

# **NON TARIFF MEASURES IN THE TRANSATLANTIC FINANCIAL SERVICES INDUSTRY**

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## **Abstract**

The financial crisis in 2008 was seen as a possibility by politicians to align financial regulation on both sides of the Atlantic. Indeed, differences in financial regulation have always been large. However, despite their apparent willingness to harmonize their sets of rules, politicians in US and EU still focus mostly on policies within their own boundaries. It is believed that – despite attempts and efforts of several committees and working groups – instead of convergence during the crisis, independently carried out domestic policies have caused divergence in financial regulations instead; i.e. the size of Non-Tariff Measures (NTMs) has increased. This research finds, using our own calculations and the simulation model of Francois and Hall (2003), that differences between financial regulations have actually increased overall since 2008, even though also some divergences have been addressed. This divergence has led to negative welfare effects on both sides of the Atlantic. In different types of scenario calculations we find that worldwide production, bilateral trade and net welfare (production- and consumer surplus) respond negatively to the increase regulatory divergence.

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## **Research question:**

**What has the impact of the global crisis been on the degree of regulatory alignment between financial services sector regulations of the United States and the European Union and what have been the economic impacts?**

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## Chapter 1: Introduction

On 17 September 2008, The New York Stock Exchange delisted Lehman Brothers. The fourth largest investment bank in the United States had officially collapsed ([www.nyse.com](http://www.nyse.com), 26/08/14 – 15:58). Its bankruptcy was seen as the start of a worldwide financial crisis. Because of a high degree of global interwovenness in the financial system, the crisis spread very quickly all over the world. It resulted in the collapse of many more financial institutions, the bailout of banks by national governments, downturns in stock markets and a large decrease in mutual confidence (Fligstein & Habinek, 2011).

Indeed, the consequences for the financial system were large, but the crisis has also offered some important opportunities for economic superpowers such as the United States and the European Union. Politicians in both US and EU pronounced their willingness to work towards alignment of their financial sectors. Already in the years before the financial crisis there remained significant obstacles to the trade and investment of these services between US and EU. Most of these obstacles are so called Non-Tariff Measures (NTM's). Investigators of Ecorys (2009) define NTM's as "non-price and non-quantity restrictions on trade in goods, services and investments."

As mentioned, the global crisis has created the potential to address significant NTM's in the financial sector. Addressing these NTM's could result in a reduction of regulatory divergence. This is what many organizations and politicians in US and EU intended to do. On the other hand, the global crisis has also created the potential to significantly increase regulatory divergence. This is possible if US and EU are not capable enough to communicate and discuss sufficiently the impact for each other's markets and firms.

In this research we will discuss the impact of the global crisis, which has started in 2008, on the degree of alignment between the financial services sectors of US and EU. So the main question reads:

**What has the impact of the global crisis been on the degree of regulatory alignment between financial services sector regulations of the United States and the European Union and what economic impact has this had?**

According to the European Union (<http://ec.europa.eu>, 26/08/14 – 17.15), the financial services sector covers three main subsectors: the banking system, insurances and securities. In our research we exclude the insurances sector and we add the derivatives industry, because the derivatives overlap more with banking and securities than insurances, which is more of a separate industry.

The relevance of this research is high because of its actuality. Since the start of the financial crisis in 2008, authorities in both continents are struggling with the discussion on transatlantic

NTM's. The existence of NTM's is costly for both continents, so US and EU both want to converge their rules and standards. However, the solution still seems to be complicated. That's why this article might be valuable in the discussion around NTM's.

In chapter two we will provide a general view on the way laws and rules are formed in both continents. This juridical background is relevant for understanding the discussion of harmonization in the financial services sectors. It's divided in two parts; First we will focus on US, and then we will focus on EU. An overview of the sub questions belonging to chapter 2:

*2.1 How are laws and rules made in US?*

*2.2 How are laws and rules made in EU?*

In chapter three, we will focus on the most important NTM's between US and EU. First we will provide the institutional setting in both continents. Thereafter we will compare the situation in 2008, at the collapse of Lehman Brothers, with the situation nowadays. We will sum up the most important US to EU NTM's and vice versa. It is important to show which measures has resulted in a regulatory convergence and which measures have resulted in a regulatory divergence between US and EU. Naturally we will focus here on the financial services industry. An overview of the sub questions belonging to chapter three:

*3.1 How is the overall institutional cooperation between US and EU framed? (Institutional setting)*

*3.2 What were the most important NTM's in the US financial services industry in 2008?*

*3.3 What were the most important NTM's in the EU financial services industry in 2008?*

*3.4 What has changed between 2008 and nowadays (2012) regarding the most important NTM's?*

In chapter four we carry out a quantitative analysis of the gains and costs of regulatory alignment . In this research we define 'compliance costs' as expenditures of money in conforming with government requirements such as regulation. We will focus on the most important NTM's between US and EU. The model approach (including the specific dataset) will be explained in this chapter. The sub question in this chapter reads:

*4. What are the total costs of compliance in due to the most important NTM's for financial trade between US and EU?*

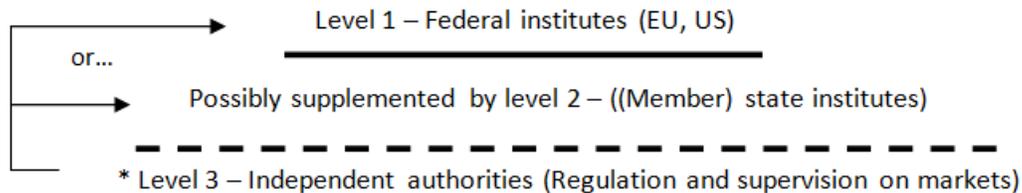
In chapter five we will discuss the model outputs from the analysis in chapter four. We will present the most important findings in order to summarize our quantitative and qualitative researches.

Finally, in chapter 6, we provide our conclusions. The belonging sub question reads:

*6. What is our general conclusion on the harmonization of transatlantic NTM's in the period 2008 till 2013?*

## Chapter 2: EU and US Legislative and regulatory frameworks

In this research we distinguish three layers in regulatory/legislative powers. The (inverted) pyramid below displays a global overview. This picture has to be considered as a simple base of our analysis.



Bodies and organizations in the different layers together are responsible for developing laws and rules. De US government (<http://www.usa.gov>, 26/08/14 – 17.43) defines laws as “principles generally apply to all people living in the United States and its territories”, and regulations are “issued by federal agencies, boards, or commissions. They explain how the agency intends to carry out a law.” In our research we use these definitions of laws and rules for both US and EU. Sometimes an upper layer controls a lower layer and sometimes a lower layer supplement an upper layer. The dotted line means that most regulators on organizational level are directly appointed by authorities on federal or national level. In this respect they are an extension of regulators on level 1 and/or level 2. The unbroken line means that authorities on level 1 and level 2 are always separated from each other, even though authorities on level 2 mostly supplement or support those on level 1.

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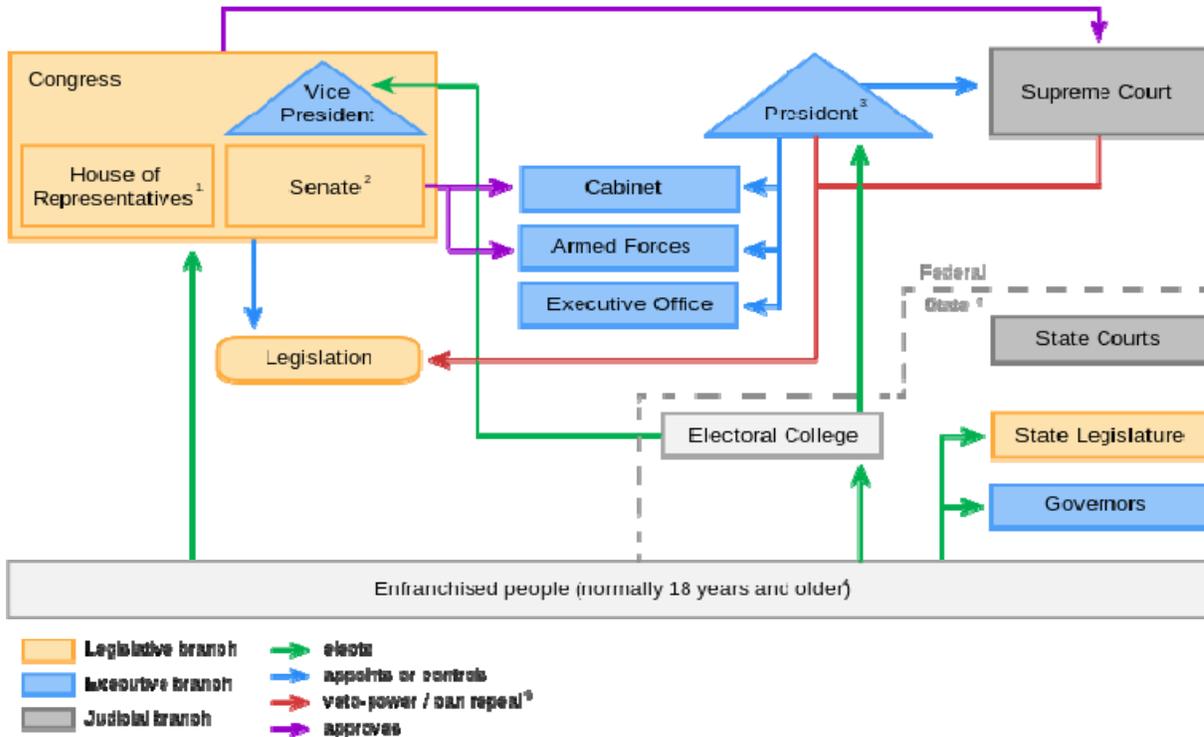
Notice again that this pyramid is a general view on legislation. Legislation relates to a wide scope of fields and markets, varying from drugs and chemicals to financial securities and derivatives. Every single market has its own regulatory framework in which the pyramid requires a different interpretation always or maybe even adaptations. Some markets relate or maybe even relay each other. In chapter 3 we will focus on the financial regulatory frameworks.

In this chapter we will focus on layer 1 of the pyramid. We will explain how laws and rules are established in both continents. We will describe the actors and the different steps in the process. In the end we will have a general view on the juridical affairs in US and EU. This chapter is divided into a few parts, in which we will analyze the legislative processes in US and EU.

## 2.1. US Actors in establishing laws and rules.

The supreme law in the US is called 'The Constitution of the United States'. It originally consisted of seven articles. The first article is the most relevant one for our analysis. Article one describes how the legislative, executive powers and judicial powers are established within the US. See the diagram below for a schematic overview (figure 2.1)

Figure 2.1: US legislative powers (<http://paulandkalin.com>, 15/08/14 - 15.32)

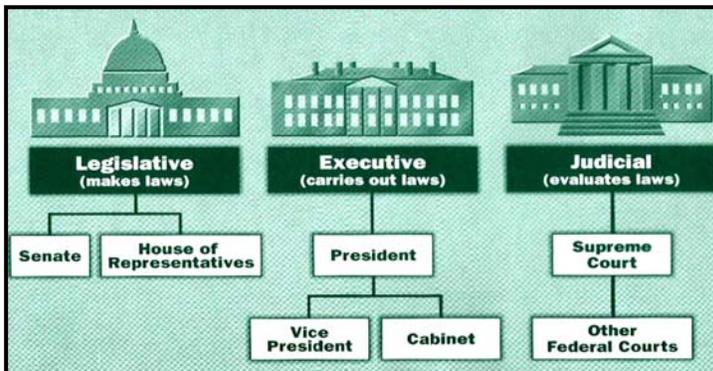


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The diagram shows all the different actors within the legal system. In this subchapter we will provide a short explanation of each of their tasks and responsibilities regarding the establishment of laws and rules.

Consider figure 2.2 for a simplistic view on the separation of powers within the legal system.

Figure 2.2: US Separation of powers (<http://paulandkalin.com>, 14/08/2014 – 15:34)



**All legislative powers are vested in a Congress of the United States, which consists of the Senate and House of Representatives.**

The House of Representatives is composed of representatives of each particular state. Each state is represented in proportion to its population. The total number of voting representatives is fixed by law at 435. Every two years members are chosen by the people of the several states and all the electors must satisfy all the requirements of the most numerous Branch of State Legislature. The House has the exclusive right to initiate and propose bills.

The Senate is composed of two Senators from each state. They are chosen for six years by the legislature of the appropriate state. Each Senator has one vote within the Senate. The Senate itself chooses their other officers. The Senate has the ability to reject or reconstruct bills.

**The evaluation of laws is the responsibility of the Supreme Court**

The Supreme Court is the highest federal court within the US. It consists of the Chief Justice and eight associate justices. The Supreme Court is the final interpreter of the Constitution and has the ultimate right to review decisions and change outcomes regarding cases involving issues of federal law. Consequently the Supreme Court has the ability to reject bills. It also has the exclusive power over all the other federal (state) courts.

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**The executive branch consists of the US President, which is followed by the Vice-President and is at the head of the Cabinet.**

The US President is the head of state, the head of the government and the commander-in-chief of the Armed Forces<sup>1</sup>. The President is the absolute leader of the executive branch of the legal system and has to approve bills before they officially become laws. He is indirectly elected by the people through the Electoral College<sup>2</sup>.

The Vice-President of the US is the first in the presidential line of succession. He becomes or acts as President in case of absence, resignation, removal or death of the US President. The Vice-President is also the President of the Senate, so he has the direct ability to influence legislation. Just like the President, the Vice-President is elected through the Electoral College.

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<sup>1</sup> *The Armed Forces are government-sponsored defense and fighting forces*

<sup>2</sup> *The Electoral College is the institution which officially elects the US President and the Vice-President. Members of the college are called 'electors', who are in turn chosen by the people on a state-by-state basis.*



The diagram shows all the different actors within the legal system. In this subchapter we will provide a short explanation of each of their tasks and responsibilities regarding the establishment of laws and rules.

