



**The Optimum Currency Area Discussion and its
Recommendations for Monetary Integration in Asia**

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Abstract

This thesis offers an analysis of the Optimum Currency Area (OCA) theory discussion and a possible monetary integration in Asia. It is divided into three parts. The first one will give a detailed insight into the OCA theory, its historical background and the main contributions. The second part will highlight the critics and contradictions, but also presents the development and evolution of the theory. The last part deals with Asia, and particularly with East Asia. Therefore the countries of that region will be presented together with their capabilities and opportunities for regional integration will be outlined. Important sections of the third part are the different possibilities of monetary cooperation, a roadmap for monetary integration and an evaluation of Asia's ability to become a monetary area.

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Glossary

ABMI	Asian Bond Market Initiative
ACU	Asian Currency Unit
AFTA	ASEAN Free Trade Area
AMU	Asian Monetary Unit
APEC	Asia-Pacific Economic Cooperation
ASEAN	Association of Southeast Asian Nations
ASEAN+3	ASEAN plus China, Japan & South Korea
CMI	Chiang Mai Initiative
ECU	European Currency Unit
EMU	Economic and Monetary Union of the European Union
ERM	European Exchange Rate Mechanism
ERPD	Economic Review and Policy Dialogue
IMF	International Monetary Fund
RIETI	Research Institute of Economy, Trade & Industry – Hitotsubashi University, Japan
YES	Yen, euro & dollar currency basket

1 Introduction

These days, Greece and the Euro show the world what risks are associated with countries adopting a common currency. In the context of the Greece discussion, questions about the viability of monetary union are likely to arise. But a more constructive question would be to ask, how to learn from the European experience.

Around the globe, in South America, Africa, the Middle East and Asia, politicians and scholars discuss regional integration and common currencies. But why do they discuss the possibilities of a deeper regional integration? With a changing world and the new role of the emerging markets, policy makers search for a way to join their forces. Especially Asia is on the way ahead, multinational companies arise, the intra-regional trade increases and living standards rise. One option to foster the economic development of this part of the world would be a broader regional integration. Discussing regional integration will finally lead to the question of monetary integration.

But how should Asia approach monetary integration? Are there any guidelines or theories to use, is Europe a fitting model and which countries should be part of a monetary area? And lastly, what has history told us about monetary integration, ...

Multiple questions arise, and this essay will propose some recommendations for monetary integration in Asia. The focus is therefore on the Optimum Currency Area (OCA) theory and its evolution over time. So this essay will cover the theory and examine Asia and East Asia in particular in relation to their history, their current economic position and their contribution to a process of regional integration. Based on OCA theory, the reader should get a better picture about the feasibility of monetary integration in Asia.

2 The Optimum Currency Area Theory

The history of the OCA theory goes back to the beginning of the 1960s, during these years Robert A. Mundell (1961) first formulated a criterion to judge a regions optimality to form a common currency area. Others to be mentioned are Ronald I. McKinnon (1963) and Peter B. Kenen (1969). These three men contributed the main pieces for an academic debate where common notion has not been found yet, much more the OCA theory seems to be an unfinished puzzle.

The following section is structured in two parts: The first part takes a brief look at the main conception, basic discussion objectives and the history, with regard to the forefathers of the

OCA theory. The second part will take a closer look on Mundell, McKinnon, Kenen and finally other criteria will be mentioned.

2.1 History, Concepts & Objectives

For a better understanding of the theory, it is useful to take a look at the historical background and the circumstances of mid 20th century. Therefore this section will take a look into monetary history, give an introduction to the questions of the time and present the forefathers of the OCA theory.

2.1.1 The Historical Background of the Optimum Currency Area Debate

The period from 1914 to 1944 was one of the most formative ages in modern history with two world wars and the Great Depression. The development of common monetary policy started during the 19th century, the beginning of the Classical Gold Standard (Wang, 2005) could not be determined clearly, Wang (2005: 21) argues that during 1820s UK first adopted the gold standard, or it could be later during 1870s when western powers followed the British example. In the following decades, until 1914 the world experienced freedom of trade, capital movements, migration and travel as never before (Yeager, 1998: 80f).

The World War I years brought a dramatic change for the monetary system of the early 20th century. Most governments overthrew the gold standard as it hindered them to print more money as means of payment for the war (Wang, 2005: 22). This unfavorable situation resulted in high inflation rates and flexible exchange rates throughout the war until the mid 1920s. During these years several European countries experienced hyperinflation, including Germany in 1923 (1 new mark for 1 trillion old mark) and France later took action with its currency reform in 1926 (Yeager, 1998: 81). Some countries made the attempt to reinstall the gold standard during the 1920s, e.g. the UK and US pegged their currencies to gold whilst others held gold, U.S. dollar or sterling reserves (Wang, 2005: 22), but by the end of the decade these steps towards normalization got hit by the Great Depression. In the aftermath, the combination of misguided policies by the central banks, the economic downturn and World War II lead to major disorders in the international financial system (Wang, 2005: 22), which was reconfigured again at the end of World War II.

In 1944, many of the world's most influential leaders gathered in Bretton Woods, New Hampshire, to overcome the monetary experience of the forgone decades. The discussion during these days was highly influenced by the interwar experiences; especially the role of flexible exchange rates. Ragnar Nurkse's *International Currency Experience* (1944) sees fluctuating exchange rates as a reason of default during the 1920s and 30s (Yeager, 1998: 85). Further-

more, Nurske believed that difficulties in the 1930s were a natural part of any free exchange system (Mints, 1945: 193). On the other hand, others such as Yeager (1998: 85) disagree, claiming that the worst periods during the 1930s were not influenced by fluctuating exchange rates. After much deliberation, finally the international community settled on “fixed exchange rates against the U.S. dollar and an unvarying dollar price of gold – \$ 35 an ounce” (Krugman and Obstfeld, 2009: 515), the so called Bretton Woods system.

The Bretton Woods system initially supported the most prosperous period in the Western hemisphere. It was characterized by the Marshall Plan and the German Wirtschaftswunder in the late 1940/50s. However, only a few years later Britain devalued its currency for the first time, setting a trend that numerous other nations would follow soon after (Yeager, 1998: 88). Another major problem were the balance of payments crisis throughout the 1960s and at the beginning of the 1970s, which could be seen as one reason for the end of Bretton Woods system (Krugman and Obstfeld, 2009: 517).

Finally, though there is no need to analyze the time period from the end of the 19th century to the beginning of the 1970s in detail, it is good to know on which questions, discussions and knowledge the scholars of the 1960s based their findings about the Optimum Currency Area.

2.1.2 Breaking the Ground for the Optimum Currency Debate

In Europe today, often people link total monetary integration with the OCA theory. However, neither Mundell (1961), McKinnon (1963) or Kenen (1969) thought about it when they first published their findings. Their work has to be seen in the light of their time; namely, the newly established Bretton Woods system and the failure of the monetary system in the previous decades. Therefore, they did not promote total monetary integration but rather asked the question for the right exchange regime. This is not to say that they do not refer to recent developments in Europe to justify or advance their theories but they did name factors which should indicate whether or not a region could be classified as optimal. So if countries join to become a monetary area, optimality is given if macroeconomic costs do not rise and its shock absorption abilities do not decline. Finally, one should keep their approaches in mind to understand the relevance of their findings to the present.

2.1.3 The Forefathers of the OCA theory– Friedman and the Others

Although Robert A. Mundell is known as the father of the OCA theory, he was not the first to pioneer into this area. Rather he was the first who formulated a full-fledge theory and named it. During the first years of the Bretton Woods system, numerous economists discussed the issue and outcome of a fixed exchange rate regime, and later formulated statements which

affected the OCA theory. From Ceserano's (2006) point of view, Lerner's *Economics of Control: Principles of Welfare Economics* (1944) was the first who formulated an idea similar to Mundell's approach. On the other side, Friedman (1953) is quoted in several publications. For example, Kawai (1987) mentions him as the initiator of the OCA evolution and also Dellas & Tavlas (2009) quote him as a corner stone for the further development of the OCA theory. The early publications about the OCA theory and its related fields can be divided into two categories: Friedman (1953) on the one hand and the forefathers of Mundell, McKinnon and Kenen (Cesarano, 2006) on the other hand. To differentiate between these two groups is difficult, however, it is possible to say that Friedman was more likely to opt for flexible exchange rates (Kawai, 1987: 740) and that he had a critical view on domestic-stabilization policies recommended by the Keynesian tradition (Dellas and Tavlas, 2009: 1124). Furthermore, the following will help clarify some of these differences.

Common interpretations of Friedman's contribution in the 1950s assume that he advocated for flexible exchange rates (Kawai, 1987: 740). However, Boyer (Boyer, 2009: 1106f) defends Friedman and points out that he was someone who weighted the options. Furthermore, Boyer adds Friedman's work has to be seen as a foundation for the later OCA theory. The main issue for all OCA theorists is the performance of a readjustment process for a single country and how to bring the economy back into equilibrium. Regarding this issue all mentioned authors, including Friedman, differentiate themselves from the classic point of view which sees the world as the optimum currency area. In the classical system, markets would reestablish equilibrium by themselves and therefore multiple currencies are not necessary and would only result in higher cost for the economy (Mundell, 1961: 662). In the following step Friedman sets himself apart from the other authors because he was convinced that the application of monetary policy and flexible exchange rates will support a smooth readjustment of the economy. Therefore, he mentions three core arguments: first, that the existence of sticky prices and wages in the real economy in line with a flexible exchange rate would avoid the rise of a balance of payment crises, second, that independent monetary policy would avoid negative effects due to a failure of a foreign central bank, and lastly, that multilateral trade would be enhanced if capital and good controls were removed (Dellas and Tavlas, 2009: 1119). From that view, Friedman came to the conclusion that in an imperfect world where the movement of labor, goods and capital are not free, regional monetary areas are required to outbalance disequilibria by means of flexible exchange rates¹. To fully understand him, however, there is the need to put his conclusions in a broader context to the monetary policy of the post-war dec-

¹ See correspondence between Friedman (1952) and Robbins (1952) mentioned in Dellas & Talvas (2009)

ades and his concepts regarding the natural rate of unemployment and the revised Philips Curve.

