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Master programme in Economic Growth,
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Agricultural transformations, the developing giants China and India

A literature review based master thesis about the development of China and India with background from historical evidence and theories to create and understanding of today's developing paths.

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Abstract: *Development and how to reach economic growth have been discussed and talked about since the Industrial revolution in Europe pushed productivity and wages up but the models have changed over time and space. The most successful ones seems to build on traditional patterns of agriculture and growing domestic markets, but with a growing global market and new players on the world market can it be that the traditional patterns of development is changing and if so, how?*

This thesis aim at finding if and how developing patterns differs over time and space by looking at historical evidence as well as the new players on the world market, the developing giants China and India.

Key words: *developing patterns, globalisation, advantage of backwardness, Lewis-model, developing giants, agriculture, industrial revolution, economic growth*

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1. Introduction

Globalisation has brought benefits such as lower production costs that have contributed to the movement of manufacturing to cheaper production countries creating economic growth in periphery regions. Despite the mobility created by globalisation Africa is still lagging behind and the rich have become richer creating an unequal wealth distribution, the bottom billion of the world's population lives in conditions similar to the 14th century yet do they co-exist with the 21st century (Collier, 2007:3). On the other hand does Thomas L. Friedman (2007) claim the world is flat, at least when looking at the global economy, but as the economy grows in some areas is poverty still largely spread in the south and over the years have development models of different kinds been employed with the hope of reducing poverty. Institutions and markets are by some claimed to be the main concern of development countries today in order to create growth, yet the focus of development have been based on dated theories and conceptual development ideas (Collier, 2007:3) that rebuilt Europe after WWII, when it was mainly infrastructure and buildings that was replaced (Stokke, 2009:100). The entry and spread of ICT have made new technology and communications spread faster, within countries and regions as well as over borders. This has made the poor population of the world more aware of different ways of living and possibilities (Haggblade, 2011). However flat the world might become due to ICT and fast communication stands the question of technology spread being skewed and the impact of large scale farms impact on vicious circles of poverty – i.e. landlessness, unemployment and crimes (Cypher and Dietz, 2009:266).

Success among developing countries, the introduction might have led you to think this will be a thesis of globalisation and poverty, this is not the direct case. This thesis aims to investigate the change of development patterns over time and space with a focus on the development giants China and India and how their development differs in terms of internal conditions as well as global integration. Did they succeed by using borrowed technology to speed up their development in combination with the offering of cheap labour, and in this way stepped outside of the 'traditional'¹ patterns of development and created a development path of their own or did they follow the traditional path of shifting labour from ineffective sectors to productive sectors to create economic growth?

1.1 Aim and Research Question

Agriculture is an important sector for growth and development in developing countries as it most often is the largest sector of employment. However, it seems like many developing models build on the European agrarian revolution which today could seem a bit dated as technology and innovations spread quickly over borders and continents. As China and India are booming, is there possible that their development can challenge the traditional development patterns of agriculture and agricultural transformation towards industrialisation and development by looking at advantages of globalisation and different development paths over time and space. By traditional development patterns am I referring to the development patterns that the Northern European countries followed in the transformation to industrial societies in the 18th century and that are still seen as essential by the common literature.

¹ Traditional – concept here used as the development pattern of Northern Europe during the industrial revolution during the 18th century. A revolution that started with agricultural development and improvements, property rights and by investments and incentives moved into a consumer society that developed industries and what we today refer to as a modern society

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However, as the developing giants China and India are alike in many ways are they also differing in development reforms and strategies, hence are the aim of this research to determine the difference between the two developing giant's development path and by the fact and figures presented aim to conclude what could possibly be the way for development and growth in other developing countries in modern time.

What are the implications of China and India' development experiences for the traditional agricultural transformation strategies?

1.2 Structure of thesis

To answer my research question and fulfil my aim will my thesis be structured so that it will help guide my arguments through a theoretical framework build upon theories of agricultural transformation, advantage of backwardness and previous research relation to development paths of now developed countries.

The reason for structuring the thesis this way is to create a historical background and theoretical framework in order to build an understanding of how development patterns have looked and changed throughout time and space. But to also show upon the relations of the world today and how the traditional development patterns may be challenged by countries such as China and India, two countries that have experienced rapid growth and development. The reason for choosing the developing giants China and India is simply because they are two countries that currently experience modern and on-going examples of successful development that take advantage of the globalised world (Urata, 2001:409).

There will be further detail on how the thesis has been conducted and what methods have been used in section 2. *Research methods*. However I did find it to be important to present a quick overview of the construction and subject of the thesis early as it might help clarify the aim of this thesis as well as give an understanding of the reasons for the writing of this thesis.

2. Research methods

It is significant to keep in mind that research design and research methods play different roles for the conducted research and that it is therefore important to keep them separated to avoid confusion. Research methods are different parts of the research design, while the research design guides the execution and analysis of data from the methods (Bryman, 2008:30) is it the general plan to how to

answer my research question, the research methods is how it will be carried out (Saunders et al. 2012:159).

By using existing theories and research, am I taking a theoretical approach to development in order to be able to generalise development patterns over time and space. However, as focus lies upon the development paths of the developing giants China and India will this thesis take a qualitative approach of secondary analysis. Previous research look at the history of development, and as the thesis treats the subject of development patterns in two different countries over roughly the same time period will the methods be of cross-sectional and cross-cultural status (Bryman, 2008:44,59. Examples of previous research in this field are Fei and Ranis (1975) or Lewis (1956). The reason is to show upon differences and similarities in two specific countries development path which makes this thesis a comparative study, both in the sense of comparing two countries but also due to the different results found in empirical evidence which will be compared to theory and traditional development.

As noticed by my choice of research design, secondary analysis will be of great importance for this thesis as the data collected and used in a secondary analysis is often of high quality and cover a wide variety of regions as well as variables. Secondary analysis and previous research will not only support the thesis with evidence and data but it will also guide its theoretical framework (Bryman, 2005:58). Secondary analysis is the analysis of data and research conducted by someone else than the writer, meaning that in this thesis have I not conducted my own data. As for detecting historical and traditional development patterns, the thesis is restricted. However, as history and previous research made on already developed countries and regions will only function as a guiding tool and support for the theoretical framework, the empirical analysis will be complemented with data on GDP growth, GDP/capita, the GINI coefficient to stand as evidence towards differences in development and how growth have been distributed as the two giants have developed. By using different data the aim is that the changes over time and between the countries will mirror reforms and development strategies carried out to determine which lessons that other developing countries can draw from two giants, China and India.

2.1 Structure of the thesis and methods used

In social science and development studies secondary analysis is important as one can find hidden information in the existing data when looking at it with a fresh eye. Existing research and data will help strengthening arguments made by secondary data as well as play an important role to factual knowledge and background (Bryman, 2008:81).

As mentioned in section 1.2 *Structure of thesis*, the thesis will be structured in a way that will first guide us through the theoretical frameworks for the thesis and then by using case specific secondary analysis and previous research create an empirical analysis of the development implications in the developing giants China and India. This is to show a historical background of development patterns in existing developed countries as well as the more recent history of the developing giants China and India. As the literature are different for the two aspects – theory/history and empirical/history this section will give a short explanation of the different methods used for creating this thesis built upon secondary analysis in theory and empirical analysis. Because of this reason have I chosen to divide

the methods chapter in two categories; *Secondary analysis and previous research* and *Secondary analysis of data*.

