Politicization of Risk in Military Acquisition: A Case Study of the A-12 Program and its Termination

Kousuke SAITOU
Research Fellow
Faculty of Humanities and Social Sciences
University of Tsukuba

Abstract

Why and how does a risk, once accepted, raise a political problem in a way that affects the consequence of a policy? To answer these questions, this article focuses on the interactive change of political context and risk perception. A changing political context may develop a gap in risk perception among actors and vice versa. This gap distorts the initial consensus on risk acceptance, affecting the consequence of policy; here, this process is referred to as the politicization of risk. Applying this perspective, this article examines the process in which the A-12 aircraft acquisition program of the U.S. Navy was adopted as policy but eventually terminated due to technical and political mismanagement of risk. The analysis indicates that risk propensity is influenced not only by personality and political institutions as some scholars point out, but is also changed by an interaction between political context and actors' perception. In the case of the A-12 program, a perception gap between the executive and legislative branches caused a politicization of risk and consolidated a risk-averse context, which led to the termination of the program.

Keywords: risk, politicization, perception gap, policy trilemma, military acquisition

要旨

政治過程において一旦受け入れられたリスクは、なぜ、いかにして政治的問題を提起し、政策の帰結に影響を与えるようになるのか。本稿ではこの問題を、アクターのリスク認識と政治的コンテクストが相互作用的に変化する過程に着目することで明らかにしていく。この過程において生じる認識ギャップは、リスク受容について当初形成されたコンセンサスを歪める。その結果、一旦は潜在化したリスクをめぐる政治論争が再燃し、政策そのものにも変更を迫ることになる（本稿ではこれを、リスクの「政治化」と呼ぶ)。本稿ではこのような観点から、米国海軍のA-12艦載攻撃機開発プログラムの事例を分析し、リスクをめぐる行政府、立法府間の認識ギャップがリスク問題の再検討を促した結

果、リスクを嫌忌する政治的コンテクストが強化され、高い軍事的要請にもかかわらずプログラムが中止されるに至った経緯を明らかにしている。

キーワード：リスク、 政治化、 認識ギャップ、 政策のトリレンマ、 軍事調達

Introduction

Risk management in public policy-making is a theme of increasing importance particularly at a time when risk consciousness is boosted under fiscal pressure. Budget reduction, with the cost growth of public policy, forces policy-makers to reallocate financial resources, leading to the redistribution of risk. This possibly raises political controversies on risk: what types of risk should be accepted (or not), and how that risk should be managed in order to achieve policy objectives. These controversies emerge even in foreign and security policy, which seems to be determined more directly by external factors including balance of power or threat from other nations, especially in the realist paradigm. In fact, risk has been, both theoretically and practically, considered as an important component of decision-making in foreign and security policy (Mintz and DeRouen Jr. 2010: 28; Conybeare 1992; Morrow 1987; Kahneman and Tversky 1979), while the effort to theorize the politics of risk is considered unsatisfactory because of its ambiguous definition (Aradau, Lobo-Guerrero, and Van Munster 2008: 147).

Risk is not only ubiquitous in public policy but is also subjective, often increasing the gaps in perception and in interpretation among actors. Once a decision is made through a process where some kind of risk is widely recognized, there also must be a consensus for accepting or avoiding that risk as a result of political coordination. But such a risk, even if once accepted, often becomes highly controversial later and the decision is changed. As Vetzberger suggests, risk preferences are not cold cognitions that just happen as a calculated rational outcome, but evolve (1995: 375). Even in military acquisition, which is carried out through a more highly-institutionalized risk management system than other domains of security policy such as alliance and foreign intervention, actors' attitudes toward risk often change in different ways. Consequently, in spite of its inertia (Russett 1983: 92), acquisition programs that are supported at the beginning are often cut back or terminated due to risk, even without a change in strategic requirements.

This article addresses why and how a risk once accepted raises political controversy in a way that changes the status quo policy. To answer this question the first section

reviews matters of risk and risk perception in the context of several traditional approaches to foreign policy-making and presents an approach referred to as a politicization of risk. The following sections attempt to empirically illustrate the process of how risk once accepted becomes politically controversial and affects the policy outcome, by examining the case of the U.S. A-12 acquisition program, which had been strongly supported but eventually terminated because of increasing risk-averseness in Congress.