As already mentioned, Dellas & Talvas (2009) say that Friedman ground his finding on a different paradigm than other economists of his time such as Mundell, Lerner, Meade and Scitovsky (Dellas and Tavlas, 2009: 1121). In contrast, Ceserano (2006), from whom Dellas & Talvas (2009) differentiates their work, draws the line from Lerner to Mundell. In the following some basic introduction to this approach should be given. The framework Lerner was working with was the gold standard of his time. Maintaining the currencies' value is the central banks' core function and therefore also interferes with the objective of full employment. Considering that the main difference between the classical paradigm and the Keynesian paradigm is that the classical view holds that an increase in interest rates does not change the unemployment rate at all; rather, it only affects the distribution between savings and consumption by the consumers (Baßeler, Heinrich and Utecht, 2006: 298f). On the other hand, the Keynesian paradigm counters that increasing interest rates would lead to an increase in unemployment (Cesarano, 2006: 719). Coming from the Keynesian point of view, Ceserano (2006: 719) explains that there are three ways from Lerner's point of view that increasing interest rates would affect the economy: first it would attract foreign funds and would be an incentive to keep funds at home, second the investment would fall and the unemployment would rise, and third the falling prices for export goods result in higher exports and strengthen the domestic industry until full employment is restored. Ceserano (2006: 720f) describes this circular flow of readjustment as a smooth course of action and mentions Lerner's question: Why is this process only limited to national boundaries. Therefore, Lerner comes to the conclusion that national borders hindering the free flow of goods, people and capital. As a result, national borders have to be removed to enhance free movement of production factors.

Both authors approach Mundell from different sides and mention elements of his theory, however, their selectivity prevents them from formulating a holistic theory. The next paragraph will first take a look on Mundell and then introduce the further OCA theorists.

2.2 Three pale Men – Mundell, McKinnon & Kenen

The first economist who formulated the term optimum currency area was Robert A. Mundell with his publication *A Theory of Optimum Currency Area* (1961). In following years Ronald I. McKinnon (1963) and Peter B. Kenen (1969) arose, and both of them added new aspects and refined Mundell's criterion. The following will present their approaches and in a last step sum them up and add further common criteria.

2.2.1 Mundell

Optimum currency areas are those within which people move easily
(Baldwin and Wyplosz, 2009: 322).

The Canadian economist, Robert A. Mundell, could be called the father of the OCA theory and the initial quote summarizes his basic assumption. In his publication he uses an example of two countries which are not optimum currency areas and expect a demand shift from *Country A* to *Country B* (McKinnon, 2005: 202). Initially both countries had full employment and balance-of-payments equilibrium. Furthermore, wages and prices are fixed and the main objective for the central banks is to keep price stability (Mundell, 1961: 658). If these two countries are separate currency areas, then the external imbalance could be outweighed by an appreciation of *Country A's* currency or a depreciation of the currency of *Country B*. If not, then country B has to accept a decline in output and employment. In his next step, Mundell extended his model in a similar manner to include a monetary union formed between the U.S. and Canada, where the continent West is producing product *A* and the continent East producing product *B*. It is also important to assume that there is no labor mobility from the West to the East and vice versa. So, in this example the productivity shock of product *B*, initiated by technical progress, results in excess demand for product *A* and excess supply for product *B*. Therefore, regardless of whatever measures the central bank will take, it always has negative effects for one of the participating countries: unemployment throughout the whole area as a result of the monetary tightening, inflation throughout the whole area and/or unemployment in the West and inflation in the East (Mundell, 1961: 659f). Based on this argumentation Mundell overthrew the idea of national borders indicating optimum currency areas and defined that a region is better fitted.

After these preliminary considerations Mundell developed his criteria for an optimum currency area where the center thereof is the labor mobility. It can be assumed that an asymmetric shock between the countries can be outweighed as labor from the negative affected country would easily move to the positively affected, which therefore would make any policy by the central bank redundant. As further argument for optimality he adds the flexibility of wages. Their level would adapt to the supply and demand situation for each country, which would influence the consumer behavior (Dellas and Tavlas, 2009: 1123) and finally restore equilibrium for both. A third argument for optimality goes along with the limitation of an optimum currency area and leads back to the initial model of Mundell's considerations. It is said that flexible exchange rates and separate monetary policies are efficient if labor mobility and/or wage-price flexibility is not given (Dellas and Tavlas, 2009: 1123).

However, the model Mundell created also comprises some limitations. The mobility of labor in an ideal perspective should extend to the mobility of the other production factors, which in the real world, will face certain constraints. So far mobility is comprehensible for financial capital but regarding installed physical capital, the application of the free movement will be hindered (Baldwin and Wyplosz, 2009: 324). Considering that Mundell knew about these and other constraints of his model, he nevertheless fought against balkanization, as McKinnon (2005: 202) calls it, the fifth chapter of Mundell's 1961 paper deals with the numerical upper limits of currencies and currency areas. This particular chapter can be seen as the introduction to his final debate where he tries to identify the right choice between flexible and fixed exchange rates. Finally there are two questions remaining: first, can the system of flexible exchange rates be effective and efficient, and second, how the world should be divided in currency areas and therefore where do we need fixed currencies (Mundell, 1961: 663).

In summary, Mundell rethought a common assumption that countries are seen as optimal currency areas. His work provides a tool to examine if that is the true case. Despite their different positions, he is very much in line with Friedman who was a mastermind regarding the smooth readjustment process. Lerner on the other side misses out a detailed analysis and quickly generalizes his point of view.

2.2.2 McKinnon

Countries which are very open to trade and trade heavily with each other form an optimum currency area (Baldwin and Wyplosz, 2009: 326).

With his work McKinnon advanced the idea of Mundell (1961) and added a second criterion to the OCA theory. His approach is quite similar but his analysis is from a different perspective and like Mundell, he tries to diminish the risks of a shock for an economy. Moreover, he analyzes the economy from the perspective of trade and introduces the concept of openness.

From his point of view an optimum currency area has to achieve the following three objectives: full employment, balanced international payments and a stable internal price level (McKinnon, 1963: 717). The openness of an economy is identifiable through the trade structure. This is indicated by the ratio of tradable to non-tradable goods because the more tradable goods an economy consumes the more open it is. Tradable goods are defined as import and export goods, regardless of whether or not they were produced abroad or domestically. Non-tradable goods on the other hand, are domestic produced goods which do not participate in international trade. For his considerations he develops two cases, first an economy with a

high consumption of tradable goods (*Case 1*) and second an economy with a high consumption of non-tradable goods (*Case 2*).

The observed economy in *Case 1* has a high degree of openness, a flexible exchange rate to the outside world and by means it is used to keep the external balance in equilibrium. As the economy consumes a high amount of tradable goods, the domestic price level is significantly correlated to international prices and therefore a change of the exchange rate would directly be transmitted to the cost of living (Mongelli, 2002: 9). McKinnon points out that a fully integrated economy where all goods are tradable would have to take the prices set by the outside world. In short, the application of flexible exchange rates to achieve external balance diminishes as the more open the economy becomes (McKinnon, 1963: 719). The setup for *Case 2* is slightly different. The economy is relatively closed and produces for the most part non-tradable goods. Also McKinnon chooses to peg the domestic currency to a basket of non-tradable goods. The question for policymakers is about how they want to fulfill the objectives for their economic area. For example, employment could be enhanced through a depreciation of the own currency and the prices for domestically produced tradable goods would be more competitive on international markets, which would have a positive effect on the trade balance. On the other hand, tight monetary and fiscal policy can improve the external balance and bring other negative effects along (e.g. unemployment). McKinnon describes the last case as the permission to “let the tail wag with the dog”; in other words, the almost insignificant amount of tradable goods misguides the policy at the cost of domestic interests (McKinnon, 1963: 720).

Note also that in a similar vein to Mundell and the forefathers, McKinnon based his consideration on the issue about how an economic shock could be avoided or outweighed smoothly by means of exchange rate regime. Based on the two presented cases, he draws several conclusions. Firstly, open economies should peg their currencies, secondly, economic areas that trade broadly with each other would benefit by forming a currency area (Dellas and Tavlas, 2009: 1125), and lastly, the size of the economy has significant influence on the chosen exchange rate regime (McKinnon, 1963: 722). Consequently, a large area can have a flexible exchange rate to the outside world, whereas a small area with a high ratio of tradable goods would benefit from a peg to a foreign currency.

2.2.3 Kenen

Countries whose production and exports are widely diversified and of similar structure form an optimum currency area (Baldwin and Wyplosz, 2009: 325).

The first part of Kenen's work describes the limits and weaknesses of Mundell's theory and proposes his criteria for an optimum currency area. The following summarizes Kenen's criticism and then clarifies his own theory. In addition to this discussion, Kenen also mentioned fiscal integration as a criterion as it assumes economic integration that goes beyond monetary integration. However, as it lies outside the scope of this essay, it will not be explained in detail.

The aim of Kenen's work was not to dispraise Mundell because he actually agrees with the main lines of the argument. However, Kenen believed there was a better approach to define optimality. The critique is that Mundell's criterion would lead to very small currency areas. Kenen's issue was that labor not only has to be mobile but also homogenous – as he calls it, the “perfect occupational mobility” – which is not given in a big monetary area (Kenen, 1969: 44), comparable to the Economic and Monetary Union of the European Union (EMU). Both, he and Mundell agree that “a multitude of micro regions” (Kenen, 1969: 45), each with its own currency, is not the final goal and neither beneficial for the economy. Furthermore, Kenen notes out that both he and Mundell tried to identify when one should recommend that currencies should be fixed or floated (Kenen, 1969: 48).

Kenen values the diversity of a country's product mix higher than Mundell's argument for labor mobility. Therefore, he has three key points: firstly, diversified economies do not have to undergo changes in their terms of trade as often as single-product economies, secondly, the rise of unemployment due to a decline in demand of the main export goods will not be as harsh as for a single-product economy, and thirdly, the linkage between exports and investment will be reduced (Kenen, 1969: 49f). Kenen justifies his first point by arguing that each export good could be affected by disturbances. If the export commodities are independent goods, then overall economic earnings will not be hit by the shock. In his second point, he underlines that whilst diversification reduces the negative outcome of an external shock, it will not diminish the probability of a major shock. With a four country model, given the characteristics of small or large and diversified or not-diversified, Kenen explains the effects of exogenous disturbances on the labor market and illustrates that diversified economies are overall better off. With his third point he reverts to his first remark that diversification implies consistence of the economic earning on exports, which means that inflationary pressure and other instability on the capital markets are reduced. In general, one must be aware that his assumptions only apply to disturbances of single goods or a group of substitutes and not when a whole economy is hit by a recession. Although Kenen does not formulate a concise definition of his optimum currency criterion, he does explain its benefits and concludes that fixed exchange rates seem to be most appropriate for a diversified economic area.

In later years, numerous scholars used his criterion of perfect occupational mobility and the product diversification. The former led them to assume that economic areas with labor mobility and narrow or similar structures are well fitted for an optimum currency area. And later assumption refers to the idea explained above (Dellas and Tavlas, 2009: 1125).

2.2.4 Further Criteria for an Optimum Currency Area

Several other authors contributed with their work to the optimum currency area; however it was mainly Mundell, McKinnon and Kenen who spearheaded the discussion. The following provides a summary of the characteristics they defined and further OCA criteria.

