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# The Economic Strategies of U.S. Nonproliferation Policy during the Nixon-Ford Years

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## Abstract

Much of international relations scholarship attributes the United States' commitment to prevent the global spread of nuclear weapons as the outcome of US national security interests. Yet, US nonproliferation policy comprises a compelling set of economic goals and strategies, beyond economic sanctions. Without incorporating economic factors and actors, and their convergence with the Cold War US national security state, the understanding of US nonproliferation policy remains incomplete. The 1970s challenged US postwar economic preeminence through the "Nixon shock," the end of dollar convertibility to gold of the Bretton Woods system, and the 1973 oil price shock. Concurrently, the United States' market share in terms of global nuclear reactor sales declined while those of West European suppliers like France and West Germany increased. This essay argues that US nonproliferation efforts, which in the Nixon-Ford era took the form of the Nuclear Suppliers Group (NSG) after India's 1974 nuclear explosion, were guided as much by security concerns about proliferation as by Washington's aim to reclaim its market share to protect US nuclear industry against West European competition.

**Keywords:** nuclear proliferation, global security, political economy, US foreign policy

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Nuclear proliferation is one of the most serious global security challenges that continues to confront the international community. States desire to acquire nuclear weapons because of their perceived political, military, and diplomatic payoffs. These weapons promise increased political leverage to the state acquiring them, which may lead to a variety of new outcomes in their foreign policy behaviors (Bell 2015). Not only can new nuclear-armed states increase the probability of nuclear wars, but also their potentially independent streak tends to challenge US national and international security interests. As a result, preventing nuclear proliferation has been of vital importance to US global security interests since World War II. Proliferation led to the loss

of US nuclear weapons monopoly to the Soviet Union in 1949, contributed to the ensuing arms race between the two superpowers, and emboldened recalcitrant allies like France and communist adversaries like China. At least since RAND strategist Albert Wohlstetter (1961) framed proliferation as the "Nth power problem," both nuclear proliferation and nonproliferation have come to be predominantly understood through the lens of security, and the economic angle, particularly the role of transnational market pressures, has taken a backseat. It is no surprise, therefore, that in the extant international relations scholarship on this subject, US commitment to nuclear nonproliferation is indisputably driven by national security (Gavin 2015; Miller 2018). Studies on

the economic logic and strategies behind proliferation and nonproliferation remain scant, with Solingen's (2007) contribution standing out as the key exception.<sup>1</sup>

While some scholars argue that nonproliferation goals are often sacrificed for higher geostrategic priorities and military effectiveness (Cavanna 2016), as in the case of Pakistan's nuclear weapons program during the Soviet occupation of Afghanistan, or alliance politics (Cameron and Rabinowitz 2017), as in the case of Israel's nuclear weapons, most scholars agree that US opposition to nuclear proliferation is driven by national security interests. A closer look at the tools and strategies of US nonproliferation policies, however, generates a more nuanced view of which political economic factors play a key role in determining US policymakers' preferences for certain tools over others in the pursuit of nonproliferation. In this article, I argue that US nonproliferation policy reflects both US foreign economic and security interests. General relative economic decline and loss of nuclear market share to global competition from West European nuclear supplier states changed US nuclear nonproliferation policy.

In the 1950s, the attractiveness of transforming Western Europe into a reactor market for US companies was a key driver for President Eisenhower's push for the European Atomic Energy Community or EURATOM (Helmreich 1991; Skogmar 2004). In the 1970s, the decline in US economic power and the consequent need to rally support of its European allies for an international economic order, likewise, drove the creation of the Nuclear Suppliers Group (NSG)—as the “nuclear” G-7. If US grand strategy is about maintaining US preponderance in the global order and nuclear nonproliferation is integral to that grand strategy (Gavin 2015), then that preponderance cannot be attained merely through containing present and future global security threats but also by neutralizing foreign economic competitors. It is here that guns meet butter, and the rubber meets the road.