2.1.1 Secondary analysis and previous research

The background chapter is based on previous research and theories as this is my guiding tools and because the research done on development patterns and existing theories are well-known and to a large extent accepted as facts which can provide the thesis with stability and credibility. This part of the thesis will therefore show upon a more historical analysis of narrative qualitative studies, especially from East Asian countries but also in form of theory. Since much good and acknowledge research has been done on the East Asian miracle as well as the theories being well recognised in the field of economic history it does feel fairly comfortable relying on those. Nevertheless, as always with secondary analysis and previous research it is important to weigh different opinions against each other and to be able to critique them and therefore reach the 'truest' truth about the specific case. As this thesis takes the form of an historical analysis it is also important to remember that what was the truth one or two decades ago might not be the truth anymore, it is therefore extra important to find articles and literature that is still historically relevant as well as still up to date. It can be argued that in social science and development studies secondary analysis is very important because one can find hidden information in the existing data when looking at it with a fresh eye. Some writers of social science methods argue that it could possibly be seen as crime not to use existing research when conducting social science (Mikkelsen, 2005). Hence will previous research build the foundation of my thesis, to create the possibility to find new patterns or ways to look upon development through history.

2.1.2 Secondary analysis of data

In my empirical analysis will I use secondary analysis of data collected. Existing research and data will help strengthening arguments made by secondary data as well as play an important role to factual knowledge and background (Bryman, 2008:81). In this case a general strategy of qualitative data analysis will be used as the guiding tool to analyse the existing data found on secondary sources such as OECD's webpage. This is often described as iterative, meaning that the data collected and analysed often is repetitive (Bryman, 2008:539). Since the data used in the empirical analysis is secondary it might be impossible to implicate the collection of data with the analysis, which will make this a good choice of method. Along with an analytical induction it is also possible to seek an universal explanation of the phoneme, in this case the development of the giants India and China. Secondary analysis can be both quantitative and qualitative but will in this case be of qualitative status and as the data has been collected by someone else than me, the analysis I can provide is a new interpretation of the collected data build on the background and theories guiding this thesis.

In this thesis statistics from OECD and CIA fact book are used. The reason why these two databases have been used and not the national statistical bureau of China respectively India is simply by the case that these are two respected sources of data and organisations. The statistics from the national bureaus might be similar or the case might even be so that OECD and CIA got their data from the national bureaus, but the fact that the data have been controlled for by larger organisation makes it more trustworthy. This is data of high quality that covers many areas in two large countries, for me to have done this myself would have not only cost a lot of money but also been very time consuming. But as I use secondary data I will also have to recognise the fact that I cannot be sure about how the

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data have been collected or manipulated, which is why I in this case also have chosen larger organisations and databases as they are known to provide trustworthy data.

3. Previous research and theoretical framework

As this thesis strive to show changing development patterns it seems natural that the previous research and theoretical framework will treat what I consider being the three cornerstones in the development discussion, and connecting them to one in order to see how they complement each other. By giving an overview of the agriculture, institutions and the idea of backwardness, I aim to connect back to the ideas of Lewis and Kuznets on labour and development. As presented in the introduction we do live in a globalised world where knowledge and goods change hands and cross boards regularly yet a large percentage does still live in poverty, by introducing the Lewis-model

again now in a globalised world can there be new solutions to the poverty-battle? When mentioning the Lewis-model one easily think of modernisation and the removing of the agricultural and urban sector, but this is not the aim and I see agriculture as an important part of development, I do however challenge it. By using the thoughts on labour by Lewis and place them in a modern global world, could it not be that the traditional role of agriculture and its transformation can be changed for greater growth and development in other sectors.

The Lewis-model is a development economic model of dual-sector characteristics that explain the growth of developing countries in terms of the labour transition between sectors by the assumption that developing countries have surplus of unproductive labour in, mainly, the agricultural sector. The unproductive labour would be attracted to new sectors such as manufacturing, and capitalists would see the profit and investments for development hence would the economy move from traditional low productive agriculture to an industrial society. (Lewis, 1954) There are similarities between the Lewis-model and the Import substitution industrialisation (ISI) development plans and some may argue that the Lewis-model of productive and unproductive sectors created the ideas of ISI, it is however important to remember that Lewis was not a dependency theorist. The ISI was based on the premises that countries should reduce global dependency and produce and industrialise by themselves by moving unproductive labour. (Ozay, 1999) The ISI programmes worked by state lead development and subsidisation of high productivity industries and the ISI were replaced by Structural adjustment programmes (SAPs) by the IMF and World Bank after proving to do more harm than good (Kwadwo, 2000). We can however, with the results in hands point to the fact that neither the ISI nor SAPs worked in favour of the developing countries and many countries are still struggling with the economic and underdeveloped heritage from the ISI reforms. However to build arguments on the economic model of Lewis for developing countries that comprises productive and less productive sectors could in hindsight be seen as foolish as Lewis's thoughts got put out of hand. In his book *The Theory of Economic Growth* from 1956 he argues that he is not creating a theory but rather a map of economic growth (Lewis, 1956:5). In the same book he argues for the importance of mobility, invention and risk taking for economic growth (Lewis, 1956:12) and that growth is not only dependent on capital but on the possibility to move from low productivity to high productivity (Lewis, 1956:201). However by this he does not mean that the transformation should be to take labour from agriculture to manufacturing without productivity changes – a stagnant agricultural sector will not help the manufacturing. In the coming sections will we look at the role of agriculture and technological advantages for development in an attempt to understand previous and present development models and see how the Lewis-model might have been misunderstood in a less globalised world of development.

3.1 The role of agriculture

In the field of development economy one often hear the concept of 'an agrarian revolution will lead the way for the industrial revolution', some even take the argument of the industrial revolution being mislabelled as there was nothing industrial about the revolution but an agrarian and cultural shift that had grown and developed for thousands of years (Clark, 2007:307). Nevertheless can the agrarian revolution in the eighteenth century England, that lead the way for industrialisation, be seen as a guide for proponents of agricultural-led development as agriculture plays a major role for the take-off of industrialisation. History points us in the direction that industrialisation is a product born out of a well-developed, structured and distributed agrarian revolution (Timmer, 1969). Agrarian

revolution and demographical changes created the foundation of the Malthus theory about population and economic growth, with an increasing agricultural sector and growing population it will become cost-effective to produce industrial goods (Timmer, 1998:113). With a rising income due to increased productivity in agriculture, with the help of industrial goods, there will be an increase in the quality of life, this according to Malthus would have a negative effect on the economy as the population would increase but the resources would stay the same. However modern economist have proved Malthus might have been wrong as he ignored the role of technical progress and innovation (Cypher & Dietz, 2009:116-117) and a mutual growth between the agrarian and industrial sector is what creates the model for classical economic growth. A country with a stagnant agricultural sector will not have the resources to lead an industrial revolution² (Timmer, 1998:113) and shift structures both social and industrial. As productivity rises less work per unit has to be put in, this creates the possibility for specialisation and urbanisation which created conditions for new markets, innovations and the chance of sharing ideas and knowledge (Söderberg, 2007:302).

By the arguments presented above by big names in the economic history department one could argue that the real source of the industrial revolution in Britain was due to the increase in agricultural production and labour intense methods, such as seasonal workers (Timmer, 1969). An underdeveloped agriculture could in many ways become a hinder for future growth and industrialisation (Martinussen, 1999:129). However is it important to remember that development and the sustainability of a society cannot depend entirely on the transformation in one sector to another, it also comes a point when a developed state is needed to uphold order and push on the importance of cooperation between political and economic institutions (North, Wallis and Weingast, 2006).

