The end of Dutch Liberalism? Export restrictions in the face of geopolitical threats.

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# Abstract

Last year the Dutch government introduced restrictions on the export of ASML's advanced semiconductor equipment. These restrictions are part of a larger shift in the western world away from the free trade of strategically important products. This thesis aims to answer the question "How has the Dutch government's attitude towards the export of semiconductor equipment changed in response to security concerns and international pressure?". It does this with a case study that uses coding to conduct a content analysis of relevant literature. The case of export restrictions on advanced ASML semiconductor equipment offers a unique opportunity to observe the government's priorities. The content analysis using coding allows for the thorough and systematic investigation of the actions and motivations of involved actors. The codes are deduced from key aspects of the theories of Waltian Realism and Neoliberalism.

Analysis of various documents has revealed that the Dutch government has shifted into a realist attitude towards export of semiconductor equipment which prioritizes national security concerns over matters of economic efficiency. Trade, interdependence and business interests are acknowledged as important to wider Dutch interests, but in this case clearly of a lower priority than facing perceived threats stemming from the export of semiconductor equipment to China.

# Introduction

How has the Dutch government's attitude towards the export of semiconductor equipment changed in response to security concerns and international pressure? In the past years western states have become increasingly concerned with the security of global semiconductor supply chains. These concerns stem both from recent supply chain disruptions during Covid-19 and from increasing geopolitical tensions with states such as China and Russia. Tensions in the relationship with China have been especially prominent due to fears of the military uses of semiconductors and a potential future conflict with Taiwan which could endanger the global semiconductor supply chain. In 2022 the United States ramped up its restrictions on the types of semiconductors that American companies could export to China and started pressing their allies to put similar restrictions into place. One of these allies is the Netherlands which has introduced its own restrictions on ASML's export of advanced semiconductor equipment to China in 2023. ASML produces the world's most advanced lithography machines and had previously been allowed to freely export these to countries around the world. The imposing of restrictions on the export of these advanced lithography machines indicates a shift of the Dutch government's policy of Neo-Liberalism towards an approach that more strongly considers Waltian Realism. The goal of this bachelor thesis is to investigate this potential shift of priorities and to examine the role that concerns around Waltian geopolitical security threats play in this development.

The thesis aims to answer the explanatory research question: "How has the Dutch government's attitude towards the export of semiconductor equipment changed in response to security concerns and international pressure?". The paper will attempt to understand the motivations behind the Dutch government's choice to put export restrictions on ASML and determine whether the choices made can be explained through the theories of Neoliberalism or Waltian Realism. Furthermore, it will try to answer the sub-question: "How strongly are realist attitudes driven internally instead of pressure from the United States?". This question will investigate the degree to which the Dutch government's realist attitudes are driven by pressure from the United States. This will provide insight into the way that foreign pressure is reflected in the way the government makes strategic decisions regarding the export of advanced semiconductor equipment.

Below is a list of the hypotheses operationalized from the theories Neoliberalism and Waltian Realism.

*Hypothesis 1: If the Dutch government maintains a Neoliberal attitude towards the export of semiconductor equipment, it prioritizes economic efficiency over perceived threats.* 

*Hypothesis 2: If the Dutch government maintains a Realist attitude towards the export of semiconductor equipment, it prioritizes perceived threats over economic efficiency.* 

Hypothesis 3: If the Dutch government maintains neither a clear Realist nor Neoliberal attitude towards the export of semiconductor equipment, it does not clearly display a prioritization of perceived threats or economic efficiency.

# Theory

According to Kenneth Waltz's Theory of International Politics (1979), the structure of the international system is anarchical and that states are rational actors that are primarily concerned with their own

survival. In his realist view of international relations, states are the key actors. His Neorealism theory argues that international relations can be explained by the distribution of power amongst states. In the book "The Origins of Alliances" (2013) Stephen Walt surveys the origins of international alliances and identifies the causes of cooperation between states. His Waltian Realism argues that international relations cannot be explained by the distribution of power, but rather by states' reaction to perceived threats. In the case of Dutch export policy surrounding ASML lithography machines, such a threat can be primarily identified in the increasing tensions between China and western nations and the potential hostile use of advanced technologies.