1. Rethinking risk in security policy

In managing risks of military acquisition, strategic factors such as threat and military capability, which scholars of security studies have often treated as significant to understand the mechanism of military build-up, obviously play an important part (Brooks 1975: 77; Waltz 1979: 127; Koubi 1999). In turn, measures of risk assessment and management are relatively institutionalized, especially in the U.S. The Department of Defense (2006) defines the concept of risk as "a measure of future uncertainties in achieving program performance goals and objectives within defined cost, schedule and performance constraints". Risk is broken down into the following three components: root cause, probability, and consequence (Department of Defense 2006: 1). Risk calculation based on this conceptualization contributes to the systematic management of risk in military acquisition. If we focus on these features, it is possible to presume that an attitude toward risk is rationally decided in terms of strategic requirements and implemented through standard operational procedure (Alison 1999).

On the contrary, there are complicated considerations in the actual acquisition planning. Maximizing military performance of a given weapon system is not always the best option because it generally means higher costs, longer schedules and an increased risk of failure (Mayer and Khademian 1996: 186). Furthermore, the validity of a program's goal is possibly determined in broader and multiple policy contexts. In practice, various factors including technological uncertainty, budgetary pressure and industrial capacity are taken into account in the acquisition process. Above all, technological uncertainty tends to have a non-negligible impact on risk management, with inevitable risks of cost overrun, schedule slippage, or lack of planned military capability (Sapolsky, Gholz, and Talmadge 2009: 84). These factors are relevant in the context not only of military strategy but of fiscal and industrial policy, often posing a dilemma, or in some cases, a trilemma. Thus, a decision may reflect the consequence of political adjustment among several conflicting policy objectives and measures.

Such a conflict often appears in the decision-making of U.S. security policy, which is characterized by democracy and the distribution of power (Sarkesian, Williams, and Cimbala 2008: 49-64). If we focus on this dimension of the U.S. decision-making process, it may be more appropriate to adopt the "governmental model" (Alison 1999), though it is necessary to take into account the strong influence of Congress especially in the budgetary process, which will be the focus of this article (Lindsay 1992/1993; Hilsman 1958). The executive branch including the DoD (Department of Defense) and, in some cases, the military services, plans a strategy and presents a budget request to Congress.[1] In turn, the support of Congress is decisively important because Congress decides the actual amount of budget by referring to the administration's plan. Indeed, the governmental model could more accurately reflect the reality of acquisition as described in a study on the V-22, Osprey, acquisition program (Jones 2001).

But at the same time, it is clear that this perspective, which sees policy-making as the consequence of a political tug of war, is not enough to understand the mechanism of political reactivation of risk problems. When a decision is made, this means that politics among actors ended with some sort of consensus, reflecting their power relationship, interests, or influence of the institution. In other words, the first step to explain a decision's reactivation is to examine why that consensus broke down. In terms of military acquisition, there is often a growing perception gap among actors whereas the conceptualization of the DoD suggests that the risk of military acquisition is seemingly assessed and systematically managed in an objective way. Often, a risk once accepted, subsequently causes serious political conflict and leads to policy change.

In dealing with the perception of actors, some scholars highlight the psychological dimension of their behavior and argue that decision-making is likely to be influenced by perception and processing of information (Jervis 1976; De Rivera 1968; Mintz and DeRouen Jr. 2010). In a recent research study, Welch, referring to a wide variety of literature including organization theory, psychological theory, and prospect theory, presents a model for foreign policy change by focusing on the influence of state characteristics and 'reference point' as a basis for understanding how leaders frame the gains or losses of a policy. Such perspectives, though developed in the broad context of foreign policy, are relatively similar to analyzing the change of risk perception, which is almost a matter of how actors accept or avoid risk by, even though subjectively, calculating the balance between gains and losses to optimize or prioritize multiple policy objectives.

