been termed 'karaoke diplomacy', what some see as the US choosing the song and Japan being left with only slender choices over how to interpret it.³⁸ The assumption is that the long-term strategy will benefit both states, yet there are many contingencies in which the needs of the US can be served while weakening Japan's overall security. Tighter ties therefore serve the US far more than they do Japan with some even cautioning that too much military freedom on Japan's part might allow deviation from US policy.³⁹ Green offered similar sentiments when stating that moves by the Abe government to revise the 1993 Kōno Statement (apologizing to Korea for wartime actions) would be a problem for the US, "not as a moral issue but as a realpolitik issue".⁴⁰ While he considers a shift to the right as positive insofar as it boosts US-Japan military ties, it becomes a threat if motivated by a more purely Japanese nationalism, i.e. the rise of Asian powers is welcome while their interests coincide with those of the US and act to enforce US control of the commons.⁴¹ Thus we see frequent US exhortations for Japan to 'pull its weight', and decide if it wants to

³⁶ 'Beijing municipal government: Tokyo plays up military theory', *China Business News*, 26 July 2012.

³⁷ Jane Perlez and Keth Bradsher, 'Ex-envoy says US stirs China-Japan tensions', *New York Times*, 30 October 2012.

³⁸ Takashi Inoguchi and Jain Purnendra Chandra, eds. *Japanese Foreign Policy Today: Reader*, (New York: Palgrave, 2000). xv.

³⁹ David Robinson, 'Why the West should discourage Japanese military expansion', *Journal of Asia Pacific Studies*, 1 (2), 2010. 312-319.

⁴⁰ Linda Sieg, 'Japan's Abe gets second chance at loosening limits on military', *Reuters*, 11 December 2012

⁴¹ Dian, Op cit. 30.

"continue to be a Tier 1 nation or drift into Tier 2 status?"⁴² Recent Gaiatsu is focused on binding the two states' militaries closer together, with Smith suggesting that "separation of US and Japanese forces no longer makes operational sense", that US and Japanese military bases be consolidated (in Japan only of course) and that US forces be allowed to make use of Japanese civilian airfields.⁴³ Holmes also advocates an end to 'free riding' with calls for hardening of military bases, combined anti-access measures and for Japan to realize that her territorial problems are a low priority for the US and thus need a larger Japanese commitment.⁴⁴

The common thread running through such recommendations is increasing the depth of US basing in Japan, whether by sharing Japanese facilities, making use of civilian airfields or hardening existing bases. These are all contingencies for a possible future conflict involving China, something that, should it occur, will see US staging areas in Japan become the primary target of Chinese strikes. In an analysis of US thinking on alliance strategy Kageura determined from interviews that the US "attempts to deter war through stability" and as such it was important to strengthen the alliance even further.⁴⁵ For this to be true, however, 'stability' must be read as preservation of the current power dynamic rather than regional peace. If the latter, China would potentially surpass the US as the largest economy in coming decades, something the US clearly wants to avoid. If the former, i.e. preventing China's rise, then a limited regional war that knocks China down a peg or two, might be seen as preferable (for the US) to letting China grow strong enough to engage in a cross-Pacific war. Clearly, Kageura's interview subjects

⁴² Richard L. Armitage and Joseph S. Nye, *The US-Japan Alliance: Anchoring Stability in Asia*, (Washington DC: Center for Strategic and International Studies, 2006). 1

⁴³ Sheila A. Smith, 'A strategy for the US-Japan alliance', *Council on Foreign Relations*, Policy Innovation Memorandum 19, April 2012.

⁴⁴ James Holmes, 'Top 5 ways to upgrade the US Japan alliance', *CNN World*, 26th November 2012.

⁴⁵ Seiki Kageura, 'Japan's defence Policy: The view from Washington DC', *The Brookings Institute*, 21st Century Defence Initiative Policy Paper, 13 August 2012.

would be unlikely to point out the benefits to their own country of a limited regional war involving the US, Japan and China, in which Japan and China bear the brunt of the damage. Yet, this is a very real possibility that must be considered when analysing the levels of deterrent force employed by each of these nations.

The phrase 'Chimerica', coined by Niall Ferguson, is generally used in reference to the economic ties that make the US and China highly dependent upon one another. In the future though, the relationship could develop into a security one in which the US agrees to share control of the Pacific commons with the foremost Asian power. While this is in opposition to current US strategy there are a number of reasons why it might occur. Two examples would be: if US power declines significantly in the coming decades, or if China's growth drops sufficiently that the US no longer views China as a serious threat to its overall dominance. In such scenarios the threat of alliance abandonment will become very real for Japan. Though it is far from sure that the US would want, or be required, to give up the benefits offered by Japanese basing, it is clear that Japan would be left in a tenuous position between two far stronger powers who would see little need to support Japan's territorial claims or to safeguard her resource needs. Japanese analyst Susumu Yabuki believes the US will abandon Japan as soon as the alliance fails to serve US interests and to counter this better Sino-Japanese ties should become an immediate priority.⁴⁶ The key effect of the US-Japan security relationship is, in his view, simply to boost China's own military spending and give rise to increasingly hard-line policies in the latter country. The views of many Chinese analysts support this, insofar as they advocate a Pacific in which China and the US establish a harmonious relationship of

⁴⁶ Susumu Yabuki, 'US-China collusion and the way forward for Japan', *East Asia Forum*, 30th June 2012.

joint control.⁴⁷ The question of whether such a relationship will develop is left, therefore, entirely in the hands of the US with practically zero influence from Japan on the final outcome.

The possibility of a 'Pacific condominium' with power shared by the US, Japan and China is raised by Holmes, who suggests that allowing China to expand its ties through the Pacific might be a means of promoting greater democratization of the Communist state.⁴⁸ Conflict between the US and China would ultimately be futile in his view, as the US will never overcome China's in-depth land defences, and China will never be stronger than the US at sea. Yet, he also warns against the danger of the US leaving a power vacuum in the region which might prompt greater Chinese aggression.⁴⁹ Schwartz and Greenert, at the time respectively the commanders of the US Air Force and Navy, wrote that, should "America appear unable or unwilling to counter an adversary's anti-access military capabilities, its friends and allies may find US security assurances less credible, leading some of them to seek accommodation with aggressors or alternate means of self-defence."⁵⁰ Why there is anything wrong with 'seeking accommodation' or possessing 'alternate means of self-defence' is not made clear, suggesting that maintenance of US influence, rather than promotion of regional stability, is the key factor. Another former chief commander of the US Navy, James Lyons, was more explicit, stating "China has become an adversary by its own conduct and threatening military expansion program which clearly targets the US Navy. The Chinese

⁴⁷ See for example, Yang Yi, 'Navigating stormy waters: The Sino-American security dilemma at sea', *China Security*, 6 (3), 2010. 3-11.

⁴⁸ James R. Holmes and Toshi Yoshiwara, *Chinese Naval Strategy: The turn to Mahan*, (New York: Routledge, 2008). 107-112.

⁴⁹ Ibid. 117-118.

⁵⁰ Katō, Op cit.

should be told in unambiguous terms they are on a dangerous course that could lead them into uncharted waters.”⁵¹

The danger is that matching US power projection (the ‘Air Sea Battle’ concept) against China’s own offensive defence, creates a security dilemma that could push existing tensions to their breaking point. US strategic thinking has a tendency to see things as short-term challenges that will be quickly resolved, rarely accounting for the possibility that conflicts might drag on (e.g. the Invasion of Iraq) or might spiral far out of control (e.g. the Cuban Missile Crisis). In an analysis of Air Sea Battle, MacGregor and Kim saw a serious risk of it becoming the 21st century equivalent of medieval siege warfare, wherein initial small-scale conflict expands into a never-ending series of bombardments and air strikes.⁵²

The Alliance’s ‘Sharp Sword’

When assessing the possibility that US strategy (whether initiating against or responding to China’s own) may increase the chance of conflict, it is worth bearing in mind the words of Randolph Churchill:

Foreign policy and free expenditure upon armaments act and react upon one another....The possession of a very sharp sword offers a temptation, which becomes irresistible, to demonstrate the efficiency of the weapon in a practical manner.⁵³

In the 2015-2025 time frame the US military will see a number of new weapon systems become operational, each of which has required huge budgetary investment. The

⁵¹ James A. Lyons, ‘Year of the Dragon’, *Washington Times*, 1 February 2012

⁵² Douglas MacGregor and Young S. Kim, ‘Without ground forces U.S. cannot counter Chinese aggression’, *Armed Forces Journal*, April 2012.

⁵³ Benjamin Fordham, ‘A very sharp sword: The influence of military capabilities on American decisions to use force’, *The Journal of Conflict Resolution*, 48 (3), October 2004. 632.

foremost among these is the Next Generation Bomber Program, the development of a long-range, optionally manned, strike bomber. Each is expected to cost \$550 million and a fleet of 100 are planned from the mid-2020s. The goal is for a force of 80-100 such bombers to maintain a constant aerial presence above a target country, holding it under persistent threat of attack.⁵⁴

Another major program is the 100,000 ton Ford-class aircraft carrier, the first three of which are expected to enter service in 2015, 2022 and 2028,⁵⁵ with projected costs of \$13 billion apiece.⁵⁶ These ships will also make use of the X-47B UCAV, an unmanned system allowing them to operate at greater range, i.e. outside Chinese missile screens. The UCAV's introduction is currently set for 2020,⁵⁷ and that of a new Rail-gun weapon system for early to mid-2020s.⁵⁸ Finally, the Advanced Missile Defence Radar, heralded as the key to countering China's ASBMs, is also projected to have an early 2020s service date.⁵⁹

In addition to these new systems many recently developed systems have yet to see combat use, something many take as the only practical test of their value. These include the F-35 Joint Strike Fighter, F-22 Raptor, the Littoral Combat Ship and latest models of the Aegis BMD system (which in 2015 will include a new SM-3 Block IB interceptor).⁶⁰ Recent sequestration of the US defence budget has seen even more

⁵⁴ David Axe, 'Why the US wants a new bomber', *The Diplomat*, 6 May 2012.

⁵⁵ Ronald O'Rourke, 'Navy Ford (CVN-78) Class Aircraft Carrier Program: Background and Issues for Congress', *Congressional Research Service*, 26 July 2012.

⁵⁶ *Ibid*

⁵⁷ See, Daniel Goure, 'A new Kind of Air carrier Wing', *Proceedings*, US Naval Institute, 23 September 2012; and Dave Majumdar, 'US Navy delays UCLASS draft RFP', *Flight Global*, 12 December 2012.

⁵⁸ 'BAE's New Railgun Firing for First Time', *Defence Tech*, 28 February 2012,

⁵⁹ Lyons, *Op cit*; and Michael Fabey, 'Missile defence worries ignite missile procurement', *Aerospace and Defence Report*, 238 (61), 24 June 2011.

⁶⁰ *Ballistic Missile Defence Review*, (Washington DC: Department of Defence, 2010). 20.

pressure on the military to justify expensive investments.⁶¹ In a study of defence spending patterns, Fordham found that increased investment in military systems produced a proportionate increase in the propensity to make use of military force as a tool of state.⁶² While this did not necessarily mean direct conflict (it might also include the threat of force), the destabilizing effect such systems will have upon an already tense regional dynamic is unquestionable.

Japan's Deterrence Strategy

The historian Thucydides listed “fear, honour and interest” as the three drivers of statecraft. In terms of military spending the first often seems to be dominant and can be considered the basis of deterrent strategy. Essentially, this equates to the view that the more costly war becomes the less likely it is to occur.⁶³ As applied to the concept of Air-Sea Battle, a senior US Navy official stated “we want to put enough uncertainty in the minds of Chinese military planners that they would not want to take us on,” and that, “Air-Sea Battle is all about convincing the Chinese that we will win this competition.”⁶⁴ Such policies, however, frequently give rise to a security dilemma in which other states feel compelled to follow suit and boost their own capabilities in response. This in turn heightens the likelihood of brinksmanship, pushing issues close to breaking point in the hope that the opponent will back down.

⁶¹ CBO, “The Budget and Economic Outlook: Fiscal Years 2013 to 2023,” *US Congressional Budget Office*, February 2013.

⁶² Quoted in Fordham, *Op cit*.

⁶³ John J. Mearsheimer, ‘Back to the future: Instability in Europe after the Cold War’, *International Security*, 15, 1990. 19

⁶⁴ ‘US Model for future War fans tensions with China and inside the Pentagon’, *The Washington Post*, 1 August 2012.

There are multiple forms of ‘deterrence’. ‘Direct deterrence’ refers to a state seeking to prevent an attack on itself, while ‘Extended deterrence’ includes efforts to protect one’s allies. ‘Immediate deterrence’ in turn refers to crisis events where the threat of conflict is strong, while ‘General deterrence’ is that involving opponents during periods of general peace.⁶⁵ For China deterrence is of the direct form while Japan is considered to benefit from US extended deterrence. Yet, this is only the case if the prime motivation of the US is to protect Japan rather than to further its own interests. If the US is driven by other goals, then each state’s deterrence strategies must be assessed individually.

What is now called ‘Classical Deterrence Theory’ argued that the long peace of the Cold War was based upon the high risk involved should direct conflict occur. The Cold War, however, was not a period of unbroken peace but instead saw numerous proxy wars fought across the globe in which many states allied to the two superpowers suffered severe damage. For Japan, as an ally of the current superpower, the possibility of being used as a proxy must be considered. That aside, even during the Cold War critics argued that deterrence policy was itself destabilizing and only increased the chance of conflict.⁶⁶ The fundamental flaw was the assumption that war was an irrational choice and that neither side would ultimately choose it. This resulted in statesmen adopting hardline strategies, convinced that their opponent’s escalation would ultimately end in a bluff.⁶⁷ Zagare attempted to address this with the concept of a ‘Perfect Deterrence Theory’ which rejected incredible threats such as ‘Mutually

⁶⁵ Stephn L Quackenbush, ‘General deterrence and international conflict: Testing perfect deterrence theory’, *International Interactions* 36, 2010. 60-85

⁶⁶ For example, Herbert Scoville, *MX: Prescription for Disaster*, (Cambridge, MIT Press, 1981); and Stephen Van Evera, ‘The Cult of the Offensive and the Origins of the First World War’, *International Security*, 9, 1984, 58–107.

⁶⁷ Zagare. Op cit. 112.

Assured Destruction' and argued for purely rational actors.⁶⁸ Yet, despite a more nuanced approach to analysis, his view also falls into the positivist trap of attempting to use simple models to map incredibly complex and fundamentally chaotic systems.

Schaub admits that analysts by necessity deal with a "dramatically simplified model of the buzzing, blooming confusion that constitutes the real world" and highlights the two common models used to gauge the key motivations of actors. The first, the 'Strategic Intent Model' perceives the actor as solving an external problem, while the second, the 'Internal Logic Model' sees the actor's main focus to be on solving an internal problem.⁶⁹ He declares that "American policy makers, scholars and analysts have relied upon these two frameworks of rational action to infer the intent of adversaries," and finds it unsurprising that "they often provide contradictory prescriptions with regard to how to approach an adversary and what to do to influence them," before suggesting that a mixed form of both should be used.⁷⁰

Yet, even this assumption that relationships between states will have clear and easily identifiable motive forces (whether driven by foreign or domestic issues) fails to account for vertical, horizontal or temporal diffusion of interest. The national interest is not a single monolithic constant but rather made up of vertical differences between what is best for the government versus what is best for the citizenry, horizontal differences between the interests of different segments of the government and temporal differences based upon what is best for each group in the short, medium or long term (see Figure 5.1). Horizontally, the military leadership might believe war would advance their

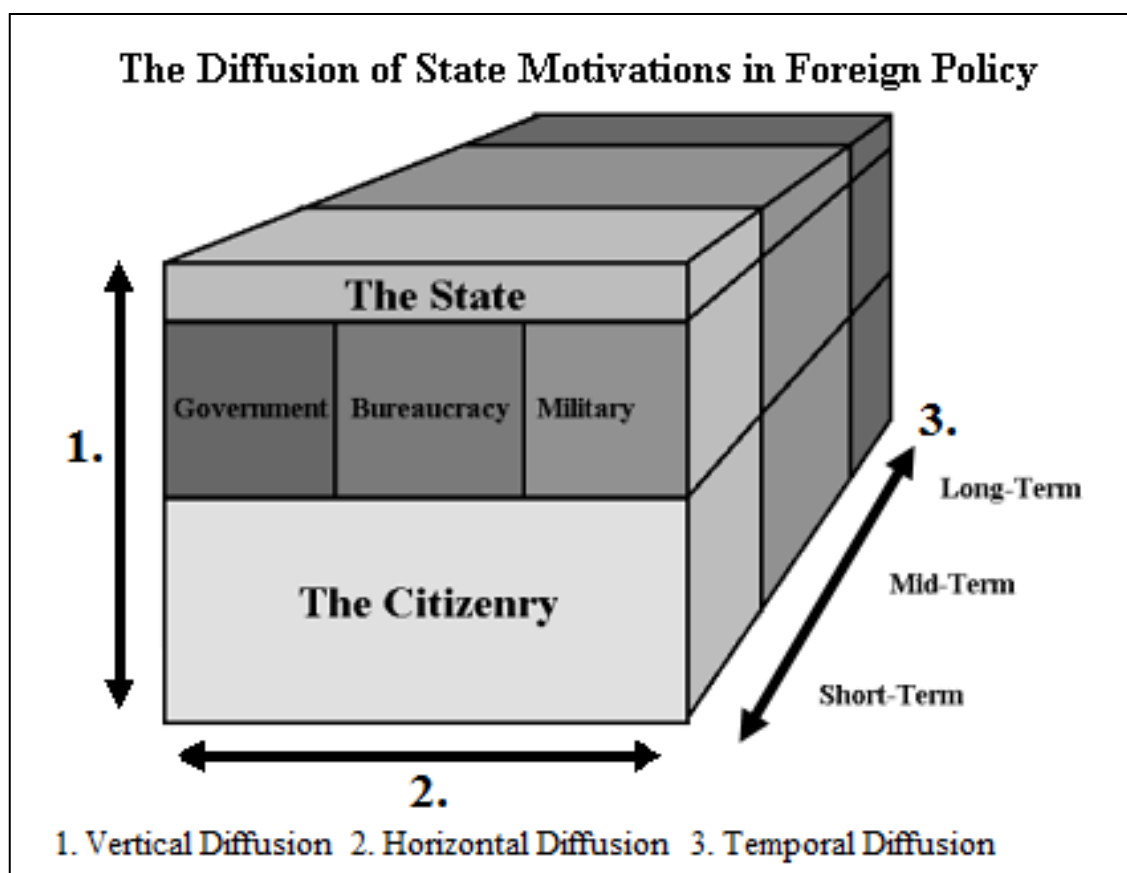
⁶⁸ Ibid, 117.

⁶⁹ Gary Schaub Jr. 'When is deterrence necessary? Gauging adversary intent', *Strategic Studies Quarterly*, Winter 2009, 53

⁷⁰ Ibid, 49-54

personal power/status even if it might be opposed by the politicians and bureaucracy, or vice versa. Vertically, conflict might advance the ideological views of the leadership even if it has negative impact on the citizenry. Temporally, conflict might have a high short-term cost but provides benefits some believe will outweigh this in the long-term.

Figure 5.1



Examples of horizontal diffusion can frequently be seen with China's military, for example, a January 2013 incident in which a PLAN warship placed a radar lock on a Japanese vessel, was apparently kept from the state's Ministry of Foreign Affairs, one of many cases in which the Ministry seems to have been left uninformed of decisions

being made by other agencies.⁷¹ The dangers involved when those carrying out acts of brinksmanship fail to maintain communication with those responsible for diplomatic resolution of such incidents go far beyond the damage they do to over-simple models of state behaviour. The gap between military and civilian control is just as evident in US statesmanship, though here it has been civilian leaders who have been more likely to press for the use of force than the military commanders themselves.⁷² Referring to questions from the Secretary of State about why the US should maintain its superb military if it was not willing to make use of it, Colin Powell, then chairman of the Joint Chiefs of Staff, recalled “I thought I was going to have an aneurysm. American GIs were not toy soldiers to be moved about on some sort of global chessboard.”⁷³ Again, the role of US strategy in determining Japan’s own policy cannot be overstated due to Japan’s normative tendency, as discussed in Chapter 3, to follow a reactive path that is strongly guided by the proactive decisions of the US.

The multitude of conflicting motivations and perspectives possible on both sides thus makes rationality (a key element of ‘perfect’ deterrence theory) impossible to judge. Additionally, the goal underlying these motivations may be something other than simple ‘security’. Generally, deterrence views the ultimate goal of each state as being to boost its security (and for realists such as the US and China, therefore their power). This does not, however, mean that states are driven to address only existential threats. The US Strategic Command and Joint Forces Command produced the ‘Deterrence Operations Joint Operating Concept’ to clarify precisely how deterrence serves US purposes and this documents defines it as “operations which convince adversaries not to take actions that threaten US vital interests by means of decisive influence over their decision

⁷¹ Linda Jakobson, ‘How Involved Is Xi Jinping in the Diaoyu Crisis?’, *The Diplomat*, 8 February 2013.

⁷² Fordham, *Op cit.* p. 635

⁷³ Colin Powell, *My American Journey*, (New York, Random House, 1995). 561

making."⁷⁴ Such 'vital interests' are open to wide interpretation including: territorial control, acquisition of resources, access to markets, support for puppet regimes or promoting a pro-American ideology. This is, of course, echoed in Chinese strategic thinking with the PLA's 'Science of Military Strategy' declaring that "If an enemy offends our national interests, it means that the enemy has already fired the first shot."⁷⁵

Even in standard systems of deterrence, the key element of determining an adversary's intent is incredibly difficult to do. It becomes much more so if we accept that multiple factions with competing priorities might be generating the perceived 'state position'. This is further complicated if we consider that 'vital interests' is not a single goal but rather a wide variety of needs which must be balanced against one another and traded off in a cost maximizing fashion throughout negotiations with an opponent. Despite its frequent reliance on positivist modelling that attempts to constrain international systems in rigid architecture, even the US military admit that "predictive intelligence is not an exact science and is vulnerable to incomplete information, adversary deception and the paradox of warning," i.e. that there is a minimum necessary requirement for subjective interpretation due to the inherent chaos of the systems.⁷⁶ Yet, rather than admitting the subjective rather than scientific in nature of such interpretations, they instead encourage analysts to focus on opposing state's 'capability' rather than their actual intent. In practical terms, capability therefore becomes intent, codifying the pessimism that underlines much of realist strategic thinking.

⁷⁴ *US Strategic Command, Deterrence Operations Joint Operating Concept, Version 2.0.* (Washington DC, Department of Defence, 2006). 50.

⁷⁵ 'The Dragon's new teeth', *The Economist*, 7 April 2012

⁷⁶ Schaub, Op cit. 51

This becomes more pressing if we consider Bueno de Mesquita's view that interstate aggressors are stronger than their opponents and that weak states rarely push to attack in what would be a lop-sided war.⁷⁷ However, threats from the stronger state may lack credibility to the weaker in the event that the cost of conflict became less than the cost of doing nothing.⁷⁸ This is the situation which existed for Japan in 1941 when the economic policies of the US drove the Japanese leadership to engage in just such uneven conflict against a stronger foe. The possibility that US containment of China might also lead China to take the aggressor's role cannot be ruled out.

As a result of this inability to gauge intent, in assessing the risks of war the capabilities of both sides, i.e. their defence systems, are perhaps the key element that policies are based upon. The implementation of those policies occurs within a system too complex and chaotic to be clearly mapped by simple branching pathway models. They, however, can serve a heuristic function in laying out the most basic contingencies, a pattern which, while offering only broad strokes, serves to show that considerable divergence can exist between what is in the US interest and what promotes Japan's own security.

In Figure 5.2 the scenario's 3 initial options reflect the possibilities (A) that China will initiate an attack against Japan, (B) that China's military expansion will falter or (C) that China will continue to grow stronger. The first of these can be considered unlikely as China will have more likelihood of success if it waits until its current growth allows military parity with the US. If it did attack Japan would have to choose to respond as acceptance of China's actions would simply leave it in the same position yet damaged.

⁷⁷ Bruce Bueno de Mesquita, *The War Trap*, (New Haven, CT: Yale University Press, 1981). 155

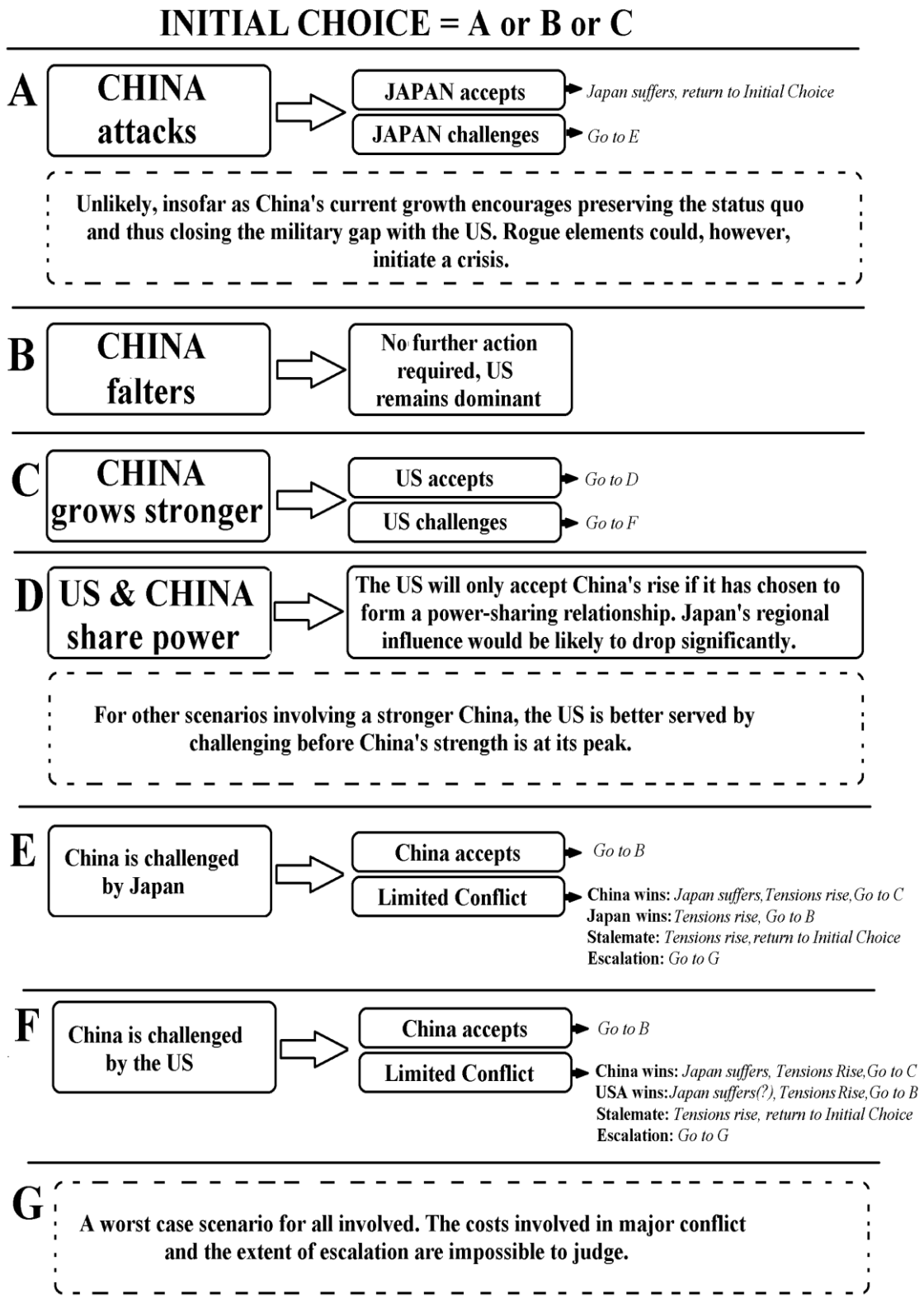
⁷⁸ Zagare. Op cit. 124.

If China were to falter (B), through economic decline, social instability or some other factor, the current US-dominant power structure would likely remain as it is, albeit with a danger that the US might abandon Japan for China.

This is what will happen in the case that China continues to grow and the US accepts it. The US would be sending a clear signal that it was willing to relinquish hegemonic control of the commons and instead work in partnership with China much as the US and Japan do now. Regardless of whether this would be a two-member alliance with only the US and China, or a three member alliance that included Japan, Japan's regional influence would be likely to decline significantly with the others capable of pressuring Japan into acquiescence on issues of resources, territory, trade and general foreign policy.

Any Japanese response to Chinese aggression (D) would be notably different from a US challenge to China's rise (E), despite the fact that both scenarios would see the US-Japan alliance involved. In the former case, conflict would almost certainly be the result of territorial disputes and thus likely to remain localized and small scale with a strong chance for diplomacy to rein the two sides in before significant escalation. In this case the most probable result would be a stalemate which would see a rise in tensions between the two countries but no significant shift in the power balance. A Chinese win would necessitate the loss of either Japanese military or political power, such that Japan would be unable to impede Chinese foreign policy in the region, and vice versa.

Figure 5.2

**NOTES:**

In case (E) a winning condition for Japan requires a lack of major damage to Japan itself, otherwise the situation can be considered a stalemate.

In case (F) a winning condition for the US may include major damage to Japan itself.

In cases (E) and (F) a stalemate is considered any resolution of conflict which leaves the initial power dynamics unchanged.

In the case of a US-China conflict, Japan would also play its part. However, in this case the clash of the 'Air-Sea Battle' and 'A2/AD' strategies would almost certainly produce a higher level of conflict encompassing the region as a whole rather than a specific territorial issue. As such, the Japanese mainland would become a target for Chinese strikes. The other important difference here would be that the US could claim a victory that reduced China's power to impede US foreign policy, even if it came at a serious cost to Japan. All cases of conflict would see an increase in tensions that might have an impact on regional relations for decades to come and would also include the risk of escalation

In the case of escalation (E), the limited conflict would become a major conflict between the US (and allies) and China (and allies). The potential scope and cost of the conflict would be impossible to judge but would offer no tangible benefits to the people of the Asian region. Due to its geostrategic location, the US would be by far the most capable of weathering such a conflict without significant damage to its military, economy or infrastructure.

Of course, the outcomes would not necessarily be so clear cut. A Chinese loss in (E) might spur a wave of nationalism that in turn fuels further expansion. Similarly, a win in (E) might be pyrrhic in nature, leaving both China and Japan weaker than before.

In the majority of these scenarios Japan has limited input and clearly some of them (Sino-US power sharing and Limited Regional Conflict) might be attractive to the US and yet harmful for Japan. Another possibility also exists, however, in which Japan has room to influence its own destiny. In scenario (C) faced with a stronger China, Japan

could attempt the Goldilock's hedging strategy. By establishing closer ties to China it can offset China's fear of attack/containment from the US and by withholding its military capabilities from the US it can forestall any moves to initiate 'limited' conflicts. This 'scenario X' does run the danger of alliance abandonment and a Sino-US alliance but Japan's only other options are either the same Sino-US alliance or the likelihood of regional instability and possible involvement in conflict. It is clear that regardless of whether Japan were to follow such a policy, having it available greatly increases Japan's strategic options in general, and negotiating power within the alliance specifically, and is perhaps the only proactive choice available. Additionally, in consideration of Japan's excessive dependence on foreign imports of resources and energy, its trade ties to North and South East Asia and the danger of major natural disasters, this option also offers the best hope of maintaining both regional stability and Japan's relevance in the Asia-Pacific. In adopting a Scenario X strategy Japan would be aiming to display enough power to deter Chinese aggression, and enough independence from the US that China would not view Japan as a threat and the US would be left incapable of initiating conflict with China.

The capabilities of specific systems thus become extremely important, particularly BMD. Powell considers the latter, unless highly reliable, a questionable investment likely to provide only modest benefits while encouraging more aggressive strategies that degrade rather than reinforce national security.⁷⁹ Zagare found that if states responded to BMD by improving their own systems (as China has done) the resulting proliferation would destabilize the entire international system.⁸⁰ Other critics say a further flaw is revealed by asking if the USSR was dissuaded from attacking the US by the threat of

⁷⁹ Robert Powell, 'Nuclear Deterrence Theory, Nuclear proliferation and National Missile defence', *International Security*, 27 (4), Spring 2003. 88.

⁸⁰ Zagare, *Op cit.* 135-136.

nuclear response, why does this not suffice to deter aggression by North Korea or China? If this proven system is insufficient, why would an unproven BMD system be sufficient?⁸¹ The threat of conventional bombing on a massive scale is an even more plausible deterrent, given the numerous examples of the US employing such force with little hesitation.⁸²

China previously expressed willingness to reduce its own nuclear arsenal, yet stated that the US and Russia (with vastly larger stockpiles) should make the first move.⁸³ Chinese proliferation, they announced, would most likely occur as a response to expansion of the US missile system.⁸⁴ While some US analysts downplay the risk of destabilization, claiming it would pose no threat to larger states,⁸⁵ the Chinese response has clearly marked the negative impact such proliferation has on actual deterrence, heightening regional instability while wasting vast economic resources.⁸⁶

The key impact of BMD for China is that it negates its primary deterrent system, leaving it vulnerable to a US first strike. China's policy has always been to maintain a credible minimal deterrent capability but BMD is currently driving expansion of their systems, including new anti-satellite weapons, something acknowledged by numerous sources.⁸⁷

⁸¹ See, Thomas L. Friedman, 'Who's crazy here?' The New York Times, 15 May 2001; and Zagare. Op cit., 108.

