1-1-2010

# Regional Integration in East Asia 

Amaleia E. Kolovos

Portland State University

## Let us know how access to this document benefits you.

Follow this and additional works at: https://pdxscholar.library.pdx.edu/open_access_etds

[^0]
## Regional Integration in East Asia

by
Amaleia E Kolovos

A thesis submitted in partial fulfillment of the requirements for the degree of

Master of Arts
in Political Science

Thesis Committee:
Birol Yesilada, Chair
Bruce Gilley
David Kinsella

Portland State University
© 2010


#### Abstract

Regional integration is not a new phenomenon but has become an increasingly important topic of political research with the continued expansion of the European Union as well as an increased number of regional organizations around the globe. This paper will seek to use both Europe and East Asia as illustrations in order to better comprehend the driving forces behind integration as well as why some regions are further integrated than others. The purpose of this research is to achieve a better understanding of what causes regional integration in hopes of developing a more inclusive theory. More specifically, it aims to see how integrated the region of East Asia is, in particular when compared to Europe. Through comparing the two regions and analyzing factors in both Europe and East Asia as determined by current integration theory, this research aims to achieve a better understanding of the driving forces behind regional integration as an international phenomenon. My research is an attempt to tie together the multiple existing theories of regional integration with the goal of creating a more cohesive and measurable theory. With an increased understanding of regional integration, we will be better able to both explain and predict integration in both Europe and East Asia, as well as other, less integrated regions around the world.


## Table of Contents

Abstract ..... i
List of Tables ..... iii
List of Figures ..... iv
Introduction ..... 1
Historical Overview ..... 3
Conceptualizing Regional Integration ..... 9
Research Model and Hypotheses. ..... 31
Hypotheses ..... 39
Findings. ..... 41
Levels of Integration. ..... 41
Regime Type. ..... 44
Intra-Regional Trade. ..... 55
Security Threat ..... 64
Regression Model Results ..... 72
Conclusions ..... 79
References ..... 84

## List of Tables

Table 1. Theoretical Overview ..... 28-29
Table 2. Descriptive Statistics for Integration Achievement Scores. ..... 43
Table 3. Descriptive Statistics for the Standard Deviation of Regime Type ..... 55
Table 4. Descriptive Statistics for Intra-Regional Trade ..... 63
Table 5. Descriptive Statistics for Military Expenditure as Percent of GDP ..... 71
Table 6. Regression Model: IAS ..... 73
Table 7. Regression Model: EIAS ..... 74
Table 8. Regression Model: PIAS ..... 75
Table 9. Model Correlations. ..... 76
Table 10. Expanded Correlations ..... 77
Table 11. Theoretical Support in Findings ..... 81

## List of Figures

Figure 1. European Integration Levels ..... 41
Figure 2. East Asian Integration Levels ..... 42
Figure 3. EU27 Polity, 1945-2008 ..... 44
Figure 4. EU Member Polity Scores. ..... 45
Figure 5. ASEAN+3 \& Taiwan Polity, 1945-2008 ..... 46
Figure 6. ASEAN+3 Polity ..... 47
Figure 7. ASEAN Polity ..... 48
Figure 8. European Regimes Percentage ..... 49
Figure 9. EU Member Regime Types ..... 50
Figure 10. East Asian Regime Type Percentage ..... 50
Figure 11. ASEAN+3 Regime Type ..... 51
Figure 12. ASEAN Regime Types ..... 52
Figure 13. Deviation in Regime Types ..... 53
Figure 14. European Intra-Regional Trade ..... 56
Figure 15. Intra-ASEAN Trade ..... 57
Figure 16. Intra-ASEAN+3 Trade ..... 58
Figure 17. Intra-ASEAN+3 Trade (including Hong Kong and Macau) ..... 59
Figure 18. Intra-Regional Trade ..... 60
Figure 19. Intra-Regional Trade with US Control ..... 61
Figure 20. Trade within Regional Organizations ..... 62
Figure 21. Military Expenditure Europe. ..... 64
Figure 22. Military Expenditure for EU27 ..... 65
Figure 23. Military Expenditure East Asia ..... 66
Figure 24. Military Expenditure in East Asia ..... 67
Figure 25. Regional Totals for Military Expenditure ..... 68
Figure 26. Regional Military Expenditure as \% of GDP ..... 69
Figure 27. Total Military Expenditure ..... 70
Figure 28. Military Expenditure as \% of GDP ..... 71

## Introduction

What is regional integration? Political theorists argue about the motivations, forms, and depth when defining the term. However, regional integration can generally be seen as nation-states in a territorial region voluntarily deferring sovereignty to intergovernmental or supranational institutions in order to better their condition as a whole through cooperation. This integration can be both economic and political in nature, though examples from regions around the globe, particularly the European Union, suggest that economic integration tends to precede its political counterpart. Integration is a process of both deepening and widening relationships amongst actors. While widening merely involves the extension of the cooperation to more actors, deepening can be more complex and controversial in that it requires increased loss of sovereignty on the part of the actor, notably a nation-state. Though this process is not necessarily inevitable for actors in the international community, it is a difficult process to reverse particularly as it progresses and actors become more intertwined.

Both economic and political cooperation are necessary for integration to continue to deepen. Economic integration can begin with a simple preferential trade area agreement, moving towards a common market and eventual complete economic and monetary union. Political integration is the movement from completely separate unitary states towards federalism and ultimately complete political unification. While the two processes can occur separately, they are intimately interconnected and must work together in order for either to progress. The more integration amongst nation-states deepens, the more the states will begin to behave as one unitary actor.

Throughout the world, integration is beginning to gain momentum in various regions perhaps in reaction to increasing levels of globalization. This paper examines regional integration in Europe and East Asia. It assesses the causal factors behind regional integration in an attempt to provide some explanation for why the two regions represent different degrees of integration. The first section of this paper gives a brief historical overview of regional integration in Europe and East Asia, focusing specifically on the development of the European Union (EU) and the Association of Southeast Asian Nations (ASEAN). The second section provides a discussion and analysis of current theories on integration to set the theoretical model of analysis. The third section provides an overview of the research question and hypotheses of the study and presents the model of analysis and data gathering. The next section is an analysis and discussion of the findings. Finally, the paper concludes with a look at the implications of the findings of this research and suggestions for future research.

## Historical Overview

While forms of regional integration theory were already in existence, specific study of the phenomenon began with a focus on Europe in the early 1950s, shortly after the end of World War II. Post-WWII Europe was left in shambles both socially and economically. After six years of combat throughout the continent, even the victors of the war were in vulnerable economic and political positions. There was a fear of further conflict and particular concern over the potential of a reunited and re-empowered Germany. Additionally, there was a region in need of rebuilding both structurally and economically after suffering such devastation.

With a shared need for development throughout Europe, states began to integrate through a regional approach to international trade liberalization. Such an approach to economic integration "involves agreements among small numbers of nations whose purpose is to establish free trade among themselves while maintaining barriers to trade with the rest of the world" (Chacholiades, 1990:222). Though seemingly purely economically based, these "preferential trade arrangements may be influenced more by political factors than by economic factors" (Chacholiades, 1990:222). As integration increases between states, their agreements develop from simple preferential trading clubs to a free-trade area, customs union, common market, and eventually an economic union. "An economic union is the ultimate form of economic integration," and is formed when states fully unify their socioeconomic, fiscal, and monetary policies (Chacholiades, 1990:225).

European integration began with only six states: Belgium, France, Germany, Italy, Luxemburg, and the Netherlands. Initial post-war discussions on European rebuilding
included grandiose visions that called for a "United States of Europe " (Rosamond, 2000:103). However, a more pragmatic and basic approach towards cooperation was adopted, starting with the creation of the European Coal and Steel Community (ECSC), established by the Treaty of Paris in 1952. The community was adopted by the six states primarily as an economic preventative measure against further war as integrated coal and steel production would make any military action significantly more costly and difficult. The ECSC led to the first European institutions including the High Authority, a predecessor to the current-day Commission, and the Common Assembly, which was the predecessor to the current-day Parliament (Europa 2010, Treaties and Law). Though the institutions had limited authority, they were an important first step toward regional integration as they constituted a decision-making body that extended beyond the nationstate.

After the success of the ECSC, its members adopted the Treaties of Rome in 1957. The treaties established the European Economic Community (EEC) and the European Atomic Energy Community (Euratom), deepening the member states' integration through increasing the topics of cooperation. In 1965, the Merger Treaty was signed to bring all three communities (the ECSC, EEC, and Euratom) together under one encompassing organization known as the European Communities (EC).

The first process of enlargement in Europe occurred in 1973 with the addition of three new members: the United Kingdom, Ireland, and Denmark. After the initial addition of these new members, enlargement continued at a relatively rapid pace with the inclusion of fifteen member states in the European Union by the end of the $20^{\text {th }}$ century. Enlargement of the EU was happening significantly more rapidly than deepening,
particularly during the 1970s and 1980s. Perhaps this was because the addition of new members was not as controversial an issue as the loss of national sovereignty associated with deepening. However, as enlargement continued at the turn of the century, the process became more controversial with the inclusion of less economically developed states from Central and Eastern Europe.

While enlargement was occurring rapidly in Europe, the 1990s and 2000s also saw significant deepening of integration in the region. The Treaty on the European Union, also known as the Maastricht Treaty, was signed 1992. This was a significant move towards deepening regional integration and led to the creation of the European Union. Today there is an impressive level of regional integration amongst the nationstates in the European Union. The past sixty years has seen the development of the region from unitary, sovereign nation-states to a compilation of intergovernmental and supranational institutions though the EU members maintain their status as independent states. Citizens of the member states of the European Union are now not only citizens of their own states but also of the EU. Border traffic is almost completely unregulated within the region for both people and goods. In addition, the last decade has seen the introduction of the Euro, a common regional currency signifying the final steps towards a complete united European market.

The member states of the EU are still autonomous in many important ways despite their deep levels of integration. This sovereignty is demonstrated through the ability of members to opt out of certain agreements in the Union as well as continued state control over many internal operations. The intergovernmental institutions of the EU, while supporting and aiding integration, allow for member states to maintain
sovereignty by promoting cooperation through a process of interstate discussion and consensus. However, Europe is gradually developing the ability to act more as one unit than as a selection of individual states with the development of its supranational institutions, particularly with regards to the economic and monetary affairs on the world scene. This is demonstrated through its common economic and monetary union as well as the development towards a shared foreign security policy where a united European voice acts for the individual member states. Today, the EU consists of 27 states and has additional states applying for entry. Though the deepening has occurred less rapidly, Europe now exhibits features of advanced integration such as the formation of an economic monetary union and regional citizenship.

Though Europe is unquestionably the most complex integrated region in the world, it is not the sole example of the phenomenon. Others have also signed regional integration agreements in diverse regions of the world. On such region is East Asia, which has made significant progress on deepening of integration. In 1967, Malaysia, Indonesia, Singapore, Thailand, and the Philippines joined together to form the Association of Southeast Asian Nations (ASEAN). The organization's initial purpose was to help foster economic relations and stimulate growth amongst its members. It has since grown to be an important arena for communication and cooperation in the region. Furthermore, its membership has expanded to include Brunei, Vietnam, Myanmar, Laos, and Cambodia. While Japan, South Korea, and China are not officially members of the organization, they are regarded as the +3 in ASEAN +3 and work closely with the organization on economic matters.

ASEAN as an organization has developed over its 43 years as a forum for international discussion among its member states. However, it has been slow to institutionalize in that the organization has been unhurried to develop active formal institutions (intergovernmental or supranational) such as those found in the EU. In December of 2008, the ASEAN Charter was adopted building institutional bodies. The Charter called for the development of the ASEAN Coordinating Council (ACC) and the ASEAN Community Councils for the economic, political-security, and socio-cultural communities (ASEAN 2010, ASEAN Charter). These bodies are primarily intergovernmental in nature and have significantly lesser regional influence than those found in the EU. However, they are an important step in developing the regional organization and deepening integration between its members. ${ }^{1}$

As ASEAN's membership and structure have expanded, so have the organization's goals with hopes of regional peace, mutual assistance, and furthered cooperation among its members. On the 30 -year anniversary of ASEAN, its members adopted the ASEAN Vision 2020. The Vision called for a further developed regional community that in some ways would resemble that found in Europe.