Agriculture have despite the historical evidence indicating its significance for development taken quite a small role in the big room of development strategies, that is until the green revolution in the 1960s (Cypher & Dietz, 2009:353). Agriculture then came to play a larger part in development strategies, and Fogel (1994) states that for the domestic market agriculture is an important player as farmers will be both consumers of industrial goods as providers of labour. As the agricultural sector still is the largest sector in most developing countries and, as historical evidence shows us, plays an important role for the transformation to an industrial society one can argue for a clear link between agricultural and manufacturing sectors in developing countries (Bairoch, 1975:91). Some, as the pro-agricultural economist John Mellor, even argue that agriculture is the fuel that pushed industrialisation and that the agricultural sector should increase and grow with the industrial as a stagnant agricultural sector results in a stagnant or non-existing industrial sector (Martinussen, 1999:132). On the topic of stagnation Timmer (1998) argues that Africa has been stagnant in both sectors and that this is the reason for their underdevelopment while classical theories such as the Lewis-model blame the underdevelopment upon the large unproductive agricultural sector in Africa. The Lewis-model sees agriculture as an economic burden with large unemployment and low productivity marginal (Martinussen, 1999:134), but as we learnt under the first sub-heading of this section Lewis and the Lewis-model has been wrongly interpreted in many cases. Fei and Ranis (1975) present in their model of dual economy the importance of the agricultural sector and its role in promoting industrial growth by explain how increased productivity in agriculture influence the industrial sector as well as releasing labour from one sector to another. Lewis argues is that there

² At least this is true in market oriented economies.

can be few generalisations of the development process but the fact that in order to reach growth will labour have to shift from low productivity sectors to higher productivity sectors (Lewis, 1956:24). However does he not mention which sectors these are, hence could it be argued that the problem with stagnant development in Africa lies in the unproductiveness of the agricultural sector rather than the size of it. Agriculture transformation is as we have seen an important factor for development and with the right policies and institution can and have agricultural transformation create economic growth and development. It is here the Fei and Ranis model fill in the gaps and improve the Lewis-model by presenting three stages for developing countries to move from stagnation to self-sustained economic growth by shifting labour from agriculture to industrial sectors to increase their productivity (Fei & Ranis, 1975).

3.2 The advantage of backwardness

As brought to your attention in the introduction chapter this thesis aims at detecting changes in development patterns over time and space. When Europe first developed it took time to transfer goods from one area to another, but with the development of technology production costs has gone down and information, knowhow and technology cross borders to countries and region a lot faster today than during the first industrial revolution. And this is just what this section will treat, the advantage of backwardness and how the globalisation and movement of production and capital can change the agricultural transformation from traditional to modern and less time consuming. The advantage of backwardness could help speed up and change the agricultural transformation, from creating traditional demands of industrial goods could the transformation maybe use a surplus of labour in service sectors or manufacturing not only due to increased productivity in the agricultural sector but also due to globalisation and the advantages of trade and knowledge. However, in order to make any use of the advantage of backwardness is it necessary to have good institutions influence the organisational structure of the state and its ability to create growth and security for its population. Investments in human capital and markets with help of foreign direct investments (FDI) is argued by Rojas and Gunnarsson (2008) to create jobs, knowledge of technology, upgrade production and generate economic growth. Something that according to Rojas and Gunnarsson (2008) also will decrease inequality and create stability - political stability creates the base for functioning and effective state with capacity for its citizens. This correlates to the hypothesis of Abramovitz (1986) that experience correlates to productivity, and by using existing knowledge and technology can less developed countries follow and catch up with the leading countries with support from institutions to create human capital and other resources needed to create a leap forward.

Advantages of backwardness is a theory that build on the hypothesis which asserts the possibility that less developed countries can enjoy advantages to create fast growth and allow them to overtake more developed countries (Nolan, 1985). The reason for this is the assumption that less developed countries do not have to invest time and capital in research for development and can consequently use capital to adopt more advanced forms of technology and innovations earlier in their development stage than the 'first' developed country. They can so to speak use borrowed technology as a primary factor to create a faster development when entering industrialisation than the countries before them (Gerschenkron, 1962:8). Nolan (1985) points to historical evidence of this by giving the example of old and new agrarian countries, the new agrarian countries have experienced a faster and more equal growth with more technical advancement than the old agrarian countries. Concrete examples of the backwardness can, according to Nolan and Lenski ,(1985) be seen in the success of

Germany and the US in overtaking Britain during the early twenties century, or more recently in Japans rapid catch up to Western Europe and the US. The advantage of backwardness also looks to the considerations of circumstances and process of societies to overcome their underdevelopment and disadvantages some cases of backwardness is geographic location and distinction brought up, however it explains nothing itself and the importance of it can be questioned. Nolan and Lenski (1985) show upon how historical differences in terms of timing matters for the success of backwardness instead. When talking about the advantage of backwardness it can almost seem rude not to mention Broadberry and his studies on the early industrial countries in Europe and especially how Germany and the US leapfrogged ahead of Britain with a manufacturing sector of managerial capitalistic model rather than personal capitalism, this can too be connected to the Lewis-model as Broadberry shows upon how the productivity shifted due to labour and technology in the different countries (Broadberry & Burhop, 2007). The same can be seen in the East Asian miracle where small changes in agriculture and manufacturing made large differences (Krugerman, 1991) however can it be argued that the growth in East Asia was driven by extraordinary inputs in form of labour and capital rather than productivity and efficiency (Krugerman, 1994). The large inputs in labour and capital was to a large extent put into upgrading the populations education and creating a broad base of human capital (Krugerman, 1994) and in combination with FDI, foreign trade and a strong state could East Asia take advantage of the backwardness technology and enjoy rapid economic growth and development (Urata, 2001:409).

Innovations are a human instinct as people have always looked for ways to improve old things, create new tools and ideas (Fagerberg et al. 2005:1). As with the advantage of backwardness can the spread of ideas be used by thousands of people at no additional cost (Jones, 2002:83) indicating the important role of ideas and innovations play for scale economies and how the returns can be characterised by production (Jones, 2002:94). Large imports of foreign machinery and know-how can bring opportunities to create industrialisation and development as it may at the same time widen the gulf between economic potentialities and economic actualities in developing countries (Gerschenkron, 1962:8). As the knowledge based economy is a growing sector and many countries today benefit from technological adoption, despite the fact of different industrial economy, could be explained by the statement that non-rivalrous goods and ideas strongly impact the global economy (Fagerberg et al. 2005:375) at the same time as cheap labour and production cost influence industries to move hence creating new economies in backward countries (Gerschenkron, 1962:9). The world is growing smaller due to lower transaction costs and globalisation, once an idea is created everyone who knows of it can make use of it, however stands the problem of patents and IPR as a hinder for technology to spread for less developed countries. The rules for patents and IPR were created in a simpler time (Thurow, 1997) and some would even argue patents and IPR stands as a hinder for the advantages of backwardness and in that case rather delay development and stimulation of growth in less developed countries (Mazzoleni & Nelson, 1998). Important to remember is that the advantage of backwardness do not refer to imitation but inspiration for similar development patterns, existing knowledge and innovations.

3.3 Background

To be able to create a understanding of the 'traditional' development path of development and how globalisation might have changed the way of development will this section give a short background of the East Asian miracle as the development in this region benefitted from agricultural

As the text has shown us have agriculture and institutions played an important role for development and the ability to use the advantage of backwardness to create development. Why this section treat the industrialisation and transformation of East Asia is simply due to the fact that it is one of the two region that have completed the development ladder and with very few facts in history that are relevant, meaning that very few countries have, and only has historical records for a very recent period (Lewis, 1956). Showcasing the European transformation very brief to focus on the more modern transformation of East Asia will create possibilities to see differences in what the transformation looked like and how it was conducted. East Asia will stand as a more modern example of development as their development started in modern time and are in some cases still present as they continue to push technology forward.