**The European Union has a bicameral legislature. The legislative powers are vested in the European Parliament and the Council of the European Union** (<http://www.law.cornell.edu>, 28/10/2014 – 00.41)

The European Parliament consists of 766 members which are directly elected by the European citizens each five years. The MEPs (Members of the European Parliament) are elected on national basis, but within the Parliament they operate in political groups. Their nationality is subordinated. Each member state has a fixed number of seats corresponding to its population share in Europe. The President (speaker and responsible for the external representation) and the Vice-President are elected by the MEPs their selves every two and a half year.

The Council of Ministers is the other half in the EU's legislature. It is composed of 28 national ministers, one per member state. The exact composition of the Council depends on the political topic being discussed. When discussing economic policy, the Council is composed by the 28 national ministers whose responsibility includes this field of policy. The Presidency of the Council is not a single post. It rotates between all the member states every six months. The President is responsible for the administration (setting agenda, organizing meetings of working groups/committees etc.) and representing the Council externally.

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**The executive branch is formed by the European Commission and the European Council.**

The European Commission is responsible for proposing bills. The Commission is composed of 28 politicians for different areas of policy. Each individual member state delivers one member for the Commission. The two most prominent Commissioners are the President and the Vice-President of the Commission, both appointed by the European Council. The other 26 Commissioners are chosen by the Council of the European Union in agreement with the President.

The European Council consists of all heads of the member states, along with the President of the European Commission and the President of the European Council, which is elected by the Council itself. The European Council has no formal legislative power. It is characterized as the collective presidency of the European Union. When the Treaty of Lisbon entered into force in 2009, the Council became an official body. It is a strategic operating body and takes responsibility and leadership in times of crises.

**The judicial branch is only formed by the European Court of Justice**

The European Court of Justice is the highest court in matters of European law. Each member state delivers one judge. The Court is the final interpreter of the EU law, which should be equally valid in all the member states. However, the European Court of Justice doesn't have any legislative power.

Other important organisations in the European governance system are the Central Bank and the Court of Auditors. As shown in figure 2.3, these bodies are not directly involved in legislative matters.

The European Central Bank is the highest institution in the Euro system. Officially the Bank has permission to carry out its tasks independently. The central goal of the ECB is maintaining price stability in the Euro zone. The President and the other five executives are elected by the European Council on the proposal of the Council of Ministers.

The European Court of Auditors acts in complete independence and is composed of one representative of each member state. The Court has the responsibility to check expenditures and revenue of the European Union on reliability, regularity and legality.

### **2.3. Legislative process US, described by the Constitution.**

Now that we have provided a short description of each particular body in the legislative process, we can focus on their separate roles in establishing laws and rules.

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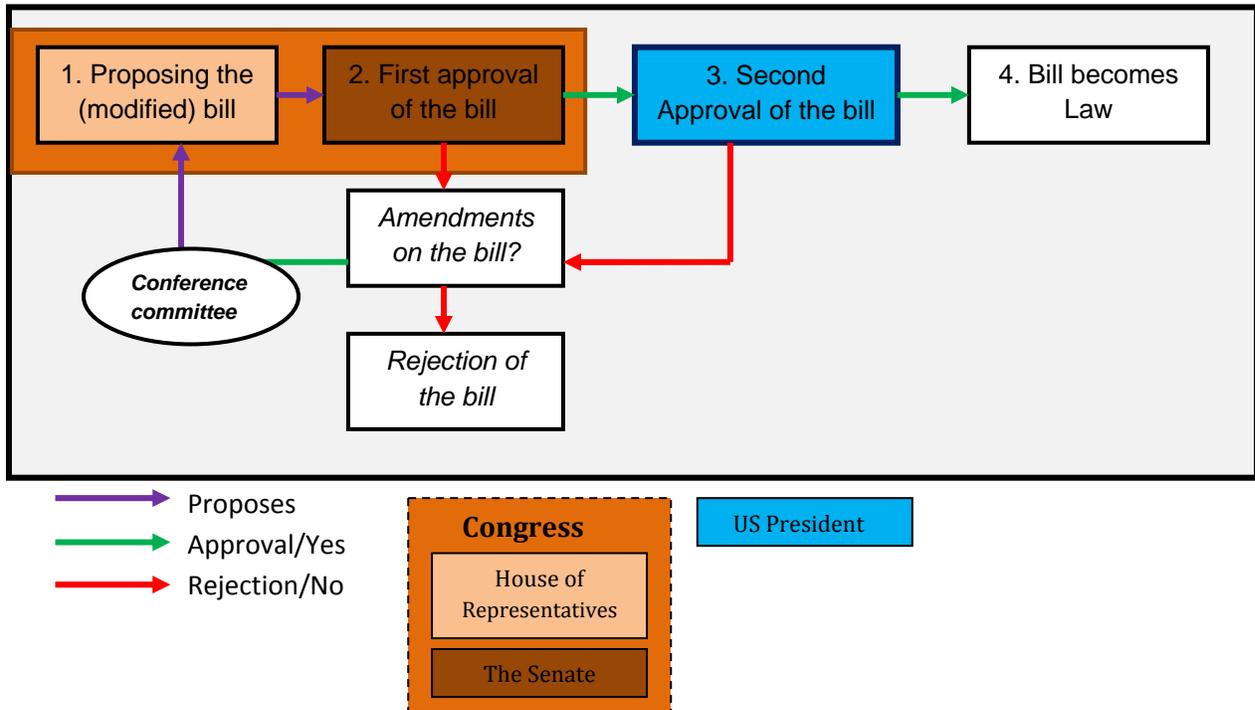
The House of Representatives has the exclusive right to originate bills for raising taxes, but the Senate may propose or counter with amendments, just like all the other bills.

Other bills than those for raising revenues, authorizing specific government spending and authorizing the expenditure of federal funds, may be introduced in either body of the Congress.

The separation of the Congress into two bodies serves the conception that a separation of power is important within a democracy. The approval of both bodies is required for any bill to become law. The bill has to be passed in each body in exactly the same version. When deviations or alternatives are proposed, the Conference Committee may be able to resolve these differences by sending back amendments.

When a specific bill is approved in either body of the Congress, it will be officially presented to the President of the United States of America. The President, in turn, may approve the bill and sign it, or refuse the bill and send it back, with his objections, to the body which had originated it. The relevant body will report the objections of the President and reconsider the bill. When two thirds of that body approves the proposal, the new version of the bill will be sent to the other body of the Congress. This second body also has to approve it with two thirds.

Figure 2.4: Legislative chain (US)



In figure 2.1 we have seen that the Supreme Court has to approve the bill before it will become law. In the US Constitution this role is explicitly assigned to the US President. Because the President appoints and controls the Supreme Court, we consider these two actors as one and the same power in the legislative process.

As shown in figure 2.2, most work in the development of a bill is done by the Congress, which consists of the Senate and the House of Representatives. Because of the democratic or republican majority in either of these two chambers (depends on the election results), there could be a lot of friction between them. For example in 2008, during the term of the 110<sup>th</sup> US Congress, the Democratic Party had majority in both chambers of the Congress. Nowadays, during the term of the 113<sup>th</sup> US Congress, the Democratic Party has majority in the Senate, while the Republican Party has majority in the House of Representatives.

Logically, the political background of the US President is also of interest in this process. We can now conclude that the communication within the Congress, and the communication between the Congress and the US President, both with possible intervention of the Conference Committee, is very important in originating and developing bills.

Despite of the presence of a centralized legislature and an official constitution for the whole country, each individual state is entitled to origin its own laws and rules. However, these specific laws and rules may have to be compatible with the constitution and may not be in conflict too

much. The relationship between the federal state and all the individual states is described in article four of the constitution. Simply put, the Congress and the President of the United States could both be seen as the supervisors of this relationship.

### **2.3.1. Legislative process US in practice**

Up to now we have focused on the legislative process in an official way, literal described in the Constitution of the United States. In fact, the actual process sometimes exhibits deviations from the constitutional text.

Besides, some actors which are involved in establishing laws are not officially described in the Constitution. In this subchapter we will introduce the most important ones.

In practice, many bills don't find their origin in the legislative power (The Congress). The According to the Constitution, the House of Representatives is responsible for proposing (new) bills. In reality, many bills find their origin in the executive branch, from which the US President is the head of. The President, the Vice-President and their advisors are important forces in originating bills. However, each separate bill still has to be approved by both bodies of the Congress (The House of Representatives and The Senate).

Proposing sensible bills is not an easy job, so the research work of the Congress plays an important role in the origination of laws and rules. Woodrow Wilson, President of the United States from 1913 till 1921, once said: "Congress in its Committee Rooms is Congress at work". Meetings from the Congress are studiously prepared in and by several different committees, each with its own specialization. The committees (or commissions) deliver important research work, knowledge and recommendations related to social issues. The committees are still playing a key role in the operating work of the Congress.

Despite of attempts to reduce the amount of Committees, the whole system around the Congress still works unabated.

The oldest committee is the Interstate Commerce Commission (for inter-state trade), founded in 1887. Important committees in our study are The Security and Exchange Commission (supervision on security trading) and The Commodity Futures Trading Commission (supervision on futures and option markets).

## 2.4. Legislative process EU, described by the Constitution.

The legislative process within the European Union is described by article 294 of the Operation Treaty (Treaty of Rome). In this subchapter we will only focus on the ordinary legislative process.

The special process, which is separately described by the Treaty of Rome, is rarely used in establishing laws and rules.

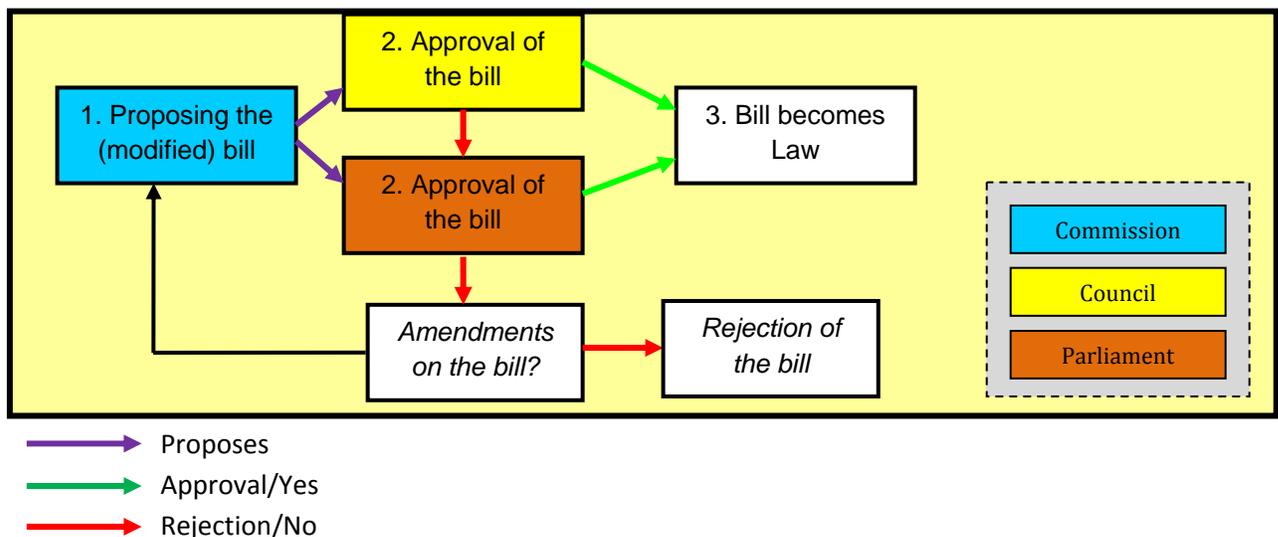
There are three major actors in the legislative process. These are the European Commission, The European Parliament and the Council of the European Union. Together they form the famous legislative triangle of the European Union.

Only the European Commission has the power to initiate bills. The Parliament and the Council normally have equal legislative power and are allowed to block and reconstruct bills. A bill has to be approved by all parts of the triangle before it officially becomes a law. In the council a double majority is required to pass a bill. This means that at least 55% of the council members has to support the bill and they must also represent 65% of the EU-citizens. In the parliament just a simple majority of at least 50% of the duties is required to approve a bill.

Consider figure 2.5. This picture shows how the bodies of the legislative triangle relate to each other. It also describes the requirements of approval for a bill to become law.

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Figure 2.5: Legislative chain (EU)



When a specific bill is blocked by one The Council or the Parliament, they will subsequently negotiate with the Commission for reconsidering the bill. The bill needs to be passed in each body in exactly the same version. Tight communication and high cooperation is thus of great importance for an efficient legislative process.

European legislation, established by the bodies of the European Union, is superior to national legislation in cases of inconsistency. National governments may establish their own laws and rules as long as they are not in conflict with European legislation. In cases of conflict, the European Court of Justice is responsible for solving inconsistencies. The Court is the final interpreter of the European law.

### **2.4.1 Legislative process EU in practice**

In this subchapter we will describe some deviations from the ordinary official legislative procedures within the European Union.

In some special cases the treaties prescribe a special legislative process in establishing regulations, directives or decisions. While article 294 of the Operation Treaty literally describes the legislative procedure, these treaties don't prescribe a defined protocol. Each particular case has to be treated according the legal bases of these special procedures.

Until the crisis, almost all the legislative procedures and political cooperation within the European Union were performed according to the treaties. Since the starts of debt crises in many European countries, the political landscape changed fundamentally in some ways. The most important change is formed by the role of the European Central Bank. According to the Treaty of Lisbon, the ECB is fully independent from political affairs. Their main task is maintaining price stability in the European Union. Because of the debt crises, this independence became untenable. With some large financial interventions the ECB tried to support the ailing national governments. These interventions were very important for the maintenance of general European welfare. Since then, the ECB became an important actor in European legislation. The ECB still doesn't have any official legislative power, but in financial issues it has more influence than ever before.