> The ASEAN Community [will be] comprised of three pillars, namely the ASEAN Political-Security Community, ASEAN Economic Community and ASEAN SocioCultural Community. Each pillar has its own Blueprint, and, together with the Initiative for ASEAN Integration (IAI) Strategic Framework and IAI Work Plan Phase II (20092015), they form the Roadmap for and ASEAN Community 2009-2015 (ASEAN 2010, Overview).

[^1]While ASEAN is not as integrated as the EU, the organization is an example of regional integration in its own right. Additionally, measures such as the ASEAN Vision 2020 suggest that the region of East Asia is striving to make further steps in the integration process.

Though the integration of Europe and East Asia discussed above can be seen as a mid $-20^{\text {th }}$ century phenomenon, regional integration itself is not as new a concept. References to the United States are often made as an example of such integration, particularly when discussing it through a Federalist viewpoint. However, the phenomenon has become an increasingly important topic of political research with the continued expansion of the European Union as well as an increased number of regional organizations around the globe such as ASEAN. What is the driving force behind such integration? What are the costs and benefits in relinquishing individual state sovereignty to intergovernmental or supranational institutions? Why are some regions attempting economic and political integration while others prefer state segregation? These are some of the questions that current integration theories are attempting to answer.

## Conceptualizing Regional Integration

Most modern theories of regional integration are Eurocentric and began to develop in the post World War II period. Pre-WWII, international relations theory was primarily divided into two camps, realism and liberalism (also known as idealism). Traces of these overarching schools of international thought can be seen in the more modern, midrange theories on integration. The midrange theories in this section all stemmed out of the grand theories of realism, liberalism, and/or constructivism, many adopting tenants from more than one. Each theory is an attempt to explain integration through getting into the specific workings of the process including its actors and motivations. There are a number of midrange theories to explain regional integration. This section will deal with ten of the most prominent. It will give an overview of their basic tenants, their vision of integration and its functions, and their relations to the grand theories previously mentioned. The theories' validity when applied to the integration seen in Europe and East Asia will also be discussed as an assessment of the quality of evidence behind each theory.

Intergovernmentalism is a theory of regional integration that stems primarily from realism. For intergovernmentalists, states remain primary, unitary, rational actors ${ }^{2}$ in the anarchic international system. Integration is seen as an increasing web of state interaction. The more interaction states have and the more they create means to cooperate, such as intergovernmental institutions, the more the states can be considered integrated. Integration is not a process of building up from the nation-state but rather

[^2]building bridges between nation-states in order to better foster each state's main goal of pursuing its interests. In this view, "National interests [arise] in the context of the sovereign state's perception of its relative position in the states system" (Rosamond, 2000:137). States integrate and cooperate in attempt to restructure their position in the international system and better thrive. This leads to interests that are primarily focused on relative power and security, further demonstrating a realist and neorealist connection.

Intergovernmentalism is, however, distinguishable from realism in its allowance for complex cooperation and potential for including state interests that extend beyond national security. The theory also strays from realist thought through its expectation of international institutionalization to help organize state cooperation. Finally, "Intergovernmentalists of various persuasions are distinguished from realists because they are attentive to the fact that the (international) politics of European integration takes place within a very specific institutional environment" (Rosamond, 2000:141-142). While they still see the international system as being anarchic, they take a more neorealist interpretation of it in seeing the anarchy as imposing its own pressures and restraints on state actors.

Intergovernmentalists view integration as a function of interstate cooperation motivated by individual state interests. Essentially, it can be seen as an effort by states to organize themselves in the international system in hopes of bettering their own position. As integration resembles a form of increased strategic bargaining amongst involved states, political will is a necessity for its success. State cooperation results from direct national decisions, therefore lack of political will would be crippling to any progress. While allowing for international cooperation and institutions, intergovernmentalists are
opposed to any form of supranationalism as it would call for a loss of state sovereignty, the very thing realist states are trying to avoid. While restrictive on integration in this sense, the theory does not have any restraints with regards to the authority of intergovernmental international institutions or the types of politics that they may address.

In terms of European integration, intergovernmentalism is able to explain such institutions as the Council of Ministers as well as the early structuring of the EU where states effectively maintained full sovereignty. Additionally, the theory is supported by ASEAN's development of the ACC, an intergovernmental institution. However, intergovernmentalism falls short in two main ways. First of all, while explaining the intergovernmental institutions of the regions, intergovernmentalism fails to explain such supranational institutions as the European Court of Justice (ECJ) or the Commission. Secondly, the theory does not get deep enough into the workings of integration to cover all that has happened in the integration process in Europe. Through strict focus on state actors, intergovernmentalism ultimately ignores other important factors that can effect integration, in particular domestic pressure and multinational corporations. ${ }^{3}$

Similarly to intergovernmentalism, institutionalism views integration as a process supported by rational actors attempting to alter their position in the international system in order to better suit their interests. Additionally, both theories share connections to realist thought with states as primary actors acting in their own interests related to security and relative power. The main difference between the two comes from institutionalism's focus on the importance of institutions. For this theory, institutions

[^3]provide the context for relations between states. This leads integration to be a function of the development of intergovernmental institutions aiding states in achieving their interests.

For both institutionalists and intergovernmentalists, integration is a process gradually connecting states through increased interaction and cooperation based on rational calculation of expected payoffs. However, for the former, the web intertwining the states is not merely a function of communication and cooperation but rather supported by the institutions created between them. Institutions are integral and necessary for integration. As these institutions develop, they become actors in their own right in the international system with their own interests and ability to affect states.

Integration is a process of joining to and submission of states to international institutions. The more power given to them between states, the more integrated the states can be considered. As a result, political will is necessary for integration because such institutions cannot be created without state support. This leads to the important question of, what is an institution? "Rational choice institutionalism tends to define institutions as formal legalistic entities and sets of decision rules that impose obligations upon selfinterested political actors" (Rosamond, 2000:115). In this view, institutions tame the anarchy of the international community as the institutions become the system itself. These institutions may constrain state actions. However, states are willing to maintain them because they reduce the risks of interaction through lowering interaction costs. While institutions play a primary role in integration, they are subject to the interests of the states. As rational, self-interested, actors, states will use such institutions in order to pursue their own goals.

Liberal institutionalism differs from rational choice institutionalism as described above through giving institutions a more powerful role in the international system, seeing them as more independent from the states. In addition, this theory strays from the notion of an inherently anarchic international system. It sees international institutional organization, along with domestic interests and forces such as technology, as triumphant over anarchy through providing an international order. Similar to rational choice institutionalism, liberal institutionalism acknowledges the motivation of state interests and sees political will as important to integration. However, liberal institutionalism does not emphasize political will as strongly due to its acknowledgment of fragmented states and inclusion of interest groups and domestic actors as driving forces behind integration. The theory is optimistic about the prospects of international cooperation. This and its discussion of non-state actors are key tenants linking liberal institutionalism more closely with its grand theory counterpart of liberalism than with realism.

In terms of European integration, both forms of institutionalism explain the initial intergovernmental institutionalization seen in agreements such as the Treaty of Paris and the Treaties of Rome. The theory also explains the recent push within ASEAN to develop formal institutions for cooperation. However, this push occurred much later in the integration process than institutionalists would have expected, leaving the theory unable to explain the initial decades of East Asian integration. Additionally, like intergovernmentalism, institutionalism cannot necessarily account for the supranational institutions seen such as the Commission or the ECJ as it does not account for why states would have an interest in developing new institutions that deprive them of further sovereignty. In addition, the theory's focus on the primacy of state interests in
integration does not allow for the sacrifice of national interests that has occurred, particularly with regard to eastern expansion movements. However, in such a case, institutionalists may argue that expansion has been in the interest of state security and therefore worth the economic burdens associated with it.

A theory better able to explain the eastern expansion of the EU and the security benefit it carries is Karl Deutsch's theory of transactionalism. For Deutsch, the international community is not necessarily anarchic as assumed by many of his predecessors. Instead, he sees states as capable and willing to cooperate in order to establish an international order that will ensure their own interests of national security and stability. Therefore, transactionalists' view integration as the formation of a security community with successful integration culminating in the absence of war. According to Deutsch,

> The kind of sense of community that is relevant for integration...[is] a matter of mutual sympathy and loyalties; of 'we-feeling,' trust, and mutual consideration; of partial identification in terms of self-images and interest; of mutually successful predictions of behavior, and of cooperative action in accordance with it - in short, a matter of a perpetual dynamic process of mutual attention, communication, perception of needs, and responsiveness in the process of decision-making.'Peaceful change' could not be assured without this kind of relationship (Nelson and Stubb, 2003:129).

Rather than the web of interactions and institutions that are integration under intergovernmentalism and institutionalism, it is a sense of identity and community that play a significant role for Deutsch. Integration is the creation of a "we-feeling" that leads to a new grouping and security community among its members. When states identify with each other to the extent that war among them is no longer conceivable, integration has been achieved. These security communities can be either pluralistic or amalgamated, with the former describing communities in which states retain their legal independence
while the later is more integrated involving a formal merger and semblance of governance.

The primary actors in transactionalism are the states forming security communities. Their primary motivation is the alleviation of any security threat and in turn war within the community. Therefore, political will is a key driving force behind integration as government action is a necessity for progress. In addition, a "hypothesis of transactionalist work on integration was that a sense of community among states would be a function of the level of communication between states" (Rosamond, 2000:44). Increased interaction and communication creates mutual relevance and eventually the mutual trust needed to form a security community.

Transactionalism draws from tenants from all three grand theories. From realism, it gains its focus on security and state actors as well as its assumption of actor rationality. In contrast, Deutsch's optimism on the prospects for cooperation and allowance for both intergovernmental and supranational entities suggests liberalist influence. Finally, aspects of constructivism, particularly its focus on community and social interaction, can be found in transactionalism as the theory stresses the development of a "we-feeling" between states in order to promote security and cooperation. This incorporation of tenants from all three grand theories discussed help make transactionalism a diverse midrange theory of integration.

In terms of European integration, transactionalism is able to explain the region's drive to integrate post-WWII. With the common security threat of Germany still lingering, European states had interests in cooperating for their own security. As their communication increased throughout the years, they eventually formed, first a pluralistic
and later, an amalgamated security community. For Deutsch, European integration can be considered a success as it has resulted in the removal of even the threat of war within the region. Any current widening, especially Eastern European expansion, could also be explained by transactionalism in that it is an attempt to alleviate any possible threat from the former soviet states. However, transactionalism falls short in that it overlooks some of the key economic motivations that have driven European integration and led to advancements such as the European Monetary Union (EMU). In addition, it fails to explain the continued political deepening of integration after the desired security and Deutch's vision of integration had already been achieved.

In terms of East Asian integration, transactionalism can explain many of the developments of ASEAN. The organization was designed "to promote active collaboration and mutual assistance on matters of common interest in the economic, social, cultural, technical, scientific and administrative fields" (ASEAN 2010, Aims and Purposes) amongst a grouping of many small, relatively weak states. Though regional security was not a specified goal of ASEAN, the organization set out to create a greater feeling of community amongst its members, which, according to Deutch, is an essential part to achieving a mutual peace. In addition, it should be noted that ASEAN was created during the Cold War at which time its members faced potential security threats from the two global powers of the period as well as division and conflict among themselves. Transactionalism supports the idea of these states integrating in response to such potential conflict through the formation of a regional community. Such a community can increase the "we-feeling" between states and therefore decrease their potential for war.

Transactionalism's main shortcoming in terms of East Asian integration is that it ignores ASEAN's primary focus on economic development in the region.

Quite a different view of integration is presented by functionalism, a theory of integration and international relations most commonly associated with David Mitrany. It is unique and stands out from intergovernmentalism, institutionalism, and transactionalism in that its less inter-state oriented. Rather than integration being a function of state interactions, the theory takes a "bottom-up" approach to international relations. Functionalism sees integration as a function of actors cooperating across state borders in order to better achieve necessary tasks. Instead of integration being a viewed as an increasing web of cooperation and institutions between states, Mitrany sees it as a developing web of pragmatic cooperation between societies concerning low politics, such as basic and uncontroversial, economic and structural policies. For functionalists, integration is an enmeshment of societies motivated by pragmatic interests and the hope of better meeting human needs. Mitrany does not see states as unitary or even primary actors in the process.