Neoliberalism is an international relations theory originating from the book "Power and Interdependence" (1977) by Joseph Nye and Robert O. Keohane. Neoliberalism also recognizes the anarchical nature of the international system but argues that this does not prevent cooperation. This cooperation has created international networks that have made states dependent on one another. This interdependence along with trade and economic efficiency are the drivers of Neoliberalism (Nye & Keohane, 1977). Keohane and Nye (1987) argue that this interdependence has caused actors other than states to also be involved in international relations. In the case selected for this study, ASML is considered such an actor. Another justification for this case is that the presence of international networks is exemplified by the complicated global supply chain for semiconductors. The case also provides examples of interdependency in China's and the United States' reliance on ASML lithography machines and ASML's, and therefore the Netherlands', reliance on parts from the United States.

ASML has identified itself as a global business (NOS, 2024) **a**nd therefore, is interested in selling their products internationally with as little restrictions as possible. Regarding the regulations, they are primarily concerned with effects on their financial results, though they claim that these have so far been limited (ASML, 2023). ASML intends to comply with any export regulations (ASML, 2023) but has also shown that they are willing to respond to political decisions that they deem harmful to their business. This is shown in the company's CEO reaction to the potential tightening of immigration laws where he stated that their priority is delivering what their customers need and that though they currently prefer to stay in the Netherlands they are prepared to move their business if truly necessary (NOS, 2024). The way that the Dutch government takes the interests of ASML into account will provide insight into the degree of Neoliberalism in their decision making.

## **Research Design**

This thesis will be utilizing a single case study design focusing on the case of Dutch export restrictions on ASML semiconductor equipment to China. These restrictions are recent, being announced and implemented in 2023. The choice of this case is primarily based on the prominent role that ASML plays in both global semiconductor supply chains and the Dutch economy. ASML is the only producer of the world's most advanced lithography machines essential to advanced semiconductor production. The role that ASML also plays as the Netherlands' most valuable company creates tension between the economic benefit of free export and the need to address security threats perceived by the Netherlands and its allies. Therefore, the selection of this case creates a unique opportunity to observe the Dutch government's priorities when it comes to the export of advanced semiconductor equipment.

Besides the primary motivator, the ease of access to relevant sources has also played a role in case selection. Due to the prominence of ASML there was a significant amount of media attention towards the introduction of export restrictions. This, combined with statements from the Dutch, American and Chinese governments ensures the availability of relevant sources written in either English or Dutch.

# Methodology

The goal of this research is to investigate a potential change in attitude of the Dutch government towards the export of ASML's advanced lithography machines and the role that international pressure and Waltian geopolitical security concerns might play in this development. To accomplish this, I have chosen a single case study research design focused on the 2023 Dutch export regulations on advanced ASML semiconductor equipment. This research design allows for a thorough investigation of the actions and motivations of various actors (George & Bennett, 2005). This design will enable the in-depth study of motivations behind the export restrictions and the roles that various actors played in the decision making. The following sections will describe the method of data collection and data analysis.

### Data collection

To investigate the shift in government priorities the study analyzed various literary sources such as statements from the Dutch and American governments, Dutch political debates, and news articles. There were plenty of these sources available online on the websites of ASML, government institutions and on news sites.

The website of ASML contains reports and statements by the company on their performance and significant events. These documents provide insights into the company's interests and their reaction to the export restrictions. The first of these documents to be analyzed were the "Statement regarding additional export controls" (ASML, 2023) and "Statement regarding partial revocation export license" (ASML, 2024). This was followed by an analysis of ASML's 2023 Annual Report to gain insight into the effects of the policy on ASML's overall performance and the steps, such as negotiating with the governments, they had taken to protect their business interests.

The government institutions provide transcriptions of political debates and provide policy documents detailing the export restrictions. These provide insight into the stated goals of the export restrictions and the way that the government defends its motivations in parliament. The first of these documents to be analyzed were transcriptions of debates on the export restrictions, namely "Tweede Kamer, 16e vergadering Dinsdag 24 oktober 2023" (Tweede Kamer, 2023) and "Tweede Kamer, 25e vergadering Dinsdag 22 november 2022" (Tweede Kamer, 2022). This allowed me to analyze the government's defense of its policies and the priorities they name in parliament.

The news sites provided articles on the export restrictions which contain statements by involved actors such as business leaders, government officials and political leaders. This provided insight into the way that these actors view the policy and what interests are being considered during decision making. The first of these documents to be analyzed were the articles "Export van ASML-machines naar China per 1 september verder beperkt (NOS, 2023) and "Vertrekkend ASML-topman: als we niet hier kunnen groeien, doen we dat elders" (NOS, 2024). These were followed by articles citing various relevant actors, such as Prime Minister Rutte, Minister Schreinemacher and the HCSS.