Mundell was the first who presented his ideas in 1961 and the core focus in his criteria was labor mobility. Dellas and Tavlas (2009: 1125) mention that wage and price flexibility and the incidence of asymmetric shocks would also be part of Kenen's framework. The first mentioned is hard to justify in a Keynesian framework and asymmetric shocks are to be taken for granted throughout the whole OCA discussion. Furthermore, McKinnon added openness and trade integration, and the size of an economy. In the last presented contribution, Kenen mentioned the degree of product diversification and the similarity of two economies. His other point on fiscal integration is only a sideline but nevertheless an important factor in the case of broader monetary integration.

Throughout literature, one can find further OCA criteria; therefore the following only shortly covers the basics. So, the price and wage flexibility concept which is mentioned in Mongelli's (2002: 8) working paper, stemming from Friedman himself, is also part of Mundell's concept (see above). The financial market integration is widely credited to James C. Ingram and his publications in the 1960s and 70s, Kawai (1987: 740), Mongelli (2002: 9) and Krayl (2009: 78), only to mention a few who cite him. John Marcus Fleming formulated the criteria of similarities of inflation rates (Mongelli, 2002: 9) or as Krayl (2009: 79) puts it, the harmonization of inflation rates. Another mentioned characteristic is political integration which is found in Mongelli's work (2002: 10) and Kawai's contribution to the *The new Palgrave* (1987: 741).

3 The Development of the OCA Theory over Time

The history of the OCA theory has been turbulent but in general scholars define three phases: firstly, the initial phase during the 1960s, which was followed by a rather calm period in the following decades which can be described as the forgotten ones. Later on came its renaissance in the 1980s and early 90s. The first pages of this essay explained the theory and its background in detail whilst the following sections trace the further development of the OCA theory.

These are, the general contradictions and critics which most likely contributed to a fall into insignificance, the new findings and policy changes which lead to the comeback, and lastly, the achievements of the discussion will be evaluated.

3.1 General Contradictions and Critics about the OCA Theory

From the beginning, the OCA theory had opposition which most likely was a result of its inherited contradictions and its missing practical relevance (Ishiyama, 1975: 378). Johnson (1969: 395) formulated the well known definition of a “dead-end problem”, the reasons therefore will be described in the following.

3.1.1 The Problem of Inconclusiveness and Inconsistency

An important note is that the authors of the OCA theory did not actually develop a common theory together but rather each of them had his own view on optimality and expressed it. They sought to establish common ground whilst also critiquing the other’s contribution. Inevitably contradictions arise when different authors get together to form a full-fledged theory, and Mongelli (2002;2008) and Dellas & Tavlas (2009: 1126) give some credible reasons for the inconsistency of the early OCA theory. Robson (1998), who first published his work at the end of the 1980s, laid the foundation for them. Best described could it be with the terms formulated by Tavlas (1994: 213f): “the problems of inconclusiveness and inconsistency”.

The problem of inconclusiveness is characterized by the difficulty that the implications vary regarding different criteria, and point in different directions (Mongelli, 2008: 4). For example, a country which trades heavily with its neighbors should agree on fixed exchange rates, but yet on the other hand, the lacking factor mobility between them would be an argument for flexible exchange rates. In this context the critics of Robson (1998: 192) note that the criteria are difficult to weigh against each other and are unambiguous. Therefore, a clear decision is almost impossible which gives no advice to the participating countries. From a different angle, the problem of inconsistency is also quite similar, but states that the individual country should be taken into account. The results from the different criteria even vary if on country is analyzed and therefore a basis for decision making cannot be given (Tavlas, 1994: 213f).

3.1.2 Limitations of Application – the European Case

As the above illustrates, the OCA theory was not easily applicable to real time questions. An important centerpiece for the monetary discussions during the second half of the 20th century, where this theory lacked relevance, was the EMU. The *One Market, One Money* report by Emerson et al. (1992) mentions that there would not be a “ready-to-use theory for assessing the cost and benefits of an [economic and monetary union]” (Emerson et al., 1992: 31), or in

other words, the OCA theory gave no advice to European leaders and therefore was unhelpful. There is further criticism to mention, which especially in the light of a possible monetary union became apparent. One is that the theory focuses on characteristics which should be fulfilled by an economy before joining a monetary union (Dellas and Tavlas, 2009: 1131) and Mongelli (2008: 4) criticizes the backward-looking approach. He wants rather point to the fact that the OCA theory does not take into account changes caused by unification.

3.2 Comeback & Revision of the OCA Theory

The above mentioned contradictions and critics were responsible for the 20 year plunge of the *old OCA theory*. At the end of the 1980s it returned on stage and underwent a revision and advancement (Tavlas, 1993: 664). Most of its criticisms were tackled and gave answers to modern day questions of monetary integration. The main impulse was given by the European Council in 1988 with its decision to establish the EMU. As a result, a manifold debate in politics and science created the new and revised ideas whose major contributions during the early period was to the Delors Report in 1989 (ECB, 2010) and *One Market, One Money* by Emerson et al. (1992). Besides the impact of the European Union, an adjustment in the understanding of monetary policy gave way for the redefined OCA theory. The following will first present the changes in monetary policy understanding, especially Friedman's contribution, followed by new findings.

3.2.1 Monetarism and its Influence on Monetary Policy

Towards the end of the 1960s, the OCA theory was discussed and became established. There Friedman published a work that still needed a couple of decades to become part of everyday monetary policy. His publication *The Role for Monetary Policy* (Friedman, 1968) overthrew the common understanding and application of monetary policy and therefore also a basic assumption of the OCA theory. An important part of his days monetary policy was the revised Philips relationship by Samuelson and Solow (1960), which is the concept of a stable Philips curve which offer policy makers a trade-off between inflation and unemployment (Beckmann et al., 2000: 34). This approach was a major tool of Keynesian stabilization policy (Mongelli, 2008: 5) in which Mundell, McKinnon and Kenen embedded their OCA theory. Therefore, giving up monetary authority through pegging the currency was linked to high macroeconomic costs for a country. With his 1968 address, Friedman set the starting point of a new era in monetary policy anticipations. He revealed that there is no trade-off in the long-run and therefore made the argument for monetary policy as a political instrument – for example, to strengthen demand – obsolete. Today Friedman's concept is known as the natural rate of unemployment (NAIRU) or the so called vertical Philips curve, and is a decisive part of modern monetarist

thinking. The development had a high influence on the function of modern central banks and the achievement of price-stability in the medium term, which therefore makes low inflation a common goal today (Dellas and Tavlas, 2009: 1130). Based on this development, politicians and central banks do not see the loss of monetary authority as such a high cost anymore. Therefore it is rather interesting for countries with a history of high inflation and a dwindling monetary credibility to peg their exchange rate or join a monetary union with a low inflation country (Mongelli, 2008: 6). Besides that one should remember that in the short run there are still costs of a deflation process if a country peg its currency to a low inflation country (Beckmann et al., 2000: 34) and that the question of price stability was already part of the discussion within the early OCA theory (Willett, 2001: 12), as shown above.

3.2.2 Friedman's Early Contribution in the Light of Monetarism

To value Friedman's work properly it is important to remind how the different authors approached and thought about flexible and fix exchange rates. In general, all of them had certain criteria for the optimality of a currency area, however they approached it differently. Mundell, McKinnon and Kenen valued the positive effects of fix exchange rates but with it they also saw the difficulties it could bring along. Especially with a Keynesian framework in mind, which uses monetary policy as a major policy instrument. Therefore, they tried to figure out if there is a possibility to create a monetary union where giving up this instrument will not lead to higher costs. Friedman came from a different direction. He preferred flexible exchange rates and suggested the circumstances given if a country wants to join for a monetary union. A major difference between both sides was the understanding of monetary policy. Friedman saw it in the context of international trade and therefore the possibility to enhance a country's competitiveness. Others thought about both the national and international perspective. Finally, Friedman revealed, that there is no need for the national perspective and thereby gave the OCA discussion a new direction.

The next sections show how Friedman's point of view helped judge the benefits of a monetary union. In terms of low inflation policy his work could be seen as an incentive to join a monetary area and to lower entry barriers.

3.2.3 Benefits of Joining a Monetary Union

The idea to peg the currency of a high inflation country to a country with a history of low inflation is based on findings about the time consistency of monetary policy decisions, which goes back to the groundbreaking publications by Kydland and Prescott (1977) and Barro and Gordon (1983). The idea behind the concept is that monetary authorities are tempted to cheat; the official policy envisions an inflation rate equal to zero (or any other inflation target) and there-

fore, as the economic agents do not anticipate it, a monetary expansion would have positive employment effects (De Grauwe, 2007: 47). As policy makers are at risk to base their decisions on short sighted results – for example, positive effects on demand and employment ahead of elections – they will stick to the pattern. These experiences lead to the assumption that announcements regarding inflation targeting are inconsistent. Over time the economic agents will realize the behavior of their authorities and anticipate and accept a constantly high inflation rate (Beckmann et al., 2000: 34). Over a long time period policy makers would have the opportunity to defend the public assumption and regain reputation for a low inflation rate (De Grauwe, 2007: 48). So, an easier way to achieve low inflation credibility would be to peg the own currency to a low inflation currency or to join a monetary union. Both options, to peg the currency or to join a monetary union have their limitations. The first one is that if the country would realign its pegged currency too often, as Italy did within the European Monetary System (Beckmann et al., 2000: 35), it would ruin the spillover effects of the reference currency. A common way to deal with that risk is the so called *dollarization*. This is where sovereign nations give up their own currency and take over the dollar as their official means of payment (De Grauwe, 2007: 52). Another limitation is the non-existence of credibility for the new established central bank, most likely, as both partners contribute to the new found institution; there will be a gain for the high inflation country and a loss for the low inflation country. Nevertheless the European Central Bank showed that the right setup of the institutional framework can avoid those anticipations.