Then, what factors determine, and more importantly in this article, change risk perception and propensity? So far, in addition to the above-mentioned scholars suggesting the importance of decision makers' perception, the theorization of risk in foreign and security policy studies has also been developed to a certain extent. Some consider the degree of democracy as a factor correlated with a state's risk propensity. According to Weitsman and Shambaugh (2001), democratic countries tend to make risk-averse decisions regardless of strategic context. Other scholars, highlighting the individual level, emphasize the political leader's character or perception in foreign policy decision-making (Kowert and Hermann 1997). Taliaferro (2004) suggests that, based on prospect theory, national leaders' ways to process information and select options provide a better explanation for national attitudes toward risk in military interventions in the peripheral regions, than the anarchical structure of the international system.

However, these approaches highlighting relatively static factors such as personality and political institution, while being useful to understand a tendency for risk acceptance, are not sufficient to explain the change of risk perception in a policy process. To understand this point, it is necessary not only to explain how decision-makers' risk perception is determined, but also to address why it changes and leads to perception gaps that spawn political controversy on risk.

By taking into account the interaction between political context and risk perception, this article attempts to explain how risk interpretation changes and develops into a difference in actors' attitudes toward risk. On the one hand, a change in the political context causes a gap in risk perception among actors involved in a policy process. On the other hand, the perception gap on risk caused by difference in a wide variety of related issues including security, economic, industrial, and budgetary forecasts, and asymmetrical information may change the political context. In this interactive process, the change in risk interpretation distorts the initial consensus on risk acceptance and causes leaders to reconsider the priority of policy objectives in a dilemma or a trilemma. Thus, the change of risk interpretation (re)activates political friction and affects the consequence of policy (in this article this process is referred to as politicization of risk), in spite of the consensus they once reached.

To examine the matter of risk in certain political contexts, we shall deal with a less abstract case as this can better reflect the specific political environment and national security issues that an individual state can face. This study examines the case of the A-12 acquisition program, in which the U.S. intended to develop a new naval

stealth aircraft but which stirred up serious political controversy on the acceptability of risk at the end of the 1980s. This means that the case selected is set in relatively risk-tolerant conditions in political terms for the following reasons: the U.S. has a highly technology-oriented strategic culture (Adamsky 2010: 85-87);[2] and the actors involved in the U.S. acquisition process tend to accept risk and immature technology (Else III 2008: 181). In some cases, aggressive risk-taking is recommended from outside the government (Birkler 2010: 21-29). Particularly in the late 1980s, the U.S., experiencing the transformation of international threat and severe fiscal pressure, shifted to an acquisition strategy which depended more on R&D (research and development) with technological uncertainty. What is equally important is the feature of the U.S. acquisition process to manage the risk once taken.[3] These attitudes toward risk in developing military technology seem to be an important part of the background of the U.S. technological superiority since the end of the Cold War (Wohlforth 1999; Posen 2003; Paarlberg 2004; Ikenberry, Mastanduno, and Wohlforth 2011).

Despite these features of the U.S. acquisition policy, the A-12 development, which was one of the top priority programs in the Navy's aviation planning in the late 1980s, was eventually terminated. This consequence resulted not only from substantial cost growth, schedule slippage, and technical performance shortfalls, which similarly arose in many other R&D programs including the Advanced Tactical Fighter (F-22), the V-22, and the B-2 which were subsequently completed, rather, it stemmed from mounting concern over risk management through the budgetary process.[4] The following sections examine why and how the risk in the A-12 development program was politicized in these risk-tolerant conditions.

2. Risk perception and policy trilemma of the A-12 program

The A-12 program, a new advanced stealth aircraft which was of high requirement in military strategy, faced a serious policy trilemma with the change in the fiscal and military environments. The U.S. defense community acutely reviewed what types of risk should be or should not be taken to optimize conflicting policy objectives in the A-12 acquisition process. The military purpose of the A-12 program planned during the mid-1980s was to replace the aging and obsolete A-6(E) naval medium attack aircraft fleet, which had been operated by the Navy and the Marine Corps. This replacement was intended to enhance the power projection capability and the survivability of naval aircraft. In the same way, the Air Force planned to acquire a variant of the A-12 in order to strengthen long-range air-to-land attack capability, and was cooperating with the project (Carlucci 1989: 160).