### Data analysis

The chosen literary sources have been analyzed with the goal of determining which factors played a role in the implementation of export restrictions and which of the selected theories was the basis for the government's decisions. A content analysis will be conducted using both deductive and inductive coding. Codes will initially be deduced from the theories of Neoliberalism and Waltian Realism. The coding will be done in Atlas.ti and provide insight into the presence of the theories in the government's decision making.

To systematically analyze the content of these documents I established a coding scheme using codes deduced from the theories of Neoliberalism and Waltian Realism. This allowed the research to test the stated hypotheses by testing for the presence of these theories in the Dutch government's attitude towards the export restrictions.

The theory of Waltian Realism argues that international relations can be explained by states' reaction to perceived threats (Walt, 2013). The codes deduced from this theory test for perceived threats on the topics of intellectual property theft, geopolitical security concerns and self-sufficiency for strategic goods. When testing these codes, the coder will look for statements from government officials and relevant organizations that display the government prioritizing perceived threats over economic efficiency. This will aid in testing the presence of key drivers of Waltian Realism in the government's attitude and testing Hypothesis 2, displayed below.

# Hypothesis 2: If the Dutch government maintains a Realist attitude towards the export of semiconductor equipment, it prioritizes perceived threats over economic efficiency.

There are also codes testing whether realist attitudes are driven by internal concerns or by U.S. pressure. By investigating the sequence of events surrounding the introduction of export restrictions and analyzing the goals and motivations stated by the Dutch government, the research will be able to understand U.S. influence on Dutch Realist attitudes. This allows it to answer the sub-question "How strongly are realist attitudes driven internally instead of pressure from the United States?"

The theory of Neoliberalism emphasizes economic efficiency, cooperation between nations and interdependence through trade (Nye & Keohane, 1977). The codes deduced from this theory tested Economic efficiency reflected in the topics of trade, business interests and interdependence. When testing these topics, the coder looks for statements from government officials and relevant organizations that display the government prioritizing economic efficiency over perceived threats. This will aid in testing the presence of key drivers of Neoliberalism in the government's attitude and testing Hypothesis 1, displayed below.

# *Hypothesis 1: If the Dutch government maintains a Neoliberal attitude towards the export of semiconductor equipment, it prioritizes economic efficiency over perceived threats.*

If the analysis displays a similar level of prioritization of economic efficiency and perceived threats, it can reject Hypothesis 3, displayed below.

Hypothesis 3: If the Dutch government maintains neither a clear Realist nor Neoliberal attitude towards the export of semiconductor equipment, it does not clearly display a prioritization of perceived threats or economic efficiency.

The coding scheme for these theories is displayed below.

Theory	Code	Subcode
Waltian Realism	Threat perception	Intellectual property
Waltian Realism	Threat perception	Security concerns
Waltian Realism	Threat perception	Self sufficiency
Waltian Realism	Driver	Independent concerns
Waltian Realism	Driver	U.S. pressure
Neoliberalism	Economic efficiency	Trade
Neoliberalism	Economic efficiency	Business interests
Neoliberalism	Economic efficiency	Interdependence

### Challenges

This section discusses challenges faced while conducting research. A problem was encountered during the data collection and data analysis phases of the study. This problem occurred during the selection of literary sources for data collection. While looking for sources that could help answer the sub question "How strongly are realist attitudes driven internally instead of pressure from the United States?", it became apparent that it was difficult to attain useful primary sources on the diplomatic interactions between the Dutch and American governments. While enough information was available on public statements and wider Dutch and American goals, details on the contents of negotiations between the states were hard to find. This issue was further amplified due to the sensitive nature of the export restrictions. The restrictions on the export of semiconductor equipment are seen as an ongoing matter of national security and therefore little information is offered to the public on the most recent developments. This lack of detailed information resulted in the decision to use sequencing to supplement the other data used to answer the sub question. For future research, it would be desirable to either wait until more detailed information becomes available over time or to further develop the research design to include more methods of data analysis and collection that could offer additional insights into the role of diplomatic contact in driving realist attitudes.