3.2.4 The Endogeneity of the OCA Criteria

Moving forward within the readjustment of the OCA theory led to one of the major accomplishments of the discussion, and therefore is a relevant matter any discussion regarding monetary integration in Asia. It is the so called endogeneity of the criteria and replies to the backward-looking approach which was criticized earlier by Mongelli (2008). The central question behind the so called endogeneity is whether the creation of a monetary union which does not fulfill the OCA criteria (ex-ante) would foster a development of an OCA in the long-run (ex-post). The idea was masterminded by Andrew Rose and Jeffery Frankel at the very end of the 1990s and the beginning of the following decade. For example, De Grauwe (2007: 96) mentions their initial work *The Endogeneity of the Optimum Currency Area Criteria* (Frankel and Rose, 1998), whose following several other papers set the starting point in the discussion. Today, scholars discuss several different endogeneities; however, Frankel and Rose defined one of the core endogeneities: monetary integration advance and deepen the reciprocal trade. The reasons therefore are numerous; however, in the center of the consideration are “borders” (Dellas and Tavlas, 2009: 1132), which arise through the existence of different monies and

disappear through the monetary integration. With the creation of a monetary union the exchange rate risk diminishes, which therefore reduces the need to hedge currencies (Mongelli, 2008: 7). Besides that, the information costs lower and the transparency of prices increase. In the case of the EMU, it accelerated the Single Market Program with its aim to reduce market segmentation and foster competition. These market based forces differ to the now presented one, which could be described as psychological, and finally led to a deeper integration within the area. A common currency is judged as a commitment to a broader integration which goes beyond monetary integration and includes property rights, non-tariff trade barriers, labor policy, regulations, and social policy. The whole process of formerly monetary integration enhances reciprocal trade, economic and financial integration, and in the long run, will most likely synchronize business cycles (De Grauwe and Mongelli, 2005: 5). Therefore, the monetary union is able to reach a new level of fulfilling the OCA criteria. Furthermore, the higher integrated area with its common business cycles will experience demand shocks across borders (Beckmann et al., 2000: 36), but as the intra-industry trade increase over time, the need for country-specific monetary policies reduce and the cost of losing monetary authority diminishes. At this point, the endogenous OCA theory reverses the old OCA approach while the historically first one sought for commonalities the later one defines the monetary union itself as a shock absorber.

Beside the above mentioned endogeneities there are further or even similar ones who developed over time, or to put it in Mongelli's words "From the endogeneity of OCA to endogeneities of OCA" (2008: 7). In the quoted work and in a collaborative publication with De Grauwe (2005) he mentions the endogeneity of financial integration or equivalently of insurance schemes provided by capital markets, the endogeneity of symmetry of shocks and (similarly) synchronization of outputs and the endogeneity of product and labor market flexibility.

3.3 The Achievements of the Discussion

The complex discussion functions to provide a useful theoretical framework. Very soon after initial publications, scholars recognized that the OCA theory had several limitations. But as history sometimes develops in an unexpected way, the OCA history did too. Instead of resignation the fathers of the Euro fueled the discussion and advanced it. The monetarist influence on monetary policy has to be seen as one of the huge achievements of the 20th century, and as Friedmans theory has become generally accepted, new doors for monetary cooperation have been opened. Based on Friedman's ideas, the perspective on the OCA theory changed as its founders formulated them as pre-criteria whether the later adaption converted it an ideal which should be achieved in the long run. Nowadays, the theory is seen as a

benchmark to judge whether or not monetary unification is something to aspire and beside it explains the possible benefits. For these days political leaders the question to join a monetary union is not to answer with an Yes or No, much more the OCA theory delivers a detailed framework upon a roadmap for monetary integration could be developed.

4 Monetary Integration in Asia

Having discussed the OCA theory, the following focuses on whether or not an Asian financial integration is possible. There are two parts: the first examines the situation in Asia, thereby two regions which would be best suited, North- and Southeast Asia, and their attempts towards regionalism will be presented, and the second part discusses the general question of monetary integration.

4.1 Defining Regions within Asia

Asia's dimension is impressive; it spreads from Siberia in the north to the Indonesian islands in the south, and from Turkey in the west to the islands of Japan in the east. The continent is the biggest and most populous and therefore it is not surprising that Asia is one of the most culturally rich and diverse regions in the world. Therefore, a general approach for the Asian continent is impossible. More importantly, there is the need to define the regions within Asia and analyze whether there are any movements towards regionalization.

The following will emphasize on two regions, first Northeast Asia with China and Japan, and then Southeast Asia. Finally, the Association of Southeast Asian Nations (ASEAN) contribution to join the East Asian countries will be presented. There are more countries that could be covered but there are several reasons to limit to the above mentioned: regionalism in other parts of Asia is very limited and recent scientific publications focus on East Asia.

4.1.1 Northeast Asia – China versus Japan

Two superpowers of the Asian continent are located at the very East, China and Japan. Beside their economic relevance for the continent and in the world, these two countries have a long standing history which shaped the past of Asia and which is still noticeable today. This section is divided into four sub-items; the first two sub-clauses are a brief look on China and Japan, with regard to the past development, actual standing and current economic situation, the third will give a broader overview of other countries in the region and the fourth provides further implications for regionalism in Northeast Asia.

4.1.1.1 China

China the world most populous nation, with 1.3 billion inhabitants (CIA, 2010) and the continents biggest country, has a rich and glorious history. The Chinese started early to shape the continent with its political and economic influence. Its modern history is highly influenced by the communist revolution in the aftermath of World War II which had implications for the future development of the country. It took the country until the very end of the 20th century to return on the world stage. Chinas 2009 GDP (PPP) of 8.8 trillion US-Dollar (CIA, 2010) was the world 3rd largest and its growth rate of 8.7% (2009) was one of the leading. China is highly integrated in international trade and is one of the leading export and import nations worldwide (CIA, 2010). For upcoming years economists expect that the country will continue its growth path. Also, in terms of exchange rate development, a modest appreciation of the renminbi will probably take place. In spite of this, the country judges the exchange rate as a major policy instrument and will not accept any intervention from abroad, especially from the U.S. In the field of foreign policy, China has a twofold approach. On the one hand, relations with Taiwan have improved and the country fulfills a key role in negotiations with North Korea, yet on the other hand, China has gained a new self-confidence with disregard to global issues and puts its own particular interests and sentiments first (EIU, 2010: 5).

4.1.1.2 Japan

Even if the pure numbers of Japan are not as outstanding as of China, the archipelago with over 6,000 islands (Ministry of Internal Affairs and Communication. Japan, 2010) has a remarkable history and was the first outpost of the industrialized world in Asia. The history of modern Japan goes back to the beginning of the 17th century. In 1854 with the Treaty of Kanagawa Japan opened its ports and the country moved towards a pro-western policy (CIA, 2010). The following decades Japan rose to a regional superpower and enlarged its sphere of influence. However, on the heights of its imperialistic endeavor the country experienced the biggest downfall in history as it forced America into World War II, resulting in Japans defeat a couple of years later. Despite being defeated by the U.S., Japan developed close economic ties with the U.S. which brought about their remarkable recovery from the 1960s on.

Japan was way ahead of the so called East Asian Tigers and the economic uprising of China in the early 1990s. Today, the country along with the U.S. and the EU belongs to the so called Triad; the big three in international trade. With a population of 127 million inhabitants (CIA, 2010), the country generates the 4th largest GDP (PPP) in the world, with 4.1 trillion US-Dollar in 2009. However, nevertheless the country has faced huge challenges since the beginning of the 1990s where growth declined and averaged around 1.7% during the decade, followed by a

modest pickup of the economy as it turned into recession in 2008. Even if the Japanese banking sector was not hit directly by the turmoil on financial markets, the outcome of the global crisis and the ongoing recession pushed Japan deeper into depression. Japan's current economic situation is not outstanding in comparison to other developed economies, e.g. Germany, Italy, Sweden, Luxembourg, the U.K., the Netherlands and Taiwan faced an economic downturn quite similar ($-6\% \leq \text{GDP growth} \leq -4\%$). What is critical and makes it difficult for Japan is the longstanding economic weakness with an average GDP growth of only 1.2% throughout the last 20 years. (IMF, 2009). The economic outlook for Japan is not too optimistic as the slow pick up of the Economy is driven by exports and the yen is expected to appreciate slightly against the US-Dollar. Regarding its foreign relations Japan is dependent on good foreign relations to its Asian neighbors and trading partners, but still its past and the way it deals with it can be a hindrance to build deeper relationships. In the center are actions and circumstances which seems to underline Japan's predominance on the Asian continent. The visit of the former Prime Minister Junichiro Koizumi to the Yasukuni Shrine, history textbooks for Japanese students and their presentation of the country's role during World War II, and territorial disputes with its direct neighbors (Dent, 2008: 174). A new area in Sino-Japanese relations began with the visit of the former Prime Minister Shinzo Abe to China in October 2006 and the return visit during 2007 of the Chinese Premier Wen Jiabao, even if still some friction appears from time to time (Dent, 2008: 175).

4.1.1.3 Further Northeast Asian Countries

Observing East Asia without taking a look at South Korea and Taiwan is almost impossible. Not only does their economic performance and relevance in international trade put them in a prominent position, but also their influence to security on the continent. Both countries belong to the so called East Asian Tiger states and their economic development started during the 1960s, which was characterized by a common macroeconomic concept. Both South Korea and Taiwan's GDP ranks in the world's top 20, with South Korea at US\$ 1.3 trillion GDP (PPP) and Taiwan with a US\$ 708 billion GDP (PPP) in 2009 (CIA, 2010). Another prominent country, and also part of the East Asian Tigers, is Hong Kong with an economic history as remarkable as for the other countries. Its importance for the region is invaluable, but since the restoration to China its political freedom is bound to the mainland.

4.1.1.4 Implications for Regionalism derived from East Asia Conditions

Taking a closer look at Northeast Asia reveals underlying political tension. The two big players, China and Japan, want to safeguard their influence in the region through economic ties, political partnerships and financial commitment. Each action taken by one of the countries could be

judged as a move towards imperialistic attempts, as Japan is often branded by the Asian society.

Therefore, it is not surprising that the country started several approaches to gain the trust of Asian leaders. The country's goodwill expresses especially in its development assistance policy where there are a whole list of activities: the foundation of the Asian Development Bank in 1966, which roots on a Japanese initiative (Dent, 2008: 154), the Japanese-ASEAN Investment Company, a 1981 established organization with the aim to attract development-oriented funds into Southeast Asia, and linked to it the 1987 ASEAN-Japan Development Fund (Dent, 2008: 154). A further activity is the Japan-ASEAN Comprehensive Economic Partnership (JACEP), a US\$4 billion fund financed by Japan to support the ASEAN efforts to reduce the gap among the member states (Dent, 2008: 104). Outstanding was the financial diplomacy in the aftermath of the 2004 Asian Tsunami, where Japan offered US\$500 million and therefore outweighed China's giving. Dent (2008: 175) describes the financial diplomacy "as key instrument when the country (Japan) has sought to practice regional leadership", and he also remarks that China at times would be wary about it.

China also seeks regional leadership and follows an active strategy of development assistance throughout the region. Hindrances on the way to a holistic regionalism in Asia could also be friction in the Strait of Taiwan (Kenen and Meade, 2008: 147). Dent (2008: 167ff) contributes a whole case study to *Taiwan's marginalization in East Asian regionalism*, and expresses clearly that the non-integration of Taiwan is a consequence of China's political action and influence on its neighboring countries. Another interesting aspect is the role of Hong Kong. As one of the leading economies in the region, it would be a stabilizing partner for any approach of regional integration. However, even if it experiences a lot of freedom under the *One country, two systems* framework, China will not allow any actions which are against their interests.