1 Gheorghe makes a commendable attempt to foreground the role of the market in nuclear proliferation but does not completely account for economic factors and actors. Apart from focusing solely on states as the source of nuclear trade (which leaves out any agency of private firms and individuals), she assumes market share to be the equivalent of political power distribution (or “polarity” as she calls it) in the international system. As a consequence, Gheorghe subsumes the economic processes under the political component, which therefore still ends up limiting our understanding of nuclear proliferation and nonproliferation through market forces. See Gheorghe 2019.

## Structural Background: Relative Economic Decline

The 1970s exemplified the limitations of US global power on multiple fronts, although the limitations were most acute in the economic domain. Postwar recovery of allies in Western Europe and Japan, the consequent competition between US firms and those of allies, and the rising costs of the Vietnam War among others, strained the US economy. The economic strains culminated in the 1971 “Nixon shock” that terminated the Bretton Woods monetary system of dollar convertibility to gold, and the subsequent end of fixed currency exchange rates. Two years later, the Organization of the Petroleum Exporting Countries (OPEC) embargo precipitated the 1973 oil price shock, leading to energy shortages across the United States and Western Europe. Oil shocks also created new market opportunities for the European nuclear supplier states. In addition to relative economic decline, the 1970s unearthed economic fractures within the West, as the United States and its transatlantic allies experienced major differences over not only the future of the global economic order but also the means to stabilize it, and a North-South conflict in the form of calls for a New International Economic Order (Gilman 2015).

## North-South by East-West

India's nuclear explosion in May 1974 came at an inexpedient moment for US policymakers. New Delhi's action demonstrated the ability of countries to legally obtain equipment and technologies from the global atomic marketplace to effectively build a nuclear device. New Delhi's nuclear explosion thereby underlined the need for multilateral controls in the marketplace. A multilateral effort for nonproliferation meant convincing major industrialized suppliers—US allies and the Soviet Union—to not trade in technologies, equipment, materials, and know-how that could lead to proliferation by the recipient states. In the era of the 1970s energy crisis, rising inflation, and unemployment in the largest economies of the Western world, a harmonized set of policies to reduce profitable nuclear exports was easier said than done. The result was near-direct conflict between Washington and some of its closest West European allies (Nuti 2018; Sarkar 2019).

After the formation of the Group of 77 (G-77) at the second United Nations Conference on Trade and Development (UNCTAD) in 1968, the countries of the Global South formed a voting majority at the United Nations General Assembly (UNGA), which they used to adopt the Declaration on the New International Economic Order and related proposals in May 1974—only weeks before

the Indian nuclear explosion. Calls for the “right to development” and global redistribution of wealth to correct the wrongs of colonialism that were intrinsic to the G-77’s proposals underlined strained relations between the West and the Rest. While Soviet leaders rejoiced the fracture within the West and the “Third World’s new insurgency” (Sargent 2015, 176), as far as global nuclear issues were concerned, Moscow agreed more with Washington than with any of its partners in the developing world. Soviet support for the West on international platforms like the International Atomic Energy Agency (IAEA) in Vienna meant that the G-77 had little effective influence there unlike inside the UNGA (Scheinman 1987, 223). Soviet-US cooperation on nonproliferation helped to materialize the Non-Proliferation Treaty (NPT) in 1968, and would play an important role in the formation of the NSG in 1975. Superpower détente thus generated nonproliferation dividends for the United States.

European allies were on a different page. By 1975, both France and West Germany, in the face of their own economic challenges, had offered nuclear technologies to numerous threshold states, like Pakistan, Brazil, South Korea, Taiwan, Iran, Iraq, and others. That most of these threshold states were in the Global South only helped to argue that the North must unite against the security risks posed by the South. Set against the backdrop of oil-rich Muslim nations of the Middle East disrupting economies of the West with the OPEC embargo, and fears of Islamist terrorism that had attracted worldwide attention with Black September’s Munich massacre, the threat of nuclear proliferation in the 1970s began to be termed as an imminent dystopia in a global North-South conflict. It was not surprising that the news of Pakistan’s nuclear weapons development was widely reported in the Western media as the “Islamic bomb,” with implications that Islamabad would not merely develop these weapons but also share them with other Muslim countries (Craig 2016).