## Analysis

This chapter contains the results of the analysis of the selected literary sources such as policy documents, debate transcriptions, news articles, and statements by ASML. This analysis aims to determine which factors played a role in the implementation of export restrictions and which of the selected theories was the basis for the government's decisions to answer the research question: "How strongly are realist attitudes driven internally instead of pressure from the United States?". To accomplish these goals, the chapter contains a section answering the main research question and describing the main findings of the study followed by sections describing the roles played by both Neoliberalism and Waltian Realism in the decision to implement export restrictions. Finally, this chapter will answer the sub question and address the extent to which pressure from the United States has influenced realist attitudes in the Dutch government.

## Main Findings

The answer to the research question "How has the Dutch government's attitude towards the export of semiconductor equipment changed in response to security concerns and international pressure?" is that the Dutch government's attitude towards the export of semiconductor equipment aligns with Waltian Realism, which is now given a clear preference over Neoliberalist attitudes. The policy is designed to address various perceived threats to Dutch interests stemming from dual use of semiconductors, undesired strategic dependencies and the need to maintain Dutch technological leadership. The results of this study allow us to reject the first and third hypotheses due to a clear prioritization of perceived threats over economic efficiency.

*Hypothesis 1: If the Dutch government maintains a Neoliberal attitude towards the export of semiconductor equipment, it prioritizes economic efficiency over perceived threats.* 

*Hypothesis 2: If the Dutch government maintains a Realist attitude towards the export of semiconductor equipment, it prioritizes perceived threats over economic efficiency.* 

Hypothesis 3: If the Dutch government maintains neither a clear Realist nor Neoliberal attitude towards the export of semiconductor equipment, it does not clearly display a prioritization of perceived threats or economic efficiency.

This answer is based on the analysis of various literary sources related to the decision to impose export restrictions. The results of the analysis can be found in *figure 1* and *figure 2* below. Overall, topics related to threat perception were mentioned a total of twenty-three times, while economic efficiency was mentioned fourteen times. Out of all the codes, security concerns were the most prevalent by far with seventeen mentions. The importance of security concerns was further reinforced by the leading role they played in the design of the policy. In both the letter announcing the policy and comments by government officials, national security is named as the primary motivator of export restrictions on semiconductor equipment. These concerns are strongly represented by the frequently stated goal to prevent the dual use of semiconductor equipment in the creation of weaponry.

While security concerns were the main Realist driving force behind the policy, self-sufficiency must also be included. Though mentioned a lot less frequently at only three times, self sufficiency is closely tied to one of the stated main strategic goals of the policy. The policies' goal of reducing long-term strategic dependencies aligns partially with the Realist driver of self sufficiency. While the government displays no interest in becoming entirely self-sufficient, it does display a desire to diversify suppliers and reduce reliance on any single actor. The other aspect of realism, Intellectual property is the least relevant of the three due to it rarely being mentioned in the dialogue surrounding the export restrictions. It was encountered just three times in the study Intellectual property is a part of the context of wider Dutch economic priorities while only being vaguely linked to the policy on semiconductor equipment export.

The role played by Economic efficiency and its three aspects is secondary to threat perception. Trade is mentioned five times and recognized as a part of wider Dutch interests. The government recognizes the great importance of international value chains and the importance of Dutch trade relations with China. In the context of the export policy, however, trade is a low priority compared to national security concerns. The choice to potentially damage an economic relationship as important as the one with China for the sake of national security, indicates a strong realist preference. Similar observations can be made for Business interests and Interdependence, which were mentioned six and three times respectively. Interdependence is the least frequently mentioned Neoliberalist code in the studied documents and is clearly not something that the policy was aimed at promoting. One of the main goals of the policy is to reduce strategic dependencies on other countries, which stands in stark opposition to the concept of interdependence. Furthermore, policy makers only mention interdependence when discussing the export restrictions when they recognize the mutual dependence of the semiconductor supply chain which is also not something the policy is actively trying to promote. Meanwhile, Business interests are mostly brought up when discussing the role of ASML or potential impact of the restrictions on the company. The company is involved in conversations with the Dutch government and feels like its concerns are being heard.

