universität wien

MASTERARBEIT

Titel der Masterarbeit

"Corruption in India and China"

Verfasst von

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angestrebter akademischer Grad

Master of Science (MSc)

Wien 2015

Studienkennzahl lt. Studienblatt:	A 066 914
Studienrichtung lt. Studienblatt:	Masterstudium Internationale Betriebswirtschaft UG2002
Betreut von:	Univ.-Prof. Dr. Franz Wirl

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Acknowledgments

First of all, I want to thank Univ.-Prof. Dr. Franz Wirl, my advisor for this thesis. He accepted my topic and was there at any time when I was stuck or needed a second opinion.

Of course I also want to thank my sister and my girlfriend who were always comforting me when I was being stressed out while writing my thesis. Also I want to thank my godmother Erna for proofreading my thesis and for her constant moral support. A very special thanks also goes to my study colleague Pit who sat next to me in nearly every course during my five years in Vienna. We both managed to finish out studies in Vienna without major problems and he is definitely one of the people responsible for this. But of course I cannot forget Jak, Mich, Jil, Stee and all my other friends I encountered in Vienna. You are the people who made Vienna the most wonderful city for the last five years.

But I kept the biggest and most important thank you till the end. I want to thank my parents. Without them, nothing of all this would have been possible, they are the ones' who gave me the opportunity to go study abroad in the first place and they are also the ones' who continuously helped me with whatever problem I had during those five years.

Thank you

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1 Introduction

Living in a country like Austria makes a topic like corruption seem far away from our everyday life. Sure every now and then one can read in the newspaper that some high official or some politician took a bribe. A perfect example would be the recent disclosure of the corruption scandal with the FIFA and their president Joseph S. Blatter. But even with such scandals, we would never expect that we would have to bribe our local authorities while applying a demand or authorization for something. We don't think about including a bribe with such demands in order to speed up the process. I am not saying that this doesn't happen at all, but it definitely is not a normal thing to do or to openly admit too.

Last semester I wrote a seminar paper about corruption in India and its effects on wages. It was the first time that I had ever been confronted with this topic and I was shocked by the extreme results but at the same time interested to do further research on this topic and so I decided to write my master thesis on a related topic. This is why in this paper I want to describe the concept of corruption, what it is, how it functions, what are the causes and the consequences of it. Can the terms of corruption be generalized or is it always case dependent? The extreme results in the case of India lead me to ask myself if it is normal that one of the major developing nations has such a high level of corruption. This is why in this paper I also want to analyse the relation between economic growth and corruption. I chose to analyse China and India, since they are two of the biggest emerging countries and I want to find out if they are in any way special when it comes to this relationship and to the topic of corruption itself.

I had a few objectives in my mind. Firstly I want to present a clear and understandable framework of corruption as a general term. Then I want to address corruption in China and India. With the help of case studies I want to find out which are the main sources of corruption in these countries and if they differ from other more developed nations. I also want to find out why corruption is so much more of a problem in these countries and see why the anti-corruption regulations are not working. The last question I want to answer is if the relationship between corruption and economic growth is special in those two countries. Normally corruption is seen as some sort of market failure, but the markets in India and China seem to be developing extremely well even though there is a high level of corruption.

Structure wise, I decided to start with a first larger theoretical part, where I will establish the above mentioned framework which should help everybody to understand the case studies later on. This part will present a definition, the causes, consequences and functioning of corruption. Additionally there will be a subsection, which defines the general relationship between economic growth and corruption.

In the second main part of the paper, I will analyse several case studies about corruption in China and India. Here the main goal is to compare the results of the case studies with the theoretical framework established in the first part. Do the causes of corruption in India or China differ from the general ones'? If not then why can countries like China and India which have such high corruption rates still be developing at such an incredible speed? Also we will see that there exist quite some anti-corruption regulations in these countries, but why are they not showing any results? These are some of the key questions that will be addressed in this part.

The third big part will again address the relation between corruption and economic growth. But this time it will be specifically about this relation in India and China. In the theoretical part, it is established that corruption and economic growth are negatively correlated and yet we have two of the fastest developing countries with high corruption indices. Are they really special/outsiders in this regard or is there another explanation. With the help of the case studies and several scatter plots I will try to answer this question.

The fourth and last part will be a conclusion in which I will recap the main results of this paper and suggest possible interpretations for these results.

2 Corruption

In this section some of the major theories and frameworks of already existing research and literature will be presented. Since corruption is such a far reaching and complex concept, it is practically impossible to cover every theoretical basis which is the reason why I will focus on the most general and important one's for my thesis.
This first main part will be subdivided into three subsections. The first one will provide a definition of corruption as well as the methods and tools by which corruption will be determined in some of our case studies. Additionally, I will present the different types of corruption that exist. This will hopefully help us to classify actions and behaviours as corrupted or uncorrupted.
The second section will review the findings of researchers on the causes, consequences and functioning of corruption, in the hope that this will help us understand the results of the case studies in the later part of this paper.
The third and last subsection of this theoretical portion, will present what recent research has found on corruption and economic growth. How are they connected and how do they influence one another. This will help us determine if China and India are really "outsiders" when it comes to this effect.

An important notice is that in this paper, I will not examine the direction of causality of corruption. This is one of the most discussed topics in the literature about corruption and it goes beyond the goal of this paper.

Even with corruption being a complex subject, the structure of the paper should help with the understanding. Every subsection builds on the knowledge gained in the previous one while adding another new aspect.

2.1 Defining Corruption

In this paper corruption is defined as:

> "The abuse of entrusted power for private gain" [1]

This means that actions are considered to be corrupted if they entail the misuse of some aspect of entrusted, public power for private gain. Even though it seems like defining something as far reaching as corruption is quite simple, since the general notion of the term is always the same, there are some other aspects to consider. Defining corruption in such a way that everyone or most researchers would agree is impossible, since the definition depends so strongly on the focus of the research. Depending on the goals of the paper, notions of the definition would change. There are thousands of research papers about corruption and in a lot of them the authors try to define corruption individually.[2] Since it is impossible to take a look at all of these definitions, I will try to explain why I chose this definition which I took from Transparency International. The main reason for this is that this definition is one of the most commonly used. Additionally in the last part of the paper where the relation between economic growth and corruption will be analysed, their data and indices will be used, so it seemed pretty straight forward to also use their definition since it harmonizes well with the research goals.[3]

Most of the case studies analysed will use their own definition but this will give us a chance to see how their definition differs from the one Transparency International proposes.

Even though there is no general consensus on the definition of corruption, there is one part on which everyone agrees, which is also contained in the definition used here and it is that corruption always entails some aspect of misusing public power for personal gain. [4]

Even though there are also some authors who criticize the definition provided by

[1] Transparency International 2015
[2] Tanzi, 1998 p.8
[3] Transparancy International 2015
[4] Jain, 2001 p.73

Transparency International for being too narrow, there will be no discussion here on why one should prefer this definition to others, since this is not relevant to this paper.

One of the most used terms when doing research on corruption, is the term of rent seeking. There are numerous cases of rent seeking in the part about China and India, but what does this term refer too? In very general it refers to the pursuit of economic rents.[5]

Weil points out that "Rent seeking usually arises in cases where government policy creates an artificial or contrived rent, such as through licenses or protected monopolies". With this information it should be safe to assume that rent seeking is more likely to arise in the public sector. This is beneficial for our case studies since most of them are about the public sector or about public sector related activities.[6] Gary Becker even went so far as to say that if we would abolish the state, corruption would no longer exist. Obviously this statement is quite exaggerated as countries like Denmark or Canada show, since they are some of the countries with the lowest CPI (Corruption perception index) ranked 1/175 and 10/175 while also having some of the largest public sectors (both ranking in the top 10 worldwide). This would be a clear indicator that corruption does not depend on the size of the state, but more on the way how the state functions and how it works.[7]

With the help of this information one might ask the question if rent seeking is really a bad thing. The answer to this question is very complex and will be addressed again in the conclusion of this paper after analysing all of the different case studies. Assiotis and Sylwester state that to some level the pursuit of rent seeking seems natural and inevitable in every political system. But in this paper we will see later that excessive rent seeking can lead to a misallocation of scarce resources and it can hinder economic growth.[8]

Researchers agree that rent seeking can be divided into two parts, one legal part: lobbying and one illegal part: corruption. Lobbying allows you to change or adapt certain rules, while corruption bends and disregards the rules. A problem with this separation is that it is not

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[5] Pindyck and Rubinfeld, 2009 p.370
[6] Weil. 2009, p.288
[7] Tanzi 1998 p.10
[8] Assiotis and Sylvester 2010p.7

possible to generally define the limits of corruption and lobbying since acts that are legal in one country, might be illegal in another one. In an effort to create this boundary between legal and illegal, Jain proposes a framework which is meant to help someone to differentiate if a rent seeking behaviour can be classified as legal or illegal.[9]

Following Jain, three conditions have to be met for the behaviour to be legal. The first one is that "The influencing of the decision makers should occur in a competitive game where all players know the rules, and as such act on an equal competitive basis". Secondly: "No secret or side payments should occur" and thirdly: "None of the opposing groups can benefit from the income earned by the other group". Even if only one of these three conditions is violated, the rent seeking behaviour of legal nature becomes illegal. With the help of these conditions, it should be easier to define corruption and lobbying. Although in most of the case studies there will be no need for additional conditions, since it will be clear for everyone reading the studies if actions are corrupt or not. [10]

2.2 Types of corruption

It was already established that corruption is more likely to take place in the public sector than in others. But according to Jain, depending on where the corrupt actions occur, three kinds of corruption can be distinguished. These three kinds differ one from another in terms of the types of decisions that are influenced by corruption.[11]

The first type of corruption is "Grand corruption". It refers to acts of the political elite by which they exploit their power to make economic policies. This type of corruption is often referred to as high-level corruption and is the most vitiating type of corruption. Since the corrupt decision comes from the political top of a country, this type of corruption can affect everyone in this nation. Often economic policies are affected in such a way that it maximizes the profits for the politicians themselves. This is possible because they can affect policies or implementations in such a way that is serves their own interest and by that they divert the

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[9] Schleifer and Vishny 2010p.393
[10] Jain, 2001 p.78
[11] Jain 2001 p.73

allocations of resources from the populace to themselves, instead of basing their decision solely upon the interest of their principals. This also means that public spending will often get allocated in sectors, where the opportunities for private gain are the highest, without consideration if the money is well spent in these sectors. Still there are some limits to this kind of corruption, since politicians have to balance their own private gains against the chance of remaining in power. The biggest problem of grand corruption is that it is very hard to detect, because often there are no bribes involved and politicians will argue that a certain group of the population profits from their choice of allocating the money in their chosen sector. In this case it is nearly impossible to prove that the politicians took the decisions solely based on their personal interests. The most extreme case of this kind of corruption is a dictatorship. In this case one person who is supposed to make the best decisions for his country can make any of his decisions solely based on his personal interests and benefits without anyone being able to do something about it.[12]

The second type of corruption that Jain describes is “Bureaucratic corruption”. This type of corruption will be the most important one in this paper, since it is the most common type of corruption in developing countries. It refers to corrupt acts of appointed bureaucrats (which in our case will be the officials working for the state) with their superior or with the public. The most common form of this sort of corruption is an interaction between the bureaucrat and the public, also known as low level corruption. Here, the main focus will be on the low level corruption since this is the type of corruption that will be analysed in our case studies.[13] Rose-Ackerman wrote a work on governments and corruption, in which he analyses these low levels of corruption in countries emerging from civil war or countries with weak governments. He lists four main examples for this type of corruption. It will be interesting to see if those examples also apply to countries like China or India. [14]