⁸² Andrew O'Neil, 'Extended nuclear deterrence in East Asia: Redundant or resurgent?', *International Affairs*, 87 (6), 2011. 1440.

⁸³ Chase, Op cit.

⁸⁴ Yunzhu Yao, 'Chinese nuclear policy and the future of minimum deterrence', *Strategic Insights*, 4 (9), September 2005.

⁸⁵ Stephen L. Quackenbush, 'National Missile defence and deterrence', *Political research Quarterly*, 59 (4), December 2006. 540.

⁸⁶ Xiangli Sun, 'Analysis of China's nuclear strategy', *China Security*, 1, Autumn, 2005. 27.

⁸⁷ Enrico Fels, 'Will the Eagle strangle the Dragon?', *Trends in East Asia*, Analysis No. 20, February 2008; Hui Zhang, 'How US restraint can keep China's nuclear arsenal small', *Bulletin of the Atomic Scientists*, 68 (4), 2012. pp 73-82; Baohui Zhang, 'US missile defence and China's nuclear posture',

James Lyons, former Commander-in-Chief of the US Pacific Fleet, claimed that uncontested Chinese access to the South China Sea would provide a safe haven from which to launch ballistic missiles.⁸⁸ This failed to address the fact that China's missile expansion is purely a response to US proliferation and also fails to point out that the new Jin-class nuclear submarines are likely to give China a secure second-strike capability that can roam the entire Pacific. Lyons also downplayed the reliability of BMD, suggesting it would not be a sufficient deterrent or defence. In contrast, Chinese military figures have often played up the efficiency of BMD, claiming that it has the potential to intercept all missiles launched by China.⁸⁹ Both claims seem designed to serve purely political goals; for China the need to counter BMD by surging missile production and for the US justifying a higher military presence in the South China Sea.

While deterrence is often viewed as a defensive strategy, it can be argued that both China and the US are using it in a more 'offensive' form, using the threat not simply to prevent attack but to limit the actions of their opponent. In Chinese the closest term is 'weishe' which embodies both deterrence and compellence. The American concept of A2/AD is thus not an accurate portrayal of Chinese 'deterrence strategy' (*weishe zhanlue*) which is defined by the PLA as "the display of military power, or the threat of use of military power, in order to compel an opponent to submit."⁹⁰ This has dual use, firstly to "to halt, or prevent, the other side from starting a conflict, and thus protect one's own interests from aggression", and also to "shake the other side's will to resist,

International Affairs, 87 (3), 2011. pp. 555.; Joan Johnson-Freese and Thomas Nicols, 'Space, stability and nuclear strategy', *China Security*, 6 (2), 2010. pp. 3-24; 'US missile defence may backfire if too robust: General', *Reuter*, 10 November 2009.

⁸⁸ James Lyons 'A new challenge at sea', *Washington Times*, 22 March 2009.

⁸⁹ Zhang, *Op cit.* 560.

⁹⁰ PLA Encyclopedia Committee, *Chinese Military Encyclopedia, Supplemental Volume* (Beijing: Military Science Publishing House, 2002), 477.

and thus seize those interests or benefits that originally would have required conflict in order to obtain them."⁹¹ This is, of course, in keeping with Sun Tzu's observation that the greatest general is the one who can win without fighting.⁹² Following such a strategy, however, requires the demonstration of both the capability and will to follow through on threats in a manner convincing enough to influence your opponent's decision-makers. China and the US have thus far displayed quite similar policies, i.e. while both claim their foremost goal is to avoid conflict they are also sending a clear message regarding the limits of the behaviour they will tolerate: for the US China should limit its military growth in the Pacific, and for China the US should avoid involving itself in any of China's regional disputes. That they have chosen to support these stances by attempting to develop new systems aimed at achieving military superiority, has only ensured the perpetuation of a classic security dilemma.

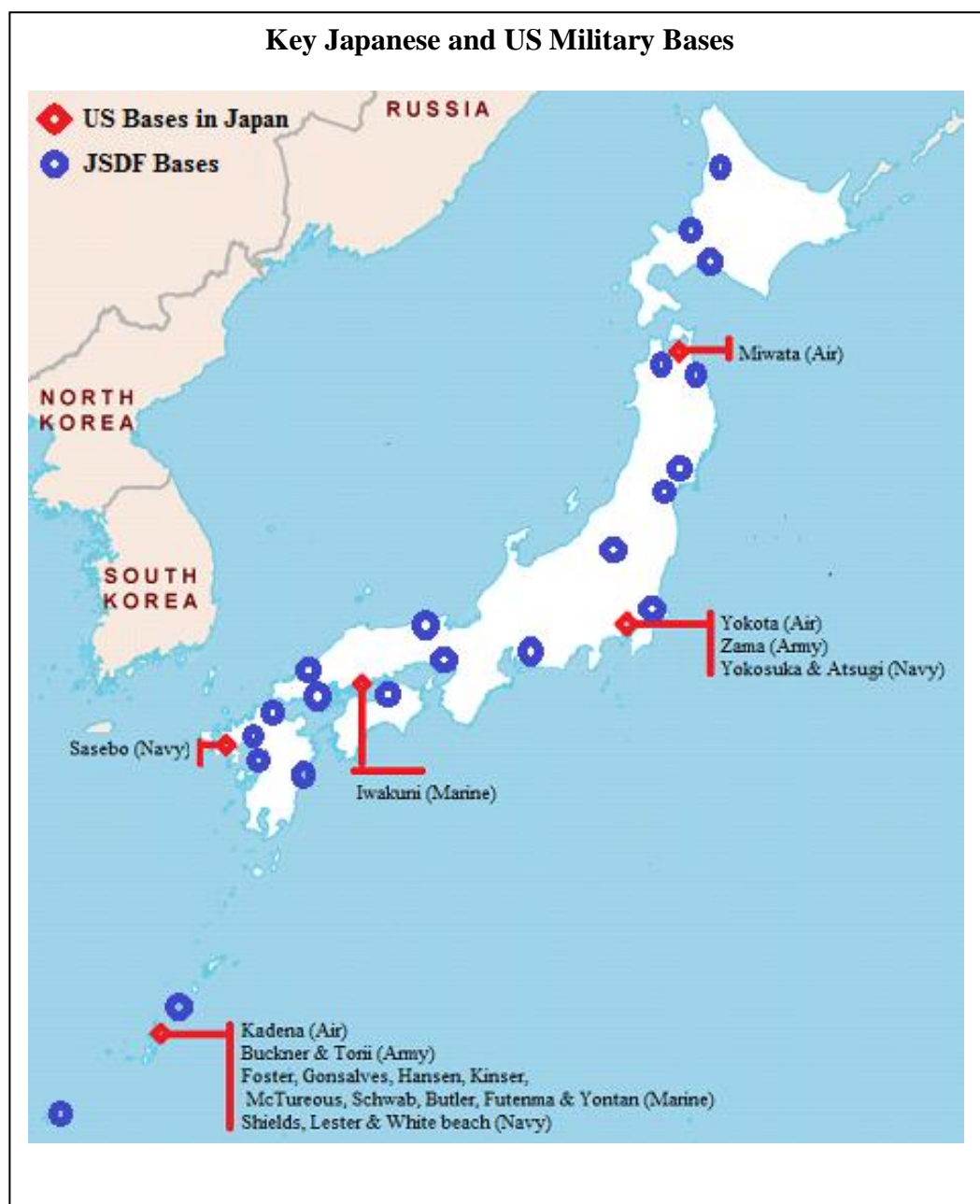
The problem for Japan in this situation is that China advocates a strategy that is not aimed simply at the targeting of US forces entering contested territory (as definitions of A2/AD would suggest) but instead preventing the use of US forces by targeting weak links in their support structure. Taking a page from the US own playbook Chinese strategists highlight the need to create "psychological pressure to shock and awe the opponent."⁹³ This involves decisive first-strikes aimed at bringing the conflict to a quick resolution by targeting the enemy's operational systems, i.e. US basing system in Japan (see Figure 5.3).⁹⁴ Commanders of the PLA 2nd Artillery Corps have urged the use of harassing strikes fired over Japan or into areas surrounding US bases as a means of

⁹¹ Dean Cheng, 'Chinese views on deterrence', *National Defence University Joint Force Quarterly*, No. 60, 1st Quarter 2011. 92-94

⁹² Ibid

⁹³ Guangqian Peng and Youzhi Yao, *The Science of Military Strategy* (Beijing: Military Science Publishing House, 2005), 214.

⁹⁴ Ibid. 461-464.

Figure 5.3

intimidating Japan's leadership and inducing pressure for Japan to distance itself from the US.⁹⁵ Other PLA works advocate 'harassment' strikes against US bases with a policy of hitting first, hitting hard and maintaining pressure until the opponent backs down.⁹⁶ The authors are aware that such a preemptive strike would cause significant

⁹⁵ Yoshihara, 2010. Op cit. 49.

⁹⁶ Ibid. 50-53.

international backlash but seem to believe that this would quickly pass if the attacks had their intended effect. They also seem confident that strikes on Japanese territory would result in increased Japanese opposition to war rather than support for alliance obligations.⁹⁷ Of course, the writings themselves may simply be a part of the strategy of 'weishe', i.e. presenting a sincere commitment to follow through on threats of force.

The threat of sudden rapid escalation is thus inherent in any clash between the US, or its allies, and China. Jervis criticized reduction of the complexities of the Cold War security dilemma to a 'game of chicken', declaring that the leaders of the states "have not behaved like reckless teenagers".⁹⁸ Yet, analysis of the Cuban Missile Crisis shows how few key decision makers are involved in the final stages of choosing whether to commit to military or diplomatic responses, and how much this choice can be swayed by the political or moral arguments of even a single actor.⁹⁹

For Japan to contribute a meaningful and influential opinion at such critical junctures requires a preexisting display of the ability and willingness to act independently, lest the US simply assume that once an American decision is made Japan will fall into lock-step. The Cuban Missile Crisis also serves to highlight the very real threat of escalation as the leaders involved were willing, in their saber-rattling and brinksmanship, to accept a certain level of risk of nuclear war.¹⁰⁰ In his analysis of Air-Sea Battle, Barnett claims China would never choose the nuclear option as even in defeat neither Hitler nor

⁹⁷ Ibid. 55.

⁹⁸ Robert Jervis, 'The Political Effects of Nuclear Weapons: A comment', *International Security*, 13 (2), 1988. 80.

⁹⁹ Graham T. Allison, 'Conceptual Models and the Cuban Missile Crisis', in Paul R. Viotti and Mark V. Kauppi (eds.) *International Relations Theory: Realism, Pluralism, Globalism*, (New York: MacMillan, 1987). 316-320.

¹⁰⁰ Marc Trachtenberg, 'The influence of nuclear weapons in the Cuban Missile Crisis', *International Security*, 10 (1), Summer 1985, 146.

Hussein made use of their chemical stockpiles.¹⁰¹ While this is flawed logic it also demonstrates the danger of assuming 'rationality' on the part of one's opponent, more specifically, assuming that what you consider 'irrational' is equally so from the opponent's perspective. In the previously mentioned case of North Korea, the fact that the threat has been exaggerated does not mean it is non-existent. Any potential threat should be addressed in some form, but its likelihood should be a large factor in determining responses. Similar assumptions are at play in arguments that economic ties between great powers would make war with China highly unlikely.¹⁰² Britain and Germany were one another's best customers in the period prior to World War One with more extensive economic ties than any time before or since. Not only did these ties fail to prevent war, the false security they generated resulted in assumptions that brinksmanship would never be fully carried through.¹⁰³

Japan, therefore, has to remain wary of the threat of escalation into a conflict which has no clear benefits that might outweigh the potential cost in lives, property and regional stability. At the same time, Japan requires some level of deterrent capability. While conflict may be against both Japanese and Chinese long-term interests (and its threat exaggerated), this does not preclude irrational action, or the possibility that conflict might serve the interests of factions within either state. The 'gray zone' territorial disputes highlighted by the NDPG are vulnerable to two specific contingencies: the use of limited probes to determine Japan's response threshold, and the use of a fait accompli strategy in which islands would be rapidly seized and reinforced in the hope that the

¹⁰¹ Thomas P.M. Barnett, 'Big war thinking in a small-war era', *China Security*, 6 (3), 3-11.

¹⁰² Barnett, Op cit, 8.

¹⁰³ Paul A.Papayouanou, 'Interdependence, Institutions, and the Balance of Power', *International Security*, 20 (4) Spring 1996.

cost of fighting to reacquire them would be more than Japan is willing to pay.¹⁰⁴ Japan's deterrent 'sweet spot' would thus be enough to discourage China from such action, yet not so great that it will heighten tensions between China and the US. This is echoed in Chinese doctrine on the subject with Zhao Xijun advocating careful consideration of the threat its military projects: too low and it will not deter the enemy from aggressive action, yet if too high it will make it lash out in fear.¹⁰⁵ For Japan possible examples might be to focus on the deployment of systems that will heighten the cost of Chinese aggression (e.g. short range missile defences) but not support power projection strategies (e.g. carrier based-fighters or long-range missiles) and to conduct training operations focused on littoral defence rather than littoral assault (the latter have recently been carried out in concert with US forces). Japan is thus left with another Goldilocks problem, just as her diplomatic ties must be carefully balanced between the US and China so too must her military capability.

Conclusions

A purely Japanese grand strategy cannot be considered the same thing as either a US-Japan alliance-based strategy, or independent US strategy. Despite this, each year sees Japan's self-imposed restrictions on a 'normal' military relax even further and the Japanese military become ever more operationally entangled with their US counterparts. The US is by far the dominant partner in this relationship and the strategy being followed arguably serves long-term US security needs far more than it does those of Japan. The entanglement restricts the adoption of alternative diplomatic or balancing strategies and heightens the security dilemma at play between Japan and China. In

¹⁰⁴ Sugio. Op cit.

¹⁰⁵ Zhao Xijun, *Intimidation warfare: A comprehensive discussion of missile deterrence*, (Beijing: National Defence University Press, 2005). 35.

adhering to it Japan is essentially gambling against the possibility of either abandonment or the US choosing an aggressive path, yet neglecting these possibilities creates a significant vulnerability in Japan's long-term security strategy. Furthermore, following current strategy is no more than a stop-gap measure to ward off a perceived Chinese threat, a policy which offers no long-term direction or path toward an ultimate resolution of the underlying tensions. These problems will only be exacerbated by a surge of new advanced weaponry due to see deployment in the mid-2020s, while increases in tensions which might spark conflict are impossible to predict given the competing web of interests that stretch between government and citizenry, branches of state and long and short term interests.

In order to permit itself greater strategic flexibility Japan needs to be capable of disentangling itself from commitment to a purely US (or US-dominated) strategy, ideally displaying both the ability to operate independently of the US and maintaining sufficient capability to deter potential aggressors. To do so, choice of weapon systems is of paramount importance, with their adoption alone sending clear signals regarding the ultimate shape of long-term strategy. The following Chapter will therefore examine in detail the choices Japan is currently making in terms of weapon procurement and the impact such choices are likely to have both on strategy and Japan's overall security.

CHAPTER 6: The Practical Value of Japan's Weapon Systems

“Tools or weapons, if only the right ones can be found, are ninety-nine percent of victory”.

General J.F.C. Fuller, 1919.¹

The Impact of Weapon System Selection

As previously mentioned, Japan's defence Industry has been in decline for some time and has been described as a 'boutique' industry, focusing on small-run custom systems that were difficult to sustain on the country's limited budget.² The recent relaxation of export prohibitions has, however, given the industry a shot in the arm. It first allowed the export of dual-use equipment to Haiti, following that nation's devastating earthquake, and then the transfer of 10 naval cutters, worth \$12 million apiece, to the Philippines.³ This is part of what Kotani sees as an effort to build a network of mini- 'Japan Coastguards' surrounding the South China Sea.⁴ Australia has also been exploring the possibility of pursuing joint development with Japan of a replacement for its Collins-class submarines,⁵ while former Defence Minister Kitazawa Toshimi suggested that Malaysia and Vietnam might also become future buyers of Japanese submarine systems.⁶

¹ J.F.C. Fuller, *Armament and History: The influence of armament on history*, London: C. Scribner's Sons, London, 1945.

² Bitzinger Op cit. 438.

³ Martin Fackler, 'Japan Is Flexing Its Military Muscle to Counter a Rising China', *New York Times*, 26 November 2012.

⁴ 'Japan flexing military muscle to counter China', *Philippines Daily Inquirer*, 28 November 2012.

⁵ Hamish McDonald, 'Navy eyeing off new Japanese submarines', *Sydney Morning Herald*, 9 July 2012.

⁶ 'Nations face off beneath the waves', *Daily Yomiuri*, 24 January 2012.

May 2013 saw Japan establish a Joint Working Group with India to pursue the sale of US-2 patrol planes by Japan. In June, Japan initiated discussions with France to begin joint development on as yet undetermined military projects.⁷ This was followed in July by the formal ratification of an agreement between Japan and Britain to pursue joint development of military systems.⁸ Originally initiated in 2012 the agreement is likely to first focus on relatively innocuous systems such as chemical protection suits and mine detectors, yet these ties could lead to more significant deals, such as Japan engaging in licensed production of Britain's Future Combat Ship or Merlin helicopters, or reinvigorate the Typhoon's appeal, should problems continue to plague the F-35.⁹ For Japan, these developments offer the defence industry a new opportunity for growth, providing the institutional problems previously discussed in Chapter 2 are properly addressed.

Bitzinger argues that the recent increase in military spending in Asia cannot be termed an 'arms race' as it has occurred simply due to increased prioritization of military affairs rather than in reaction to others capabilities.¹⁰ This is true to the extent that in many Asian states recent military growth has largely been a delayed reaction to earlier economic growth and an effort to match the investment levels of more powerful states. The US and Russia respectively invest 4.7 and 4.4 per cent of their GDP in their militaries. By comparison, in Asia Singapore is by far the largest investor at 3.6 per cent, with other states ranging between this and Japan's low of 1 per cent. At the same time, the surge in defence procurement has not simply been an effort to achieve parity, instead it has also been driven by regional tensions, particularly the growth of China and

⁷ 'France and Japan to work together on development of military equipment'. *AFP*, 8th June 2013.

⁸ Treaty Series No. 27. London: Foreign and Commonwealth Office, FCO, 2013.

⁹ J. Ryall, 'Britain and Japan to agree lucrative defence deal,' *The Telegraph*, 4th April 2010..

¹⁰ Richard A. Bitzinger, 'Will the US pivot trigger a new regional arms race?', *Global Asia*, 7 (4), December 2012.

the threat many nations feel due to this. Military planning will always take account of the capabilities of potential opponents and seek the most efficient means of countering them. Systems used for ballistic missile defence (BMD) and anti-submarine warfare (ASW) are designed to counter very specific enemy systems and are currently the most expensive and strategically important weapons programmes in Asia.

The military spending involved is both a reaction to and an inciter of the actions of other states. Yet, despite the key role such systems play the development process alone gives little evidence of how they will perform in combat. Even field deployment merely shows a commitment to the theoretical merits of the individual systems.¹¹ As such, accurate assessment of strategic value is impossible to achieve and analysts are often forced to assume worst-case scenarios (or rather 'best performance'). For example, while China's ASBM are unproven, US analysts will advise a response based upon the maximum potential threat they pose. In the same way, Chinese strategic advisors unsure of BMD's effectiveness, therefore work under the (flawed) assumption that the system is highly effective and base responses on this.

The choice of systems Japan develops or procures will therefore send specific signals (to both the US and China) regarding its long-term military strategy. In addition, systems must contribute to sustaining the defence industrial base and promote the diffusion of cutting-edge technology. Thus, the value of a weapon system can be measured by its suitability to the country's military, economic and technological needs.¹² The development must also be balanced across three separate stages: design and R&D, production and support. Over-investment in any one stage will mean less

¹¹ Thomas G. Mahnken, 'China's anti-access strategy in historical and theoretical perspective', *The Journal of Strategic Studies*, 34 (3), June 2011. 308-311.

¹² Evron, *Op cit.* 64.

funds remain to fully finance the other two. This can create problems in situations where technologically innovative systems are highly supported during development but left insufficiently funded for proper deployment. This is a long recognized problem that has only increased in relevance as advanced technology increases the amount of time required for system repair and the overall Life Cycle Cost (LCC) of the system.¹³ Japan's vulnerability to the trend can be seen in Table 6.1.

Table 6.1

Ratio of Maintenance Costs to Procurement Costs: 1989-2010 (¥100 million)									
Year	1989	1992	1995	1998	2001	2004	2007	2009	2010
Procurement	10207	8650	8250	7980	7670	8010	7436	7256	6837
Maintenance	4400	5339	6372	6477	6790	6972	7575	7755	7923
Ration M/P	43.1%	61.7%	77.2%	81.1%	88.5%	87%	101%	106%	115.4%

Source: Shin chūki bōei-ryoku seibi keikaku ni tsuite, Ministry of Defence, January 2011. 22.

As previously mentioned in Chapter 3, very often it is political factors unique to each state, rather than military strategy that determine procurement choices. One aspect, analysed by Greenwood in his study of US development of the MIRV missile system, is that it is quite possible for systems conceived purely as a hedge against uncertainty to gain enough political power to become fully deployed regardless of the fact that they might ultimately be unnecessary.¹⁴ This is supported by Beard's study of the decision to develop the Intercontinental Ballistic Missile (ICBM), in which military preference for focus on manned jets was overridden by the political appointment of ICBM proponents

¹³ Richard K. Betts, Conventional Strategy: New critics, old choices, *International Security*, 7 (4), 1983. pp. 159-160.

¹⁴ Ted Greenwood, *Making the MIRV: A study of defense decision making*, Cambridge, Ballinger, 1975. p. 156.

to key bureaucratic positions.¹⁵ Betts highlighted the nature of a state's strategic needs to change far more quickly than weapon procurement cycles can adjust to,¹⁶ and the need for greater flexibility was echoed by Gray who determined that narrow systems analysis on the part of politicians can encourage acquisition of weapons with too limited a function to provide the state with future strategic manoeuvring room.¹⁷ There is thus a danger that military planning will find itself driven by the systems available, rather than vice versa, i.e. basing military contingencies and targets upon what the available systems are best suited for rather than designing new systems to pursue the optimum strategy.¹⁸ This Chapter examines five specific examples of recent weapons procurement to examine to what extent choices are being made which service Japan's actual security interests.

Case Studies

The case studies selected comprise three of Japan's most expensive current systems (the F-35 fighter, the Izumo-class destroyer and ongoing BMD spending (see Table 6.2), as well as one potentially under-utilized system (the Type 12 Missile) and one future system (the F-3 fighter).

¹⁵ Edmund Beard, *Developing the ICBM: A study in bureaucratic politics*, New York, Columbia University Press, 1976. p. 159.

¹⁶ Richard K. Betts, Conventional Strategy: New critics, old choices, *International Security*, 7 (4), 1983. p. 152.

¹⁷ Gray, Colin. Op cit. p. 76.

¹⁸ Keen, Op cit. 180-188.

Table 6.2

Japan's Most Expensive Defense Systems 2012				
Rank	System	Vendor	Units	Total Cost
1	X-Band Radar (BMD)	DSN	2 sets	122
2	Field Communication System	NEC	14 sets	87.7
3	Patriot SAM (BMD)	MHI	3 sets	77.3
4	Izumo-class Destroyer	Japan Marine United	1 vessel	74
5	F-35A Fighter	US Air Force FMS	1 set*	56.9
6	Aegis Upgrade (BMD)	US Navy FMS	1 set	34.1
7	Soryu-class Submarine	KHI/Fuji Electric	1 vessel	30.8
8	Type-03 Med. Range SAM	Mitsubishi Electric	2 sets	29.3
9	C-2 Transport Plane	KHI	2 planes	28.7
10	SH-60K Helicopter	MHI/IHI	7 helis	19.7

All monetary values = ¥ billions.

** Represents 2x F-35A and 2x Training Simulators*

Source: Heisei 24-nendo sōbi shisetsu honbu chōtatsu jisshi gaikyō, Japan Ministry of Defence, 2013

The cases are chosen not because they are the most expensive or prestigious aspects of defence production, but rather because each highlights one of the ‘X factors’ of Japan’s defence industry, choices that must be made that will affect industrial strength, strategic options, deterrent capability and alliance ties. The questions that must be resolved are:

- ♦ Have systems been chosen based upon practical capabilities or to strengthen alliance ties? In the latter case, is the cost in military terms worth it?
- ♦ Is Japan capable of following a path of independent production, or even joint production which does not include the US?
- ♦ Are systems being developed in a manner that will allow their full tactical application? If not, why not?
- ♦ Are systems enhancing Japan’s deterrent capability or do some promote destabilization of regional security?
- ♦ Are systems being developed that will allow the choice of alternate security strategies in the future or will choices be constrained by weaponry suitable for only a single strategic path?

CASE STUDY #1: The F-35**Name:** F-35 Lightning II**Purpose:** Multi-Role 5th Generation Fighter**Manufacturer:** Lockheed Martin (USA)**Initial Development:** 2003**Service Introduction:** 2017 (projected)**Unit Cost:** unclear, currently ¥15 billion+ (projected)**Planned Acquisition:** 42 Units for ASDF**Notes:** Designed to perform ground attack, reconnaissance and air defence tasks with limited stealth capability.**Table 6.3****F-35 Recent Procurement (Cost in ¥ billions)**

2010	2011	2012	2013	2014-15
-	-	4 (39.5)	2 (29.9)	+6

The F-35 was originally designed by the US to be a cost-efficient means of replacing its entire tactical air-fleet with three variations of a single system. The F-35 A would replace the Air Force's F-16 and A-10s, the F-35 B would do the same for the Marine's AV-8B Harrier jump jets and the F-35 C would be a carrier variant replacing the Navy's A/F-18s. The sharing of development costs was expected to produce considerable production savings while the similarity of parts (80% standard) would help reduce support and logistics. Initial plans for 3,000 units also guaranteed economy of scale and initial deliveries were scheduled for 2010.¹⁹

Early in its development significant problems arose that threatened the estimated timeline. This in turn threatened the reliability of orders, pushed unit costs up and

¹⁹ 'The last manned fighter', *The Economist*, 14 July 2011.

created a cycle of increasing cost and decreasing confidence. Some analysts began to question whether its role might not be better handled by cheaper cruise missile or drone systems.²⁰

The background to the procurement decision is as follows. In the post-war era Japan's first systems had been F-86 Sabres, licensed and built by Mitsubishi, which remained in service through the 1970s. They were supplemented by F104J Starfighters (licensed and built by Mitsubishi and Kawasaki) which were used until 1986. F4 Phantoms (licensed and built Mitsubishi) were introduced in 1971 to replace the aging Sabres and remain in service today despite nearing the end of their lifespan. In 1971 they were supplemented by the 1st indigenous fighter, the F-1 (designed and built by Mitsubishi), also now being phased out. During the 1990s Mitsubishi was licensed to build F-15 Eagles and in the 1990s developed and produced the F-2, which was based on the F-16. Both of these platforms are still in widespread use.

Originally referred to as F-X, the choice for a replacement eventually came down to the F-35 Lightning II (Lockheed Martin), F/A-18 Super Hornet (Boeing) and the Eurofighter Typhoon (EADS/Alenia/BAE). Among the requirements were: filling the F-4's air defence role, allowing access to advanced technology and allowing continued domestic production. With the end of F-2 production in 2011 the industry was left relying solely on the ATD-X program (a technology demonstrator for a future F-3 fighter) to support domestic aeronautic designers and engineers.

²⁰ Ibid.

Assessing the candidates the MoD found that each fulfilled the basic requirements; the F-18 was best in terms of unit cost and fuel use, the Typhoon best for industry needs and the F-35 2nd in both areas while also fully compatible with Japan's existing aerial refueling system.²¹ In the end the F-35 was chosen with licensed production to be carried out by Mitsubishi Heavy Industries for the airframe, Mitsubishi Electric for internal systems and IHI for the engine.²² One immediate concern was that much of its technology was likely to be 'black boxed', i.e. withheld from Japanese engineers. In the case of the Super Hornet 70-80% would have been available, while the Typhoon offered almost 100% access.²³ With the F-35 the level of access to key systems has been left up in the air and will require further negotiation (or may never be offered). Furthermore, the F-35 is still unfinished and the first planes will not be available to Japan for several years (currently a 2017 estimate), creating a potential gap in both Japan's air defences and her industrial base, following the end of F-2 production in 2011 (see Table 6.4).²⁴ As a result of this gap, 81% of aerospace firms predicted a loss of skilled workers, with 92% saying it would be impossible to maintain the same level of expertise across a gap of even five years.²⁵ Both the F/A-18 and Eurofighter had by that stage been combat tested and would have been available for production far earlier.

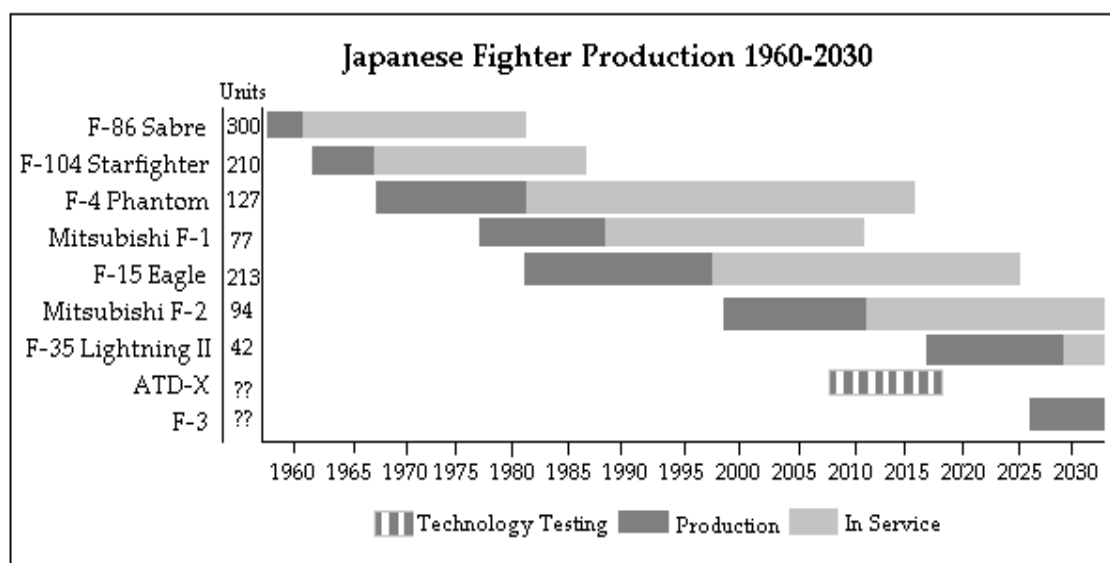
²¹ Mark Miller, 'Japan and the F35: What to do?', *Japan Today*, 2 April 2012.

²² Jeffrey W. Hornung, 'How the F-35 may hurt US-Japan ties', *The Diplomat*, 5 April 2012.

²³ 'Choosing next fighter jet a balancing act', *Nikkei*, 31 October 2011

²⁴ 'Japanese built F35 to debut in 2017', *Flight International*, 16 October 2012.

²⁵ *Current state of the Defence Industry (Aircraft)*, Institute of Aeronautical and Space Industries Association (Japan), 25th January 2011.

Table 6.4

The F-35 had, in fact, been a second place choice behind initial efforts to acquire the US F-22 Raptor. The US rejected licensing though, and in this regard Japan dodged a bullet as the F-22 had a catastrophic production run. Despite an original order of 700-800 units, the US reduced orders to 180, driving the unit cost from \$149 million to \$342 million. Following a F-22 crash in 2010 the US grounded all 180 planes (almost half its frontline air defence), yet once they were redeployed complaints over poor oxygen supply saw them again consigned to their hangers. In all, F-22s provided an average 15 hours air-use per month in 2010, while in 2011 they were entirely grounded for almost five months.²⁶ Senator John McCain described the plane as “the most expensive, corroding, hangar queen ever in the history of modern aviation.”²⁷ McCain highlighted “sky-rocketing maintenance costs” that made the system “cost-prohibitive to sustain over the

²⁶ Winslow Wheeler, ‘The jet that ate the Pentagon’, *Foreign Policy*, 26 April 2012.