Waltian Realism		
Code	Subcode	Prevalence
Threat	Intellectual	3
perception	property	
Threat	Security	17
perception	concerns	
Threat	Self	3
perception	Sufficiency	
Threat	Total	23
perception		

Neoliberalism			
Code	Subcode	#	
Economic efficiency	Trade	5	
Economic efficiency	<b>Business interests</b>	6	
Economic efficiency	Interdependence	3	
Economic efficiency	Total	14	

Figure 1

Figure 2

## Neoliberalism

#### Economic efficiency

To determine the amount of Neoliberalism present in the Dutch government's attitude towards the export of semiconductor equipment, three different codes were constructed on the basis of writings by Joseph Nye and Robert Keohane (1977). Each of these codes encompasses a relevant aspect of the Neoliberalist driver economic efficiency which, if found to be significantly present in the government's motivations, would indicate the presence of a Neoliberalist attitude. The documents analyzed during this study mentioned Neoliberalism a total of fourteen times, with business interests being mentioned the most and interdependence the least. The significantly lower presence of Economic efficiency compared to Threat perception reflects the priorities of Dutch policy makers. Overall, concerns regarding economic efficiency took a back seat to facing perceived threats. The export policy's stated goals and motivations repeatedly mention security concerns, while economic interests are seen as secondary and only shortly mentioned as a way of trying to reduce the necessary impact of the restrictions on the economy. The clear lack of priority over perceived threats that economic efficiency gets in the export restriction policy allows us to reject the first hypothesis.

# *Hypothesis 1: If the Dutch government maintains a Neoliberal attitude towards the export of semiconductor equipment, it prioritizes economic efficiency over perceived threats.*

The rest of this chapter goes into more detail on the roles that trade, business interests and interdependence played in the Dutch government's decision to impose restrictions on the export of semiconductor equipment.

#### **Business interests**

Of the three aspects of economic efficiency, business interests were the most prevalent in the analyzed documents. The presence of business interests is found primarily in the relationship between ASML and the export restriction policy. The policy is aimed at certain pieces of advanced semiconductor equipment produced by the company. Government officials recognize the importance of ASML in the Dutch economy and its international influence. Due to this importance, the government made specific mention of their efforts to cooperate with businesses when designing and implementing the policy (Schreinemacher, 2023). According to statements by ASML (2023), the effect of the export restrictions on their financial outlook has been limited. ASML's former CEO stated that they have a seat at the negotiating table and that policy makers listen to their concerns (NOS, 2023). Despite this, the company still harbors concerns about possible future restrictions affecting their supply chains and customer base.

Analyzing the government's statements on the export restriction policy has revealed an important detail about the role business interests play in its implementation. While promoting the interests

of businesses is not mentioned as one of the policy's main goals, there is mention of an effort to shield businesses from the impact of the policy. This displays how business interests play a secondary role in moderating a policy. These interests are not entirely disregarded, but they no longer are a driving force behind the export restriction policy. It is not a primary goal of the policy, but the interests of the semiconductor industry and specifically ASML are still important enough to involve them in discussions on the shaping of policy and its smooth implementation.

#### Trade

Trade was mentioned five times in the analyzed documents, but typically not as the main focus of the export restrictions. Trade and specifically the maintaining of international value- and supply chains is described as important by various government officials. Statements on the semiconductor industry often mention the complexity of these value- and supply chains and the crucial role that maintaining trade relations and the ability for companies to compete on a level playing field plays in nurturing the industry. When discussing specifically the export restrictions trade is not mentioned as the primary consideration, but as an important piece of context that is relevant to the wider interests of Dutch foreign policy. Government officials recognize the strong economic ties with China and the great mutual benefit free trade has brought.

A strong example of the secondary role of trade can be found in a letter by the Dutch minister of foreign trade and development cooperation, Liesje Schreinemacher (2023), to the Dutch parliament. This letter informs the parliament of the announced export restrictions on semiconductor equipment and outlines the government's motivations and the policy's main goals. Trade is neither mentioned as a policy goal nor primary motivation, but the minister does specifically mention that the export restrictions are designed in a way to minimize unnecessary disruption of value chains and to take into consideration the international level playing field.

The Chinese government has strongly stated their opposition to the export restrictions and promoted the importance of continuing close (economic) relations between China and the Netherlands (CGTN, 2024). Despite this, the Dutch government has decided to prioritize national security concerns over trade ties with China. This displays a preference of dealing with perceived threats over boosting economic efficiency.