3.3.1 Traditional development

The industrial revolution started in Britain and spread over the Western Europe and the US, this was a revolution of transition. From the late 1700 s to the early/mid 1800s did many new manufacturing processes started and production went from relying on manual labour to machinery that improved the efficiency by water power, steam engines etc. This was an era of fundamental changes in agriculture, textile, infrastructure and social structure in Britain (Ashton, 1969) and some historians claim that the agricultural transformation was of such importance for the industrial revolution that it has been mislabeled and should really be called the agricultural revolution (Clark, 2007:307).

The industrial revolution did mark a key turning point in history as it influenced the daily life of the global population that experienced it. Lucas (2002) claims that the industrial revolution was the reason the living standards the masses experienced sustained growth, this being because the advances in agricultural techniques which increased the food supply and raw materials in turn resulted in increased production of heavy industry and manufacturing. Hence could it be argued that the industrial revolution was born in the increased agricultural production and productivity, which released seasonal labor to work in the manufacturing sector (Timmer, 1969). A traditional view of development based on the case of the first industrial revolution in Europe could hence be the acknowledgement of the importance of agricultural transformation and factor endowments, which was also profound in the more modern case of the East Asian miracle countries.

3.3.2 The East Asian miracle

In this section does the term East Asian miracle/development mean the Asian tigers or dragons which portrays the countries that have a record of high and sustained economic growth during the last twenty five years. These countries being: Japan, Hong Kong, Taiwan, Singapore and the Republic of Korea. They do not all follow a specific model, but the main factors of their successful development are similar as agriculture and land reforms played an important role (Booth, 2002).

The East Asian development looks to be a perfect example of a development model as East Asia is the region that have experienced the most dynamic growth in the modern time world during the last two decades (Wade, 2003). Still are there questions concerning if the development in East Asia is a miracle rather than a developmental model, as the growth have been randomly distributed meaning that there is roughly a chance in ten thousand that successful development occurs in a concentrated region such as East Asia (World Bank, 1993). Previous researchers and different scholars have discussed and disagreed as well as agreed on the reasons for the centralised growth in East Asia, but

what stands is the fact that it is hard to pinpoint the reason for the centralised growth East Asia have experienced.

The East Asian development is often referred to as growth with equity as the countries in East Asia have not only managed to continuously create high growth rates but also been remarkably successful at distributing growth. The government in the East Asian miracle countries has managed to provide institutions and incentives that generated a high production growth and allocating of resources by changes in factor productivity. (World Bank, 1993) Much of the success of East Asia seems in many texts to be explained by the export oriented emphasis by the governments, but as argued by Rodrik (1994) is it important to remember that the export oriented policies came to play an important role first later in the economic transformation of East Asia. In the early development of East Asia was three important factors for growth recognised – increasing productivity, capital accumulation and the allocation of resources and innovations. For this to happen was a political will a necessary and the state invested in the development process by education, institutions and maybe most importantly did they push for land reforms to provide a more egalitarian development (Booth, 2002). So, besides the argument that the East Asia miracle is based on export oriented policies also lies the argument of initial conditions. With a high percentage of the GDP devoted to education many of the East Asian countries were blessed with low illiteracy rates and high levels of human capital, hence was the capitalists in East Asia well prepared to invest in new innovations and growth sectors. (Booth, 1999) The role the government played for the development in East Asia was of great importance as they created and sustained public goods as well as property rights (Wade, 2003). Park (2002) argues that the role of the government is what underlies the development strategies that have come to be referred to as the East Asian miracle, namely the investments in human capital that created an ability and enthusiasm to absorb foreign technology and knowledge on how to use the advantage of backwardness. This argument has agreement from Urata who points upon the East Asian growth being due to stable macroeconomic policies, human capital and the government's role and ability to connect FDI with local firms both in terms of capital but also in technology and knowhow to use the advantage of backwardness (Urata, 2001:453). But the government in East Asia also located structural economic weakness to encourage corporate transparency and relationships between private firms and government (Park, 2002). This made it possible to use domestic savings to reinvest in industries that combined the transformation from agriculture to a growing manufacturing sector that created the unusually high productivity growth that make the East Asian miracle. The success of factor endowments and the transformation from agriculture raised labour productivity and pushed up wages also in the rural areas which strengthened the linkages between on-farm and off-farm growth which created a domestic market for the East Asian countries to build their growth upon as it created new demands (Booth, 2002)

To summit, it could be argued that the growth and development in East Asia is characterised by equity that was an outcome of political framework and institutions (Quibria, 2002). The role of institutions played an important role for the growth in East Asia and showed the importance of them as pointed out by North (1973), but the role of institutions and government was not only to implement reforms of agricultural transformation but also to allocate the investment boom that occurred in East Asia during its early stages of development (Rodrik, 1994). In the early stages East Asia were the precipitants of much foreign direct investments (FDI) as a tool against the communism threat from Russia and China, it could therefore be claimed that investments and timing played an

equally important role to the development in East Asia as the role of government and institutions (Park, 2002).

3.4 Summary

As the name of this section tell us, this section will try to connect the previous research of agriculture and advantage of backwardness, as well as the role of institutions to create an understanding of how they connect to each other and create a theoretical framework and how they are important to understand a shifting transformation of agriculture and development. From the text in the two previous sections, institutions can be detected as a key role, in order to create a transformation within the agricultural sector as well as promoting new technology and educate human capital, hence in this summary a short paragraph will be dedicated to institutions, to easier understand the role they can play for development.

The word institution reflects to a structure or mechanism of social order, institutions is the cooperation of governing behavior among individuals in a society, they are the 'humanly devised constraints that structure political, economic and social interactions'. Constraints that according to North (1991) are the formal and informal rules that create and preserve safety within a society and/or market, this of course also depends on the circumstances in which they exist i.e. organizational state, governments role and religious law. (North, 1991)

History shows us that agriculture plays an important role for development and industrialisation as it provides labour and products. But the relation between agriculture and industrialisation is not the only relationship that matters, the relation between political and economic institutions is equally important as it creates the guiding rules and restrictions for development in different sectors as well as creates the opportunities and incentives for change and development. Institutions play an important role for development, but the framework of economic institutions are sometimes pushed into the background and referred to as 'laws' of market (Bardhan, 1989:3). To connect the role of institutions and politics with the advantage of backwardness Acemoglu (2006) draw the parallel that political and economic elites are unlikely to block development if there is a high degree of political broad-baseness, only when political power is limited and they feel threatened by the development will they block it. When Nolan and Lenski (1985) used Germany and the US as historical evidence for the advantage of backwardness can Acemoglu (2006) do the same with political plausibility for using the advantage of backwardness as new technology enriches competing groups but threatens the elite as they fear losing their power in the case of political change or economic growth and integration with other countries (Acemoglu, 2006). A country of backwardness that stands as a great example of this is Soviet Russia, where you can see the problem with adopting the advantage of backwardness was as much political as economic (Gerschenkron, 1962:28).

The ability for a country to use the advantage of backwardness lies to a huge degree in the institutions of the country, and the relationship between institutions and backwardness is quite easy to detect. How to relate this to agriculture might be harder and as the interpretations of the Lewis-model have suggested agriculture is the sector one could skip as the marginal production cost is low, labour would simply just be transferred from agriculture to the industrial sector and more productive sectors to create growth (Martinussen, 1999:130). However, when looking closer to Lewis-model it is not necessary the move from agriculture to industry but from low to high production that should be counted for when searching for development. And in combination with institutions and the

advantage of backwardness could it be that the Lewis-model makes more sense today, with globalisation? A good institutional framework creates the ability to make the most out of the advantage of backwardness for developing countries and in combination with the globalisation can the agricultural transformation change and become less essential in its traditional form.