²⁷ Tony Capaccio, ‘F-22 Jet Is ‘Expensive Corroding Hangar Queen,’ McCain Says’, *Bloomberg*, 19 December 2011.

long run", with corrosion of internal components alone requiring a \$228 million repair package.²⁸

These development problems should have played a far greater role in the selection of the, as yet untested, F-35. Unlike the standard procurement process outlined in Chapter 2, the final selection of the next-generation fighter followed a special directive issued in January 2011 nominally aimed at offering greater transparency. The original selection process had begun in 2005 with six prospective planes, of which all but the F-35 have been deployed in active service (the F-35 will not see service with any country until 2015 at the earliest). The final stage selection focused on three fighters and assigned 100 points overall: 50 for performance, 22.5 for cost, 22.5 for industrial involvement and 5 for logistics. In the case of the F-35, however, the areas of performance and cost (72.5% of the score) were purely speculative based on data the US provided and which was then used in 'mathematical analysis' to evaluate each candidate. The F-35 scored first and second respectively, higher than the Typhoon in both cases despite the fact that its actual capabilities and cost remain unknown.²⁹

Still years before receiving operational units the recent defence budgets have, nonetheless, seen ¥69.4 billion allocated for the cost of the first fighters. Production will continue to run throughout the 2020s and could increase from an initial 42 to as many as 120 units.³⁰ This long-term commitment depends upon a lack of critical errors preventing orders from being cancelled or reduced. Such errors would result in longer development cycles, compromising Japan's air defences and increasing unit costs,

²⁸ Ibid

²⁹ Defense of Japan 2012, 174-178.

³⁰ Bradley Perrett, 'Not just Japan', *Aviation Week and Space Technology*, 19 December 2011.

something that will likely reduce the number of units Japan can afford, further compromising air defences.

There are of course some clear benefits the F-35 offers. It is at the very edge of advanced aeronautics, particularly stealth technology: radar-absorbing components, radar cancelling paint, low-energy smart sensors, recessed engine inlets, etc. Yet, use of a standard heat exhaust nozzle (a cost-cutting decision) might render all other features irrelevant.³¹ While it is likely Japan will become a global supplier of some components, this remains entirely at the discretion of Lockheed.³² Such supply does raise a further issue, however, in that it will include states determined solely by the US, including Israel. The Japanese government has declared that this will not violate remaining export prohibitions as, “The United States approved Israel as a user nation because it abides by the objectives and principles of the UN charter”,³³ a statement at odds with the scores of UN resolutions which Israel has violated throughout its history.³⁴

Cost

The initial cost of the US program was \$233 billion in 2001, climbing 70% to \$395 billion by 2012.³⁵ Including operating costs, the full cost of the system could be \$1.5 trillion.³⁶ Unit cost (including life-cycle support) has been estimated to run as high as \$769 million.³⁷ Japan’s initial estimates were \$176 million for each of the first 4 units

³¹ David Axe, ‘7 ways America’s stealth armada stays off the radar’, *Wired*, 13 December 2012.

³² ‘Japan confident F35 jets will be delivered on schedule despite US defence cuts’, *Xinhua*, 27 January 2012.

³³ ‘Abe administration changes basic concept in approving export of weapon parts’, *Asahi Shimbun*, 2 March 2013.

³⁴ Mark Weiss, ‘Israel to run for seat on UN Security Council’, *Irish Times*, 5th October 2013.

³⁵ David Lerman, ‘U.S. Air Force Slams Lockheed Martin on F-35 Program’, *Bloomberg*, 17 September, 2012.

³⁶ US estimates Japan’s F35 productions at \$10 billion’, *Jiji*, 5 May 2012.

³⁷ Estimate of the Norwegian military in, ‘41st Parliament, 1st Session, Standing Committee on National Defence.’ *Parliament of Canada*, 24 November 2011. Retrieved 15 December 2011.

and \$127 million for later, locally produced, units. For 42 this meant a life-cycle cost of \$20.8 billion.³⁸

Both prices and delivery remain completely at the discretion of Lockheed, however, and will change to reflect decreasing orders. Initial pricing required 3100 units over 25 years, for a final (US) price of \$73 million.³⁹ The program is now five years behind schedule and running far above its cost projections. Italy cut its order from 131 units to 90, Australia delayed its own for two years and even the US cancelled its initial 13 units while delaying its larger package of 179 units. In Canada, commitment to the costly system produced a scandal that saw the government accused of malfeasance.⁴⁰ Present US unit costs are almost double initial estimates and though supporters claim they will decline once volume production begins, critics argue that ongoing research expenditure to address technological problems will prevent any significant reduction and may result in a final unit price as high as \$250-300 million.⁴¹ For Japan, devaluation of the Yen alone has already seen the initial unit price climb from ¥10.16 billion to ¥12.52 billion,⁴² while the Defence Ministry has hinted that it will spread the purchases out over a longer period of time, a move that can only increase the final cost.⁴³

Another factor is the 'flying per hour' (FPH) cost to run the systems. While the F/A-18, had an FPH of \$15,346, the F-35's FPH is estimated at \$32,500.⁴⁴ Furthermore, Japan

³⁸ 'Japan confident F35 jets will be delivered on schedule despite US defence cuts', *Xinhua*, 27 January 2012.

³⁹ 'Japan awards jet fighter contract to Lockheed Martin', *Bloomberg*, 19 October 2011.

⁴⁰ Andrew Coyne, 'Peeling back the layers of misconduct in the F-35 fiasco.' *National Post*, 4 April 2012.

⁴¹ Winslow T. Wheeler, 'How much will each F-35 cost?', *Huffington Post*, 1 April 2010

⁴² As of 30th November 2013.

⁴³ Paul Kallender, -Umezū, 'Japan Might Delay F-35 Purchases', *Defense News*, 10 July 2013.

⁴⁴ Terry Milewski, 'Boeing touts fighter jet to rival F-35 — at half the price', *CBC News*, 27 February, 2013.

typically pays far more to manufacture systems than the Commercial Off-the-Shelf (COTS) cost. In the case of the F-15, Japan ended up paying more than double the US price.⁴⁵ This will become more of a problem the higher the amount of parts Japan produces domestically. The agreed level of such production was capped at 40% but so far only 10% of parts are likely to be Japanese but even this has had a strong impact on pricing. The current revised estimate for each jet stands at ¥15 billion but is certain to increase.⁴⁶

Technical Issues

Recently the US General in charge of F-35 acquisition attacked the manufacturers for wastefulness and failure to meet deadlines. One particular problem was the unfinished state of its software. Although only 15% remained undone, these were the most complex elements requiring 6 years of further development.⁴⁷ In 2012, the F-35 had only completed 20,000 out of a total 60,000 planned tests. The Pentagon's chief of weapon procurement claimed the program amounted to "acquisitions malpractice". Problems included: the helmet tracking system, the weapon bay doors, the radar tracking system, cracks on the fuselage, the lift fan for the VTOL, the ability to transfer data to ships and the internal coolant system. In February 2013 the planes were once again grounded due to cracks in their outer shell, and while flying are banned from operations within 25 miles of storms due to a danger of fuel tank explosions.⁴⁸ A recent Pentagon report found their testing inadequate because, "Aircraft operating limitations prohibit flying the aircraft at night or in inclement meteorological conditions," such that,

⁴⁵ James Simms, 'Japan puts the dog in dogfight,' *Wall Street Journal*, 22 December 2011.

⁴⁶ Kuniichi Tanida, 'Japan made parts to push up price of F35 fighter jets for ASDf', *Kyōdō News*, 22 August 2013.

⁴⁷ Lerman, Op cit.

⁴⁸ Reuters, 20 January 2012

“pilots must avoid clouds and other weather.”⁴⁹ In addition the report stated the aircraft “does not yet have the capability to train in . . . any actual combat capability, because it is still early in system development.” Despite this, pilots openly criticize its combat capability saying that radars often did not work, targeting helmets caused double-vision and headrests created a vulnerable visual blindspot.⁵⁰

Other problems include: the small size limiting fuel capacity, overall range and upgrades, its single jet engine makes long-distance maritime patrols more risky, it has only a small number of hard-points, its internal storage for missiles creates a wide non-aerodynamic front and its performance suffers at high speed or altitude.⁵¹ Winslow Wheeler, a combat aviation expert formerly with the US Government Accountability Office (GAO) considers the F-35 “a bad idea that shows every sign of turning into a disaster as big as the F-111 fiasco of the 1960s.”⁵² He considers the plane less suitable for any of its individual roles than the existing planes it will replace and believes it must choose between a moderate weapon load or stealthiness, but not both. Wheeler estimates that as little as 17% of components will receive the necessary testing before they are put into operation.⁵³

The F-35 now seems likely to be far more costly than the Eurofighter Typhoon, a plane many considered more suitable for Japan’s security needs.⁵⁴ The Typhoon is more specifically designed for air defence (Japan’s primary security need), is likely to be

⁴⁹ Lee Berthiaume, ‘F-35 design problems make night flying impossible, increase risk of being shot down, U.S. pilots warn’, *National Post*, 6 March 2013.

⁵⁰ Ibid.

⁵¹ Andy Nativi, ‘F35 combat skills analyzed’, *Aviation Week and Space Technology*, 6 March 2009.

⁵² Wheeler, Op cit.

⁵³ Ibid

⁵⁴ Christopher Hughes in ‘Japan officially selects the F35’, *The Diplomat*, 20 December 2011; David Warren, ‘Eurofighter best option for Japan’s ASDF’, *Yomiuri Shimbun*, 24th November 2011; Masahiro Matsumura, ‘Acquiring Japan’s Next-Generation Fighter’, *RIPS*, 5th August 2010.

cheaper to buy and far cheaper to support, has been combat tested, offered 100% technology transfer to Japan's industry and was available for immediate production. The Typhoon is also seen as superior in close range combat and while the F-35 excels at long-range stand-offs it has been argued that in these situations the missiles involved are more important than the systems launching them.⁵⁵ Gareth Jennings, aviation editor at Jane's, also considered the Typhoon most suitable noting that the F-35's advantages at 'beyond visual range' combat were irrelevant for operations other than full-scale war as fighters are otherwise generally required to make visual identification of targets before permission to fire is granted.⁵⁶ The final weakness is that the F-35's most acclaimed feature, stealth capability is not the 'invisibility' to radar that many assume it to be, rather it limits detection by some radars, at some angles. During NATO bombing of Kosovo in 1999 a US F-117 stealth fighter was shot down by antiquated Russian air defence systems and wreckage was used to test countermeasures.⁵⁷ The F-35's own technology may already be compromised following successful hacking of a key manufacturer in 2009.⁵⁸ This is actually only one of dozens of key US weapon systems whose sensitive designs have been breached by hackers.⁵⁹ Finally, there is a strong possibility that in coming decades radar detection will lose its importance as other forms of detection (infrared, wake detection, and electro-optics) render true stealth far more difficult to achieve.⁶⁰

⁵⁵ Nativi, Op cit.

⁵⁶ 'Japan's F35 choice questioned', *The Diplomat*, 22 December 2011.

⁵⁷ Charles R. Smith, 'Russia Offers India \$8 Billion Weapons Deal', *Newsmax*, 12 December 2001.

⁵⁸ 'Security experts admit China stole secret fighter jet plans', *The Australian*, 12 March 2012

⁵⁹ Ellen Nakashima, 'Dozens of key weapon systems whose Confidential report lists U.S. weapons system designs compromised by Chinese', *Washington Post*, 27 May 2013.

⁶⁰ Alessio Patalano, 'The FX competition and the dilemma of Japanese defence policy', *Asahi Shimbun*, 19 December 2011.

Japan's options

The original F-X proposal envisioned a replacement being selected between 2005 and 2009. This was delayed by negotiations for the F-22 and second-guessing the alternatives, with production now scheduled to begin in 2016, considerably behind schedule. Japan's Defence Minister stated that the order might be cancelled if Japan's needs are not met,⁶¹ yet this seems highly unlikely if the initial selection was driven by alliance ties rather than security needs.

Former Defence Minister Morimoto Satoshi criticized the government for failing to establish a clear vision for selecting the fighters, but eventually supported the choice of the F-35.⁶² The military had been the initial supporters of the US plane, desiring to have access to the same advanced technology as their closest allies.⁶³ MHI, the main fighter manufacturer in Japan, was itself opposed to the choice of the F-35 due to the restrictions on technology transfer,⁶⁴ however, the choice represented a significant diplomatic boost to the US-Japan relationship.⁶⁵ Coming in the wake of the clash between the US and Hatoyama over Futenma any move away from alliance ties, i.e. selection of the Eurofighter, was highly improbable in purely political terms, something evident in comments by government figures that they were concerned the choice might affect alliance relations.⁶⁶ Hughes viewed the choice as politically expedient in the short-term but questioned its long-term value in that it weakened domestic production, decreased Japan's strategic autonomy and rejected opportunities to develop defence ties

⁶¹ 'Japan may cancel F35 purchase if prices hike', *Xinhua*, 29 February 2012.

⁶² 'Govt FX project at standstill', *Kyōdō News*, 3rd August 2010.

⁶³ 'Japans military chief says F35 is best fighter', *Reuters*, 27 March 2013; 'Why Japan chose F-35 fighter no mystery', *Asahi Shimbun*, 21st December 2011.

⁶⁴ Sunho Beck, 'Power play', *defence Technology International*, 1 November 2008.

⁶⁵ Humza Ahmad, 'F35 fighter brings Japan multiple benefits', *Japan Times*, 22 December 2011.

⁶⁶ 'Why Japan chose F-35 fighter no mystery', *Asahi Shimbun*, 21st December 2011.

with Europe.⁶⁷ Patalano felt it favoured "alliance management priorities over Japanese air defence requirements" and that Japan's purchase of an "unfinished, untested and astronomically expensive fighter" would be warmly welcomed by China.⁶⁸ The political nature of the decision was revealed in comments by a senior defence official who stated that "If the Japan-US relationship had not worsened due to the dispute over the US Futenma air station, the Eurofighter could have been one of our choices."⁶⁹

Masahiro Matsumura, professor of national security at St. Andrew's University disparaged the choice of the F-35 as a purely paper assessment and compared it to purchasing a car without taking a test drive.⁷⁰ While some media such as the Yomiuri, supported the choice as necessary to retain parity with neighbouring states, others have since criticized the move with the Asahi labelling it a potential "waste of public funds",⁷¹ and Sankei expressing doubt that either its cost or delivery date could be relied upon.⁷²

Japan still has time to rethink its commitment, though the MoD has no plans to do so, stating, "If we don't buy until all the glitches are eliminated, it would be too late."⁷³ This is far from a reasonable justification for persisting when glitch-free alternatives that suit Japan's need are available. These include the Typhoon (best suited for security needs), the F/A-18 (the cheapest and easiest to upgrade) or simply a greater number of refitted F-15s (a huge economic boost in terms of economy of scale on training, maintenance and supplies) or F-15SE Silent Eagles, a new version offering limited stealth similar to

⁶⁷ 'Japan officially selects the F35', *The Diplomat*, 20 December 2011.

⁶⁸ Patalano, Op cit.

⁶⁹ 'Govt FX project at standstill', *Kyōdō News*, 3rd August 2010.

⁷⁰ Why Japan chose F-35 fighter no mystery, *Asahi Shimbun*, 21st December 2011.

⁷¹ 'An export ban worth keeping', *Japan Times*, 15th February 2013.

⁷² *Sankei Shimbun*, 2nd June 2013

⁷³ Andrea Shala-Esa, 'Expensive F-35 fighter at risk of budget death spiral', *Reuters*, 21 March 2013.

the F-35.⁷⁴ The flaws of the F-35 system (ballooning cost, unreliable delivery schedule, lack of thorough testing, technical problems and questionable air superiority) clearly require firmer attention from the MoD and government regarding Japan's air defence needs. While the F-35 could potentially suffice, there is no justification for failing to engage in hard bargaining, using the threat of cancellation to ensure the best possible deal for Japan. In similar negotiations in late 2013 South Korea agreed to a purchase of F-35s only after gaining a commitment that offsets, including support for a communications satellite and access to technical documents on planes including the F-22, would be part of the deal.⁷⁵

While maintenance of alliance ties might be an important political consideration, this single element should not be allowed to dominate the entire process, particularly when the US government itself is taking a very firm and critical position regarding its own F-35 procurement. Should the systems problems persist over the next one or two years, a failure by Japan to formally reassess their procurement decision should be considered a victory of political alliance ties over both Japan's practical security and defence industrial needs.

⁷⁴ Jon Grevatt, 'LM offers F35 Line to Japan as sweetener', *Jane's Defence Weekly*, 15 June 2011.

⁷⁵ Andrea Sahala-Esa, 'Lockheed says committed to South Korea F-35 offset offer', *Reuters*, 22nd November 2013.

CASE STUDY #2: The ATD-X Shinshin (F-3).**Name:** ATD-X Shinshin**Purpose:** An ‘advanced technology demonstrator’, i.e. a prototype system.**Manufacturer:** Mitsubishi Heavy Industries (airframe), IHI (engine)**Initial Development:** 2005**Service Introduction:** Initial flights = 2014-2015, project completion = 2017 (projected)⁷⁶**Unit Cost:** n/a, Core R&D costs estimated at ¥22.8 billion**Planned Acquisition:** n/a**Notes:** The ATD-X will act as a testing model for a future F-3 fighter entering service in the 2030s.⁷⁷**Table 6.5****Recent Development Funding (Amount in ¥ billions)**

	2010	2011	2012	2013
ATD-X Core System	22.8	-	-	-
New Fighter Sensors	0.5	4	-	-
Internal Fighter Weapons		1.6		
New Fighter Engine		3.3		4.5

Note: These represent only the major projects associated with the ATD-X. Numerous other projects are also underway that may be applied to the system.

The ATD-X is a technology demonstrator for a future 6th generation fighter called the F-3. The F-3 is labeled an ‘i3 fighter’, referring to requirements that it be informed, intelligent and instantaneous, aspects of a ‘networked combat management’ system that will allow the sharing of sensor data between units and ‘cloud shooting’, the ability of any unit to guide missile fired by any other.⁷⁸ Other intended features include: jamming resistant ‘fly by light’ controls, anti-stealth radar capability, increased stealth

⁷⁶ ‘Japan stealth jet prototype set to fly in 2014’, *AP*, 8 March 2011

⁷⁷ ‘Mitsubishi Heavy Industry : MHI Begins Assembly of Full-scale Model for Advanced Technology Demonstrator Aircraft Project’, Mitsubishi Heavy Industries, Press Release, 28 March 2012.

⁷⁸ ‘F-3 ShinShin R&D cost estimated at \$5.9 ~ 9.4 billion, demonstrator flying in 2015’, *Nikkei*, 25 August 2010

functionality, and a next-generation (slim cross-section, heat-resistant) engine. These features are expected to be part of initial development from 2021-2030, while later improvements during the 2040s would include networking with sensor drones that fly ahead of units and a directed energy laser/micro-wave weapon system.⁷⁹ In addition, IHI are developing a prototype engine that generates 50% more thrust than the F/A-18. Altogether ¥22.8 billion has been allocated for ATD-X development until 2017.⁸⁰

The US Navy and Air Force are also considering future fighter systems,⁸¹ and some Japanese executives suspect the F-3 might become part of a joint development program.⁸² If so, having IHI's independently developed engine would allow Japan increased strategic freedom in choosing whether to participate or instead produce a fully independent system. While the latter would be far more expensive, the Society of Japanese Aerospace Companies highlighted the need for domestic production to offset the danger of the US withholding advanced technology.⁸³ Such caution is evident in the requirement for the F-3 to have advanced stealth capability, something Japan would not need to pursue if joint production with the US was predetermined.

Given the deep flaws involved in choosing the F-35 as Japan's next fighter, the danger of alliance pressure similarly affecting F-3 development must be recognized. The most likely form will be pressure for joint development on the basis of cost efficiency and former Defence Minister Morimoto Satoshi has been among those urging joint

⁷⁹ Bradley Perrett, 'Tokyo, Seoul Mull Advanced Fighters', *Aviation Week*, 1 October 2010.

⁸⁰ Bradley Perrett, 'Japan Aims To Launch F-3 Development In 2016-17', *Aviation Week*, 22 October 2012.

⁸¹ Robert Johnson, 'Boeing Offers A Glimpse Of Its 6th-Generation Air Dominance Fighter', *Business Insider*, 29 September 2011; Dave Majumdar, 'US Navy issues F/A-XX RfI', *Flight Global*, 17 April 2012.

⁸² Perrett, Op cit.

⁸³ Bradley Perrett, 'Japan's roadmap to an indigenous fighter', *Aviation Week*, 11 February 2011.

development with the US.⁸⁴ Japanese advanced technology will also be a target for the US should the former outstrip the latter's capabilities in any area. Finally, there will also be pressure for joint development simply to prevent weakening of alliance ties should Japan's defence development take on a more international dimension. The influence of gaiatsu should therefore be weighed against Japan's specific security needs in analysing the best direction for the F-3 program to take and to prevent another situation, as seems the case with the F-35, in which the latter were clearly overridden by the former.

CASE STUDY #3: Ballistic Missile Defence (BMD)

Name: Ballistic Missile Defence (comprising Aegis BMD, Patriot BMD, FPS-5 Ground Radar system and the Japan Aerospace Defence Ground Environment (JADGE) control system)

Purpose: Protection from ballistic missile attack

Manufacturer: Patriot = Raytheon (USA) with licensed production by MHI (Japan), Aegis = Lockheed Martin (USA), FPS-5 = Mitsubishi Electric (Japan), JADGE = NEC (Japan)

Initial Development: 2004

Service Introduction: 2007

System Cost: ¥900 billion+ from 2004 to 2013

Planned Acquisition: Currently 6 Aegis Destroyers, 80 Patriot Launchers, 4 FPS-5 Radars.

Notes: The BMD system has a major impact on the concept of collective defence

Table 6.6

Recent Procurement (Cost in ¥ billions)

2010	2011	2012	2013	2014-15
32.8	47.3	57	28	-
Note: From 2004 to 2009 BMD cost a total of ¥692 billion in systems acquisition costs and another ¥73 billion in R&D funding. Its total costs so far are more than ¥900 billion.				

⁸⁴ Kōsuke Takahashi, 'Japan presses ahead with ATD-X program', *Jane's Defence Weekly*, 25th November 2011.

Japan's participation in BMD began in the late 1980s as part the US Strategic defence Initiative (SDI). Calls for Japanese joint development were delayed by concerns over the prohibitions against weapon exports.⁸⁵ Only from 1998, with North Korea's missile tests, did Japanese political opinion soften, leading to a 1998 decision permitting an exemption.⁸⁶ In 2003, PAC-3 and SM-3 Block 1A systems were deployed and since then the system has been expanded to include: 4 PAC-3 Groups (Each has 4 Fire Units and each of these has 5 Launcher Stations, i.e. there are 80 Launchers, each of which can hold up to 16 missiles), 6 Aegis Destroyers, 4 FPS-5 X-band radars, 7 upgraded FPS-3 radars, and modifications to the Japan Air-Defence Ground Environment (JADGE) system to incorporate BMD (see Tables 6.7 and Figure 6.1).

Table 6.7

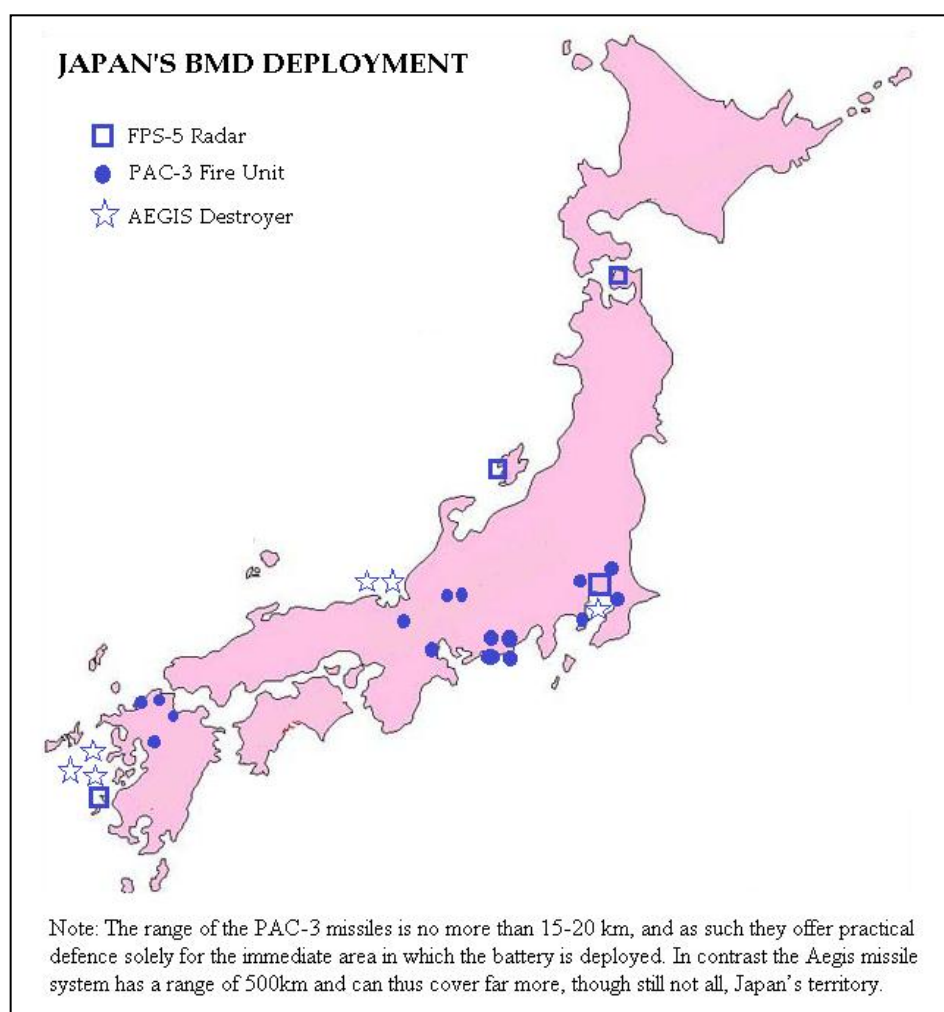
Deployment of Japanese BMD Systems		
SYSTEM	GROUP	LOCATION
PAC-3 Batteries	Battalion 1: Kanto Area	Narashino, Takeyama, Kasumigaura, Iruma (each 1 FU)
	Battalion 2: Kyushu Area	Ashiya x2, Tsuiki, Kouradai
	Battalion 3: Training Group	Hamamatsu x 4
	Battalion 4: Kansai Area	Aibano, Gifu x2, Hakusan
Aegis Systems	JDS Kongo, JDS Chokai, JDS Atago	Sasebo
	JDS Myoko, JDS Ashigara	Maizuru
	JDS Kirishima	Yokosuka
FPS-5 Radars	Northern Station	Ominato
	Central Station	Sado
	Western Station	Shimokoshikijima
Note: The US also stations one of its own Aegis Destroyers (USS Shiloh) at Yokosuka and an additional PAC-3 Battalion (4 Fire Units) in Okinawa.		

⁸⁵ Sugio Takahashi, 'Ballistic Missile defence in Japan: Deterrence and Military Transformation', *IFRI Proliferation Papers* 44, December 2012. 9-10.

⁸⁶ Statement of the Chief Cabinet Secretary, Japan-US Joint Technological Research on Ballistic Missile defence, 25 December 1998.

The importance of BMD is highlighted by their designation as a ‘fourth category’ for the JSDF, i.e. much like China’s 2nd Artillery Corps they are a distinct branch of the military in addition to the ASDF, GSDF and MSDF.

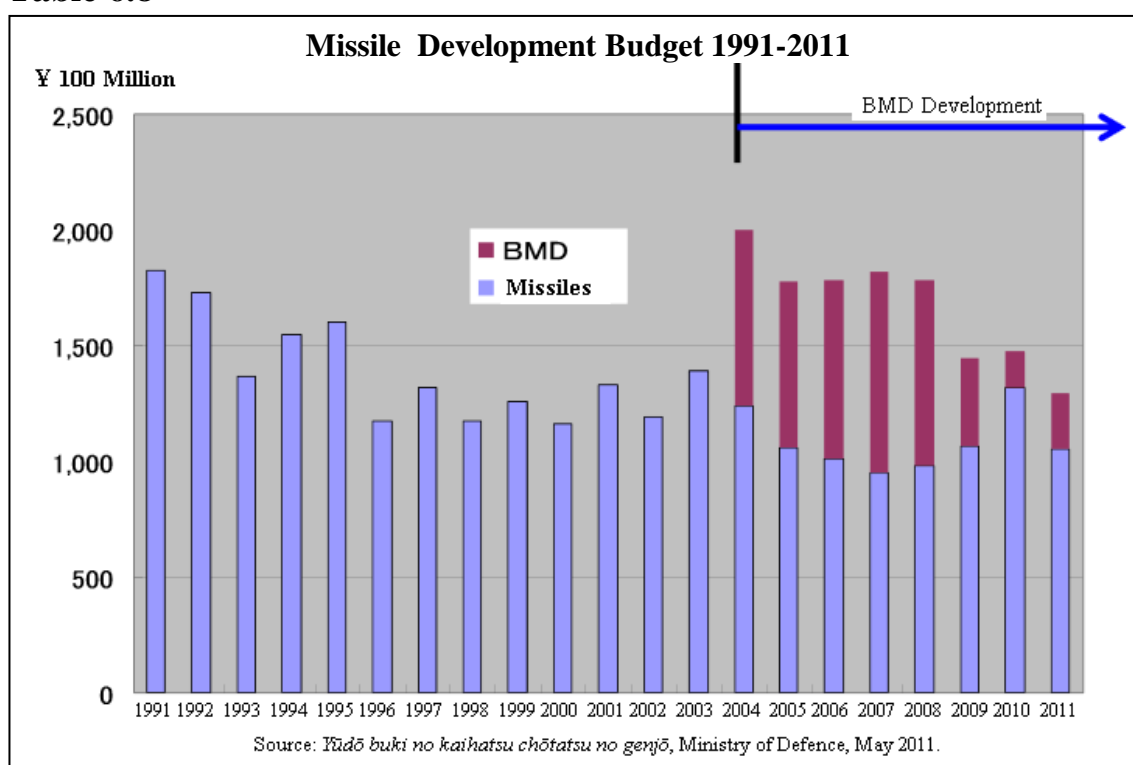
Figure 6.1



BMD is one of Japan’s most expensive defence programs, costing more than ¥900 billion so far and at one point amounting to almost 50% of all missile development (see Table 6.8). Green was an early advocate of its benefits, claiming that modest

deployment would reduce Japan's vulnerability to "ambiguous coercive threats."⁸⁷ Takahashi echoed his sentiment, saying that it would give the Japanese public a greater sense of security.⁸⁸ Yet these are very different justifications. Putting the public at ease is a response to perceptions of danger, something that is not necessarily true, e.g. the inflated threat of North Korea's missile system. As such, it becomes very important to determine whether BMD is a practical defence against credible threats or an expensive placebo for illusory ones.

Table 6.8



A recent report by the US National Research Council dismissed the chances of boost-stage interception, where the missile is targeted soon after launch, due to the need for interceptors to be in the right area at the right time and the excessive costs such

⁸⁷ Michael Green, 'Theater Missile defence and strategic relations with the People's Republic of China', in Ralph Cossa (ed) *Restructuring the US-Japan Alliance: Toward a more equal partnership*, (Washington DC. Center for Strategic and International Studies, 1998). 112.

⁸⁸ Takahashi, Op cit. 23

operations would entail.⁸⁹ As a result, the system focuses on either mid-stage interception (when missiles are at an altitude of one hundred kilometres or more) or terminal stage interception (as they approach their target), something that is important when considering US and Japanese views of the system. For Japan, BMD is a national defence protecting Japanese cities and key military installations from attack by other states (specifically North Korea and China). For the US the system serves a dual purpose, firstly to protect US bases in Japan and secondly to act as an early or mid-stage interceptor for missiles directed at the US (by North Korea, China, Iran or Russia). From the outset, therefore, there are some very clear discrepancies in what each of the allies would require from the system. In Japan's case it should be capable of effectively defending, if not the entirety of Japan, at least its major urban areas, and, while mid and terminal stage are important, the short distance from likely launch sites would make mid-stage interception considerably harder. For the US, on the other hand, only a few locations within Japan are strategically important and require terminal stage defence (PAC-3), while mid-stage defence of the continental USA (using AEGIS) would have a higher priority, and a much wider window of opportunity for targeting.

The Nature of the Threat

The danger of ballistic missiles is often presented as a single nuclear missile fired by an enemy state. The more likely scenario, however, would be a swarm of missiles fired at once, using conventional explosives. While nuclear threats cannot be ruled out there is little evidence to suggest it is likely. If we assume a rational actor model (accepting its previously mentioned fallibility) for North Korea the US nuclear deterrent offsets any action that would constitute national suicide. China has more capability for a nuclear

⁸⁹ Ann Roosevelt, 'Navy concentrates on Midcourse, terminal phase missile defence', *Defence Daily*, 225 (53), 12 September 2012

strike, yet explicitly states a policy of minimum deterrence (including a 'no first strike' clause), and a preference for the use of swarm tactics.