#### Interdependence

Interdependence is the least frequently mentioned of the three aspects of economic efficiency. In statements surrounding the export restrictions, the Dutch government recognizes the interdependence of semiconductor supply chains and the Dutch and Chinese economies (Ministerie van BZK 2023). ASML's semiconductor equipment is part of a complicated global supply chain involving nations such as China, Taiwan, Japan, United States and Netherlands. Trade relations between the countries remain strong and there is a significant amount of mutual investment. While economic ties are expected to remain strong for the foreseeable future, there is no mention of wanting to increase interdependence. Instead, there appears to be a shift away

from interdependence in Dutch goals. Analyzing government statements on the relationship between China and the Netherlands has revealed a growing desire to reduce reliance on China and thus increase strategic autonomy. This is part of the Dutch goal to achieve open strategic autonomy by reducing strategic dependencies. This general trend away from interdependence combined with the lack of focus the policy puts on it, indicates a low prioritization of interdependence and hints at Realist attitudes.

## Realism

### Threat perception

To determine the amount of Waltian Realism present in the Dutch government's attitude towards the export of semiconductor equipment, three different codes were constructed on the basis of writings by Stephen Walt (2013). Each of these codes encompasses a relevant aspect of the Realist driver threat perception which, if found to be significantly present in the government's motivations, would indicate the presence of a Realist attitude. The documents analyzed during this study mentioned an aspect of Waltian Realism a total of twenty-three times. Seventeen of these mentions were of security concerns, with intellectual property and self-sufficiency only being mentioned three times each. This reveals the role of security concerns as the main driving force behind Dutch Realist attitudes and the secondary role of other realist factors. The significantly higher presence of Threat perception compared to Economic efficiency reflects the priorities of Dutch policy makers. Perceived threats from security concerns clearly are the main consideration in the design of the restrictions. The export policy's stated goals and motivations repeatedly mention security concerns, while economic interests are seen as secondary and shortly mentioned as a way of trying to reduce the necessary impact of the restrictions on the economy. The clear priority of perceived threats, especially security concerns, over economic efficiency means that we cannot reject the second hypothesis.

# *Hypothesis 2: If the Dutch government maintains a Realist attitude towards the export of semiconductor equipment, it prioritizes perceived threats over economic efficiency.*

The rest of this chapter goes into more detail on the roles that Intellectual property, Security concerns and Self sufficiency played in the Dutch government's decision to impose restrictions on the export of semiconductor equipment.

### Intellectual property

Intellectual property was only explicitly mentioned three times in the analyzed documents. While occasional references to it do occur, it is not designated as a main priority of the export restrictions. A potential link can be made with the second stated strategic goal of the export policy which is to "Maintain Dutch technological leadership", however this goal is rather vague in its exact definitions and mostly refers to the growing importance of semiconductors and the value of maintaining their production capability. Whether intellectual property would be

included here is unclear due to a lack of additional information. In discourse surrounding the export restrictions, protecting intellectual property is mostly named as a part of broader goals in the relationship between the Netherlands and China. An example of this is found in a statement from Prime Minister Rutte's visit to China in July of this year in which he claimed that it is of crucial importance that China works on a level playing field and the protection of intellectual property. This displays how concerns about intellectual property have not disappeared from Dutch attitudes towards China but have taken a backseat to security concerns in the decision to introduce restrictions on the export of semiconductor equipment.

#### Security concerns

Security concerns are the main driving forces behind the Dutch decision to impose export restrictions on semiconductor equipment. It is mentioned a total of seventeen times, by far the most of any of the codes. The presence of security concerns was found in the statements of officials, analyses by experts and in the official goals and motivations of the export restriction policy. All evidence points towards security concerns being the primary motivator and consideration when designing the export restriction policy.

The presence of security concerns can easily be identified in the export restriction policy. The government's letter informing parliament of the export restrictions opened with a mention of (inter)national security concerns and the strategic importance of semiconductors in military and civilian use. This opening was followed by a description of the export restriction's three strategic objectives: Preventing the contribution of Dutch goods to undesirable use, such as military use or weapons of mass destruction; The prevention of undesirable strategic dependencies in the long term; and the maintaining of Dutch technological leadership (Schreinemacher, 2023). These goals, and especially the first one, are linked to Dutch security concerns. The prevention of undesirable use described in the policy, is aimed at preventing the use of Dutch semiconductor equipment to make semiconductors for military equipment. This so-called dual use of semiconductors is framed as a threat that the Dutch government is increasingly concerned with (Schreinemacher, 2023).

Mentions of security concerns are also found in other statements by Foreign Minister Schreinemacher. In a letter to parliament in January of 2023, she described how changing relations with China raised concerns about national security due to reliance on an increasingly assertive China (Ministerie van BZK, 2023). In debates on the export restrictions, the foreign minister repeatedly named national security as the main consideration behind the export policy. In defense of the validity of such concerns, she also outright rejected the claim by a member of parliament that American export restrictions were based on economic concerns, stating that both American and Dutch policy makers were primarily concerned with national security.