The actual replacement was scheduled for the 1990s. As an interim measure, the DoD planned to procure the A-6F, an upgraded version of the A-6E, to consistently enhance naval aviation capability. But in fiscal year 1988 Congress did not authorize spending for the A-6F, hence the DoD decided to implement a limited modification of the A-6E. This measure was considered as a temporary expedient until the A-6E could be replaced with the A-12 (Weinberger 1986: 205; Weinberger 1987: 195; Carlucci 1988: 209).

But this budgeting increasingly prompted the administration to take a risky option, which led to subsequent controversy on risk management. Concerning the quantitative shortage of the A-6, the DoD and the Navy placed a greater emphasis on the development of the A-12. The DoD even proposed a plan to invest in the A-12 by cutting spending for an additional procurement of the A-6. Similarly, the Navy, in the congressional hearings in 1989, also insisted that the A-12 would not only solve the problem of aircraft shortage but also enhance the attack capability of carrier battle groups, hence it was one of the top priority programs along with the Aegis system and a new submarine that would be the basis of future military capability planning (HASC 1989a: 952, 982).

It is also important to note that the A-12 program could still be justified in the context of the Cold War strategy at that time. Richard B. Chaney, Secretary of Defense, clearly argued that the development of the A-12 must be continued so as to compete with the Soviet Union even under fiscal pressure forcing the cancellation of various programs (SASC 1989b: 32). Likewise, the Navy also justified the requirement of carrier battle groups in terms of the Soviet threat, and suggested to Congress to replace the A-6 with the A-12 at a ratio of one to one. This demand was based on the outlook that the capability of the A-6 would be increasingly insufficient in the mid-1990s because of the revitalization of the Soviet Union (SASC 1989a: 240-241).

In turn, Congress also agreed to the military importance of the A-12. At the same time, however, there was concern for the measure proposed by the administration. If Congress decided to reduce the procurement quantity of conventional aircraft to reallocate the budget to the A-12 development, the solution of naval aircraft shortage depended on whether the A-12 development would succeed or not. Congress perceived this situation as highly risky because such a measure was based on a technologically uncertain assumption that would escalate the aircraft shortage if the program had any problems (SASC 1989b: 361-362; HASC 1989a: 1027-1028). In fact, some congressmen expressed concern about the shortage of the A-6E and the closure of its production line before completing development of the new aircraft (SASC 1989d: 387-388;

SASC 1989c: 249). But if aggressively investing both in the A-12 development and in the production of conventional aircraft to reduce military risk, it would make it difficult to achieve the objective of the fiscal policy at that time, i.e. a reduction of the deficit. In short, Congress faced a trilemma of three conflicting policy objectives: maintaining short-term capability, preparing for long-term military threat, and achieving fiscal soundness.

However, the DoD plan did not anticipate such a trilemma because it was based on a slightly different evaluation of program status. The DoD and the Navy argued that it was possible to maintain the required capability by modifying and cautiously operating existing aircraft. In other words, the executive branch perceived that it was possible to accept the short term risk caused by the reduction of procurement quantity in order to save costs. This proposal was based on a more optimistic evaluation of the progress of the A-12 program which led to the expectation that the replacement of naval aircraft would be implemented on time (SASC 1989d: 387-388; SASC 1989c: 249).

Congress, however, maintained a cautious stance toward the proposal. The Armed Services Committees of both the House and the Senate approved the funding of the A-12 development program while withholding judgment whether they would cancel the procurement program of the existing type of aircraft. In the Committee report, the Senate expressed concern over the serious shortage of naval aviation capability and the overuse of aircraft in operation (SASC 1989e: 46). The conclusion of Congress was intended neither to deny the importance of the A-12 itself, nor to criticize the administration's effort to reconstruct naval aviation capability around the A-12. Rather, Congress questioned, with the premise to complete the acquisition of the A-12, the problem of how to evaluate and manage the risk that could emerge in the program. Consequently, Congress, facing a policy trilemma, decided to avoid military risk by setting aside the budgetary purpose at least in fiscal year 1989. In other words, whereas the risk perception between the administration and the legislature had already been slightly different, the latter considered it to be manageable.