> If one were to visualize a map of the world showing economic and social activities, it would appear as an intricate web of interests and relations crossing and re-crossing political divisions - not a fighting map of States and frontiers, but a map pulsating with the realities of everyday life. They are the natural basis for international organizations (Mitrany, 1948:358-359).

For him, the international community is not anarchic but rather an interconnection of economic and social activities relating on a human level. State or territorial needs are not primary. As a result, political will is of limited importance to functional integration.

Functionalists view integration as a process that navigates around traditional state barriers. It is a shift away from strict nation-state governance to a more pragmatic
societal organization that can extend to an international level. The more practically enmeshed the communities of different states become, the more integrated they are considered. This view differs from the previous theories discussed. If individual states could be considered cells with borders and contents, intergovernmentalism would see integration as a process of the cells grouping together for a mutually beneficial function while each cell maintains its own integrity. Institutionalism would see integration similarly but would place a greater importance on the bonding agents holding the cells together and helping them interact (intergovernmental institutions). Functionalism however would view integration quite differently. Under the same analogy, integration would start as a group of cells (states) grouped together. As integration occurs, their contents begin to flow more freely between borders in attempts to increase function and output. To functionalists, integration is not so much superceding or enhancing state authority as it is undermining or circumventing it in favor of technocracy.

As functionalist actors begin to work together to achieve mutual, practical benefits, ${ }^{4}$ trust and desire for cooperation will build and cooperation will continue. Though mostly liberalist in origins through allowing for state cooperation and non-state actors, functionalists incorporate the realist tenants of maintained state sovereignty, particularly with regards to high politics (such as national security). Functionalist international organizations, though important, are limited to low politics and intergovernmental authority, leaving state sovereignty intact.

Functionalists do not see states as integrating past mutual practical cooperation. Functional organization of international activity can be achieved without the

[^4]incorporation of high politics and rigid institutions. "The essential principle is that activities would be selected specifically and organized separately - each according to its nature, to the conditions under which it has to operate, and to the needs of the moment...No fixed rule is needed, and no rigid pattern is desirable" (Nelson and Stubb, 2003:111-112). They are opposed to any large-scale attempts at cooperation, seeing it as impractical and threatening to state sovereignty. In this way, functionalists have fallen short in describing the integration seen in Europe.

European cooperation such as the ECSC and other trade and production agreements can be explained (and possibly could have been predicted) under functionalist thought as they are examples of functional cooperation based on pragmatic needs.

However, functionalism does not explain the important role of the state in the development of such agreements. In addition, the theory fails to explain attempts at a common European foreign security policy or social policy due mainly to its dismissal of the influence of political will. Both of these examples of integration step past the basic stages predicted by functionalism in that they create supranational entities, reducing state sovereignty, and involve both controversial and high politics. While European society has become enmeshed on many levels, as functionalism would call for, it has done so with political will and interstate cooperation unexpected by the theory. Similar political will and state action has also been the basis for ASEAN where integration has not been based on functional cooperation but rather on state communication. Finally, Mitrany’s theory fails to explain the permanent and rigid institutions of the EU or the continued push to further formalize European relations through a European constitution. Though
functionalism explained the initial European integration of low politics, it fell short once the region began institutionalizing and integrating high politics.

Neofunctionalism attempts to address some of the shortcomings of functionalism that are apparent in terms of explaining European integration, particularly the role of the state and political will. Commonly associated with Ernst Haas, it can be thought of as a revamping of functionalist theory in its attempts to better explain what had been seen. While it follows the basic premise of pragmatic, low-politics, cooperation found in functionalism, neofunctionalism acknowledges the potential for cooperation in one interest area to "spillover" into others. This spillover leads to a buildup of cooperation and integration between states both spreading in interest areas and deepening in integration. In other words, increased cooperation in neofunctionalism develops in a three-dimensional web of integration as opposed to the two-dimensional web of functionalism where cooperation remains a pragmatic function of solving mutual technical problems. Neofunctionalism allows for integration to build on itself through spillover where cooperation can grow to involve more complicated concerns through the incorporation of high politics and international institutions.

The inclusion of high politics, as well as neofunctionalism's emphasis on the need for state actors, increases the importance of political will in the process of integration that had been dismissed in functionalism without neglecting domestic actors. In addition, neofunctionalism strengthens functionalist positions on institutionalization as the spillover effect provides for the possibility of eventual supranational institutions and potentially even an integrated federal state as a result of continued mutually beneficial cooperation. Neofunctionalism combines the web of state interaction discussed by
intergovernmentalists with the web of pragmatic societal interactions discussed by functionalists. Integration is a bottom-up process of enmeshment and cooperation between states. However, the structure of the end product of such integration or even the existence of one is left unclear by the theory.

Neofunctionalism is a theory of integration primarily based on liberal assumptions in that it acknowledges non-state actors in international relations, particularly intergovernmental and supranational institutions, while still assuming actors to be rational. In addition, there is an optimistic outlook on the possibility of state cooperation. The theory strays from liberal thought in that the primary interests are not state or institutionally based but rather are focused on individuals.

By the 1960s, neofunctionalism was the predominant school of thought. However, its validity came into question when European integration first stagnated in the 1970s only to rapidly leap forward in the late 1980s and early 1990s. Neither of these actions fit the neofunctionalist model of progressive and unidirectional integration or continual spillover of cooperation. The main shortcoming of neofunctionalism is that it overlooks the international systemic factors that greatly contributed to the altered pace of integration observed. It is an inward looking theory focused solely on regional changes. This leaves neofunctionalism lacking in ability to fully explain integration as international factors can greatly influence regional behavior.

Though a founder of neofunctionalist thought, this stagnation of integration led Haas has to argue, "that the study of integration should cease to be a subject in its own right, and should become an aspect of the study of interdependence" (Rosamond, 2000:94). Haas' abandonment of integration-specific study in favor of the more global
theory of interdependence reflects both the rapidly changing international system in a globalizing world as well as the tension between international and comparative studies when observing the phenomenon. The importance of geographical proximity can be easily taken for granted when discussing integration. Haas saw the stagnation in European integration as a result of externalization where integration may "be slowed down by the perception of individual member-states of interdependencies beyond the region" (Rosamond, 2000:94). In other words, state interaction and interdependence extending beyond the region could be inimical to regional integration.

While there are many significant similarities in the premises of both neofunctionalism and interdependence theory including a view of non-state actors and an array of interconnections between such actors, interdependence is less a unidirectional process and more of a state of being in the international system. Integration among states is considered more of a strategic reaction from its members to the current state of the international system. Additionally, interdependence focuses on primarily on economic security and cooperation. According to interdependence theory,

> Countries are searching for instruments to increase their economic security. Thus, international economic institutions will have to be concerned...with collective economic security. Broadly defined, [this] means governments' acceptance of international surveillance of their domestic and foreign economic policies...international organizations could be used to moderate conflicts over the distribution of the gains from trade and other economic relations and to improve the economic security of all participants (Krause and Nye, 1975:331).

Rather than the neofunctionalist view of integration as a means to achieving mutual pragmatic needs, interdependence sees the process as a function of economic relations between societies.

Interdependence theory is not motivated by a normative stance on integration and gives no specific direction for the process to proceed by. Rather, it sees interdependence
between states as "a condition in the global political economy that might... produce a regional integrative response" (Rosamond, 2000:95). Integration is merely seen as a group of societies responding to turbulent fields of interests and therefore may not take on the same form in all cases. The phenomenon is more of a naturally driven force produced from international conditions than a result of intentional state cooperation. While this does not eliminate the importance of state action, political will does not play the same crucial role as it does in transactionalism or neofunctionalism.

Complex interdependence, as discussed by Keohane and Nye, is a result of deepened integration under interdependence theory. Once complex interdependence has occurred, the involved actors are intricately intertwined and reliant upon each other. At this point, their combined interests stem past initial economic concerns into other areas of society. In this way, interdependence theory allows for the widening and deepening of integration as it spills over into other areas of interest. International institutions are built to reflect and manage such interdependence. Separation of the actors involved is not likely or feasible at this stage. However, any further deepening of integration is not necessarily called or accounted for by the theory. In this, it falls short in explaining European integration as interdependence theory provides no prediction or explanation for the continued deepening of the region after economic security and complex interdependence had been established.

Interdependence theory is primarily based on liberalism as shown by its tenants. Notably, it challenges the state-centric view of realism in a liberalist manner through its allowance of non-state and domestic actors. Interdependence also challenges realist thought through its focus on economic rather than security-based motivations. Finally,
the theory reflects liberalism in holding an optimistic outlook on the ability of international cooperation as a means to solving common problems.

While interdependence theory takes a more internationally based approach to integration, federalism is more of a comparative approach to the phenomenon demonstrating how drastically different approaches to the study and interpretation of integration can be. Unlike functionalism or interdependence, federalism finds geographical proximity and claim to territory to be essential ingredients for integration. Additionally, it directly contrasts interdependence through having a political, rather than economically based motivation. Federalism is a theory of integration that contains tenants from both liberalist and constructivist thought as it allows for non-security based international cooperation and supra-national institutions while incorporating the importance of norms and societal construction.

In terms of integration, federalism was initially an idealistic push towards creating a United States of Europe in order to boost the security and strength of the continent after the devastation of WWII. Such a concept could be readily applied to regions throughout the globe, including East Asia, though ASEAN has not yet pushed for such a development. There is no clear-cut version of federalism as the theory encompasses many different incarnations of itself. However, prominent versions of federalism all "rest upon a number of similar elements: a degree of close kinship or relationship [and] a will to unity" (Mitrany, 1948:351). While federalism was most influential as an integration theory post-WWII, it is still relevant in modern-day discussion.

The primary focus in federalism is the integration of those states sharing similar norms and values in order to eventually form a regional federal system through the
ceding of sovereignty to a supranational government. According to Murray Forsyth, a modern federalist, "Federalism is the ensemble of structures and processes whereby a union of states or a union of polities is created and sustained" (Nelson and Stubb, 2003:206). In short, the theory sees integration as culminating in the transcendence of the nation-state. A new level of political organization such as a shift up to a region-state can be seen as the ultimate goal of federalism. Integration would result in states (or "cells" as discussed earlier) permanently joining to form a new barrier around themselves. The extent to which each state would maintain its original composure varies depending on if centralized or decentralized federalism is being observed. In either case, political will is a key component to success as national governments are primary actors whose support is necessary for the progress towards and successful attainment of a federalist state.

In terms of explaining European integration, federalism has been insufficient. Though the eventual creation of a United States of Europe is not unimaginable, particularly when observing movements towards constitutionalization and continued deepening of integration, a European federalist state has not yet appeared and there is no certainty that one will. While the theory has not necessarily been falsified, there are concerns are that it calls for too rigid a framework for international relations. For functionalists, this rigidity is undesirable in the international community because "of the limits and obstacles it places to fresh common action" (Mitrany, 1948:353). ${ }^{5}$

[^5]While neofunctionalism describes integration as a process, federalism primarily describes it as a final product. Monnetism, an integration theory named after Jean Monnet, an influential figure in European integration often referred to as the Father of Europe, looks to reconcile these two contrasting views. It is an older theory of European integration that can be seen as a subtype of federalism in its goal of transcending the nation-state through an integrated international community. Monnetism offers both a discussion of integration as an end product as well as the process in which states obtain it through including key aspects of both neofunctionalism and federalism. With neofunctionalism, the theory shares an approach to integration that begins with lowpolitics leading to a snowballing of international interaction and cooperation. Likewise, actors are primarily states though non-state actors are acknowledged. From federalism, Monnetism adopts a focus on geographical regions, societal norms, and supranational institutions. In these ways, it can be seen as influenced by both liberalist and constructivist tenants.

Monnetism views the international community as non-anarchic and manageable on a larger level. It takes the normative stance that supranational integration is desirable. According to Monnet, Europe should stretch beyond the interests of individual nation states and adopt a method of common action.