#### Self sufficiency

Similarly to intellectual property, self sufficiency was also mentioned only three times in the analyzed documents. It differs from intellectual property however, in that self-sufficiency has a stronger association with one of the policy's main goals: The prevention of long-term strategic dependencies. The Dutch government has identified the country's reliance on foreign powers for important resources as a potential threat to national security. In a parliamentary debate on export restrictions, Minister Schreinemacher named reliance on a single country as a potential threat to national interests. Addressing this threat and achieving strategic autonomy is a wider goal of the government which is worked on at both the national and European level (Ministerie van BZK, 2022). An important distinction to make here is that the goal of this strategic autonomy policy is not complete self-sufficiency in strategic goods, but to diversify suppliers of and ensure the stability and security of supply lines. This indicates that while there is a broader desire by Dutch policy makers to become less reliant on individual trade partners, true self sufficiency is not embraced as a core part of Dutch attitudes towards the export of semiconductor equipment.

## Driver of realism

The answer this study gives to the sub question "How strongly are realist attitudes driven internally instead of pressure from the United States?" is that there is a significant influence from American policy initiatives and diplomatic outreach, but that realist attitudes also derive from national security concerns and a desire to protect Dutch intellectual property and technological leadership. This question was answered by studying recent developments in American and Dutch stances on the export of semiconductor equipment and analyzing the connections between them. Analyzing these developments has revealed a link between Dutch and American attitudes. The American influence appears to be significant, but not the only driver of realist attitudes in the Netherlands. Statements by Dutch officials and the official goals and motivations of the policy indicate serious concerns about national security, strategic dependence and maintaining technological leadership.

Date	Event
October 7, 2022	Biden administration announces sweeping new limits on sale of semiconductor technology to China which also impacts ASML.
November 3, 2022	U.S. Secretary of commerce announces visit to ASML to promote export restrictions.
January 13, 2023	Dutch foreign ministry informs parliament of shifting relations with China, stating need for more assertive diplomacy.
January 17, 2023	President Joe Biden meets with Prime Minister Mark Rutte to discuss cooperation against challenges from Russia and China.
March 8, 2023	Dutch government confirms export restrictions on semiconductor equipment to China.
October 19, 2023	Biden administration expands restrictions on export of semiconductor equipment to China.
January 1, 2024	ASML announces that the Dutch government has partially revoked the export license for a shipment of advanced lithography machines to China.

Figure 3

In figure 3 above you can see a sequenced list of actions related to the export restrictions by the United States, marked in blue and the Netherlands, marked in red. This sequencing displays a

relationship between American action and Dutch reaction. The Americans decided in 2022 to impose sweeping new restrictions on the sale of semiconductor technology to China. This decision displays tensions between these countries and an increase in American realist attitudes towards strategic technology. The unilateral imposition of restrictions on the export of semiconductor equipment forced a reaction by other parts of the supply chain. The Biden administration's policy initiative was combined with a diplomatic outreach to allies such as the Netherlands to promote similar policies. Multiple statements from Dutch officials confirmed ongoing conversations with the American government (Schreinemacher, 2023). The Dutch export restrictions were announced within two months of Prime Minister Mark Rutte's visit to the White House, where he discussed cooperating against the security challenges of Russia and China with President Joe Biden (White House, 2023). American efforts to promote export restrictions in the Netherlands were also highlighted in late 2022 with a visit to ASML by the U.S. Secretary of commerce. This visit with the goal of convincing ASML of restricting exports to China voluntarily, is seen by experts from the Hague Center of Strategic Studies (HCSS) as an American attempt to increase pressure on ASML and the Dutch government (BNR, 2022). The HCSS also addresses the power imbalance between the Netherlands and the United States, pointing out that ASML is reliant on American parts and that the company lacks the real ability to continue their business without complying with American demands.

While the presence of American pressure is readily apparent, there are also clear signs of Dutch national interests driving realist attitudes. The strongest indicators of this can be found in statements by Dutch officials. When commenting on the export restrictions, national security concerns are continually stated to be the driving force behind this policy. While international cooperation is mentioned as an important part of wider semiconductor policy, the government rejects the idea of simply following along with the U.S.A. The Dutch Minister of Foreign Trade and Development stated that while the U.S.A and Netherlands have similar security concerns about semiconductor equipment, restrictions would only be imposed on Dutch terms (Schreinemacher, 2023). This is reflected in the three strategic goals of the policy which center around Dutch national and economic security: Preventing the use of Dutch goods contributing to undesirable uses such as weapon production, preventing undesirable long term strategic dependencies, and the maintaining of Dutch technological leadership.