Nevertheless, the role of South Korea for a further unification of the Asian continent could be exceptional. In his contribution, Kim (2009) contributes a huge part of the section *The Roles of East Asian States* (Kim, 2009: 55f) to it. He does not only explain that the country has an interest in a peaceful future of the continent – as a war on the Korean peninsula would be devastating – but also points out, the possibility to act as a mediator between China and Japan and a representative of the small Asian countries.

To derive universal implications for further regionalism in Northeast Asia is almost impossible; resentments, different political understanding and fears could arise easily and hinder a deeper cooperation. Never the less there are two major paths to go if Northeast Asia will participate in

monetary integration. The first one includes a solution where China and Japan take the lead, therefore both countries have to overcome their egoism and build up an understanding for each other. In Kims (2009) contribution it is noted that some scholars think a Sino-Japanese alliance would have a momentum comparable to the German-French during the European unification (Kim, 2009: 55). The author remarks, differences between these two countries would appear regarding the economic development, political system and regional security interest. The second path would be without the participation of China and Japan, and therefore it is questionable to which degree a monetary integration is doable in Northeast Asia, and if so, how far cooperation with Southeast Asia would make sense. In that case, it seems much more reasonable to foster an independent Southeast Asian solution. The next section will take a closer look on Southeast Asia and how far prerequisites for further integration are fulfilled.

4.1.2 Southeast Asia

Taking a closer look on Southeast Asia, the observer will figure out that it is quite different to its northern brother. This particular part of the Asian continent is much more diverse; the countries are smaller but there are more of them and it has a different history. The region as a whole is home to 11 nations: Brunei, Cambodia, East Timor, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam.

There are several different ways to express those differences in regard to the political system, religion, their history or the per capita income. A good tool to examine the differences among the countries is the Human Development Index (HDI), the formula defining the HDI includes: life expectancy at birth, adult literacy rate, combined cross enrolment ratio in education and GDP per capita (PPP) (UNDP, 2009).

The table below illustrates inhomogeneous development in the region. It ranges from Singapore, one of the leading economies in the world and a perfect model of economic development, to countries like Myanmar and East Timor, whereby the former is led by an autocratic regime (Kenen and Meade, 2008: 148). Most of the Southeast Asian countries are young nation-states compared to their northeastern neighbours. The only country out of the above mentioned 11 countries that was not colonized is Thailand. The others gained their sovereignty in the years after World War II, and even since then Southeast Asia was not able to settle quietly, territorial and sovereignty disputes arose from the early 1960s on and emerge even today from time to time (Kenen and Meade, 2008: 86). Today Southeast Asia is characterized by a wide range of political systems, young democracies, socialist-communist states, military juntas and absolut monarchies.

Table 1: HDI for Southeast Asia

Country	HDI Rank	HDI Value	GDP
	Out of 182 countries		per capita (PPP) in US\$
	<i>Very High Human Development</i>		
Singapore	23	0.944	49,704
Brunei Darussalam	30	0.920	50,200
	<i>High Human Development</i>		
Malaysia	66	0.829	13,518
	<i>Medium Human Development</i>		
Thailand	87	0.783	8,135
Philippines	105	0.751	3,406
Indonesia	111	0.734	3,712
Vietnam	116	0.725	2,600
Lao People's Democratic Republic	133	0.619	2,165
Cambodia	137	0.593	1,802
Myanmar	138	0.586	904
	<i>Low Human Development</i>		
East Timor	162	0.489	717

Source: Human development index 2007 and its components (UNDP, 2009: 171-175)

Their economic development goes along with other East Asian countries. In general scholars divide the phenomena of the East Asian Tigers into the tier one and tier two countries. Singapore belongs to the tier one countries as it underwent a comparable path as South Korea and Taiwan. Classifications diverge, but in general Singapore is the first Southeast Asian country which is classified as a developed or industrialized country. In reference to the HDI the country is positioned nearby major European economies. The group of tier two countries contains Malaysia, Thailand, Indonesia and the Philippines, their development started of sometime later and in our days they still lacking behind the tier one countries. Their GDP per capita in comparison to Singapore varies substantially, with Malaysia reaching 27% of Singapore's GDP per capita, Thailand reaches 16% and the Philippines 7%. Vietnam, Lao, Cambodia, Myanmar lack way behind but most of them are catching up in recent years. Finally, East Timor has to be seen beside it and there is no reason to examine it any further in this context. Beside a strong economic development, Southeast Asia is perfectly integrated in international and regional trade. Around 25% of the world trade passes the Malacca Strait (at the southern end of the Malaysian peninsula) (Dent, 2008: 86) and since the beginning of the 1990s, when Japanese compa-

nies started to set up production facilities in its neighboring low cost countries, trade within Asia increased rapidly (Kenen and Meade, 2008: 149).

As it is to see, the single countries in Southeast Asia do not have such an economic power as Japan or China, and probably not its voice in international politics, but it is the best organized region of Asia. Ten out of the eleven Southeast Asian countries are part of the ASEAN, a 1967 founded regional organisation which most likely is the birth of all regionalism in Asia (Dent, 2008: 89). The development during the first years of the ASEAN was very sluggish. Its founding members, Malaysia, Singapore, the Philippines, Indonesia and Thailand, focused mainly on security-issues and meetings were seldom. One main function of the organization was to safeguard peace among its member states and to create a platform for arising disputes. Examples therefore are the 1971 Zone of Peace, Freedom and Neutrality (ZOPFAN) agreement and the Treaty of the Southeast Asia Nuclear Weapon-Free Zone (SAENWFZ) in 1995. First approaches to a broader cooperation in trade and economical issues were made during the 1976 meeting in Bali, however, most achievements until the agreement on creation of the ASEAN Free Trade Zone in January 1992 were rather small scale. With the end of the Cold War and the opening up of Indochina, the ASEAN spread its sphere of influence and Vietnam acceded in 1995, Myanmar and Laos 1997 and Cambodia in 1999. Since the 1997 East Asian financial crises the focus of the ASEAN member states has shifted much more onto regional integration, and the development over the last years made obvious, that the association is one of the driving forces behind a broader regionalism in Asia. The next section describes ASEAN contributions to a broader integration in East Asia.

4.1.3 ASEANs Contribution in Uniting East Asia

The process of a deeper Asian dialogue, and therefore also the prospect of further integration, should not solely be credited to the ASEAN but rather be seen as a process initiated by the incidents of its time. Nevertheless as the only stable and longstanding multilateral association in Asia the ASEAN is always the first-point-of-contact.

Over the last 20 years manifold reasons arose for a more extensive dialogue between the countries of East Asia. A turning point for East Asian regionalism was the 1997 Asian Financial Crisis and the behavior of the international community. Before the situation of 1997 and its long run effects will be analyzed, a brief look on the surrounding influences. So, regionalism is nothing new to the countries and people in East Asia. The foundation of a broader Asian culture and entrepreneurship goes back to Chinese merchants and emigrants who spread throughout the region over the last centuries. In our days Japanese companies and their expansion during the 1990s laid the foundation for massive growth of intraregional trade and

business activities (Kenen and Meade, 2008: 149). A uniqueness of the ongoing Asian integration is its markets-led process, which in comparison, did not exist the same way in Europe.

Obviously the institutional framework in Asia has benefited through the 1997 Asian Financial Crisis. As a long-standing agent for regional financial co-operation, Japan tried to develop a stronger, regional based, monetary framework. The core of Japans proposal in September 2007 was the foundation of an Asian Monetary Fund with a volume of US\$100 billion to safeguard East Asian countries whose currencies were subject to speculative pressures (Dent, 2008: 155). The reasons for the Japanese initiative are numerous and among others it could be justified with the Japanese effort to grasp regional leadership. However, it was impeded by the U.S. most likely to maintain the influence of the International Monetary Fund (IMF) and therefore keeping Washington in indirect control (Dent, 2008: 155). Nevertheless, Japan kept working on alternative options and in 2000 their efforts have been rewarded. Disappointed by the behavior of the U.S., and with it the IMF, sagging development of further trade, financial and development cooperation within the Asia-Pacific Economic Cooperation (APEC), China's supportive monetary policy throughout the crisis and a new understanding of the interdependence of Asia's economies and financial markets fueled the process of further integration (Plummer and Click, 2009: 17).

During the same time the idea of EU-East Asia dialogue, the Asia-Europe Meeting (ASEM), inquired the ASEAN, as first-point-of-contact, to make a move towards all East Asian countries and thereby ended up talking to China, Japan and South Korea. The first ASEM took place in March 1996 and built the foundation for more extensive regional dialogue which created the ASEAN+3 meetings (Plummer and Click, 2009: 23). Today, the ASEAN+3 can be seen as the major platform for broader East Asian regionalism which goes beyond the scope of ASEAN and therefore covers the whole region. The main focus these days is the financial regionalism, as Grimes (2009: 4) describes it, with the aim "to reduce vulnerability to crisis and to enhance development and growth by strengthening domestic financial markets and creating institutions or regional self-help". Grimes sees four major focuses of East Asian regionalism (Grimes, 2009: 4): first, the Chiang Mai Initiative (CMI), a Japanese lead currency swap arrangement among East Asian nations which prevents the case of liquidity shortage in times of crises. Several authors judge the CMI as the core piece of political integration in East Asia. For example, Hugh Patrick from the APEC Study Center (Columbia Business School) describes the meeting in 2000 as a "beginning of meaningful East Asian regional economic cooperation" (Patrick, 2005: 17). Also Plummer and Click judge the CMI "as a milestone in the financial cooperation of the region" (Plummer and Click, 2009: 23). Secondly, Grimes sees the development of regional bond

Table 2: Trade Agreements Involving East Asian Economies (as of March 2010)

In Effect (19)
ASEAN Free Trade Area
ASEAN-Australia and New Zealand Free Trade Agreement
ASEAN-China Comprehensive Economic Cooperation Agreement
ASEAN-India Regional Trade and Investment Area
ASEAN-Japan Comprehensive Economic Partnership
ASEAN-Korea Comprehensive Economic Cooperation Agreement
Japan-Brunei Free Trade Agreement
Japan-Indonesia Economic Partnership Agreement
Japan-Malaysia Economic Partnership Agreement
Japan-Philippines Economic Partnership Agreement
Japan-Singapore Economic Agreement for a New-Age Partnership
Japan-Thailand Economic Partnership Agreement
Japan-Viet Nam Economic Partnership Agreement
Korea-Singapore Free Trade Agreement
Laos-Thailand Preferential Trading Arrangement
People's Republic of China-Hong Kong Closer Economic Partnership Arrangement
People's Republic of China-Macao Closer Economic Partnership Arrangement
People's Republic of China-Singapore Free Trade Agreement
People's Republic of China-Thailand Free Trade Agreement
Under Negotiation (1)
Japan-Republic of Korea Free Trade Agreement
Proposed/Under consultation and study (6)
Comprehensive Economic Partnership for East Asia (CEPEA/ASEAN+6)
East Asia Free Trade Area (ASEAN+3)
Korea-Thailand Free Trade Agreement
Malaysia-Korea Free Trade Agreement
People's Republic of China-Japan-Korea Free Trade Agreement
People's Republic of China-Korea Free Trade Agreement

Source: Asian Regional Integration Center (Asian Development Bank, 2010)

markets within ASEAN+3 as a focus with which the countries would tackle one of the major weaknesses which occurred during the 1997 crises; namely, the high dependence on non-regional lenders. Third and fourth are the extension of communication and surveillance of the financial markets and early stage discussions of a common currency.