> To establish this new method of common action, [Europe has] adapted to [its] situation the methods which have allowed individuals to live together in society: common rules which each member is committed to respect, and common institutions to watch over the application of these rules. Nations have applied this method within their frontiers for centuries, but they have never yet been applied between them (Nelson and Stubb, 2003:23).

Monnet's vision involves the ultimate goal of an organized international society of cooperation. He sees this as best achieved though a federalist state while following a
pragmatic neofunctional approach in order to ease political actors into such integration.
In this way, Monnet acknowledges the importance political will in international relations. For him, it is a necessary driving factor of integration as the process cannot progress without the support of national leaders as has been demonstrated throughout European integration.

While Monnetism is able to explain the functionalist integration of Europe such as the ECSC and any increased deepening, there are a few aspects in which it falls short. First, as with neofunctionalism, the stagnation of integration seen in the 1970s and 1980s does not follow a monnetist line of thought that expects a consistent and progressive course towards supranationalism. Secondly, as with federalism, a supranational government has not been, and may never be, achieved in Europe. Finally, Monnetism says little to account for the EU's rapid widening, particularly its recent acceptance of Eastern European states. These new additions do not fit into what has been typically seen as the (Western) European society, which has been home to the norms and values that play such an important role for Monnet. While Monnetism provides a repeatable template for integration, it has not been clearly followed in Europe nor does it explain the path ASEAN has taken in East Asia.

| Theory | Level of Analysis | Primary Actors | Nature of Relationship Between Actors | Related <br> Grand <br> Theories | View of Integration | Instruments of Change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | State/ <br> Regional | States | States are equal players working for their interests. | Realism | Web of state interaction and cooperation influenced by state interest. | Intergovernmental institutions |
|  | State/ <br> Regional | State/ <br> Domestic <br> Actors | States are equal players. <br> Decisions influenced by domestic and int'l interest groups. | Liberalism | State interaction and cooperation influenced by domestic need. | Intergovernmental institutions and interest groups |
| $\begin{aligned} & 0 \\ & 0.0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | Regional | States/ Institutions | Institutions directly reflect and act on state interests. | Realism | Increased communication and cooperation between states facilitated by int'l institutions. | Intergovernmental and Supranational Institutions |
|  | Regional | Insti- <br> tutions/ <br> Interest <br> Groups | Institutions reflect state interests and develop own interests to act on. | Liberalism | Increased cooperation between states with a strong focus on the development of int'l institutions | Intergovernmental and Supranational Institutions |
|  | Regional / International | States | States display mutual cooperation and attention in matters of communication. | Realism/ <br> Liberalism/ <br> Constructivism | The elimination of potential conflict between states based on a built sense of community. A web of | Security <br> Alliances and Int'l Institutions |
|  | State | Domestic Actors | Actors interact on shared issues based on technical knowledge. | Liberalism/ Realism | cooperation between communities on mutual pragmatic, functional concerns. Increasing | Technocratic Organizations |
|  | State/ <br> Regional | States/ Domestic Actors | States facilitate cooperation between domestic actors on mutual concerns. | Liberalism | cooperation between communities on shared concerns facilitated by states and institutions. | Intergovernmental and Supranational Institutions |


| Theory | Level of Analysis | Primary Actors | Nature of Relationship Between Actors | Related Grand Theories | View of Integration | Instruments of Change |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | International | Econ. <br> Institutions/ Corporations | Economic actors cooperate based on market demands. | Liberalism | States cooperate and interact through int'l institutions based on mutual need for economic security | International Economic Institutions |
|  | Regional | States/ <br> Int'1 <br> Insti- <br> tutions | States interact sharing norms allowing for deeper cooperation. | Liberalism/ <br> Constructivism | States in a region cede sovereignty to a shared supranational government. Cooperation on | Supranational Institutions |
|  | State/ Regional | Domestic Actors/ States | States cooperate based on shared needs, developing common norms and values. | Liberalism/ <br> Constructivism | functional needs builds, leading states to choose to cede sovereignty to a supranational government. | Intergovernmental and Supranational Institutions |

Table 1. Theoretical Overview of the midrange theories on regional integration.
Table 1 provides a brief summary of each of the midrange theories discussed in this section. While the theories all provide their own insight to the process of regional integration, each also falls short of being able to explain the entirety of such a phenomenon. The widely varied literature on integration suggests that there is little consensus on what integration is let alone how to achieve it. Functionalists and interdependence theorists see the phenomenon as a process while others like federalists and transactionalists view it as an end product. Integration is and must be both.

Each theory discussed provides part of the integration seen in Europe thus far covering various motivations, actors, and actions involved. However, none are capable of explaining the entirety of the phenomenon. Without being able to provide a full explanation of occurrences thus far, the theories additionally find themselves lacking in
their ability to predict the future of integration in Europe, East Asia, or any other region. The study of integration is lacking a comprehensive theory capable of properly explaining the phenomenon. The theories in place are each capable of telling merely part of the story as they see the process from only one angle, missing the larger picture. Together, however, they can start to give a more reasonably comprehensive explanation with each theory bringing its own piece to the puzzle accounting for various actors and actions already observed. Perhaps then, the solution to understanding integration lies in finding the right combination of the puzzle pieces these theories offer.

Without an overarching inclusive theory, making predictions as well as policy prescriptions for regional integration is more like guess work than science. The phenomenon is seen in a vague sense as increased international interaction and cooperation rather than a clear process and end point. Without a comprehensive understanding of integration, how can we determine what makes Europe so advanced in the process and what can be done to explain, predict, and prescribe in terms of the phenomenon for East Asia and other regions around the globe? This research is an attempt to combine a few of the testable aspects from the theories above in order to move closer to a more comprehensive understanding of integration.

## Research Model \& Hypotheses

While theories on integration have not lead to a comprehensive explanation, they do provide a detailed picture of the actors and motivations involved from different perspectives. Through combining existing theories, one can achieve a thorough understanding of the intricacy of integration and some of the necessary conditions for it to occur. Many of the views on integration share similar aspects such as the formation of institutions, increased interaction, and a desire for security. It is with these shared aspects that this paper will begin looking for causes of regional integration through developing a model with correlating independent variables. The creation of a model incorporating these shared aspects should aid in the understanding of integration in developing a method to better explain and predict the phenomenon. A model that can be applied uniformly to regions throughout the globe will not only illuminate the necessary conditions for integration but also allow for predictions on where it will likely occur. Additionally, a clearer understanding can provide insight for policy prescriptions to facilitate integration. While an ambitious task, the hope for this paper is to gain a clearer understanding of the causal variables involved.

In looking at the theories in the previous section, none were adequate to explain integration as a whole but each contributed to explaining a part of the process. Perhaps one of the most intriguing aspects of integration highlighted by its multiple theories is that it is a phenomenon that does not fit easily into either comparative studies or international relations. Most of the theories on integration are based on comparativists' perspectives and tend to miss the impact of systemic factors of international relations. In contrast, the theories based on international relations' perspectives tend to miss the state
and regional level developments captured in comparative politics. Integration crosses equally into both disciplines needing both state level changes and changes in the international system in order to occur. Therefore, a model on integration needs to be able to capture the impact of both state level and international systemic developments. Through combining elements of both international relations and comparative based theories, the model presented combines their differing levels of analysis by looking at state, regional, and systemic factors.

It would seem logical that, in order to integrate, states would need the ability and incentive to do so, both of which can be affected by changes within the state and region as well as the international system. As mentioned above, the theories on integration paint a broad picture of the phenomenon seeing it as the formation of regional institutions, increased interaction between both states and society, and a mutual desire for security. In creating a model for integration, this research began by looking for empirically measurable variables to represent these three aspects of integration illuminated by its theories. The variables chosen must incorporate incentive and ability for states to integrate impacted by both the regional and international levels through capturing changes in both the levels. In order to do this, the combined variables must consider changes in the state and region as well as how the region is behaving in relative terms to the international system. The model must represent tenants of both comparative politics and international relations through observing how states and regions are behaving while taking into consideration happenings in the international system.

The integration model will need three independent variables, one for each aspect of integration discussed above. In addition, the model must capture multiple levels of
analysis through observing changes at the state, regional, and global levels. Each of these independent variables will be measured to see their effect on the overall level of integration in the regions observed. Based on this model this paper conceptualizes integrations as a function of the following:

$$
\text { IAS }=\alpha+\beta_{1} X_{1}+\beta_{2} X_{2}+\beta_{3} X_{3}+e
$$

Where:
IAS $=$ The Integration Achievement Score for the region;
$\mathrm{X}_{1}=$ Standard deviation of regime type within the region;
$\mathrm{X}_{2}=$ Percent of global trade occurring within intra-regionally; and
$\mathrm{X}_{3}=$ Percent of the region's GDP spent on military expenditures.
These variables incorporate the state and regional levels of analysis of comparative politics through looking at individual state's development and the region as a whole. Additionally, international relations theory in incorporated by taking the international system into consideration in their measurements.

For this model, the dependent variable is the Integration Achievement Score (IAS), ${ }^{6}$ which measures the level of integration within the region in economic terms between states and for regional organizations as a whole. While political integration is important, the measurements are economically focused for two primary reasons. First of all, indicators of economic integration are more universally measurable, at least at this time while integration is in its infancy in most parts of the world, excluding Europe. Secondly, the history of the EU suggests that indications of integration are first evident in the economic sector, though potentially driven by social and political factors, with

[^6]political integration usually following a step or two behind. Therefore, the use of more politically oriented measurements could overlook initial progress being made, especially in East Asia. While, in this model, integration is considered affected by systemic factors, the IAS is a measurement strictly of state and regional integration levels.

The level of integration was measured using the integration achievement score as composed by Dr. Gaspare Genna. IAS scores were initially available for only the states in Europe. These scores have been thoroughly developed to give dyadic scores between all states in the region, allowing for an intricate look at European integration. More recently, the IAS scores have been expanded to include data for regions throughout the globe. This data shows the growth of integration levels in specific regional organizations over time. However, IAS data between dyads of states in the regions outside of Europe is not yet available. This creates a serious problem in comparing IAS between Europe and East Asia. Therefore, when observing integration levels in East Asia, this paper will be looking at the IAS scores for the organization of ASEAN. For the purpose of consistency, European levels of integration will be viewed as the IAS scores for the organization of the EU.

The data composed by Dr. Genna includes three types of integration scores; the Economic Integration Achievement Score (EIAS), the Political Integration Achievement Score (PIAS), and the overall Integration Achievement Score (IAS). The IAS looks at all six factors included in the data; free movement of goods and services, free movement of capital, free movement of labor, supranational institutions, monetary coordination, and fiscal coordination. Each factor is given a score from zero to five with five being the most integrated. The IAS is the average of the scores for all six factors. The EIAS
incorporates the more economically based factors; movement of goods and services, movement of capital, and movement of labor. The EIAS is the average of the scores for these three factors. The PIAS is an average of the scores for the more politically motivated factors; supranational institutions, monetary coordination, and fiscal coordination. This research will take all three measurements into consideration in order to get a more rounded view of integration levels in these regions.

The unit of analysis for this research will be the region with Europe and East Asia being observed. For Europe, all states that are a member of the EU (referred to as the EU27) are included. For East Asia, the cases include all 13 states that compose ASEAN+3. In addition, where applicable, Taiwan will be considered in the data as it is a key economic figure in the region despite its controversial status as an independent state. The time span for the measurements will cover post World War II interactions. However, measurements for some states might begin later, particularly in East Asia, as political independence will be a necessary condition both due to data availability and to prevent any skewed data from colonized states not acting of their own accord.

The first independent variable presented in the model is regime type variance and will focus on state and regional level changes. Regimes are "sets of implicit or explicit principles, norms, rules, and decision-making procedures around which actors' expectations converge," (Krasner, 1983:2). The development of international institutions plays a significant role in integration particularly as discussed in intergovernmentalism, institutionalism, and federalism. The formation of regional institutions is perhaps the most tangible sign of integration as the institution is a direct representation of states agreeing to cooperate. However, in attempting to model integration, measuring the
number or intensity of regional institutions in an area would be more a way to measure the effect of integration, not the cause. In searching for a causal variable, a feature that enables and encourages states to create the regional institutions in the first place must be found.