Just like the Congress of the United States, the European Parliament also makes use of Committees and Expert groups with a large variety of specializations. These bodies are not officially mentioned in the treaties. Nowadays there are 22 standing committees, supplemented with some special committees which have been created because of current social issues within the European Union. These special committees are temporary.

Important committees in our study are The Committee of European Securities Regulators and The Committee of European Banking Supervisors.

## Chapter 3: The institutional setting

Until now we have independently focused on the broad legislative systems of both US and EU. We have seen similarities and differences. In chapter 3 we will first broaden our view with an analysis of the overall institutional cooperation between US and EU. Thereafter we will slowly narrow this view and we concentrate on the financial services sectors in both US and EU and the specific cooperation regarding this service sector.

### 3.1 Overall institutional cooperation

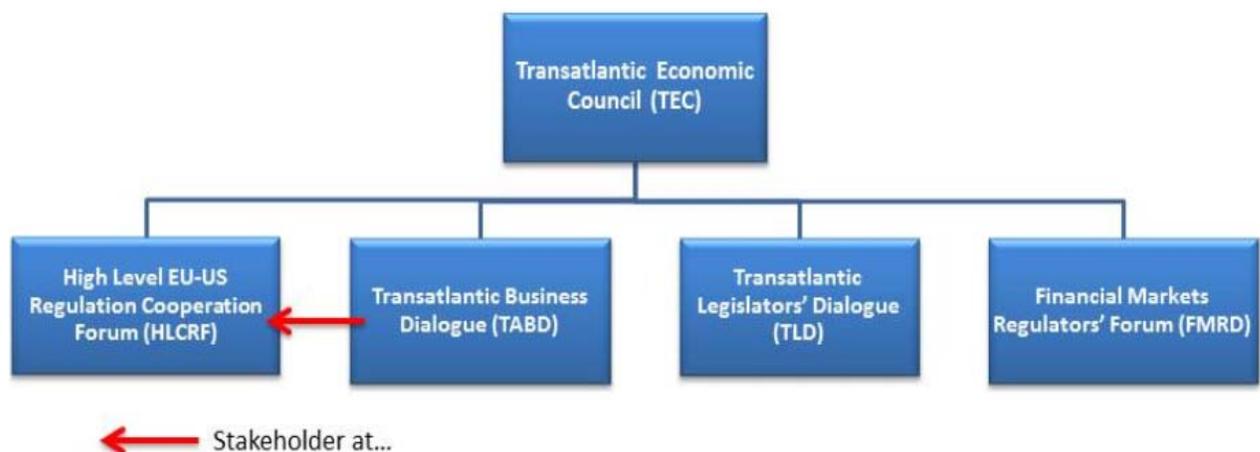
How is the overall institutional cooperation between US and EU framed?

Probably the most known occasions where the US and EU communicate about economic issues are at the meetings of WTO (World Trade Organization), OECD (Organization for Economic Cooperation and Development) and G8 (Group of Eight). For the purpose of this thesis, the idea of regulatory cooperation, these meetings are less useful, however. It is much more important to look at the bilateral negotiating and cooperation initiatives between the EU and US

Consider figure 2.1 below. This figure provides a schematic overview of the overall institutional cooperation between US and EU. The most important institutional body so far is TEC. It is linked to several initiatives that all matter for EU-US cooperation and who all have their own focus and specialties. Since its establishment in 2007 the TEC has initiated a multitude of dialogues and forums. For a better understanding we have picked the most important ones for our analysis (see figure 3.1). Roughly we can distinguish four subjects; Business, Consumer, Environment and Labour.

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Figure 3.1: Transatlantic cooperation in financial services



### **Transatlantic Economic Council (TEC)**

The umbrella body is the Transatlantic Economic Council (TEC). The TEC is a body set up between US and EU to address and involve the high level political support needed. For the financial services sector this implies involving the U.S. Securities and Exchange Commission and its EU counterparts. Its main objective is to direct economic co-operation between the two economies. It's officially called the "*Framework for Advancing Transatlantic Economic Integration between the United States of America and the European Union.*" The TEC ensures that many actors are involved in transatlantic political issues. Thematic dialogues bring legislators, businesspeople, scientists, consumers and citizens' groups together.

### **High Level EU-US Regulation Cooperation Forum (HLRCF)**

The HLRCF was set up in 2008 to provide a setting for senior government regulators from both sides of the Atlantic to discuss regulatory policy matters in many economic sectors. The main objective of the Forum in this field is to improve the quality of regulations on both sides through sharing useful information and best practices related to reducing compliance costs, and to minimize unnecessary regulatory divergences. The Forum is co-chaired by the Director-General of the Directorate General for Enterprise and Industry and the Administrator of the Office of Information and Regulatory Affairs in the Office of Management and Budget (<http://ec.europa.eu>, 15/01/2014 – 12.43). The Forum engages with stakeholders in public sessions once or two times a year. Its stakeholders are several kinds of regulators. Most of them are invited by the HLRCF, but persons wishing to attend meetings can also request access. Examples of topics being discussed are the safety of imported products, cooperation in energy efficiency and setting standards in all kinds of regulations.

### **Transatlantic Business Dialogue (TABD)**

TABD is an important body which provides a framework for the transatlantic dialogue. It was set up in 2013 as the result of a merger between TransAtlantic Business Dialogue (TABD) and European-American Business Council (EABC). The framework, which is a dialogue system, consists of separate dialogues for consumers, labor, environment and business.<sup>4</sup> The main objective of TABD is to boost transatlantic trade and investment through removing barriers caused by regulatory divergence in many economic fields, such as Energy & Climate, ICT, Trade etc. The TABD is co-chaired by two directors. Both the US and EU have one chair in the Board of Directors. Its members are business leaders of both large multinationals and small-and-medium size businesses. The Dialogue provide their members high-level access to US Cabinet Secretaries and European Commissioners once or two times a year. The TABD already has produced many achievements. One of them is the comprehensive Mutual Recognition Agreement, which fosters the exchange of information between parties and mutual understanding of procedures in many several economic sectors.

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<sup>4</sup> Because TABD has a strong focus on regulation issues it is the most important stakeholder at the 'High Level EU-US Regulation Cooperation Forum' (HLRCF), which we have mentioned before. However, TABD is also directly reporting and advising to TEC.

### **Transatlantic Legislators' Dialogue (TLD)**

The TLD is a dialogue between American federal legislators, the American Congress and the European Parliament and is held twice a year, in the United States and the European Union. The TLD was set up in 1999 to focus on a wide scope of fields, varying from energy and climate change to civil liberties and financial policies. The transatlantic alignment of laws is an important issue within TLD. Both the US and EU have one chair in the directory board. Besides, a twelve-member steering committee has been established to coordinate the TLD activities. The TLD already has produced some achievements in the mutual understanding of regulations. However, at the end of 2011, the TLD admitted that it "have not yet achieved the maximum possible success in removing or reducing the tariff and non-tariff barriers that still impede transatlantic trade." (<http://ustr.gov>, 28/08/14 – 15:34)

### **Financial Markets Regulators' Dialogue (FMRD)**

An important dialogue between US and EU is the Financial Markets Regulators' Dialogue, which has a strong emphasis on regulatory approaches. The FMRD is a dialogue system which is led by the European Commission and the US Treasury. It was set up by the US Treasury Department in 2002. FMRD complements other transatlantic dialogues aiming for sustainable growth and further integration of financial markets on both sides of the Atlantic. Its main objectives are threefold. First to foster a better mutual understanding of EU and US regulatory approaches. Second the identification of potential conflicts as early in the regulatory process as possible. Third to discuss regulatory issues of mutual interest.

The FMRD has focused on a variety of issues the last few years. For example, an important topic has been the EU's Financial Conglomerates Directive to US financial firms. This directive establishes specific requirements of supervision for European firms headquartered outside the EU, such as US banks. Due to these requirements, such US banks have to deal with multiple types of supervision. The FMRD has solved and cleared several similar issues in transatlantic financial regulation.

### **Transatlantic Consumers' Dialogue (TCD)**

The last important dialogue we have to mention is the TCD, which was launched in 1998 to provide a venue for consumer representatives to deliver input to transatlantic negotiations. All US and EU consumer organisations working on a (inter)national level can become member of the TCD. The different policy committees in which they work are Food, Intellectual Property, Nanotechnology, Information Society and Financial Services. A steering committee and the two US and EU chairs of the Policy committee lead the activities of the TCD.

Meetings of the TCD take place once a year. Many topics (see above) are being discussed. For the financial services sector, the TCD has achieved the establishment of several standards regarding consumer protection.

Other examples of forums and dialogues regarding transatlantic economic issues and provided by TEC are:

- EU-US Development Dialogue
- EU-US Education Policy Forum
- EU-US Energy dialogue

## **The most recent initiatives: HLWC on Jobs and Growth and TTIP**

### **High Level Working Group on Jobs and Growth (HLWC on Jobs and Growth)**

Then, in 2011, the EU and US announced the initiative of the High Level EU-US Working Group on Jobs and Growth (HLWG). This initiative was the result of an understanding that in light of the Global Economic Crisis, both the US and EU could use an economic boost without having to spend more budget revenues. The HLWG on Jobs and Growth was tasked to find out if there would be enough potential on both sides of the Atlantic to enter into negotiations on a possible EU-US Free Trade Agreement.

The HLWG met one time, and the final report of the WG concluded the following. First the elimination or reduction of conventional barriers to trade in goods, services and investment. Second the enforcement of compatible regulations and standards. Third the elimination, reduction or prevention of non-tariff barriers to trade in all sectors. Fourth the enforcement of regulations and principles in the interest of shared economic goals. The final overall recommendation to EU and US was to start negotiations on a possible EU-US Free Trade Agreement.

### **Transatlantic Trade and Investment Partnership (TTIP)**

In his State of the Union speech on January 20, 2013, Obama announced his intention to start negotiating a broad and deep Free Trade Agreement with the European Union: “And tonight, I’m announcing that we will launch talks on a comprehensive Transatlantic Trade and Investment Partnership with the European Union.” (<http://www.whitehouse.gov>, 28/08/14 – 18:07)

On the EU side, Presidents Van Rompuy and Barroso also made public statement in line with Obama’s: “Together, Europe and the United States are the backbone of the world economy. Opening up that space further for opportunities for business and consumers is simply common sense” (<http://www.whitehouse.gov>, 28/08/14 – 18.10), and “ TTIP is a powerful demonstration of our determination to shape a free, open and rules-based world.” (<http://ec.europa.eu>, 28/08/14 – 18.11)

In short, TTIP is a free-trade and investment agreement between US and EU. The goal of TTIP is to create economic growth and new jobs. Over the past years a lot of independent research has gone into looking at the potential economic effects of TTIP.

In the Table below, the main economic impact results are presented.

Table 3.1: Estimated gains of TTIP

Study (year)	Impact on GDP *	Impact on trade *	Impact on jobs/wages
Ecorys (2009), "Non-Tariff Measures in EU-US Trade and Investment"	EU: <b>0,32</b> – 0,72 US: <b>0,13</b> – 0,28	EU exports: 0,91 – 2,07	Positive wage effects & no additional jobs created
Bertelsmann (2013), "Who benefits from a free trade deal?"	EU: <b>0,52</b> – 1,31 US: <b>0,35</b> – 4,82	Positive bilateral trade effects	Positive wage effects & additional jobs: <b>1,3 million</b>
CEPR (2013), "TTIP, the economic analysis explained"	EU: <b>0,02</b> – 0,48 US: <b>0,13</b> – 0,28	EU exports: <b>0,16</b> – 5,91	Positive wage effects & no additional jobs created

\* These findings are based on different scenarios, percentage changes compared to baseline scenario

## 3.2 Financial Services jurisdiction

In sub chapter 3.1 we have analyzed the overall institutional cooperation. From now we will narrow our focus to the financial services sector by first analyzing its jurisdiction in both US and EU.

### United States

In chapter 2.1.2 we have described the role of The Congress in the process of US legislation. Remember that The Congress consists of The Senate and The House of Representatives. Both chambers have to approve bills before they can become law.

#### The U.S. Senate Finance Committee

The Senate uses committees in a wide scope of political fields. The U.S. Senate Finance Committee is one of the most influent standing committees, because it is a permanent legislative panel with a wide jurisdiction. According to their general statement, the Committee "concerns itself with matters relating to: taxation and other revenue measures generally, and those relating to the insular possessions; bonded debt of the United States; customs, collection districts, and ports of entry and delivery; reciprocal trade agreements; tariff and import quotas, and related matters thereto; the transportation of dutiable goods; deposit of public moneys; general revenue sharing; health programs under the Social Security Act, including Medicare, Medicaid, the Children's Health Insurance Program (CHIP), Temporary Assistance to Needy Families (TANF) and other health and human services programs financed by a specific tax or trust fund; and national social security" ([www.finance.senate.gov](http://www.finance.senate.gov), 22/01/14 – 16:14).

For this research, the Senate Finance Committee is important, because it is the most influential body in creating meaningful legislation in the financial services sector.

### **House Ways and Means Committee**

The House of Ways and Means committee is the chief tax-writing committee and belongs to the House of Representatives. It has jurisdictions over all taxation, tariffs and other measures regarding raising revenue. The House committee is important for our research because of its influential position in establishing laws. All bills regarding taxation have to be approved by the committee. Taxation issues play an important role in the financial services sector.

Both committees are controlled by republican or democratic members that are assigned to these committees by their party conference. The ratio of majority to minority members is based on the ratio of majority to minority of that from the Senate and House their selves. Because of the fact that the ratios regularly differ between these chambers, an approval of (financial) bills could be very complicated. Both the Senate and the House of Representatives have to pass a bill in exactly the same version.