The CMI and its outcomes must be seen in the broader picture of the development over the last couple of years. The first attempts towards an Asian Free Trade Area were made during the 1990s and, as the table above shows, several trade agreements have been established within the region over the last years. It is to note, that change comes slowly, for example, with-

in the ASEAN Free Trade Area (AFTA) exceptions of different time frames are granted for the less developed countries who joined at the end of the 1990s. Furthermore, the term free trade would be defined quite loosely, with tariffs ranging from 0 to 5 percent (Plummer and Click, 2009: 17) and several exclusions are part of the agreement. The next huge step is the possible creation of the ASEAN Economic Community (AEC) by 2020, as it was decided in November 2002 (Plummer and Click, 2009: 22). The aim is to create a region which is characterized by the free flow of goods, services, capital and labor, or to put it differently, to create the Asian version of the European Union. Plummer and Click mention several reasons why the Heads of Governments made their decision. First of all, there will be the need to create a post-AFTA agenda because there is the need of a deeper economic integration within ASEAN regarding a world of growing FTAs. This is to prevent member countries by-passing the ASEAN with their own bilateral trade agreements. Also, the region learned its lesson during the Asian financial crisis that a deeper integration in real and financial sector is needed if it does not want to experience a similar situation again.

Finally, the ASEAN is not the answer to all questions regarding a monetary integration in East Asia. However, for the moment, it is the best organized institution and has already achieved several steps which will be helpful to realize monetary integration. Especially the ASEAN+3 meetings and their accomplishments is something the continent could build upon. Monetary integration involves several steps to be taken: if the continent overcomes its old fears and prejudices and China and Japan lift their voices for true regionalism, the process of integration will gain a new momentum and change the region significantly. Based on the findings, the ASEAN will be in the center of the following steps; it is the only organization within the region that can provide change towards a deeper integration. As a result, the following will analyze monetary integration of whole East Asia, and not only the northern or southern part of it.

4.2 Monetary Integration in East Asia

After the foregoing section examined the preconditions for monetary integration in East Asia, the following will describe the implementation of monetary integration. Therefore, the first part describes several ways to achieve a deeper monetary cooperation in East Asia whilst the second one will discuss its feasibility. Thereby the findings are based on the above explained, especially the OCA criteria and the achievements of the later 20th century will be taken into account.

4.2.1 A roadmap for monetary integration

Monetary integration in East Asia could be distinguished in two ways. The first would be the adoption of a common basket peg and the second would be a full fledged monetary integration with a common currency. The accomplishment of each way is manifold and contains different approaches and solutions. The following will present firstly the opportunities for a common basket peg with its different characteristics and in a second step a possible road map for a full integration. Worth noting is that a common basket peg could be the first step towards a fully integrated monetary area. The inserted section 4.2.1.2 will highlight why East Asia should not choose to have an anchor currency.

4.2.1.1 Different Currency Baskets

The opportunities for an East Asian currency basket are various. Scholars discuss the different approaches strengths, weaknesses and feasibilities, and the center of the discussion is whether or not East Asia should adapt an internal or external basket. Authors who opt for an internal often try to value the weight of the participation of China and Japan in regard to having both, one or none of these two countries participating. Kawai (2008: 16) organizes the discussion with his three options for a regional currency basket and therefore gives his reader the opportunity to assign the surrounding discussion to his framework (Kawai, 2008: 16):

- 1) G3 currency basket comprising the U.S. dollar, the euro and the yen
- 2) G3-plus currency basket comprising the U.S. dollar, the euro, the yen, and emerging East Asian currencies
- 3) Asian Currency Unit (ACU) – an appropriately weighted basket of East Asian currencies including the yen, renminbi, won, baht, ringgit, etc.

The following will present the three options, mention their pros and cons and will go beyond Kawai's work and refer to other authors who developed similar ideas.

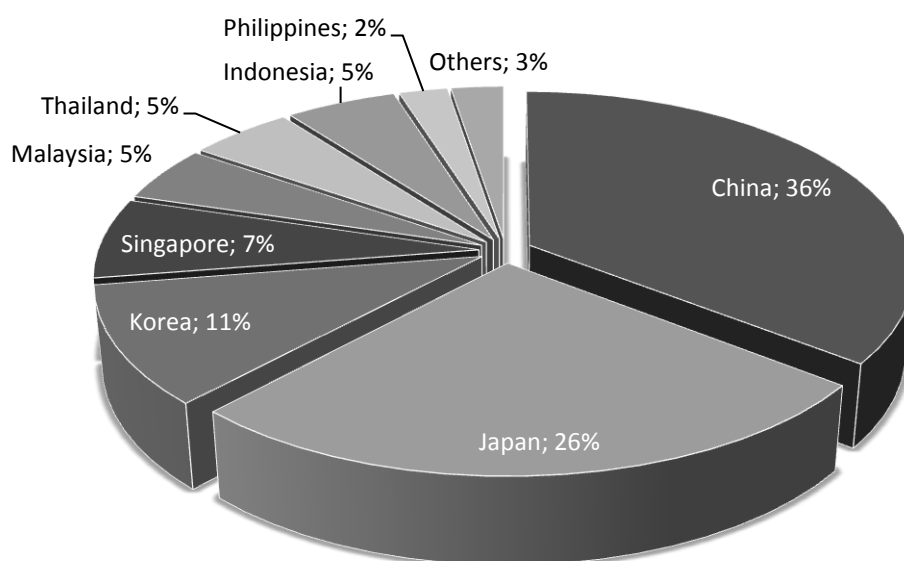
The first option, also referred as the YES basket (Ito, 2008: 251), would be the one the East Asian countries could adopt easily because of the limited degree of policy coordination (Kawai, 2008: 16). Both Ito and Kawai see the role of Japan within a G3 currency basket as exceptional. Ito sees Japan in the presented case as outside the region and Kawai suggest this sort of currency basket to China and the other East Asian countries for the case they want to maintain their managed floats. Therefore Japan could keep its policy of a free floating yen. The advantages of an external basket are obvious: as East Asia would link their currencies to the YES countries, they would not only stabilize their exchange rates to the outside world but they would also limit the fluctuation of their intraregional exchange rate (Kenen and Meade, 2008:

168). What also should be mentioned is that if the East Asian countries chose an external basket, they will, to a certain degree, import the monetary policy of the Euro area, U.S. and Japan. Nevertheless, the participating countries will focus strongly on the weight of each currency as each of them have different structures and interests in international trade. However, as long as the share of East Asia's trade with the triad remains strong it will pay off for all of them (Ito, 2008: 253). Currently it seems that Korea and Thailand adopted a G3 basket without any formal commitment.

Moving on within the framework of Kawai (2008), the degree of monetary cooperation increases and finally it could be used to approach towards monetary integration. This will be developed further later on in this section, however, for now, note that a 3G-plus currency basket would not only contribute to the huge importance of East Asia international trade, but would also take into account the rising intra-regional interdependence (Kawai, 2008: 14), going along with the spin-off from the regions dependence on America and Europe. Recent publications from Time Magazine (Schuman, 2009) and DB Research (Deutsche Bank Research, 2009) point to above mentioned fact, especially the last mentioned one sees a tremendous change in trade patterns through a rising Asian middle class. The G3-plus basket is sort of a middle way and could be seen as a door opener towards a sole East Asian monetary basket (also known as ACU). In comparison to the EU, the regional integration in East Asia is heavily market driven and scholars admit the institutional deficit. As market integration increases and institutions will be created, the G3-plus basket could transform its setup to fit within its time and finally lead to the ACU. These days Singapore follows a strategy similar to the G3-plus, and since July 2005, China and Malaysia most likely moved towards the same direction (Kawai, 2008: 16).

The third option would need a high level of policy coordination between the different East Asian countries and only a solution with all of East Asia participating could prevent from an imbalance. Park (2008) points to several specifics regarding the role of China and Japan: with the yen in the basket, the ACU could be highly influenced by the dollar/yen and euro/yen exchange rates so Japan must be willed to give up the free float. After all, without the participation of Japan the basket would be dominated by the renminbi (Park, 2008: 266). The major question while setting up the ACU would be the weight of each national currency. Ito (2008) refers to the Asian Monetary Unit (AMU) project by the Research Institute of Economy, Trade & Industry (RIETI) – Hitotsubashi University, Japan (RIETI, 2010). The weight of each of the 13 currencies is calculated on the basis of the average of the share of trade and the share of GDP by market exchange rate or purchasing power parity (PPP) exchange rate (Ito, 2008: 253). In Figure 1, the strongest weight on the ACU would be assigned to China, followed by Japan and

Figure 1: AMU Project - Shares of an Asian Currency Unit



Source: (RIETI, 2010)

Korea, and the ASEAN countries barely have a higher share than Japan, with Singapore, Malaysia, Thailand and Indonesia, contributing around 6% each. In comparison to the G3 basket, the internal basket would only stabilize the participating currencies against each other; however, in general the ACU would float freely towards the outside world. As there is no guarantor for monetary stability, the participating countries should commit themselves to e.g. inflation targeting. Compared to the former European Monetary System the situation would be different, with the German Bundesbank as guarantor for monetary stability.

4.2.1.2 The possibility of anchor Currencies for East Asia

Before moving on to the setup of a monetary union it should be reviewed why it is not useful to opt for an anchor currency instead of a currency basket. Generally, the advantage of the anchor would be that East Asia could overcome the lack of credibility with the choice of a regarded currency. Taking a closer look on the case, there are three currencies that should be considered: namely the U.S. dollar, the Japanese yen and the Chinese renminbi.