The Lewis-model, with background from institutions, advantage of backwardness and agriculture could possibly be of use in today's global world as capital flows and development paths have changed. At the core of the Lewis-model is labour market dualism, with one productive and one less productive sector or in Lewis words a formal and one informal sector. Fei and Ranis (1975) improved the Lewis-model and made it possible to generalise it to developing countries by identifying these sectors as agricultural and industrial.

4. Empirical analysis

The bottom billion and the poor in the world diverge from the increasingly sophisticated developed world economy which makes it harder to integrate and graduate from poverty by creating growth (Collier, 2007:4). Aid agencies and 'Hollywood' do what they think is right but the truth according to Collier (2007) is that they help everywhere and everyone but the bottom billion, a concrete example of this is the fact that World Bank has offices in every major middle income country but not a single resident in Central African Republic. And despite the heart and effort put into recognising poverty among Hollywood celebrities it will not influence the possibility to change and implement the policies needed or push governments in poor countries to change. (Collier, 2007:4)

Despite this somewhat sad introduction and pessimistic thought concerning development aid's incapacity to reach the poorest of the poor this section will take a few optimistic detours. Over time and history of development strategies some have worked better than others, and the bottom billion are stuck in an unlucky trap – this does not mean liberation for those is impossible (Collier, 2007:79). The best studied example is probably Europe, the convergence or catch-up of the latecomers during the industrial revolution, but in more recent times the East Asian development stands out and in particular the extraordinary growth of China (Collier, 2007:80). As we became familiar with the European industrial revolution and East Asian miracle in chapter three, this chapter will look at the two developing giants, China and India as they are the developing giants countries currently making the game rules of development. With the background from the Europe and East Asia in combination with developing patterns from China and India the aim of this chapter is to find common ground for the leap forward and escaping of poverty, but also the differences and changes in their development patterns with support from agriculture, advantage of backwardness and institutions.

Globalisation is complex and the consequences of it is hard to determine, some argues the inequality in developing countries are due to globalisation and capitalism while others like Pranab Bardhan (2007) says globalisation is not the force creating inequalities in the developing world. As the background showed us have the East Asian growth miracle long been connected with equity but new reports from the Asian Development Bank now shows that inequality is rising in Asia, and especially so in the new developing giants China and India. This despite the fact that China a few years ago was among the most equal countries in the world, and often is this blamed on globalisation as China has experienced global integration. However this global integration is also argued to be the reason for the massive poverty reduction in the two giants, therefore are there two sides of globalisation and aim of this section is to use the examples of the developing giants China and India, as the leading development countries of today to explore the rules of development and growth today. (Bardhan, 2007)

4.1 China and India, the developing giants

The developing giants China and India share a similar history with colonial pasts and how that affected their first tumbling steps towards development; the new freedom was the start for both countries nation building with focus on a modern urban industrial sector.

Both China and India came to protect their markets and the economy was planned with a strong top down approach where the agricultural sectors main task was to support the urban industry. (Bhagwati) However, the reforms that came to be implemented in China after 1978 of land reforms and market orientation never occurred to its full extent in India (Naughton, 2007:234). The land- and rural reforms in China were based on the idea that the rural economy needed reconstruction and rehabilitation to create better incentives for the Chinese population and improve the domestic market so that all parts of the society could enjoy the growth – the rural enterprises set up under the reforms contributed to a 60 percentage agricultural growth (Lin & Yao, 2001:150). The rural reforms and enterprises were the first step of two. China's development that pushed their growth and development forward (Qian, 2001:299-300) as similar reforms never occurred in India their growth become central and an issue of the government. As a result was domestic savings not reinvested in small rural enterprises to create incentives but in heavy urban industries (Bhagwati).

Some argue the difference between the two giants development lies in how the government interpreted its resources and status, while Chinese leaders saw China as a low income country that needed a bottom-up approach to create a foundation for manufacturing and FDI (Naughton, 2007:87) India choose to focus on a top-down approach that privileged the urban industrial sector as the government did not see any future in the rural and agricultural sector (Winters & Yusuf, 2007). The top-down approach of India shut a large percentage of the population out of the developing process which have left India with basic problems and underdevelopment even though they are a rising economy with impressive growth and success in the service and ICT sectors (Sen, 2008:36). And here we see differences between the two giants – China created a more inclusive growth for domestic incentives with support from FDI while India favoured its development towards the urban industrial areas and became a service economy with high human capital but a large part of the population is unskilled and unemployed (Kowalski, 2008). The high level of human capital is something Krugerman (1994) is questioning as model for development, you can only offer so many jobs within a developing country for PhD students, so if the human capital level is too high does countries risk outsourcing the incentives and knowledge that could create poverty traps?

As understood by the text China and India started out their independence in similar style of planned economy but after the reforms in China 1978, China opened up their economy to become more export oriented as well as a large recipient of FDI (Winters & Yusuf, 2007) while India perfunctorily opened for a liberalisation but with tricky bureaucracy to hinder FDI (Kowolski, 2008). And this is where we find the profound differences between the giants, China have followed a more traditionally development path with rural reforms and industrialisation from within and in combination with open borders and FDI, new technology and knowhow managed to create an outstanding economic growth and development that have made them the workshop of the world (Lin & Yao, 2001:144) while India took a more modern path of urban focused development and became service intensive economy (Bhagwati). A reason for the different development path in India and China could be due to the political climate, China is a strong authoritarian state which for the common good have been able to make decisions quickly and build strong institutions and implement policies (Krugerman, 1994) while India is a democracy and consequently have more to answer to when it comes to decisions. As important as democracy might be considered by developed countries it might be the economic development that lead the demand for democracy, and not democracy that create economic growth and development (Sen, 2008:37) however the important fact to bring along from this section is that both China and India leapfrogged their economic growth and development when they entered the global market with comparative advantages of cheap labour – one being the workshop of the world and the other providing low cost human capital.

4.2 'Modern vs. Traditional development'

As briefly touched upon in the previous section it can be argued that the developmental patterns of our worlds two giants differ, some claim India have taken a more modern development path while China is following the traditional development path with agriculture at its core. Where China in the beginning of their development and economic reforms took a dual track of rural and urban as well as private and state owned to improve labour absorbing industries (Bardhan, 2010:20), India followed a more conservative path by scaling down and focusing on the urban industrialisation (Bardhan, 2010:25).