This model will look at regime types within a region as the more similar the regime types are, the more feasible the creation of both intergovernmental and supranational institutions should be. For example, when looking at Europe, one will find that all states are democracies. Such democratization is, in fact, a requirement for entrance into the EU. Without relatively similar regime types, consensus on the structure and creation of international institutions would be difficult for states to come to, particularly if such institutions are indeed a reflection of state interests as the theories suggest. States would want their international institutions to reflect their own interests. Varying regimes between members would make complex development of these institutions extremely complicated as the states would be unlikely to carry similar interests to such an extent.

In measuring regime type, this research will use a uniform scale between authoritarian and democratic regimes, observing similarities in civil liberties, government control on market, and democratic voting behavior. The Polity IV 2008 data will be used in order to measure this uniformly in both regions between the years of 1945 to 2008. The focus on similarity of regime types throughout the regions is based on an expectation that similarity will increase ability of states to integrate. To measure variance throughout the region for each year, the standard deviation from the mean will be calculated.

The second independent variable captures economic interaction between states. It is generally assumed in integration theories (particularly functionalism, neofunctionalism, and interdependence) that, as economic interaction increases, states are likely to seek more deepening of regional integration. This is a reciprocal effect as deepening of regional integration reinforces increase in economic relationships between member states. Economic interaction between states observes changes on a state and regional level while also considering systemic factors such as the state of the global economy. The more states interact, the more incentive and ability they create to work together and form institutions to make the process run more smoothly through lowering transaction costs.

Interaction between states can be measured in numerous ways. This model will specifically measure levels of intra-regional economic interaction between states through external (imports and exports) trade. Trade between states in the region as well as total trade with the globe will be measured for both Europe and East Asia in order to determine the percentage that is intra-regional. By finding the percentage of trade that is intra-regional in comparison to total global trade, the measurement will take into account not only the direct levels of interaction between states in the regions but also the relative levels on an international scale.

Using information gathered from the Direction of Trade Statistics dataset provided by the International Monetary Fund, the levels of intra-regional trade for Europe and East Asia will be observed between the years of 1980 to 2008. Intra-regional trade is considered to be all imports and exports traded between nations within the specified region. The expectation is that increased intra-regional trade will provide incentive for regional integration. The more interaction and dependence within a region, the more
incentive there will be to cooperate and eventually formalize such cooperation in order to make it more efficient. In addition, the more interaction, the better able states will be to integrate.

The final independent variable is the presence of a security threat. The theories on regional integration commonly view actors as integrating in pursuit of their interests, particularly the primary shared interest of state security. This directly correlates with Karl Deutch's idea of security communities in his theory of transactionalism as well as aspects of federalism and intergovernmentalism. Such theories argue that the lingering threat of Germany was a primary incentive for European integration during post WWII as integration was a means of protecting the shared state interest of security in the region. A similar threat in other regions of the world should provide incentive for similar actions. Therefore, this variable will be looking for any threat to the security within the regions observed.

The presence of a security threat will be measured through states' military expenditure where a rise in military expenditure would suggest a perceived increase in security threat. To measure this, this research will look at the amount spent on military expenditure in each region. In attempts to control for the vastly different levels of development and national wealth in the states being observed, military expenditure will also be measured as a percentage of each state's GDP. This will give a more relative view for the regions. A spike in military expenditure should suggest the presence of a security threat. The data for this variable will come from two primary sources. The military expenditure data will be gathered from the Correlates of War project giving
statistics for the dollar amount spent by each state for each year. The GDP data will be gathered from the World Bank.

A security threat may be either external or from within the region itself as an increase in expenditure could be due to either. This allows for the variable to consider both regional and systemic factors in its observations. The presence of a threat will be expected to increase integration through providing incentive for cooperation. Its absence, however, will be expected to have a neutral, rather than negative, effect on integration. This is due to the assumption that the absence of a security threat would only represent the lack of a particular incentive to integrate, not any particular disincentive for or strain on the process.

The model developed views regional integration as a function of the three variables discussed above. All three must be in place for the process to occur and integration to progress. Each independent variable is expected to interact with the dependent variable in a specific manner. The specific expectations and hypotheses for each variable are discussed below.

## Hypotheses

From the variables stemming from integration theories discussed above, similar regime types, increased economic interaction, and the presence of a security threat to the region are expected to have a causal relationship with increased levels of regional integration. Therefore the testable hypothesis for this paper is three-part:
$H_{1}$. A lower standard deviation between the Polity IV rankings of the states in a region will lead to a higher integration achievement score.
$H_{2}$. A higher percentage of intra-regional trade observed will lead to an increased integration achievement score in the region.
$H_{3}$. An increase in military expenditure will lead to a higher integration achievement score in the region.

All three hypotheses work together and are necessary suggesting the dependent variable of integration to have multiple causes. Similarity of regime type, increased economic interaction, and the presence of a security threat will lead to increased integration amongst states in a region. To test these hypotheses, this research will look at both Europe as East Asia and then compare the results of the two regions to see if they are consistent with both the theory and each other.

## Findings

This section provides an overview of the data gathered on each variable in the aforementioned equation for both Europe and East Asia. The data for each variable will first be presented individually. This will be followed by a discussion of their behavior with one another in the model presented.

## Levels of Integration

Figure 1 is a chart showing the three integration achievement scores for the EU from 1952 to 2004. The IAS begins with a score of one for the organization meaning the EU demonstrated a degree of regional integration from its conception. All three integration scores show a steady increase over the time span with the EIAS leading the way until all three scores merge at 3.67 in 2002.


Figure 1. Integration Achievement Scores for the EU from 1952-2004. Data Source: Gaspare Genna

Figure 2 shows the integration achievement scores for ASEAN from 1968 to 2004. The scores in East Asia are much lower than those found in Europe ending at a lower integration level in 2004 than the EU began with. Additionally, East Asian integration levels remain at zero even after the formation of ASEAN, not increasing until 1977; a decade after the organization was created. The three scores for the region remain almost completely consistent with each other for the first 24 years. However, when there is variance among them, the EIAS is again the leading score, especially in the last decade.


Figure 2. Integration Achievement Scores for ASEAN from 1968-2004. Numbers include the ASEAN Free Trade Agreement beginning in 1992. Data Source: Gaspare Genna.

These integration scores demonstrate that the EU is significantly more advanced than ASEAN in terms of integration levels. In the time span observed, both organizations show a gradual increase in their levels of integration with both regions also demonstrating the tendency to increase their EIAS prior to their PIAS. In Europe, the creation of an institution, the EU, coincided with instant levels of integration for the region. This is to be expected as the institution was designed to increase integration and
cooperation amongst its member states. In contrast, from its conception ASEAN has been viewed more as forum for communication amongst its members than an effort to integrate them. As the integration scores demonstrate, the organization had virtually no hold over its members initially as it provided no increase in integration levels for its first decade. Even as ASEAN's IAS increases, it still has a significantly lesser impact on the region's integration levels when compared to the EU.

Descriptive Statistics

|  |  | N | Minimum | Maximum | Mean | Std. Deviation |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EU | IAS | 53 | 1 | 3.666666667 | 2.443396226 | 0.71383115 |
|  | EIAS | 53 | 1.333333333 | 3.666666667 | 2.899371069 | 0.658880512 |
|  | PIAS | 53 | 0.666666667 | 3.666666667 | 1.987421384 | 0.821615732 |
| ASEAN | IAS | 36 | 0 | 0.666666667 | 0.337962963 | 0.223557496 |
|  | EIAS | 36 | 0 | 1 | 0.425925926 | 0.33438986 |
|  | PIAS | 36 | 0 | 0.333333333 | 0.25 | 0.146385011 |
| Valid N (listwise) |  | 36 |  |  |  |  |

Table 2. Descriptive Statistics for Integration Achievement Scores.
Table 2 gives the descriptive statistics for the integration scores in both Europe and East Asia. The statistics given echo the data observed in the charts with the EU showing a higher average as well as higher minimum and maximum IAS than ASEAN. Additionally, both regions show highest averages for the EIAS as well as increased scores for all three measurements over the time span. This growth is greater both in overall quantity and proportionality in the EU than in ASEAN. The IAS data demonstrates what was expected; Europe is more integrated than East Asia.

## Regime Type

The IAS shown above demonstrates that East Asia is not as integrated as Europe. Therefore, the first hypothesis would expect to find more consistency in regime types in Europe and more diversity in East Asia. Figure 3 displays the results of the Polity IV scores for all 27 members of the current EU for these years. Data was not available for states of Malta and Luxembourg.


Figure 3. Polity scores for all EU27 members from 1945-2008. Malta and Luxembourg are not included. Data source: Polity IV

As Figure 3 demonstrates, there was a significant amount of regime type diversity among the EU27 until 1989 when all members scored between a five and a ten on the scale. The diversity lessened even further by the turn of the century and has remained there since with all members scoring between an eight and a ten. Polity IV classifies
states scoring a six or higher as a democracy. Under this classification, all EU27
members were democracies by 1996 .

Figure 4 shows the Polity IV scores for the members of the EU when membership is controlled for. No scores are displayed for states before they joined the union. With this control added, there diversity in regime types in the region drastically declines.


Figure 4. Polity scores for all members of the EU as it developed from 1951-2008. Malta and Luxembourg are not included. Data source: Polity IV

With the exception of France between 1958-1968, the polity scores for members of the EU remain between eight and ten demonstrating both a high level of democracy and similarity. With regard to the decade long dip in the French score, it is important to note that it occurred after France had been a member for seven years. Additionally, the French decreased polity score also occurred after the Treaty of Rome was signed and coincided with the slowed pace of integration in the region at the time.

Figure 5 displays the same measurement when applied to the region of East Asia, specifically the current member states of ASEAN+3 and Taiwan. Data was not available for the state of Brunei. Though Figure 3 showed a significant amount of diversity in Europe over the same time span, the variance of regime types found in East Asia would appear to be much greater.


Figure 5. Polity scores for all members of ASEAN+3 and Taiwan from 1945-2008 excluding Brunei. Data source: Polity IV

The range of scores shown for Europe in Figure 3 start at a difference of 19, drop down to a difference of five by 1989 and settle at a difference of two by 2000. In contrast, while East Asia begins with a similar range of scores, such a range is relatively maintained throughout the time period observed. Though the overall trend of the member states has shown a slight democratization in the region, there is still a range of 18 among the polity scores shown by 2008.

Figure 6 adds the control of membership to ASEAN +3 to the polity measurements with no scores being reported for members prior to their addition. In
contrast to Europe, the range of scores is unaffected by the control of membership to the regional organization. While, again, a slight trend towards regional democratization can be seen, the overall variance of regime types is significantly greater within ASEAN+3 than the EU with a range of 18 by 2008.


Figure 6. Polity scores for ASEAN +3 members as added excluding Brunei from 1967-2008. Data source: Polity IV

As ASEAN +3 comprises of less binding agreements than ASEAN itself, Figure 7 observes the polity scores of the organization without the +3 states of Japan, China, and South Korea. While there is little effect on the range of regime types, the difference in scores does drop by two points down to 16 by 2008. There is also a decrease in overall democratization with the subtraction of the developed democracies of South Korea and Japan.


Figure 7. Polity scores for ASEAN members as added excluding Brunei from 1967-2008. Data source: Polity IV

The final observations made on regime types in the regions focus on overall classification rather than specific scores of member states. Polity IV categorizes states with a polity score from -10 to -6 as autocracies, those with scores from -5 to 5 as anocracies, and those scoring between 6 and 10 as democracies. Figure 8 shows the categories of regime types as found in Europe between 1945-2008 as a percentage of the overall region. While Europe is initially diverse in regime types, it remains predominantly democratic throughout the time period. Additionally, by 1997, the region is $100 \%$ comprised of democracies.


Figure 8. Regime type distribution in Europe by percentage, 1945-2008. Data source: Polity IV
Figure 9 shows the same measurement but controls for membership to the EU, excluding all data for states prior to their addition. With the addition of this control, the regime types in the region become almost entirely uniform with the exception of France being classified as an anocracy from 1958-1968. Aside from this, the members of the EU are consistently classified as democracies.


Figure 9. Regime types of EU members by percentage from 1951-2008. Data source: Polity IV
In contrast to Europe, East Asia displays a great deal more diversity in its regime types. Additionally, there is no consistent dominant regime type such as democracies in Europe. Rather, each regime category takes a turn at being the most prominent in the region over the time span observed.