Hoyler analyzed how this could overpower US defences in Okinawa. The US currently deploys a PAC-3 battalion there, consisting of 4 batteries with 8 launchers apiece, each holding 16 interceptor missiles. This equals a total of 512 interceptors, yet this would be two-thirds of US stockpiles and 264 would be a more reasonable number. For each ballistic missile US policy recommends using two interceptors, so a total of 132 Chinese missiles could be targeted. Assuming 100% success (hugely improbable), Hoyler estimates that China would simply have to launch 172 missiles to destroy US air bases in Okinawa. China has a stockpile of 350 Dongfeng-15 (CSS-6) missiles and supplements it at a rate of +30 each year, making such tactics perfectly feasible.⁹⁰ While these missiles would be a credible threat only to Taiwan/Okinawa, the Dongfeng-21 (CSS-5) and Dongfeng-31 (CSS-10), with a 2000km and 8000km ranges, would be capable of targeting anywhere in Japan. With an estimated 90-110 of these missiles currently available (and an additional 80+ earlier models) China would also be able to overwhelm any single grouping of Japanese PAC-3 defences. This also assumes a best-case scenario in which the battery is fully supplied with missiles, each missile is 100% effective and the target is within the limited range of the PAC-3. Philip Coyle, while working for the US Center for Defence Information, spoke of seeing diagrams showing the defence radius of PAC systems in Japan requiring “dozens of Patriot batteries to defend even Tokyo – forget about all the country”.⁹¹

⁹⁰ Marshall Hoyler, 'China's anti-access ballistic missiles and US active defence', *Naval War College Review*, 63 (4), Autumn 2010. 84.

⁹¹ David Axe, 'Counterstrike', *Missiles defence*, 1 (2), 1 March 2007.

Aegis-based destroyers are just as vulnerable to missile swarms. The first 4 SM-3 equipped ships were supplied with only 8 missiles apiece.⁹² Even if a ship is available for interception to be carried out it would, at best, be capable of stopping four targets.

In more realistic conditions Takahashi considers BMD as practical only against a limited strike involving one or two missiles. He suggests that a swarm attack would not be carried out as this would pass the threshold for US intervention and retaliation and that China would therefore only launch a small number of missiles.⁹³ This is weak logic. China's oft-stated strategy is that should it attack, it will do so in full force and make use of swarming tactics. Secondly, if a limited strike were below the US response threshold, what would Japan do? Commit to a unilateral response? Wait for a repetition to occur? It seems clear that a limited strike will lead to escalation in some form, thus making a Chinese commitment to large scale attack from the outset far more plausible than Takahashi's "one or two missiles".

Hoyler estimates Aegis capabilities as allowing them to intercept a maximum of 13 targets, and China capable of launching over 100 long-range missiles, not including decoys.⁹⁴ Pradun agrees, suggesting that even the US, with broader BMD systems than Japan, would be capable of intercepting only 16-32 targets.⁹⁵ China's real advantage, however, is that while both ballistic missiles and interceptors are quite expensive to manufacture (each Patriot missile currently costs \$3.4 million and improved versions

⁹² Sunho Beck, 'Top defence budgets Asia-Pacific', *Defence Technology International*, 3 (1), January 2009. 45

⁹³ Takahashi, Op cit. 23

⁹⁴ Hoyler, Op cit. 89-90.

⁹⁵ Pradun, Op cit.. 28.

\$6.9-9.6 million), decoys and dummies are far cheaper, allowing China to easily outstrip any effort by Japan or the US to surge production of missiles.⁹⁶

Reliability of BMD

This suggests weak capability to offset China's missile capability (even with the assumption of 100% accuracy). Yet, even BMD's strongest proponents admit the system has an accuracy of at best 80%, while critics say the figure is far lower. During the Gulf War the earlier PAC-2 was claimed to have up to 96% accuracy. US government reports later stated that Administration and Raytheon officials had inflated the number of successful intercepts, and official numbers have since been revised down from 96% to 80%, then 70% and finally to 25%.⁹⁷ These were the US military's own estimates though and independent researchers suggested rates of less than 10% or even zero.⁹⁸

This prior inflation of success needs to be considered when studying current results for PAC-3 and SM-3 testing. By 2004 the US had conducted 20 tests of the SM-3, with an 80% success rate, yet analysis revealed that test conditions were far from realistic and that reliability was likely far lower.⁹⁹ By 2011 the success rate was steady for SM-3 (22 successes from 27 tests) yet ground based systems fared much worse (only 7 successes

⁹⁶ Ibid.7-38.

⁹⁷ 'Performance of the Patriot Missile System, Activities of the House Committee on Governmental Operations, One Hundred Second Congress, First and Second Sessions, 1991 - 1992', US Congressional Report 102-1086, 179- 188.

⁹⁸ Theodore A. Postol, 'Optical Evidence Indicating Patriot High Miss Rates During the Gulf War', Statement to the Committee on Government Operations, U.S. House of Representatives, 7 April 1992; and William J. Broad, 'Antimissile testing is rigged to hide a flaw, critics say', *New York Times*, 9 June 2000.

⁹⁹ Lisbeth Gronlund et al, *Technical Realities: An analysis of the 2004 deployment of a US national defence system* (Cambridge: Union of Concerned Scientists, 2004). x-xiii.1

from 15 tests, with the most recent test, on 5th July 2013, also a failure).¹⁰⁰ However, the DoD's own data shows that the vast majority of 'successful' SM-3 experiments failed to destroy attacking warheads, success instead simply meaning the interceptor exploded within range of the target. In 80-90% of such cases the target warhead would have continued to its target.¹⁰¹ Additionally, the tests revealed many artificial elements unlikely in a real world scenario: targets were never in clusters, the targets had oversized stabilizer fins, targets were always side-on to interceptors and the exact geometry of the target missile was always known.¹⁰² In 2011 the Federation of American Scientists questioned efficiency of the system and pointing out that it had never been tested against proper countermeasures, salvos, rough weather, or unknown trajectories and that there were no future plans to conduct such realistic tests.¹⁰³ The report also pointed out that while the system was likely to be far less effective than claimed, opponents would be forced to assume its effectiveness and bolster their own capabilities to match its claimed efficiency.

One of the weaknesses raised in the Federation's report, the impact of rough seas on the Aegis system,¹⁰⁴ has already been borne out by a 2008 attempt to shoot down a faulty US satellite using a SM-3 missile, which was repeatedly delayed by poor weather.¹⁰⁵ Another factor making interception considerably more difficult is dummy targets, something warned of since the 1960s, yet still not properly tested against - surprising,

¹⁰⁰ 'Pentagon: Key U.S. missile interceptor test fails', *Reuters*, 6 July 2013.

¹⁰¹ George N. Lewis and Theodore A. Postol, 'A flawed and dangerous US missile defence plan', *Arms Control Today*, May 2010.

¹⁰² *Ibid.*

¹⁰³ Robert Karniol, 'The paradox of missile defence', *The Straits Times*, 6 June 2011.

¹⁰⁴ Yousaf Butt, and Theodore Postol, 'Upsetting the reset: The technical basis of Russian concern over US missile defense', Federation of American Scientists, September 2011.

¹⁰⁵ Robert Burns, 'Spy satellite shootdown hinges on tricky factors', *AP*, 20 February 2008.

given the Pentagon's policy of assuming worse case scenarios.¹⁰⁶ Launching dummy missiles, or warheads, vastly increases the number of interceptor missiles required unless interceptors can discriminate between warheads and dummies, something that so far seems beyond their capability. Philip Coyle, director for National Security and International Affairs at the White House Office of Science and Technology said, "discrimination is the Holy Grail, but no one really knows how to find it or how to get there. And like Monty Python, the Missile Defence Agency has only pretend solutions, banging coconuts together to make the sounds of horse's hooves, when what America needs is real horses."¹⁰⁷ As early as 2000, the CIA warned that states capable of fielding ballistic missiles would also be able to develop "penetration aids and countermeasures".¹⁰⁸ This has not, however, been reflected by testing.

Finally, development of China's Jin-class nuclear submarine produced alternate vectors for missile launches that some analysts consider far beyond the capabilities of BMD to intercept for the next several decades.¹⁰⁹ When targeting Japan rather than North America the submarines benefit from near-shore launch-sites and depressed trajectories that vastly reduce the reaction time available to defence systems. While there are a number of hurdles for China to overcome in this area (perfecting the technology and training crews) it is another weakness which BMD is incapable of addressing.

Washington's Centre for Defence Information, sees the problem's root in the lack of scientific knowledge among those championing BMD: people who engage in a "rush to

¹⁰⁶ Yousaf Butt, 'Billions for Missile defence, Not a Dime for Common Sense', *Foreign Policy*, 10 June, 2011

¹⁰⁷ Tom Z. Collina, 'Report critiques U.S missile defence', *Arms Control Today*, October 2012.

¹⁰⁸ Butt, Op cit

¹⁰⁹ Jim Holmes and Toshi Yoshihara, 'China's New Undersea Deterrent: Strategy, Doctrine, and Capabilities,' *Joint Force Quarterly*, 50, 2008, 31-38.

failure”, pushing the system to the next stage of development before sufficient testing has been accomplished.¹¹⁰ Joseph Cirincione, president of the Ploughshares Fund, claims this is "a very smart move politically and diplomatically, but just doesn't make sense militarily. They hit all the right buttons, including sending a strong signal to North Korea and China, reassure allies, please Republicans and generate news headlines" but in the end "these interceptors don't work."¹¹¹

Yamaguchi Tsuyoshi, Deputy Defence Spokesman in the Hatoyama administration, announced that investment in BMD would be cut as the system was "almost totally useless."¹¹² The Noda administration reaffirmed its commitment to BMD, yet defended it with the weak statement that the missiles would probably be able to shoot down a sound missile flying in a parabolic course,¹¹³ suggesting that they can be defeated simply by the opponent's use of a Manoeuvrable Reentry Vehicle (MaRV), as found in China's DF-21 and DF-31.¹¹⁴

What should Japan do?

The threat facing BMD is of two classes. Single missiles (or small salvos) carrying WMDs, and swarming strikes, using massive salvos of rockets to knock-out basing and infrastructure in line with 'weishe' strategy. While BMD might offer limited defence against the first, it is unlikely to provide real defence against the second. While the US frequently highlights the danger to the continental USA of single missile strikes, Japan (with nothing to fear from Iran and North Korea likely to use WMDs only in response

¹¹⁰ Martin Sieff, 'BMD Focus: The Test Of Reality', *UPI*, 26 July 2006.

¹¹¹ Gopal Ratnam and Tony Capaccio, 'Obama backs unproven missile defence for uncertain threat', *Bloomberg*, Mar 20, 2013

¹¹² Sachiko Sakamaki and Takashi Hirokawa, 'Japan should cut useless Missile defence, DPJ official says', *Bloomberg*, 11 September 2009.

¹¹³ 'Japan's Missile defence system not perfect', *Jiji*, 10 April 2012.

¹¹⁴ Their inability to target MaRVs is supported by Pradun, *Op cit.* 28-29.

to conventional attack) has far less to fear from such attacks (even if one occurred, missile launches from China or North Korea could be done at depressed trajectory, making interception far more difficult than it would be for the US).¹¹⁵ BMD, therefore, does not seem a suitable investment to offset the danger of swarming attacks. Takahashi's claim that it provides the Japanese populace with a sense of security, is hard to balance against the negative impact of the system on overall security.

The main detriment of BMD is its impact on China's own security policy. While Chinese analysts have argued that the system is both technologically flawed and a waste of money, they also state that it will, regardless of its efficacy, undermine China's deterrent capability, promote greater militarization in Japan and undermine regional stability.¹¹⁶ For China, therefore, it is significant not for its strategic impact but for its political effect in making Japan increasingly dependent on the US and, through this, encouraging the US to act in a more unilateral fashion in Asia.¹¹⁷ Russia has also voiced concerns that the systems development will cause a disruption of strategic parity and a new arms race.¹¹⁸ This would be in line with Barkley's finding that states are more likely to procure ballistic missiles in proportion to the use of such systems in neighbouring states.¹¹⁹ This proliferation can be seen in recent South Korean plans to invest in their own multi-billion dollar upgrade from PAC-2 to PAC-3.¹²⁰

¹¹⁵ 'DF-41: China's answer to the US BMD efforts', *Institute for Defence Studies and Analysis*, 15 November 2012.

¹¹⁶ Kori J. Urayama, 'Chinese perspectives on Theater missile defence: Policy Implications for Japan', *Asian Survey*, 40 (4), July 2000. 599-621.

¹¹⁷ *Ibid.* p. 603.

¹¹⁸ Butt, *Op cit*

¹¹⁹ Daniel Barkley, 'Ballistic missile proliferation: An empirical investigation', *The Journal of Conflict Resolution*, 52 (3), June 2008. 455-473.

¹²⁰ 'Korean plan sparks speculation about US missile defence', *Korean Herald*, 31 October, 2012

While such a development might be beneficial for missile manufacturers, such as Raytheon in the US or NEC in Japan, the impact on regional security will be far more negative. Quackenbush argued that while the technology for effective BMD is far beyond our current reach it might still enhance deterrence due to the high cost of 'all-out war'.¹²¹ Yet it is possible to have a limited conflict that does not escalate to all-out war and given the doctrinal focus, of both China and the US, on carrying out short-term, high-intensity conflict it seems that both state's feel capable of engaging in combat without escalating to a higher level. Johnson-Freese and Nicols argue that it is BMD itself, preventing either side from clearly prevailing at a regional level, which would drive escalation to wider conflict.¹²²

The head of the National Security Decision-making Department at the US Naval War College described BMD as "inherently politically counterproductive, undeniably fiscally draining and technologically tenuous" and stated that "some of the technical challenges are potentially insurmountable without defying the laws of physics and (where they are not) overcoming them would require a virtual blank check from the American people."¹²³ This raises the question of whether BMD, given its failings, should be tolerated as a financial investment that utilizes funds better spent on modernization or improvement of other, more strategically capable, systems. With is flat defence budget, Japan cannot afford to suffer such inefficiency.

In the US, several alternatives have been suggested. The National Academy of Sciences recommended scrapping the entire system and designing a new version from the ground

¹²¹ Quackenbush, Op cit. 533-554.

¹²² Johnson-Freese, Op cit. 16.

¹²³ Ibid. 3-24.

up.¹²⁴ Pradun argues that the threat of retaliatory mass bombing campaigns makes a more forceful deterrent.¹²⁵ Johnson-Freese, regards preemptive strikes as a better solution.¹²⁶ For Japan BMD is easily sold to the public due to its supposedly defensive nature. To replace it with a more offensive option would be a tough sell, regardless of whether the alternative offered a higher degree of deterrence and stability. Even so, given the excessive cost, limited practical efficiency and destabilizing effect of BMD many arguments can be made for more practical use of its funding.

CASE STUDY #4: Izumo-class destroyer

Name: Izumo-class Type 22-DDH (27,000 ton destroyer)

Purpose: Multi-role (primarily Anti-submarine) Helicopter Carrier

Manufacturer: Hull by IHI (Japan); Engines by General Electric (USA)

Initial Development: First keel laid in 2012

Service Introduction: 2015 (projected)

System Cost: ¥114 billion

Planned Acquisition: 2 vessels by 2017

Table 6.9

Recent Procurement (Cost in ¥ billions)

2010	2011	2012	2013	2014-15
1 ship (113.9)	-	1 ship (115.5)	-	-

When it enters service the Izumo-class will be the largest Japanese naval vessel since the Pacific War. The two currently commissioned will replace two Shirane-class destroyers reaching the end of their service life.

¹²⁴ 'Making Sense of Ballistic Missile defence: An Assessment of Concepts and Systems for U.S. Boost-Phase Missile Defence in Comparison to Other Alternatives,' *National Academy of Sciences*, 2012.

¹²⁵ Pradun, Op cit. 30-31.

¹²⁶ Johnson-Freese, Op cit. 18.

The Shirane-class housed three helicopters but were only 7,500 tons (full load). Current Hyūga-class helicopter carriers, at 19,000 tons, support 11 helicopters. In contrast, the Izumo-class at 27,000 tons supports up to 14, including 7 Anti-Submarine Warfare (ASW). It can also be used for troop transport or HADR operations, carrying 4000 troops and up to 50 3.5 ton trucks.

In its ASW role each carrier would be able to rotate 4 flights of three ASW helicopters to ensure one was always on station, providing coverage of a target area, making them a significant threat to enemy submarines. It has also been speculated that in the future they may make use of Osprey planes and F-35B STOVL fighters.¹²⁷ This would mimic the development of carriers such as the British Invincible-class which were originally developed for helicopters alone but later modified to support fighters.

The Impact of the Izumo-class

The new helicopter carrier has been designed with considerable versatility, yet its practical use will be dependent on Japanese strategy. Former MSDF commander in Chief, Kōda Yōji sees the Navy's role as forming the shield in the 'sword and shield' relationship of the US-Japan alliance. He clarifies that this entails having Japan defend US assets in Asia in order that the US might allocate extra assets to strike operations. The key element of this role, he says, is ASW operations, hence the importance of the Izumo-class.¹²⁸ Kōda states that the presence of Japan's Escort Flotillas are the equivalent of "two additional fleets operating in the West Pacific in support of US strike and expeditionary forces".¹²⁹ Despite Kōda's claim that without the US assistance in

¹²⁷ 'Details of new Japanese Helicopter Destroyer', *Forecast International*, 21 June 2010.

¹²⁸ Yōji Kōda, 'Perspectives on the Japanese Maritime Self-defence Force', *Australia Sea Power Center*, Working paper 21, 2012. 4.

¹²⁹ *Ibid.* 18.

controlling China's growth Japan could face a "devastating" future, little argument is made either for the inevitability of conflict with China or the practical benefits for Japan of siding with the US rather than seeking alternate strategic paths (e.g. Goldilocks, regional-balancing or pro-China).

This presumption that Japan should adhere to the overarching US grand-strategy is present in a large amount of Japanese strategic analysis. In some cases it advocates the adoption of systems, such as BMD and the F-35, which are of questionable practical use in regard to Japan's national security. In others, as with the Izumo-class, it limits the strategic application of systems designed with inherent flexibility. In a lengthy article on the role of carriers in Japan's modern navy, Kōda focuses entirely upon ASW capability. While he recognizes the potential for conversion to support F-35B fighters he considers this "improbable" and the vessels role in HADR operations is referenced in a single comment that merely states they are capable of such things.¹³⁰

Given the previously-stated dangers Japan faces from natural disasters, and the growing role the JSDF plays in response to major crises, it seems absurd not to give a higher level of attention to the humanitarian role that vessels such as the Hyūga-class, Ōsumi-class and Izumo-class, can play. Some seem to think that this is a result of Article 9, and that vessels capable of acting as dedicated hospital ships would be seen as support for possible offensive operations.¹³¹ Others have said that the blatant ASW role of the ships rules this out, and that the failure to acquire dedicated humanitarian vessels is rather a weakness of Japanese foreign policy, in which all direction stems from Washington.¹³²

¹³⁰ Yoji Koda, 'A new carrier race? Strategy, Force Planning, and JS Hyuga', *Naval War College Review*, 64 (3), 2011.

¹³¹ Christopher R. Albon, 'Why Japan Does Not Have Hospital Ships', *Conflict Health*, 12 May 2010.

¹³² Kyle Mizokami, 'More on Japan and hospital ships', *Japan Security Watch*, 12 May 2010.

The end result is not simply a failure to plan and train for what might be an important application of these systems, it also sends a signal to China that Japan prioritizes military use of such systems over probable scenarios in which peaceful use could increase regional stability. Some Chinese analysts have already linked the development of the Izumo-class to increasing Japanese militarism.¹³³

Rather than simply accepting the role it can best fill in the US strategy of ‘Air-Sea Battle’, Japan must give equal consideration to other practical uses of its weapons systems, whether more offensive use (such as modifying the Izumo-class for the use of STOVL fighters) or more peaceful use (such as modifying the vessels to use a well-dock for greater HADR capability). Given the severe constraints imposed by Japan’s limited budget, flexible systems like the Izumo-class are highly practical, yet only insofar as their varied uses are fully exploited.

CASE STUDY #5: Type-12 Surface to Ship Missile

Name: Type 12 SSM

Purpose: Anti-ship missile systems

Manufacturer: Mitsubishi Heavy Industries (Japan)

Initial Development: 1973 (as ASM-1),

Service Introduction: 2012

System Cost: ¥2 billion per system

Planned Acquisition: 6 sets as of 2013 (projected)

Notes: Its predecessor (Type-88 SSM-1) carried a 225kg warhead, had a speed of 1,150 km/h and a range of 150-200 km. The specs of Type-12 are undisclosed but will be an improvement over the previous model.

¹³³ Xiaohui Su, ‘Actions don’t match words’, *China Daily*, 8 January 2013.

Table 6.10**Recent Procurement (Cost in ¥ billions)**

2010	2011	2012	2013	2014-15
-	-	2 sets (4.3)	4 sets (7.9)	+12 sets

In the 1970s Mitsubishi Heavy Industries began development of the ASM-1, an anti-ship missile first employed by the same company's F-1 jets. In the 1980s a modified land-based version (the Type-88) was developed for the GSDF, consisting of several launchers mounted on 6x6 trucks and a jeep-mounted radar unit. The missiles, produced from 1988 to 2001, remain in service. Since then an improved version, the Type-12, has been developed for a second production run. A new ship-to-ship missile based upon the Type-12 is also being developed to replace older Type-90 models.

Mitsubishi are also developing a new air-to-ship missile, the ASM-3, with a range of 200km, which some consider Japan's answer to China's 'carrier killer' missiles.¹³⁴ Japan has also continued to invest in both the Type 96 Multipurpose Missile (4 new sets since 2011, for a total of 37) and the Middle-Range Multi-Purpose Missile (34 new sets since 2011 for a total of 57). Both of these systems are designed for Anti-Tank/Anti-Landing Craft roles.

Japan has a long history of development and production of advanced missile systems of all kinds and remains at the cutting-edge. Possession of these systems suggests Japan is quite capable of adopting its own A2/AD strategy as a means of counterbalancing

¹³⁴ 'Japan Building Missiles to Counter China's Naval Power', *Chosun Ilbo*, 22 July 2010.

Chinese expansion yet this option is generally passed over in favour of commitment to the US 'Air-Sea Battle' strategy of power projection.¹³⁵

Holmes highlighted the potential inherent in Japanese A2/AD. In response to the 2011 deployment of Type-88 SSMs to Amamiyoshima (one of the Northern Okinawan islands) in November 2011, and the planned deployment of GSDF troops to Yonaguni Island by 2015, he highlighted the practical benefits of SSM systems and the possibility of using them to make the entire Okinawan chain and much of the East China Sea a "no go zone for Chinese surface forces". The mobile nature of the systems, combined with hardened shelters, tunnels, disguised sites and decoys would "undermine the PLA's capacity to identify, target and destroy missile units."¹³⁶ This strategy would reverse the roles of the actors, with the PLA now having to choose whether to accept the new deterrent, or to develop its own 'power projection' strategy and attempt to neutralize the missile assets. To do so it would have to choose between air or missile strikes, something Holmes believes would have disappointing results and deplete Chinese resources for little return, or to land an amphibious assault force, something US and Japanese submarines would make very costly.¹³⁷ Of course, Holmes sees this strategy as working in tandem with a wider application of Air-Sea Battle as a means of wresting "control of the commons" away from the PLA, yet there is no reason that it could not stand as an alternative to it.

Sayers suggests that Japan has, in fact, three options for military defence against China. The first would focus on sea-control, Intelligence Surveillance and Reconnaissance (ISR) and a small number of island-based SSM units (the minimum necessary). This is

¹³⁵ For example, Sugio Takahashi, 'Counter A2/AD in Japan-US defence cooperation: Toward Allied Air Sea Battle', *Project 2049*, 18 April 2012.

¹³⁶ Holmes and Yoshihara, 2012. Op cit.

¹³⁷ Ibid

the policy currently advocated by the MoD and entails strong reliance on US support (i.e. buck-passing and commitment to US grand-strategy). It requires modest expenditure and a gradual enhancement of force in the region and thus fits well with Japan's financial and political limitations. It is, however, militarily weak (and as such, alliance dependent) and may not offer sufficient deterrent capability.¹³⁸

Sayers sees an alternative in the production of asymmetric deterrents, small, low-cost systems that will off-set any numeric advantage China might achieve in larger naval systems. This would include the use of fast-attack boats equipped with missiles, diesel attack submarines, mine warfare, attack helicopters and land-based SSMs. This would see US and Japanese roles clearly split, with the US responsible for control of the sea and Japan focusing on littoral defence. The major problem Sayers sees in this strategy is the level of coordination it would require between the branches of the JSDF and the acceptance of radical doctrinal shifts. He believes it would also see a diversion of funding from blue water fleet activities and thus would likely have little support among the MSDF.¹³⁹

The third option is full A2/AD, in line with Holmes idea, essentially combining the asymmetric littoral defence above with a stronger commitment to Air-Sea Battle. The cost of adopting such a strategy would be substantial in financial terms and, as discussed in Chapter 7, not necessarily in Japan's best interests strategically. The flaw in both Sayers' and Holmes' analysis is assuming Japan's commitment to US strategy. Should a future administration attempt to restart Hatoyama's Goldilocks policy of balancing between the US and China, the expenditure for enhanced littoral defence

¹³⁸ Eric Sayers, 'Coastal defence in Japan's Southwestern Islands: Force posture options for securing Japan's Southern Flank', *Project 2049*, 7 January 2013.

¹³⁹ Ibid

might be found somewhere other than funding for blue water fleets, for example through a reduction of investment in BMD or F-35 orders.

Thus far the MoD has made only a modest investment in both the Type-10 and other asymmetric capabilities. While, during the last four years, the MoD has spent ¥57.7 billion on the Type-03 Surface-to-Air missile systems, it has invested only ¥12.2 billion in the Type-12. The former is in line with the doctrine of Air-Sea Battle which recommends the ‘hardening’ of military bases through reinforcement and air defence. Altogether, Japan's three primary Surface-to-Air systems will receive a life-cycle investment of ¥814 billion compared to only ¥111 billion for the Type-12 (see Table 2.33). The ratio of investment in the latter, especially considering the focus China has placed upon developing its own missile capability, is far less than it could be, suggesting that Japan has no current intention of fully committing to alternate strategies.

Of course, this could change in the future. Japan's rapid turnover of Prime Ministers, the rise of the DPJ in 2009, and the 2011 Tohoku disaster, show that even in a country dedicated to maintaining the status-quo sudden shifts of equilibrium are possible. What strategy is adopted in the future will depend on a variety of factors including: US-Japanese relations, Sino-Japanese relations, Japan's domestic politics and the nation's economic and social stability. Obviously, Japan doesn't not possess the finances to support a force structure capable of carrying out every possible strategy and prioritization of systems must occur. A certain level of flexibility should, however, be maintained that will allow the option of adopting alternate paths in the future, rather than becoming stuck in a decades long commitment to a narrowly focused set of

systems. It is important therefore that systems offering both cost-efficiency and strategic flexibility (such as the Type-12) not be neglected.

Other Systems

Japan has numerous other defence systems that have received significant investment in recent years. Several of these have been highlighted for increased procurement as part of the 2011-2015 MTDP (see Table 6.11). The official MoD budget does not include 'supplementary budgets', which provide emergency funding for high-priority projects. In 2013 this included more than ¥90 billion for weapon systems (see Table 6.12).¹⁴⁰

Table 6.11

Major Weapon System Procurements (2010-2015)						
SYSTEM	2010	2011	2012	2013	Cost (2010-2013) ¥ billion	2014-2015 (projected)
22-DDH Helicopter Carrier	1	-	1	-	229.4	-
Submarine	1	1	1	1	215.2	+2
P-1 Patrol Plane	1	3	-	2	116.4	+1
Patriot System Upgrades	6	1	-	-	82.5	-
C-2 Transport Plane	-	2	2	-	70.3	+4
Destroyer	-	-	-	1	70.1	+1
F-35 Fighter	-	-	4	2	69.4	+6
SH-60K Helicopter	3	3	4	-	58.7	+22
Type-3 SAM	1 set	1 set	1 set	-	57.7	+2 sets
Type-10 MBT	13	13	13	-	38.8	+28
Aegis System Upgrade	-	-	2 sets	-	38.2	-
Other Ships	-	1	-	1	34.2	+3
Type-99 Howitzer	9	6	6	6	25.2	+14
CH-47JA Helicopter	1	1	2	-	23.3	+2
Minesweeping Helicopter		2	1		18.3	+2
AH-64D Helicopter	-	1	1	1	15.8	-
Type-12 SSM	-	-	2 sets	4 sets	12.2	+12
Armored Vehicles	20	12	14	12	8.1	+37

Source: Defense Budget, Ministry of Finance, various years; Defense White Paper, Ministry of Defense, various years.

¹⁴⁰ 'Japan cabinet OKs \$147 billion extra budget', *AP*, 15 January 2013.

Table 6.12

Supplementary Defense-Related Expenditure 2013	
System	Additional Funding (¥ billion)
Type-03 Medium SAMs	20.2
Patriot System Upgrades (BMD)	17.8
SH-60K Helicopter (x3)	15.2
MCH-101 Helicopter (x3)	12b
PAC Missiles (BMD)	10.9
F-15 Upgrades	9.1
UH60J Helicopter (x2)	7
CH-47JA Helicopter	6

Source: 2013 Defense-related additional expenditure, Ministry of Finance, 2013.

Of the latest systems, one of the most important is the Soryu-class submarine, built by MHI and Kawasaki Shipbuilding. Five are in service with the MSDF, and a new submarine is commissioned each year in conjunction with decommissioning of the oldest vessel. Recently the system has shown potential for foreign technology transfer with Australia, which hopes it might be incorporated into the successor to its Collins-class submarines.¹⁴¹ While the deal is not guaranteed, and may yet be vetoed by Japan, if it passes it would notable both for its scale and the initiation of military technology transfers to partners other than the US. A visit to Japan by the British Prime Minister in April 2012 also saw progress made on Japan-UK joint development with initial projects focusing on relatively uncontroversial defensive systems, including chemical protection suits and mine detectors.¹⁴² This was followed in July by the transfer (in the form of a loan) of 12 patrol boats to the Philippine Coast Guard. Narushige Michishita, director of the Security and International Studies Program at Japan's National Graduate Institute for Policy Studies, considers three options available to Japan following the relaxation of

¹⁴¹ 'O-sutoraria ni sensuikan gijitsu kyōyo bōeisho kento chugoku nirami renkei', *Nihon Keizai Shimbun*, 17 February 2013.

¹⁴² 'Japan, UK to develop defence equipment', *Daily Yomiuri*, 5 April 2012

export prohibitions: joint R&D, direct sales in the international market and subsidizing equipment/technology transfers to favoured partners.¹⁴³ While Michishita expected Japan to focus on the first, the British, Philippine and (possible) Australian exchanges show that Japan is more than capable of concurrently pursuing each avenue.

In the meanwhile, though SMEs may be feeling the pinch, there is likely to be ample domestic work available to ensure that the major industrial players are kept occupied. KHI will be manufacturing P-1 and C-2 planes as well as CH-47JA and MCH-1010 helicopters. Mitsui and MHI will share development of a number of destroyers and minesweepers. MHI will also be producing Tanks and Howitzers. FHI will work on SH-60K and AH-64D helicopters and Komatsu will continue to produce the GSDF's armoured vehicles.

Japan, via the TRDI, is also continuing to pursue R&D of new systems, though in recent years there has been a clear prioritization of air systems, specifically missile, fighter and radar systems (see Table 6.13). Overall, both the current research projects and future procurement policy are suitable for the MoD's preferred strategy of providing limited support to the US Air-Sea Battle concept and reinforcing Japan's defences in an incremental manner.

¹⁴³ Paul Kallender-Umezu, 'Japan inches towards arms exports', *Defence News*, 9 February 2013.

Table 6.13**TRDI Major Research Projects (2010–2013)**

PROJECT	BUDGET (¥billion)
Type-3 Surface-to-Air Missile	34.4
SM-3 Block IIA Missile	26.1
ATD-X Fighter	22.8
New Multi-purpose Helicopter	21.8
ASM-3 Anti-ship Missile	13.6
New Fighter Engine	7.8
Radar Research	6.4
Sonar Research	5.9
Fighter Sensors	4.5
New Torpedo	3.5

Source: MoD White Papers, MinFin Defence Budget, various years.

Even so, there are some clear weaknesses in the under-utilization of certain systems which would seem to offer clear strategic benefits and help to address the paucity of innovation highlighted in Chapter 2. One such area is robotics where Japan, despite being recognized as a world leader in the field, has invested very little in researching military applications.¹⁴⁴ In contrast, from 2010–2013 the US military (through DARPA) has expended more than ¥29 billion on varied robotics research programs.¹⁴⁵ While TRDI does have some projects in development (the Type-3 Hand-deployed Scout Robot and the Urban Movement Robot),¹⁴⁶ investment in the field as a whole is relatively meagre.