3. Politicization of risk in the budgetary process

In the budgetary process of fiscal year 1990, it was a more urgent task to solve the naval aircraft shortage under increasingly heightened fiscal pressure. Although the Navy continued to explain that it was necessary to modernize the A-6 in the short term, it was still extremely interested in replacing it with the A-12 in the long term (HASC 1990a: 5, 18). The Navy and the Air Force expressed little concern as to the

A-12 development, and instead presented its progress as smooth. Additionally, in March 1990, they confirmed that the program cost would not increase (HASC 1990a: 101). The official line was that both budgetary and military risks of the A-12 development still remained low.

In late April, a congressional hearing was held to discuss the Major Aircraft Review (MAR) that the DoD had conducted. Although the DoD revealed a plan to reduce the overall procurement quantity of the A-12 and to postpone the procurement schedule of the Air Force version, Congress did not show much concern about this measure (SASC 1990a: 781-783). In the subsequent hearing held in May, while showing the estimate that the acquisition cost would swell due to the reduction in overall procurement quantity, the Navy insisted that the A-12 still remained the top priority program because the existing aircraft was neither financially feasible nor militarily satisfactory. The background to this contention was that the Navy's program evaluation was still optimistic at that time. Richard M. Dunleavy, Deputy Chief of Naval Operations, stated that he had been informed of the program status at the production line of McDonnell Douglas, one of the contractors of the A-12, and evaluated that the progress of the development was satisfactory (SASC 1990b: 164-165, 186). From the Navy's standpoint based on such recognition, the risk of the A-12 program was not so serious and the cost overrun of the program was expected to be offset, in the long run, by the expected efficiency of the deployment phase.

By this time, however, the A-12 program had such severe problems that it had to be cancelled. In June, McDonnell Douglas and General Dynamics, the prime contractor, informed the Navy that the first flight schedule would be seriously delayed, that the development cost would swell and exceed the contractors' capacity, and that the specifications required in the contract could not be fulfilled. At congressional request, in July, the Navy started to investigate the program to find out the cause of the difference between the actual progress and the information that was given in the MAR.[5]

The Committee report for the fiscal year 1991 was written in the midst of increasing skepticism toward the risk of the program. The Senate Armed Services Committee pointed out that not only a technical problem of overweight was not fixed but that even the required capability was not fulfilled. These concerns led to further questions on spending for the procurement of the A-12 included in the budget request because of the acquisition principle 'fly before buy' which requires the completion of development and the test of a prototype before starting production (SASC 1990c: 26-27).[6] Congress, facing the end of the Cold War, increasingly began to criticize the kind of program

management that necessitates additional investment to fix technical problems after deployment. Therefore, it was unacceptable for Congress to provide procurement spending for the A-12 with its substantial uncertainties, which deviated from the acquisition principle (SASC 1990c: 53).

Similarly, the report by the House Armed Services Committee required the fulfillment of the principle of 'fly before buy' before making a procurement plan. In addition, the House Committee remarked on the difficulty of evaluating highly confidential information despite their recognition of problems such as schedule slippage due to the financial and technical capacity of the contractors. Based on these considerations, the Committee recommended cutting 1.15 billion dollars from the requested procurement spending for the A-12, and declassifying program information before requesting the procurement budget (HASC 1990b: 55).

In terms of risk management, it is also important to note that these concerns for the A-12 development prompted an additional procurement of conventional aircraft. The Committee recommended about 2.3 billion dollars for eighty-four F/A-18s while the administration requested about 1.9 billion dollars for sixty-six aircraft. This budget increase was justified, in spite of severe fiscal discipline, due to the fact that the operational capability of the existing A-6E was not satisfactory, i.e. seventy percent of the required level, though the development programs of two advanced aircraft, the A-12 and the Naval Advanced Tactical Fighter, were facing serious schedule slippage and could have been reduced in quantity in the future (HASC 1990b: 55-56). In short, the Committee perceived the developmental risk as unacceptably high and tried to solve the problem of naval aviation capability by procuring existing models, which was a less risky option.