It is not without accident that the Persepolis Conference that was held in 1977 as a response against the NSG framed its critique in North-South terms (Sabet 2018). These critics argued that the NSG was in effect a “nuclear cartel” of the Global North, and hardly any different from the OPEC. The Persepolis Conference attracted a fair number of US industry personnel who were worried that President Carter’s “excessive” nonproliferation policy might bring their lucrative nuclear exports to a halt.

## The Nuclear G-7

A key Nixon-era National Security Council document from summer 1974 noted that “the increased availabil-

ity of weapons-usable materials from the growth and dissemination of nuclear power industries” necessitated a policy review by the US government and consultation with countries that were “present or potential suppliers of materials, technology and equipment.”<sup>2</sup> After Richard Nixon’s exit from the presidency, President Gerald Ford followed through the recommendations by convening major nuclear suppliers in London (Walker 2001). This would bring to light major differences between Washington and the other suppliers for the next years.

Nuclear exports were treated like any other exports by Bonn and deemed necessary for the export-oriented West German economy. The decline in domestic demand, antinuclear protests at reactor construction sites in West Germany, and strong government investment in nuclear energy generated the rationale to find markets abroad. In France, the impetus to export reactors and reprocessing plants was high given the rising demand for nuclear energy in the wake of the 1973 oil price shock. Moreover, both those economies were strained by the energy crisis such that generating export-led growth through nuclear trade made economic sense for Paris and Bonn. The outcome was increased West European competition for the US nuclear industry.

By the latter part of the 1970s, market shares in terms of global nuclear reactor sales of West European suppliers like France and West Germany increased while US market shares declined (Jones et al. 1984, 67). During 1975–1979, the French market share of nuclear plants exported to the noncommunist world increased to 18 percent from 5.5 percent in 1965–1969. The West German market share rose to 20 percent in 1975–1979 from 7.5 percent in 1965–1969. In stark contrast, the market share of US companies fell drastically from a whopping 84 percent in 1965–1969 to 55 percent in 1975–1979. In other words, although the United States was still the dominant nuclear reactor supplier in the noncommunist world, its monopoly was over (Joskow 1976; Ribicoff 1976).

The formation of the NSG abroad for multilateral controls and the Nuclear Regulatory Commission (NRC) at home for managing domestic nuclear industry grew out of the US need to reclaim its global market share. Prior to the Energy Reorganization Act of October 1974,

- 2 National Security Council (NSC), National Security Decision Memorandum (NSDM) 255, June 3, 1974, [https://www.nixonlibrary.gov/virtuallibrary/documents/nsdm/nsdm\\_255.pdf](https://www.nixonlibrary.gov/virtuallibrary/documents/nsdm/nsdm_255.pdf); see also NSC, National Security Study Memorandum (NSSM) 202, May 23, 1974, [http://www.nixonlibrary.gov/virtuallibrary/documents/nssm/nssm\\_202.pdf](http://www.nixonlibrary.gov/virtuallibrary/documents/nssm/nssm_202.pdf).

the US Atomic Energy Commission (USAEC) was in charge of both US nuclear weapons and civilian use of nuclear energy. Under the bifurcation of October 1974, the Energy Research and Development Administration (the predecessor of the current US Department of Energy) took over most responsibilities of the USAEC except for regulation of domestic civilian-purpose nuclear industry, which was assigned to the NRC. The dawn of the “age of vulnerability” and interdependence that the 1970s brought about necessitated US policymakers to adopt concerted policy harmonization with suppliers abroad and government guidance of industry at home. The total nuclear reactor exports in the “Free World” (measured as their total electricity generation capacity) fell from 32.1 GWe in 1970–1974 to 15 GWe in 1975–1979. Since the US market share in the 1970s was overall declining and those of France and West Germany were overall increasing, the fall in total nuclear exports economically hurt the Europeans more.

