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STRENGTHENING TRANSATLANTIC COOPERATION

Policy Brief

Asia Program

July 9, 2010

Summary: After years of clear distinctions between friend and foe during the Cold War, commercial partners of the United States and Europe now offer attractive trade opportunities and security risks at the same time. High technology trade with China presents the transatlantic partners with one such dilemma, but competing interests and different threat perceptions between — and within — the United States and Europe with regards to China also raise the possibility of future transatlantic disputes. Under these circumstances, the United States and Europe must work together to forge a concerted approach to dual-use technological transfers.

Toward a Transatlantic Approach to Technology Transfers to China

by May-Britt U. Stumbaum[1]

Qian Xuesen, the so-called father of the Chinese space program, died last October at the age of 98. An outstanding MIT-educated rocket scientist, who had been a pioneer of American jet and rocket technology in the 1930s and 1940s, Qian was sent back to the People's Republic of China (PRC) during the height of McCarthyist red-baiting in 1955. Upon his return, he became a significant driving force behind China's aerospace ambitions and had a major impact on the successful development of the nation's first ballistic missiles, its first satellite, and the Silkworm anti-ship missile. Former U.S. Secretary of the Navy Dan Kimball once called Qian's deportation from the United States to China "the stupidest thing this country ever did." This case illustrates the unintended self-damage caused when ideology supersedes sober risk assessment, something that remains an important problem even today.

After years of clear distinctions between friend and foe during the Cold War, the United States' — and Europe's — trading partners can now offer attractive trade opportunities and security risks at the same time. Dual-use technologies in fields ranging from semiconductors to space play a central role for economic development as well as for network-centric warfare. High-tech collaboration between the transatlantic allies and the Peoples' Republic of China therefore combines possible security risks, intellectual property losses and espionage with general considerations about innovation capacity, competitiveness, and access to the Chinese market.

In these matters, potential conflicts in transatlantic relations linger on the horizon. Given their significantly different global outlooks, the United States and the European Union differ fundamentally in their perceptions of China's rise, as well as the guiding paradigms and control mechanisms of their export control regimes. Although the United States is undisputedly the largest player in many technology fields, including space, the European Union has been the main provider of the high technology enabling China's rise over the past three decades. Differing perceptions between different EU member states, too, should not be forgotten.

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Yet actors on both sides of the Atlantic have an interest in finding a common approach. Trade in high technology presents a tempting opportunity to balance their ballooning trade deficits with China. As China's rapid catch-up in space technology has shown, efforts to stop technological flows and development have often been futile and, as some experts argue, even economically self-damaging. If both sides find a common approach, they can avert clashes over this issue and instead develop a promising strategy, one that manages the risks of transferring dual-use technologies while providing the benefits of collaborating with the rising technological power that is China.

A New Environment

The post-Cold War environment has fundamentally changed the political conditions for high technology collaboration and trade, with the signature development being the rise of China. China finances the U.S. budget deficit and holds about $800 billion in U.S. treasury bonds. It runs substantial trade surpluses with the United States ($286 billion in 2008) and the European Union ($239 billion). For the aerospace industry, China now presents the second largest market after the United States. And today, it is the world's largest carbon dioxide emitter.

China is also undergoing a metamorphosis from a developing country into a leading technological nation. Six million graduates leave Chinese universities every single year, of which a substantial number are engineers. An increasing number of educated Chinese are also returning from universities abroad. China's enormous currency reserves also provide the central government with the necessary cash for substantial investments in new technologies. While consumers and public research and development (R&D) investments dwindle in Europe and the United States, China offers both a promising market as well as up-and-coming high-tech manufacturers. R&D investments have been growing by approximately 10 percent annually for the past decade and totaled $65.8 billion in 2008. This year, China plans to spend 2.2 percent of its GDP on R&D, amounting to the same sum as the European Union as a whole. In stark contrast, the goal once set by the EU's Lisbon Agenda of creating a European Research Area (ERA) and increasing R&D spending to 3 percent of GDP by 2010 will likely be missed.