The question is, however, to what degree TTIP is simply a trade agreement that is the competence of the US executive to negotiate, subject to support from House Ways and Means and Senate Finance Committee or a deeper level of cooperation, including issues on energy, environment, labour markets, etc. that require much broader support from Congress.

### **European Union**

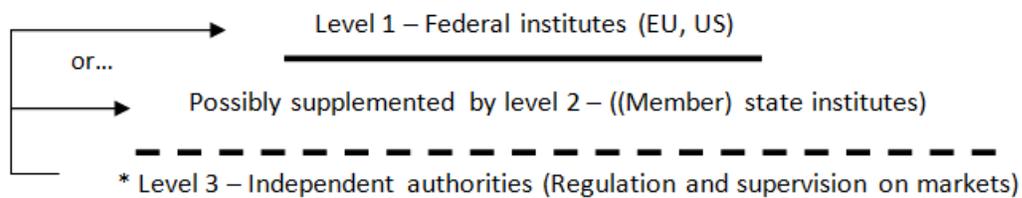
The EU operates according the principle of subsidiarity. Because the member states have given up a part of their sovereignty, there is a shared jurisdiction between the European Union and its member states, an exclusive EU jurisdiction, or member state jurisdiction with support from the EU. This is all laid down in the Treaty of Lisbon of 2009 (<http://eur-lex.europa.eu/>, 28/08/14 – 16:57). This type of conducting supranational policy could be very complicated because of the different interests between member states. Trade policy – important for the this research – is – in the Treaty of Lisbon (and before) – clearly defined as a competence of the European Union.

The question is, however, to what degree TTIP is simply a trade agreement that is the competence of the EU to negotiate, or a deeper level of cooperation, including issues on energy, environment, labour markets, etc. that require much broader EU Member State and European Parliament support.

### 3.3 Regulatory frameworks and dialogues

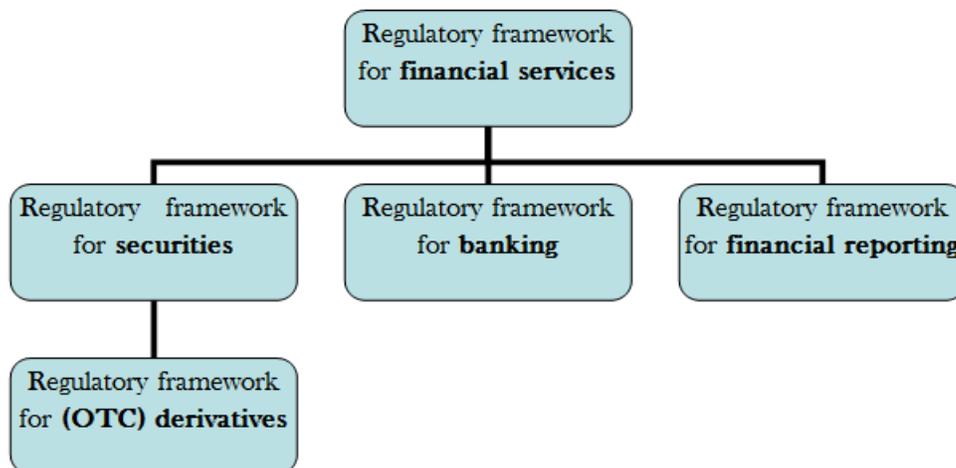
Probably the most important regulatory dialogue regarding financial services is the aforementioned 'Financial Markets Regulators' Dialogue'. FMRD forms a political platform for the debate that is actually the core of our analysis. However, the description of FMRD in chapter 3.1 is not enough to understand the transatlantic dialogue regarding financial services. In and around FMRD there are several authorities involved in this cooperation.

Consider the pyramid from chapter 2 again. Until now we have focused exclusively on layer 1. In chapter 3 we will widen our focus to layer 3.



In chapter 2 we have shortly discussed the different regulatory frameworks. A regulatory framework is a system of regulations and the means used to enforce them. They are established to regulate specific activities and most of them are covered and recognized by the law. It is important to define the frameworks that are important in our analysis. Since we are analyzing the financial markets of US and EU, we mention the following regulatory frameworks:

Figure 3.1: Different regulatory frameworks



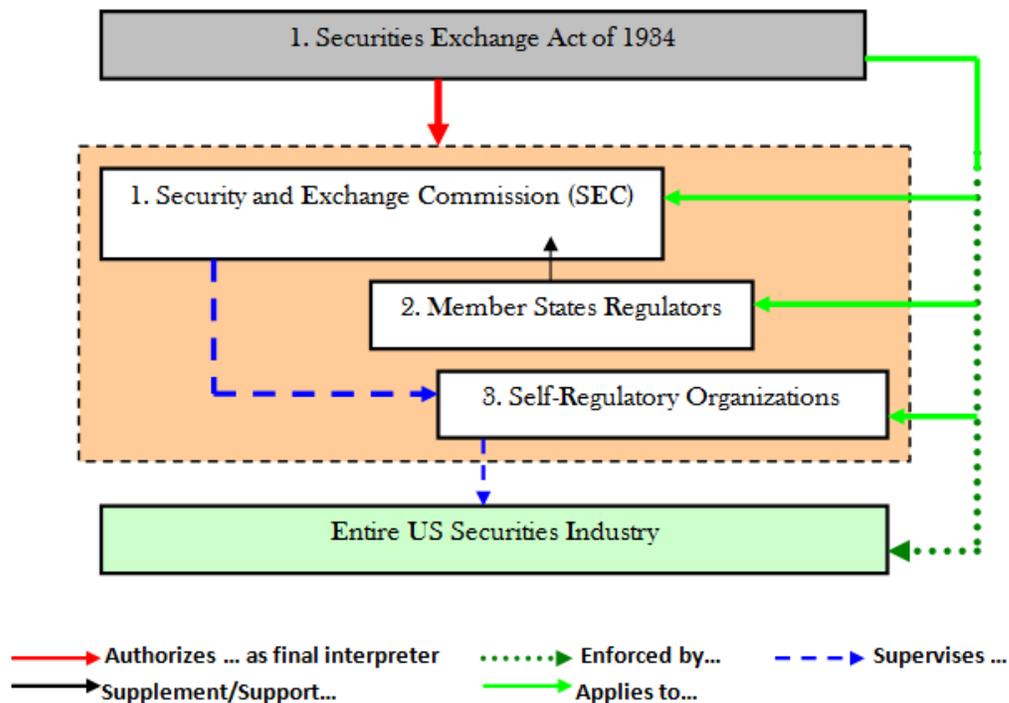
Remember that regulatory frameworks are very abstract. For example, within the regulatory framework of securities we could define other frameworks exclusively regarding derivatives, stock exchanges, options, futures etc. And some implications for banks or other financial institutions might have their origin in the regulatory framework of securities and vice versa. We use these frameworks for simplifying our analysis and just for a better understanding of the US-EU differences. We will discuss the features of the different frameworks. Changes after 2008 have already been included.

### 3.3.1. Regulatory frameworks for securities

#### United States

Consider figure 3.2 for a schematic overview of the regulatory framework for securities.

Figure 3.2: Regulatory framework for securities (US)



Level 1 – The federal regulator within the securities framework is the Security and Exchange Commission (SEC). SEC is an official agency of the US government. It is responsible for regulating the securities industry, maintaining its integrity and enforcing the federal laws. The historical trend is that powers have been shifted away from states level to federal level. The SEC has the ability to issue rules interpreting the securities laws passed by the Congress and it reviews rules proposed by self-regulatory organizations.

The authority of the SEC is recorded in the Securities Exchange Act of 1934. Most securities laws are stipulated in this act. SEC is the final interpreter of it and is the most important enforcer. Other important statutes enforced by the SEC are respectively the Securities Act of 1933, the Trust Indenture Act of 1939, the Investment Company Act of 1940, the Investment Advisers Act of 1940 and the Sarbanes–Oxley Act of 2002.

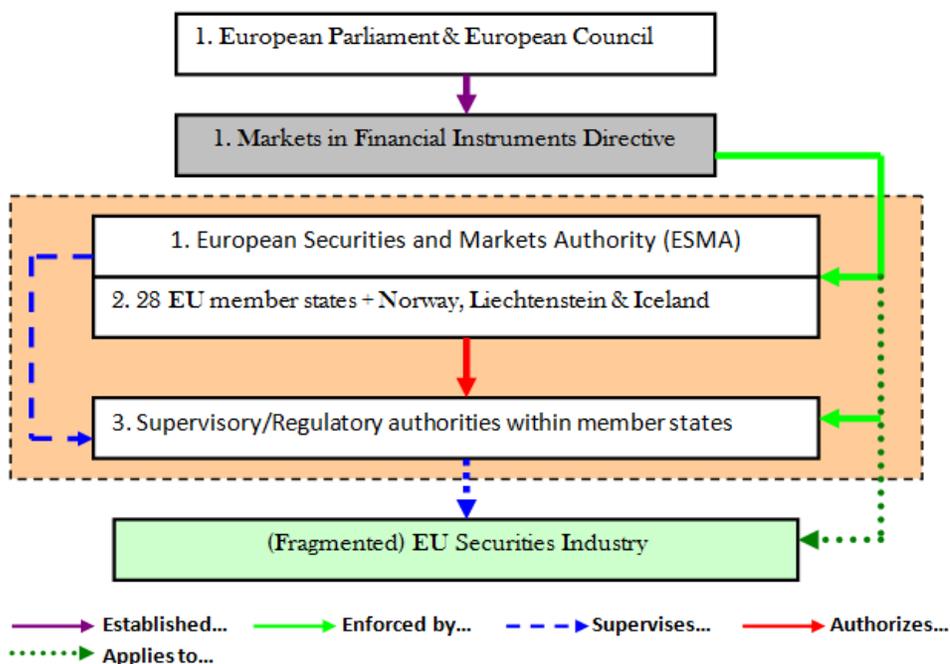
Level 2 – The SEC usually registers the largest broker-dealers and investment advisors of the country. Those who are not registered by the SEC are registered and supervised by agencies of the states. In this respect they are nothing more than the extension of the SEC, so they must rely on the SEC rules. An important power of state law enforcers with respect to the SEC is their ability to pursue criminal prosecutions, so states are especially focusing on preventing frauds within their borders. In short, the states complement the SEC and collaborate with SRO’s to regulate the securities industry and maintain the federal laws (see the statutes above).

Level 3 – The first line supervisory responsibility is taken by the self-regulatory organizations (SRO’s). They can also set rules and guidelines which supplement SEC’s rules. However, any rule adopted by a SRO has to be reviewed by SEC. Rules also have to be in line with the federal law. Examples of SRO’s are National stock exchanges (NYSE, Nasdaq Stock Market) and Securities Associations (Financial Industry Regulatory Authority (FINRA)) Remember that the unbroken line means that the SRO’s are not an executive branch of the SEC, but an independent supplement on SEC’s work, rules and federal laws.

## European Union

Consider figure 3.3 for a schematic overview of the regulatory framework for securities.

Figure 3.3: Regulatory framework for securities (EU)



Level 1 - The European Council and European Parliament jointly adopted the Markets in Financial Instruments Directive (MiFID Directive 2004/39/EC). This directive provides a unified regulatory framework for the EU securities industry. It covers investment firms, Multilateral Trading Facilities, Regulated Markets and financial instruments. On 1 November 2007 the MiFID directive officially entered into force in 28 EU-countries plus Norway, Lichtenstein and Iceland. It has three main objectives. First, protecting investors and maintaining the integrity of financial markets. Second, promoting of transparency, efficiency and honesty within financial markets. Third, further harmonizing of the European trading and investment markets.

An important enforcer of MiFID is the European Securities and Markets Authority (ESMA), established in 2011. Securities regulators of all member states, as well as Norway, Iceland and Liechtenstein are represented in ESMA. This independent organization has to be seen as a supervisory authority.

Level 2 – The MiFID directive has to be transposed and implemented in the different EU-countries. This is a responsibility for the member states themselves. The directive prescribes the implementation measures which have been adopted by the member states without any interference of the EU parliament. This differs from the US regulatory framework. The SEC is a supra-national supervisor, while EU does not have binding supra-national supervision. However, remember that ESMA has great influence on the national supervisory authorities (see level 3).

Level 3 – National compliance with the MiFID directive is regulated by government and/or by national law. In some member states supervisory agencies fall under the responsibility of the ministry of finance, while in others they are independent public bodies whose authority is established by law. Keep in mind that all these authorized supervisors cooperate closely with ESMA.

In short, the European Union is supported by their member states and the member states' governments are supported by their national supervisory agencies. Compliance with MiFID is their common objective.