The first example that he considers is the allocation of a scarce public resource. In this case, the official would allocate the resource to the person who is willing to pay the highest price

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[12] Jain 2001 p.74-75
[13] Jain 2001 p.75
[14] Ackerman 2008 p.330

for it. Ackerman sees this as the weakest form of low level corruption, since this kind of corruption comes actually fairly close to an open market bidding situation, where the person who is willing to pay the most and so to whom the resource has the highest value, gets it. [15]

The second example he considers, is the situation when a certain benefit is to go only to the qualified. For example this could be aid to victims of a certain conflict. Now an official is given the job, to select the best suited of the applicants. A problem is that those officials cannot be perfectly monitored. It does not really matter if the supply of the resource in question is scarce or open ended, the official can accept bribes both from the ones who would be qualified as well as from the ones who are unqualified. The extent of this corruption will strongly depend on the ability of supervisors to monitor the officials' behaviour as well as the honesty and moral sense of the official. But there are also some other factors in place which are circumstantial like if there is a possibility for the applicants to make the request with another (potentially honest) official, which would increase the chance of being caught.[16]

The next and probably most common example is the so called speed money. This sort of bribe is paid in order to speed up the bureaucratic process. Those processes on itself have a reputation of being slow which gives the officials excellent opportunities to extract more bribes by threatening to create even more delays. In urgent/emergency conditions, people might have no other choice than to bribe the official in order to get their demand through in time.[17]

The fourth and last example given for low level corruption presents itself in a situation where an official may overlook an illegal trade or action in return for a bribe. He could for example overlook or ignore the absence of a tax payment. There is one main difference between this fourth case and the three others. In the three other cases the government does not lose any money by the actions of the official, but in this case, the official reduces

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[15] Ackerman 2008 p.330
[16] Ackerman 2008 p.330
[17] Ackerman 2008 p.331

the government's incomes by allowing people not to pay their taxes. This will be addressed in a later section of this paper. [18]

The third type of corruption is the "Legislative corruption", which is the kind of corruption affecting voting behaviour of the legislators. The most common example would be "vote-buying" where a single person or groups of people are bribed to vote for a certain person. But since this type of corruption will not be of any relevance in this paper, it will not be explained in further detail here.[19]

2.3 Methods and tools to measure corruption

Measuring corruption is and probably will be a topic of discussion for quite some time. During the last two decades there has been a flood of new works about corruption. But not only have the publications been rising exponentially, also the number of indices which focus on measuring corruption have grown over the past decade. This raises the question on the validity of the traditional measurements. Some of the more established and widely used indicators are the Transparency International's (TI) "Corruption perception index" (CPI) and the World Bank's "Worldwide Governance Indicators". But now they are being challenged by some of the newer indicators like the Ibrahim Index of African governance or the global Integrity index. Another kind of tools that have been added, are the area-specific tools, which are restricted to certain countries or regional areas.[20]

In general one would assume that this is a good thing. If there are more tools to measure corruption than it should be easier to find the one which is best for every situation. But unfortunately this is not the case, since the big problem with all these toolkits is that despite having similar sounding names, they measure very different things, which makes it close to impossible to compare the generated results. An example for this would be the Corruption perception index by Transparency International and the World Banks's Control of corruption index. While both indices are often lumped together, they are different in a lot of ways. The

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[18] Ackerman 2008 p.331
[19] Jain 2001 p.75
[20] UNDP and Global Integrity, 2008 p.3

one thing which they have in common is that both are composite indicators, made up of distinct component data sources. The CPI is composed of 14 sources. On the other hand, 25 sources are used to generate the World Bank's corruption index. It should be clear that the scope and use of such an indicator depends fundamentally on which sources it is based on. This is why it is not simple to compare the indices. This is also one of the reasons why they should not all be simply termed "corruption measures" since this implies that they are uniformly comparable. In some cases this terminology is the only thing that the measuring tools have in common.[21]

In order to make the indicators more comparable, one idea is to classify them into four categories depending on their:

- Scale and scope
- What is actually being measured
- Methodology employed
- Role that internal and external stakeholders play in generating assessments[22]

Going into detail for all of these categories would be beyond the scope of this paper, but it is still important to realise that such a categorization might be necessary in order to determine the right measuring tool for any type of research. Another way to categorize, is to define the different types of indicators. Three main types can be distinguished[23]:

- Perception-based indicators or experience based indicators
- Single source data indicators or composite indicators
- Proxy indicators

Perception-based indicators rely on the subjective opinions and perceptions of levels of corruption in a given country among experts or citizens. Experience based indicators on the other hand, try to measure actual personal experience with corruption.

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[21] UNDP and Global Integrity, 2008 p.5-6
[22] UNDP and Global Integrity, 2008 p.7
[23] UNDP and Global Integrity, 2008 p.8

Proxy indicators assess corruption indirectly by aggregating as many signals of corruption as possible or by measuring its opposite namely anti-corruption.[24]

But even with all this categorization and differentiation, how does one choose the right indicator? The answer is simple, it depends on the scenario. Where are you trying to measure corruption? Which type of corruption do you want to measure? Is official data available? There are so many factors that influence the decision about which corruption indicator to use. Only after answering all of these questions in detail, one can start selecting the most suited indicators for ones' research.[25]

So far this paper has provided a first good impression on what corruption is how it is defined and how rent seeking is an underlying factor of corruption. Also the difference between corruption and lobbying was presented as well as the different types of corruption as some of the tools how corruption is measured. Having this first basic knowledge needed, we now take a closer look at the causes and consequences of corruption.

2.4 Causes, functioning and consequences of corruption

2.4.1 Causes

In this part of the paper the causes of corruption will be presented. There is a multitude of factors that can be said responsible. This section will focus on the factors that are most present in developing countries like China and India. The causes can generally be divided into three types, namely cultural, psychological and system related causes.[26]

It is a fact that in some cultures like in the Indian culture, certain types of corruption are acceptable. Often this is small scale corruption. It has simply become a habit that if one wants something to be done a little bit faster, one bribes the person who is in charge, even if this is a state official. [27]

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[24] UNDP and Global Integrity, 2008 p.9
[25] UNDP and Global Integrity, 2008 p.10
[26] Shinde 2002 p.3
[27] Shinde, 2012 p.3

The second type are psychological causes. Firstly, there are some people who are “naturally evil” and who will look for illicit ways to make money no matter what society thinks of them and no matter if other people do it or not. Obviously, this will only be a small number of people; peer-pressure and peer-comparison is a much more wide spread effect. If an individual sees all his co-workers increase their salary by accepting bribes without any consequences, there might be a lot of temptation on his part to do the same. Most of the psychological factors can be explained by this one simple quote: “When the best of people take bribes, isn’t the fool who doesn’t?” [28]

Even if cultural and psychological factors explain corruption to a certain extent, the most important part is very clearly the system related issues, since there can be huge differences from one country to another and the amount of corruption they “allow”. This is also the reason why this paper will mainly focus on the system related causes.[29]

2.4.1.1 Regulations and authorizations

Regulations and authorizations will be the most important cause of corruption that will be analysed in this paper. The reason for this is that with India and China, the focus of this paper lies on two developing countries and in those countries, the role of the state is often carried out through rules and regulations. In other words if one wants to engage in any serious activity like opening an own business, building a house, getting water access to your town… one will have to go through the process of having to get permits, licences and other authorizations of various kinds. This in itself is not the problem. The problem is that in a lot of developing countries, the state will give partial monopolies to its officials by giving them the power of single handily being able to decide who gets a permit and who doesn’t without any serious supervising or monitoring. [30]

For example, if someone wants to open his own ice cream shop, he will have to apply for multiple authorizations. The problem is that by refusing to give certain permits or ignoring

[28] Shinde, 2012 p.3
[29] Shinde, 2012 p.3
[30] Tanzi, 1998 p.10

the demands, the officials can put a lot of pressure on this person, because without the permit he can't continue with his project. Often those people will then feel the need to bribe the official in order to get their permit or to simply speed up the process (speeding money).[31]

In his work, Tanzi even argues that the more regulations, permits licences or authorisations exist, the higher the level of corruption.[32] Some other authors like Shleifer and Vishny say that in a lot of developing countries a number of regulations only exist for the single purpose of giving the underpaid state officials a chance to extract bribes.[33]

The fact that in countries like India and China a lot of the regulations are not transparent and are often not publicly available, makes it even easier and less risky for officials to take bribes. Apart from the fact that it is very easy for officials to "force" bribes, due to the large amount of different permits and the long waiting times, a lot of people just can't afford to wait. As a result they willingly bribe the officials because it is "normal". This is the same effect as already seen above for the psychological cases of corruption and low level corruption. In this case it might seem a logical conclusion to give the official a bribe, since everyone does it and it will help to speed up the process. The fact that this kind of bribe has its own name "speeding money" shows how common it is. But this is a bigger deal than one might think, because if everybody is paying this kind of bribe, then nobody is paying it, meaning that if the official gets money by all of his customers, then he will not have an incentive to work faster for any of them, since they all pay him the same. This would then again cause someone to pay a little bit more which would start the whole bribing process from zero only with a higher level of bribes. [34]

2.4.1.2 Level of public sector wages and penalties

Let's ignore any moral sense just for a second and ask ourselves the question: "When do people behave in a corrupt way?" The answer would have to be if the gains are larger than

[31] Tanzi, 1998 p.10
[32] Tanzi, 1998 p.10
[33] Schleifer and Vishny, 1993 p.409
[34] Tanzi 2000 p.131

the costs. The gains of corruption are obvious; usually it is the monetary reward for a certain illicit behaviour on the official's part.