For now, however, Chinese science has not yet yielded significant breakthroughs commensurate with its rising R&D investments. The rate of citations of Chinese science and technology papers, for example, remains low. Yet given China's growing R&D investments, its purchase and reverse engineering of technology, and its enormous pool of talent, it seems only a matter of time before China catches up in various research fields, as it has done already in the modernization of its military-industrial complex. Yet the substantial risks of involuntary technology transfers remain.

Export Control Systems

Export controls and arms embargoes are based on different jurisdictions and mechanisms in the European Union and United States. In Europe, dual-use technology and arms exports are regulated by EU Council regulations, by the EU Code of Conduct and by international and national regimes. However, they are interpreted and executed by national authorities. This often leads to different national interpretations, loopholes being exploited, and member states undercutting one another. In contrast to the legally mandated U.S. arms embargo on China, the EU embargo is only a politically binding declaration, which has been translated and interpreted into the national laws of its 27 member states.

But even the United States has been struggling to cope with the new challenges posed by its post-Cold War environment. In June 2007, the Bureau of Industry and Security (BIS) at the Department of Commerce initiated a new approach by introducing a still controversial Validated End-User (VEU) regime based on the selection of so-called trusted companies in China, monitoring of track records and on-site inspections. A further complication is that, in general, U.S. export policy includes a consideration of past technology delivered to China, and possible next-generation developments of these technologies. EU member states, by contrast, often do not want to reveal information on future technologies for reasons of industrial competition, with only denials of export licenses reported.

Different Threat Perceptions

Uneasiness about potential dual-use technology transfers to China derives from the key role high technology plays

in its ongoing technology-driven Revolution in Military Affairs (RMA). According to a 2007 U.S. Department of Defense report, the People's Liberation Army (PLA) is "pursuing comprehensive transformation from a mass army designed for protracted wars of attrition on its territory to one capable of fighting and winning short-duration, high-intensity conflicts against high-tech adversaries, which China refers to as 'local wars under conditions of informatization.'" With double-digit percentage increases in annual growth, China's defense expenditure has octupled within the last decade to $63.6 billion in 2008 according to SIPRI. The real number might be much higher.[2] So far, China's military activities and long-term goals are still not transparent enough for the comfort of the United States and the European Union. U.S. Secretary of Defense Robert Gates described American policy as one of "encouraging China to make the right strategic choices for its people, while we hedge against other possibilities."

Both Europe and the United States have an interest in solidifying connections with a rising China in order to tie it into a Western-shaped international system as a so-called responsible stakeholder, thereby preserving their influence in the system as well as the system itself.

[2]Since parts of the budgets of several ministries include military-related expenditures, Western experts believe that the real amount could be as high as $110-170 billion for 2005. See, for example, Dan Blumenthal, "Rising Star: What does China's economy mean for US strategy," *Armed Forces Journal*, February 2006 and Evan Medeiros et al., "A New Direction for China's Defense Industry," RAND Corporation, 2005.

Both Europe and the United States have an interest in solidifying connections with a rising China in order to tie it into a Western-shaped international system as a so-called responsible stakeholder, thereby preserving their influence in the system as well as the system itself. Gone are the days when Western nations would threaten to interrupt relations over human rights. During a visit last October by General Xu Caihou, China's second-ranking officer, U.S. Secretary of Defense Robert Gates stressed the need to preserve a dialogue between the U.S. and Chinese militaries regardless of disputes or policy differences. Similarly, the latest EU-China summit focused on the potential for collaboration on a range of global challenges, particularly climate change and the financial crisis.

Potential divergences arise from differences in threat perceptions on both sides of the Atlantic. The United States perceives China as its only potential peer competitor. In the Asia-Pacific, China's growing influence competes directly with the established "Pax Americana," which is underpinned by a series of bilateral security agreements and patrols by the U.S. Seventh Fleet in the South China Sea. The European Union and most of its member states, however, share a primarily regional security outlook that does not extend as far as China. For Europe, China-anxiety stems primarily from the fear of economic, not military, competition. The transatlantic clash over the proposed lifting of the EU arms embargo on China in 2004 and 2005 painfully revealed these differences in perception, yet it did not trigger a lasting change.