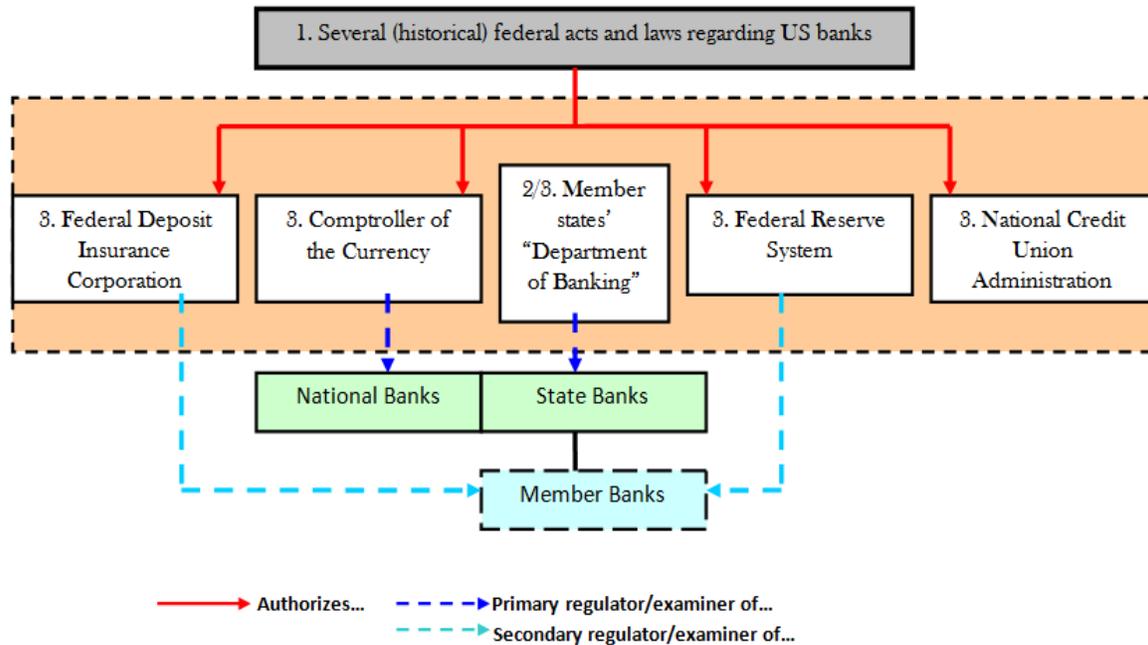
### **3.3.2 US and EU regulatory frameworks for banking**

#### **United States**

Bank regulation has been a hot international topic the last few years. Banks in many countries have been criticized for the risks they have taken. Many economists argue that banks were the instigators of the credit crisis. This subchapter discusses the US and EU regulatory frameworks for banking.

Banking regulations in US are highly fragmented compared to other countries. Most countries have only one central bank regulator and supervisor, but the US banking regulation occurs at federal level and member state level and at member state level. This structure is quite complex as figure 3.4 illustrates

Figure 3.4: Regulatory framework for banking (US)



*\*Within the US regulatory framework for banks, the member state agencies (2) and independent (national) authorities (3) operate next to each other on the same regulatory level and have similar powers.*

Level 1 – In US banking history, many acts have influenced the industry. The referred acts and laws in level 1 are established and approved by the US government. The acts are related to many different aspects of banking. Banking regulation includes things like privacy, fraud prevention, anti-money laundering, disclosure, anti-usury lending etc.

Level 2 – Each member state has its own set of laws and rules regarding the banks within their jurisdiction. The authorities are state agencies which are responsible for establishing rules on permitted practices and the supervision on banks. In figure 3.4 these agencies are mentioned as level 2 and level 3 authorities, because they operate on the same level as the other independent authorities within the US banking system. US banks can choose the option of going with a national or state charter. In the case of choosing the last option, the regulatory and supervisory authority will be the member state agency, mostly called “Department of Banking” or “Division/Department of Financial Institutions”.

Level 3 – Again, the independent regulatory and supervisory authorities in level 3 operate on the same level as the member state agencies. It depends on the choice of the banks themselves whether they fall under the supervision of state agencies or the Office of the Comptroller of the Currency (OCC). The OCC is thus the supervisor of national banks.

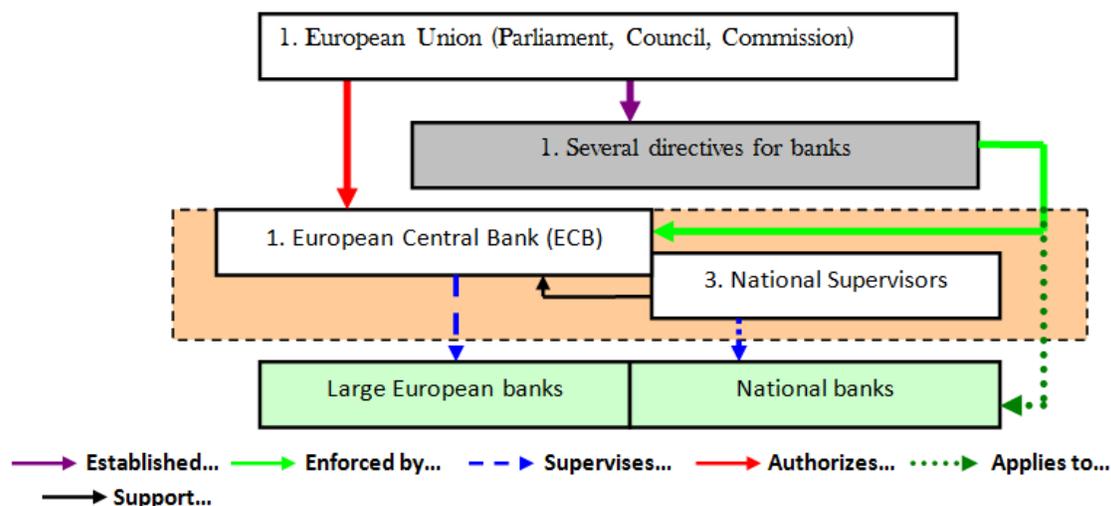
State banks can also choose to belong to the Federal Reserve System. This brings some advantages, such as greater access to capital, but also more regulation. Besides, state banks that carry FDIC insurance also fall under the regulatory and supervisory authority of the FDIC. Almost all state banks carry FDIC insurance, so they are exposed to both state supervision and some degree of national supervision.

## European Union

In September 2012, the European Commission proposed a single supervisory mechanism (SSM) for European banks led by the European Central Bank in order to strengthen the Monetary Union. This supervisory task is strictly separated from the monetary task of the ECB. Even though this mechanism did not enter into force yet, its features are accurately described and it is very likely that it will be legally defined in the near future.

For our analysis it is not valuable to discuss all the aspects and components of the SSM. Structuring the regulatory authorities and institutes is more important. Consider figure 3.5 for a schematic overview of the regulatory framework for European banks.

Figure 3.5: Regulatory framework for banks (EU)



Level 1 – Several directives, established by the European Union, play an important role within the banking union. They have been/will be established in order to harmonizing the European regulatory banking framework. We discuss the most important ones. First, the **Capital**

**Requirements Directive (CRD IV/CRR)** contains important rules which require banks to hold more capital. This directive tries to prevent banks from getting into trouble. Second, the **Bank Recovery and Resolution Directive (BRRD)** contains rules about resolving problems when banks still get into trouble. This is called 'the resolution framework'. Third, the **Deposit Guarantee Schemes Directive (DGSD)** guarantees deposits from individuals and small businesses up to 100.000 euro per person per bank.

These kinds of directives apply to all banks within the European Union. The ECB is responsible for the supervision on all banks and will be authorized by the European Commission, Parliament and Council. The Supervisory Board will be composed of a Chair (appointed for five years), a Vice Chair, four ECB representatives and one representative of the national bank of each participating country. The ECB is in fact supported by the national banks of all these participating countries. Together they form the European System of Central Banks.

Level 2 – Notice that level 2 is not mentioned in the schematic overview of figure 3.5. This is no coincidence, because it is an important feature of the single supervisory mechanism. European banks are supervised by the European System of Central Banks, from which the ECB is the head of. National governments and/or authorities have given up their sovereignty with regards to the legislation of their banking system.

Level 3 – National supervisors still have their tasks and responsibilities in supervising national banks. They will support the ECB in this respect. There will be a clear division of tasks. The ECB itself will supervise large banks which often perform trans boundary operations. These banks could have significant influence on the entire financial system. National supervisors will continue to supervise medium and smaller banks.

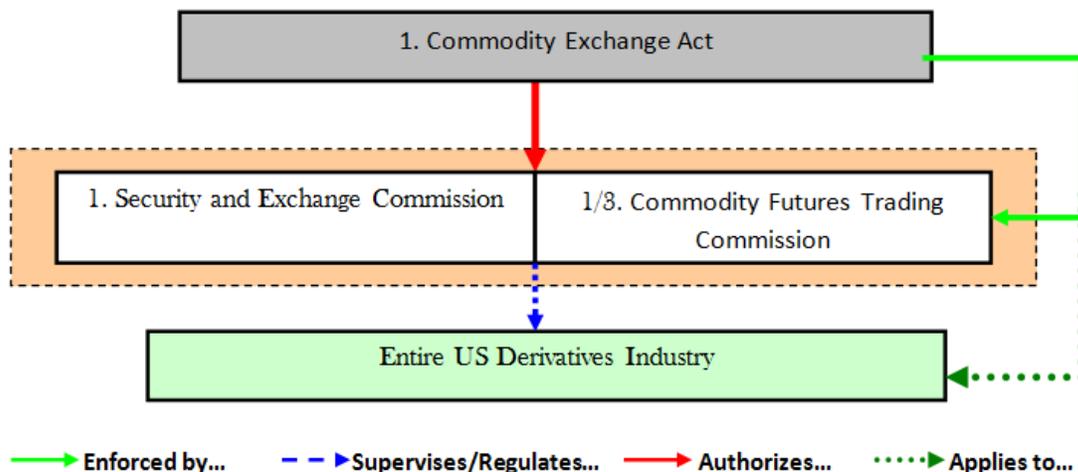
### **3.3.3. US and EU regulatory frameworks for derivatives**

Securities are tradable assets of any kinds, so derivative contracts by definition are also securities. However, SEC regulations and the MiFID directive are both limited, which means that they are not applied to all financial instruments within the securities industries. An important (and large) market with its own regulators and framework is the OTC derivative market.

#### **United States**

The regulatory framework for derivatives is less complicated than the securities framework, because regulation in the derivative industry is more centralized. The Commodity Exchange Act (Dodd-Frank since 2010) directs the SEC and the Commodity Futures Trading Commission (CFTC) to comprehensively regulate the OTC derivatives industry. We can display this structure as follows (figure 3.6)

Figure 3.6: Regulatory framework for derivatives (US)



\* In the OTC Derivatives market CFTC (3) operates on the same level as the SEC (1).

Level 1 – Under the Commodity Exchange act the CFTC has authority over swaps, swap dealers and major swap participants, swap data repositories, derivative clearing organizations with regard to swaps, persons associated with a swap dealer or MSP, eligible contract participants, and swap execution facilities.

The SEC has authority over security-based swaps, security-based swap dealers and major security-based swap participants, security-based swap data repositories, clearing agencies with regard to security-based swaps, persons associated with a security-based swap dealers or major security-based swap participant, eligible contract participants with regard to security-based swaps, and security-based swap execution facilities. (KPMG, 2012).

Level 3 – CFTC is an independent agency of the US government. It operates on the same level and with similar powers as SEC, which in turn is not an independent agency of the government.

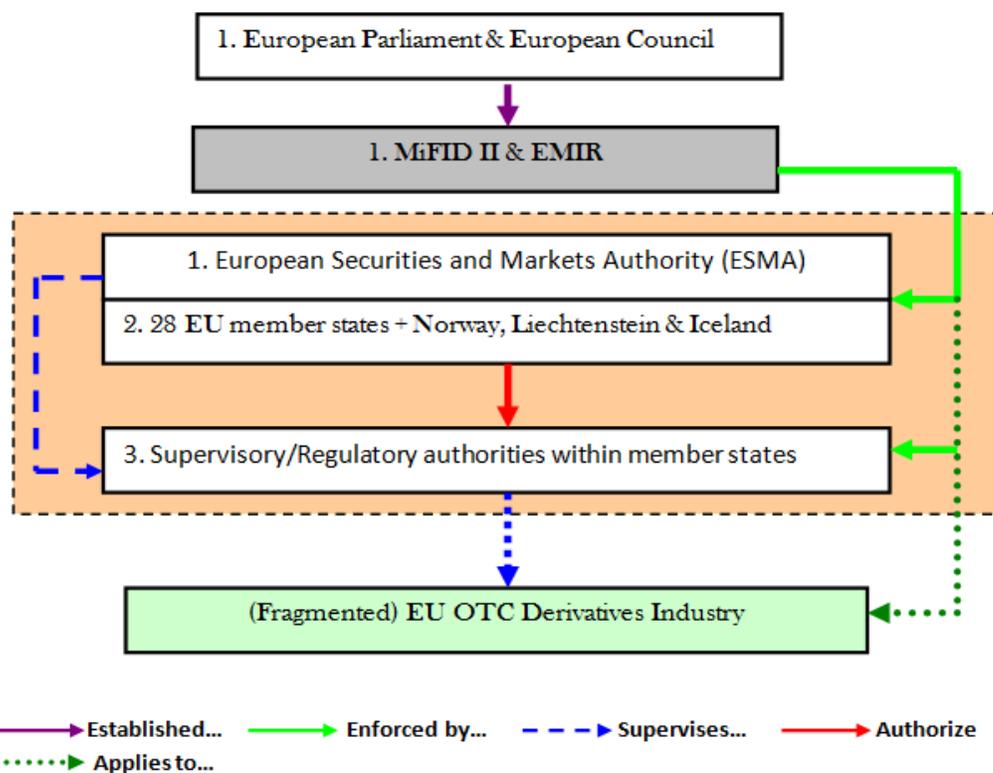
## European Union

The regulatory framework for OTC derivatives is quite similar to the framework for securities (see chapter 3.1.1). It only differs in the applicable directives.

After the start of the crisis in 2008, political leaders all over the world decided that the trade in derivatives had to become more transparent. The European Union established MiFIR (Markets in Financial Instruments Regulation) and revised MiFID I. Together they are defined as MiFID II. The European Union established EMIR (European Market Infrastructure Regulation) in 2012. EMIR interrelates with MiFID II in several aspects of the OTC derivative trading venue.

Consider figure 3.7 for an overview of the regulatory framework for OTC derivatives.

Figure 3.7: Regulatory framework for derivatives (EU)



Level 1 – The European Securities and Markets Authority (ESMA) is an independent authority which contributes to the stability of the financial system. Its powers and responsibilities are large. The ESMA directly supervises Credit Rating Agencies, it establishes binding standards for the derivatives industry, and it is able to prohibit and limit certain financial activities.