The costs of corruption are not as easy to describe because they depend on multiple factors. The most important one would have to be the probability of getting caught, since any punishment only can be seen as a punishment if there is a real chance of being caught. In a system with widespread corruption, there may be no effort done to apprehend those who are corrupt, but in a system where corruption is infrequent, the risk of being caught if acting in a corrupt way, may increase drastically. Depending on the type of system a person works in, his/her costs of corruption may be higher or lower.[35]

The second factor influencing the costs of corruption is: "Enforcement". The extent to which law-enforcement officials are corrupt themselves will determine the effectiveness of anti-corruption efforts. If officials know that their boss/controlling-officials would never fire them or punish them if they give him a stake of the bribes they take, the theoretical punishments don't matter anymore. An important notice is that if such cooperation between the official and his boss exists, a case of low level corruption becomes an issue of high level corruption.[36]

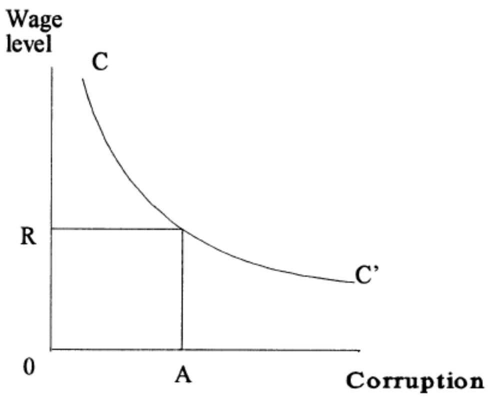
Penalties are often related to the wages, so the level of wages is also important when considering the costs of corruption. One can assume that higher wages would equal higher costs of corruption and thus they would induce a lower level of corruption. This phenomenon can also be observed in reality. Countries like Sweden or Luxembourg have some of the highest public sector wages and at the same time some of the lowest corruption indexes being ranked 4/175 and 9/175 in the CPI index. [37]

Rijckeghem and Weber wrote a whole paper on this subject called: "Corruption and the rate of temptation: Do low wages in the civil service cause corruption?" Even though the title suggests that the paper is about finding evidence if wages affect corruption, this is not the main goal. From previous papers, it is already a known fact that this is the case; the real

[35] Jain 2001 p.84
[36] Tanzi 2000 p.18
[37] Transparancy International 2014

question and debate is about how much of an effect wages have on corruption, since this is a controversial topic. One of the ideas is that if a bribe is large enough, the wage does not matter anymore, since the gains from such a bribe would overshadow the disciplinary effect of job loss.[38] This assumption is also confirmed in the work by Ul Haque and Sahay who used a cross-sectional data set to find a statistically significant relationship between corruption and wage levels. This can also be observed in figure 1 below, where OR would represent a wage level consistent with the minimum required for a decent living. In this case OA would represent any corruption due to greed and any point beyond OA would represent corruption due to need. Another fact that can be seen here is that if wages increase, corruption clearly decreases but in order to reduce corruption to minimal level very large wage increases would be necessary which would probably be very costly to the budget, especially in developing countries.[39]

Figure 1 Wage level and corruption



[40]

We see that wages have a major impact on corruption, not only in the direct way like just seen above but also in an indirect way as a part of the penalty system. In his work on crime prevention, Gary Becker states that “the penalty imposed plays an important role in determining the probability that such criminal acts would take place”. This means that the existing penalty structure in each country is one of the determining factors of corruption.

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[38] Rijckeghem and Weber 2001 p.3
[39] Tanzi, 1998 p.17
[40] Tanzi, 1998 p.17

But again the same effect as with the wages can be observed. In order to keep corruption to a minimum, penalties would have to be extremely drastic, because if one simply increases penalties marginally this will not change anything except that the bribes will also increase by this margin and so this does not address the essence of the problem. And even if one would assume that a country drastically increases the punishment for corruption, this still does not guarantee that corruption will disappear completely since corrupt behaviour does not necessarily have to be captured. In reality a lot of corrupt behaviour goes unpunished. Often there are a lot of administrative procedures which have to be followed before punishing someone for corrupt behaviour, which is why people often get suspended for a couple of weeks and then everything continues like nothing has happened. [41]

So to conclude one can say that the cost of corruption depends on three main factors, namely the wages, the chance of being caught and the enforcement. There is no "One most important factor", since all of them interact with one another and it is also case dependent which factor has the most influence in a situation.

2.4.1.3 __Controlling institutions and transparency of rules__

Like mentioned in the previous paragraph, the probability of being caught is very crucial when it comes to corruption levels. A high or respectively low level of institutional control reflects the attitude of the government towards corruption. If a country has a high level of corruption and a low level of control, it appears to be clear that the government does not think that corruption is one of the main issues at this point. But if the government sees corruption as a problem and wants to address it, controlling officials seem to be one of the most effective and simple solutions. In general control from within the institutions seems to produce the best results. Supervisors or auditing offices are generally one of the best cost-quality solutions, but only if they are not corrupt themselves.[42]

For these officials it is important that they work with good and transparent procedures. This includes that supervisors should be able to monitor all the activities of the workers that they

[41] Tanzi 1998 p.17-19
[42] Tanzi 1998, p.19

are supervising. The problem is that this is often not the case and additionally often the supervisors do not have any intrinsic motivation to catch corrupt officials, which makes them become lazy in their job.[43] The problem with transparency is that rules on corruption are often confusing and the documents in which those rules are specified are not publicly available. Additionally they may be changed without any public announcements. This makes it close to impossible for people who are not working with these rules on a day to day basis to keep track of them. Also most of the rules leave room for interpretation which is a big problem when it comes to corrupt behaviour, since offenders will always argue that they did not know that they were doing something illegal because the rules were not clear enough.

Another crucial point when it comes to controlling institutions is that they have to be able to punish the corrupt people. If they do not have any power to enforce penalties or report to someone who has this power, their job becomes pointless. Because if they have to go through several institutions in order to punish someone for corrupt behaviour, there is a big chance that someone in this chain will accept a bribe and charges will be dropped. In the case study part, a closer look will be taken at how effective those anti-corruption campaigns really are.[44]

2.4.1.4 Education

All of the causes seen so far are the ones which are finding consensus amongst researchers. Education and school enrolment is a factor that is topic to discussion. In his paper, Dreher et al. finds results that indicate that school enrolment is a factor which reduces corruption which he interprets as a proxy for the effectiveness of democracy in a given country.[45]

In 1997 Mauro already approached the same question but from quite a different perspective. He took a look at the relation between government spending on education and corruption.[46] One way to interpret this, is that as less money is spent on education, the population gradually becomes less educated. A whole other question is whether the low

[43] Tanzi 1998, p.19
[44] Tanzi 1998, p.19
[45] Dreher et al. 2007 p.12
[46] Mauro 1997 p.10

level of education results in a high level of corruption or if the high level of corruption causes the low level of education. But this is a question about the direction of causality and like already mentioned this is not the aim of this paper. Here it is important to notice that some kind of relation exists between those two variables. In our case studies the effect of education on corruption was also analysed and the results will be presented later on.[47]

2.4.2 Functioning of corruption

Now that the types of corruption and the causes of corruption have been explained, it should be possible to understand the functioning of corruption. At the basis of this, one has to know that there are two main ways how government corruption can work: with or without theft from the government. The common factor in both cases is that the official provides a good or a service to a person in exchange for a monetary reward.[48]

Let's assume that the government price for a good is set at p. Now in the case without theft, the official will turn over p to the government. But the official will charge more than p for the product, he will ask the customers for p plus a bribe. In this case the government will get p and the official keeps the bribe. So the government does not lose out on anything.
In the second case, the one with theft, the official will simply hide the sale from the government which means that the government loses p. The official will keep the money of the bribe he gets for the good, so it might even be possible that the buyer pays less than what he would have to pay if the official was honest. Even though the two cases are conceptually similar, there is a major difference for the buyers, since in the first case the price for the buyers will be p+b and in the second case it will only be b, so the buyers will obviously prefer the lather type of corruption.[49]

There are some authors who do not agree with Schleifer and Vishny's description of corruption without theft. They argue that in this type of scenario the bribe acts as a tax which increases the price for this good. With this increased price, buyers might be inclined to

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[47] Mauro 1997 p.10-12
[48] Shleifer and Vishny 1993 p.601
[49] Shleifer and Vishny 1993 p.602

go and search for the product somewhere else. Even if this is not the case, it is very likely that future demand will be lower with this additional "tax". This is why authors like Buehn and Schneider argue that in both scenarios there is corruption with theft.[50]

2.4.3 Consequences of corruption

It should be no surprise that there are numerous consequences of corruption. They can be very diverse and ranging from not being a real problem to being devastating for a whole economy. According to Transparency International, the consequences are four-fold. They state that "The cost of corruption can be divided into four main categories: political, economic, social and environmental"[51]

A result that has been found by Mauro as well as Schleifer and Vishny is that corruption lowers economic growth. Yet there is still a lot of discussions as to how exactly those two variables influence each other. Since this subject is the topic of the next main part, this problem will be discussed then.

The topic of rent seeking was already briefly touched and here it will be presented more in detail. Rent seeking is probably the main consequence of corruption. The problem is that rent seeking behaviour can cause a lot more consequences which could all be avoided if corruption were eliminated. As already seen before, in the event of grand corruption, money is being channelled through the sectors, where the political elite see the biggest chances of personal gains. And here is the big problem, resources are not allocated on the basis of where they are best, but resources are allocated due to personal interests. As a resource, one might only think of money here, but there are far more resources which are misallocated due to corruption, for example talent. Due to corruption the more talented and educated people might engage in rent seeking rather than in productive work, due to the financial incentives. This may even go so far that in countries where grand corruption

[50] Buehn and Schneider 2012 p.16
[51] Transparancy International 2015

prevails, the political elite use all the talent they can find in order to ensure their pursuit of rents. In this case, all the talent would end up where the highest rents can be obtained.[52]

Another example for the misallocation of resources can be investments, since in the case of corruption, people will not invest into the projects that are the best for everyone, but they will favour projects based on the ease of hiding the gains through bribes in these, rather than in others. So again corruption will be the reason why one favours projects based on potential gains and not on societal gains. Like seen before, this type of consequence is most common with grand corruption. This effect has been proven in multiple papers, where a relation between higher levels of corruption and overinvestments in potentially useless projects were found. In most cases, there were far more useful investment projects from an objective point of view. Again it can be observed that in the case of corruption the largest projects are mostly favoured, since they offer the biggest potential for extracting larger bribes. Additionally it is far easier to hide bribes in an extensive cost structure than in a small one.[53]

Some authors argue that corruption would act like an extra tax in countries where corruption is seen as natural behaviour. If one wants to have something done, one will always have to consider the bribe money that one will have to pay additionally to ones' investments. This is why Buehn and Schneider say that corruption drives individuals underground to the shadow economy. This causes the government to lose the revenue from their tax collection, which causes the economy to shrink and at the same time it empowers the shadow economy. By reducing tax collection, corruption may lead to adverse budgetary consequences.[54]

Another important part of the economy that can be affected by corruption, are the imports. In every country, some products are subjected to tariffs in order to protect the local economy. But by bribing the officials who decide on the level of those tariffs, one can basically secure a monopoly by making them set the tariff as such a high level that foreign

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[52] Mauro 1997 p.6-8
[53] Schleifer and Vishny 1993 p.645
[54] Buehn and Schneider 2012 p.140

companies have no way to compete with the local producers after they pay the tariffs. The result of this would be the same as if one would ban importation of a product completely, which obviously influences the local economy in a severe way since there will be most likely a lack of competition causing high prices.[55]

The last major consequence which will be presented here is inequality. Since corruption creates a more unequal societal income and wealth distribution as well as undermining programs designed to help the poor, corruption is one of the major factors to increase inequality. As seen earlier, corruption is one of the reasons why shadow markets develop and become bigger. In such shadow markets, there is no equal distribution and no one cares about the poor. Taking a look at the cases of corruption analysed here, one can see one motivation behind all of the actions: personal gain. When people who hold most of the power in a country use this power to distribute the resources among themselves then the logical consequence is that the rest of the population gets poorer and the gap between the rich and the poor increases.[56]

In this part, the causes, functioning and the consequences of corruption have been presented. Also the relation between corruption and several other factors, like the state officials or the political elite were explained. Also its relation with inequality was briefly discussed. But one major relation that has not yet been talked about is the one between corruption and economic growth. This will be the focus of discussion the last subsection of the theoretical part.