¹⁴⁴ Robotic systems fail to appear on any of the MoD budget's annual list of TRDI's major projects receiving over ¥1 billion in funding.

¹⁴⁵ *President's Budget Submissions, Research Development, Test and Evaluation, Defence-Wide, Vol 1: defence Advanced Research Projects Agency, FY 2010–2013*. (Washington DC: US Department of Defence, 2012)

¹⁴⁶ See, http://www.mod.go.jp/trdi/research/gaibuhyouka/pdf/SmallUGV_23.pdf; and, http://www.mod.go.jp/trdi/research/gaibuhyouka/pdf/SUGV_19.pdf

Drone technology is another area where Japan should be at the cutting-edge, yet TRDI has requested only a relatively modest ¥3 billion over the next four years for a missile detecting UAV that it hopes will be operational by 2020.¹⁴⁷ Under the previous DPJ administration officials commented that financial restrictions could make even a single UAV system prohibitively expensive, and the possible acquisition of COTS US-made UAVs was raised.¹⁴⁸ Considering that Japan's combined territorial waters and EEZ rank 6th in the world at 4.4 million square km. there is clearly a practical role for such systems. Their importance was only increased by Japan's reliance, during the Tohoku disaster, on US UAVs to provide surveillance of the disaster zone. Since then China has begun deploying its own drones to disputed areas such as the Senkaku Islands leading to a strong commitment from Japan to acquire up to three Northrop Grumman Global Hawks by 2015.¹⁴⁹ The Asia Pacific region has now become the second biggest market for UAV systems (after the US) with \$590 million in purchases in 2011 and the regional market is expected to increase to \$1.4 billion by 2017.¹⁵⁰ For Japan to remain merely a customer rather than a producer (even in joint development) would represent a failure to capitalize on its expertise in sensors, electronics and other subsystems required in the development of UAVs.

There has been an even greater lack of investment in the strategic possibilities offered by missile boats. As of 2012 China had at least sixty 220-ton Houbei-class fast-attack missile boats, with some analysts suggesting they will soon field up to 100. Each one is

¹⁴⁷ 'Japan to develop missile detecting drone', *AFP*, 4 November 2012.

¹⁴⁸ Chester Dawson, 'Japan's Next Stage of Military Expansion: Drones?' *Wall Street Journal*.15 November 2010.

¹⁴⁹ Bill Gertz, 'Game of Drones: China stepping up drone deployment', *Washington Free Beacon*, 26 March 2013.

¹⁵⁰ Saira Syed, 'Drone-makers target Asia for growth', *BBC News*, 16 February 2012.

armed with up to 8 surface-to-surface cruise missiles and 12 surface-to-air missiles and, at an estimated cost of from ¥1.4-3.6 billion apiece, they represent a significant threat to the MSDF's destroyers (which cost roughly ¥70 billion each).¹⁵¹ Given the current tensions over disputed territory, if Japan was to produce such vessels they would almost certainly find a high level of market interest for possible regional exports.

Other areas of concern include the JSDF's airlift capacity. While likely to be sufficient for small-scale military operations it was found to be insufficient for disaster response during the Tohoku crisis.¹⁵² The ASDF maintains a fleet of 40 C-1 and C-130H transport planes that are now being replaced with new C-2 models, yet this is a staggered 1:1 replacement rather than an expansion of the fleet. The C-2 does, however, offer significant increases in cargo capacity and range, thus representing an advance in overall capability.¹⁵³ Despite this, disaster relief efforts will still be compromised by the previously-mentioned absence of Hospital Ships among the MSDF's fleet and the inability of the new 22-DDH helicopter carriers to facilitate direct landings (the absence of a well-deck will mean vehicles must be offloaded at Roll-on/Roll-off ports).

Evaluation

Despite the fact that US strategy does not always align with Japanese security needs, Japan's government and military are strongly committed to following the US lead in alliance security policy. As a result, several of the systems currently being procured act to reinforce the alliance, creating deeper entanglement that might lead Japan into a high-cost military conflict that offers little strategic or political return.

¹⁵¹ David Lague, 'Chinese missile boat a game changer in South China Sea disputes', *Reuters*, 1 June 2012, and David Axe, 'China Builds Fleet of Small Warships While U.S. Drifts', *Wired.com*, 4 August 2011.

¹⁵² Ken Tinnerman, 'Japanese Reaction to Catastrophe Worries White House', *NewsMax*, 13 March 2011.

¹⁵³ http://www.mod.go.jp/j/yosan/nihon_saisei/pdf/2012/02.pdf p. 11

The systems chosen reflect some of the problems and liabilities of the procurement process, issues which can be highlighted by evaluating the practical benefits the systems offer Japan. This can be done in four key areas: how well they satisfy Japan's strategic needs, the return they offer on investment, how well they sustain industrial production and specialist workers, and to the extent to which they offer access to new technology.

Strategic Needs

Starting with the F-35 it seems quite clear that there is some question as to whether it will be fully capable of meeting its design goals. Even if eventually deployed, technical glitches and faulty parts suggest it will suffer considerable downtime. Even in ideal circumstances its role as a 'strike fighter' rather than an air-interceptor makes it more suitable for US strategic needs (power projection) rather than defence of Japanese air space.

The F-3 has not even entered development and therefore has the potential to be tailored precisely to the state's needs. This will be dependent, however, upon whether it is independently or joint developed. In the latter case its strategic assets will be determined by group consensus and may not be an ideal match.

The 22-DDH has the potential for great flexibility though at present it is being designed specifically for ASW operations. It is very well-suited to this role though and, despite the fact that it might be more useful to have it designed for multiple types of operation (including HADR) it will clearly be a strategic asset even if restricted to a single purpose.

BMD, however, is completely untested in 'real world' conditions and considerable doubt exists regarding whether it can fulfil its duties against even limited strikes. In the case of swarming strikes it is guaranteed to fall short. Apart from this, its very existence acts not as a deterrent but a destabilizing force, pushing China to invest even more heavily in offensive missile development and heightening regional tensions.

The much smaller scale Type-22 missile system is the direct opposite. It provides an effective deterrent threat without destabilizing the regional balance of arms. Of course, its actual effectiveness is impossible to know without battlefield use. Like China's ASBMs it will suffer from the requirements of detecting and tracking its targets as well as having to overcome any countermeasures employed. Its deterrent benefits are unaffected, however, insofar as they aim to prevent the system ever being used in the field.

Return on Investment

The F-35 is still without a fixed price but given the delays, problems and serious fluctuations in future price estimates, as well as the postponements and cancellation of orders by other customers, it seems certain that this will cost Japan significantly more than first expected. The fact that the fighter is not ideal for Japan's needs, means its price will be far above its worth in security terms.

The F-3 is also likely to be far more expensive than simple military needs would require (i.e. foreign COTS systems would offer similar capabilities for less), and unless it is offered for foreign sale, its low production run will offer little economy of scale. Joint

production would help both reduce production costs and increase the likelihood of foreign sales.

The 22-DDH is clearly the most expensive per unit procurement but it is worth comparing to similar systems fielded by other nations. Perhaps the closest match is Spain's Juan Carlos I. Like the 22-DDH, this is for all intents a light aircraft carrier and at 27,000 tonnes is a close match in size and length. It has 900 crew, can transport 1,900 soldiers and support up to 30 planes or helicopters. It also has a well-deck (something the 22-DDH lacks). Despite running 30% over its initial budget the ship was procured for roughly ¥55 billion, which is half the cost of the 22-DDH (¥114 billion each). At the same time, the 22-DDH are cheaper than the Canberra-class vessels being produced for the Royal Australian Navy. Despite being modelled on the Juan Carlos these will cost roughly ¥147 billion each. France's lighter Mistral-class amphibious assault ships (21,300 tons) cost ¥40-56 billion apiece, with two sold to Russia for ¥80 billion each. The 22-DDH thus sits on the high end of the pricing scale for what it provides though not excessively so.

BMD is inherently expensive but an MoD study found the unit cost unreasonable and that mid-stage spending was excessive, yet supported development on the grounds that no alternatives were available.¹⁵⁴ Yet, had Japan forgone BMD entirely it might have procured an additional 2 helicopter carriers and 10 destroyers to safeguard them, two entire fleets with clear practical value in securing Japan's EEZ and SLOCs. Instead, Japan has secured a hypothetical system that remains realistically untested, has serious weaknesses and acts to promote the regional security dilemma. It also seems likely that

¹⁵⁴ 2013 National Business Review Sheet 0047, Ministry of Defence, 2013.

the one situation in which BMD might offer a practical solution, the firing one or two missiles at an area of Japan within the systems umbrella, could be offset by the investment of far less than ¥900 billion in diplomatic, economic or other deterrent military alternatives.

The Type-12 is a far more practical and cost-effective system and so far 6 sets of launchers have been procured for a total of ¥12.2 billion. The most applicable comparison might be India's BrahMos land-based anti-ship missile system. The BrahMos launcher fires only three missiles, compared to the Type-12's six, and the price for five launchers (and support systems) came to ¥7.8 billion in 2007.¹⁵⁵ This was also an older system that is currently being replaced by BrahMos II systems (similar to the Type-12's relation to the earlier Type-88), so Japan's higher outlay seems justifiable. If it was mass-produced for either use in an asymmetric strategy or for foreign export, it would also be capable of meeting economies of scale.

Industrial Production

The F-35 is being manufactured locally under license by MHI and will thus keep their production lines running. Two problems prevent it being entirely successful in this area though: delays in both the decision for the F-X, and the more fundamental delays in the F-35s testing, have already created a significant gap in Japan's aerospace production, on top of this the fact that it is a licensed system will prevent many Japanese aeronautic engineers, designers, etc. from playing a part in the project.

¹⁵⁵ 'Army inducts new regiment of BrahMos', *Times of India*, 10 November 2011; and 'Indian Army demands more missile units', BrahMos Aerospace, 27 January 2010.

The F-3 on the other hand, has the potential to be fully native. Even if it becomes a joint project Japan would still remain the driving force for some subsystems and would likely engage in full local manufacturing.

The 22-DDH is also an (almost) fully native system designed and manufactured by IHI Marine United. The exception to this are the engines, LM500s (for onboard power) and LM2500s (for propulsion), both of which will be provided by General Electric and manufactured locally by IHI.

BMD is also a mixture of native and licensed production though with a greater amount of the latter. The missile systems, Raytheon's SM-3 and Lockheed Martin's PAC-3, are manufactured by MHI. Lockheed, however, were the primary contractor for the Aegis upgrades to Japan's destroyers. The FPS-5 radars were developed by Mitsubishi Electric though, while the underlying JADGE coordination and control system was produced by NEC. A significant segment of the system is therefore native.

Finally, the Type-12 is a fully native system from MHI and thus represents the optimal system-type for domestic industry.

New Technology

This question is quite easy to address as all the systems bar the F-35 either include the joint development and transfer of technology or are native systems developed from original Japanese research. BMD, however, is limited in that it offers only certain areas of participation and does not allow Japan an opportunity for full system development. In contrast, the F-35 is still possessively controlled by Lockheed Martin and the US

government and it remains unclear whether Japan will be granted access to any of the more sensitive technological advances.

Table 6.14

Do Japan's Weapon Systems Meet the State's Needs?				
	Strategic Needs	Value for Money*	Sustain Industrial Production	Technological Boost
F-35	▲	X	▲	X
F-3	●	X	●	●
22-DDH	●	▲	●	●
BMD	X	X	●	▲
Type-22	●	▲	●	●

● successful ▲ limited X poor

* Of course, in terms of value for money all Japan's systems suffer poor economies of scale.

The questions that were asked earlier should now be easier to address.

1) Have systems been chosen based upon practical capabilities or to strengthen alliance ties?

In the case of the F-35 it is clear that alliance ties were, if not the deciding factor in the initial selection, the primary reason why Japan remains committed to a system that is behind schedule, increasing in cost and still troubled by a wide variety of serious technical problems. The choice has already resulted in the first major break in fighter production for Japan's aeronautics industry and persists despite the availability of several combat-tested alternatives that offer significant advantages for both industry

growth and strategic needs. The closer ties to the US it provides can themselves be seen as a negative restraint on Japan's strategic freedom.

2) Is Japan capable of following a path of independent production, or even one of joint production that does not include the US?

This question will likely be resolved with the development of the F-3, wherein an independent or non-US joint development project would offer increased room for manoeuvre in Japan's security policy. There are also clear signs from countries such as Australia, the UK and India, that many other states are very interested in conducting joint development with Japan. Independently, Japan's proficiency in developing naval systems in particular offers considerable room for bilateral arms exchanges both regionally and globally. Japan clearly has the potential capability to stand independent of the US but two significant barriers remain.

The first are the deeply-rooted political ties to the US-Japan alliance within the Japanese government and the high level of Gaiatsu the US can bring to bear to impede any attempts at separation. The second is the fact that many of Japan's current defence systems have some level of dependence upon US military or industrial support. For example, the F-35's reliance upon black-boxed US technology, or the BMD systems dependence upon US satellite systems. For Japan to be capable of strategic paths independent of the US it will need to wean itself off such dependencies in the future by developing a minimum level of self-sufficiency in key areas. The F-3, for example, can provide an independent fighter program, while Japan's space agency is already working

in conjunction with the MoD to boost Japan's satellite capability, with two new intelligence satellites launched in early 2013.¹⁵⁶

3) Are systems being developed in a manner that will allow their full tactical application?

The Type 22-DDH is a good example of a system that has a wide range of capabilities, whether ASW operations, HADR support or as a fleet flagship. Yet, some of these have not been fully utilized. Its HADR role would be improved by the incorporation of a well-deck to allow offloading of vehicles to a wider variety of sites, something that would also enhance its role in supporting amphibious assault. The latter might be seen as too offensive for Japan's constitutional prohibitions but given that ASDF planes are being equipped with JDAM munitions and partnered with air-tankers for long-distance sorties, such normative restrictions seem to have faded from practical application. Yet, perhaps they are still strong enough for defence planners to adhere to incremental normalization. This might also explain the absence of a launch ramp which would have made the utilization of F-35B STOVL fighters easier to accommodate if future situations saw the need.

Given Japan's restrictive defence budget and varied security needs, it is vital that, where possible, systems be utilized that fill multiple security niches. In the US the recently developed Littoral Combat Ship (LCS) has already been found deficient in many areas, yet the underlying concept (a modular ship capable of being fitted for various roles such as coastal interdiction, surveillance, ASW, or surface combat) seems ideally suited to

¹⁵⁶ Eric Talmadge, 'Japan launches 2 intelligence satellites', *AP*, 27 January 2013.

Japan's situation. With this in mind, the fact that Japan has entered talks with the US regarding the possible joint development of a future model LCS, with TRDI already funding preliminary research, is a good sign.¹⁵⁷ Nonetheless, this is another example of Japan simply following the US lead. In general its strategic capabilities are being tuned with a prioritization on alliance needs first (e.g. ASW, base defence) and separate Japanese needs (such as HADR, littoral defence) second.

4) Are systems enhancing Japan's deterrent capability or do some promote destabilization of regional security?

Japan's role within the US-Japan alliance as a 'defensive shield' means that the lion's share of deterrent threat falls upon the US. It is largely American offensive capability which acts to threaten reprisal. However, Japan's considerable defensive capabilities also ensure that any gains made by an aggressor will be incredibly costly. The two thus work in tandem to offer a robust and credible deterrent. Recent procurement of systems that offer more offensive options to the JSDF (such as the F-35 and 22-DDH) could be seen as promoting tensions. Yet they have a justifiable place as a deterrent response to littoral invasion in the event China attempts a fait accompli land-grab.

BMD is, however, another matter. Its application (setting aside North Korean suicide strategies) is restricted to either defending against an unprovoked attack by China on central Japanese targets or acting as a shield for Japanese/US forces in the event of a Chinese reprisal to US/Japanese aggression. In either case the questionable accuracy of the system brings its deterrent capability into question. At the same time, if China has

¹⁵⁷ 'Nichibei shingatasentoukan kyoudoukenkyu he, chugoku yokushi no shouchou ni', *Sankei Shimbun*, 24 November 2012.

no intention of initiating an attack itself it will perceive BMD to be part of a broader US offensive strategy. At the very least it will see an increase in weapons production and probable arms race in missile related fields, such as satellite imaging. It may even push Chinese fears to the point where a preemptive strike becomes an attractive strategic choice.

5) Are systems being developed that will allow the choice of alternate strategies in the future or will choices be constrained by the weapons available to a single strategic path?

Japan already has access to systems, such as the Type-12, which would prove suitable for alternate strategic paths, yet, many others, such as fast-attack boats, mine layers or a greater number of attack helicopters are currently beyond its technical or financial means. To utilize them requires significant advance planning and this is not something Japan appears to be engaging in, instead simply trusting to the future benefits of a strong US-Japan alliance.

Even in purely defence industrial terms, maximizing Japan's capabilities seems to be taking a back-seat to alliance goals. Professor Yuzo Murayama, an expert of Japan's defence production, believes that revitalization of the industrial base will require a long-term international R&D and export strategy. While the government are aware of this he feels they do not regard it as an immediate priority and instead build their defence policy on what is needed in the near-term to address the issues of Okinawa, North Korea and China.¹⁵⁸ This myopic approach to defence planning is probably the single

¹⁵⁸ Paul Kallender-Umezu, 'Japan inches towards arms exports', *defence News*, 9 February 2013.

greatest weakness of not only Japanese defence production but of the state's security strategy in general.

The US response to its LCS program suggests a way in which Japan might proceed. Despite the high cost involved in the \$37 billion program and the dangers of succumbing to 'sunk-cost reasoning', recently senior US Navy commanders raised the possibility of reversing the planned acquisition of 52 vessels after the first 24 (to which the US committed) have been delivered.¹⁵⁹ Similarly, Japan should not feel bound, by either *gaiatsu* or sunk-cost rationalization, to persist in the development and procurement of systems which are of questionable value to its industrial and strategic needs. In terms of security policy there is a clear need to take into account long-term views that consider a wider variety of scenarios in a more critical and independent fashion.

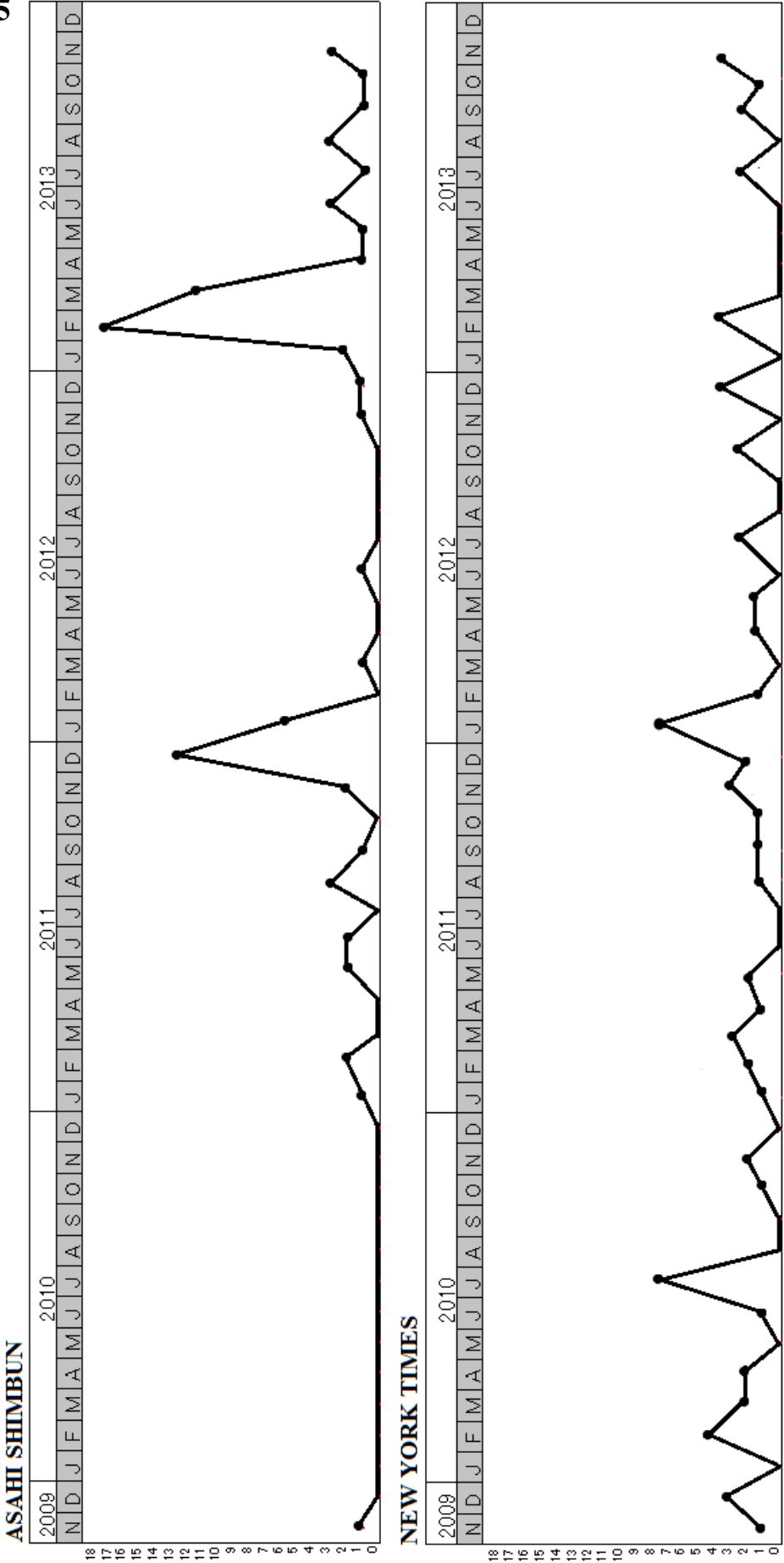
State of Public Discourse

The issues raised so far clearly have significant impact on both Japan's security in particular and its foreign relations in general. Nonetheless, military procurement, specifically its impact upon security, continues to receive scant attention in Japan from either the mainstream media or international relations think tanks. Taking the case of the F-35, major newspapers in Japan give the topic comparable coverage to those of the US (see Table 6.15), yet coverage is limited entirely to reportage of economic developments with no consideration of strategic affairs exhibited. The exception to this,

¹⁵⁹ David Lerman, 'Ships Costing U.S. \$37 Billion Lack Firepower, Navy Told', *Bloomberg*, 30 March 2013.

Table 6.15

Comparative Sampling of Japanese and US Coverage of the F-35 2009-2013



in Japan's case, were two spikes in coverage occurring in late 2011 (with the selection of the F-35 as the next Japanese fighter) and early 2013 (during a debate over how weapon exports might violate the constitution). The former saw limited discussion of the planes merits, while the latter considered it in relation to normative values. Strategic and diplomatic concerns have been absent.

Coverage of the F-35 by the Nihon Keizai Shimbun (see Table 6.16) saw spikes at similar points. Of the five case study systems the F-35 was the most well-reported, while BMD also received intermittent coverage. The Izumo-class destroyer, ATD-X (F-3) and Type12 SSM, were all effectively ignored though. As with the F-35, coverage of BMD was tied to specific events, in this case North Korean missile tests in 2009, 2012 and 2013. The coverage clearly shows that the F-35 attracts attention only insofar as it represents either bilateral trade with the US or a constitutional problem, and BMD in relation to the perceived North Korean threat. Cost effectiveness, strategic capabilities and impact on foreign relations are not factors placed under consideration while the majority of weapon systems receive no coverage whatsoever.

Table 6.16

Coverage of Key Systems by Nihon Keizai Shimbun (Jan. 2009 - Dec. 2013)					
	2009	2010	2011	2012	2013
Izumo-class	1	-	-	-	2
F-35	8	3	23	12	16
ATD-X	-	-	-	1	-
BMD	24	1	3	15	14
Type-12	-	-	-	-	-

No. articles/year specifically discussing the system

This coverage is important in that it represents the public awareness for military systems and through this the importance they have for domestic political issues. The F-35, therefore, has political value as a bilateral trade issue as well as a constitutional law issue, while BMD is important in terms of offering a counterbalance to the purported North Korean threat. The lack of coverage of other systems equates to a low political value. In the case of the Izumo-class a single story during the period above related to its use in HADR activities and another to Chinese concerns over its possible use as a fighter carrier. Had there been repeated focus upon either of these issues the Izumo might have gained political importance yet this has thus far not occurred.

In regard to academic assessment of the various systems there is a clear gulf between Japanese analysis and that carried out in the US. Examining the archives of the Japan Institute for International Affairs and the Brookings Institution (see Table 6.17) for their discussion of the F-35 reveals a marked gap, with the former offering only a single paper making oblique reference to the system. In contrast, Brookings supplies two specific references to the system (records of congressional testimony on the F-35 by Brookings' staff and a paper on next generation fighters) as well as 25 papers, articles and events which make oblique references to the system.¹⁶⁰ It should be noted that two of Brookings papers are authored by Japanese nationals, something which allows a case to be made that the center for weapons analysis by Japanese academics is Washington DC.

¹⁶⁰ 'Specific' being a paper in which the system is the primary focus, 'oblique' one in which it is merely referenced in relation to a separate topic.

Table 6.17

Comparative Sampling of Japanese and US Think Tank's Coverage of the F-35				
Japan Institute of International Affairs			Brookings Institution	
	Japanese Author	Western Author	Japanese Author	Western Author
Specific Focus				
Government Testimony	-	-	-	1
Paper	-	-	1	-
Oblique Reference				
Paper	1	-	1	11
External Article	-	-	-	3
Discussion Event	-	-	-	10

Note: Does not include news snippets from JIIA's 'Koukusei Mondai' or blog posts from Brookings

These two institutions have a broad foreign policy focus but in Japan even if we select a security-focused institution such as the Research Institute for Peace and Security there is still a low level of analysis, in this case amounting to a single specific paper and 2 oblique references. The subject of the strategic and diplomatic impact of weapon procurement is clearly not something which, given its potential impact upon security, is receiving sufficient coverage.

Conclusions

Military systems have become increasingly expensive to maintain, such that operational costs are now a larger cost-factor than design or production. This only heightens the importance in making long-term commitments to a specific system. Despite this, serious flaws exist in the systems Japan has chosen. Some (the F-35) offer poor value for money, others (BMD) are of questionable practical efficiency, yet more (the Izumo-class) have not been fully optimized, while others (the Type-12) represent strategic paths that have been underfunded. Taken as a whole, the choices made regarding

weapon procurement show that in some cases political agendas have influenced a neutral assessment of security policy and that some of these decisions are exacerbating rather than reducing the regional security dilemma.

Equally important is the fact that these dangers are not the subject of either media or academic analysis. In the press, weapon procurement is almost entirely a matter of economic reportage, gaining significant public and political attention only when tied to specific issues such as trade with the US, constitutional reform, or the North Korean threat. In academic terms Japan conducts discussion of weapon systems or procurement strategy extremely rarely, to the extent that it can be safely said that the issues raised here see no public debate. This absence of healthy discourse on serious issues of security is as much a problem as the ongoing weaknesses of the procurement system itself. As tensions with China continue to escalate and deadlines approach for firm decisions to be made regarding the F-3 and other future systems, it is vital that these concerns be properly analyzed and addressed.

CHAPTER 7: Conclusion

The study began by analyzing the development of Japan's defence industry. From its earliest roots it has displayed a remarkable capacity to react swiftly to change, and to adopt and then adapt new technologies. These strengths have seen it promote growth in wider industry and support the rapid diffusion of new technology, and as such have been a key factor in Japan's rise to its current level of economic power. Its selection of weapon systems have also influenced, and in some cases compromised, its security strategy. More recently such choices have become political tools in reinforcing and committing to alliance relations.

Very clear structures exist to govern the political and bureaucratic process of weapon selection and development, largely under the aegis of the Ministry of Defence and EPCO in particular. There is, however, apart from the initial proposal stage, very limited strategic input from either academics or military personnel such that the procurement and development process are largely focused on economic rather than security factors. There are systemic weaknesses in both the contract system (e.g. insufficient competition) and the management practices employed (e.g. duplication of effort). The process is also prone to interference in the form of both corruption and political pressure (both US driven *gaiatsu* and domestic concerns promoting private agendas).

The industrial base also suffers from various weaknesses, the most serious of which is the ongoing poor economy of scale resulting from lack of access to international

markets. Whether the relaxation of export prohibitions will be enough to offset this remains to be seen. Recent moves by major manufacturers to internally consolidate defence production within distinct departments will help, as will efforts to engage in joint-development with a wider number of states. There is still a significant weakness in R&D and broader innovation, however, as well as need for greater support for small and medium enterprises.

Looking at the domestic influences on defence policy revealed that they impacted the rate at which policy is altered rather than the strategic direction policy will take. The web of domestic factions and their competing aims and ideologies establish a construct that is non-linear, prone to disproportional reaction and impossible to understand without the wider context of the system as a whole. On the governmental level, rapidly changing political appointees compete with an entrenched, conservative bureaucracy to ensure any change is incremental. On the organizational level domestic groups tend to place a low priority on both foreign and security policy and, as a direct result, have little influence on its formation. The ideological level influences all others but is dominated by a 'pass the buck' strategy of defensive realism that relinquishes control of security policy to external actors. Individual leadership ideology, meanwhile, though capable of creating waves, has displayed little power to overcome more dominant internal and external forces, rendering it of negligible influence in security affairs. Normative factors have more power, though here it is anti-radicalism rather than Japan's vaunted pacifism, which is the dominant force. This is trumped only by fear of sudden crises, which temporarily endorses more radical attempts to reaffirm the status quo. Coupled with this, and often acting as a complimentary force in security terms, is the normative desire for

international prestige which sees Japan attempt to adhere to prevailing international trends.

Both the international and regional communities are, however, relatively minor influences in terms of overall defence policy. Far greater are the alliance ties that bind Japan to the US, and that act to prioritize not only alliance strategy, but also US strategy, over any strategic goals driven purely by Japanese security interests. This external pressure (*gaiatsu*) is generated by the US utilizing a multi-varied network of channels that includes politics, the mass media, academia and the military. These vectors of influence are long-standing, deeply rooted, and quite capable of overriding domestic Japanese interests. At the same time they are routinely invoked by Japanese politicians as justification for advancing personal agendas. In both cases, the exertion of any extrinsic influence upon security policy undermines its effectiveness and potentially undermines national security.

Possible impact can be assessed through consideration of Japan's security needs. The North Korean threat, which to a large extent drives public acceptance of normalization, has been over-exaggerated and serves primarily to justify military build-up against China. The Chinese threat itself, while real, is not beyond Japan's own capability to address and does not warrant the increasing military build-up in the region. This developing security dilemma threatens to ignite a regional arms race, something that may serve the interests of Japan's defence industry in terms of pure profit, but which does little to enhance the state's actual security. The overt focus on China, meanwhile, diverts attention from two equally pressing concerns: maintenance of the security of Japan's Sea Lines of Communication and ongoing preparation for Humanitarian

Assistance and Disaster Relief Operations. Both of these areas will be greatly enhanced by cooperation and mutual assistance between Japan and China, further underscoring the crucial importance to Japan of maintaining amicable relations with her neighbour.

This core goal of Japanese Security, i.e. the self-evident importance of a healthy relationship with China, is at the heart of a clear conflict between long-term Japanese and US strategies. The competing goals of each (for Japan it is littoral defence, and for the US a broader containment of China) cannot be equally served by any one strategy, yet Japan is adhering to a grand-strategy that is alleged to promote the interests of 'the alliance'. The actual benefactor is not, however, difficult to ascertain. Japan has acknowledged its role as the 'shield' in a partnership with the US in which Japan defends US basing while the US remains free to engage in 'power projection', i.e. offensive military operations, clearly defining Japan's role as reactive and that of the US as proactive. China's response has been to announce a strategy that will see Japan targeted in the event of conflict. Japan's support for US efforts to contain China only makes it more likely that the latter might take steps to seize Japanese littoral territory, considerably raising the risk of conflict between Japan and China. This risk is only likely to increase in the future as the arms build-up continues, with several strategically important US military systems coming online in the mid-2020s.

Japan's recent choices in weapon development and procurement also highlight an excessive deference to US strategic goals. The F-35, increasingly seems like a poor choice of fighter when compared to the Eurofighter Typhoon. This ill-judgment is even more apparent in the past decade's investment in BMD, which remains essentially unproven against real-world targets and works to greatly exacerbate the security

dilemma between the Alliance and China. The 22-DDH is also dedicated purely to an ASW role that plays into Alliance needs, despite the potential it has as a HADR resource or even to boost Japan's own power projection capability. Other systems offer room for future strategic manoeuvring yet it remains to be seen whether their benefits will be utilized. The ATD-X/F-3 program could give Japan a more independent fighter capability, if it follows either domestic or (non-US) joint development. Similarly, the Type-12 SSM is one of a number of systems that could allow Japan to pursue alternate asymmetric defensive strategies that could degrade the overt threat to China that US 'Air Sea Battle' represents.