Level 2 – The governments of the member states authorize the supervisory organizations within their country.

Level 3 – The supervisory/regulatory authorities within the member states closely cooperate with the ESMA. Examples of such organizations are national central banks and (independent) behavior regulators.

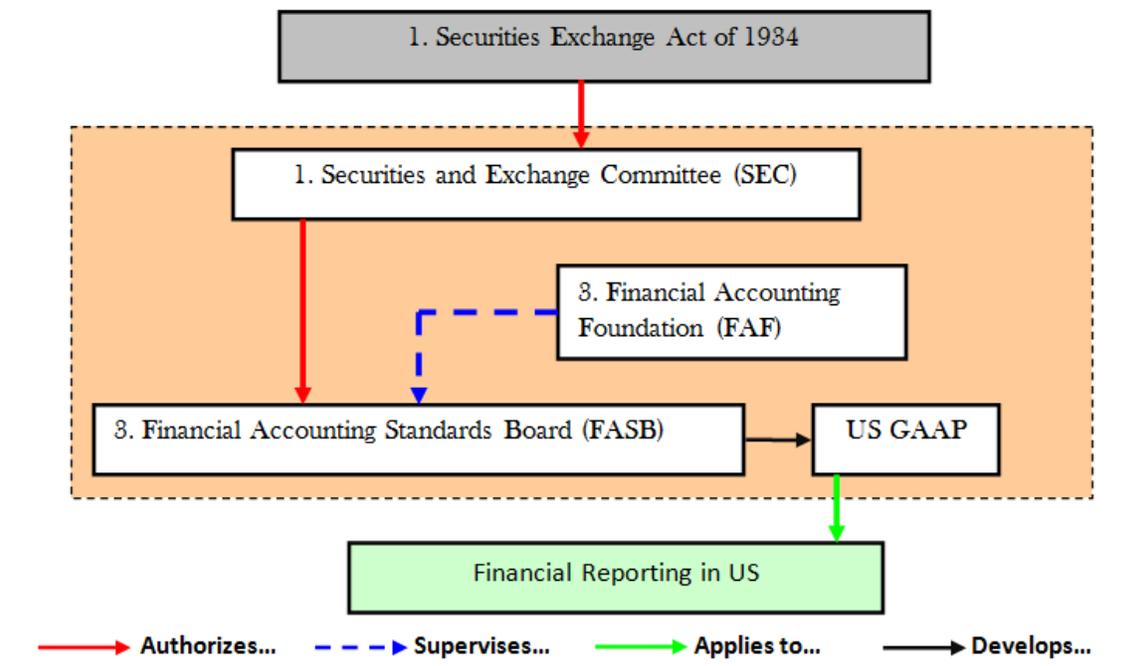
### 3.3.4. US and EU regulatory frameworks for financial reporting

Financial reporting is an important aspect in our analysis because of the transatlantic diversity in reporting systems. In this sub chapter we will analyze both regulatory frameworks. The differences between US and EU will become clearly visible.

## United States

Consider figure 3.8 for an overview of the regulatory framework for financial reporting.

Figure 3.8: Regulatory framework for financial reporting (US)



Level 1 – Just as we have seen in the regulatory frameworks we have already discussed, the SEC also carries responsibility for the accounting standards within the US. Its authority in this field is established in the Securities and Exchange Act of 1934. However, in practice the SEC is highly supported by the Financial Accounting Standards board (FASB). The SEC has authorized FAF in setting accounting standards for public companies in the US.

Level 2 – In the US framework for financial reporting there are no authorities which are allied to the individual member states.

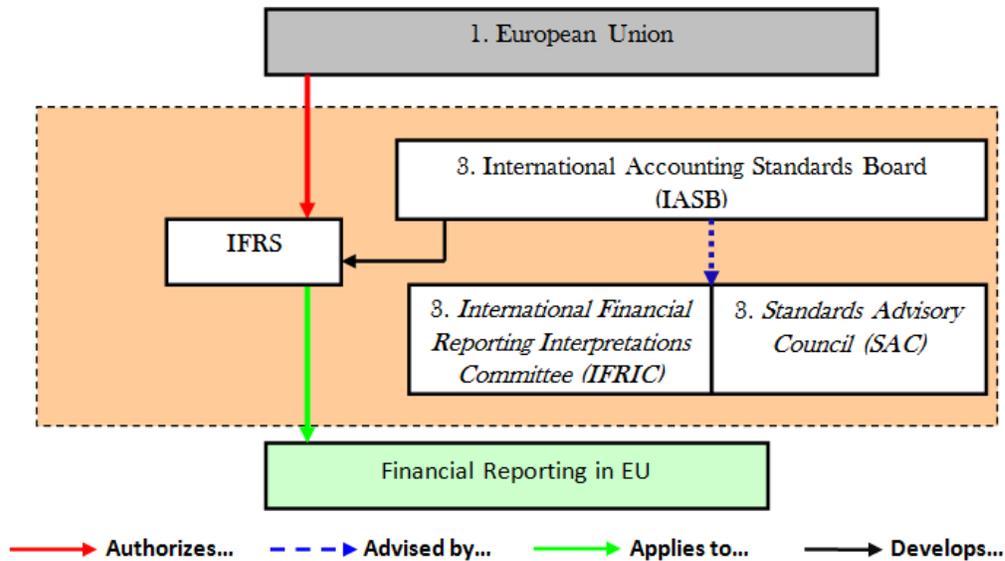
Level 3 – Again, the FASB is responsible for setting accounting standards for public companies. FASB was designated by the SEC in 1973. The rules they develop are called generally accepted accounting principles (GAAP), also known as US GAAP.

The FASB is supervised and overseen by the Financial Accounting Foundation (FAF). The FAF is an independent body in the private sector. Its goal is ensuring objectivity and integrity in financial reporting standards. Besides developing and improving reporting standards (see FASB above), it educates constituents about those standards and it selects members of standard-setting boards and advisory councils.

## European Union

Consider figure 3.9 for an overview of the regulatory framework for financial reporting.

Figure 3.9: Regulatory framework for financial reporting (EU)



Level 1 – In 2005 the European Commission obliged European companies which are listed in the EU’s stock market to use the International Financial Reporting Standards (IFRS) for their financial reporting. However, the European Commission’s work extends beyond the European borders and tries to promote the use of IFRS as a worldwide standard in financial reporting.

Level 2 – National governments and/or authorities are not individually authorized and responsible for setting financial reporting standards. Financial reporting legislation is regulated on European level.

Level 3 – The IFRS are developed by an independent and international organization; The International Accounting Standards Board (IASB). The IASB tries to develop an internationally accepted language in financial reporting. Its structure is a bit complicated because of its use of more advisory bodies. We picked the most important ones; The International Financial Reporting Interpretations Committee (IFRIC) and the Standards Advisory Council (SAC). The IFRIC advises the IASB and prepares reports in which it is described how to deal with IAS-standards and how to interpret them. The IFRIC is also involved in uniform the international standards with national laws and rules. The SAC is also an advisory board which can be seen as a platform for the debate on reporting standards. Many stakeholders are involved an their joint insights should lead to official standards.

### 3.4.1 Existing NTM's 2008

Remember that our analysis refers to the period between 2008 and 2012. In this sub chapter we will answer two sub questions. First, What were the most important NTM's in the US financial services industry in 2008? Second, What were the most important NTM's in the EU financial services industry in 2008?

Ecorys (2009) has reported the most important NTM's in 2009. We can use their results as the starting point of our analysis, because the situation in 2009 hasn't changed dramatically since the start of the crisis in September 2008. See table 3.1 and table 3.2 for the existing NTM's at the start of the crisis.

Table 3.1 Most important EU to US NTM's in the financial services sector

Rank	NTM or Diverging Regulation	Trend
<b>Trade Measures</b>		
1	Discriminatory taxation of EU financial institutions that apply IFRS instead of US GAAP	Decreasing
2	Section 319 of the PATRIOT Act that requires US correspondents banks to maintain certain records concerning foreign banks with a US correspondent account	Increasing
3	Tax Code Reporting Requirements applied to foreign-owned corporations	Constant
4	Registration requirements for foreign banks in the US providing global custody and related services directly to US investors	Increasing
5	Differences in the implementation of the Basle II framework for banks	Constant
6	Sarbanes Oxley Act	Constant
7	Lack of Convergence in the regulation of financial services across US states	Increasing
<b>Investment measures</b>		
1	Duplicative consolidated supervision of EU Central Bank and Federal Reserve	Constant
2	Local licensing requirements	Constant
3	Absence of convergence regulations in reporting standards	Decreasing
4	Requirement for professional qualifications for foreign firms	Decreasing

(Berden, K., Francois, J., Tamminen, S., Thelle, M., & Wymenga, P., 2009)

Table 3.2: Most important US to EU NTM's in the financial services sector

Rank	NTM or Diverging Regulation	Trend
Trade Measures		
1	Differences in the implementation of the Basle II framework for banks	Constant
2	Auditor oversight and lack of cooperation between US and EU financial regulators	Decreasing
3	EU intellectual property rights which are less broad than the US ones	Constant
4	US and other investment firms from non-EU countries may operate with authorisation from Italy's securities market regulator, CONSOB, only	Constant
5	Different regulatory requirements and local licensing requirements	Decreasing
6	National treatment may be applied to non-EC branches of Foreign Credit Institutions (FCIs) on the basis of reciprocity	Constant
7	Absence of convergence between EU Member States	Constant
Investment measures		
1	Individual Member State authorisation and regulation applied to direct branches of non-EU financial service institutions	Constant
2	Government procurement only open to national companies	Decreasing

(Berden, K., Francois, J., Tamminen, S., Thelle, M., & Wymenga, P., 2009)

### 3.4.2 Added regulation between 2008 and 2012

Between 2008 and 2012, several directives, laws and rules have been added to the existing sets of regulation, most in wake of the Global Financial Crisis. In this sub chapter we briefly describe the most important ones for both US and EU.

#### United States

##### Dodd Frank Wall Street Reform and Consumer Protection Act

The Dodd-Frank act was signed into federal law in 2011. It was a direct response to the global financial crisis. It contains the most significant changes to US financial regulation since mid-1940s. This all-encompassing act aims to reduce the likeness of a new crisis. It provides the Federal government with more authority to intervene in troubled financial firms and introduces a Federal council to monitor threats to the financial system. Also shareholders receive more influence according to the act.

The Dodd-Frank act contains eight major issues. First, supervising Wall Street. Second, regulating risky derivatives. Third, getting transparency in hedge funds trades. Fourth, supervising credit rating agencies. Fifth, increasing the supervision of insurance companies. Sixth, reforming the Federal Reserve. Seventh, Protecting consumers' financial security. Eight, The Volcker Rule prohibits banks from certain kinds of speculative investments for their own profit.

### Supervising Wall Street

The Financial Stability Oversight Council is responsible for monitoring risks that could affect the financial system. The council oversees all kind of financial firms and has to prevent companies getting too big. It also has the ability to recommend companies to be supervised by the Federal Reserve.

### Regulating risky derivatives

The riskiest derivatives have to be regulated by the SEC or the CFTC. Excessive risk-taking can be identified before a crisis occurs.

### Getting transparency in hedge funds trades

Hedge funds and other financial advisers weren't regulated before. The Dodd-Frank act forces hedge funds to register with the SEC and provide data about their trades.

### Supervising credit rating agencies

The act authorizes an Office of Credit Ratings at the SEC to regulate CRA's (Credit Rating Agencies). The SEC can impose agencies to submit their rating methodologies.

### Increasing the supervision of insurance companies

The act established the Federal Insurance Office. FIO must identify insurance companies that could be risk full for the financial system.

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### Reforming the Federal Reserve

The Fed may not provide an emergency loan to a single entity without permission of the Treasury Department. The Fed also must publish the names of the banks that receive emergency loans.

### Protecting consumers' financial security

The act sets regulations for credit, debt and prepaid cards, payday and consumer loans, credit reporting, debt collection, and financial advisory services.

The Volcker Rule prohibits banks from certain kinds of speculative investments for their own profit. However, banks have lobbied hard against this rule, so it was still not been implemented in 2012.

### **FASB GAAP Codification**

On 1 July 2009, the FASB launched the FASB Accounting Standards Codification as the single source of authoritative nongovernmental US Generally Accepted Accounting Principles (US GAAP).

The codification has been established because it is seen by FASB as an efficient and user-friendly method. It structures thousands of US GAAP statements into many different topics and displays all these topics according a consistent structure. The codification also includes relevant SEC directives.

## **Europe**

### **Markets in Financial Instruments Directive (MiFID)**

MiFID and EMIR (see below) are the most important European counterparts of the Dodd-Frank act. MiFID entered into force on 1 November 2007, one year before the start of the financial crisis. Even though this directive dates from before the start of the crisis, its objectives are highly comparable to those of Dodd-Frank. Mentioning MiFID in our analysis is thus important to compare US and EU. MiFID has three main objections. First, protecting investors and the integrity of financial markets. Second, stimulating transparent, efficient and integrated financial markets. Third, harmonizing European stock exchanges and investment markets

Summarizing, MiFID strongly emphasizes on the relation between the firm and their clients. The most important implications of MiFID are client order handling and enforcing transparency and authorization, regulation and registration of firms. The formers aims to ensure that firms are operating in the best interest of their clients, certain requirements are imposed regarding the mutual provision of information. The latter means that “home state” authorizes and regulates firms covered by MiFID, after which firms will be allowed to operate in other EU member states.

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### **European Market Infrastructure Regulation (EMIR)**

EMIR entered into force on 16 August 2012. In contrast to MiFID, this regulation is a direct response to the financial crisis. However, like for MiFID, EMIR aims to make financial markets safer and more transparent. EMIR attempts to achieve this by mainly inducing regulation specifically focusing on OTC-derivatives.