2.5 Fight on corruption, anti-corruption measures

So far is has been established what corruption is, by what it is caused and how it affects whole nations. It should be clear that if the fight against corruption would be an easy one, then corruption would not exist. But unfortunately this is not the case and there are still some steps that can be taken, mostly by the governments, which prevent corruption from

[55] Schleifer and Vishny 1993 p.653
[56] Mauro, 1997 p.6-7

spreading to a level at which it is uncontrollable. The problem is that it is very difficult for less developed nations to somehow force economic development.[57]

A fact that should be clear right away is that it is impossible to reduce corruption to zero. The amount of resources it would take to achieve this, would just not justify the whole process. It would require excessively high public sector wages as well as multiple major legal or organizational changes or very harsh effective penalties. And even with all of this, there would be no guarantee that corruption would drop to zero. In theory there exists equilibrium where the government should not try to reduce corruption any more. This level is reached when the marginal cost of reducing corruption is equal to the marginal social benefit from that reduction. An interesting fact is that corruption has a demand and supply side, just as every market. When regulating corruption, it has to be clear if one wants to prevent public employees to perform corrupt acts (supply side) or if one wants to reduce the amount of people who demand for acts of corruption (demand side).[58]

Like mentioned before, corruption is a very complex phenomenon, which is nearly always caused by a multitude of factors. This means that in order to reduce it, all of these factors have to be affected. This is the major reason why the fight on corruption is a long-term fight which is not won by a single action in a single area.[59]

One general way to reduce corruption is by increasing transparency. Total transparency in processes and policies often results in less power for the decision maker because their discretion in affecting the welfare to a particular group is reduced. Increasing transparency fights corruption on two fronts. On one side people who would normally engage in corrupt activities might fear the increased chance of getting caught and as a result will not participate in the illegal activity at all. On the other hand, people who are corrupt and who still behave in such a manner are more likely to be caught.[60]

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[57] Tanzi, 1998 p.29-30
[58] Tanzi, 1998 p.30
[59] Tanzi, 1998 p.30
[60] Tanzi, 1998 p.31

In a previous part, it was mentioned that the level of wages plays an important role for corruption. People with low salaries are often more willing to behave in a corrupt way since they don't have as much to lose as someone who earns a lot more. This would also imply that if the wage differences can be reduced, then corruption will also reduce to some extent. If the differences between the highest and the lowest salaries are reduced, then there are less really "badly paid" jobs where people don't care if they lose them due to corrupt activities.[61]

At first sight, those two methods seem fairly complicated compared to the most obvious one, which is to simply increase the penalties of corruption. However the implementation of this solution is not as easy as it sounds. A first barrier would be to get the higher penalties past the employees' association, trade unions as well as the judiciary system. Another dangerous problem with excessive punishments is that they could be used selectively by governments against political opponents. If penalties are too harsh, controlling officials might even let smaller acts of corruption go since the punishment does not fit the crime and they don't want to be responsible.[62]

Once again it can be seen that corruption is an extremely complex problem which cannot be solved or reduced by one single action. Reducing corruption is a long-term project which can only be successful if the government in the given country is willing to give up some of its advantages and reduces some of its functions. As will be presented in the next part, one factor that reduces corruption is economic development.

2.6 Corruption and Economic Growth

Like stated before, we now take a closer look at the relationship between economic growth and corruption. At this point the knowledge of corruption should be sufficient, but I also want to establish a theoretical basis of understanding for economic growth. While the presentation of corruption was quite extensive and went into detail, economic growth will be explained in a more basic way, since the principles are much clearer and easier to

[61] Tanzi, 1998 p.32
[62] Tanzi, 1998 p.32

understand. The first section will be about the role that investments play for economic growth.

2.6.1 Investment

Amongst researchers there is a general agreement that the process of economic growth and investment formation are closely interconnected. In both, the neoclassical and the Marxist economics, capital accumulation is seen as the engine of economic growth. One of the main reasons for this is that capital increases the production of capital intensive goods and the consumption of such goods generally increases with the growth of income through which capital accumulation promotes growth of income. According to the World Bank, GDP growth is higher for those countries which have relatively higher investment/GDP ratios.[63]

But what does investment generally refer too? A general definition would be that it refers to all economic activities which involve the use of resources to produce goods and services. For developing countries, the most important kind of investment is the one in infrastructures, since good infrastructures make it possible for producers to use modern technology which directly stimulates productive activities. It can also be assumed that investment in infrastructures is more likely to increase foreign investment by attracting larger companies. Other types of investment include education, agricultural research and investment in human capital.[64]

Researchers emphasize the importance of investment in the process of development, which is why investment is such an important factor if one is looking for the relation of economic growth and other variables, like corruption. In this case the relation can be explained with the help of corruption and investment.

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[63] Anwer and Sampath 1999 p.3
[64] Anwer and Sampath 1999 p3-4

2.6.2 Economic growth

Economic growth as an issue receives much attention. It is one of the standards how national leaders discuss the successful evolution of their countries; it is promoted by the International Monetary Fund as one of their founding principles. But also institutions like the Organization for Economic Cooperation and Development (OECD) promote economic growth and stated it as one of their reform goals in 2005. But why is economic growth such an important factor? A higher economic growth means a higher standard of living. The benefit of a higher economic growth is that consumers can benefit from having access to more goods and services. Generally consumption is related with utility and so a higher consumption would result in a higher utility. Some other effects of economic growth may include improved public services and a higher employment rate.[65] Some authors also find indications that there is a correlation between a higher GDP and a higher life expectancy. Health and nutrition increase, as well as levels of education, while inequality decreases.[66]

Weil argues that all of these factors are interacting and are highly correlated. Improved nutrition leads to a higher life expectancy and overall better health. Healthier people will work better and more productive. It is clear that if people work more productively, there is a high chance that their GDP will grow and this trend of increasing economic growth will continue. All of this should be clear answers as to why economic growth is important to a country and why Institutions like the OECD state economic growth as one of their main points of emphasis.[67]

All of the above mentioned advantages are only true if the population does not grow faster than the economy. If the population would grow faster, then economic growth becomes even more important, since it will have to increase in order to keep the standard of living in a country.

[65] Unknown 2015 (http://www.economicshelp.org/essays/economics-growth-happiness/)
[66] Weil 2009 p.379
[67] Weil 2009 p.379

Now that it has been established why economic growth is an important factor for any country, we will take a look at the fundamentals of neoclassical economic theory since this will give us the theoretic background to understand the relationship between economic growth and corruption.

One of the fundamental principles of economic theory is that prices are set trough a mechanism of supply and demand. The market equilibrium will be defined as the price where both the buyer and the seller are willing to trade. This point is also called the clearing price. If supply would exceed demand then prices would decrease since the sellers have to compete amongst each other to get the few buyers. If demand is larger than supply, prices will increase since the resource can now be considered scarce and its value will increase. If perfect competition exists, the market will regulate itself because if the supply of a product is too small and does not match the demand then additional suppliers will enter the market which will solve the scarcity problem. If supply exceeds demand, prices will drop and some suppliers will have to leave the market because it will no longer be profitable for them. These mechanisms will cause prices to approach the equilibrium.[68]

This was only a very brief introduction into neoclassical economics, but these basics should be enough to help with the understanding of the following sections.

2.6.3 The relationship between corruption and economic growth

In the introduction it was already mentioned that the third main part of this paper will analyse the relationship between corruption and economic growth in China and India. The goal of this will be to see if these two countries are special in any way or if they follow the general guidelines of this relationship. In order to test this, this paper will first have to create a basis on how the relationship is in other countries. This basis will be established here in this subsection.

The first serious papers on this relationship were published in 1964 and 1968 by Leff respectively by Huntington. They suggested that corruption may increase economic growth,

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[68] Rittenberg and Tregarthen 2009 p65

because a practice like “speed money”, which was already mentioned in previous parts of this paper, would enable people to avoid bureaucratic delay and inefficiency. Additionally government employees who take bribes would have a lot of incentive to work harder, since the payment of bribes would act like a piece rate on top of their normal wages. While the first type of corruption would only be profitable in countries with slow and complicated bureaucratic processes, the second type would be profitable to any country. [69]

Later studies on this topic including the ones' of Rose-Ackerman as well as the one of Schleifer and Vishny did find very different results. They argue that corruption would lower economic growth and that if there were any positive effects, it would be impossible to limit corruption just to those areas which might be economically desirable. Additionally they find evidence that countries in which talented people are allocated to rent-seeking activities tend to grow slower due to increased corrupt activities. The main work on the topic of corruption and growth is arguable the one of Paolo Mauro, which he published in 1997. Here the most important parts of his paper will be presented which will hopefully give us a good comparative value for our own research later on. The main goal of his paper was to identify channels through which corruption and other institutional factors affect economic growth and to quantify the magnitude of these effects. [70]

All of the corruption indices as well as the other institutional variables used in his paper are taken from Business International (BI), a private firm which sells those indices to other companies. In his paper, Paulo Mauro compares 68 countries with the help of these indices. Important for this paper to notice is that China was not among those 68 countries, but India was. After doing some research on why China was not included I could not find any other answer as that it was not covered in the indices by Business International. The BI indices range from 0 to 10 and the higher the value, the better the given institution in this country is. BI published 30 country risk factors for each of the 68 countries, but Mauro decided to only use the nine most suited ones for his research. Those were political change, political stability, probability of opposition or group takeover, stability of labour, relationship with

[69] Mauro 1995 p.681-681
[70] Mauro 1995 p.682

neighbouring countries, terrorism, Legal system judiciary, bureaucracy and Red Tape and corruption.[71]

Figure 2 Bureaucratic efficiency index

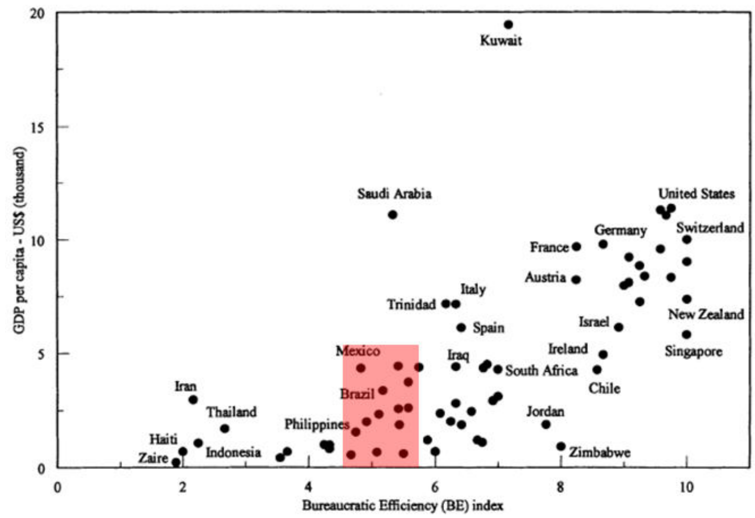
1.5–4.5	4.5–5.5	5.5–6.5	6.5–7.5	7.5–9	9–10
Egypt	Algeria	Angola	Argentina	Austria	Australia
Ghana	Bangladesh	Dominican Rep.	Ivory Coast	Chile	Belgium
Haiti	Brazil	Ecuador	Kuwait	France	Canada
Indonesia	Colombia	Greece	Malaysia	Germany	Denmark
Iran	India	Iraq	Peru	Ireland	Finland
Liberia	Jamaica	Italy	South Africa	Israel	Japan
Nigeria	Kenya	Korea	Sri Lanka	Jordan	Hong Kong
Pakistan	Mexico	Morocco	Taiwan	Zimbabwe	Netherlands
Thailand	Philippines	Nicaragua	Uruguay		New Zealand
Zaire	Saudi Arabia	Panama			Norway
	Turkey	Portugal			Singapore
	Venezuela	Spain			Sweden
		Trinidad/Tobago			Switzerland
					United Kingdom
					United States