The U.S. dollar was the longstanding anchor currency for most of East Asia but its importance declined successively when the trade structure in the region changed. These days economic cycles develop differently and Kawai (2008: 14) foresees a downward pressure on the U.S. dollar and vis-à-vis an appreciation of most East Asian currencies. Moreover, the trade patterns have changed and especially the intra-regional trade increased over the last decade as the recent development will halt a solely Asian solution will bring more benefits for the continent. The arguments against the renminbi and yen carry on the above mentioned critics. There

are other doubts beside the fact that choosing one currency would foster the influence of one country on the continent. The major arguments against the renminbi include that it is not convertible yet and the underdevelopment of the Chinese financial system (Kawai, 2008: 15; Mundel, 2003: 6). The antipathy for the yen as the leading East Asian currency is based on its high volatility throughout the last decades and the macroeconomic disorders within the Japanese system.

So far it is to see that choosing an anchor currency is not a suitable opportunity for East Asia, much more the region needs a better fitted solution, which serves its economic and monetary need in a broader sense.

4.2.1.3 Monetary Union

Major contributions regarding a monetary union in East Asia discuss the feasibility and try to evaluate to which degree East Asia is an Optimum Currency Area. As it is an important part of the discussion, a later step will examine these facts, but in a first step it seems to be more useful to think about a schedule of monetary integration. Kawai (2008: 17) presents a 4 steps scheme: from the status quo to, as he describes it, “a complete exchange rate and monetary policy coordination”.

Table 3: Steps toward Exchange Rate and Monetary Policy Coordination in East Asia

Progress	Exchange Rate Policy	Institutions	Trade-Investment
Current State	Uncoordinated exchange rate arrangements	CMI & ERPD; Asian Bond Markets Initiatives (ABMI)	Uncoordinated FTAs (Asian noodle bowls)
Informal Coordination (exchange rate regime coordination)	Move to greater exchange rate flexibility vs. US dollar; A G3 or G3-plus currency basket as loose reference; ACU index for surveillance	Multilateralized CMI; An independent secretariat for a multilateral CMI & ERPD; Asian Financial Stability Forum	Coordination and harmonization of rules (including rules of origin) & provisions among FTAs
Loose Coordination (exchange rate policy coordination)	A G3-plus currency basket system with well-defined rules for intraregional rate stability	Asian Monetary Cooperation Fund; Regional infrastructure for bond markets (credit guarantees, clearance, rating)	East Asian FTA (ASEAN+3 or ASEAN+6); East Asian Investment Area
Tight Coordination (monetary policy coordination)	ACU-based system—“Asian Snake” or “Asian ERM	Regional regulatory authority; Very short-term liquidity arrangement	Asian customs union
Complete Coordination	Asian monetary union	Asian central bank	Asian common market

Source: Kawai (2008: 17)

The first step towards a monetary union is a loose approach to harmonize the exchange rates within the region. Therefore, the countries of East Asia should adopt a basket consisting of G3 or G3-plus currencies where a main focus during this first period should be a more flexible exchange rate towards the U.S. dollar. During this stage the countries should still keep a high degree of autonomy. The accomplishment of the basket exchange rate should depend on each country's economic condition and development. During that period, an ACU index, comparable to the AMU project by the RIETI, could be used to survey the East Asian currencies. Moreover, this early stage could be used to foster the financial cooperation, strengthening the CMI, the Asian Bond Market Initiative (ABMI) and therefore the ASEAN+3 platform and advance the regional economic surveillance (Economic Review and Policy Dialogue, ERPD).

The advancement during the next step is the formal implementation of the G3-plus currency basket. Here the East Asian countries should jointly adapt the basket and agree on clearly defined and transparent rules regarding the parity against the common basket. Therefore, East Asia could settle on a 10% exchange rate band around the central rate which would have the effect of a decrease of national monetary authority and, along the way, would allow a greater flexibility towards the U.S. dollar. On the institutional side, the CMI and several other supporting institutions could replace the need of the IMF for East Asia. By that time the local currency bond market should be fully operational.

The last step before a fully integrated monetary union would include the realization of a systematic exchange rate and monetary policy coordination, with the aim to create a regional monetary anchor. Therefore, two options are possible: the first comparable to what the EU did during the 1980s and 90s, known as the snake or European Exchange Rate Mechanism (ERM), which is a common basket peg. The Asian currency would free float towards the outside world but within the system they maintain their set exchange rate vis-à-vis the ACU. This solution would demand a high commitment of the participating countries, common and well-defined monetary policy for the area, and intervention rules and access to short-term liquidity within the system. The second possibility would be looser. It is known as the parallel currency approach, and thereby the ACU would be issued as a legal tender parallel to national currencies.

The final step would be the creation of an Asian Monetary Union, characterized by a common East Asian monetary policy, an East Asian central bank and a single East Asian currency as means of payment.

There are several remarks regarding Kawai's (2008: 18f) framework. First of all, in Table 3 he draws the line for an Asian common market. The above does not mention it because it is on

the sideline of monetary integration, but nevertheless, it is highly supportive for any attempt of monetary integration in East Asia. Furthermore, he mentions the “multi-track, multi-speed approach” where he grants the countries of East Asia a different speed in adopting the new monetary framework for the region. In this context, it is important that certain countries go ahead, e.g. Japan, China, Hong Kong, South Korea, Singapore, Brunei Darussalam, Malaysia and probably Thailand too. A strong core would give the weaker countries the opportunity to catch up and cling with their monetary development to them – an approach also followed by the EMU. Finally, it is important that the solution fits to the Asian continent. Kawai succeeds with his framework to develop a long-term plan for East Asia because throughout literature it is mentioned that East Asia has a lack of supranational institutions. Therefore East Asia should not try to create a copy of the EU (Kenen and Meade, 2008: 178), even though the creation of a well fitted monetary integrated region will take time and consideration.

4.2.2 The Feasibility of Monetary Integration

The answer to the question whether or not a monetary integration in East Asia is feasible is complex. The theory of Optimum Currency Areas can give us some help in evaluating it but it will not give a clear answer. The history of the theory has revealed its limitations, however, there was also light at the end of the tunnel. Its adaption and evolution during the 1980s and 90s will provide some answers to the particular Asian case. The following gathers the opinions of several scholars and wants to explain to which degree East Asia fulfills the classic OCA criteria. Thereafter it will be examined which lessons East Asia could learn from Europe.

4.2.2.1 OCA Criteria

If scholars try to judge whether or not East Asia is an optimum currency area, they focus most of the time on the symmetry of shocks and compare their findings with Europe. It is to admit, that the center of the OCA theory always has been to find regions with similar characteristics because they are meant to outweigh shocks smoothly in a conjoint approach. As the core of the theory always dealt with the criteria, the following will only give a brief look on some econometric research and the focus is thereby on the work of Tamin Bayoumi and Barry Eichengreen. Throughout the following, the classic OCA criteria by Mundell, McKinnon and Kenen will be analyzed.

The work of Bayoumi and Eichengreen (1994) is highly regarded among scholars. Using the Blanchard-Quah technique; they surveyed the correlation of demand and supply shocks between a country pair. Their assumption was that the higher the correlation for a particular country pair, the lower are the costs of forming a monetary union. In their work they examined supply and demand shocks for European and East Asia countries. A comparison between both

regions is quite interesting and reproduced in Kenen and Meade (2008: 171f). Finally, it is to assert that the percentages of large correlations (for both supply and demand shocks) are higher in East Asia than in Europe. Another finding of the Bayoumi and Eichengreen is that East Asia adjusts much faster to shocks than the EU. Scholars approach the question of symmetry differently, and therefore, the numerical results vary. However, as De Grauwe (2009: 117) figures out in terms of symmetry East Asia would be as close to an optimum currency area as Europe.

Mundell formulated his optimum currency area around the criterion of labor mobility; however, identifying the degree of it in East Asia seems to be difficult. First of all, the share of foreign population in East Asian countries at 1.2% is rather small compared to North America and Europe (Kwack, 2004: 160). A major difference towards these continents is probably the long history of migration, and especially the U.S., as well as Europe, are characterized by streams of foreigners moving into the region. Nevertheless, intra-Asian migration has increased over the last decades from one million at the beginning of the 1980s to 6.5 million in 1997. A particularly in East Asia is the division of migration between Northeast Asia and the Southeast Asia. The restrictions over labor migration are rather strict in the first northern part, whereas labor mobility in Southeast Asia is high (Kawai, 2008: 6). Overall, Japan, Hong Kong, Singapore, and Taiwan are receiving labor forces, major exporters are Indonesia and the Philippines and Korea, Malaysia and Thailand both import and export migrant workers. Concluding it is to say, the possibility that labor mobility is as high as in Europe is given (Kawai, 2008: 6), but further achievements has to be done and hopefully newly signed free trade agreements have a stimulating effect.

McKinnon build his criteria around trade openness and intra-regional trade. As it is broadly known, regional integration in East Asia, contrary to Europe, is market driven which is a first indicator that McKinnon's criteria could be fulfilled (Kawai, 2008: 2). Kwack (2004) uses an indicator of openness measured by the ratio of the sum of exports and imports in goods and services to twice the level of GDP (Kwack, 2004: 155f). Ranking the regions of the world, by openness, Europe would be first (Europe = 0.36), followed by the ASEAN (0.26, respectively Southeast Asia), the world (0.19), East Asia (0.17), Northeast Asia (0.15) and the U.S. (0.14). Considering the given data East Asia's openness is relatively high with ASEAN ranking 2nd and the whole of East Asia before the U.S. It is interesting to notice that two countries are outstanding, Singapore (1.61) and Hong Kong (1.53), who are both known for their entrepôt trade. Further research will reveal that in terms of trade perspective, East Asian countries are well integrated with their neighbors (De Grauwe, 2009: 114f). Intra-regional trade has grown conti-

nuously over the last decades. The whole of East Asia started off with an intra-regional trade share of 22.7% in 1980 and almost doubled the share to 45.2% in 2007. The numbers for ASEAN+3 also grew from 30.2% to 38.4% within the same time (Kawai, 2008: 3). It is to assess that ASEAN+3 is already competitive in regard to other major regions in the world, NAFTA attracted 43% of the world trade in 2007, the EU (15) 56.9% and EU (27) 67.2%, in the light of a broader East Asian integration these numbers would become more advantageously.