# Conclusion

This study was conducted with the goal of answering the research question "How has the Dutch government's attitude towards the export of semiconductor equipment changed in response to security concerns and international pressure?". is that the Dutch government's attitude towards the export of semiconductor equipment aligns with Waltian Realism, which is now given a clear preference over Neoliberalist attitudes. The analyzed documents have shown that topics linked to perceived threats, especially security concerns, are the most prevalent. Being mentioned seventeen times, security concerns clearly dominate the Dutch attitude towards semiconductor export restrictions.

The analysis of the policy shows that it is designed to address various perceived threats to Dutch interests stemming from dual use of semiconductors, undesired strategic dependencies and the need to maintain Dutch technological leadership. These goals are linked to protecting the state from perceived threats which is an important driver of Waltian Realist attitudes. Especially strategic dependencies and the dual use of semiconductor technology is frequently referred to as a major concern of Dutch officials. This is visible in the government's stated motivations and goals behind the policy which aim to address threats to Dutch national security and strategic autonomy. This strongly suggests a Waltian Realist attitude due to the presence of state intervention with the goal of addressing perceived threats to national security. In prioritizing these security concerns over economic concerns regarding trade and business interests the Dutch government has displayed that it maintains a Realist attitude towards the export of semiconductors. This means that Hypothesis 2, displayed below, cannot be rejected.

# Hypothesis 2: If the Dutch government maintains a Realist attitude towards the export of semiconductor equipment, it prioritizes perceived threats over economic efficiency.

The dominance of realist attitudes is visible in the secondary role Neoliberal concerns play in the export restrictions. Economic efficiency clearly is still something valued by the Dutch government, which has made multiple statements on the importance of free and equal trade, helping business adjust to policy and the maintain mutually beneficial economic relations with China. Regardless, these economic concerns took a clear secondary role to dealing with perceived threats. Business interests and trade are mentioned in the policy only so far as limiting the damage to them is concerned. There is no mention in the policy of a desire to improve economic performance with it. The decision to impose economically harmful restrictions for the sake of national security shows a clear prioritization of handling perceived threats over economic efficiency and suggests a Realist attitude.

This study has obtained insights into the internal and external factors that drive realist attitudes inside the Netherlands. It allowed for the investigation of state behavior in a unique and relevant case. The great importance of ASML in global supply chains and the Dutch economy granted relevant insights into the manner that Realist attitudes can affect government behavior when

major economic concerns are involved. It has produced insights into the sort of modern threats that drive Realist attitudes, and the way states act when making regulatory decisions for the sake of national security in an industry that is both extremely valuable and reliant on a complex global value chain. Furthermore, these insights were supplemented by insights into the role that Neoliberalist concerns play in realist policy. Trade and business interests were present as secondary concerns which influenced the way that the government interacted with ASML and made efforts to limit the damage that realist export restrictions would do to broader economic concerns.

This study was able to gaze into the complexity of international relations in the modern world and has revealed the need for more research while doing so. Increasing western concerns about national security is something that still has plenty of room for research, especially into the manner that states can drive realist attitudes in other states through assertive diplomacy and policy making. The study has already displayed the ability of the U.S.A. to influence a smaller allied state like the Netherlands, which raises the question of how such a relationship would function between a different set of countries. The United States also cooperates with Japan on restrictions on the export of semiconductor equipment to China. This offers a similar case of United States pressure and allied shift in semiconductor policy. Studying this case would allow for the analysis of the effects of independent variables such as the relationship with China and the size of the economy.

Study into other European countries with ties to semiconductor supply chains is recommended. Studying countries like Germany, France, Austria, Ireland and the United Kingdom could yield insights into differences between European attitudes towards semiconductor export policy. Large economies like Germany, France and the United Kingdom are all investing billions of euros into their semiconductor industries. Smaller countries like Austria and Ireland make smaller investments but still harbor active and economically important semiconductor industries. Comparing the attitudes that these different states hold towards the export of semiconductor technology allows us to better understand government behavior. Further insight could also be granted by studying the differences in the way that bigger and smaller states are influenced by foreign pressure.

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