### Atomic Linkage

The shift in US strategy over economic-nuclear links is evident in the 1973 shift in the preferences of individual policymakers. Henry Kissinger’s pivotal role in forming the NSG is well accounted for by historians (Burr 2014; Antsey 2018; Sarkar 2019). But this nuclear component of his statecraft is less widely known in comparison to his diplomatic finesse in orchestrating the Sino-US rapprochement and Soviet-US détente.<sup>3</sup> Kissinger’s approach of “strategic and geopolitical globalism” emphasized the military and diplomatic tools of US foreign policy but neglected the economic dimension (Hanhimäki 2004; Del Pero 2010, 59). While that worked until most of 1973, the economic challenges thereafter on domestic and international fronts necessitated immediate attention to economics. Kissinger in the Ford administration, therefore, adopted a multilateral approach to manage US economic interdependence that would serve US economic ends, reunite the Global North, and divide the Global South. Kissinger’s strategy on nuclear exports was representative of “atomic linkage”: he linked economic interests in tackling the loss of US monopoly in the reactor market to the US national interest in nonproliferation; he linked one nuclear export case with another; and he linked the nuclear with other domains to gain leverage. This atomic linkage was operationalized through a case-by-case treatment of most nuclear export transactions of US allies, thus allowing

Kissinger to exercise near complete control over the fate of nuclear exports.

The primacy of market pressures for supporting US exports in justifying US nonproliferation policy is evident in the Nixon administration’s 123 agreement with China in July 1974 over the sale of US light water reactors.<sup>4</sup> The normalization with China in 1972 created the possibility of a new reactor market for US firms, which the Nixon administration wanted to readily exploit. Such sales to Communist countries required exemptions from the Coordinating Committee for Multilateral Export Controls (CoCom), which were to be on a case-by-case basis.<sup>5</sup> In the fall of 1974, when West German Chancellor Helmut Schmidt approached the Ford administration for a CoCom exemption to construct a power reactor in the Soviet oblast of Kaliningrad, Kissinger decided that blocking the Soviet-West German endeavor could exacerbate US-West German tensions. Instead, he recommended that IAEA safeguards be implemented on the future West German-built Soviet reactor, despite the well-known Soviet opposition to accepting IAEA safeguards on its own territory.<sup>6</sup> By June 1975, in the face of Soviet rejection of the safeguards request, Kissinger sought Soviet assurances for peaceful use of the future reactor instead.<sup>7</sup> This change of tone was because by then, the West German offer of the “deal of the century” to Brazil—nuclear reactors including enrichment and reprocessing facilities—had become a greater priority for Washington. The West German-Brazil deal posed higher proliferation risks than a power reactor in Kaliningrad. In other words, while the Nixon and Ford administrations created new markets for the US nuclear industry in the Communist world, they posed restrictions on other suppliers seeking similar entry into the East. These restrictions were not through direct opposition but by new conditions sought on a case-by-case basis. Pressure on one export case was often eased when a more compelling case came by.

4 It was not until the Reagan administration that a 123 agreement was signed with Beijing in 1984. NSC, NSDM 261, July 22, 1974, [https://www.nixonlibrary.gov/virtuallibrary/documents/nsdm/nsdm\\_261.pdf](https://www.nixonlibrary.gov/virtuallibrary/documents/nsdm/nsdm_261.pdf).

5 *Ibid.*

6 Secret telegram from State Department to US embassy in Bonn containing text of the letter from Kissinger on October 19, 1974, Nodis, National Security Advisor Presidential Country Files for Europe and Canada: Germany (7), Box 6, Gerald Ford Presidential Library, Ann Arbor, MI.