According to the official website of ESMA, these are the most important implications of EMIR are “central clearing for certain classes of OTC-derivatives, application of risk mitigation techniques for non-centrally cleared OTC derivatives, reporting to trade repositories, application of organizational, conduct of business and prudential requirements for Central Counterparties (CCPs) and application of requirements for Trade repositories, including the duty to make certain data available to the public and relevant authorities. “ (ESMA, n.d.)

### **Capital Requirements Directive III (CRD III)**

CRD III has been adopted on 24 November 2010 by The European Council and European parliament . The target of this directive is to ensure that the effectiveness of bank capital regulation in the EU is empowered and, while maintaining the competitiveness of the EU banking industry, restraining any excessive pro-cyclical impacts on the real economy.

The most important implications of CRD III are higher requirements on VAR, charges on default risk, and addressing the methodological difficulties of modelling, increasing the capital requirements for re-securitization positions of banks, enhancing disclosure requirements in several areas such as the sponsorship of off-balance sheet vehicles and increasing the supervisory capabilities of authorities within member states.

### **3.4.3 Comparison of new US and EU regulations**

In this sub chapter we will compare the most important new US regulations with similar EU regulations and vice versa. The areas considered are:

- Capital and liquidity requirements
- Derivatives
- Securitization
- Short selling
- Consumer protection
- Corporate governance and compensation
- Size and scope of banks
- Hedge funds and private equity funds
- Credit rating agencies
- Intervening with troubled financial institutions
- Accounting rules

We will elaborate below on each of these areas, by looking at US regulation for each of them, EU regulation for each of them, after which we compare and draw conclusions on similarities and differences in regulatory systems. Finally, we will provide a clear overview of our findings. First consider table 3.3 on the next page.

Table 3.3: Comparison of new US and EU regulation

Subject	US regulation	EU regulation	Trend
Capital and liquidity requirements	Basel II <b>never</b> implemented	Basel II	Diverged
Derivatives	Dodd-Frank (Title VII)	EMIR	Converged
Securitization	Dodd-Frank (Section 941-945)	CRD III (Article 122a)	Converged
Short selling	SEC guidelines (Rule 201)	Member state dependent	Constant
Consumer protection	Dodd-Frank (BCFP)	-	Constant
Corporate governance and compensation	FED & FDIC guidelines	CEBS guidelines & CRD III	Diverged
Size and scope of banks	Dodd-Frank (Too Big to Fail)	-	Diverged
Hedge funds and private equity funds	Dodd-Frank (Title IV)	AIFMD 2011/61/EU	Diverged
Credit Rating Agencies	Dodd-Frank (Title IX, sub C)	ESMA guidelines & CRA II	Diverged
Intervening with troubled financial institutions	Dodd-Frank (FSOC)	-	Constant
Accounting rules	FASB - US GAAP	IASB - IFRS	Diverged

### **Capital and liquidity requirements**

**US:** The international Basel II accord, which entered into force just before the start of the financial crisis, was never implemented by the US for its commercial banks. Therefore its capital and liquidity requirements have never applied to American banks. The reason for not implementing Basel II was that it caused the institutions to take on more leverage, which in times of crisis was considered undesirable according to the SEC.

**EU:** EU did implement Basel II.

**Comparison:** There are substantial differences between banks which have adopted the credit-risk-based capital requirements of Basel II and banks which did not. The requirements of Basel II allow banks to hold less capital when it comes to certain types of historically low-risk loans such as residential mortgages, compared to banks which did not adopt Basel II. This causes Basel II banks to be able to offer lending rates which are more competitive.

### **Derivatives**

**US:** Title VII of the Dodd-Frank act requires derivatives to be traded on an exchange or Swap Execution Facility, and to be cleared through a central clearing house. Furthermore it imposes higher capital and collateral requirements for banks. Lastly, Dodd-Frank forbids commercial banks to trade in derivatives, except for foreign exchange and interest rates.

**EU:** Similar to the Dodd-Frank act, EMIR contains similar implications regarding the clearing of and reporting derivatives contracts. In addition, it forces financial institutions to maintain strict capital and collateral requirements for OTC derivatives that remain bilaterally cleared.

**Comparison:** The regulation regarding derivatives could be seen as an area where transatlantically similar efforts happened in parallel. Between 2008 and 2012, the US and EU approaches have resulted in clear regulatory convergence, though also here differences remain.

### **Securitization**

**US:** The Dodd-Frank act (Section 941-945) increased information requirements for securitizations, required issuers to retain 5% of the risk on securitizations, and placed new regulatory and legal burdens on rating agencies.

**EU:** CRDIII (Article 122a) have set the same rules and requirements regarding securitization

**Comparison:** Introducing the same set of rules regarding securitization has led to regulatory convergence

### **Short selling**

**US:** In February 2010, the SEC has adopted Rule 201 (Alternative Uptick Rule) restricting short-selling for the remainder of the day and all of the following days once a stock suffers a 10% drop from the previous day's closing price.

**EU:** Between 2008 and 2012, short selling has been prohibited or restricted in a few member states. Other member states did not impose such restrictions on short selling. This has led to a highly degree of fragmentation across European countries when it comes to short selling.

**Comparison:** US and EU regulation regarding short selling have not converged since even the EU Member States do not apply the same regulation.

### **Consumer protection**

**US:** Consumer protection is a very important issue in the Dodd-Frank act. Consequently Dodd-Frank has created a new Bureau of Consumer Financial Protection (BCFP).

**EU:** Consumer protection was not considered a big problem in the European Union and therefore no significant regulation was established by the EU.

**Comparison:** There are no major conflicts in the area of consumer protection at this point – it seems though that regulation has diverges somewhat. EU financial institutions which also operate in US would have to act to the US consumer laws, which differ from those in the European Union. The same would be true in the other direction.

### **Corporate governance and compensation**

**US:** The FED has set guidelines which use regulatory pressure to ensure that banks set compensation policies that follow best practices. Furthermore, the FDIC has issued guidelines which should prevent financial firms taking excessive risks.

**EU:** Compared to the US, CRD III is enforcing a lot more restrictive remuneration policies. One of the new rules, issued by the Committee of European Banking Supervisors, limits the bonuses of bankers to an amount proportional to salaries.

**Comparison:** Regulation regarding corporate governance and compensation has clearly diverged between US and EU. US banks experience much more margin for manoeuvre than their European counterparts. Furthermore, European bankers fear a serious competitive disadvantage towards US because of limitations on bonuses.

### **Size and scope of banks**

**US:** The Dodd-Frank act introduced the principle of “Too Big to Fail”. This principle modestly tightens the existing limitations on the size and scope of commercial banking groups. Once a bank exceeds a 10% limit on their liabilities as a portion of the total banking system, limitations on further growth by acquisition will be imposed.

There will be a severe limitation on the ability to grow by acquisition once a bank surpasses a 10% limit on their liabilities as a portion of the total banking system.

**EU:** Similar EU regulation did not enter into force yet. Although, in 2010 the European Commission proposed the Single Resolution Mechanism in which issues about the size and scope of banks have been addressed.

**Comparison:** The fact that US have implemented regulation regarding the size and scope of banks, while EU did not, means that transatlantic regulatory divergence has arisen. Especially since single US banks form a much smaller part of the entire economy than their European counterparts.

### **Hedge funds and private equity funds**

**US:** Under the Dodd-Frank act (Title IV, amending the 1940 Investment Advisors Act), large and medium-sized funds are obliged to register with the SEC, but only relatively simple information is required.

**EU:** In contrast to US, the EU has substantially increased its regulatory control (The Alternative Investment Fund Managers Directive 2011/61/EU). Some important changes involved valuing by independent parties, depositing with regulated financial institution, avoiding excessive risk-taking, disclosing more information and marketing to strict new limits.

**Comparison:** The US and EU chose fundamentally different approaches regarding regulation on hedge fund and private equity funds. This causes policymakers and business people in US to fear that EU restrictions in the AIFMD will make it relatively difficult to raise money in the European Union.

#### **\* Credit rating agencies**

**US:** Similar to the regulation on hedge funds and private equity funds, the Dodd-Frank act (Title IX, subtitle C) added light new requirements on credit rating agencies. Only relatively simple information is required.

**EU:** EU imposed a number of specific requirements that will affect day-to-day activity by credit rating agencies. The ESMA would have the power to request information, launch investigations, and perform on-site inspections. Moreover, all securitizations issuers are obliged to provide the same information to all rating agencies (Credit Rating Agencies II regulation).

**Comparison:** The US and EU chose fundamentally different approaches regarding regulation on credit rating agencies. The difficulty in this field is that the largest rating agencies are operating both in US and EU, so different regulatory approaches cause the credit rating agencies to meet contradictory legal mandates.

#### **Intervening with troubled financial institutions**

**US:** The Dodd-Frank act authorizes the Financial Stability Oversight Council, advised by the Fed, to declare a (non-bank) financial institution to be systemically significant. When such institutions get into trouble, the Fed will be able to intervene, by forcing them to meet the same rules as bank holding companies. Systemic risk activities could be winded down if considered necessary.

**EU:** The Commission has published an action plan in October 2010 on crisis management (Single Resolution Mechanism). The outlines of this mechanism have been well defined in the last few years. However, talks about several provisions will be continued till the establishment of the SRM. It is not yet known when this will happen.

**Comparison:** It is still unclear if there will be any divergence between the US and the EU in this field, because the US is further in specifying resolution procedures. However, we have mentioned this aspect of financial regulation, because it will be extremely important that these approaches will be coordinated to prevent any significant divergence.

#### **Accounting rules**

**US:** the FASB launched the FASB Accounting Standards Codification as the single source of authoritative nongovernmental US Generally Accepted Accounting Principles (US GAAP).

**EU:** Financial institutions in the EU have to apply accounting rules according to the International Financial Reporting Standards (issued by the International Accounting Standards Board). There have not been any significant regulatory changes in this field.

**Comparison:** International accounting standards have caused a long-standing conflict between US and EU, mostly due to the mutual unwillingness of regulatory convergence. During the crisis period 2008 till 2012, near to nothing has changed in this field.

Table 3.3 (above) summarizes the analysis in this sub chapter. The number of divergent changes clearly exceeds the number of convergent changes. New regulations on both sides of the Atlantic did not result in overall convergence of regulatory systems overseeing the financial services industries.

### 3.4.4 What happened with the 2008 NTM's?

Now we have analyzed the regulatory developments between 2008 and 2012 in sub chapter 3.4.3, we can compare the situation at the end of 2012 with the situation at the start of 2008 (see tables 3.1 and 3.1 in sub chapter 3.4.1). We present our results in tables 3.4 and 3.5. This links to our question of what has changed between 2008 and today (end 2012) in terms of regulatory systems in the EU and US on financial services?

We find that most NTM's have not been aligned the last few years. The regulations of financial services across US states have been converged because of the establishment of the Dodd-Frank Act, which aims to impose the same regulation for all US financial institutions as much possible. Besides, regulations in reporting standards have also been aligned, as is illustrated in table 3.4.

Table 3.4: Comparison of NTM's (2008 vs 2012)

Rank	NTM or diverging regulation US	Actual development 2008-2012		
		Converged	Diverged	Constant
<b>Trade Measures</b>				
1	Discriminatory taxation of European financial institutions that apply IFRS instead of US GAAP			X
2	Section 319 of the PATRIOT Act that requires US correspondent banks to maintain certain records concerning foreign banks with a US correspondent account			X
3	Tax Code Reporting Requirements applied to foreign-owned corporations			X
4	Registration requirements for foreign banks in the US providing global custody and related-services directly to US investors		X	
5	Differences in the implementation of the Basle II framework for banks			X
6	Sarbanes Oxley act			X
7	Lack of convergence in the regulation of financial services across US states	X		
<b>Investment measures</b>				
1	Duplicative consolidated supervision of EU Central Bank and Federal Reserve			X
2	Local licensing requirements			X
3	Absence of convergence regulations in reporting standards	X		
4	Requirement for professional qualifications for foreign firms			X

(Berden, K., Francois, J., Tamminen, S., Thelle, M., & Wymenga, P., 2009)

Table 3.5: Comparison of NTM's (2008 vs 2012)

Rank	NTM or diverging regulation EU	Actual development 2008-2012		
		Converged	Diverged	Constant
Trade Measures				
1	Differences in the implementation of the Basle II framework for banks			X
2	Auditor oversight and lack of cooperation between EU and US financial regulators			X
3	EU intellectual property rights which are less broad than the US ones			X
4	US and other investment firms from non-EU countries may operate with authorisation from Italy's securities market regulator, CONSOB, only			X
5	Different regulatory requirements and local licensing requirements			X
6	National treatment may be applied to non-EC branches of Foreign Credit Institutions (FCIs) on the basis of reciprocity			X
7	Absence of convergence between EU Member States			X
Investment measures				
1	Individual Member State authorisation and regulation applied to direct branches of non-EU financial service institutions			X
2	Government procurement only open to national companies			X

(Berden, K., Francois, J., Tamminen, S., Thelle, M., & Wymenga, P., 2009)

## **4. The economic impact of NTM developments 2008 – 2012**

In this chapter we take the qualitative analysis of the previous two chapters one step further. We will quantify the potential economic effects of the changes in regulatory systems in the EU and US between 2008 and 2012. In order to do so, this chapter is structured as follows: first we present the Global Simulation model (GSIM) and explain why we choose this model and how it works (section 4.1). Then we look at the data that is needed, including a quantification of the costs of the NTMs described in the previous chapter (section 4.2).