[72]

In figure 2, one can see the countries divided depending on the ranking they got from the BI for bureaucratic efficiency. A quick look shows that richer countries tend to have better institutions than poorer ones'. Fast growing countries also tend to be among the first ones'. At this point it is very interesting to see that India did not follow this trend. Even though they were among the fast growers, they were in the bottom half of the efficiency scale. [73]

[71] Mauro 1995 p.683-684
[72] Mauro 1995 p.683
[73] Mauro 1995 p.687

Figure 3 Relation between GDP/capita and bureaucratic efficiency



[74]

In figure 3 one can see a scatter plot for the 68 countries with GDP per capita on the Y axis and Bureaucratic efficiency on the X axis. One can see that there is some positive correlation with only very few exceptions like Saudi Arabia, Kuwait and Zimbabwe. Both Saudi Arabia and Kuwait have a very high GDP per capita and a respectively low bureaucratic efficiency level. This might be explained by the fact that both countries are very rich due to their oil fields but their economies on themselves are not as developed. It is interesting to notice that India is not an outlier here, even though not all the points have a name, we know that India is somewhere in the red box and so it follows the trend line. We will later see if this is still the case today, because this would be a first indication that India is not special when it comes to the relationship of corruption and economic growth.[75]

In his first part of the results Mauro looks for a relation between corruption and investment and finds a negative and significant association between corruption and the investment rate. He gets these results using an OLS estimation as well as a 2SLS estimation. For the magnitude of this relation he states that a one-standard-derivation increase in the corruption index (which is an improvement) results with an increase in the investment rate by 2,9 percent of GDP. Additionally excessive regulations (red tape) do not seem to have an influence, since the results are almost identical in both cases. So those results do not

[74] Mauro 1995 p.688
[75] Mauro 1995 p.688

support the hypothesis that in cases of slow bureaucracy, corruption would become beneficial as suggested by Leff and Huntington.[76]

Additionally Mauro finds a positive and significant correlation between bureaucratic efficiency and the investment rate. A one-standard-derivation increase (improvement) in the bureaucratic efficiency index results in an increase in the investment rate of 4,75 percent of GDP. Both corruption and bureaucratic efficiency are negatively associated with the investment rate, even after controlling for a variety of other determinants of investment.

In the second part of his results, Mauro analyses the relationship between institutional efficiency and economic growth. And again he finds significant results at the 5 percent level. A one-standard-derivation improvement in bureaucratic efficiency results in a 1,3 percentage point increase in the annual growth rate of GDP per capita. This relationship seems to be robust for bureaucratic efficiency but not for corruption. When controlling for other variables as well as the political stability index, the magnitude of bureaucratic efficiency becomes very small and is at best significant at the 10 percent level. The null hypothesis of no relationship between investment and corruption as well as the one between growth and corruption can be rejected, the later with a lower level of significance. After providing these first results which clearly supported his hypothesis that corruption lowers economic growth, Mauro wanted to find out through which channels this interaction takes place.[77]

There are two major ways in which bureaucratic efficiency can affect growth. The first one is the indirect way, by lowering the investment rate. The second one is in a direct way, by misallocating investments among sectors. Additionally bureaucratic corruption can also lower the private marginal product of capital and by this lower the investment rate. To analyse this empirically, Mauro added investment to the list of independent variables in OLS growth regressions and observed the magnitude and significance of the coefficients on the bureaucratic efficiency and corruption indices. The bureaucratic efficiency index falls by about a third after including the investment ratio, yet it remains significant at the

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[76] Mauro 1995 p.695

[77] Mauro 1995 p.701-704

conventional levels. The more important result is that the coefficient on the corruption index falls substantially and becomes insignificant. [78]

In order to test how significant all of his results are, Mauro introduces a new null hypothesis. In this one he states that the only channel through which institutions affect economic growth is through investment. This hypothesis can be rejected but only at the 10 percent level. Therefore Mauro concludes that there is only weak support for the hypothesis that corruption reduces growth only by leading to inefficient investment choices. The relation between the two variables is probably far more complex and a lot of other factors are also important. But what is more important for our paper, he also proved that there is a clear negative correlation between corruption and economic growth.[79]

Even though not all of the results found by Mauro can be taken for granted and are not significant at the highest levels, some of his results and indications are important to notice. One of these trends is that a lower level of corruption seems to be associated with a higher level of GDP per capita, which could clearly be observed in the scatter plot. The work of Mauro is seen as the most important one on this topic, but is far from being the only one.

Assiotis and Sylvester argue that the effect of corruption on economic growth is not a constant one. Rather than being constant, the relationship is subject to a country's political regime. Also they argue that controlling and restricting corruption may even have negative effects in countries with strong democracies.[80]

The works of Rose-Ackerman and Schleifer/Vishny are also very well-known, but the results are very similar to the ones' of Mauro. They all find some evidence that there exists a negative relationship between corruption and economic growth. They also all agree that there are different mediators which affect the interrelation between the two factors, but no one seems to be able to single out the factors which affect the relationship most.

Following all of this information, it seems even more plausible that China and India have a special relationship when it comes to corruption and economic growth. Since there are no

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[78] Mauro 1995 p.704
[79] Mauro 1995 p.704-705
[80] Assiotis and Sylvester 2010 p.24

general rules and that the interrelation is affected by a multitude of factors, it is very likely that the relationship will be different as the one that can be generally observed.

3 Corruption in China and India

So far, this paper did built a general theoretical knowledge of the different aspects of corruption. Now in this second main part, this theory will help us understand how corruption works in specific countries. This paper will focus on China and India; this section will be about China.

3.1 Corruption in China

Corruption is and has been a topic of intense debate and discussion among scholars, researchers, pundits and commentators, especially in a country like China. Even though many anti-corruption campaigns were launched in the early 1980's, corruption seems to have worsened from that point onwards. Since corruption is at such a high level in China, one of the main questions is: how much corruption is acceptable? In a previous part we have seen that decreasing corruption close to a level of zero can be inefficient. But can a corruption level as high as the one in China still be efficient? This is one of the questions which I will focus on in the next part of the paper.

In some of the early literature on corruption by Huntington or Badhan, it is suggested that corruption goes through some sort of a life cycle. In the early stages of a developing country, corruption will be at extremely high levels, but with time this level will steadily decline until the optimal level of corruption has been reached.[81]

The more important question is, where does China position itself compared to other countries? Like seen before, the data and indices used were taken from Transparency International. Every year Transparency International publishes their Corruption Perception Index (CPI). In this index, every country gets a score from [0-100] depending on the existing

[81] Ramirez, 2013 p.77-78

corruption. Zero would be the worst score possible and one hundred the best one. In this index from 2014, China had a score of 36/100 which ranked it as 100/175 countries. As a comparison, countries like Trinidad and Tobago, Zambia or Gabon have higher scores than China. This is just an example to show that China has a big corruption problem compared with the importance it has for international economic exchanges.[82] This is also confirmed by the bribe payer index, an index also published by Transparency International which ranks the world's wealthiest and most economically influential countries according to the likelihood of their firms to bribe abroad. Only the 28 most influential countries were analysed and China came in 27th place only ahead of Russia. This shows very clearly that for being such an important and influential country, there is a lot of corruption. In order to counter this, China's parliament has passed an amendment which makes it a criminal offence for companies to bribe foreign government officials. Penalties range from 3-10 year in prison while the companies themselves face severe financial penalties.[83]

Here the causes of corruption in China will be presented. For this, I will use a case study by Bin Dong and Benno Torgler who wrote the article "Causes of corruption: Evidence from China". In this case study, they try to identify all the different drivers of corruption in China. I picked out four of these drivers on which this paper will mainly focus: income, education, media coverage and anti-corruption regulations. The results of their paper will be presented in this section as well as the possible explanations for them. After this, those results will be compared with case studies which only focused on a single one of these variables in each of the countries.

In their paper, Dong and Torgler use a province–level data set covering 22 provinces, 5 autonomous regions and 4 municipalities for the period 1998 to 2007. In figure 4 one can see the average regional corruption data which will be used.

[82] Transparancy international, 2014 p.4-5
[83] Transparancy International, 2011 p.12

Figure 4 Average annual cases of corruption per 100,000 people in China across regions

Region	Average annual registered cases per 100,000 pop.	Region	Average annual registered cases per 100,000 pop.	Region	Average annual registered cases per 100,000 pop.
Tianjin	5.01	Shaanxi	3.15	Yunnan	2.61
Heilongjiang	4.77	Qinghai	3.08	Hunan	2.59
Jilin	4.5	Ningxia	3.08	Hainan	2.59
Liaoning	4.12	Hubei	3.05	Beijing	2.59
Shanxi	3.83	Guizhou	2.95	Chongqing	2.49
Hebei	3.67	Zhejiang	2.9	Anhui	2.36
Shandong	3.61	Inner Mongolia	2.77	Sichuan	2.35
Xinjiang	3.41	Shanghai	2.77	Gansu	2.05
Fujian	3.4	Jiangsu	2.71	Guangdong	2.05
Henan	3.35	Guangxi	2.64	Tibet	1.77
Jiangxi	3.29				

[84]

An interesting factor here is that they did not use perceived corruption, but they used conviction data which should offer a more objective view. The one big disadvantage of using conviction data is that this data depends very strongly on the quality of the detection process. This process depends on two main variables, local judicial systems and local anti-corruption efforts. Since the local judicial systems in China are very similar, they can be assumed to be homogeneous, so this factor can be negated and their regressions will only have to account for local anti-corruption efforts.[85]

3.1.1 Income and corruption in China

The first variable that was analysed was the income variable. In the theoretical part it was established, that normally there should be negative correlation between corruption and income, but at first glance, one can see that the opposite seems to be the case here, which contradicts nearly all previous results.

Income	0,56**	0,55***	0,69***	0,68*	0,64***	0,56***	0,39**	0,60***	0,62***	0,59***	0,73***	0,76***
	(0,22)	(0,20)	(0,24)	(0,35)	(0,21)	(0,21)	(0,18)	(0,22)	(0,21)	(0,21)	(0,22)	(0,17)

[86]

[84] Dong and Torgler, 2012 p.155
[85] Dong and Torgler, 2012 p.155
[86] Dong and Torgler, 2012 p.157

The dependent variable in their research was always corruption and in the different models, they used more, respectively less control variables. But here one can observe that the results are positive and significant in every case. How can this be? The authors argue that China is a special case because China began its transitional process right when economic reform loosened up its economy; however political reform has lagged behind. What this means is that for most of the time between 1998-2007, there was absence of institutional and legal constraints which are normally the reason for the negative correlation between the two variables. A second effect of all this, is that during this period the role of the government in China was more important and as it has already been established in the theoretical part, when government power increases so does corruption. So in the case of China for this specific period, it might be that the regions with the highest income may also be the most corrupt ones'. If these assumptions are right, then this positive correlation should only have been temporary. A first indication which lets us assume that the positive correlation was only a temporary effect is by comparing the different results if one subdivides the time period into 1998-2002 and 2003-2007. For this, the authors created a dummy variable (period), which represents the second time span from 2003-2007.