7 NSC, NSDM 298, June 14, 1975, <https://www.fordlibrarymuseum.gov/library/document/0310/nsdm298.pdf>.

3 On Kissinger’s realism, see Suri (2007).

During 1974–1976, Kissinger adopted measures to undercut the economic leverage of other suppliers. Within months of India’s nuclear test, as the United States was about to embark on a policy coordination approach with other suppliers, the Nixon administration offered US light water reactors to three countries: Egypt, Israel, and the People’s Republic of China. Two of these were not signatories to the NPT—Israel and China—with no immediate intent to join the treaty.<sup>8</sup> In March 1975, as the supplier states were about to meet in London to decide on multilateral export controls, the Ford administration began to explore the sale of light water reactors to Iran, an oil-rich ally at the time.<sup>9</sup> Congressional opposition, Israeli indifference, and Iranian revolution halted the exports by 1978–1979.

In the nonproliferation crisis of the 1970s, Kissinger saw ripe economic opportunities for US private firms like Westinghouse, General Electric, Babcock & Wilcox, and Bechtel. US light water reactors used low-enriched uranium as fuel, which was nowhere close to weapon-grade material. As a result, when negotiators in London battled over what proliferation risk-posing technologies, equipment, and materials to control, the light water reactors were hailed as proliferation resistant and, therefore, off limits. In addition, since these reactors were fueled by low-enriched uranium, it made the recipients dependent on the United States for reactor fuel. In other words, the proactive push in the 1970s by the Nixon and Ford administrations for light water reactors for nonproliferation was not merely financially profitable for US firms but also generated dependence on Washington, potentially becoming bargaining chips for the future.

## Conclusion

The historical record reviewed in this article from the Nixon/Ford years suggests that the incorporation of the factors, actors, and processes from political economy into the security studies scholarship on nonproliferation is needed in order to arrive at a more comprehensive understanding of US nonproliferation policy, which is ar-

guably one of the most consistent characteristics of US foreign policy since 1945. This article accentuates the political economy-global security nexus that constitutes the complex picture that is US nonproliferation policy. The framework of political economy of global security aims to encourage future research that integrates variables from political economy more deliberately with the often-overemphasized security-based variables. Global economic interdependence, market share, private firms, transnational supply chains, lobbying groups, regulatory capture, and the lock-in effect, among others, are important and integral to how US nonproliferation policy is devised and executed. Without the political economy of global security of nonproliferation, we are all missing out on innovative and important scholarship.

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## References

- Anstey, Isabelle. 2018. “Negotiating Nuclear Control: The Zangger Committee and the Nuclear Suppliers’ Group in the 1970s.” *International History Review* 40 (5) 975–95.
- Bell, Mark. 2015. “Beyond Emboldenment: How Acquiring Nuclear Weapons Can Change Foreign Policy.” *International Security* 40 (1, Summer): 87–119.
- Burr, William. 2014. “A Scheme of ‘Control’: The United States and the Origins of the Nuclear Suppliers’ Group, 1974–1976.” *International History Review* 36 (2): 252–76.
- Cameron, James, and Or Rabinowitz. 2017. “Eight Lost Years? Nixon, Ford, Kissinger and the Non-Proliferation Regime, 1969–1977.” *Journal of Strategic Studies* 40 (6): 839–66.
- Cavanna, Thomas P. 2016. “Geopolitics Over Proliferation: the Origins of US Grand Strategy and Their Implications for the Spread of Nuclear Weapons in South Asia.” *Journal of Strategic Studies* 41 (4): 576–603.
- Craig, Malcolm M. 2016. “‘Nuclear Sword of the Moslem World’?: the United States, Britain, Pakistan, and the ‘Islamic Bomb,’ 1977–80.” *The International History Review* 38 (5): 857–79.
- Del Pero, Mario. 2010. *The Eccentric Realist: Henry Kissinger and the Shaping of American Foreign Policy*. Ithaca: Cornell University Press.
- Gavin, Francis J. 2015. “Strategies of Inhibition: US Grand Strategy, the Nuclear Revolution, and Nonproliferation.” *International Security* 40 (1, Spring): 9–46.