Figure 10. Regime type distribution in East Asia, 1945-2008. Data source: Polity IV

When the control for membership to ASEAN +3 is added to the data, there is still a significant amount of diversity in the region, particularly compared to Europe. When membership to ASEAN +3 is considered, there is actually more diversity in regime types with each category consisting of approximately one third of the membership in 1996 and 2007.


Figure 11. Regime types of ASEAN+3 by percentage, 1967-2008. Data source: Polity IV
When the same membership control is given for just the members of ASEAN, the numbers from 1997 onward show an even greater variance in regime types. When the +3 are subtracted, ASEAN consists of one third autocracy, anocracy, and democracy for all but 4 years between 1995 and 2008.


Figure 12. Regime types of ASEAN by percentage, 1967-2008. Data source: Polity IV
While the data shown above gives an overall picture of what the regime types look like in the two regions and shows us that East Asia appears to be much more diverse as expected, a measurement is needed that demonstrates exactly how varied the regimes are in a region in any given year. Above, the range of scores found in each region is discussed. While a range can offer a general idea of variance by showing the outer limits of the scores, the standard deviation from the mean for the regime types in each region gives a more precise measurement of their variance over the time span observed. Figure 13 shows the standard deviation of regime types in Europe and East Asia as well as standard deviation specifically within the EU, ASEAN, and ASEAN+3.


Figure 13. Standard deviations of regime types, 1945-2008. Europe does not include Malta or Luxembourg. East Asia includes all members of ASEAN +3 as well as Taiwan.

Europe as a region shows the highest standard deviation but drops rapidly at the end of the Cold War, almost a full six points between 1988 and 1990. In contrast, the standard deviation shown for the EU is very low remaining at zero until 1958 with the ten-year drop in the French polity score under De Gaulle. Other than the increased deviation during this period, the standard deviation for the EU regime types stays below one for the time span observed. The numbers for Europe and the EU merge in 2007 when the final two members of the EU27 gained membership.

The standard deviation of regime types in East Asia is actually lower than Europe until 1989. While East Asia shows a great deal of variance in regime type, Europe was drastically polarized up to this time due to the Cold War. This polarization raised the standard deviation from the mean more than the variety found in East Asia. Over the time observed no decrease is shown in the standard deviation for the region. When
looking at the numbers for ASEAN and ASEAN +3 , they show a slightly lower standard deviation in regime types than the region as a whole with the numbers for ASEAN and ASEAN +3 being identical up until 1997 when the +3 were added. After 1997, ASEAN+3's numbers rise while ASEAN's begin to slowly drop.

The data shown for Europe behaves somewhat as expected with the EU showing low levels of standard deviation in its regime types and the deviations for the region overall lowering as time passes and the region becomes more integrated. However, Europe's numbers behave unexpectedly in having such a high standard deviation up until 1989, higher than found for East Asia the less integrated region. East Asia behaves as expected through having a high standard deviation for the time span observed.

Additionally, ASEAN and ASEAN +3 show higher numbers than the EU, which follows as expected with their integration scores. ASEAN +3 also behaves as expected with a higher standard deviation than ASEAN, consistent with it being less integrated. Where East Asia does not behave as expected is that it does not show a general downward trend in its regime type variation over the time span despite it gradually becoming more integrated.

Below, Table 3 gives the overall descriptive statistics for the standard deviation in both regions. The numbers given are specifically for the standard deviation of each regional organization so as to be compatible with the IAS. As the graph above demonstrates, the control for membership in these organizations drastically affects the deviation in regime types found. The effect of this will be discussed later on in this paper.

Descriptive Statistics

|  | N | Minimum | Maximum | Mean | Std. Deviation |
| :--- | :---: | :---: | :---: | :---: | :---: |
| StDev of <br> Regime Type for <br> ASEAN | 42 | 3.834057902536 E 0 | 7.529940238807 E 0 | 5.90818798709095 E 0 | .919223173633749 |
| StDev of <br> Regime Type for <br> EU | 58 |  | 0 |  |  |
| Valid N |  |  | 2 |  |  |
| (listwise) |  |  |  |  |  |

Table 3. Descriptive statistics for the standard deviation of regime type in the EU and ASEAN.
Table 3 shows that the standard deviation of regime types in ASEAN is higher in its minimum, maximum, and mean than the EU. Overall, the data observed on regime types in the two regions demonstrates that Europe has less variance but more polarization in its regimes during the Cold War and trends towards uniformity and democratization over the period observed. In contrast, East Asia has a vastly diverse set of regime types and maintains its variance throughout the time span observed. With the control for membership in the regional organizations of the EU and ASEAN, the EU is much more similar in regime types than ASEAN as expected in the hypothesis with its higher integration levels. However, up until 1989, the view of the region as a whole tells a somewhat different story with Europe having a significantly higher standard deviation than East Asia due to its extreme polarization, contrary to the expectations of the hypothesis.

## Intra-Regional Trade

In looking at economic interaction in both Europe and East Asia, the second hypothesis above would expect to find a greater amount of trade among European states
than in East Asia as the latter has a lower IAS than Europe. Additionally, gradual increases of intra-regional trade in both regions over the time observed are expected as their IAS score increased. Figure 14 displays the amount of imports, exports, and total trade between the EU27 members as a percentage of the total goods traded by the EU27 to the world.


Figure 14. Percent of total trade occurring within the EU27 members, 1980-2008. Data Source: IMF
The data in Figure 14 includes all 27 current members of the EU. However, measurements for East Germany prior to its reunification with West Germany and Czechoslovakia prior to its split into the Czech Republic and Slovakia are not included. The data shows that, since 1980, Europe has seen a gradual increase in overall intraregional trade. This is consistent with the expectations of the hypothesis as it correlates with the region's gradually increased levels of integration. Levels of intra-regional
imports for Europe have remained consistently, though not drastically lower than intraregional exports.

Figure 15 shows the same measurements when applied to the members of ASEAN. There is a notable difference between ASEAN and the EU27 data shown above, primarily that there is a significantly lower overall percentage of intra-regional found amongst the states of ASEAN. This is again consistent with the hypothesis as East Asia would be expected to show a lower level of economic interaction than Europe.


Figure 15. Percent of total trade occurring within ASEAN members, 1980-2008. Data Source: IMF
Figures 16 and 17 below display the levels of trade between the states in ASEAN +3 with figure 17 taking Hong Kong and Macau into consideration. The addition of the +3 members (Japan, South Korea, and mainland China) significantly increases the levels of trade within the region by over $10 \%$. A similar increase is seen with the inclusion of Hong Kong and Macau in the measurements. This would appear to be
contrary to the hypothesis that would expect to see the highest levels of intra-regional trade between the members of ASEAN, the most integrated group, and the lowest levels with the inclusion of Hong Kong and Macau, the most loosely associated members in the regional organization.


Figure 16. Percent of total trade occurring within ASEAN+3 members, 1980-2008. Data Source: IMF


Figure 17. Percent of total trade occurring within ASEAN+3 members including Hong Kong and Macau, 1980-2008. Data Source: IMF

Figure 18 provides a comparison between Europe and East Asia with the latter being presented in the three groupings discussed above. A direct comparison between the regions supports the hypothesis of a higher level of economic interaction amongst more integrated states as Europe shows a significantly higher level of intra-regional trade as expected. In addition, all measurements show a steady increase in regional economic interaction in the 28 years observed. This is consistent with the hypothesis in that both Europe and East Asia have been continuing to integrate. However, the break down of the East Asian organizations is contrary to the expectation of the hypothesis with the lesserintegrated groups showing a higher level of intra-regional trade.


Figure 18. Percent of total trade in Europe and East Asia, 1980-2008. Data Source: IMF
The unexpected results in East Asia led to curiosity on the effect of the removing the United States from the total global trade of the regions. With the US being a globally dominant economic power for the time span observed as well as having a particularly high level of trade with many East Asian states, removing the US from the measurements could drastically alter the percentage of intra-regional trade. Figure 19 shows the percentage of intra-regional trade for Europe and East Asia in the same groupings as found in Figure 18. However, all trade with the US has been removed from the equation. While the percentages for all groups measured increased, they did so at similar rates
keeping them in almost identical relative position to one another giving similar response for the hypothesis.


Figure 19. Percent of total trade minus the US for Europe and East Asia, 1980-2008. Data Source: IMF
All the data presented above is for member-states in the region for the entire time span. While it offers an insight into the economic interaction within each region, it does not control for membership in the regional organizations of the EU and ASEAN as is necessary for compatibility with the IAS data. Figure 20 presents the levels of intraregional trade within the organizations of the EU and ASEAN, including only trade data for states after they have become members. The numbers both with and without US trade are included.


Figure 20. Percent of total trade within the EU and ASEAN, 1980-2008. Data Source: IMF
The levels of trade for both the EU and ASEAN are similar though slightly lower than those for their respective regions as a whole. Both organizations behave as expected by the hypothesis with the EU showing significantly higher levels of intra-regional trade than ASEAN. Additionally, they both show a gradual increase in intra-regional trade over the time span observed, which is consistent with their integration scores.

Descriptive Statistics

|  | N | Minimum | Maximum | Mean | Std. Deviation |
| :--- | :---: | :---: | :---: | :---: | :---: |
| \% Intra-EU | 29 | 4.905231703988 E 1 | 6.593905659515 E 1 | 5.81102222434642 E 1 | 4.950825172319340 E 0 |
| \% Intra- |  |  |  |  |  |
| ASEAN |  |  |  |  |  |
| \% Intra-EU | 29 | 1.500100551128 E 1 | 2.501069024114 E 1 | 1.99622056429195 E 1 | 3.278958258137006 E 0 |
| US Control <br> \% Intra- <br> ASEAN | 29 | 1.779993677056 E 1 | 2.852303769170 E 1 | 2.37301057936118 E 1 | 3.440288161294996 E 0 |
| US Control <br> Valid N <br> (listwise) | 29 |  |  |  |  |

Table 4. Descriptive Statistics for intra-regional trade in the EU and ASEAN.
Table 4 provides an overview of the descriptive statistics for the trade data presented for both the EU and ASEAN. These statistics show that the EU has a higher minimum, maximum, and mean than ASEAN for its percentage of intra-regional trade from 1980-2008. In general, the trade data observed for the two regions behaved as expected by the hypothesis. Both Europe and East Asia show an increased level of intraregional trade over time, consistent with their increased IAS. Additionally, Europe showed higher levels of intra-regional trade than East Asia, also consistent with their respective IAS levels.

Unlike the measurements for regime type similarity, controlling for membership in the regional organizations of the EU and ASEAN had little effect on the behavior of the trade data. The measurements did alter the findings slightly by lowing the overall percentages for each region but did not alter the relationship between them or their gradual increases in intra-regional trade over time. The only finding that was contrary to the expectations of the hypothesis came from within East Asia. The relationship between

ASEAN, ASEAN+3, and ASEAN+3+Hong Kong and Macau is the inverse of what was expected with the least integrated grouping showing the highest level of trade and vice versa. More country specific data would perhaps present an explanation for this finding and is something to be observed in future research.

## Security Threat

The third hypothesis expects to see a spike in military expenditure around the time or slightly prior to a rise in integration levels. Figure 21 displays the amount in current US dollars that each of the EU27 states spent on military expenditures from 1945 to 2001. All figures are measured in current US dollars.


Figure 21. Military expenditures for European states, 1945-2001. Data Source: Correlates of War.

While most of the states in Europe spent under $\$ 10,000,000,000$ and showed a slow, gradual rise in expenditure, there are a few notable outliers. France, Germany, East Germany, the UK, and Italy all show proportionately more drastic increases in their military expenditure. In addition, Poland shows a spike in expenditures in the late 1970s and early 1980s. However, when the numbers are converted to a percentage of each state's GDP, the results are drastically different.


Figure 22. Military expenditures for European states as percent of their GDP, 1960-2001. Data Sources: Correlates of War and World Bank.

Figure 22 shows the military expenditure as a percentage of GDP for the EU27
from 1960 to 2001. Those states that appeared to spike in their expenditures in Figure 21 are actually among the lower spenders in terms of percentages. In contrast, Bulgaria, Hungary, Poland, and Cyprus are among the big spenders each showing notable spikes in their military expenditures.