Income	2.56**
	(1.03)
Income∗period	−1.53**
	(0.61)

[87]

In this case one can observe that there is a negative correlation between corruption and income, which is a strong indication that the previous positive correlation was only a temporary effect.[88] But is it really this simple? In their work on wage effects on corruption in China, Gong and Wu say no to this question.

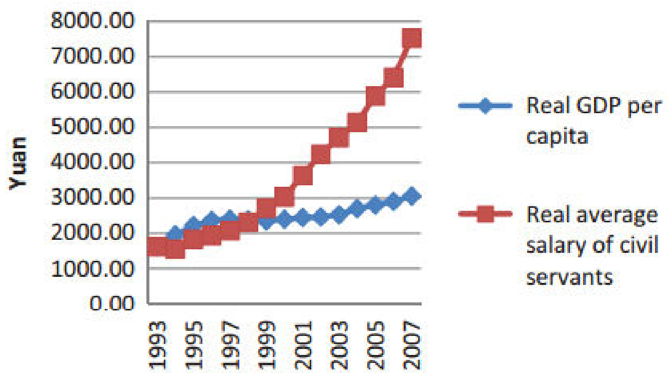
They argue that the biggest problem with this topic in China is that most of the existing literature relies on theory since the information concerning the civil servants' wages as well as the corruption levels are often scattered or simply inaccessible. Also it has to be

[87] Dong and Torgler, 2012 p.159
[88] Dong and Torgler, 2012 p.160-161

considered that workers might not change their behaviour at the exact moment when their salary increases. It is very likely that the reaction follows after a certain time. Also government salaries are often raised in small incremental steps. Officials might not see a reason to change their corrupt behaviour because of these small increases. It is likely that if salaries were raised by a lot at the same time, the effect would be much clearer.[89]

In order to analyse the effect of a wage increase, there has to be something to trigger such an increase at the regional or national level. In China, this was done by Mr. Zhu Rongji (Prime minister in China at the time) who announced in 1997 that he was going to double the salary of civil servants within 3 years. Such a dramatic increase in wages is the perfect basis for Gong and Wu's research. There were several motives behind the wage increase. One of them was to increase the moral of all the civil servants whose wages had been some of the lowest in the country for over 5 decades. Although there were several other goals behind the wage increase, the most important one was the goal of deterring corruption. At the end of the 80's, beginning of the 90's corruption was at an all-time high in China and something had to be done.[90]

Figure 5 Comparison between civil service pay and GDP



[91]

In figure 5 it can be seen that the premier did not only keep his promise, but wages kept skyrocketing even after they had doubled by 2000. In the period from 1997 to 2006, there were six consecutive pay raises. As a result, the wage in 2007 was 8,38 times that of 1993.

[89] Gang and Wu, 2012 p.195
[90] Gang and Wu, 2012 p.196
[91] Gang and Wu, 2012 p.196

Even if one considers inflation, the wages have far more than just doubled in the nine years between 1997 and 2006. If corruption is negatively correlated with wages, this should be a prime example, with salaries increasing by an unbelievable amount in just a short period of time. The authors wanted to find out just this and so they analysed how perceived corruption, grand corruption and major corruption evolved during this time span.[92]

The results are surprising to say the least. Here a closer look at the perceived corruption will be taken. Every year the National Bureau of Statistics Population and Labour conducts a public opinion poll in which the people can rank the most important problems in the country. In figure 6 below, one can see the ranking of corruption in all these years. One can see that the relative ranking has been steadily decreasing even after all of these wage increases. This clearly shows that corruption is still perceived as one of the most important problems, which is getting even more important in the last few years.[93]

Figure 6 Ranking of Civil Servant Salary Among Various Occupational Categories

Year	Total categories (A)	Absolute ranking (highest) (B)	Relative ranking (A/B)
1993	16	10	0.63
1994	16	10	0.63
1995	16	12	0.75
1996	16	11	0.69
1997	16	9	0.56
1998	16	10	0.63
1999	16	9	0.56
2000	16	9	0.56
2001	16	8	0.50
2002	16	8	0.50
2003	19	10	0.53
2004	19	10	0.53
2005	19	10	0.53
2006	19	9	0.47
2007	19	8	0.42

Source: Compiled by the authors, using data from the National Bureau of Statistics Population and Labor Branch (1994-2008).
Note: The occupational categories were divided into 16 groups from 1993 to 2002 and 19 groups after 2003. The relative ranking is the number of total categories divided by the value of absolute ranking. The lower value denotes a higher rank.

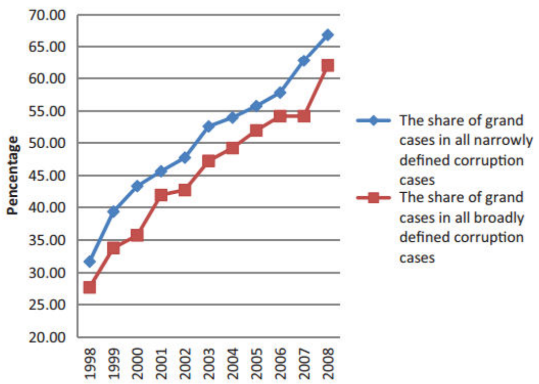
[94]

Even though, perceived corruption is an important issue which cannot be ignored, it might be better to look at the conviction data, since it gives us a more objective representation.

[92] Gong and Wu, 2012 p.196
[93] Gond and Wu, 2012 p.197
[94] Gond and Wu, 2012 p.197

This is why Gong and Wu took a look at the conviction data for “grand corruption cases” and “major corruption cases”. In China “grand cases” refer to cases that involve large sums of money. It does not matter if the money is incurred in a graft, bribery or embezzlement. At the point where the sum exceeds a certain amount, the case will be classified as a grand case. In the 1980’s the threshold was 1,000 yuan (150 Euro) for bribery and 50,000 yuan (7,516 Euro) for embezzlement. These limits have been raised considerably and since 1998 the limits are 50,000 and 100,000 yuan. Normally due to the increase of the threshold levels, the cases of grand corruption should have declined over the last decade, but the opposite seems to be the case which can be seen very clearly in figure 7 below. While in 1998 only about 25% of all the cases were considered to being grand cases, by 2008 it were over 60%.[95]

Figure 7 Growth of “grand” corruption cases



[96]

In this case, narrowly defined corruption only includes graft, bribery, embezzlement and misappropriation, while broadly defined corruption includes all of those plus some other types of power abuse like for example privilege seeking or dereliction of duty. The results are very clear and a trend is recognizable.[97] At first I thought that the results could be explained by inflation, but the results are way too drastic, even the highest yearly inflation rate of 6,58% in 2004 cannot explain these results.[98]

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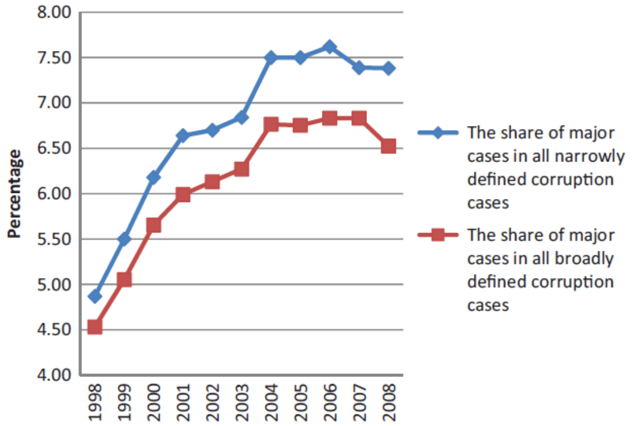
[95] Gong an Wu, 2013 p.198
[96] Gond and Wu, 2012 p.198
[97] Gong and Wu, 2012 p.198
[98] Inflation, 2015

The second type of cases which were analysed are the major cases, which do not depend on the amount of money which is embezzled but on the persons who are involved. This means that every corruption case involving a senior party official, state official at the rank of county level or above is being regarded as a major case.

Figure 8 Growth of "major" corruption cases



[99]

The results in figure 8 are fairly similar as the ones' for grand corruption. The share of major corruption cases has grown form 4,5% to 6,7% from 1998-2007. What I find more important is the fact that this share of major cases seems to have stabilized since 2004 with even a slightly decreasing trend. To my surprise this is not mentioned by the authors at all, which seems very strange since even they say that it is likely that changes to anti-corruption behaviour or to salary increases could be lagging behind which means that the 2004 reaction can still be caused by the wage increases in the previous years. Unfortunately there is a multitude of other factors which can cause the results which means there is no way to point at a specific reason without further data.[100]

It is very surprising that a relationship which was considered to be so clear, as the one between corruption and income, seems to be not so clear after all, in the case of China. The two case studies have shown that the two variables do not only not correlate negatively, but for a large part of the analysed time period they seem to even correlate positively. What was extremely surprising to me was the fact that none of the authors really emphasized the fact

[99] Gond and Wu, 2012 p.199
[100] Gong and Wu, 2012 p.201

that the wage increases seem to provoke delayed reactions. In both cases it seems that the initial reaction to a wage increase is an increase in corrupt behaviour, but after a certain amount of time this effect seems to stagnate and decrease, which could also be an effect of the wage increase, but as I mentioned without further data it is impossible to point out the exact trigger for these reactions. Before characterizing China as a complete outsider I will wait to see how this relation is characterized in India. Seeing how these variables react in another similarly developing country might help us to explain why China is an outsider or why it isn't.

3.1.2 Education and corruption in China

The second variable that was analysed is education. In previous literature it was established that normally education and corruption are negatively correlated.

Education	0,045**	0,092***	0,049***	0,019	0,046**	0,047**	0,062***	0,046**	0,074***	0,050***	0,049***	0,13***
	(0,018)	(0,021)	(0,018)	(0,060)	(0,019)	(0,018)	(0,018)	(0,018)	(0,022)	(0,017)	(0,019)	(0,025)

[101]

But here again, the results are different and education seems to have a positive effect on corruption. Once again this raises questions on how this can be explained. The reason might be a cultural one in this case. Education normally decreases corruption, because if there are more educated people, then there are also more people who are able to oversee officials and take actions when they observe illicit behaviour. The difference in China is that in the early decades, less educated workers and peasants had much more political power than intellectuals, who were referred to as "stinking ninth-class people" until the 1976 cultural revolution. This means that until then there was no reason for education to affect corruption in any way, since it was very unlikely for educated people to monitor government officials. Testing for the same effect in Chinese provinces after income, anti-corruption efforts and other variables are controlled for, yield different more plausible results. [102]

[101] Dong and Torgler, 2012 p.161
[102] Dong and Torgler, 2012 p.161

Education	-0,22***	-0,083	-0,21***	-0,22**	-0,17**	-0,26***	-0,20***	0,18*	-0,15***	-0,013	0,17**	-0,031

[103]

In this case they find moderate evidence that education lowers corruption. Unfortunately, I was not able to find case studies where only the effect of education on corruption in China was analysed, so there is no real comparative value to these results. But with the given results, it should be pretty safe to assume that the relation between those two variables is still changing in China because of the cultural background which is changing and becoming more favourable for the educated people. It is very likely that in ten years from now, the relationship is similar to the one which can be observed in other countries.