Key Arguments Revisited

The study has examined and provided ample support for the following arguments:

- Japan's security policy is influenced by domestic and foreign political factors that have led to a long-term commitment to unproven and highly expensive weapon systems which, rather than increasing regional stability, instead exacerbate a growing security dilemma in the Asia-Pacific region. Furthermore, these choices undercut potential funding for other systems which offer Japan alternate methods of improving both its national security and its regional ties. Most importantly, the absence of broader debate upon these subjects by a wider segment of the academic community, prevents a robust and thorough examination of the full range of strategic options available to Japan and thus compromises the formation of security policy at the base level.
- Japan is far from a pacifist state, instead consistently supporting the military activity of its allies and following its own steady and unrelenting process of military normalization with little resistance from a public that is far more concerned

with issues of a domestic social and economic nature than either foreign or security policy. Japan's dominant norm is instead one of anti-radicalism, where the preservation of Japan's own peace (as opposed to that of other nations) is paramount. The caveat to this is that sudden change is accepted insofar as it addresses unexpected disturbances of the status quo. In this regard Japan is vulnerable to sudden shocks that might see an unexpected military clash, terrorist incident, North Korean provocation, etc. drive a massive surge in support for rapid militarization.

- The threat posed to Japan by both China and North Korea has been greatly exaggerated. The North's missile program is an incredibly inefficient bargaining tool and its nuclear capability a purely defensive asset. The threat of North Korean missiles has been used to justify massive Japanese investment in BMD, yet these systems are aimed far more at countering China's threat to the US presence in the region. Similarly, while China is a far more serious threat the danger is far from unavoidable using diplomacy alone and has only been exacerbated by Japanese support for US strategies aimed at containing Chinese expansion and the increased military build-up in which BMD plays a key role.
- Japan's foreign policy is to a large extent dominated by the US and this is particularly the case in security issues where Japan has proven incapable of acting outside the guidelines laid down by the alliance's senior partner. Japan is thus tied to an alliance strategy dominated by the US and which, given their diverging security needs, cannot be expected to serve both partners equally. Use of foreign pressure is also used by domestic politicians and bureaucrats to secure short-term gains, yet these too ultimately compromise the long-term security of Japan.

- Japan's defence industry has played a vital role in the development of the modern Japanese state, acting as a frequent spur for industrial growth and diffusion of advanced technology. Nonetheless, institutional weaknesses and lack of access to international markets have left the industry weak and while recent policy changes have the potential to spur growth, its future health is by no means guaranteed.

Recent Events

December 2013 saw the creation of a new National Security Council which aims to give stronger central control over security policy. It was accompanied by a first National Security Strategy, that hinted at the formal introduction of collective defence, and the latest MTDP projection for 2014-2018, an expected commitment to the deepening of the US-Japan alliance and continued development of tools to offset the perceived Chinese and North Korean threats. Tensions between Japan and both potential foes remain high and incredibly volatile. Responding to a 2013 incident in which Chinese vessels allegedly locked their Fire-Control Radar onto Japanese ships, Kevin Maher, former State Department Country Director for Japan (now acting as a consultant to private industry) characterized it as a possible act of war and recommended that Japan further invest in BMD, Aegis ships and F-35s.¹ Japan itself continues on its path to normalization, taking part, in June 2013, in new alliance wargames which simulated the retaking of islands seized from Japan by China.² China responded by establishing a new Air-Defence Information Zone (ADIZ) which included the Senkaku islands.³ The move has been portrayed as an escalation of tensions, yet, in actuality, the political and media response to these minor incidents has a far greater influence upon the state of

¹ Satoshi Tomizaka, 'Japan, let us fight together,' *Shukan Bunshun*, 21 February, 2013.

² Martin Fackler, 'Japan Shifts From Pacifism as Anxiety in Region Rises', *New York Times*, 1 April 2013.

³ 'China scrambles jets to new air-defence zone', *Reuters*, 29th November 2013.

tensions in the region than the incidents themselves, i.e. if they were downplayed they would have negligible impact.

The tensions do, however, offer support to the defence industry's new freedom to indulge in joint development. Following on from 2012 agreements to engage in joint development with the UK, a recent visit to Japan by the French Premier Francois Hollande, saw the two countries seal another deal for future joint development.⁴ As with the UK, the projects are likely to focus on purely defensive items, at least initially. Funding for such projects also seems likely to increase with TRDI seeing a 55% growth in its budget in 2013 and plans put into place to establish a Japanese equivalent of DARPA for high risk, high return research.⁵ More recently, in April 2014 restrictions on weapon exports were relaxed even further, allowing more rapid transfers in emergencies and permitting third-party sales to be decided on a case-by-case basis.

In November 2013 a devastating hurricane in the Philippines saw Japan's largest post-war troop dispatch with over one thousand personnel and three naval vessels taking part in relief efforts. This further raising the Jieitai's public profile and highlighted the valuable role the Izumo-class would be capable of playing in such regional operations.

Future Prospects

Working under the assumption that the most likely future course is a continuation of current trajectories, this would mean further escalation of the Alliance-China security dilemma and further incremental normalization of the Japanese military. On the

⁴ Kyōko Hasegawa, 'France, Japan to jointly develop military hardware', *AFP*, 7 June 2013.

⁵ Kelly, Tim, 'Japan to tap technology for military use, another step away from pacifism', *Reuters*, 13th November 2013.

business end it will see increased Japanese participation in international development and an accompanying increase in international sales, with taboos on what systems may be traded broken down in the same steady incremental manner that has been done with restrictions on JSDF operations.

In both instances, the security of Japan and the health of the defence industry will be well served by the initiation of more in-depth study and analysis of each to see where improvements might be made and errors addressed. Specific areas where major reform are needed include: improvements to contract systems and greater use of new contract types, greater support for SMES, greater focus on independent R&D and innovation, a reduction of bureaucratic duplication of effort and improved LCC management.

In broader terms, this study has highlighted a lack of assessment of the strategic implications of weapon procurement and argues for greater participation in and oversight of this process. Steps which should be taken include: establishing an independent review of strategic policy that is free from both bureaucratic and governmental political influence, in-depth analysis of the strategic, tactical, economic and diplomatic merits and flaws of major weapons systems, and an independent threat assessment regarding the dangers posed by North Korea and China. The participation of a wider segment of Japan's academic community in the discussion of issues both broadly security-related and specifically military-focused, should be encouraged in order to develop the most accurate perspective possible of the realities of Japan's security needs and capabilities.

Another key recommendation of the study is to address weaknesses in Japan's alliance relationship that leave it little room for strategic manoeuvring. Tensions between Japan and China have continued to increase in recent months yet despite this sabre-rattling it is likely, given the nature of forthcoming US and Chinese weapon systems, that another decade remains before the deployment of new systems significantly increase the security dilemma and the chance of conflict. During the interim it is hoped that the concerns raised here will be more fully evaluated and, if judged warranted, addressed in a manner that will enhance and stabilize both regional diplomatic relations and Japan's core security needs.

Gavan Gray

Kyoto, Japan

26th May 2014.

Bibliography

Government Publications and Sources

Board of Audit, Japan, Overview of FY2012 Financial Results Inspection Report.

Canadian Parliament, '41st Parliament, 1st Session, Standing Committee on National Defence.' 24 November 2011.

Japan Cabinet Legislation Bureau, Accessed on 19th September at
<http://www.clb.go.jp/english/process.html>

Japan Cabinet Office, Statement of the Chief Cabinet Secretary, Japan-US Joint
Technological Research on Ballistic Missile Defence, 25 December 1998.

---, Dōteki bōei-ryoku no kōchiku (iji shūri-hi-tō) ni kakaru jigyō ni tsuite (*Regarding the structure of the Dynamic Defence Power project*), March 20, 2003.

---, Constitution of Japan.

---, 'National Defense Program Guidelines for FY2011 and beyond', 17th December
2010

---, Defence and Security Public Opinion Poll, 1962-2012.

---, Social Consciousness Public Opinion Poll, 2002-2012.

---, Citizens Lifestyles Public Opinion Poll, 2001-2012.

Japan Ministry of Defence, Defense of Japan (various years).

---, Defense Programs and Budget of Japan (various years)

---, Bōei sōbi hintō no chōtatsu ni kansuru keiyaku ni okeru seido chōsa, genka kansa-tō
no jisshi jōkyō-tō ni tsuite (*Investigation into the quality of Defence equipment
procurement contracts and the state of the pricing and auditing system*), (undated)

- , Ōbei shuyō kuni ni okeru bōei kensa no shuhō to jirei (*Examination of the primary methods of inspection for defense systems by Western states*), General Accounting Office, 2008.
- , 'Bōei-shō ni okeru Soshiki Kaikaku ni kansaru Kihon Hōshin' (*Defence Ministry plan for fundamental structural reform*), 27th August 2008.
- , Bōei seisan gijutsu kiban (*Defence production technology base*), March 2010.
- , Anketo chōsa-tō no kekka, Sōbi seisaku-ka (*Results of equipment production survey investigation*), 23rd November 2010.
- , Sōbi shisetsu honbu chōtatsu jisshi gaikyō (*Status of procurement implementation at the Equipment Institution Headquarters*), 2011.
- , Shin chūki bōei-ryoku seibi keikaku ni tsuite (2011-2015) (*Regarding the Real Mid-term defense strength maintenance/outfitting plan*), January 2011.
- , Bōei sangyō no genjō - Kōkūki, Shadanhōjin Nihonkōkū uchū kōgyō-kai (*Defense industry present conditions - Aircraft, corporation JSDF space manufacturing group*), 25th January 2011.
- , Bōei-shou kōkūki no genjō to seisan gijutsu kiban ni kansuru torikumi (*Defense Ministry aircraft present conditions, concerning the production technology base efforts*), Bureau of Equipment Accounting, January 2011.
- , Sōkō sharyō kaki oyobi dan'yaku no kaihatsu chōtatsu ni tsuite (*Regarding the development and provision of Armored vehicles, firearms, as well as ammunition.*), Bureau of Equipment Accounting, February 2011.
- , Kansen no seisan gijutsu kiban no genjō ni tsuite (*Regarding the present conditions of the Warship production technology base*), Bureau of Equipment Accounting, March 2011.

- , Yūdō buki no kaihatsu chōtatsu no genjō (*Present conditions of guided weapons development and supply*), May 2011.
- , Wazahon no kenkyū kaihatsu no genjō to gunji gijutsu no hōkō-sei (*Present conditions of techniques of research development and military technology trends*), Bureau of Equipment Accounting, May 2011.
- , Equipment Policy Division Survey, 2011.
- , Bōei-shō ni okeru Kokunai gijutsu kōryū ni tsuite (*For the Defense Ministry regarding domestic technology exchange*), Bureau of Equipment Accounting, 9th November 2011.
- , Sangyō soshiki, kokusai kyōdō kaihatsu seisan no ronten seiri shiryō (*Manufacturing organization, international joint development production factors ordering data*), Equipment Policy Division, 15th December 2011.
- , Heisei 25-nen gyousei jigyou rebyūshi-to, 2013 (*2013 Administration project review sheets*). (various numbers)
- , Heisei 24-nendo sōbi shisetsu honbu chōtatsu jisshi gaikyō (*2012 Equipment institution headquarters supply implementation outlook*), 2013.
- , Bōei seisan gijutsu kiban kenkyūkai chūkan hōkoku, 2013 (*Defense production technology base research group mid-term report*).
- , Bōei seisan gijutsu kiban kenkyūkai sonohoka no jōhō (*Defense production technology base research group other information*), 10th Defense Production Study Group, 2013.
- , Japan Defense Production and Technology Base, March 2013.
- , Heisei 24-nendo Raifusaikurukosuto Kanri Nenji Hokoku-shō (*2012 Life Cycle Cost management annual report*), Equipment Facility Headquarters, 21st March 2013.
- , Heisei 24-nendo seisaku hyōka-shō (*2012 Policy assessment*), Bureau of Equipment

Accounting, March 2013.

---, Jiei-kan no sai shūshoku jōkyō no kōhyō ni tsuite, 2011-2012 (*Redeployment status of SDF members 2011-2012*), 7th September 2012.

---, Mitsubishi-denki-tō ni yoru kadai seikyū jian no gaiyō oyobi saihatsu bōshi-saku ni tsuite (*Summary regarding the circumstances of Mitsubishi Electric's excessive claims and recurrence prevention plan*), 21st December 2012.

---, Equipment Procurement and Construction Office.

---, Technical Research and Development Institute.

Japan Ministry of Finance, White Paper (various years).

---, Defence Budget (various years).

---, Trade Statistics Bureau.

---, Defence-Related Additional Expenses, 2013.

Japan Ministry of Economy, Trade and Industry, Nihon no kikai kōgyō: Sono seichō to kōzō' (*Japan's machine industry: Structure and growth*), The Heavy Industries Bureau, 1960.

---, Japan Small Business Research Institute White Paper 201.

Japan Ministry of Foreign Affairs, Three Principles on Arms Exports, 1967.

---, Japan's Actions against Piracy off the Coast of Somalia, October 2012

Japan Ministry for Internal Affairs and Communication, Statistics Bureau.

---, Japanese Governmental Procurement Guidelines.

Japan Prime Minister's Office, National Security Strategy, 17th December 2013.

UK Foreign and Commonwealth Office, Treaty Series No. 27. 2013.

United Nations, General Assembly Resolution (various).

---, Ranking of Military and Police Contributions to UN Operations, January 2011.

US Department of Defence, *The United States Security Strategy for the East Asia-Pacific Region*, Washington DC: US Department of Defence, 1995.

---, US Strategic Command, *Deterrence Operations Joint Operating Concept*, 2006.

---, *Ballistic Missile Defence Review*, 2010.

---, *Annual Report to Congress: Military Power of the People's Republic of China*, 2010

---, *Military and Security Developments involving the People's Republic of China* 2011.

---, *President's Budget Submissions, Research Development, Test and Evaluation*,

Defence-Wide, Vol 1: Defence Advanced Research Projects Agency, FY 2010-2013. 2012.

---, *Sustaining Global Leadership: Priorities for 21st century defence*, January 2012.

---, *Budget Request* 2014.

US Director of National Intelligence, *Worldwide threat assessment of the US Intelligence Community*, January 2012.

US Central Intelligence Agency, *World Factbook*, 2012.

US Congressional Budget Office, *The Budget and Economic Outlook: Fiscal Years 2013 to 2023*, February 2013.

US Congressional Research Service, 'Navy Ford (CVN-78) Class Aircraft Carrier Program: Background and Issues for Congress', 26 July 2012.

US Senate, *Performance of the Patriot Missile System, Activities of the House Committee on Governmental Operations, One Hundred Second Congress, First and Second Sessions, 1991 - 1992*, US Congressional Report 102-1086.

---, Statement by Theodore A. Postol, 'Optical Evidence Indicating Patriot High Miss Rates During the Gulf War', Committee on Government Operations, U.S. House of Representatives, 7 April 1992.

US State Department, Politico-military problems in the Far East: United States initial post-defeat policy for Japan, The State-War-Navy Coordinating Committee, 6th September 1945.

US White House, 'Remarks by President Obama and Prime Minister Noda of Japan at Joint Press Conference', Office of the Press Secretary, 30 April 2012.

Political Party Manifestos

Democratic Party (Minshutou)	www.dpj.or.jp
Japan Communist Party (Nihon Kyosantō)	www.jcp.or.jp
Japan Restoration Party (Isshin no Kai)	www.j-ishin.jp/
Liberal Democratic Party (Jiyu-Minshutō)	www.jimin.jp
New Komeito (Komeitō)	www.komei.or.jp
Social Democratic Party (Shakai Minshutō)	www5.sdp.or.jp
Your Party (Minna no tō)	www.your-party.jp

Industry Reports

Bonn International Center for Conversion, Conversion Survey 2005: Global

Disarmament, Demilitarization and Demobilization, 2005.

Business Monitor International, Japan Defense and Security Report (various years).

Deloitte, The Aerospace and Defense Industry in the US: A financial and economic impact study, Deloitte, March 2012.

Eurostat European Commission for Science and Technology, Database.

Institute of Aeronautical and Space Industries Association, Current state of the Defence Industry (Aircraft), 25th January 2011.

Japan Defense Equipment Industry Association, Bōei sangyō no genjō (zenpan)

(*Present conditions of the defence industry: Interim report*), 22nd February, 2011.

Keidanren, Proposal for the New National Defence Program Guidelines, 20 July 2010.

---, Bōei Sangyō no Genjō (*Present conditions of the defence industry*), Keidanren, 1st December 2010.

---, 'Joint Statement on Defence Industry Cooperation between Japan and the United State', 17 July 2012.

---, Proposal for the National Defence Program Guidelines, 14 May 2013.

KPMG, Aerospace and Defence 2012 Industry Outlook Survey, 2013.

Mitsubishi Heavy Industries, Press Release, 28 March 2012.

---, Press Release, 19th December 2012.

---, Corporate Social Responsibility (CSR) Report for 2013.

PriceWaterhouseCoopers, Global city GDP rankings 2008–2025, 2009

Sipri, Military Expenditure Database 2013.

Society of Japanese Aerospace Companies, Japan Aerospace Industry 2013.

Transparency International, Government Defence Anti-Corruption Index, 2013.

World Bank, Development Indicators Database 2011.

Books

2012 Global Go To Think Tank Index, Philadelphia: University of Pennsylvania, 2013.

Alexander, Arthur, *Of tanks and Toyotas, an assessment of Japan's Defence industry*, Santa Monica: Rand, 1993.

Allen, G.C., *A short economic history of modern Japan*, London: Macmillan, 1981.

- Allison, Graham T., 'Conceptual Models and the Cuban Missile Crisis, in Paul R. Viotti and Mark V. Kauppi (eds.) *International Relations Theory: Realism, Pluralism, Globalism*, (New York: MacMillan, 1987).
- Armacost, Michael H., *Friends or Rivals? The Insider's Account of US-Japan Relations*, New York: Colombia University Press, 1996.
- Armitage, Richard L., and Joseph S. Nye, *The US-Japan Alliance: Anchoring Stability in Asia*, Washington DC: Center for Strategic and International Studies , 2006.
- Avenell, Simon Andrew, *Making Japanese Citizens: Civil Society and the Mythology of the Shimin in PostWar Japan*, Berkely: University of California Press, 2010.
- Barnett, Thomas, *The Pentagon's New Map*, Berkley: Berkley Trade, 2005. 115, 143
- Beard, Edmund, *Developing the ICBM: A study in bureaucratic politics*, New York, Columbia University Press, 1976.
- Beasely, W.G., *Japanese Imperialism 1894-1945*, Oxford: Oxford University Press, 1991.
- Berger, Thomas, *America's reluctant allies: The genesis of the political military cultures of Japan and West Germany*, PhD Dissertation, Department of Political Science, MIT, 1991.
- , *Cultures of Antimilitarism: National Security in Germany and Japan*, Baltimore: John Hopkins University Press, 1998.
- Berton, Peter, 'The Japanese Communist Party and its Transformations', *Japan Policy Research Institute*, May 2000; A. R. Swearingen, *Communist Strategy in Japan, 1945-1960*, Santa Monica: RAND Corporation, 1965.
- Blumenthal, Tuvia, 'The Japanese shipbuilding industry', in H. Patrick (ed.), *Japanese Industrialization and its Social Consequences*, Berkeley: University of California Press, 1976.

Boston Consulting Group, *The World's most Innovation-friendly Countries*, Boston:

Boston Consulting Group, 2009.

Bueno de Mesquita, Bruce, *The War Trap*, New Haven, CT: Yale University Press, 1981.

Bush, Richard C., and Michael E. O'Hanlon, *A War like no Other: The truth about China's Challenge to America*, Hoboken: Wiley, 2007.

Buzan, Barry and Ole Waever, and Jaap de Wilde, *Security: A New Framework for Analysis* Boulder: Lynne Rienner Publishers, 1998.

Calder, Kent E., *Crisis and Compensation: Public Policy and Political Stability in Japan 1946-86*, Princeton: Princeton University Press, 1988.

---, *Pacific Alliance: Revising US-Japan relations*, London: Yale University Press, 2009.

Chase, Kenneth, *Firearms: A Global History to 1700*, Cambridge University press, New York, 2008;

Christensen, Clayton M., Michael E. Raynor, *The innovator's solution: creating and sustaining successful growth*, Boston: Harvard Business School Publishing Corporation, 2003.

Cingranelli, David Louis, *Ethics, American Foreign Policy and the Third World*, New York: St. Martin's Press, 1993.

Cliff, Roger, et al. *Entering the Dragon's Lair: Chinese anti-access strategies and their implications for the United States*, Santa Monica: RAND, 2007.

Colignon, Richard A, and Usui Chikako, *Amukadari: The Hidden fabric of Japan's Economy*, London: ILR Press, 2003.

Connors, M., 'The Asian Economic miracle and its unmaking' in M. Connors (ed) *The New Global Politics of the Asia Pacific*, Abingdon: Routledge Curzon, 2004.

- Crowell, William G., 'Official Soft Power in Practice: U.S. Public Diplomacy in Japan', in Yasushi Watanabe and David McConnell (eds), *Soft Power Superpowers: Cultural and National Assets of Japan and the United States*, New York, M.E. Sharpe, 2008.
- Curtis, Gerald L., *The Logic of Japanese Politics*, New York: Colombia University Press, 1999.
- Dobson, H., *Japan and United Nations Peacekeeping: New Pressures, New Responses*, London: Routledge Curzon, 2003.
- Doyle, M., 'Liberalism and Foreign Policy', in S. Smith (ed.), *Foreign Policy: Theories, Actors, Cases*, Oxford: Oxford University Press, 2008.
- Drifte, Reinhard, J.W.M. Chapman and Ian T.M. Gow, *Japan's quest for comprehensive security: defence, diplomacy, dependence*, New York: St. Martin's Press, 1982.
- , *Arms production in Japan: the military applications of civilian technology*, Boulder: Westview Press, 1986.
- Dunne, J., 'The defence industrial base', in K. Hartley, *Handbook of defence economics*, Elviesier Science B.V. 1995.
- Duus, Peter, *The abacus and the sword: The Japanese penetration of Korea 1895-1910*, Los Angeles, University of California Press, 1995.
- Edstrom, Bert, *Japan's evolving foreign policy doctrine: from Yoshida to Miyazawa*, London: macmillan, 1999.
- , 'Japans foreign policy and the Yoshida legacy revisted', in Bert Edstrom (ed), *Turning points in Japanese history*, Avon: Routledge-Curzon, 2002.
- , 'The Yoshida Doctrine and the unipolar world', in Christopher P. Hood (ed.), *The Politics of Modern Japan*, New York: Routledge, 2008.

Ellis, Joseph J., *His excellency George Washington*, New York: Vintage, 2005.

Finkelstein, David M., 'China's National Military Strategy', in James Mulvenon and Richard H. Yang (eds) *The People's Liberation Army in the Information Age*, Santa Monica: RAND, 2000.

Friedman, George, *The Next 100 Years: A Forecast for the 21st Century*, New York: Anchor, 2009.

Friman, H.R., 'Immovable object? Japan's security policy in East Asia', in P Katzenstein (ed) *Rethinking Japanese Security: Internal and External dimensions*, London: Routledge, 2008.

Fuller, J.F.C. *Armament and History: The influence of armament on history*, London: C. Scribner's Sons, London, 1945.

Global Innovation Index 2011, New York: Insead, 2011.

Grant, Jonathan A., *Rulers, Guns and Money*, Cambridge, Harvard University Press, 2007.

Gray, Colin S. *Weapons Don't make War*, Lawrence: University Press of Kansas, 1993.

Green, Michael J., *Arming Japan: defence production, alliance politics and the postwar search for autonomy*, New York: Colombia University Press, 1998.

---, 'Theater Missile defence and strategic relations with the People's Republic of China', in Ralph Cossa (ed) *Restructuring the US-Japan Alliance: Toward a more equal partnership*, (Washington DC. Center for Strategic and International Studies, 1998).

---, 'On the Armitage Nye Report', *METI*, Tokyo, 17 January 2001.

Green, Michael J., and Patrick M. Cronin (eds), *The U.S.-Japan alliance : past, present, and future*, New York : Council on Foreign Relations Press, 1999.

- Greenwood, Ted, *Making the MIRV: A study of defense decision making*, Cambridge, Ballinger, 1975.
- Gronlond, Lisbeth, *Technical Realities: An analysis of the 2004 deployment of a US national defence system*, Cambridge: Union of Concerned Scientists, 2004.
- Gsponer, Andre, and Jean Pierre Hurni, *ITER: The international thermonuclear experimental reactor and the nuclear weapons proliferation implications of thermonuclear fusion energy systems*, Geneva: Independent Scientific research Institute, 2004.
- Hackett, James, (ed.), *The Military Balance 2010*, Institute for Strategic Studies, London: Routledge, 2010.
- Hanami, Andrew K., *The military might of modern Japan*, Dubuque: Kendall, 1995.
- Hane, Mikiso, *Modern Japan: A Historical Survey*. New York: Westview Press, 2001.
- Hasegawa, Yukihiro, *Nipponkoku no Shotai*, Tokyo: Kōdansha, 2009.
- Havens, Thomas, *Fire Across the Sea and the Vietnam War, 1965-1975*, Princeton: Princeton University press, 1987.
- Heidenkamp, Henrik, John Louth and Trevor Taylor, *The defence Industrial Ecosystem*, London: RUSI, 2011.
- Hein, Laura, *Fueling Growth: The Energy revolution and Economic Policy in Postwar Japan*, Cambridge: Harvard East Asian Monographs, 1990.
- Holmes, James R., and Toshi Yoshiwara, *Chinese Naval Strategy: The turn to Mahan*, New York: Routledge, 2008.
- Hook, Glen D., *Militarization and demilitarization in contemporary Japan*, London: Routledge, 1996.
- Hughes, Christopher W., *Japan's re-emergence as a 'normal military power*, Abingdon: Routledge, 2005.

---, *Japan's Remilitarisation*, New York: Routledge, 2009.

Inoguchi, Takashi, and Jain Purnendra Chandra, eds. *Japanese Foreign Policy Today: Reader*, New York: Palgrave, 2000.

Institute for National Strategic Studies, *The United States and Japan: Advancing toward a Mature Partnership*, Washington, National Defence University, 2000.

Ishida, Miki, *Toward peace: war responsibility, postwar compensation, and peace movements and education in Japan*, New York: iUniverse, 2005.

Ishikuza, Katsumi, 'Japan and UN peace operations', in Christopher P. Hood (ed.), *The Politics of Modern Japan*, New York: Routledge, 2008.

Jansen, Marius B., *The Making of Modern Japan*, Boston: Belknap Press, 2002.

Johnson, Chalmers, *Who Governs Japan: The Rise of the Development State*, New York: W.W. Norton and Company, 1995.

Johnson, Curtis, *Japan - Who governs: The rise of the developmental state*, New York: W.W. Norton and Co. 1995.

Katzenstein, Peter J., *Japan's National Security: Structures, Norms and Policy Responses in a Changing World*, Ithaca: Cornell University, East Asia Program, Cornell East Asia Series, 1993.

---, *Cultural norms and national security: Police and military in postwar Japan*, Ithaca: Cornell University Press, 1996.

---, *Rethinking Japanese Security, Internal and external dimensions*, New York: Routledge, 2008.

Katzentsein, Peter J, and Rudra Sil, 'Rethinking Asian Security: A Case for Analytical Eclecticism,' in J.J. Suh, Peter J. Katzenstein, and Allen Carlson (eds.), *Rethinking Security in East Asia: Identity, Power and Efficiency*, Stanford, Ca.: Stanford University Press, 2004.

- Kawashima, Yutaka, *Japanese foreign policy at the crossroads: Challenges and options for the 21st century*, Washington DC: The Brookings Institute, 2005.
- Keen, David, *Useful enemies: When waging war is more important than winning*, New Haven: Yale University Press, 2012.
- Kennedy, Paul, *The Rise and Fall of the Great Powers*, New York: Random House, 1987.
- Kerbo, Harold, and John A. McKinstry, *Who Rules Japan: The Inner Circles of Economic and Political Power*, New York: Praeger, 1995.
- Kyogoku, Jun'ichi, *Gendai Minshusei to seijigaku*, Tokyo: Iwanami Shoten, 1969.
- LaFeber, Walter, *The Clash*, New York: Norton, 1997.
- Lind, Jennifer, *Sorry States: Apologies in International politics*, New York: Cornell University press, 2008.
- Marra, R.F., And Ostrom C.W. Jr., 'Issues in defence Spending: Plausability and Choice in Soviet Estimates', in A. Mintz (ed), *The Political Economy of Military Spending in the United States*, New York, Routledge, 1992.
- Martin Prosperity Institute, *Creativity and Prosperity: The Global Creativity Index*, Toronto: Martin Prosperity Institute, 2011.
- Maswood, S. Javed, *Japanese Defence: The search for political power*, Singapore, Institue of Southwest Asian Studies, 1990.
- McCargo, Duncan, *Contemporary Japan*, New York: Palgrave, 2004.
- Meeks, P., 'Soft power interests and identity: The future of the US-Japan alliance', in David Arase (ed) *The US-Japan Alliance: Balancing soft and hard power in East Asia* Abingdon: Routledge, 2010.
- Midford, Paul, *Japanese public opinion and the War on Terrorism: Implications for Japan's security strategy*, Washington DC, East West Center, 2006.

---, *Rethinking Japanese public opinion and security*, Stanford: Stanford University Press, 2011.

Mikanagi, Yumiko, *Japan's trade policy: Action or reaction?*, London: Routledge, 1996.

Miyashita, Akihiro, 'Where do Norms come from?' in Sato Yoichiro and Hirata Keiko (eds.) *Norms, Interests and Power in Japanese Foreign Policy*, New York: Palgrave-MacMillan, 2008.

Miyashita, Akitoshi and Sato Yoichiro, *Japanese Foreign Policy in the Asia Pacific*, New York, Palgrave MacMillan, 2001.

Miyashita, Akitoshi, *Limits to power: Asymmetric dependence and Japanese Foreign Aid Policy*, New York: Lexington Books, 2003.

Naka, Norio, *Predicting Outcomes in United States-Japan trade negotiations: The political process of the structural impediments initiative*, New York, Praeger, 1996.

National Academy of Sciences, Missile Defence in Comparison to Other Alternatives, National Academy of Sciences, 2012.

Neill, Alexander, Jonathan Eyal and John Hemmings, *Delivering defence Industrial Change*, London: RUSI, 2008.

NIDS, *NIDS China Security Report*, Tokyo, NIDS, December 2012.

Nye, Joseph, *Bound to lead: the Changing nature of American power*, New York: Basic Books, 1990.

Ōgawa, Kazuhisa, *Jū-yon-sai Kara no Riaru Bōei-ron*, Tokyo: PHP Kengyūjo, 2010.

Oros, Andrew L., *Normalizing Japan: Politics, identity and the evolution of security practice*, Stanford: Stanford University press, 2008

Ota, F, *The US-Japan Alliance in the 21st century: A view of the history and a rationale for its survival*, Folkenstone: Global Oriental, 2006.

Ozawa, Ichirō, *Blueprint for a New Japan: the Rethinking of a Nation*, Tokyo:

Kodansha International, 1994.

P.W. Singer, *Wired for War*, New York: Penguin Press, 2009, 241-243.

Paine, S.C.M., *The Sino-Japanese War of 1894-1895: Perception, Power, and Primacy*.

Cambridge: Cambridge University Press, 2005.

Peng, Guangqian and Yao Youzhi, *The Science of Military Strategy* (Beijing: Military

Science Publishing House, 2005.

Perrin, Noel, *Giving up the gun: Japan's reversion to the sword, 1543-1879*, Boston:

Godine, 1979.

PLA Encyclopedia Committee, *Chinese Military Encyclopedia, Supplemental Volume*

Beijing: Military Science Publishing House, 2002.

Powell, Colin, *My American Journey*, New York, Random House, 1995.

Power, Samantha, *A problem from hell: America and the age of Genocide*, New York:

Basic Books, 2002.

Pyle, Kenneth, *The Japanese Question: Power and Purpose in a new era*, Washington:

AEI Press, 1996.

Pyle, Kenneth B., *Japan Rising*, Cambridge: Public Affairs, 2007.

RAND Corporation, *Japanese Science and Technology Capacity: Expert Opinions and*

Recommendations, RAND, Santa Monica, 2010.

Renwick, Neil, *Japan's alliance politics and defence production*, Oxford: Macmillan,

1995.

Robertson, John R., *Japan meets the world: The birth of a superpower*, Connecticut:

Millbrook Press, 1996.