The question if East Asia fulfills the criteria given by Kenen could partly be answered with Quahs (2009) empirically work on export diversification in East Asia. Based on the United Nation's Standard International Trade Classification (SITC) Revision 2, he applies the Herfindahl index. As the SITC has 10 main categories, the indices range from 1, in countries where exports are least diversified, to 10, where exports are most diversified (Quah, 2009: 69f). For his work he examined 33 countries, thereof 16 East Asian countries, including the ASEAN+3 and Hong Kong, Macau and Taiwan. The following will take a closer look on the time period from 2001 to 2005, as it is the most recent data available. The average during this period for East Asia, is 5.157 and therefore 0.942 points above the average for 9 selected EMU countries in a comparable period. The exports diversification index for 4 East Asian countries is above 4.0, they are Indonesia, Myanmar, Thailand and Vietnam. Overall the indices range from 1.141 for Cambodia to 6.159 for Indonesia, the lower ranked countries, could be either explained by their specialized economy, Brunei (1.197) and Macau (1.171), or the least level of economic development for Cambodia. It is interesting to recognize that the regions behemoths are not in the front row. The explanation therefore will lead to the second criterion about countries of similar structure. The East Asian countries are highly dependent on each other and their history of economic development is quite similar. Japan's economic development was the cutting-edge for the continent and over the decades several other countries followed; starting off with Hong Kong, Taiwan, Singapore and South Korea, and during the later years Malaysia, Thailand, Indonesia and the Philippines. In general, it could be said that the different countries of East Asia had more or less the same economic structure during different periods in time. These days the diversity in East Asia is high, Table 1 (HDI for Southeast Asia, p. 21) reveals this fact based on socio-economic indicators. Throughout literature there are hints that monetary integration could take place within a small part of East Asia and that the less developed countries join later. The indices for the export diversification partly represent the level of development, Plummer and Click (2009: 26f) point to the fact that the original ASEAN countries emerged during the 1990s from primary-based exports (i.e. SITC 0-4) to higher value products (i.e. SITC 7). Thailand is the only country out of the founding members who still has a large agricultural-export base; the other ones moved along the value chain and specialized on products with a

higher value. Therefore, the economic behemoths of the region have become more specialized and leave the field to medium developed countries, which export a wide range of products.

The question whether or not East Asia is an optimum currency area could not be answered in one sentence, De Grauwe (2009) draws the right assumption that East Asia comes as close to be an optimum currency area as it is the case for Europe. Going through the criteria it is to see that on certain levels East Asia fulfills them quite good for the other ones there are still achievements ahead. The lack of labor mobility is concentrated in the Northeast Asia, but compared to other regions, the whole of East Asia is still behind. Hopefully the further development of free trade will also enhance the movement of labor and capital within the region. Regarding the criteria set by McKinnon East Asia should be ready for a monetary union and the prospects for further development will strengthen this view. The intra-regional trade is not yet comparable to the EU but there is no reason to concern that intra-Asian trade will not increase over the next decades. As shown above the ASEAN is one of the most open regions in the world. Regarding diversification and similarity it is to admit, that those factors are influenced by the divergence in economic and social development in East Asia. Finally, East Asia still has some way to go until it is an optimum currency area, Kawais (2008: 19) multi-track, multi-speed approach probably fits best for the region, first of all it would give the different countries the possibility to converge and secondly a slow process of monetary integration would give East Asia the possibility to create the much needed institutions. Much of it is similar to the EMU, therefore the next step should try to explain which lesson East Asia can learn from Europe, nevertheless the region has to go its own, East Asian way.

4.2.2.2 Lessons from Europe

Before it is possible to draw any lesson from the monetary integration in Europe, it is to admit that there is a main difference between the two regions. In other words, if there is a broad foundation East Asia could build upon (De Grauwe, 2009: 118), why it does not came true until now? De Grauwe says that the answer to the question most likely is institutional, political and historical. So far the integration in East Asia was market-driven, and not, as it was in Europe a political will, which was expressed through treaties and agreements. Finally, there are three fields where East Asia can learn from Europe: the building of institutions, the creation of a common currency unit and the findings on the field of endogeneity of a currency area.

The field of institution building is broad and does not only cover monetary integration but rather the whole process of East Asian integration. Looking at Europe and the creation of the EU East Asian leaders can draw several lessons which will be useful for a further integration. At the very first it is important that they do not underestimate the differences and do not adapt

European experience to the Asian context without any considerations. A difference is the lack of institutions to provide a broad basis for monetary integration (De Grauwe, 2007: 123) and missing experiences with regionalism (Kim, 2009: 48). It nevertheless took Europe over 40 years from the Treaty of Rome in 1957 to the establishment of the monetary union in 1999. Keeping in mind that monetary and financial integration was not the objective of early European regionalism (Kim, 2009: 47) but much more a result of it and the incidents in East Asia so far give a good prospect on what could arise. The ASEAN+3 summits, the CMI, the ABMI, the AFTA and other regional activities which go along within the ASEAN are a good foundation to build upon. If East Asia now focuses on the steps which have to follow these first attempts, a monetary integration will be possible at the very end of it. Outstanding for Europe was the Economic and Financial Affairs Council of the European Union, the ECOFIN, which was the body who worked out the framework for the ERM and the Single European Act, the primary treaty which formed the common market by 1994. In the East Asian context, the centerpieces of regionalism will be the further realization of the AFTA, a broad dialogue on the basis of the ASEAN+3 and the implementation of the aspired AEC. Within this process East Asia can follow the European example of an integration process which is incremental and contributes to the needs of the participating countries. Kawai (2008) mentions the multi-track, multi-speed approach, which in the case of the EMU meant to abide to the principles while allowing exceptions (Kim, 2009: 47). In contrast to Europe, East Asia should be outward-looking and focus rather on global economic interaction, and therefore, should avoid the inward-looking discrimination as it was, and is, practiced by the EU (Plummer and Click, 2009: 26f). Plummer and Click base their argumentation on the fact that ASEAN countries are far more open as the European countries have been at the mid of the last century and that intra-ASEAN trade would be only one fourth of global trade, compared to two thirds in the case of the EU. Nevertheless, they come to the conclusion that East Asia will profit if it follows the EU on a customized path.

An important step towards monetary integration in Europe was the European Currency Unit (ECU), a weighted currency basket which referred to each country's GDP and foreign trade. Eichengreen (2006), same as Kawai (2008), opts for an ACU instead of intra-regional currency pegs or a dollar peg. Thereby, he refers to the European experiences and highlights several benefits and shortcomings. The perception of the ECU differs among scholars: Plummer and Click (2009: 30f) present a success story and point out that the ECU increased its importance on the Eurobond markets and in private transactions over time until it was displaced by the euro after 20 years of usage. Eichengreen clearly sees the ECU as a "steppingstone" towards monetary integration, but even if the ECU was able to increase its shares in European financial transactions, from his point of view, it has never reached the critical mass to create a deep and

liquid secondary market (Eichengreen, 2006: 433). Beside the discussion of the mechanism and risks of an ACU, there are conclusions which could be drawn from the European experience. First, the ECU was helpful to establish the later monetary union, second, Europe should have promoted the usage of the ECU and probably missed to create incentives to foster the attractiveness and third and last the usage of a common currency unit is an indicator for market acceptance. Therefore, East Asia could adapt its policy in reference to the EMU. It would include, as Kawai (2008) suggests, a common currency unit as a forerunner of a later monetary union. Therefore, it would be important to promote the usage of the ACU extensively and alongside East Asia should not only limit the usage to government activities, but also create instruments which makes the ACU interesting for financial and business activities. As integration in East Asia is market driven, it is very interesting to see the common currency unit as an indicator for market acceptance. If East Asian policy makers create a market friendly environment for the ACU, they will experience the adaption of the ACU over time and could align their politics to it.

Beside the conceptual implications for East Asia the endogeneity of the OCA criteria, is probably the biggest contribution Europe could have made. The above presented focuses on the endogeneity of economic integration as well as the effects on financial integration, the symmetry of shocks and the product and labor market flexibility. In the current situation it is now the mission of politics to create a surrounding which is endogeneity friendly. The free trade agreements are a first step and also the achievements regarding the financial cooperation will help. Even if East Asia does not fulfill the OCA criteria these days, an ongoing process of integration will contribute to it. Especially the markets forces in East Asia could create an area which is much more optimal than its European counterpart.

If East Asia will take a close look on the European experience it could gain a lot for its process of integration. Building institutions in Europe was a long and not always easy process and balancing the different interest remains until today a huge challenge for Europe. East Asia can examine Europe and work out which are the important ones, how they have been set up and what are their core functions. Overall, the European process took a lot of time and therefore East Asia has no reason to hurry but rather take time to develop a well fitted East Asian model. The example of the ECU shows how interesting it could be for East Asia to adapt a common currency unit but it also highlights the areas where further achievements could have been possible in Europe. In particular the markets forces are a great opportunity for East Asia, not only that the markets could foster the integration process with the acceptance of an ACU but

also in the light of the endogeneities the markets are able to contribute to a possible East Asian monetary union.

5 Closure

The OCA theory has been in and out of fashion since its conception in the 1960s falling from favor and in recent decades being resurrected again. But the main question should be whether the theory applies to countries and regions which seek monetary integration.

The OCA in its early phase from the 1960s contained many contradictions and scholars soon found the theory could not be used to develop the answers needed in their time. At the end of the last century a move in the right direction was made and the OCA theory was modified. New aspects have been added since and the common understanding changed from the anticipation as a theory to a set of recommendations. It is considered almost impossible to fulfill the pre-conditions of the OCA theory; nevertheless Europe partly joined to become a monetary union, and others want to follow its example. Therefore, the question of the theory's role could not be avoided.

Taking a look at this particular question, the narrow view on the theory could be widened. It has to be asked what relevance the new OCA theory has for Asia and especially East Asia. There are two remarks to be made: First, East Asia should pay attention to the theory, even if the application has limits, there is a truth inside. Policy makers and scholars should not interpret the theory as a guidebook for monetary integration, but rather consider the recommendations and apply where appropriate. No one will deny that labor mobility and an open and diverse economy are good preconditions for monetary integration. But because it is a process, the fulfillment of the conditions will take its time. Second, the European experiences and the endogeneity of the OCA theory will not smooth out unfulfilled criteria easily. In fact, the current incidents in Europe should make people aware of risks coming along with monetary integration.

Finally, it has to be said that East Asia is an economic area which would probably gain from a deeper monetary cooperation. Therefore it is important to discuss how the countries of the region want to achieve their goal. Full monetary integration is the highest level that can be achieved and therefore East Asia should set it as a target. But on their way towards monetary integration, countries should take their time and develop a roadmap which credits to the above mentioned. The question whether or not East Asia is ready to become a currency union would be wrong. Several pre-conditions are fulfilled and with the ASEAN an institutional foun-

dition to build upon is laid. The question for the countries should be within which time frame they want to fulfill their goal. If East Asia would follow a long term plan to strengthen the ties and interactions between each of the participating countries, chances are high that monetary integration will be successful.

Nevertheless the world should not be disappointed if it takes decades until full monetary integration will be achieved. Most likely incremental changes will increase the possibility for success rather than overthrowing the monetary system immediately.

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