3.1.3 Media and corruption in China

One of the variables which has not been mentioned in this paper before, is the media. Media is seen as one of the key elements in a democracy and so free and independent press should have a significant effect on corruption. Previous research has shown that control of corruption and freedom of press are strongly correlated. There is also broad consensus that free press helps curbing corruption by improving citizens' accessibility to information. This in turn makes it much more difficult for politicians and public servants to behave in a corrupt way without being caught. Additionally media has one important key feature, it raises awareness. Once something is being published in the media there is no chance of hiding the facts because everyone has got public access to the information. This in turn puts a lot of pressure on the responsible entities once someone is caught of being corrupt. This also means that the punishment of corruption goes up, since there is now a much bigger chance to lose the job if one is caught.[104] A whole different aspect of the media is that in many cases it is investigative journalism which finds out and discloses information about corrupt behaviour. There is no question that the existence of journalists who are willing to dig deep to find out the truth, has an effect on corruption due to the increased risk of being caught.[105] Once again the case of China is special because all the mainstream media, including

[103] Dong and Torgler, 2012 p.161
[104] Mendes, 2013 p.2
[105] Dahlström et al 2008 p.3

newspaper, radio and television are fully controlled by the state. This raises the question if one would even expect the media to act as an external control for corruption.

Media	-0.0029^{***}
	(0.0011) [106]

But looking at the results, the answer seems to be a clear yes. The results indicate consistent evidence that media in China significantly depresses corruption. The results become even more significant after the variables which are highly correlated with income are dropped. It is surprising that even though the media is completely controlled and censored by the Chinese government, media still does exert a negative influence on corruption.[107]

3.1.4 Anti-corruption regulations and corruption in China

The most plausible and straight forward relation should be the one between corruption and anti-corruption efforts. In the introduction about China, it was very briefly mentioned that they introduced some new anti-corruption regulations and yet we have a country which is plagued by corruption. Somehow, this sounds quite illogical. The problem is not that there are no anti-corruption regulations and campaigns; the main problem is that most of them are managed inefficiently and only a small amount of people are punished because of this.

In quite regular intervals, the Chinese government announces that it has launched a new campaign against corruption. Coincidently these announcements normally go hand in hand with announcements of the press that multiple government officials have been arrested and convicted for misbehaving the anti-corruption regulations. The problem is that usually after those initial results no one mentions the regulations or corruption again until the next scandal erupts and only then, the process starts over. It is clear that such a strategy will never eliminate corruption, but this might not at all be the goal of the government, rather it wants to reduce corruption to an acceptable level. Here again one faces the problem that no one knows exactly how high or low this acceptable level is. One of the people who argue

[106] Dong and Torgler, 2012 p.161
[107] Dong and Torgler, 2012 p. 162

that China's anti-corruption reforms are actually successful is Melanie Manion, a professor of Public Affairs and Political Science at the University of Wisconsin–Madison. As an example she gives the 1987 corruption crisis in China, where corruption was threatening to destroy the whole Chinese economy, but a well-timed anti-corruption campaign succeeded to push back the corruption below the "tipping point". Corruption was still at a very high level but was not threatening to destroy the economy. The question remains if this can be seen as a success or a failure.[108]

In order to argue if the anti-corruption campaigns in China are successful or not, it is important to understand how these campaigns work. The campaigns are characterized by short terms of intensified enforcement, harsher punishment and rhetoric calling for public attention of anti-corruption. In the end, the government always claims success evidenced by a large number of officials arrested and convicted.[109]The biggest advantage of this kind of fight against corruption is that it is way cheaper than constant surveillance and controls. The fight on corruption is a very capital intensive one and so the "Chinese-style anti-corruption" has become a symbol for the fight against corruption in poorer countries. When officials are arrested, they can reduce their penalties by giving information on their confederates. This is usually the reason why the number arrests are so high during the campaigns. Everyone wants to reduce their own sentence and in order to do so, they sell out their colleagues. Due to this multiplying effect, it can be argued that this style of anti-corruption regulation is more efficient than having controlling officials who work full-time. Another big advantage of the campaign style is that it induces fear and hesitation on the corrupt people. First of all there is the fear that one gets caught, but now there is additionally the fear that someone else betrays you, which increases the risk and so the cost of corruption immensely. For an official it is also very difficult to estimate the risk which he is taking because he does not know when the next campaign will be or how intensive it will be. [110]

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[108] Wedeman, 2005 p.94
[109] Whu and Zhu, 2010 p. 436
[110] Wedeman, 2005 p.96

During the beginning of such a campaign, the government will exercise psychological pressure on all the officials by threatening them that everyone will be caught and severely punished. Often this on its own is already enough that some of them voluntarily admit to corruption even though it was not certain that they would have been caught. After this, the first people will be arrested. Usually, the government arrests the most important people who they have evidence on first. The reason for this is to further intimidate all the smaller workers and bring them to confess. Then once again those people will be offered to work as an informant in order to reduce their sentences. Due to this system, even small government officials who only performed small scale corruption can be caught.[111] Why would people so easily agree to provide information about their colleagues is easily explainable if one takes a look at the punishments in figure 9.

Figure 9 Punishments for corruption crimes

Over ¥100,000	Ten years to life imprisonment, with capital punishment in extreme cases
¥50,000 to ¥100,000	Five to seven years imprisonment, with a maximum of life in serious cases
¥5,000 to ¥50,000	One to seven years in most cases, but increased to seven to 10 years in serious cases
Less than ¥5,000	Maximum of two years imprisonment. In less serious cases sentence may be reduced to disciplinary sanctions without criminal punishment

[112]

With such strict and severe sentences a lot of officials want to avoid the maximum sentences and are happy to reach a deal with the government.[113]

The goals for anti-corruption regulations are quite simple. In the short run the government wants to capture corrupt officials and in the long run, it wants to reduce the overall levels of corruption. Although “Chinese-style anti-corruption” definitely succeeds in the short run, as can be seen in the results below, it is not sure if this is also the case in the long run.

[111] Wedeman, 2005 p.96-97
[112] Wedeman, 2005 p.102
[113] Wedeman, 2005 p.102

Anti-corruption	-0,0070***	-0,0071***	-0,0076***	-0,0077*	-0,0069***	-0,0069***	-0,0072***	-0,0067***	-0,0095***	-0,0065***	-0,0069***
	(0,00073)	(0,00069)	(0,00088)	(0,0043)	(0,00072)	(0,00075)	(0,00076)	(0,00080)	(0,00012)	(0,00075)	(0,00080)

[114]

One can see that in all the cases corruption and anti-corruption regulations are negatively correlated, significantly and robustly in most cases.[115]

The results for the four variables show that China may well be a statistical outlier when it comes to corruption. As seen, some of the results are initially the opposite of what has been found out in previous research. As for the relation between corruption and education, I found some evidence that it may be influenced a lot by cultural factors and it is likely that this relationship can be explained fully and completely by the cultural history of the country. What I could not find out so far, is why the relationship between wages and corruption is so different in China. So far I did not find any indication that a wage increase causes an immediate decrease in corruption. In most cases an increase could be observed. This relationship seems to depend on a lot of other factors and it is close to impossible to point out which ones' are missing in China. One possible explanation is that even after the wage increases the wages of public officials were still at such a low level that the cost of corruption may only have increased marginally and the amounts of money which can be made due to corrupt behaviour are overshadowing the wage increase. All in all, these first results may be seen as an indication that the relationship of economic growth and corruption may also be different in China than it is in other countries.

3.2 Corruption in India

This subsection will focus on India, a country that in a lot of aspects is very similar to China nowadays. One big difference is that in India corruption has not always been a problem. In 1953 Paul Appleby wrote a report on irregularity and corruption in India. In this report he

[114] Dong and Torgler, 2012 p. 162
[115] Dong and Torgler, 2012 p. 162

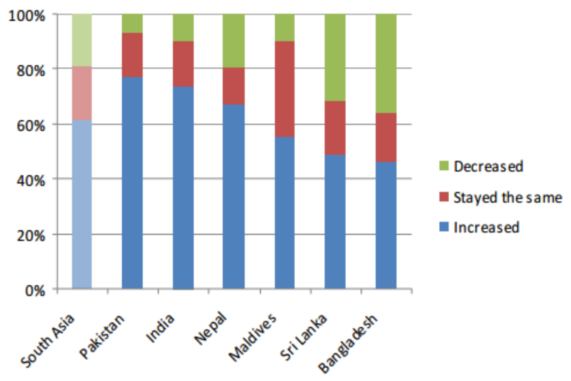
writes that he is very impressed by the low levels of corruption and the honesty of its government and people.[116]

This is very surprising if one takes a look at the more recent evaluations, for example the one of S.R. Maheshwari in 1995 who states that the civil servant has forsaken his truly professional traits and is increasingly inclined to seek personal favours. Also the relationship between the civil servants and the rest of the population has worsened. The government officials are said to be arrogant, self-opinionated, inaccessible and power-hungry. Other reports from the last 20 years are very similar, they often criticise the Indian bureaucracy for being backward looking and one of the main obstructers of development. [117]

So what has happened in the last five and a half decades that the image of the government has gone from being very positive to being one of the worst in the country? Is this only a perception or is corruption really a bigger problem nowadays? In order to answer this, we will once again look at the indices from Transparency International where India is ranked 85/175 with a score of 38/100. So India is ranked slightly higher than China, but the difference in score is only minimal. But still a look at the bribe payer index confirms that India is being ranked clearly above China, where India ranks 19/28 (China was 27.). In a survey by TI, people were asked how they felt that corruption has changed in their country over the past three years. [118]

[116] Jon S.T.Quah, 2008 p. 235
[117] Jon S.T.Quah, 2008 p. 241
[118] Transparency International, 2012 p.6

Figure 10 Perceived corruption changes in the past three years



[119]

In figure 10 we see that the survey confirms the first impressions gotten from the evaluation reports, which were getting worse and worse over the past few decades. How can this change be explained? What has happened in the last 60 years that has changed the perception that people have of the government officials and corruption?

One aspect that was already briefly mentioned in the theoretical part is that corruption is a way of life in India, meaning that it is being accepted by society as something normal and ordinary. The problem with this is, that corruption has become so normal, that even the most extreme cases of its exposure fail to shock. There are several causes why corruption is seen as something harmless. One of the major reasons is certainly that the government has created a monopoly in the supply of public goods and by this it has reduced competition close to zero. This of course creates a lot of opportunities for corruption as has been established before. A second problem is that the officials are not being adequately supervised and their behaviour is not monitored. Additionally, service providers often possess information which is not known to the public which again creates opportunities for corruption.[120]

Here again, I will analyse the four same variables as for China and it will be very interesting to see if the results will be just as surprising or if they are more "normal". I will first look at the empirical results from the text "The correlates of corruption in India". After analysing

[119] Transparency International, 2012 p.6
[120] Jon S.T.Quah, 2008 p. 242-244

the results from this multivariable research I will focus on the different variables and try to explain the results just as I did with China.

The "Indian Corruption Study" was undertaken by TI and the Centre for Media Studies. It was the largest corruption study which has ever been conducted in India, with a total of 14,405 respondents in over 150 cities and 306 rural areas within 20 Indian states. In this study, the author compared the states among each other which will help us to see if for example wealthier states have less corruption and vice versa.[121]

3.2.1 Income and corruption in India

Again the first variable I took a look at is the income variable. In theory, the relationship should normally be a negative one, but after the surprising results for China, it will be interesting to see how this relationship behaves in India.