A Common Approach

In order to benefit from high-tech opportunities with China, the transatlantic partnership must adopt a common strategy of managing risks instead of finger-pointing, particularly with China growing ever more confident and assertive. Decision-makers on both sides of the Atlantic find themselves in a field of competing business interests and security concerns, a situation which on the European side is only magnified by differences between the 27 EU member states. Such competing interests, paired with a distrust of each other's policies and control mechanisms, mean that the possibility of future transatlantic clashes over dual-use technology transfers to China remains significant. This may, in turn, impact technology transfers across the Atlantic.

Adopting a common approach for managing risks towards China, while simultaneously reducing the risk of transatlantic disputes, requires the United States and Europe to do their homework. On the European side, member states need to work towards a strategic assessment of China's rise in order to find some common ground with their U.S. counterparts. Given the sensitivity of the issue, this might be most effective to initiate at a Track II level. It remains to be seen if the provisions of the Lisbon Treaty will help to harmonize the foreign policy outlook and activities of the EU member states, and if it will provide the "single voice" with which it can engage in discussions with U.S. counterparts. Finally, Europe needs to boost its own investment in R&D so that it has something to bring to the table when negotiating with both China and the United States.

On the American side, it will be important to recognize that an exchange of views with the European Union, as arduous as it may be, will be beneficial in the long run. The United States may lead in technology, but Europe leads in technology transfers to China; both facts are not likely to change in the near future. This exchange should broaden the debate beyond involved civil servants by including other stakeholders, such as scientists on both sides, in the discussion.

Establishing such a regime will certainly hit some very sensitive issues: Gates' recent proposal to establish a single agency to license export controls in the United States will be met with severe resistance from other agencies, thus complicating coordination with the United States' European partners. On the other hand, a "traffic light system" as recommended by some U.S. scholars to label the different levels of technological sensitivity has been met with European resistance.

The sharing of information on exports also harbors further risks. Public knowledge of the level of defense technology available would not be in the interests of any of the participating states for both industrial and security reasons. Yet keeping shared information confidential has been a challenge with a European Union composed of 27 states. Attempts to set up information-sharing mechanisms with the United States might nevertheless reveal politically sensitive differences.

About GMF's Asia Program

The German Marshall Fund's Asia Program addresses the implications of Asia's rise for the West—in particular, how Asia's resurgence will impact the foreign policy, economic, and domestic challenges and choices facing the transatlantic allies—through a combination of convening, writing, strategic grants, study tours, fellowships, partnerships with other GMF programs, and partnerships with other institutions. Led by Senior Fellow for Asia Daniel Twining and Transatlantic Fellow Andrew Small, the program's initiatives include the Stockholm China Forum and India Forum, seminars and other activities in Japan, a Japanese fellowship program, Asia-related panels at GMF's flagship events at Brussels and Halifax, and a paper series on transatlantic approaches to wider Asia and on deepening cooperation between democratic Asia and the West. For more information see http://www.gmfus.org/asia.

About GMF

The German Marshall Fund of the United States (GMF) is a nonpartisan American public policy and grantmaking institution dedicated to promoting greater cooperation and understanding between North America and Europe. GMF does this by supporting individuals and institutions working on transatlantic issues, by convening leaders to discuss the most pressing transatlantic themes, and by examining ways in which transatlantic cooperation can address a variety of global policy challenges. In addition, GMF supports a number of initiatives to strengthen democracies. Founded in 1972 through a gift from Germany as a permanent memorial to Marshall Plan assistance, GMF maintains a strong presence on both sides of the Atlantic. In addition to its headquarters in Washington, DC, GMF has seven offices in Europe: Berlin, Bratislava, Paris, Brussels, Belgrade, Ankara, and Bucharest.

Although the odds seem to be against finding a common transatlantic approach, there is no real alternative. Not attempting to do so will mean undercutting each other's export control policies while preventing fruitful collaboration between European and American companies. Finding a common approach will not just maximize benefits, it will help the United States and Europe manage the risks of transferring technology to China, and minimize the chances of transatlantic conflicts over the same.