Developing countries around the world have (at least) one component in common and it is the large share of agricultural employment, our giants China and India are no exception of this. China and India are both ancient agrarian economies and the agricultural sector supports a huge percentage of the population, mostly the poor part of the population. (Bardhan, 2010:42) Even though both countries have huge agricultural sectors, development in the two countries has taken different paths, the Chinese climate provided the Chinese farmers with more favourable conditions than the Indian farmers who had to adjust to monsoon rains. But the green revolution came to improve the crops yield per hectare in both countries over the last decades, however the change in Chinese agriculture production from collectives to the household responsibility system and TVEs created incentives for the agricultural employed part of the population which can be seen in the intense rise in productivity in the 1980s. By looking at statistics it can be seen that China during the period 1987-2004 had a total factor productivity in agriculture of almost double that of India (Sources of Growth by Major Sector, 1987-2004). The combination of higher output in agricultural productivity and household responsibility made China contract domestic savings that made investments in agriculture and education spread, creating an equitable distribution of land and successful rural industrialisation, as we are familiar with from section 4.1. This have reviled some of the pressure on land and helped

China overtake India's agricultural production and productivity, however China does still have a large percentage of the population employed in the agricultural sector. This can be seen in official data, where Chinese agriculture employment counts for nearly 45 percent of the labour force but only contribute to about 12 percent of GDP compared to India where 55 percent of the labour force are found in agriculture and only contributes to 18 percent of the GDP (Brandt, Hsieh & Zhu, 2008). The large differences between agriculture as an employment sector and its contribution to GDP is a source of rural-urban inequality, and our two giants have had different ways of tackling this problem. While China moved away from substitution and taxes to open up their market and make use of the global economy and new green technology for sustainable growth, India tried to sustain their growth by implementing subsidies and bureaucracy that made it harder for FDI (Bardhan, 2010:45). As China opened up and India became somewhat more protective China experienced a much faster rise in GDP (Bardhan, 2010:46) something that when looking at history makes sense as protectionism in an integrated society can be self-destructive, something that could be seen in the decreased growth during the 1930s crisis (Rogoff, 2010). The open and growing economy in China stimulated rural infrastructure due to the interregional competition (World Bank, 2012) that have proven important for sustainable growth and with support from international cooperation (Rodrik, 2006) while investments in rural infrastructure in India declined (Bardhan, 2010:46). According to the text one can find that with openness and responsibility China created incentives for growth over sectors and this could have been the fact to why China is argued to have had the most egalitarian land distributions and growth in modern times, and that due to the lack of rural infrastructure and incentive India came to develop a growth with huge inequality. This can also be seen when comparing GINI coefficient of the two countries, in 2002 the GINI in rural India were 0.62 while during the same period it was 0.49 in China (Bardhan, 2010:51). With this in hand it is relatively easy to see that China have taken the more traditional development, of developing from the rural agriculture but with modern transformation that took help of FDI and globalisation to speed the process up, while India have experienced a less equal growth compared to China with urban focus and high human capital made out by the elites. Deng Xiaoping, political leader in China during the economic revolution never claimed the road to economic development in China would be glorious. However did he state that some people would get rich before other and some had to in order to create markets and innovation to bring the country forward. In 2012 had China's GINI-coefficient lowered to 0.474 indicating on a more equal economy. (The Economist, 2013)

Land reforms that occurred in China to create equal distribution and incentives for development did not occur to the same extent in India which has left a huge part of the Indian population in poverty and with underdeveloped social securities, however, despite this India has created an impressive growth in the ICT sector (Sen, 2008:36). India took a modern path of development that privileged the urban areas with investments and education for human capital and the global market have seen it pay off, India is now the call centre of the world and many developed countries outsource consumer service and ICT development to India. It seems like India found a way to skip steps in the traditional development patterns, with less focus on agriculture and the rural areas did they achieve high economic growth by developing human capital in the urban sectors (Kowalski, 2008). Though it looks like India have created a new path of development it is important to look behind the economic results, India sure has become a service economy and a developing giant but is it a growth that will be sustainable? The inequalities in India are high and with a huge percentage of its poor population living in rural areas with bad infrastructure and uneven land distribution, and with limited spread of

education are the poor people in India stuck in poverty traps and less equipped to use the opportunities globalisation could bring to their economy (Bardhan, 2010:43). In order to cure the inequalities in India does some claim a step back on the development ladder is needed, hence to move into rural manufacturing would create the possibility of employment for the huge part of India's unskilled population (Kowalski, 2008).

4.2.1 The growth question of the development giants

That China and India are economies on the rise and blossoming developing countries is nothing new by now, with growth rates in GDP of around ten percent that have been sustained over the last few years. But we have also stumble upon differences between the two countries in both growth rates and the outcomes of implemented reforms and the new economic growth. Different economic structure show that the Chinese economy is more investment driven than that of India, the average contribution of investments in developing countries is about 20-25 percent of GDP while investment in China account for over 40 percent of GDP sustained over the last decade (Park). This divides the growth question of the two developing giants India and China to two more relevant questions – with such high percentage of investments in GDP growth why are China not growing faster and with demographic changes and high inequality in India will they manage to retain a balanced structure of their GDP growth?

China has moved from having a centrally planned economy to become market oriented and a world leading economy in just a few decades while India is still developing into an open economy but with shadows of autarkic policies remaining. This has been discussed in previous parts of the empirical chapter of this thesis, however it is once again brought up here to show how past reforms and historical heritage may influence the current economy. The standard reaction to China and India's rapid growth is globalisation, but globalisation does also in many cases get the blame for the growing inequalities in Asia and in this specific case China and India. The open market reforms have, as can be seen in figure 1 and 2 increased both countries economic situation (the drop in 2007-2008 can be explained by the financial crisis that hit the world economy) and argued by Bardhan (2007) also helped a large number of workers and eliminated much extreme poverty.

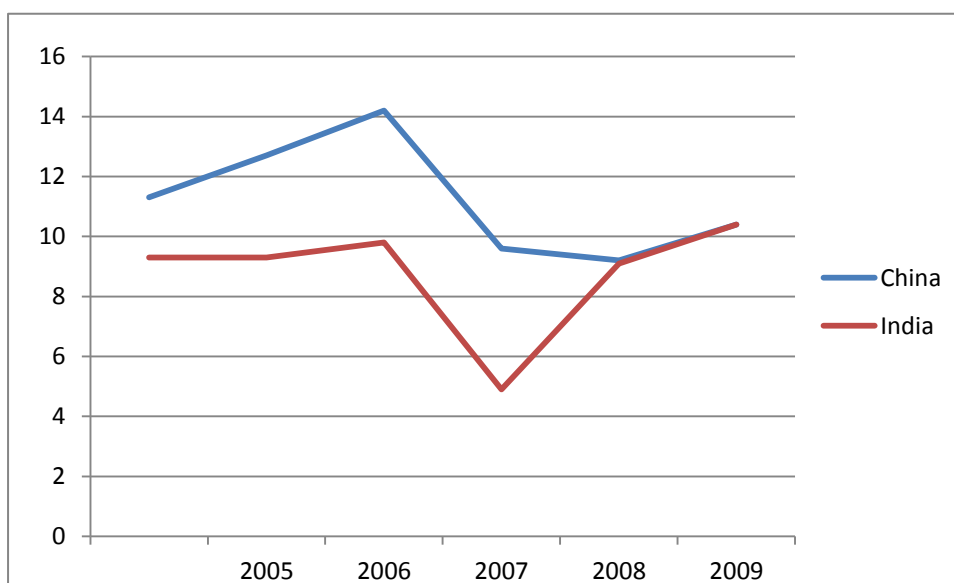


Figure 1: Real GDP growth in Annual % growth

Source: OECD country statistical profile: Key tables from OECD 2013

The open market orientation and global integration during the last two decades have created new opportunities but of different characters for the two developing giants as the extensive and intensive growth patterns have been targeted through different reforms.