- Rose, Caroline, 'The textbook issue: Domestic sources of Japan's foreign policy,' in Christopher P. Hood (ed.), *The Politics of Modern Japan*, New York: Routledge, 2008.
- Sakurabayashi, Misa, *Daremo Kattaranakatta Bōei Sangyō*, Tokyo: Namiki Shoubō, 2010.
- Samuels, Richard J., 'How to Succeed without Really Flying: The Japanese Aircraft Industry and Japan's Technology Ideology', in Jeffrey Frankel and Miles Kahler (eds.) *Regionalism and Rivalry: Japan and the United States in Pacific Asia*, Chicago: The University of Chicago Press, 1993.
- , *Rich nation, strong Army: national security and the technological transformation of Japan*, Ithaca: Cornell University Press, 1994.
- , *Securing Japan*, New York: Cornell University Press, 2007.
- Satō, Masaru, *Kokka no Wana*, Tokyo, Shinchōsha, 2005.
- Schencking, J. Charles, *Making Waves: Politics, Propaganda, and the Emergence of the Imperial Japanese Navy, 1868-1922*. Stanford: Stanford University Press, 2005.
- Schaller, Michael, *Altered States*, New York: Oxford University Press, 1997.
- Schiller, Markus, *Characterizing the North Korean Nuclear Threat*, Santa Monica: RAND, 2012.
- Schoppa, Leonard T., *Bargaining with Japan: What American pressure can and cannot do*, New York: Colombia University press, 1997.
- Scobell, Andrew, 'Discourse in 3D: The PLA's evolving doctrine, circa 2009', in Roy Kampenhausen et al (eds) , *The PLA at Home and abroad: Assessing the operational capabilities of China's military*, Carlisle: US Army War College, 2010.

Scoville, Herbert, *MX: Prescription for Disaster*, Cambridge, MIT Press, 1981.

Sebata, Takao, *Japan's defence Policy and Bureaucratic Politics, 1976-2007* New York: University Press of America, 2010.

Shinoda, Tomohito, *Kantei Gaiko: Seiji Ridaashippu no Yuku*, Tokyo: Asahi Shinbunsha, 2004.

Shinoda, Tomohito, 'Japan's top-down policy process to dispatch the SDF to Iraq', in Christopher P. Hood (ed.), *The Politics of Modern Japan*, New York: Routledge, 2008.

Shirk, Susan L., *China: Fragile Superpower*, New York: Oxford University press, 2007.

Shlapak, David A., et al. *A Question of Balance: Political Context and Military aspects of the China Taiwan Dispute*, Santa Monica: RAND, 2009.

Soeya, Yoshihide, 'Japan: Normative constraints versus structural imperatives', in Muthiah Algappa, (ed.), *Asian Security practice: Material and Ideational Influences*, Stanford: Stanford University Press, 1998.

Stowsky, Jay , 'From spin-off to spin-on: Redefining the military's role in technology development', in *Berkeley Roundtable on the International Economy*, Berkeley: US Berkeley, 2005.

Takao, Tsuchiya, *Sangyoushi, Gendai Nihon Bunmeishi, Volume 8*, 1937.

Tamogami, Toshio, *Mizukara no mi ha kaerimizu*, Tokyo: WAC, 2008.

Tanter, Richard, 'With eyes wide shut: Japan, Heisei militarization and the Bush Doctrine', in Melvin Gurtov (ed.), *Confronting the Bush Doctrine: Critical Views from the Asia-Pacific*, New York: RoutledgeCurzon, 2005.

Tatsumi, Yuki, *Japan's National Security Policy Infrastructure*, Washington DC: Henry L Stimson Center, 2008.

- Tutman, Conrad, 'Bakufu Policy 1853-1868', in Najita Tetsuo and J Victor Koschman (eds), *Conflict in modern Japanese history*, Princeton: Princeton University Press, 1982.
- Uchiyama, Y, *Koizumi and Japanese Politics: Reform strategies and leadership style*, London: Routledge, 2010.
- Walt, Stephen M., *The Origin of Alliances*, Ithaca: Cornell University Press, 1987.
- Waltz, Kenneth N., *Theory of International Politics*, Reading: Addison-Wesley, 1979.
- , *Realism and International Politics*, New York: Routledge, 2008.
- Welfield, John, *An empire in Eclipse: Japan in the postwar American alliance system*, London: The Athlone Press, 1988.
- Westwood, J.N., *Russia against Japan 1904-05*, London: MacMillan, 1986.
- White, John Albert, *The Diplomacy of the Russo-Japanese War*, Princeton: Princeton University Press, 1964.
- Yamamoto, Mari, *Grassroots pacifism in post-war Japan the rebirth of a nation*, London: Routledge, 2004.
- Yasutomo, D.T., *Japanese Policymaking: The Politics behind Politics*, Westport: Prager, 1995.
- Yuzawa, Takeshi, *Japan's security policy and the ASEAN Regional Forum: the search for multilateral security in the Asia-Pacific*, Routledge, London, 2007.
- Zhao, Xijun, *Intimidation warfare: A comprehensive discussion of missile deterrence*, Beijing: National Defence University Press, 2005.
- Zheng, Wehan, *Categories of Military Science*, in *Chinese views of Future Warfare*, Micahel Pilsbury, ed., Washington DC: National Defence UP, 1997.

Journal Articles

Agnell, William, 'Offensive versus defensive: Military strategy and alternate defence', *Journal of Peace Research*, 24 (1), 1987.

Akaha, Tsuneo, 'Japan's Comprehensive Security Policy: A New East Asian Environment', *Asian Survey*, Vol. 31, No. 4, 1991.

Allison, Graham T., and Morton H. Halperin, 'Bureaucratic Politics: A Paradigm and Some Policy Implications', *World Politics*, Vol. 24, Spring 1972.

Anagboso, M., and A. Spence, 'Measuring defence', *Economic and Labour Market Review*, Vol. 3. No 1, January 2009.

Angel, Robert, 'Prime Ministerial leadership in Japan: Recent Changes in personal style and Administrative Organization', *Pacific Affairs*, Vol. 61, No. 4, Winter 1989.

Arase, David, 'Japan the active state? Security Policy after 9/11', *Asian Survey*, Vol. 47, No. 4, 2007.

Auer, James E., 'Article Nine of Japan's Constitution: From Renunciation of Armed Force 'Forever' to the Third Largest defence Budget in the World,' *Law and Contemporary Problems* 53 (1990).

Axe, David, 'Counterstrike', *Missiles Defence*, Vol. 1, No. 2, 1 March 2007.

Bae, Jong-yun, 'South Korean strategic thinking toward North Korea: The evolution of the engagement policy and its impact upon US-ROK relations', *Asian Survey*, Vol. 50, No. 2, March 2010.

Barkley, Daniel, 'Ballistic missile proliferation: An empirical investigation', *The Journal of Conflict Resolution*, Vol. 52, No. 3, June 2008.

Barnett, Thomas P.M., 'Big war thinking in a small-war era', *China Security*, Vol. 6, No. 3. 2010.

Beck, Sunho 'Top defence budgets Asia-Pacific', *Defence Technology International*, Vol. 3, No. 1, January 2009.

Bennett, Bruce W., and Jennifer Lind, 'The collapse of North Korea: Military, missions and requirements', *International Security*, Vol. 36, No. 2, Fall 2011.

Berger, Thomas U., 'From sword to Chrysanthemum: Japan's culture of Anti-militarism', *International Security*, Vol. 17, No. 4, Spring 1993.

Berkofsky, Axel, 'Japanese defence and security policy and the national defence guidelines (NDPG): Radical change or business as usual', *ISPI Working Paper No. 45*, February 2012

Betts, Richard K., 'Conventional Strategy: New critics, old choices', *International Security*, 7 (4), 1983.

---, 'Is strategy an Illusion?' *International Security*, 25 (2), 2000.

Bitzinger, Richard A., 'China's defence technology and industrial base in a regional context: arms manufacturing in Asia', *The Journal of Strategic Studies*, Vol. 34, No. 3, June 2011.

---, 'Will the US pivot trigger a new regional arms race?', *Global Asia*, Vol. 7, No. 4, December 2012.

Blank, Stephen, 'Turning a new leaf in relations: Russia's renewed arms sales to China', *China Brief*, Vol. 11, No. 2, 28 January 2011.

Blasko, Dennis J., 'Technology determines tactics: The relationship between technology and doctrine in Chinese military thinking', *The Journal of Strategic Studies*, Vol. 34, No. 3, June 2011.

Blumenstein, William. H., 'Arms and Ammunition in Japan', *The North American Review*, 179 (572), July 1904.

- Brady, Ryan R., and Victoria Greenfield, "Competing explanations of US defence Industry Consolidation in the 1990s and their policy implications", *Contemporary Economic Policy*, Vol 28, No 2, April 2010.
- Butt, Yousaf , and Theodore Postol, Upsetting the reset: The technical basis of Russian concern over US missile defense, Federation of American Scientists, September 2011.
- Carlisle, L.E., 'The changing political economy of Japan's economic relationship with Russia: The rise and fall of Seiei Fukabun', *Pacific Affairs*, Vol. 67, 1994.
- Chai, Sun-ki, 'Entrenching the Yoshida doctrine: Three techniques for institutionalization', *International Organization*, Vol. 51, No. 3, Summer 1997.
- Chase, Michael S., 'Chinese nuclear force modernization: How much is enough?', *China Brief*, Vol. 12, No. 8, 12 April 2012.
- Cheng, Dean, 'Chinese views on deterrence', *National defence University Joint Force Quarterly*, No. 60, 1st Quarter 2011.
- Cheung, Tai Ming, 'Dragon on the horizon: Chinese defence industrial renaissance', *The Journal of Strategic Studies*, Vol. 32, No. 1, February 2009.
- , 'China's Emergence as a defence technological Power', *The Journal of Strategic Studies*, Vol. 34, No. 3, June 2011.
- Christensen, Thomas J., and Jack Snyder, 'Chain gangs and passed bucks: Predicting Alliance', *International Security*, Vol 9, No. 1.
- Cooney, Kevin J., 'Nissan Syndrome and Structural reform in Japan: Will it take a Gaugin?' *Asian Perspective*, Vol. 28, No. 2, 2004.
- Cruz de Castro, Renato, 'Exploring a 21st century Japan-Philippine security relationship', *Asian Survey*, Vol. 49, No. 4, July 2009.

David Potter and Sudo Sueo, 'Japanese Foreign policy: No longer reactive?' *Political Studies Review*, 1(3), September, 2003.

Dian, Matteo, 'The transformation of the US Japan alliance and the pivot towards the Asia Pacific region', Paper at National Convention of International Relations of the Italian Society of Political Science, Trento, 13 July 2012

Dower, John W., 'The useful war, Showa: The Japan of Hirohito', *Daedalus*, 119, Summer 1990.

Eichenberg, R.C., and Stoll R.J. 'Representing defence: Democratic control of the defence budget in the United States and Western Europe', *Journal of Conflict Resolution*, Vol. 47, No. 4, 2003.

Eldridge, Robert D., and Ayako Kusunoki, 'To base or not to base? Yoshida Shigeru, the Ikeda mission and post-Treaty Japanese security conceptions', *The Kobe Law Review*, No. 33. 1999.

Evans, David C., and Mark R. Peattie, *Kaigun: Strategy, Tactics and Technology of the Imperial Japanese Navy 1887-1941*. Annapolis: Naval Institute Press, 1997.

Evron, Yovram, 'China's military procurement approach in the early 21st century', *The Journal of Strategic Studies*, Vol. 35, No. 1, February 2011.

Fels, Enrico, 'Will the Eagle strangle the Dragon: An assessment of the US challenges towards China's nuclear deterrence', *Trends in East Asia*, Analysis No. 20, February 2008.

Ferguson, James, 'Al Qaeda's Threat To Japan: Tokyo's Wake Up Call To The War On Terrorism', *Terrorism Monitor*, Vol. 2 No. 2, January 2004.

Fordham, Benjamin, 'A very sharp sword: The influence of military capabilities on American decisions to use force', *The Journal of Conflict Resolution*, Vol. 48, No. 3, October 2004.

Forman, Connor, 'China: A threat assessment through the lens of strategic missiles',
Global Security Studies, Vol. 1, No. 3, Fall 2010.

Fravel, M. Taylor, 'China's search for military power', *Washington Quarterly*, Vol. 31,
No. 3, Summer 2008.

Fruhstuck, Sabine, and Eyal Ben-Ari, "Now we show it all! Normalization and the
management of violence in Japan's armed forces", *Journal of Japanese Studies*,
Vol. 28. No. 1, Winter 2002.

Glaser, Charles L., 'Realists as optimists: Cooperation as self-help', *International
Security*, Vol. 19, No. 3, Winter 1994.

Goure, Daniel, 'A new Kind of Air carrier Wing', *Proceedings*, US Naval Institute, 23
September 2012.

Gray, Gavan Patrick, 'Japan's passive support for US Wars: Examining the case for
humanitarian intervention in Libya and Syria', *Ritsumeikan International Affairs*,
Vol. 10, November 2011.

Gray, Robert C., 'Learning from History: Case studies of the weapons acquisition
process', *World Politics*, 31 (3) 1979.

Grieco, J.M., 'Realism and regionalism: American power and German and Japanese
institutional strategies during and after the Cold War', *Paper for the Annual
meeting of the International Studies Association*, San Diego, April 17 1996.

Hagström, Linus, and Jon Williamsson, "“Remilitarization,” Really? Assessing Change
in Japanese Foreign Security Policy', *Asian Security*, Volume 5, Issue 3, 2009.

Hirata, Keiko, 'Japan as a Reactive State?: Analyzing the Case of Japan-Vietnam
Relations', *Japanese Studies* 18: 2, (1998).

Holden, Jack Edward, 'What factors influenced Japan's decision to dispatch its self-
defence forces to Iraq in 2004', *Polis*, Vol. 6, Winter 2011.

Holmes, James R., and Toshi Yoshihara, 'Asymmetric Warfare, American Style',
Proceedings, April 2012.

Hoyler, Marshall, 'Chain's anti-access ballistic missiles and US active defence', *Naval War College Review*, Vol. 63, No. 4, Autumn 2010.

Hughes, Christopher W., 'Super-sizing the DPRK threat: Japan's evolving military posture and North Korea', *Asian Survey*, Vol. 49, No. 2, 2009.

---, 'The Slow Death of Japanese techno-nationalism? Emerging comparative lesson's for China's defence production', *The Journal of Strategic Studies*, Vol. 34, No. 3, June 2011.

Huntley, Wade L., 'US policy toward North Korea in strategic context', *Asian Survey*, Vol. 47 No. 3, June 2007.

Inoguchi, Takeshi, 'Are there any theories of international relations in Japan?', *International Relations of the Asia Pacific*, Vol. 7, No. 3, 2007.

Ishibashi, Natsutyo, 'The dispatch of Japans Self-defence forces to Iraq: Public opinion, elections and foreign policy', *Asian Survey*, Vol. 47, No. 5, September 2007.

Izumikawa, Yasuhiro, 'Normative and realist constraints on Japan's security policy', *International Security*, Vol. 35, No. 2, Fall 2010.

'Japan's 2011 megaquake reactivated dormant faults', *New Scientist*, 24th February 2012.

Jervis, Robert, 'The Political Effects of Nuclear Weapons: A comment', *International Security*, Vol. 13, No. 2, 1988.

Johnson-Freese, Joan, and Thomas Nichols, 'Space, stability and nuclear strategy: rethinking missile defence', *China Security*, Vol. 6, No. 2, 2010.

- Katada, S.N., 'Two Aid Hegemons: Japanese-American Interactions and Aid Allocations to Latin America and the Caribbean,' *World Development*, Vol. 25, No. 6, 1997.
- Kawasaki, Tsuyoshi, 'Postclassical realism and Japanese security policy', *Pacific Review*, Vol. 14, No. 2, June 2001.
- Kazui, Tashiro, . 'Foreign Relations During the Edo Period: Sakoku Reexamined', *Journal of Japanese Studies*. Vol. 8, No. 2, Summer 1982.
- Kerr, Richard A., 'The Earthquake that will eat Tokyo', *Science*, Vol. 315, No. 5808, January 2007.
- , 'More megaquakes on the way? That depends on your statistics', *Science*, Vol. 332, No. 6028, 22 April 2011.
- , 'Megaquake heightened the risk to Tokyo', *Science*, Vol. 334, No. 6063, 23 December 2011.
- Kitaoka, Shin'ichi, "Army as Bureaucracy: Japanese Militarism Revisited," *Journal of Military History*, Special Issue No. 57, October 1993.
- Kline, Jeffrey E., and Wayne P. Hughes, 'Between peace and the air-sea battle', *Naval War College Review*, Vol. 65, No. 4, Autumn 2012.
- Koda, Yoji, 'A new carrier race? Strategy, Force Planning, and JS Hyuga', *Naval War College Review*, Vol. 64, no. 3. Summer 2011.
- , 'A Japanese perspective on China's rise as a naval power', *Australia Sea Power Center*, Working Paper No. 21, 2012.
- , 'Perspectives on the Japanese Maritime Self defence Force', *Australia Sea Power Center*, Working Paper No. 21, 2012.
- Kuboniwa, Keiichiro, 'Civilian control of military shaken by uniformed leaders', *Japan Economic Journal*, 31 May 1986.

Kubota, Yukari, 'Japan's New Strategy as an Arms Exporter: Revising the Three Principles on Arms Exports', *RIPS Policy Perspectives* No. 7, 2008.

Levite, Ariel, 'Never say never again: Nuclear reversal revisited', *International Security*, Vol. 27, No. 3, Winter 2002.

Lieberman, Robert C., 'Ideas, Institutions and Political Order: Explaining Political Change', *American Political Science Review*, Vol. 96, No. 4, December 2002.

Lind, Jennifer M., 'Pacifism or passing the buck? Testing theories of Japanese security policy', *International Security*, Vol. 29, No. 1, Summer 2004.

MacGregor, Douglas, and Young S. Kim, 'Without ground forces U.S. cannot counter Chinese aggression', *Armed Forces Journal*, April 2012.

Mahnken, Thomas G., 'China's anti-access strategy in historical and theoretical perspective', *The Journal of Strategic Studies*, Vol. 34, No. 3, June 2011.

Maslow, A.H., 'A theory of human motivation', *Psychological Review*, 50(4), 1943.

McCormack, Gavan, 'Deception and Diplomacy: The US, Japan, and Okinawa', *The Asia-Pacific Journal*, Vol 9, Issue 21 No 1, May 23, 2011.

Mearsheimer, John J., 'Back to the future: Instability in Europe after the Cold War', *International Security*, Vol. 15, 1990.

Meng, Lai Yew, 'Resurgent nationalism and changing security perceptions in contemporary Japan-China Relations', *IPEDR*, Vol. 20, 2001..

Metraux, Daniel A., 'Religion, politics and constitutional reform in Japan: How the Soka Gakkai and Komeito have thwarted conservative attempts to revise the 1947 constitution', *Southeast Review of Asian Studies*, No. 1, January 2007.

Midford, Paul, 'Japan's response to terror: Dispatching the SDF to the Arabian Sea', *Asian Survey*, Vol. 43, No. 2, 2003.

Miyashita, Akitoshi, Gaiatsu and Japan's foreign aid: Rethinking the reactive-proactive debate', *International Studies Quarterly*, Vol. 43, No. 4, December 1999.

Mochizuki, M., and M. O'Hanlon, 'A Liberal Vision for the U.S.-Japanese Alliance', *Survival: Global Politics and Strategy*, Vol. 40, No. 2, 1998.

Mulgan, Aurelia George, 'Japan's 'UnWestminster' System,' *Government and Opposition*, Vol. 38, No. 1, January 2003.

---, 'Japan's Defence Dilemma', *Security Challenges*, Vol. 1, No. 1, 2005.

Nanjo, K.Z., et al, 'Predictability study on the aftershock sequence following the 2011 Tohoku-Oki Japan earthquake: first results', *Geophysical Journal International*, Vol. 191, July 2012.

Normile, Dennis, and Richard Kerr, 'A disaster and a warning - but of what?' *Science*, Vol. 334, No. 6063, 23 December 2011.

O'Neil, Andrew, 'Extended nuclear deterrence in East Asia: Redundant or resurgent?', *International Affairs*, Vol. 87, No. 6, 2011.

Olimpo, Guido, 'Japan: A target for Al Qaeda?', *Terrorism Monitor*, Vol. 4, No. 5, March 2006.

Panton, Michael A., 'Politics Practice and pacifism: Revising Article 9 of the Japanese constitution', *Asian-Pacific Law and Policy Journal*, Vol. 11, No. 2, 2010.

Papayoanou, Paul A., 'Interdependence, Institutions, and the Balance of Power: Britain, Germany, and World War I', *International Security*, 20 (4) Spring 1996.

Posen, Barry, 'Command of the Commons, The military foundation of US Hegemony', *International Security*, Vol. 28. No. 1, Summer 2003.

Powell, Robert, 'Nuclear Deterrence Theory, Nuclear proliferation and National Missile defence', *International Security*, Vol. 27, No. 4, Spring 2003.

- Pradun, Vitaliy O., 'From Bottle Rockets to Lightning Bolts: China's missile revolution and the PLA strategy against US military intervention', *Naval War College Review*, Vol. 64, No. 2, Spring 2011.
- Quackenbush, Stephen L., 'National Missile defence and deterrence', *Political Research Quarterly*, Vol. 59, No. 4, December 2006.
- , 'General deterrence and international conflict: Testing perfect deterrence theory', *International Interactions*, No. 36, 2010.
- Rangsimaporn, Paradorn, 'Russia's debate on military technological cooperation with China: From Yeltsin to Putin', *Asian Survey*, Vol. 46, No. 3, May 2006.
- Rapp, William E., 'Past its prime? The future of the US-Japan alliance', *Parameters*, Summer 2004.
- 'Rethinking megaquakes', *New Scientist*, vol. 210, No. 2809, 23 April 2011.
- Richardson, David J. 'US-Japan defence Cooperation: Possibilities for regional Stability', *Parameters*, Summer 2000.
- Rikki, Kersten, 'Japanese Security Policy formation: assessing the Koizumi revolution', *Australian Journal of International Affairs*, February 2011, Vol. 65, No. 1.
- Robinson, David, 'Why the West should discourage Japanese military expansion', *Journal of Asia Pacific Studies*, Vol. 1, No. 2, 2010.
- Roosevelt, Ann, 'Navy concentrates on Midcourse, terminal phase missile defence', *Defence Daily*, Vol. 225, No. 53, 12 September 2012
- Rosenbluth, F.M., 'Messy Politics but Healthier Democracy', *Asian Survey*, Vol. 51, No. 1, January 2011.
- Ross, Robert S., 'China's Naval Nationalism: Sources, prospects and the US response', *International Security*, Vol. 34, No. 2, Fall 2009.
- Roy, Denny, 'Parsing Pyongyang's strategy', *Survival*, Vol. 52, No. 2, February 2010.

Rozman, Gilbert, 'Japan's quest for great power identity,' *Orbis*, December 22, 2001.

---, 'Japan's North Korea Initiative and US-Japanese Relations', *Orbis*, Foreign Policy Research Institute, Spring 2003.

Sakai, K, 'Stories of our boys" but for whom? The Japanese media's coverage of the SDF in Iraq', *International Journal of Contemporary Iraq Studies*, Vol. 1, No. 3, 2007.

Samuels, Richard J. 'Reinventing security: Japan since Meiji', *Daedalus*, Vol. 120, No. 4, Fall 1991.

---, 'Japan's Goldilocks Strategy', *Washington Quarterly*, Vol. 29, No. 4, Autumn, 2006.

Schaub, Gary Jr., 'When is deterrence necessary? Gauging adversary intent', *Strategic Studies Quarterly*, Winter 2009.

Schoppa, Leonard J., 'Two level games and bargaining outcomes: Why Gaiatsu succeeds in Japan in some cases but not others', *International Organization*, Vol. 47, No. 3, Summer 1993.

Schweller, Randall L., 'Bandwagoning for Profit: Bringing the revisionist state back in', *International Security*, Vol. 19, No. 1, Summer 1994. 72-107.

Sebata, Takao, *Japan's Defence Policy and Bureaucratic Politics, 1976-2007* (New York, University Press of America, 2010).

Singh, Bhubbindar, 'Asean's perception of Japan: Change and continuity', *Asian Survey*, Vol. 42, No. 2. March 2002.

Snyder, Glenn H., 'The Security Dilemma in alliance Politics', *World Politics*, Vol. 36, No. 4, Jul., 1984.

Soderberg, Marie, 'Can Japanese foreign aid to North Korea create peace and stability', *Pacific Affairs*, Vol. 79, No. 3, Fall 2006.

- Soeya, Yoshihide, 'Diplomacy for Japan as a Middle Power', *Japan Echo*, Vol. 35, No. 2, April 2008.
- Sohn, Yul, 'Japan's new regionalism: China shock, values and the East Asian Community', *Asian Survey*, Vol. 50, No. 3, May 2010.
- Stengle, Frank A., 'The reluctant peacekeeper: Japan's ambivalent stance on UN peace operations', *Japan Aktuell*, No. 1, 2008.
- Sun, Xiangli, 'Analysis of China's nuclear strategy', *China Security*, No. 1, Autumn, 2005.
- Suchman, Mark and Dana Eyre 'Military Procurement as Rational Myth', *Sociological Forum*, 7 (1), 1992.
- Takao, Yasuo, 'Democratic representation in Japanese defence spending: Does public sentiment really matter?' *Asian Social Science*, Vol. 7, No. 3, March 2011.
- Takahashi, Sugio, 'Transformation of Japans defence Industry? Assessing the Impact of the Revolution in Military Affairs', *Security Challenges*, 4 (4), Summer 2008.
- Trachtenberg, Marc, 'The influence of nuclear weapons in the Cuban Missile Crisis', *International Security*, Vol. 10, No. 1, Summer 1985.
- Tsuroka, Michito, 'Japan-Europe Security Cooperation: How to use NATO and the EU', *Kenkyusho Kiyo*, Vol. 13, No. 1, October 2010.
- Tuman, John P., 'The disbursement pattern of Japanese foreign aid: A reappraisal', *Journal of East Asian Studies*, Vol. 9, 2009.
- Twomey, Christopher P., 'Japan a circumscribed balancer: Building on defensive realism to make predictions about East Asian security', *Security Studies*, Vol. 9, No. 4, Summer 2000.
- Urayama, Kori J. 'Chinese perspectives on Theater missile defence: Policy Implications for Japan', *Asian Survey*, Vol. 40, No. 4, July 2000.

- Van Evera, Stephen, 'The Cult of the Offensive and the Origins of the First World War', *International Security*, 9, 1984.
- Willcock, Hiroko, 'The political dissent of a senior General: Tamogami Toshio's nationalist thought and a history controversy', *Asia Politics and Policy*, Vol. 3, No. 1, 2011.
- Wishik, Anton Lee, 'An antiaccess approximation: The PLA's active strategic counterattacks on exterior lines', *China Security*, Issue 19. 2011.
- Yamamura, Kozo, 'Success illgotten? The role of Meiji militarism in Japan's technological progress', *The Journal of Economic History*, Vol. 37, No. 1, March 1977.
- Yang, Yi, 'Navigating stormy waters: The Sino-American security dilemma at sea', *China Security*, Vol. 6, No. 3, 2010.
- Yao, Yunzhu, 'Chinese nuclear policy and the future of minimum deterrence', *Strategic Insights*, Vol. 4. No. 9, September 2005.
- Yasuaki, C, 'Insights into US-Japan relations on the eve of the Iraq War: Dilemmas over showing the flag', *Asian Survey*, Vol. 45, No. 6, 2005.
- Yoshihara, Toshi, 'Chinese Missile Strategy and the US Naval Presence in Japan', *Naval War College Review*, Vol. 63, No. 3, Summer 2010.
- Zagare, Frank C, 'Reconciling Rationality with Deterrence', *Journal of Theoretical Politics*, Vol. 16, No. 2, 2004.
- Zhang, Baohui, 'US missile defence and China's nuclear posture: changing dynamics of an offence-defence arms race', *International Affairs*, Vol. 87, No. 3, 2011.
- Zhang, Hui, 'How US restraint can keep China's nuclear arsenal small', *Bulletin of the Atomic Scientists*, Vol 68, No. 4, 2012.

Zhang, Yunzhuang, 'China's military procurement and its operational implications: A response to Yoram Evron', *The Journal of Strategic Studies*, Vol. 35, No. 6, December 2012.

Newspaper and Magazines Articles, and Policy Papers

'70% chance of big Tokyo earthquake within 4 years', *The Yomiuri Shimbun*, 24 January 2012.

'A new phase for the US-Japan Alliance: The Japan US Alliance toward 2020', *IIPS*, September 2009.

'Abe administration changes basic concept in approving export of weapon parts', *Asahi Shimbun*, 2 March 2013.

'Abe proposes national security council to deal with crises', *AFP*, 27 January 2013.

Abe, Naoki, 'Japan's shrinking economy', *The Brookings Institute*, 12 January 2010.

'Abe: China radar-lock on Japan ship 'dangerous'', *AFP*, 6 February 2013.

A-bombings couldn't be helped: Kyuma", *Japan Times*, 1 July 2007.

Aboulafia, Richard, 'Japan's military aircraft slump', *Aerospace America*, August 2006.

Ahmad, Humza, 'F35 fighter brings Japan multiple benefits', *Japan Times*, 22 December 2011.

Albon, Christopher R., 'Why Japan Does Not Have Hospital Ships', *Conflict Health*, 12 May 2010.

'An export ban worth keeping', *Japan Times*, 15th February 2013.

'Army inducts new regiment of BrahMos', *Times of India*, 10 November 2011.

Asai, Heigo, 'Boei seisan keikaku o suishin suru mono', *Chuuou Kouron*, April 1953.

'Attack mandate valid', *Japan Times*, March 18, 2003.

'Australia, Japan sign military agreement', *Sydney Morning Herald*, 20 May 2010.

‘Aviation and aerospace innovation invigorating industry, survey finds’, *Aviation Daily*, 27 October 2009.

Axe, David, ‘China Builds Fleet of Small Warships While U.S. Drifts’, *Wired.com*, 4 August 2011.

---, ‘Why the US wants a new bomber’, *The Diplomat*, 6 May 2012.

---, ‘7 ways America’s stealth armada stays off the radar’, *Wired*, 13 December 2012.

‘BAE’s New Railgun Firing for First Time’, *Defence Tech*, 28 February 2012,

Baerwald, Hans, ‘The Occupation of Japan as an exercise in regime change: Reflections after fifty years by a participant’, *PRI Occasional Paper No. 29*, February 2003.

Barry, Sion, ‘Change needed in governments buying methods’, *The Western Mail*, 29 August 2007.

Basu Das, Sanchita, ‘ASEA: A united front to tackle the South China Sea issue’, *East Asian Forum*, 13 May 2012.

Batchimeg, Migheddorj, ‘Mongolia’s DPRK Policy: Engaging North Korea’, *Asian Survey*, Vol. 46, No. 2, March 2006, 275-297.

Beck, Sunho, ‘Power play’, *Defence Technology International*, 1 November 2008.

‘Beijing municipal government: Tokyo plays up military theory’, *China Business News*, 26 July 2012.

Bennett, Andrew, and Cory S. Julie, ‘The US, China and preparing for North Korea’s demise’, *CSIS*, 31 January 2011.

Bergman, Justin, ‘Setting Rivalry Aside: China Responds to Japan's Plight’, *Time*, 14 March 2011.

Berkofsky, Axel, ‘Koizumi: US ties beat out public opinion’, *Asia Times*, 20 March 2003.

Berthiaume, Lee, 'F-35 design problems make night flying impossible, increase risk of being shot down, U.S. pilots warn', *National Post*, 6 March 2013.

Betigeri, Aari, 'As China Eyes Indian Ocean, Japan and India Pair Up on defence', *New York Times*, 27 July 2012.

'Bid-rigging at the ASDF', *Asahi Shimbun*, 27 March 2010.

Branigan, Tania, "China knife attack and explosions leave several dead" *The Guardian*, 31 July 2011.

Broad, William J., 'Antimissile testing is rigged to hide a flaw, critics say', *New York Times*, 9 June 2000.

Burns, Robert, 'Spy satellite shootdown hinges on tricky factors', *AP*, 20 February 2008.

Butt, Yousaf, 'Billions for Missile defence, Not a Dime for Common Sense', *Foreign Policy*, 10 June, 2011.

Capaccio, Tony, 'F-22 Jet Is 'Expensive Corroding Hangar Queen,' McCain Says', *Bloomberg*, 19 December 2011.

Carpenter, Ted Galen, 'The Pentagon's worried view of China', *CATO Commentary*, 30 August 2010.

Chin, Josh, 'Wukan Elections the Spark to Set the Prairie Ablaze?' *Wall Street Journal*, 1 February 2012.

'China aligns with Japan on Piracy Patrols', *AP*, 3 July 2012.

'China scrambles jets to new air-defence zone', *Reuters*, 29th November 2013.

'China should establish Diaoyutai town: PLA Luo Yuan', *China Times*, 1 November 2012.

'China slams Japan over separatist meeting', *Xinhua*, 14 May, 2012.

'China's military a global concern: Japan', *India Today*, 17 December 2010.

‘China-Philippine confrontation a warning for Senkakus’, *Daily Yomiuri*, 25 May 2012.

‘China's peaceful development’, *Xinhua*, 6 September 2011.

Choate, Allen, 'Japan Gets New Prime Minister, but Same Foreign Policy Challenges Remain', In Asia, *The Asia Foundation*, 9 June, 2010.