Nonetheless, the spending for the A-12 development was not intensively criticized while the procurement spending was deleted. According to Farrell, this program outcome in fiscal year 1990 can be attributed to the outbreak of the Gulf Crisis, which diverted congressional concern (1997: 150). Yet, at the same time, the congressional recommendation, regardless of the situation in the Middle East, obviously reflected an outlook that the acquisition of the A-12 could be completed sooner or later by cautiously managing risk. In fact, the conclusion of the Conference Committee required the Navy to fully commit to the A-12 program and would authorize 554.5 million dollars for the procurement if the development in fiscal year 1992 made enough progress (HASC 1990c: 425, 531).

Their recommendations meant that Congress recognized, at their discretion, the risk of the program as still manageable while denouncing the optimistic risk evaluation by the administration. But at the end of November an investigation report was submitted, and then, Lawrence H. Garrett III, Secretary of the Navy, acknowledged the inaccuracy of the information the contractors reported in the MAR.[7] Subsequently, the administration's management of the A-12 program came to be severely criticized.

In December, the House Subcommittees on Procurement and Military Nuclear Systems, Research and Development, and Investigation held a joint hearing on the A-12 program. They placed greater emphasis on the limited access right to information, which obstructed Congress in comprehending the entire scope of the problem due to the administration's inaccurate risk evaluation, rather than the realized risk itself. Les Aspin, chairman of the House Armed Services Committee, at the beginning of the hearing, raised the issue that the cost and schedule problems were revealed just after five weeks of hearings in April, despite the DoD and the Navy's explanations that there were few problems with the program (HASC 1990d: 1). Ronald V. Dellums, chairman of the Research and Development Subcommittee, suggested that the poor performance in spite of strong congressional support was a problem beyond the A-12 itself, leading to the broader question of how research and development should be managed thereafter (HASC 1990d: 2-3). Furthermore, this problem was framed as an institutional flaw of the entire acquisition management system (HASC 1990d: 6; HASC 1991b: 429-430).

4. Was the A-12 unnecessary? Unsolved problems and increased risk averseness

On January 7, 1991, the DoD terminated the A-12 program due to contractor failure. It was pointed out that the DoD denied the Navy's demand to continue the program after revision because of the cost overrun and the increasing fiscal pressure on defense spending (Farrell 1997: 153; General Accounting Office 1992: 5). But these issues were not specific to the A-12, and all other programs were facing the same problem. In other words, these problems were necessary conditions but are insufficient to explain the termination of the A-12 program. As described above, the more direct cause was the risk (and the perception gap) concerning the serious shortage of naval aircraft by that time. While the program risk was accepted at the beginning, it was politicized because of mismanagement.

In terms of the politicization of risk and its consequence, it is of equal importance to note that the policy trilemma was not solved just by program termination. Whereas the DoD and the Navy insisted on the adequacy of the termination itself, there was a concern that the decision would amplify the insufficiency of military capability to implement the post-Cold War military strategy (HASC 1991a: 60; SASC 1991a: 140). The Air Force was also concerned about its impact on the construction plan of next generation forces and began advocating the resumption of the program (HASC 1991c: 474; SASC 1991b: 52). Moreover, the lessons learned from the Gulf War, such as the effectiveness of stealth aircrafts and the transformation of regional threat, boosted the argument that the capability expected for the A-12 would still be vital in the post-Cold War strategy (HASC 1991d: 65, 68). For the advocates, the successor aircraft to the A-6 would need to be equipped with capabilities for night and all-weather operations, have a well-balanced payload and operational range, and stealth capability in order to be able to confront future threat with an increasingly enhanced air defense system (HASC 1991d: 65-66). These features are precisely what the A-12 would have, and its termination meant that there was an emerging gap between the new military strategy and the necessary capability to implement it.

The lack of necessary capability forced the administration to rebuild the naval aviation programs. Two key options were proposed. The first one was to maintain capability by modifying existing aircraft such as the A-6 and the F/A-18. The second was to start the AX, a new stealth aircraft development program, by reallocating the budget of the terminated A-12 program. The Navy demanded a mixed plan, which carried on the development of a new aircraft to replace the A-6 in the future, while upgrading the F/A-18 to the F/A-18E/F as an interim measure. The Navy seemed to perceive that only the AX could be effective to maintain future naval capability. But just after the failure of the A-12 program, the development of a new stealth aircraft was unlikely to be completed in the immediate. In fact, the Navy forecast that full scale development of the A-12, even if it had started, would be completed in 2003 or 2004 (HASC 1991d: 82, 87; SASC 1991c: 116). Modernization of existing aircraft was demanded to complement the lack of capability accrued by that time.