Figure 23. Military expenditures for East Asian states, 1945-2001. Data Source: Correlates of War.
Figure 23 above shows the military expenditure for all East Asian states from 1945 to 2001. China and Japan prove to be clear in the leaders in the region in terms of overall military expenditure for most of this time period with South Korea and Taiwan also spending notable amounts. Thailand remains a comparably low spender though it demonstrates a significant spike in military expenditures between 2000 and 2001. When looking at the percentages presented below in Figure 24 showing military expenditure in the region's state as related to their GDPs, one can see periodic spikes in Cambodia and Vietnam. Additionally, the data shows that China was clearly well above the rest of the region in its relative expenditures up until the mid-1980s and going up again after 2000.


Figure 24. Military expenditures for East Asian states as percent of their GDP, 1960-2001. Data Sources: Correlates of War and World Bank.

In order to get a better picture of the military expenditures in both Europe and East Asia in their entirety, the figures for each region's states were added together to create a regional total. Figure 25 shows the total dollar amount spent on military expenditure in both Europe and East Asia from 1945 to 2001. Both regions see an overall increase in spending with Europe spending significantly more as would be expected due to their larger economies.


Figure 25. Total military expenditure per region. Data Source: Correlates of War
Figure 26 shows the overall military expenditure for each region as a percentage of the region's total GDP. Both Europe and East Asia demonstrate a gradual decrease in the relative military expenditures over the time observed. While Europe shows a fairly smooth decrease, there are the occasional spikes in expenditure for East Asia. The first spike occurs in 1962, five years prior to the official formation of ASEAN in 1967. However, this is not necessarily consistent with the hypothesis as, while ASEAN was formed shortly after, integration scores for the region remain at zero until 1977. Military expenditures spike again in East Asia in 1996. This spike occurs only a year prior to the 1997 addition of the +3 members as well as Myanmar and Laos. Additionally, and in support of the hypothesis, this 1996 spike in expenditure also happens shortly prior to the 1999 rise in the region's integration scores.


Figure 26. Total military expenditure as percent of GDP per region. Data Sources: Correlates of War and World Bank.

Unlike East Asia, Europe does not show any notable spikes in military expenditure in the time observed offering no support for the hypothesis as its integration scores continued to rise. However, for Europe in particular, data back into the late 1940s early 1950s would potentially tell a different story as it would show any potential security threats during the time of the EU's formation. By 1960 when this particular dataset begins, the EU had already been initiated and Europe was showing notable levels of integration.

As with the other two independent variables, military expenditure must be observed in terms of each region's organizations in order to be directly compatible with the IAS scores previously shown. Figures 27 and 28 show the total amount spent on military expenditure by the EU and ASEAN as well as the amount as a percentage of the
total GDP. No numbers are reported for any states prior to their joining their respective regional organizations.


Figure 27. Total military expenditure per regional organization. Data Sources: Correlates of War.
With the control for membership, the totals for Europe are slightly lowered whereas East Asia's are drastically lowered having lost larger economies of the +3 states. In this, the members of the EU can be seen as spending significantly more on military expenditures than those of ASEAN. When looking at expenditure as a percentage of GDP, Europe's numbers again remain relatively similar. Similarly, East Asia again shows significantly lower numbers through losing the data from states with high percentages in expenditure such as China (a member of the +3 ) and Cambodia (who did not become a member until 1999). Both regions show similar percentages for military expenditure with no notable spikes in spending except for one in East Asia in 2001 that correlates with the spike in Thailand's expenditures. These findings are not supportive of the hypothesis as no spikes in military expenditures for EU or ASEAN correlate with their rising integration levels.


Figure 28. Total military expenditure as percent of GDP per regional organization. Data Sources: Correlates of War and World Bank.

Table 5 displays the descriptive statistics for the military expenditure as percent of GDP for both the EU and ASEAN. While these descriptive stats are not able to show spikes in expenditure, they do show that, on average, the two organizations spend similar levels of their GDP on military expenditures. Additionally, the two regions have similar ranges in expenditures though ASEAN spends slightly more.

|  | N | Minimum | Maximum | Mean | Std. Deviation |
| :--- | :---: | :---: | :---: | :---: | :---: |
| EU Military <br> Exp. as \%GDP <br> ASEAN Military | 32 | 1.841983713784 E 0 | 4.611945284466 E 0 | 3.07368365664756 E 0 | .775770427377203 |
| Exp. as \%GDP <br> Valid N | 2.384673082860 E 0 | 5.373065620940 E 0 | 3.14215261893400 E 0 | .625437767714383 |  |
| (listwise) | 35 |  |  |  |  |

Table 5. Descriptive Statistics for military expenditure as percent of GDP.
Overall, the data presented for military expenditure in both regions was not directly supportive of the hypothesis. Neither region demonstrated drastic spikes in
expenditure prior or during increases of their IAS scores. The 1996 spike in military expenditure for the entire region of East Asia was the only notable spike to coincide with an increase in the region's IAS. What was observed instead was a steady decrease in the regions' overall military expenditure.

## Regression Model Results

To analyze the data presented above, a multiple regression was run with all three independent variables against each version of the dependent variable. For this, the data for all three independent variables and the dependent variable was gathered.

Unfortunately, due to data availability issues, the data for all variables was only available for the years 1980 to 2001, giving the model a total N of 44 , which is less than ideal for such a calculation. A multiple regression with the three independent variables was run for each version of the dependent (IAS, EIAS, and PIAS). For the second independent variable, intra-regional trade, the data that included trade with the US was used as it is a more appropriate version to measure intra-regional trade as a percentage of total global trade. Below are the results for the three regressions, starting with the IAS data as the dependent variable.

a. Dependent Variable: IAS

Table 6. Regression Model: IAS
Table 6 shows that intra-regional trade is the only variable found to be significant in the model when run against IAS as the dependent variable. However, the R square for the model is .97 . This number is too high and could either be a result of the small N or suggestive of an issue of colinearity. Despite this finding, the model was still run against the EIAS and PIAS in order to determine if they showed any significant differences.

| Model Summary |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Model | R | R Square | Adjusted R <br> Square | Std. Error of the Estimate |
| 1 | $.984^{\mathrm{a}}$ | .968 | .966 | .264 |

a. Predictors: (Constant), \% Intra-Reg Trade, MilEx, StDev_Reg_Type

Coefficients ${ }^{\text {a }}$

a. Dependent Variable: EIAS

Table 7. Regression Model: EIAS
With the model run against the EIAS in Table 7, again, only intra-regional trade was determined to be significant. The other two independent variables became even less significant. Additionally, the R square proved again to be too high at .96 either due to colinearity, the small N , or both. The final regression was against the PIAS as the dependent variable and is shown below in Table 8. In this regression, both the standard deviation of regime type and the level of intra-regional trade are shown as significant. While it is encouraging to see deviation in regime type reported as significant, particularly in terms of political integration levels, the findings cannot be heavily relied upon as, again, the R square is too high for reliability at .96 .

a. Predictors: (Constant), \% Intra-Reg Trade, MilEx, StDev_Reg_Type

Coefficients ${ }^{\text {a }}$

| Model |  | Unstandardized Coefficients |  | Standardized Coefficients | t | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | B | Std. Error | Beta |  |  |
| 1 | (Constant) | . 626 | . 473 |  | 1.323 | . 193 |
|  | StDev_Reg_Type | -. 125 | . 043 | -. 313 | -2.886 | . 006 |
|  | MilEx | -. 083 | . 058 | -. 050 | -1.426 | . 162 |
|  | \% Intra-Reg Trade | . 039 | . 007 | . 656 | 5.792 | . 000 |

a. Dependent Variable: PIAS

Table 8. Regression Model: PIAS
Due to the drastically high R square levels found in the regressions above, correlations for each variable were analyzed in order get a better idea of how the variables were interacting with each other. Below in Table 9 are the correlations between each variable used in the model above for the years 1980 to 2001. This shows both a problem of colinearity between the standard deviation of regime types and the intraregional trade as well as a covariate issue between the same two independent variables and all three dependent variables (IAS, EIAS, and PIAS). This is most likely the cause of the extremely high R square levels found in the regressions.

|  |  | StDev_Reg_Type | MilEx | $\begin{gathered} \text { \% Intra- } \\ \text { Reg Trade } \end{gathered}$ | IAS | EIAS | PIAS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| StDev of <br> Regime <br> Type | Pearson <br> Correlation | 1 | .362* | -.958** | -. $954 *$ | -. 943 ** | -.959** |
|  | Sig. (2-tailed) |  | . 016 | . 000 | . 000 | . 000 | . 000 |
|  | N | 44 | 44 | 44 | 44 | 44 | 44 |
| Military | Pearson Correlation | . 362 * | 1 | -.452** | -.452** | -. $442 * *$ | -.459** |
|  | Sig. (2-tailed) | . 016 | 44 | . 002 | . 002 | . 003 | . 002 |
|  | N | 44 |  | 44 | 44 | 44 | 44 |
| \% Intra- | Pearson Correlation | -. 958 ** | -.452** | 1 | .985** | .984** | .978** |
|  | Sig. (2-tailed) | . 000 | . 002 |  | . 000 | . 000 | . 000 |
|  | N | 44 | 44 | 44 | 44 | 44 | 44 |
| IAS | Pearson <br> Correlation | -. $954 * *$ | -. 452 ** | .985** | 1 | .997** | .995** |
|  | Sig. (2-tailed) | . 000 | . 002 | . 000 |  | . 000 | . 000 |
|  | N | 44 | 44 | 44 | 44 | 44 | 44 |
| EIAS | Pearson <br> Correlation | -. 943 ** | -.442** | .984** | .997** | 1 | .985** |
|  | Sig. (2-tailed) | . 000 | . 003 | . 000 | . 000 |  | . 000 |
|  | N | 44 | 44 | 44 | 44 | 44 | 44 |
| PIAS | Pearson <br> Correlation | -.959** | -.459** | .978** | .995** | .985** | 1 |
|  | Sig. (2-tailed) | . 000 | . 002 | . 000 | . 000 | . 000 |  |
|  | N | 44 | 44 | 44 | 44 | 44 | 44 |

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).
Table 9. Model Correlations
While these correlations point out serious issues for running the regressions necessary to measure causality, they also allow for a clearer picture of how the variables interact with one another. Below in Table 10 is the expanded version of the correlations between each variable. This is different slightly from the numbers given in Table 9 in
that it includes both measurements for trade by including numbers with the US control. It also has an expanded N for variables when available in order to give the broadest view of the data possible.

|  |  | IAS | EIAS | PIAS |
| :---: | :---: | :---: | :---: | :---: |
| StDev Regime Type | Pearson Correlation Sig. (2-tailed) | -.839** | -.844** | -.802** |
|  |  | . 000 | . 000 | . 000 |
|  | N | 90 | 90 | 90 |
| \% Intra-Regional Trade | Pearson Correlation <br> Sig. (2-tailed) | .985** | .985** | .970** |
|  |  | . 000 | . 000 | . 000 |
|  | N | 50 | 50 | 50 |
| \% Intra-Regional <br> Trade, US Control | Pearson Correlation <br> Sig. (2-tailed) | .985** | .986** | .970** |
|  |  | . 000 | . 000 | . 000 |
|  |  | 50 | 50 | 50 |
| Military Expenditure | Pearson Correlation <br> Sig. (2-tailed) | -. $257{ }^{*}$ | -. 182 | -.350** |
|  |  | . 025 | . 115 | . 002 |
|  |  | 76 | 76 | 76 |

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).
Table 10. Expanded Correlations.
The correlations in Table 10 tell an interesting story about the variables' interaction with each other. Though causality cannot yet be determined, the movement of the variables can be considered in terms of the three hypotheses offered. As the table shows, the first independent variable, standard deviation of regime type, shows a large negative correlation with all three IAS measurements of around -0.8. This is compatible with the expectation that as the regime types become more similar (the standard deviation is lowered) integration levels should increase.