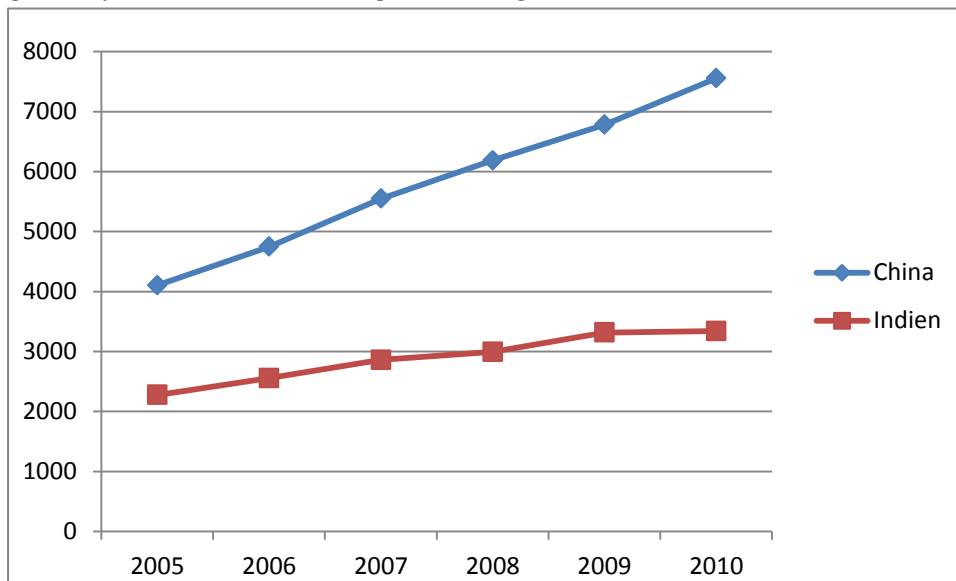


Figure 2: GDP/capita
 USD current PPPs

Source: OECD
 country statistical
 profile: Key tables
 from OECD 2013

Extensive
 economic growth
 refers to the
 continuously
 increasing

resource inputs to generate growing output, while intensive economic growth is identified by the effectiveness of resource productivity along with growth in the output and greater consumption. The *intensive* model is what characterizes developed countries across the world, the *extensive* model is what eventually collapsed the Soviet economy and it could be claimed that the Soviet case is what made China act early towards an *intensive* model while India still struggles with large-scale industries that are over-resourced and uncompetitive (Park). Though China earlier created reforms for intensive economic model can we in figure 1 see that India is catching up in terms of real GDP growth, however are China still in a clear lead of GDP/capita which might be explained by the labour intensive industrialization that occurred when China opened their economy to the world. The globalisation of China and the intensive economic reforms could be the reason that eliminated the once substantial extreme poverty in China, but also in India thought slower as the poverty level in both have declined massively over the last decades. (Bardhan, 2007) Globalisation have presented opportunities for developing countries and the developing giants China and India are significant examples of this, with market oriented reforms, technology spread and access to markets have the developing giants and especially China created competitive markets.

Table 1. Poverty and Unemployment in the developing giants, China and India

Population below poverty line in % (2010)	
China	13,4
India	29,8
Unemployment rate in % (2011)	
China	6,5
India	9,8

Source: CIA Factbook

By looking at the statistics of poverty line and unemployment can we see that China continues to be ahead of India this is presumably explained by the quicker and earlier adaption to the *intensive* economic model in combination with the expansion of exports of labour-intensive goods which lifted many Chinese out of poverty while India still struggles with resource intensive industries from its past (Bardhan, 2007). Much of the extreme poverty is focused to rural areas, as China managed to increase agricultural growth and egalitarian land reforms at the start of their growth they grew with equity even before they catered the global demand for labour-intensive products. India, on the other hand had slow agricultural growth and internal conditions and historical heritage which have made poverty reduction in India slower than that of China and these factors have also made the inequalities in India higher than in China.

4.3 China as a role model?

China, a country that went from world leaders to catastrophic poor – a country that seemed to have no future but a sad one, however the role of China has changed (World Bank, 2012). With rapid and extra ordinary growth China has become the second largest economy in the world and seems to be transforming into the new leaders of the world (www.worldbank.org).

From being a world leading economy and innovative country something happen to China and from approximately 1820 this forward and rich country began its backwards path and the future seemed grim and underdeveloped. Over a century of underdevelopment would pass until something happened, and China began in the 1950s its journey that would bring them to the top of the global economy and after the economic reforms 1978 China has stayed on its impressive path (World Bank, 2012). Though one might count China into the East Asian miracle it does not seem they followed the same pattern of development as the early developed countries in East Asia. The Chinese development and economic growth was more due to open and market oriented business than institutional reforms, hence does China seem to have taken a development path more alike the Anglo-American than the East Asian (Lee, 2001). With this said is not as to say that the government did not play an important role for the development and economic growth in China, the role of government did play an important role in China by setting up functioning institutions to support domestic capabilities and lift million out of poverty (Rodrik, 2006). Besides a more export and market oriented approach to growth China differ from the East Asian model by the concept of equity as well, East Asia is very much connected with the concept of growth with equity while China more concerned over capacity and deflation, creating a long term income distribution towards a more equal society, following the Kuznets curve and idea of growth and inequality (Lo, 2003).

Chinese policies were formed to keep social stability during times of structural change, which mobilised different parts of the society and created interregional competition for investments, infrastructure and business mainly (World Bank, 2012). This was a sophisticated and smart move of importance for sustainable growth as the government implicated policies and institutions to support both domestic capabilities and international cooperation (Rodrik, 2006). By integrating into the world market and with policies and institutions supporting international cooperation, could the Chinese policy makers effectively link FDI with domestic industries and hence create the rapid economic growth in China as well as becoming an important player on the world market (Tang, 2008). Unlike many of the East Asian countries China developed with a cooperative government that considered outsiders and separated firms and financial institutions (Lee, 2001), this proved to be successful as the economic institutions relied on market and price signals within its boundaries (Rodrik, 2006). Due

to the fact that the market relied on price signals the economy changed from the grassroots and the inefficient firms were eliminated creating a growing sector of investments and incentives (Lin & Yao, 2001:151-52). The trade policy implemented by the Chinese government played a huge role for the Chinese development however evidence point towards the fact that China would still have grown without the export oriented policy (Rodrik, 2006). But needless to say did the export oriented approach speed up the development, and Chinas entrance into the world trade organisation (WTO) created possibilities for China to not only be part of the global market but to also influence it (Weiss, 2005).

With policies that created possibilities for competition and international cooperation it became possible for Chinese firms and population to move between sectors and maybe that we could see the Lewis-model in the development of China. By using the international cooperation and globalisation does it seem like China did not follow the traditional patterns of development and became the most free trade oriented developing country in the world (Branstetter, 2006). The labour intensive industries in China became a comparative advantage on the world market with cheap production (Lin & Yao, 2001:157) and with a large population and domestic market could China make use of the globalisation to change their agricultural transformation and at an early stage enter the industrial and manufacturing sector to create truly impressive growth rates (Krugerman, 1994). It could therefore be argued that the Lewis-model of dual labour markets holds up remarkably well even in modern developments. The transformation from agricultural to industrial sector was a shift of labour from inefficient to efficient production in both sectors as recognised by the improved Lewis-model by Fei and Ranis (1975) indicating that Lewis model of labour dualism is still characterising developing countries. Though China successfully seems to have carried out a development following the Lewis-model is it important to remember that the Lewis-model focuses on economic growth first and later on inequality and poverty, issues that seem more important for today's researchers to find in the Lewis-model.