Similarly, Congress agreed to the termination of the A-12 program in spite of an aircraft shortage which would increase military risk (HASC 1991d: 64; SASC: 1991c: 106-107). Nonetheless, Congress could not support the Navy's plan unconditionally, for it doubted the forecast concerning the AX development due to the failure of the A-12. In addition, under the policy trend of restoring fiscal discipline, both Armed Services

Committees attempted to avoid duplication of parallel programs. Put another way, the termination of the A-12 placed Congress, as well as the Navy and the DoD, before a more severe trilemma among fiscal and military risks. Indeed, the Armed Services Committees perceived that their recommendation to cancel or to shrink various programs due to fiscal policy would lead to a militarily inadequate reduction of naval aircraft (HASC 1991d: 91-92).[8] As William L. Dickinson in the House Armed Services Committee also pointed out, the doubt concerning the AX program was directed to the feasibility of the AX program rather than its military requirement since the termination of the A-12 development was due to financial and technical capacity (HASC 1991d: 81).

The Navy's AX, naturally, was not planned to fulfill the requirement as much as that expected for the A-12. On the one hand, the technology acquired from the A-12 development was considered to be commensurate with the size of the investment, and it was obviously important to apply it to the development of the AX as much as possible so as not to incur sunk costs (HASC 1991b: 396). On the other hand, with the experience of the A-12 development, the AX program was required to include a measure to enhance feasibility, while harnessing accumulated technology. Whereas there was criticism by Congress that the Navy's demand would not match the technological level at the time (HASC 1991d: 84), the Navy explained that the planned capability of the AX was subject to be degraded in balancing payload, stealth capability and operational range (HASC 1991d: 84-85; SASC 1991c: 121). As the Navy repeatedly insisted, the AX would not be another A-12 (HASC 1991d: 85, 94). Rhetorically, at least, the AX was supposed to be a well balanced and a highly feasible program with lower developmental risks.

However, Congress was motivated by a sense of mistrust caused by the failure of the A-12. Consequently, in spite of the Navy's effort to reduce risks, some members of Congress preferred to invest in the F/A-18 procurement, which entailed lower risks and was satisfactory in quantitative terms compared to the AX (SASC 1991c: 86; HASC 1991d: 91-92, 106). In contrast to the trend of shrinking military risk due to the end of the Cold War which accelerated many R&D programs, the plan to switch from the A-12 to the AX was rather influenced by the short term capability shortage and risk averseness heightened by the A-12 failure.

As described above, the risk issue once highly politicized in the budgetary process fostered a risk-averse situation, hence risk management was considered as a much more serious problem. While authorizing AX program spending, the House Armed

Services Committee additionally specified concerns of risk management failure due to the limited information access right of the A-12 program, and recommended not to limit access for the new program in so far as possible (HASC 1991e: 15, 41). In turn, whereas the Senate Committee also agreed to implement the AX program based on the view that the termination of the A-12 would erode the core of the modernization plan of naval aviation, they attempted to disperse the risk with development by transferring the R&D budget of the Navy to the procurement account for the existing A-6 modification and an additional procurement of the F/A-18 (SASC 1991d: 22, 65-66).

The Conference Committee reconfirmed these concerns on program feasibility and information access rights, and added a clause to the final draft of the authorization bill to prohibit classification of the cost and schedule information of the AX. In addition, as the Senate Committee recommended, the budget transfer from the R&D account to other aircraft procurement programs was authorized.[9] This less risky budgeting reflected the Committees' risk averseness raised by the A-12 program. This experience continued to influence planning of the AX development and overall naval aviation management.

Conclusion and implications

Risk propensity is influenced not only by personality and political institutions as some scholars point out. Nor is it static. This article showed that it is changed by an interaction between political context and actors' perception. As a result, it develops into a perception gap leading to risk politicization. The controversy over the A-12 development and subsequent process indicate the factors inducing risk politicization are as put forward below.