8 Reactor sales to Israel and Egypt could potentially become a “partial NPT” thought Kissinger in the hope of compelling Israel to accept the future US-supplied reactor under IAEA safeguards. It is not clear how much Kissinger genuinely believed that Israel would accept the offer but what is evident is US companies stood to gain if the reactor offers materialized. See Rabinowitz and Sarkar (2018).

9 NSC, NSSM 219, March 14, 1975, <https://www.fordlibrarymuseum.gov/library/document/0310/nssm219.pdf>.

- Gheorghe, Eliza. 2019. "Proliferation and the Logic of the Nuclear Market." *International Security* 43 (4, Spring): 88–127.
- Gilman, Nils. 2015. "The New International Economic Order: A Reintroduction." *Humanity: An International Journal of Human Rights, Humanitarianism, and Development* 6 (1, Spring): 1–16.
- Hanhimäki, Jussi M. 2004. *The Flawed Architect: Henry Kissinger and American Foreign Policy*. Oxford: Oxford University Press.
- Helmreich, Jonathan E. 1991. "The United States and the Formation of EURATOM." *Diplomatic History* 15 (3, Summer): 387–410.
- Jones, Rodney W, Cesare Merlini, Joseph F. Pilat, and William C. Potter. 1984. *The Nuclear Suppliers and Nonproliferation: International Policy Choices*. Lanham: Lexington Books.
- Joskow, Paul L. 1976. "The International Nuclear Industry Today: The End of American Monopoly." *Foreign Affairs* 54 (4, July): 788–803.
- Miller, Nicholas L. 2018. *Stopping the Bomb: The Sources and Effectiveness of US Nonproliferation Policy*. Ithaca: Cornell University Press.
- Nuti, Leopoldo. 2018. "The Making of the Nuclear Order and the Historiography on the 1970s." *International History Review* 40 (5): 964–75.
- Rabinowitz, Or, and Jayita Sarkar. 2018. "It Isn't Over Until the Fuel Cell Sings": A Reassessment of the US and French Pledges of Nuclear Assistance in the 1970s." *Journal of Strategic Studies* 41 (1-2): 275–300.
- Ribicoff, Abraham A. 1976. "A Market-Sharing Approach to the Nuclear Sales Problem." *Foreign Affairs* 54 (4, July): 763–87.
- Sabet, Farzan. 2018. "The April 1977 Persepolis Conference on the Transfer of Nuclear Technology: A Third World Revolt Against US Non-Proliferation Policy?" *International History Review* 40 (5): 1134–51.
- Sargent, Daniel J. 2015. *A Superpower Transformed: The Remaking of American Foreign Relations in the 1970s*. Oxford: Oxford University Press.
- Sarkar, Jayita. 2019. "Whack-a-Mole: American Policy to Curb West European Nuclear Exports, 1974–1978." *Journal of Cold War Studies* 21 (2, Spring): 110–49.
- Scheinman, Lawrence. 1987. *The International Atomic Energy Agency and World Nuclear Order*. Washington, DC: Baltimore: Resources for the Future; Distributed by the Johns Hopkins University Press.
- Skogmar, Gunnar. 2004. *The United States and the Nuclear Dimension of European Integration*. Basingstoke: Palgrave Macmillan.
- Solingen, Etel. 2007. *Nuclear Logics: Contrasting Paths in East Asia and the Middle East*. Princeton: Princeton University Press.
- Suri, Jeremi. 2007. *Henry Kissinger and the American Century*. Cambridge: Belknap Press of Harvard University Press.
- Walker, J. Samuel. 2001. "Nuclear Power and Nonproliferation: The Controversy Over Nuclear Exports, 1974–1980." *Diplomatic History* 25 (2, spring): 215–49.
- Wohlstetter, Albert. 1961. "Nuclear Sharing: NATO and the N+1 Country." *Foreign Affairs* 39 (3, April): 355–87.