5. Concluding discussion

Traditionally the role of agriculture in the development process has been seen as instrumental in the development process (see for example Lewis 1956, Fei and Ranis 1975). The aim of this thesis has been to re-visit this discussion with a focus on two of the new rising economies, the developing giants China and India. As understood by the thesis has the world has changed over time and we no longer live in the same world as a few generations ago. Technology and communication have created new markets and possibilities as well as more awareness of other people's living standards and challenges (Haggblade, 2011). The per person income level have increased over and since the industrial revolution in Britain and evolutionist claim this to be simply due to structured economic reasoning namely that production and consumption expand depending on investments (Clark, 2007:197). Well known economist Arthur W. Lewis however states that growth is a result of human effort and that men are not likely to get more unless they try. However societies do differ widely, which influence their ability and concern to seek and exploit economic growth, but it is up to everyone to change history (Lewis, 1956:23). Economic growth is often, and maybe especially in an evolutionist view, associated only with an increase in per capita income, but as seen in the literature and text above economic growth and development is related too much more than increased capital. In order to create economic growth and development does institutions play an important role, to create incentives, values of economic growth and support new technology with human capital and knowhow. (Lewis, 1956:201) The words of Lewis make the evolutionist ideas of development seem unoptimistic and quite backwards thinking as their explanation of underdevelopment lies in no other argument then laziness. When looking at developing countries today, can their underdevelopment really be blamed on something as simple as the whole population being lazy (Clark, 2007:13)? Economic growth and development does not happen overnight; it is a process that requires time and good institutions to care for both the political and economic society (North & Thomas, 1970).

With this said about economic growth and development, how come the world is not yet fully developed? Judging from previous literature and the text in this thesis, development relies on agriculture and good institutions to cater for future development and smooth transformations, and yet the majority of the world's population is still living in poverty. It seems the world is a bit more complicated than in print, and the discussion here will therefore lie within the lessons that can be taken from previous and currently development patterns. It has been stated in this thesis before but it can be stressed again, the traditional development patterns of the industrial revolution in Britain can seem dated and the new actor on the world market that sets the game rules is China. But how much have really changed? The agricultural sector is still of great importance, even though the

transformation might have changed with global contribution of both capital and knowhow, with this in mind can the literature based research in this thesis observe a change in the traditional development patterns and agricultural transformation?

A quick answer to this would be to look at the case of India, a developing giant that took a modern approach to development and skipped steps for faster development. It resulted in rapid economic growth but also in huge gaps between the urban and rural sector, and now researchers mean that in order for India to become more equal and create sustainable growth a step back will be needed (Kowalski, 2008). Out of this premise it could be argued that the steps that have been seen as traditionally important for development seems to still bear importance, however the look and shape of them might have changed and it seems China is the evidence of this. Following the traditional path of development by starting with land reforms and agricultural advancements and by domestic savings and investments create growing industries and economy, but with a modern turn of FDI and cooperation it does seem like China have found the new path of development by connecting modern globalisation and markets with traditional agricultural development for a sustainable development and economic growth. As this thesis in some ways have been guided by the Lewis-model, and not the interpretations of it, it could be argued that China developed according to the traditional pattern of agriculture leading the development and as productivity grew other sectors absorbed the unproductive labour to generate productivity in manufacturing and pushing the growth forward. Hence would I argue that the Lewis-model of market dualism still remains a useful framework for some of the economies today, however capital formation may have become more important than Lewis suspected which may hinder further development in modern sectors. Could this maybe be what is seen in India and the reason why it is suggested India take a step back in their development to close gaps between modern and traditional development. As Lewis mainly thought of his model in terms of economic growth can it today also be seen as a model of poverty reduction as the movement from agricultural to industry targets the rural poor and incorporate them in the labour force – and as we have seen in China have millions been lifted out of extreme poverty.

So far have I learnt that developing patterns seem to have followed the same path since the industrial revolution due to the simple fact that they have worked but also as these examples are the only ones we have seen yet complete the journey of development. One of the developing giants, India have taken an alternative path which generated a rapid economic growth ,however can the sustainability of its growth and future development be discussed and maybe even criticised as the growth have also created great inequality gaps. At the same time I will not say that the development patterns follow the exact same path now as during the industrial revolution in Europe, while the core might be the same with agricultural development and domestic savings and industrialisation do countries today have the ability to take shortcuts, thanks to globalisation. A clear example of this is the developing giant China, who as we have seen taken a more traditional development path than India but with the help of globalisation and modern technology, foreign knowhow and investment managed to play domestic abilities to its best and created themselves a leading position in the world market.

Despite East Asia's, and particularly China's, leading role on the world market and spectacular growth that have been fairly well distributed, there are the sceptics that claim they do not form a model for development in the west (Krugerman, 1991). But then is it really a developing model for the west that we should be searching for? Should not the focus lie on the underdeveloped countries of the

world, and with China being the rule setter of today's developing countries I think it is important to look at the Chinese development and how they effectively moved labour from low productivity sectors to high productivity sectors as well as connected domestic abilities with foreign capital and knowhow. And for just this can the Chinese experience be related, even though the developing pattern of China might have limited results on land- and capital abundant countries, to other developing countries:

The rural industrialisation in China resulted in more equal development than in any other developing country, which eased social tension that can otherwise be a threat to development. Also the role of the government and how they used their comparative advantages at its fullest to create incentives and growth – this all adds to the key of development in China but also East Asia and Europe, namely the investments in rural infrastructure to promote overall development (Lin & Yao, 2001:188).

The economic reform in China and the equal industrialisation starting from land reforms and state invention created the possibilities for China to move from phase one to phase two as described in Fei and Ranis (1975) model of dual economy.

To finish of the analysis of the material presented it could be argued that the Lewis-model worked in China but not in India – the Lewis model, as explained in chapter 3 have often been misunderstood, it is not about moving labour from agriculture to manufacturing but to shift labour from sectors where it is unproductive to sectors where it can be productive. When China developed it started in traditional patterns of agriculture but with good policies and the ability to absorb FDI to the advantage of the domestic market, this lead to a competitive and productive rural sector as a response to this could the agricultural sector release unproductive labour to manufacturing and industry and hence develop in an egalitarian way. On the contrary India developed with its elite and urban population which has created a huge gap between labour sectors, making it hard for the poor people to move up the developing ladder – the misinterpretation of the Lewis-model and the non-favourable outcomes of it shows in India. Lui, Cao and Deng (2012) wrote a paper that discusses the Lewis-model in China and they conclude, as so have been shown in this thesis, that there is a connection between the Lewis-model and rural labour surplus in China. And this is where this thesis will end, by concluding that the traditional development patterns seems to still be the way to go for equal economic growth and development, but the transformation of it have changed due to globalisation – globalisation have eased the pressure of domestic savings for development through FDI for investments and development in domestic abilities. However one may wonder what growth and development would look like in India if they invested to develop the rural areas. Would it be able to create more human capital for a service build economy? I could only speculate, but the guess would be that the human capital intensive economy of India would come to work better and be more inclusive.

6. Food for thought

As stated, well actually quite a few times in this thesis is this a broad topic and one that many month and maybe years could be spent on, however was this not an option in my case as I as a masters student have deadlines and limited resources. But I hope with this thesis that I have contributed to somewhat more of an understanding of development patterns over time and space, but I leave it here to you to answer the question whether I can really answer the question of development patterns and agricultural transformation over time and space. We have seen how the Lewis model with alterations from Fei and Ranis (1975) seems to have influenced and worked in China, however India moved straight into step two which have held them back in comparison to China that have gone from a poor planned economy to the second largest economy in the world with an open market.

I think and hope that I have contributed to something but with future research and empirical analysis of developing country data and case studies would provide a clearer picture over the development patterns of today's developing world. China took advantage of foreign investments and technology and the Chinese state created possibilities for domestic abilities with advantage of backwardness and globalisation for capital, so why should not other countries be able to do the same? The bottom billion live a different life than the developed countries still do they co-exist with the modern, globalised 21st century – it is a though question to answer and with Africa just starting their development is it hard to see their development patterns but one thing is sure: globalisation have brought more awareness to people all over the world of the possibilities out there.

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