First, the A-12 program was prone to gather attention in the political process because its military requirement was 'too high'. The U.S. was working toward the revision of its long-term military strategy in reaction to the reduction of Soviet threat and increasing fiscal pressure. In spite of these trends, the plan to rebuild naval aviation capability around the A-12 tended to be framed as a matter of both short-term risk management and long-term military strategy because of the concern of aging and quantitative shortage of naval aircraft.

Second, the administration and Congress had different interpretations of risk and preferences in management approaches. Although the DoD and the Navy planned to build naval capability based on an optimistic evaluation of the A-12 program,

Congress, while showing some understanding of its needs, did not necessarily give full support to evaluation. This attitude was associated with the matter of risk framing described above, leading to congressional action to reduce the short-term risk by maintaining procurement spending for existing aircraft.

And finally, what is most important here is that a perceptional change occurred, which in turn accelerated risk politicization. It was obvious that a gap in risk evaluation between the branches was initially perceived as manageable at congressional discretion. Nonetheless, Congress increasingly criticized the risk management of the A-12 program due to suspicions of limited information access. Consequently, the decision became politically unjustifiable since the risk realized as Congress had expected, resulting in the termination of the program and the consolidation of risk averseness in subsequent acquisition planning.

In the case of naval aircraft acquisition, all these circumstances stimulated the politicization of risk and the consolidation of a risk-averse context. This indicates that even the U.S., with a relatively well-institutionalized system for risk management and a higher technological and financial capacity than any other state, could not easily ignore risk as a political matter.

Needless to say, we must be cautious in making generalizations from a conclusion derived from a single case study. But there are certain implications if we look at current circumstances surrounding the U.S. The U.S. is facing a larger financial deficit than ever, while simultaneously being urged to reconsider its military strategy both in the short and the long term to react against the rapidly rising Chinese threat. Under this severe circumstance, a policy trilemma of restoring fiscal discipline, short term arrangement of military capability, and preparation for long term threat, may impose problems of risk and its politicization in a more general context than in the late 1980s. At the same time, similar problems may be unavoidable for other states forced to improve their equipment with fewer financial and technological resources. Hence, it will be of increasing importance to understand the current international security dynamism in terms of risk management and its politicization.

[1] Especially at the end of the Cold War, Lacquement Jr. points out, military leaders could exercise their influence over the arrangement and the doctrine of the military forces due to the lack of a presidential leadership and mass public interest (2003: 142).

[2] It has also been pointed out that, although the military services tend to be more reluctant to change than other actors, they do not necessarily resist technological change while being unwilling to accept a doctrinal one (Sapolsky, Gholz, and Talmadge 2009: 22).

[3] The matter of program concurrency had been tied to an attitude toward risk management and institutionally changed several times during the Cold War (Congressional Budget Office 1988: 22-23). And since the late 1990s the introduction of Evolutionary Acquisition and Spiral Development methods has been focused in reflection of an increasingly technology-oriented military acquisition policy in the U.S., for the purpose of risk reduction and rapid acquisition of military capabilities (Pagliano and O'Rourke 2004).

[4] A Report of the General Accounting Office (1992) briefly describes the process toward the termination of the A-12 program.

[5] Memorandum by Chester Paul Beach Jr. for the Secretary of Navy submitted to the hearing on the Navy's A-12 Aircraft Program (HASC 1990d: 14).

[6] Other programs recommended to be applied this approach include the B-2, the Advanced Tactical Fighter, the C-17, and the Missile Experimental (MX) of the Air Force, the V-22 of the Marine Corps, the Light Helicopter (LH) of the Army, the SSN-21 of the Navy.

[7] Memorandum by Lawrence H. Garrett III for the Secretary of Defense submitted to the hearing on the Navy's A-12 Aircraft Program (HASC 1990d: 9).

[8] The similar concern on the inadequate consequence of the congressional action was shared in the Senate Committee (SASC 1991c: 87).

[9] Public Law 102-190, "NDAA for Fiscal Years 1992 and 1993," December 5, 1991, Sec. 121, 213.

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