### **4.1 The Global Simulation Model (GSIM)**

In our research we use the GSIM model as developed in Francois and Hall (2003), “Global simulation analysis of industry-level trade policy.” This model is a multiregion, imperfect substitutes model of global trade. Only a small amount of data is required to get some insights about the effects of trade policy changes on measures like output, trade flows and net welfare effects.

The model works as follows: First, we have to import the bilateral trade data in matrix form. Second, we have to upload the initial matrix of bilateral import tariffs in ad valorem form, thereafter the final matrix of bilateral import tariffs. At least, by adding the demand elasticities to the model, also in matrix form, by using equations GSIM can calculate changes in output, in trade volume, the producer- and consumer surplus and the net welfare effect.

This model has been chosen because of its ability to provide some insights about the effects on economic measures, only because of an increase and/or the divergence of transatlantic financial regulations and their associated costs.

### **4.2 Data issues and the costs of NTM's**

From the previous section it has become clear that in order to estimate the effects in partial equilibrium with the GSIM model, we need the original bilateral trade flow data of 2008, we need the initial ad valorem tariff equivalents of regulatory ‘costs’ between the EU, US and ROW in 2008, and the same ad valorem tariff equivalents in 2012 (the time period we assess in this research).

### 4.2.1 Bilateral trade data

Our bilateral trade data are retrieved from the Eurostat databases. Eurostat databases and publications provide extensive access to trade data. See the table below for the bilateral trade flows of financial services between the US, EU-27 and Rest of the World. We used the data of 2008.

Table 4.1: 2008 Bilateral Trade Flows I financial services, in billions of USD (source: Eurostat BOP 260)

		destination		
		EU	US	ROW
origin	EU	78,1	14,1	43,1
	US	15,3	0,0	27,2
	ROW	33,3	14,6	41,7

### 4.2.2 Ad valorem equivalence values for NTMs between the EU and US

It is very difficult to estimate the costs of NTMs. In Ecorys (2009) and CEPR (2013) an aggregate approach using gravity estimations is used. This approach looks at the difference between existing trade flows and potential trade flows based on the gravity equation that includes GDP size of trading countries, distance between countries, common language, and other factors that affect global trade flows.

From these analyses, we have gathered the following estimates for the degree of NTMs between the EU and the US in 2008:

Table 4.2: The degree of financial services NTB's between the EU and US in 2008.

Sector	NTM level US to EU	NTM level EU to US
Financial services	11.3	31.7

Source: Ecorys (2009)

In order to get figures that we can use comparatively in 2012 for the differences in NTMs between the EU and US, we need to look again at estimating the NTMs between the EU and US, this time, including the new NTMs that have arisen and without those NTMs that have (partially) disappeared).

Analysis of the costs of NTMs for the financial services sector, split out per category as described in chapter 3, amount to the table below.

Table 4.3: Changes per category

Subject	US regulation	EU regulation	Increase / decrease NTM	Change in TCE EU-US	Change in TCE US-EU
Capital and liquidity requirements	Basel II never implemented	Basel II	Small increase	0%	3%
Derivatives	Dodd-Frank (Title VII)	EMIR	Decrease	-5%	-5%
Securitization	Dodd-Frank (Section 941-945)	CRD III (article 122a)	Decrease	-5%	-5%
Short-selling	SEC guidelines (Rule 201)	EU MS dependent	Decrease / increase inEU	-2%	0%
Consumer protection	Dodd-Frank (BCFP)	NA	Increase	1%	0%
Corporate governance and compensation	FED & FDIC guidelines	CEBS guidelines & CRD III	Increase	1%	3%
Size and scope of banks	Dodd-Frank (too big to fail)	NA	Increase	5%	0%
Hedge funds and private equity funds	Dodd-Frank (Title IV)	AIF MD 211/61/EU	Increase	5%	7%
Credit rating agencies	Dodd-Frank (Title IX, sub C)	ESMA guidelines & CRA II	Increase	5%	5%
Intervening in troubled financial institutions	Dodd-Frank (FSOC)	NA	Not clear	?	?
Accounting rules	FASB – US GAAP	IASB – IFRS	Decreasing	-3%	-3%

Combining the initial matrix with the detailed analysis of reduction in some and also creation of new NTMs in financial services (as detailed in the table above), we can derive that the new levels of NTMs in 2012 are the following:

Table 4.4: Levels of NTMs (2008-2012)

Sector	NTM level US to EU	NTM level EU to US
Financial services NTMs in 2008	11.3	31.7
% change 2008 – 2012	+5%	+2%
Financial services NTMs in 2012	11.9	32.3

Source: Ecorys (2009) and own calculations

#### 4.2.3 Trade cost equivalents – totals - between the EU and US

The total trade cost equivalents hampering trade in financial services are the sum of tariff lines and non-tariff measures between the EU and US. In order to get the right overall values, we need to add these up. In the Table below, the total trade cost equivalents are calculated.

Table 4.5: Total trade costs equivalents

Tariff lines						
	EU		US		ROW	
EU	0%		2.6%		5.1%	
US	2.4%		0%		5.1%	
ROW	4.2%		3.6%		4.9%	
Non-tariff barriers (from table above)						
	EU		US		ROW	
	2008	2012	2008	2012	2008	2012
EU	5%		31.7% 32.3%		35%	
US	11.3% 11.9%		4%		35%	
ROW	35%		35%		35%	
TOTAL barriers (tariffs + non-tariff barriers)						
	EU		US		ROW	
	2008	2012	2008	2012	2008	2012
EU	5%		34.3% 34.9%		40.1%	
US	13.7% 14.3%		4%		40.1%	
ROW	39.2%		38.6		39.9%	

#### 4.2.4 The scenario experiments

From the above Table the input for the GSIM model is clear and so is the experiment. The changes in barriers between the EU and US financial sectors have led to more divergence on average (14.3% in 2012 against 13.7% in 2008 for US financial services trade to the EU and 34.9% in 2012 versus 34.3% in 2008 for EU financial services trade to the US) when adding up all new regulations of which some have led to regulatory convergence and others not.

We also run one additional experiment in which we assume there to be 3<sup>rd</sup> country spill-over effects. We model the spill-over effects as 20% of the effects of the EU-US change. This means that in case of regulatory convergence these spill-overs are expected to be positive, but in this case – with regulatory divergence – also the spill-overs are negative. The reason for this is intuitive in economic terms: when EU and US diverge, it also means that the rest of the world is faced with more divergence in regulation, which is also costly for them. The second experiment is summarized in the Table below (please note the 2012 values in italic/bold).

Table 4.6: Results of experiment with spill-over effects.

Tariff lines						
	EU		US		ROW	
EU	0%		2.6%		5.1%	
US	2.4%		0%		5.1%	
ROW	4.2%		3.6%		4.9%	
Non-tariff barriers (from table above)						
	EU		US		ROW	
	2008	2012	2008	2012	2008	2012
EU	5%		31.7%	32.3%	35%	
US	11.3%	11.9%	4%		35%	
ROW	35%	<b>35.2%</b>	35%	<b>35.2%</b>	35%	<b>35.2%</b>
TOTAL barriers (tariffs + non-tariff barriers)						
	EU		US		ROW	
	2008	2012	2008	2012	2008	2012
EU	5%		34.3%	34.9%	40.1%	<b>40.3%</b>
US	13.7%	14.3%	4%		40.1%	<b>40.3%</b>
ROW	39.2%	<b>39.4%</b>	38.6%	<b>38.8%</b>	39.9%	<b>40.1%</b>



## Chapter 5: Results and Analysis

In this chapter we present the results of two scenarios calculated with the GSIM-model. The results in this chapter have to be considered as a rough estimation of the economic effects caused by the added NTM's.

Consider tables 5.1 and 5.2 for the welfare decomposition and changes in trade at the end of 2012. The effects are purely caused by the difference in the amount of NTM's in the financial services sector between 2008 and 2012.

Table 5.1: Scenario 1 results (3<sup>rd</sup> country spill-over effects excluded).

Left: Welfare decomposition and output changes. Right: Changes in bilateral trade (percentage)

	EU	US	ROW
Consumer Surplus	-1,3	-3,0	3,1
Producers Surplus +	-1,7	-2,1	0,2
Net Welfare effect	-3,0	-5,1	3,3
% Change in output	0,0	-0,2	0,0

		destination		
		EU	US	ROW
origin	EU	0,2	-3,9	0,1
	US	-4,2	0,0	0,9
	ROW	0,0	0,3	-0,1

Table 5.2: Scenario 2 results (3<sup>rd</sup> country spill-over effects included).

Left: Welfare decomposition and output changes. Right: Changes in bilateral trade (percentage)

	EU	US	ROW
Consumer Surplus	-4,6	-3,9	-12,8
Producers Surplus +	-0,6	-3,7	-6,4
Net Welfare effect	-5,2	-7,6	-19,2
% Change in output	-0,1	-0,3	-0,2

		destination		
		EU	US	ROW
origin	EU	0,5	-3,5	-0,8
	US	-3,4	0,0	0,6
	ROW	-0,3	0,1	-0,2

When we look at the above tables some important results stand out.

First, we see in Tables 5.1 – if we do not assume spill-over effects that because of the divergence, EU and US consumer surplus is declining – more so in the US (-3.0 billion) than in the EU (-1.3 billion) while in ROW (Rest of World), consumer surplus is increasing because third countries could take over part of these financial services (e.g. China, Brazil). In other words: the regulatory divergence is like a mirror-image of a normal FTA whereby the partners grow apart and the outside world gains. Remarkable is however, that if we look at the welfare effects in Table 5.2, we see that the spill-over component is crucially important. In the first scenario, the ROW benefitted from the regulatory

divergence between the US and EU. However, in the second scenario, which includes spill-over effects, the impact of the regulatory divergence between EU and US has a significantly larger and negative (!) effect on welfare in third countries. In other words: if we assume that spill-overs occur – that is: the financial services sector is heavily linked globally – we see that EU-US divergence has had a negative effect on the global financial services sectors. Given the degree of interlinkedness between financial services sectors, we believe that the second scenario is more likely.

When we look at output effects, we see that production is affected negatively by the regulatory divergence between EU and US. These effects are stronger when we assume spill-over effects to play a role – for EU, US, but also for ROW. This can be explained by the fact that financial institutions will see increases in their costs of running operations if they have to comply more with more different regulatory systems (i.e. compliance with more divergent regulatory systems leads to higher operational costs). This leads to higher financial costs and lower production. A relevant point to make here is that the GSIM model is likely underestimating the effects because it is a partial equilibrium model and as such does not look at interlinkages between sectors and countries, nor does it look at income effects. This is a limitation of the model.

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When we look at trade flows, we see that bilateral EU-US financial services trade decreases strongly (-3.9% EU-US and -4.2% US-EU in the first scenario) and depending on the degree of spill-over effects, also ROW witnesses some changes. The ROW related percentages are not too high, but involve a large value base.

Overall, the differences in effects on US and EU are remarkable. In particular, our results show that the US has been hit harder by the regulatory divergence than the EU. The cause for this can be partially found in table 4.3. During the period between 2008 and 2012, the increase of US-to-EU NTM's has been higher (5%) than the EU-to-US NTM's (2%). Larger percentage change effects on net welfare and relative trade volume changes follow as a logical consequence.

## Chapter 6: Conclusion

In our analysis we have compared the US and EU in various fields of legislation. We have especially demonstrated the differences and contradictions between both continents, which are the most plausible explanations for the historical emergence of NTM's. Even though the legislative processes of the US and EU share some similarities (for example the separation of powers), their frameworks operate completely independently of each other. On both sides of the Atlantic, several authorities are involved in the decision-making process, all of them with their own interests and backgrounds. Since the mutual awareness of each others frameworks and protocols seems hard to find, the harmonization of laws and rules is very difficult to achieve.

Despite establishments of different bodies and partnerships, which are charged with the task to harmonize laws and rules in the transatlantic financial services sector, only little progress has been made so far. Tables 3.4 and 3.5 show that from the most important NTM's at the start of 2008, just a few have been (partially) removed. Apparently the interests of authorities, bodies and organizations on both sides of the Atlantic are too contradictory for an adequate and quick harmonization of laws and rules.

An other important explanation for the lack of convergence in laws and rules, seems to be the separate responses of the US and EU politicians on the worldwide financial crisis. In order to combat the crisis, both the US and EU authorities seems to have their own ideas of solutions to resolve the problems. Remarkably is their approach of first wanting to resolve the financial problems in their own continents and countries, instead of harmonizing the set of rules with their transatlantic counterparts. The Dodd-Frank Wall Street Reform and Consumer Protection Act (US) and the MiFid's I and II (EU) are absolutely not positive steps towards regulatory harmonization.

We have seen that NTM's form the most important obstacle for international trade. There is thus still a lot of work to do for political bodies which aim a reduction of unnecessary tariffs and barriers. The Transatlantic Trade and Investment Partnership (TTIP) is questionless the most prominent one. In chapter 4 we have shown that there is still a lot to achieve, because the NTM's in the financial services sector are serious barriers for trade. Efforts in TTIP can result in positive trade effects all over the world and especially in the transatlantic. The question may be how. We leave this and other questions regarding this subject for further scientific investigation.

With our calculation in GSIM we find that production, the bilateral trade volume and net welfare (production- and consumer surplus) respond negatively to the increase in regulatory divergence. We demonstrated the influence that 3<sup>rd</sup> country-spillover effects on these measures. If we assume that spill-overs occur we see that EU-US divergence has had a negative effect on

the global financial services sectors. Bilateral EU-US financial services trade decreases strongly and depending on the degree of spill-over effects, also the rest of the world witnesses some changes.

We also find that the US has been hit harder between 2008 and 2011. A logical explanation for this should be the fact that the increase of US-to-EU NTM's has been higher (5%) than the EU-to-US NTM's (2%).

In general, politicians and regulators at both sides of the Atlantic have not succeeded in converging financial services regulations between 2008 and 2012.

## 7. Literature overview

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