The second independent variable of intra-regional trade also behaves in a compatible way with its hypothesis. Both the full measurement for percentage of intraregional trade as well as the measurement controlling for the US are highly positively correlated with all three IAS measurements nearing an almost one to one correlation. Intra-regional trade levels and IAS levels rise at nearly identical rates in a compatible manner with the expectation of the hypothesis. However, for both the regime type and the trade levels, such high levels of correlation with the IAS measurements poses the question of which, if either is a causal variable. Perhaps both are or perhaps the IAS scores are actually the causal variables, not dependent. Such high correlation makes it difficult to distinguish.

The final variable of military expenditure behaves quite differently from the first two in terms of correlations. With the overall IAS score, military expenditure shows a statistically significant, yet not drastic, negative correlation. It shows a slightly larger negative correlation with the PIAS scores. However, there is not a significant correlation between military expenditure and the EIAS scores. These numbers suggest that, as military expenditure decreases, IAS levels will show an increase. This does not directly speak to the hypothesis and therefore does not support it. However, it does provide in insight to the relationship between the variables that should be further analyzed in future work.

## Conclusions

Regional integration is a complex phenomenon that has yet to be summarized in either a single theory or a single model. While further research is clearly needed, this paper offers some valid insights into the workings of regional integration, in particular how the phenomenon relates to the three independent variables presented. The data presented here will hopefully provide a stepping-stone into determining the causal variables behind integration.

The findings for the first variable observed, regime type similarity, are compatible with the first hypothesis as they show a negative correlation with integration levels. As the deviation in regime types decline, integration levels increase. Unfortunately, the high level of correlation between the two variables makes determining causality impossible without further research. For future research, I intend to also measure levels of democratization throughout the regions to see what relationship this has with integration scores.

The findings for the second variable observed, level of intra-regional trade, faced similar issues as the first. The trade levels also behaved in a compatible manner for the hypothesis through showing high levels of positive correlation with the IAS measurements. As trade levels increased so did integration levels. However, as with the regime type measurements, the correlation was too high to be able to determine causality. Extending the observations prior to 1980 in future research will likely present a more comprehensive picture of the variables' interactions.

Finally, the findings for the third variable, military expenditure, did not provide support or concrete answers for the hypothesis. Instead, they showed a significantly valid
negative correlation between regional military expenditure levels and integration scores. Complications with the first two variables prevented a proper regression from being run to determine military expenditure's effect on integration. However, the correlations demonstrated that there is a significant relationship between the two variables suggesting that military expenditure is a variable that should be considered in future research regarding regional integration.

All three variables observed in this paper demonstrate a relationship with the IAS data presented. The initial intent of this research was to provide a comprehensive overview of the variables for the entirety of the regions of Europe and East Asia. However, due to data constrictions, particularly in East Asia with regard to integration scores, the model presented could only be run for the actual organizations of the EU and ASEAN. This had the effect of both biasing the data in favor of integration by only presenting states that have joined a regional organization. Additionally, it drastically lowered the N for the study through preventing dyadic measurements for both regions.

For future research, I intend to use or create dyadic data for integration levels between the states of East Asia as well as Europe. This should have two effects on the data. First it will reduce the issue of selection bias by examining each region in its entirety rather than only their organizations as they develop. Secondly, it will drastically increase the N available for regressions by looking at each country dyad rather than just each region as a whole. This future expansion of the data will better allow us to determine causality and provide us with an increased understanding of regional integration necessary in order to better explain and predict the phenomenon.

The independent variables in this research are each related to aspects of the existing theories on integration as discussed in the presentation of the research model. Table 11 below provides a basic outline to which of these theories best support the conclusions found for each independent variable. For example, institutionalism supports the data's finding that integration levels increase as regime types become more similar (lowering the standard deviation between them). Institutionalism focuses on the importance of intergovernmental and supranational institutions. These can be more easily created between states of similar regime type as they have a more mutually agreed upon system of government for these institutions to mimic. Similar reasoning lies behind intergovernmentalism's support of these findings. The more similar the states are, particularly in regime type, the more easily communication between them can be facilitated. Additionally, as both federalism and Monnetism aim towards a complete political merging of states, similarity between their regimes is a necessity in order to fit them all under an overarching supranational government.

| Theory | $\downarrow$ StDev Regime <br> Type $=\uparrow$ IAS | $\uparrow$ Intra-Regional <br> Trade $=\uparrow$ IAS | $\downarrow$ Military Expenditure <br> $=\uparrow$ IAS |
| :---: | :---: | :---: | :---: |
| Intergovernmentalism | $\sqrt{ }$ |  | $(\sqrt{ })$ |
| Institutionalism | $\sqrt{ }$ |  |  |
| Transactionalism | $(\sqrt{ })$ | $\sqrt{ }$ |  |
| Functionalism |  | $\sqrt{ }$ |  |
| Neofunctionalism | $(\sqrt{ })$ | $\sqrt{ }$ |  |
| Interdependence |  |  |  |
| Federalism | $\sqrt{ }$ | $\sqrt{ }$ |  |
| Monnetism | $\sqrt{ }$ |  |  |

Table 11. Theoretical support in findings. Integration theories' support for empirical findings are indicated by check marks. Those with parentheses indicate a more indirect though still significant level of support.

Interdependence is the most supportive integration theory for the findings on economic trade as it directly expects higher levels of economic interaction (i.e. trade) to increase states' dependence on each other and therefore their integration levels.

However, functionalism, neofunctionalism, and Monnetism also provide theoretical support for the data as they all expect to see an increase in basic, domestic-level interaction between states as the integration process begins. Trade is a prime example of such interaction and therefore should positively correlate with integration levels as the findings show.

Transactionalism supports the data finding military expenditure among states to be negatively correlated with their integration levels. The goal of integration under Deutch's theory is a security community between the states involved, eliminating the possibility of war between them. Therefore, as integration is achieved, it would be expected to see military expenditure rates drop. According to transactionalism, as integration increases, security increases. As security increases, the need for military expenditure declines.

Though the data outlined in the previous section shows the need for more thorough research, each variable has displayed the potential to be a significant factor in the process of integration. Each of the findings for the variables observed is supported by at least one of the theories on integration. Furthermore, each of the theories provides support the findings of at least one of the variables. This means that the multiple theories behind these variables each have the potential to explain a part of the phenomenon of integration. In other words, integration does not have to be understood as a function of one of the theories but rather can be seen as a function of a combination of them. This was assumed during the creation of the model for this research based on a critical analysis of the theories themselves and the evidence provided by the development of the

EU and ASEAN. It is now better supported by the data on the three variables drawn from the theories showing a relation to integration as measured by the IAS.

The data needs to be perfected through more extensive and comprehensive research. Once it is, it will offer a stronger empirical view of integration than can be provided through simply looking at the history and development of integration in individual regions. This in turn will enable a more thorough critical review of the theories through providing a more extensive quality of evidence with which to analyze them.

The eventual goal of this research is to aide in developing an overarching theory capable of explaining and predicting integration. Continued research into the causal variables behind the phenomenon will provide a more thorough body of evidence to be used in analyzing the theories. This will allow for a better understanding of each theory's specific strengths and weaknesses. Increased understanding of the individual integration theories is a necessary step in order to properly combine their strengths into a workable, overarching, and comprehensive theory.

## References:

-ASEAN: Association of Southeast Asian Nations. 2010.
[http://www.aseansec.org/64.htm](http://www.aseansec.org/64.htm) 2010, Apr. 17
-Ashley, Richard K. "The Poverty of Neorealism," International Organization, Vol. 38, No. 2 (Spring 1984), p.225-286.
-Chacholiades, Miltiades (1990) International Economics. United States: McGraw-Hill, Inc.
-Correlates of War. "Military Expenditure," National Material Capabilities, Version 3.02.
-Europa: Gateway to the European Union. 2009. $<$ Http://europa.eu $>2009$, Jun. 10
-Genna, Gaspare. 2010. Integration Achievement Score, Version 4.1.
-Haas, Ernst B. (1975) The Obsolescence of Regional Integration Theory. Berkeley: Institute of International Studies, University of California.
-International Monetary Fund. 2008. Direction of Trade Statistics.
-Keohane, Robert and Nye, Joseph (2000) Power and Interdependence, $3^{\text {rd }}$ edition. New York: Longman.
-Krasner, Stephen D. (1983) International Regimes. Ithaca: Cornell University Press.
-Krause, Lawrence B. and Nye, Joseph S. "Reflections on the Economics and Politics of International Economic Organizations," International Organization, Vol. 29, No. 1 (Winter 1975), p. 331.
-Marshall, Monty G. and Keith Jaggers. 2008. Polity IV Project: Political Regime Characteristics and Transitions, 1800-2008. Version p4v2008e [Computer File]. http://www.systemicpeace.org/polity/polity4.htm
-Mearsheimer, John J. (2001) The Tragedy of Great Power Politics. New York: W.W. Norton \& Company.
-Mitrany, David. "The Functional Approach to World Organization," International Affairs, Vol. 24, No. 3 (July 1948), p.350-363.
-Nelsen, Brent F. and Stubb, Alexander (2003) The European Union: Readings on the Theory and Practice of European Integration, $3^{\text {rd }}$ edition. Boulder: Lynne Rienner Publishers.
-Rosamond, Ben (2000) Theories of European Integration (European Union). New York: Palgrave.
-Ruggie, John Gerard. "What Makes the World Hang Together? Neo-Utilitarianism and the Social Constructivist Challenge," International Organization, Vol. 52, No. 4 (Autumn 1998), p.855-885.
-Russett, Bruce, Harvey Starr, and David Kinsella (2006) World Politics: The Menu for Choice, $8^{\text {th }}$ edition. Belmont: Thomson Wadsworth.
-Singer, J. David, Stuart Bremer, and John Stuckey. (1972). "Capability Distribution, Uncertainty, and Major Power War, 1820-1965." in Bruce Russett (ed) Peace, War, and Numbers, Beverly Hills: Sage, 19-48.
-Singer, J. David. (1987). "Reconstructing the Correlates of War Dataset on Material Capabilities of States, 1816-1985" International Interactions, 14: 115-32.
-Waltz, Kenneth N. (1979) Theory of International Politics, $1^{\text {st }}$ edition. United States: McGraw-Hill, Inc.
-Wendt, Alexander. "Anarchy is What States Make of it: the Social Construction of Power Politics," International Organization, Vol. 46, No. 2 (Spring 1992), p.391425.
-World Bank Group. 2010. World Development Indicators and Global Development Finance.
-Yesilada, Birol and Wood, David (2009) The Emerging European Union, 5th edition. New York: Longman.


[^0]:    Recommended Citation
    Kolovos, Amaleia E., "Regional Integration in East Asia" (2010). Dissertations and Theses. Paper 93.
    10.15760/etd. 93

[^1]:    ${ }^{1}$ Deepening of integration refers to intensifying the level of interaction and dependency between states. This can happen in both economic and political integration. As economic integration deepens, states gradually grow from sharing a preferential trade area to a customs union, a common market, and eventually a monetary union. As political integration occurs, states shift from being two autonomous actors to a confederation to a strong federation. States integrated at the deepest political level will have fully merged to act as a unitary state.

[^2]:    ${ }^{2}$ A rational actor is one that seeks to maximize its expected utility or payoff from any given decision through determining the benefits of different possible outcomes minus their costs. When acting rationally, "actors clarify their goals, evaluate their options and determine their preferences, and then make a decision" (Russett, Starr, and Kinsella, 2006:165).

[^3]:    ${ }^{3}$ It should be noted that liberal intergovernmentalism as discussed by Andrew Moravcsik does allow for the influence of domestic factors. While similar in seeing international interactions and integration as occurring between states, Moravcsik differs from traditional intergovernmentalists in allowing for domestic pressure and discussion to influence the state interests driving cooperation.

[^4]:    ${ }^{4}$ An example of such mutual efforts could include the coordination of actors in order to clean a shared river or lake.

[^5]:    ${ }^{5}$ Flexibility of action is more crucial for functionalists as they are concerned with human need above state interests. Federalists, on the other hand, would not be concerned with institutionalization and rigidity as it allows for a more solidified alliance and increased security for states.

[^6]:    ${ }^{6}$ I am extremely grateful to Dr. Genna for his generosity in sharing his most recent IAS data with me for the purposes of this paper.