‘Choosing next fighter jet a balancing act’, *Nikkei*, 31 October 2011.

Cockburn, Patrick, 'US finally ends Vietnam embargo', *The Independent*, 4 February 1994.

Cohen, Jeff, and Norman Solomon, ‘Jimmy Carter And Human Rights: Behind The Media Myth’, *FAIR*, 21 September 1994.

Collina, Tom Z., ‘Report critiques U.S missile defence’, *Arms Control Today*, October 2012.

'Concentration in the arms industry', *SIPRI*. 30 September 2011.

Coyne, Andrew, ‘Peeling back the layers of misconduct in the F-35 fiasco.’ *National Post*, 4 April 2012.

Dawson, Chester, 'Japan's Next Stage of Military Expansion: Drones?' *Wall Street Journal*. 15 November 2010.

‘Defence Agency to boost uniformed officers authority’, *Japan Economic Newswire*, 25 November 2005.

‘Defence outline to look at possible lifting of arms export ban’, *Kyōdō News*, 16th December 2010.

‘Details of new Japanese Helicopter Destroyer’, *Forecast International*, 21 June 2010.

‘DF-41: China's answer to the US BMD efforts’, *Institute for Defence Studies and Analysis*, 15 November 2012.

'Digging the right hole? Japan, China and rare earth metals', *Japan Foreign Policy Observatory*, 30 June 2012.

Doi, Ayako, 'Japan's Emerging Security Role in East Asia', Panel Discussion at The Brookings Institution, 14 June 2005.

Dyer, J.E., 'Peace in our time: Russian air defence to Kuril Islands', *Commentary*, 15 February 2011.

'Effective Measures Must Be Taken', *Sankei Shimbun*, 2 September 1998;

Erdbrink, Thomas, 'Nonaligned Nations Back Iran's Nuclear Bid, but Not Syria', *New York Times*, 31 August 2012.

'F-3 Shinshin R&D cost estimated at \$5.9 ~ 9.4 billion, demonstrator flying in 2015', *Nikkei*, 25 August 2010.

Fabey, Michael, 'Missile defence worries ignite missile procurement', *Aerospace and Defence Report*, Vol. 238, No. 61, 24 June 2011.

Fackler, Martin, 'Japan summons envoy to Russia over Kurile Islands dispute', *New York Times*, 2nd November 2010.

---, 'Japan Is Flexing Its Military Muscle to Counter a Rising China', *New York Times*, 26 November 2012.

---, 'In an answer to China in the Pacific, Japan flexes military muscle', *New York Times*, 27 November 2012.

---, 'Japan Shifts From Pacifism as Anxiety in Region Rises', *New York Times*, 1 April 2013.

Farley, Robert, 'Neocons salivating over their next great exaggerated threat: electromagnetic pulse attack', *Alternet*, 22 October 2009.

'Fight terrorism together', *Daily Yomiuri*, 22 August 1998.

Fitzpatrick, Mark, 'North Korean Security Challenges: A net assessment', *ISIS*, 2011.

Flake, Gordon, speaking at the 'Soft Power in East Asia' seminar at The Brookings Institution in Washington DC, 17 June 2008.

Ford, Peter, 'China's sympathetic response to Japan's crisis eases tensions', *Christian Science Monitor*, 4 April 2011.

'France and Japan to work together on development of military equipment'. *AFP*, 8th June 2013.

Friedman, Thomas L., 'Baker asks Japan to broaden role', *New York Times*, 12 November 1991.

---, 'Who's crazy here?' *The New York Times*, 15 May 2001.

Fulhum, David A., 'Japan juggles on', *Aviation Week and Space Technology*, Vol. 172, No. 22, July 2010.

Funabashi, Yoichi, 'Japan-China relations stand at ground-zero', *Asahi Shimbun*, 20th October 2010.

Gaouette, Nicole, 'In Japan loose lips on nukes lose politician his job', *Christian Science Monitor*, 26 October 1999.

'Gates: North Korea will pose direct threat to US', *AP*, 11 January 2011.

Gertz, Bill, 'Game of Drones: China stepping up drone deployment', *Washington Free Beacon*, 26 March 2013.

Ghosh, Palash R., 'North Korea: Huge military, but small threat', *International Business Times*, 21 December 2011.

Glaser, Charles, 'Will China's rise lead to war?' *Foreign Affairs*, March 2011.

Glionna, John M., 'Tensions between China, Japan escalate', *The LA Times*, 23rd September 2010.

'Govt FX project at standstill', *Kyōdō News*, 3rd August 2010.

'Govt FX project at standstill', *Kyōdō News*, 3rd August 2010.

Graham, Euan, *Japan's Sea Lane Security: A Matter of Life and Death?*, (London: Routledge, 2005).

Green, Michael J., 'Japan Is Back: Why Tokyo's New Assertiveness Is Good for Washington', *Foreign Affairs*, March 2007.

Green, Michael, David Bertau et al, 'US Force Posture Strategy in the Asia Pacific region', *CSIS*, June 2012.

Grevatt, Jon, 'LM offers F35 Line to Japan as sweetener', *Jane's Defence Weekly*, 15 June 2011.

Haddick, Robert, 'This week at war: An arms race America can't win', *Foreign Policy*, 8 June 2012.

---, 'Shipping out: Are aircraft carriers becoming obsolete', *Foreign Policy*, 31 August 2012.

Harden, Blaine, 'North Korea's extreme makeover', *Foreign Policy*, 26 July 2012.

Hasegawa, Kyōko, 'France, Japan to jointly develop military hardware', *AFP*, 7 June 2013.

'Hatoyama govt strayed', *Yomiuri Shimbun*, 16 May 2012.

'Hatoyama's foolish trip to Iran hurt national interests', *Yomiuri Shimbun*, 10 April 2012.

Heginbotham, Eric, 'Raising the bar on the military: Is Japan ready?', *International Herald Tribune*, 19 December 2003.

Helm, Leslie, 'Japan Close to Resuming Aid to Vietnam; Embargo Could Be Hurt', *LA Times*, 30 October 1992.

Hille, Kathrin, 'Tense mood prevails after Xinjiang attack', *Financial Times*, 21 July 2011.

Hirokawa, Takashi, 'Noda Ally Calls on Japan defence Chief to Resign', *Bloomberg*, 6 December 2011.

Hiwatari, Yumi, 'Japanese defence strategy for the 21st Century', *CIS*, 19 October 2005.

Holmes, James, 'Top 5 ways to upgrade the US Japan alliance', *CNN World*, 26th November 2012.

Holmes, James, and Toshi Yoshihara, 'China's New Undersea Deterrent: Strategy, Doctrine, and Capabilities', *Joint Force Quarterly*, Number 50, 3rd quarter 2008.

---, 'The master plan: China's new guided-missile destroyer', *The Diplomat*, 4 September 2012.

Hornung, Jeffrey W., 'How the F-35 may hurt US-Japan ties', *The Diplomat*, 5 April 2012.

Hughes, Christopher, in 'Japan officially selects the F35', *The Diplomat*, 20 December 2011.

Humber, Yuriy, 'Japan must stop forecasting big Tokyo quake as models flawed', *Bloomberg*, 14 April 2011.

Hwang, Balbina, 'Japan's Troop Dispatch to Iraq: The End of Checkbook Diplomacy', *Heritage Foundation*, February 9, 2004.

'Indian Army demands more missile units', *BrahMos Aerospace*, 27 January 2010.

'Ishiba takes shot at SDF weapons curb', *Jiji*, 27 January 2013.

Ishiguro, Rie, 'Japan quakes economic impact worse than first feared', *Reuters*, 12 April 2011.

'Ishihara: Life respecting US no match in war against China', *Asahi Shimbun*, ' 5 November 2005.

Izuka, Keiko, 'Three Keys to Understanding Japan's New Diplomacy', *Brookings Institution*, 16 October 2009.

J. Ryall, 'Britain and Japan to agree lucrative defence deal,' *The Telegraph*, 4th April 2010.

Jaffe, Greg, 'Model for future war fans tensions with China and inside Pentagon', *Washington Post*, 2 August 2012.

Jakobson, Linda, 'How Involved Is Xi Jinping in the Diaoyu Crisis?', *The Diplomat*, 8 February 2013.

'Japan awards jet fighter contract to Lockheed Martin', *Bloomberg*, 19 October 2011.

'Japan Building Missiles to Counter China's Naval Power', *Chosun Ilbo*, 22 July 2010.

'Japan cabinet OKs \$147 billion extra budget', *AP*, 15 January 2013.

'Japan confident F35 jets will be delivered on schedule despite US defence cuts', *Xinhua*, 27 January 2012.

'Japan confident F35 jets will be delivered on schedule despite US defence cuts', *Xinhua*, 27 January 2012.

'Japan earthquake exposes weakness in aerospace supply chain', *Aviation Week*, 25 March 2011.

'Japan embarrassed again over N. Korean launch', *Asahi Shimbun*, 14 April 2002.

'Japan flexing military muscle to counter China', *Philippines Daily Inquirer*, 28 November 2012.

'Japan gives up on easing weapons export ban', *Reuters*, 9 December 2010.

'Japan holds firm on disputed islands', *RIA Novosti*, 8 March 2012.

'Japan may cancel F35 purchase if prices hike', *Xinhua*, 29 February 2012.

'Japan Must Speed Up Theater Missile defence Research', *Yomiuri Shimbun*, 2 September 1998.

'Japan officially selects the F35', *The Diplomat*, 20 December 2011.

'Japan PM courts former ally to pass budget', *Kyōdō News*, 6th December 2010.

- 'Japan PM wants more assertive foreign policy,' *BBC News*, 21 January, 2011.
- 'Japan preparing for external expansion with US support', *Korean Central News Agency*, 19 January 2012.
- 'Japan protests over Korean builders on Kuril Islands', *Chosun Ilbo*, 1 June 2012.
- 'Japan ruling party calls for weapon export ban easing' *Kyōdō News*, 30th November 2010.
- 'Japan says it 'understands' use of force,' *Japan Times*, March 25, 1999.
- 'Japan should ease ban on weapons exports', *Nikkei Report*, 28th October 2010.
- 'Japan stealth jet prototype set to fly in 2014', *AP*, 8 March 2011.
- 'Japan sticks to postponement on US base issue despite pressure', *Kyōdō News*, 23 December 2009.
- 'Japan to boost defence ties with Australia' *Jiji Press*, 26 September 2012,
- 'Japan to build own housing, plane tarmac in Djibouti for military patrols', *Japan Times*, 31st July 2009.
- 'Japan to develop missile detecting drone', *AFP*, 4 November 2012.
- 'Japan 'understands' US actions in Panama', *Japan Economic Newswire*, 21 December 1989.
- 'Japan, Russia to peg fishing quota for 2013', *Jiji*, 2 November 2012.
- 'Japan, UK to develop defence equipment', *Daily Yomiuri*, 5 April 2012
- 'Japan's 2010 National defence Program guidelines – Reading the tea leaves', *Asia Pacific Bulletin*, No. 89, 22nd December 2010.
- 'Japan's Afghan Expedition', *Eureka Street*, December 2001.
- 'Japan's F35 choice questioned', *The Diplomat*, 22 December 2011.
- 'Japan's Missile defence system not perfect', *Jiji*, 10 April 2012.

‘Japan’s security strategy toward China: Integration, balancing and deterrence in the era of power shift’, *The Tokyo Foundation*, 31 October 2011.

‘Japanese built F35 to debut in 2017’, *Flight International*, 16 October 2012.

‘Japanese nukes could counter China – politician’, *Reuters*, 6 April 2002.

‘Japan’s military chief says F35 is best fighter’, *Reuters*, 27 March 2013; ‘Why Japan chose F-35 fighter no mystery’, *Asahi Shimbun*, 21st December 2011.

Jimbo, Ken, ‘Dynamics of Power Shift from U.S. to China--Asia-Pacific Security and Japan's Foreign Policy’, *Japan Policy Forum*, March 2013.

Johnson, Mark W., ‘No more blank checks, the defence Department must innovate’, *Washington Post*, 12 June 2011.

Johnson, Robert, ‘Boeing Offers A Glimpse Of Its 6th-Generation Air Dominance Fighter’, *Business Insider*, 29 September 2011.

‘Justice Minister resigns’ *Asahi Shimbun*, 22nd November 2010.

Kageura, Seiki, ‘Japan’s defence Policy: The view from Washington DC,’ The Brookings Institute, 21st Century defence Initiative Policy Paper, 13 August 2012.

Kallender-Umezu, Paul, ‘Japan Strives To Overcome defence Industrial Base ‘Crisis’’, *Defence News*, 24 June 2012.

---, ‘Japan inches towards arms exports’, *Defence News*, 9 February 2013.

---, ‘Japan might delay F-35 purchase’, *Defence News*, 10 July 2013.

‘Kan cabinet support falls to record 25%’, *Yomiuri Shimbun*, 7th December 2010.

‘Kan gives up idea of lifting weapons export ban’, *Kyōdō News*, 7th December 2010.

‘Kans political instability forces japan foreign affairs to stall,’ *Jiji*, February 1, 2011.

Kaplan, Robert D., ‘The tragedy of American foreign policy’, *The National Interest*, 1 August 2013.

Karniol, Robert, 'The paradox of missile defence', *The Straits Times*, 6 June 2011.

Katō, Kazuyo, 'The Response to Japan's March 11 Disaster: When the Going Gets Tough...', Japan Chair Platform, *Center for Strategic and International Studies*, Washington DC, 25 March 2011.

Katō, Yōichi, 'Japan's response to the new US defence strategy: Welcome but...', *Asahi Shimbun*, 9 March 2012.

Katsumata, Hiro and Li Mingjiang, 'China wary of a normal Japan', *Asian Times*, 7 August 2008.

Kawashima, Shin, 'The importance of Maritime Security', *Nippon.com*, 7 November 2011.

Kazianis, Harry, 'Behind the China missile hype', *The Diplomat*, 24 July 2012.

Kingston, Jeff, 'Grand security plans for a stronger Japan', *Japan Times*, 18 November 2007.

Klinger, Bruce, 'North Korean missile defiance requires a stern response', *The Heritage Foundation*, 12 December 2012.

Koh, Yoree, 'Tokyo and Manila Strengthen defence Ties With an Eye Toward China', *Wall Street Journal*, 28 September 2011.

'Koizumi tells Abe cabinet 'be insensitive'', *Asahi Shimbun*, 22 February 2007.

'Korean plan sparks speculation about US missile defence', *Korean Herald*, 31 October, 2012.

Koshoji, Hiroyuki, 'Analysis: North Korean threat to Japan', *UPI*, 19 March 2009.

Krishnan, Ananth, 'In South China Sea, a surprise Chinese escort for Indian ships'. *The Hindu*. 21 June 2012.

Kubota, Yukari, 'Japan's defence industrial base in danger of collapse', *Japan Institute of International Affairs*, 20th May 2010.

Kurashige, Nanae, 'Japan, Vietnam agree on defence cooperation', *Asahi Shimbun*, 25 October 2011.

Kurihara, Jun, and James L. Schoff, 'For whom Japan's last dance is saved - China, The United States or Chimerica?', *Cambridge Gazette: Politico-Economic Commentaries*, No. 4, March 2010.

Kwon, Yong, 'Food before politics on North Korea', *Asia Times*, 6 October 2011.

Lague, David, 'Chinese missile boat a game changer in South China Sea disputes', *Reuters*, 1 June 2012.

Laird, Robbin F. , 'American and European defence Industries: Future Trends and Challenges', *RUSI Defence Systems*, Summer 2006.

Lake, Eli, 'China deemed biggest threat to US', *Washington Times*, 10 March 2011.

Lee, Byong-chul, 'The aims of North Korea's rocket rattling', *Asia Sentinel*, 17 December 2012.

Lerman, David, 'U.S. Air Force Slams Lockheed Martin on F-35 Program', *Bloomberg*, 17 September, 2012.

---, 'Ships Costing U.S. \$37 Billion Lack Firepower, Navy Told', *Bloomberg*, 30 March 2013.

Lewis, George N., and Theodore A. Postol, 'A flawed and dangerous US missile defence plan', *Arms Control Today*, May 2010.

Li, Xiaokun, 'Report fires back at military coverage' *China Daily*, 6 June 2012.

Lyons, James A., 'A new challenge at sea', *Washington Times*, 22 March 2009.

---, 'Year of the Dragon', *Washington Times*, 1 February 2012.

MacDonald, Joe, 'Japan quake stirs unease about global supply chain', *AP*, 30 March 2011.

MacGregor, Douglas, and Young S. Kim, 'Without ground forces U.S. cannot counter Chinese aggression', *Armed Forces Journal*, April 2012.

Madsen, Robert, and Richard J. Samuels, 'Japan, LLP', *The National Interest*, No. 107, May/June 2010.

Maguire, Fergus, 'Hatoyama Approval Rating Drops to 24% Amid Futenma Dispute,' *Nikkei*, 26 April 2010.

Majumdar, Dave, 'US Navy issues F/A-XX Rfl', *Flight Global*, 17 April 2012

---, 'US Navy delays UCLASS draft RFP', *Flight Global*, 12 December 2012.

'Making Sense of Ballistic Missile Defence: An Assessment of Concepts and Systems for U.S. Boost-Phase in Comparison to Other Alternatives,' *National Academy of Sciences*, 2012.

Mandel, Michael, 'Say what you want, but this war is illegal,' *Toronto Globe and Mail*, October 9, 2001.

'Manga to promote US-Japan military alliance', *BBC News*, 10 August 2010.

Masuda, Masayuki, 'China's increasing 'rights defence' (weiquan) activities on the sea', *NIDS News*, March 2012.

Matsumura, Masahiro, 'Acquiring Japan's Next-Generation Fighter', *RIPS*, 5th August 2010.

McCormack, Gavin, 'Koizumi's Japan in Bush's world: After 9/11', The Nautilus Institute, *PFO 0-46A*, 8 November 2004. 3.

McCurry, Justin, 'Japan foreign minister resigns over illegal donations,' *The Guardian*, March 7, 2011.

---, 'North Korean leader Kim Jong-un wrests economic control from military', *The Guardian*, 20 July 2012.

---, 'Japanese hawk's election victory prompts fears of regional tension', *The Guardian*, 16 December 2012.

---, 'Japan increases defence budget amid tensions with China', *Guardian*, 17th December 2013.

McDonald, Hamish, 'Navy eyeing off new Japanese submarines', *Sydney Morning Herald*, 9 July 2012.

Milewski, Terry, 'Boeing touts fighter jet to rival F-35 — at half the price', *CBC News*, 27 February, 2013.

Miller, Mark, 'Japan and the F35: What to do?', *Japan Today*, 2 April 2012.

'Ministry official regrets US troop sending to Grenada', *Japan Economic Newswire*, 26 October 1983.

Mizokami, Kyle, 'More on Japan and hospital ships', *Japan Security Watch*, 12 May 20120.

Mochizuki, Mike, and Michael O'Hanlon, 'The unnecessary crisis', *The Oriental Economist*, January 2010.

'Moriya lists Yamada freebies', *Japan Times*, 30 October 2007.

Mulgan, Aurelia George, 'US-Japan alliance the big winner from Senkaku dispute', *East Asia Forum*, 26th October 2010.

Murdoch, Lindsay, 'Arms race explodes as neighbors try to counter China', *Sydney Morning Herald*, 19 September 2012.

Nakashima, Ellen, 'Dozens of key weapon systems whose Confidential report lists U.S. weapons system designs compromised by Chinese', *Washington Post*, 27 May 2013.

Nakayama, Toshihiro, 'How to Enliven Japan's Foreign Policy Think Tanks', *Nippon.com*. 7 September 2012.

‘Nations face off beneath the waves’, *Daily Yomiuri*, 24 January 2012.

Nativi, Andy, ‘F35 combat skills analyzed’, *Aviation Week and Space Technology*, 6 March 2009.

‘Nichibei shingatasentoukan kyoudoukenkyu he, chugoku yokushi no shouchou ni’, *Sankei Shimbun*, 24 November 2012.

Nichol, C.W., ‘Building hospital ships for disaster response’, *Japan Times*, 24 April, 2011.

Nicholson, Brendan, ‘Aussie role tipped for US missile system’, *The Australian*, 24 August 2012

‘Noda gets rid of censured Cabinet Ministers’, *Asahi Shimbun*, 4 June 2012.

Nye, Joseph ‘An alliance larger than one issue’, *New York Times*, 7 January 2010.

Nyquist, J.R., ‘Japanese rearmament and the China threat’, *Financial Sense*, 12 February 2005.

O’Hanlon, Michael E., ‘Going beyond the air-sea battle in Asia and the Pacific’, *Washington Post*, 23 August 2012.

O’Callaghan, John, ‘Southeast Asia splashes out on defence, mostly maritime’, *Reuters*, 8 October 2012.

Ogawa, Hiroki, ‘The problem with Amakudari’, *The Diplomat*, 23 March 2011.

Ōki, Seima and Yamaguchi Kyōko, ‘China, Russia team-up on territorial claims’, *Yomiuri Shimbun*, 29th September 2010.

Olsen, Alexa, ‘China dubs tiny island new city in sea claim bid’, *AP*, 24 July 2012.

Ōnishi, Norimitsu, ‘Japan military recalibrates its definition of pacifism’, *International Herald Tribune*, 23 July 2007.

- Ono, Keishi, 'Cooperation between the Self defence Forces and civil sector medical institutions - Lessons from the Great east Japan earthquake', *NIDS News*, July 2012.
- 'Operation Tomodachi a huge success, but was it a once off?', *Japan Times*, 3 March 2012.
- 'Operation Tomodachi continues to help', *Daily Yomiuri*, 4 December 2011.
- 'O-sutoraria ni sensuikan gijitsu kyouyo boeisho kento chugoku nirami renkei', *Nihon Keizai Shimbun*, 17 February 2013.
- Pan, Esther, 'The scope of China's threat', *Council on Foreign Relations*, 2 June 2006
- Panetta, Leone, 'The United States and Japan: An enduring 21st century alliance', *Yomiuri Shimbun*, 24 October 2011.
- Park, Hyeong Jung, 'Diverging threat perceptions on North Korea', *Brookings Institution*.
- Patalano, Alessio, 'The FX competition and the dilemma of Japanese defence policy', *Asahi Shimbun*, 19 December 2011.
- Penketh, Anne, 'US exaggerating nuclear threat from North Korea', *The Independent*, 3 March 2008.
- Pentagon: Key U.S. missile interceptor test fails', *Reuters*, 6 July 2013.
- Perlez, Jane, and Keth Bradsher, 'Ex-envoy says US stirs China-Japan tensions', *New York Times*, 30 October 2012.
- Perrett, Bradley, 'Tokyo, Seoul Mull Advanced Fighters', *Aviation Week*, 1 October 2010.
- , 'Japan's roadmap to an indigenous fighter', *Aviation Week*, 11 February 2011.
- , 'Not just Japan', *Aviation Week and Space Technology*, 19 December 2011.

---, 'Japan Aims To Launch F-3 Development In 2016-17', *Aviation Week*, 22 October 2012.

Preble, Christopher, 'A plea for normalcy: US-Japan relations after Koizumi', *The National Interest*, 1 September 2006.

Pry, Peter Vincent, 'North Korea EMP attack could destroy U.S. - now', *Washington Times*, 19 December 2012.

Ramsey, Adam, 'Cutting edge companies', *Daily Telegraph*, 20 January 2010.

Ramstead, Evan, 'Japan, South Korea Close to defence Pacts', *Wall Street Journal*, 8 May 2012.

Ratnam, Gopal, and Tony Capaccio, 'Obama backs unproven missile defence for uncertain threat', *Bloomberg*, Mar 20, 2013

'Rengo may rethink support for DPJ', *Yomiuri Shimbun*, 4 July 2012.

Robertson, Matthew, 'Mass Protests in China Increasing and Inevitable, Panel Says', *Epoch Times*, 3 March 2011.

Roth, Terence, 'US expected to lose innovation crown to Japan', *Wall Street Journal*, 3 February 1999.

Rubenstein, Gregg A., 'Comments on cooperative acquisition', Speech at Forum for Diversifying Japan's Security: A Wider Partnership for defence capabilities, British Embassy, Tokyo, 12 May 2010.

Sakamaki, Sachiko, and Takashi Hirokawa, 'Japan should cut useless Missile defence, DPJ official says', *Bloomberg*, 11 September 2009.

Sakamaki, Sachiko, 'Kan says he plans to resign after passage of Japan's quake, energy bills', *Bloomberg*, June 14, 2011.

Sakurabayashi, Misa, "Ragtag military left to defend Japan on a shoestring budget", *Shukan Shincho*, 8 April 2010.

Sanger, David E., "Missile is Tested by North Koreans", *New York Times*, June 12, 1993.

Satake, Tomohiko, 'US rebalancing toward the Asia Pacific and the Japan-US dynamic defence cooperation', *NIDS*, October 2012.

Sayers, Eric, 'Coastal defence in Japan's Southwestern Islands: Force posture options for securing Japan's Southern Flank', *Project 2049*, 7 January 2013.

'SDF troops fly supplies to thousands cut off by floods in Kyushu', *AFP*, 15 July 2012

'Security experts admit China stole secret fighter jet plans', *The Australian*, 12 March 2012

'Sengoku: SDF events not for open candor,' *Kyōdō News*, November 19, 2010.

'Senkaku Naval battle: JSDFs secret simulation', *Shukan Bunshun*, October 4, 2012.

'Shadow Boxing: Japanese Foreign Policy,' *The Economist* (US), June 4, 1988.

Shala-Esa, Andrea, 'Expensive F-35 fighter at risk of budget death spiral', *Reuters*, 21 March 2013.

---, 'Lockheed says committed to South Korea F-35 offset offer', *Reuters*, 22nd November 2013.

Shalom, Stephen R., 'A Just War? A critique of Richard Falk,' *ZNet*, October 22, 2001.

Shannon, Don, 'U.N. Assembly Condemns U.S. Invasion', *Los Angeles Times*, 30 December 1989.

Shiraishi, Takashi, 'Looking ahead in promoting free trade and sustaining Japan's Defence industry', *Nippon.com*, 21 June 2012.

Sieff, Martin, 'BMD Focus: The Test Of Reality', *UPI*, 26 July 2006.

Sieg, Linda, 'Japan's Abe gets second chance at loosening limits on military', *Reuters*, 11 December 2012

Simms, James, 'Japan puts the dog in dogfight,' *Wall Street Journal*, 22 December 2011.

Smith, Charles R., 'Russia Offers India \$8 Billion Weapons Deal', *Newsmax*, 12 December 2001.

Smith, Sheila A., 'A strategy for the US-Japan alliance', *Council on Foreign Relations*, Policy Innovation Memorandum No. 19, April 2012.

---, 'Japan and the East China Sea dispute', *Foreign Policy Research Institute*, Summer 2012.

South Korea spurs regional arms race headed by China', *Korea Times*, 16 October 2012.

Stewart, Devin T., 'Raising Japan's Profile', *The Daily Beast*, 5 November 2009.

---, 'Slowing Japan's Galapagos syndrome', *Huffington Post*, 29 April 2010.

Su, Xiaohui, 'Actions don't match words', *China Daily*, 8 January 2013.

Sukovitsyn, Victor, 'What makes Japan cling to Russia's Kuril Islands?', *Pravda*, 26 January 2012.

Sumida, Chiyomi, 'Report: Japan never fully committed to moving Futenma off Okinawa', *Stars and Stripes*, 4 May 2011.

Syed, Saira, 'Drone-makers target Asia for growth', *BBC News*, 16 February 2012.

Tabuchi, Hiroko, "US expresses concern over cyberattacks in Japan", *New York Times*, 21 September 2011.

Takahashi, Kosuke, 'Japan presses ahead with ATD-X program', *Jane's Defence Weekly*, 25th November 2011.

Takahashi, Sugio, 'Counter A2/AD in Japan-US defence cooperation: Toward Allied Air Sea Battle', *Project 2049*, 18 April 2012.

---, 'A time of change on the Korean peninsula: Japan's defence policy and the future of the US-Japan alliance', *Nippon.com*, 23 April 2012.

---, 'Ballistic Missile defence in Japan: Deterrence and Military Transformation', *IFRI Proliferation Papers No. 44*, December 2012.

Takano, Koichiro, and Tomohiro Ozeki, "Weapons procurement process open to abuse", *Yomiuri Shimbun*, 30 November 2007.

Takenaka, Kiyoshi, 'Japan has the right to develop preemptive strike capability: defence chief', *Reuters*, 13 February 2013.

Talmadge, Eric, 'Japanese military assumes more global role', *AP*, 22 March 2009.

---, 'Japan talk of warning shots heats up China dispute', *AP*, 20 January 2013.

---, 'Japan launches 2 intelligence satellites', *AP*, 27 January 2013.

Tang, Didi, 'Tibet Self-Immolation Convictions: China Finds 8 Guilty in Public Prosecution', *Huffington Post*, 31 January 2013.

Tanida, Kuniichi, 'Japan made parts to push up price of F35 fighter jets for ASDF', *Kyōdō News*, 22 August 2013.

Taniguchi, Tomohiko, 'Wither japan? New constitution and defence build-up', *Brookings Institution*, May 2005.

Terashima, Jitsuro, 'Sekaishi no shinso teiryu wa nanika,' *Chuo Koron*, November 2001.

Tharoor, Ishann, 'Why Was the Biggest Protest in World History Ignored?', *Time Magazine*, 15 February 2013.

'The Dragon's new teeth', *The Economist*, 7 April 2012

'The last manned fighter', *The Economist*, 14 July 2011.

'The truth behind Japan-US ties (3): Numbers inflated in Marine relocation plan to increase political impact', *Asahi Shimbun*, 4 May 2011.

Thompson, Paul, "Vast budget fuels arms industry", *Japan Times*, 20 June 2004.

Tinnerman, Ken, 'Japanese Reaction to Catastrophe Worries White House', *NewsMax*, 13 March 2011.

'Tokyo likely to be hit by major quakes in next 30 years', *Russia Today*, 21 December 2012.

Tomizaka, Satoshi, 'Japan, let us fight together,' *Shukan Bunshun*, 21 February, 2013.

Turnbull, Don, "Management of Defence: International Comparisons", *RUSI Defence Systems*, October 2009.

Tyson, Ann Scott, "Marines waiting for basic supplies", *Washington Post*, 16 July 2009.

'U.S.-Japan alliance a cornerstone in a complex world', *Asahi Shimbun*, 16 July 2010.

'US estimates Japan's F35 productions at \$10 billion', *Jiji*, 5 May 2012.

'US missile defence may backfire if too robust: General', *Reuter*, 10 November 2009.

'US Model for future War fans tensions with China and inside the Pentagon', *The Washington Post*, 1 August 2012.

'US planning expansion of missile defence systems in Asia', *The Nation* (Thailand), 24 August 2012.

'US presses on Iranian sanctions', *Kyōdō News*, 19 January 2012.

Vogel, Ezra F. 'Pax Nipponica?', *Foreign Affairs*, No. 64, 1986.

'W. European and Japanese reactions to US pressure', *BBC World*, 15 April 1980.

Wada, Shuichi, 'Operation Tomodachi in Miyagi Prefecture: Success and Homework', *CSIS*, 23 December 2011.

'Walking on eggs: Japan's financial and military contributions to the Persian Gulf War', *The Economist*, 2nd March 1991.

Warren, David, 'Eurofighter best option for Japan's ASDF', *Yomiuri Shimbun*, 24th November 2011.

Weiss, Mark, 'Israel to run for seat on UN Security Council', *Irish Times*, 5th October 2013.

'What makes Japan cling to Russia's Kuril Islands?' *Pravda*, 26 January 2012.

Wheeler, Winslow T., 'How much will each F-35 cost?', *Huffington Post*, 1 April 2010.

---, 'The jet that ate the Pentagon', *Foreign Policy*, 26 April 2012.

‘White paper rings alarm over China’, *Yomiuri Shimbun*, 17 July 2012

White, Hugh, ‘As power shifts ASEAN stumbles’, *The Lowy Interpreter*, 25 July 2012

‘Why Japan chose F-35 fighter no mystery’, *Asahi Shimbun*, 21st December 2011.

Williams, Andy, ‘Costa Rica Foreign Minister sparks army debate’, *Tico Times*, 13th January 2011.

Yabuki, Susumu, ‘US-China collusion and the way forward for Japan’, *East Asia Forum*, 30th June 2012.

Yamaguchi, Mari, ‘Japan weapons ban eased’, *Huffington Post*, 27th December 2011.

Yamaguchi, Noboru, ‘Redefining the Japan-US alliance’, *Nippon.com*, 11 May 2012.

Yamamoto, Gen, ‘Japan: Government and the defence Industry’, *RUSI defence Systems*, Autumn 2004.

Yates, Ronald E., ‘Nakasone star dims in the land of the rising sun’, *Chicago Tribune*, 18 May 1986.

Zan, Myin, ‘US attacks may be illegal’, *Japan Times*, 26 August 1998.