GSP per capita	*H1*	−0.816***
		(−3.27)

[122]

In this case, the results are as anticipated meaning the wealthier a state is, the lower the level of corruption in it. An increase in per capita yearly income by one standard derivation is associated with an 82 per cent decrease of one standard derivation in corruption. The results are clear and significant and there is no reason to doubt them. But this model only analyses the relation between wealth and corruption. Will the relation change if one analyses specifically for income and corruption?[123] To test this, I took a closer look at the text "The golden goose effect".

To understand the basis of the text, one has to know that in India there is one major institution which is responsible for all the unemployed: the NREGS (National rural employment guarantee scheme). The idea behind their employment scheme seems very

[121] Charron, 2010 p.182
[122] Charron, 2010 p.183
[123] Charron, 2010 p.183

easy and straightforward; every household in rural India is entitled to 100 days of paid employment per year.[124]

There are two methods how workers get paid on these unemployment projects, either by daily wage or by piece rate. Like the name already suggests, one gets paid by time on daily wage projects. On the other hand, piece rate project workers are paid for their effort. Typically piece rate projects, are projects where the output is easily measurable, like for example digging work. In this case one gets paid by the weight and quantity of rocks which have been lifted. [125]

The way those projects work, is that every project has a supervisor, they are called officials. Those officials are the ones' who report the amount of work done to the central government. This means that he either reports the amount of days worked on a project in case of a daily wage project, or he reports the quantity of their work if it is a piece rate project. After having reported the numbers to the central government, the central government reimburses the local government who has already paid the workers.[126]

The main plan for the empirical approach was to compare official micro data to an original household survey which was being performed by the authors. Since the official data is available online it is easily comparable with their own survey. In order to test the effect of a wage increase on corrupt behaviour, all the authors needed was an exogenous trigger. This trigger was a statutory wage increase for all daily wage projects in the state of Orissa on May 1st 2007. This means that now an official can make more money from illicit behaviour, but at the same time, the cost of getting fired is higher. A big advantage with this wage increase is that it is restricted to daily wage projects and to the state of Orissa. Piece rate projects and all the surrounding villages are unaffected. These represent the perfect conditions to see the full effect of a wage increase on corrupt behaviour.[127]

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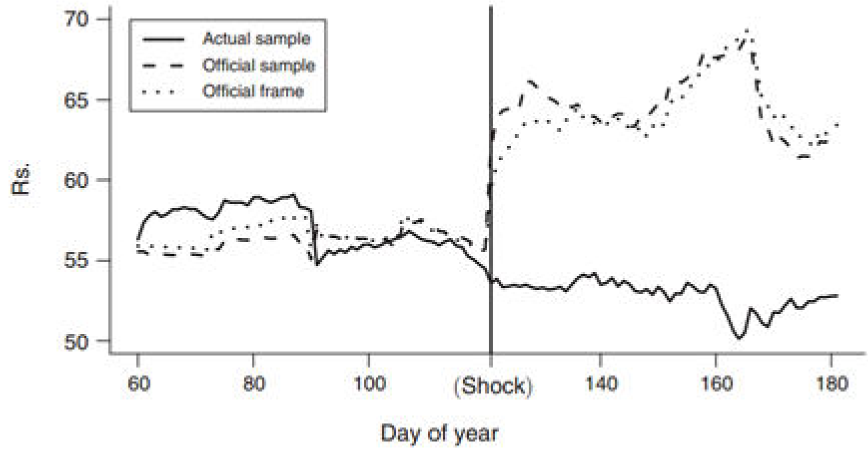
[124] Niehaus and Sukhtankar, 2013 p.233
[125] Niehaus and Sukhtankar, 2013 p.234
[126] Niehaus and Sukhtankar, 2013 p.235
[127] Niehaus and Sukhtankar, 2013 p.248

Figure 11 Wages before and after shock

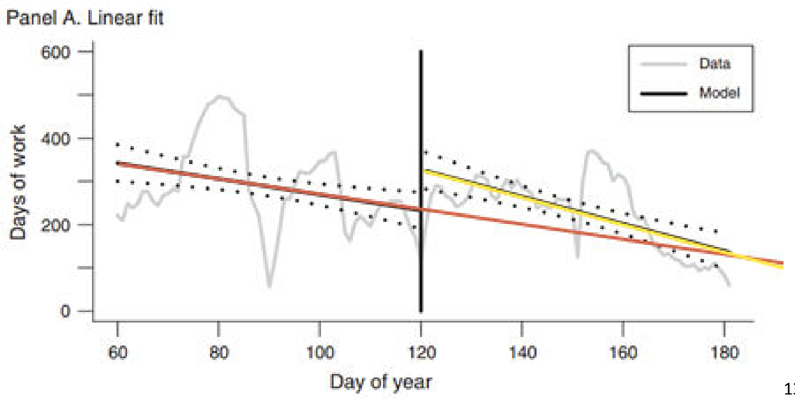


[128]

Figure 11 shows the stunning results of the actual wage payments after the wage increase. To no surprise the officials report with the new statutory wage of 70. The official number is a little bit lower at about 65, but this is due to the fact that some officials might not have been informed about the wage increase. Normally the actual sample should also be at around 70 after May 1st the day of the wage shock. But astonishingly the actual sample even decreases a little bit although this effect can be ignored. But this shows that the workers do not get paid any better after the wage increase than they did before. Even though 71% of the workers claimed that they were aware of the wage increase, they were not more likely to receive a higher wage than the non-informed workers. [129]

[128] Niehaus and Sukhtankar, 2013 p.248
[129] Niehaus and Sukhtankar, 2013 p.249

Figure 12 Over-reporting on daily wage projects before and after wage shock



[130]

If the relationship between corruption and wage is negative, then over-reporting should reduce after the wage shock, so it is kind of surprising to see that over-reporting actually increased after the wage shock. But after taking a closer look, it can be seen that this is only a temporary effect and that after a first stage, over-reporting decreases faster than it did before the shock. Most of the major spikes in the figure can be explained by major holidays. Officials tend to reduce over-reporting drastically on holidays since they fear the risk of getting caught is higher on those days.

Another interesting observation that can be made is that there is a major increase in over-reporting after day 150. The reason for this is that the monsoon seasons starts mid/end of June. During the 3 month lasting monsoon season no projects will be started which means that the future rents are steadily falling and the cost of getting fired, is reduced. All of this are very clear indications that corruption and wages correlate negatively.[131]

Both studies clearly suggest that a wage increase would decrease corrupt behaviour, but what is very interesting to see, is that even in India the initial reaction to the wage increase was a short time increase in corrupt behaviour. It seems that people need a little bit of time to adjust to the new situation until they find out what would be optimal for them in the long run and only then they will reduce their corrupt behaviour.

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[130] Niehaus and Sukhtankar, 2013 p.249

[131] Niehaus and Sukhtankar, 2013 p.251

3.2.2 Education and corruption in India

The second relationship which analysed here is the one between education and corruption. Again one would expect this relationship to be negative, but it could be observed in the case of China that culture and other factors may well influence the relationship. To analyse the relationship, the author decided to analyse the literacy rate and a development factor, since the states which are more developed also normally grant a better access to education.[132]

Literacy rate	*H2*	−0.775*** (−4.22)
Development (factor index)[a]	*H2*	−0.701*** (−3.72)

[133]

The results are clear and significant. Like in theory, the two variables correlate negatively with corruption. The most plausible explanation is that the more people become educated, the more they will be capable to monitor their public representatives and take action in case of corrupt activities. Due to this greater likelihood of being caught, incentives are reduced for politicians and bureaucrats to engage in corrupt behaviour.[134]

Unfortunately I was not able to find any other empirical data which analysed the relationship between corruption and education, but since the relationship is as one would expect and both results are significant at the highest level, I see no reason to doubt the results.

3.2.3 Media and corruption in India

The third relationship I want to analyse at this point is the one between corruption and the media. As the case of China showed us, normally both variables should be negatively correlated.

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[132] Charron, 2010 p.188
[133] Charron, 2010 p.188
[134] Charron, 2010 p.188

Media exposure (factor index)	*H5*	0.277 (0.99)

[135]

It is very surprising that the relationship here is a positive one but one also has to notice that the results are not significant and thus they have to be interpreted with extreme caution. The problem with analysing the influence of the media is that it is very difficult to find a good comparative value. Within a country it is very unlikely that there are major differences. This is why the author tried to analyse the variable by comparing states with higher media consumption levels to the ones' with lower levels. As the results show, the differences between the different states are not large enough to be significant. [136]

Even though it is very hard to empirically prove that media deters corruption, there have been some prime examples in India over the last few years that this is true. Private television channels are becoming more and more common as well as private internet domains. That these factors constitute a new tool to curb corruption has been shown recently in two different events.[137]

The first one is the so called "Tehelka exposé". In order to prove that corruption exists even at the highest levels, Tarun Jit Tejpal set up a website called Tehelka.com. On this website he set up a bogus company called West End International which supposedly sold thermal cameras. The ministry of defence caught attention and was interested in his product. Within 270 minutes of negotiations, which Tarun Jit Tejpal videotaped, he got footage of the presidents of the two largest political parties in the country taking bribes as well as several high ranking military officers who asked for good whiskey and women. The scandal went all the way to the top, where two advisors of the prime minister were mentioned in the report. Some of the segments were aired for the first time on a private television channel, which completely shook up the government and the political parties. The president of the largest political party, the BJP Banguru Laxman resigned in disgrace. A few other people involved

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[135] Charron, 2010 p.188
[136] Charron, 2010 p.188
[137] Tummala, 2008 p.49

also resigned but most of them returned to their positions only a few weeks later when the country was facing a possible nuclear war between India and Pakistan which made corruption an unimportant topic. But even though the fear of a possible war took away a lot of the attention, the government took a big blow by the campaign. “Government Shamed and Crippled” was the title in some of the more prominent magazines.[138]

The second big scandal, which shows the importance of the media and the effect that it can have even on the highest ranking officials is the “Petrol Pump Scam”. In 2002 the English daily the Indian express published a story about Ram Naik, the petroleum minister who had changed the procedure to licence dealers who want to sell petroleum, kerosene or cooking gas. The chairmen of every dealer-selection-committee across the country were given a virtual veto power. By this, the chairmen got nearly the complete power, rendering the other members of the committee powerless. Additionally every application had to be submitted through the state BJP chief’s office. The results were shocking in that half of all the 3,850 licences were given to relatives of the BJP colleagues and related political partners. Obviously, this move was heavily criticized by the opposition and asked for an immediate dismissal of the minister. If the prime minister wanted to keep any integrity, he had to act immediately and severely and so he cancelled 3,565 out of the 3,850 licences even though 2,131 of them had already come into operation. Additionally to this, he announced an inquiry of every licence that had been issued between 1983 and 2000.[139]

Since in India freedom of press has been a point of emphasis by the government since the beginning, it is very difficult to measure its effects empirically which is why I was not able to find empirical data on the effects of Media on corruption in India. But on the other hand these two major examples clearly show that the relationship is a negative one and there is no reason to assume that corruption should increase due to the media. The opposite is the case, there is quite strong evidence that the media is not controlled by the government since in both cases the government suffered huge blows which should be a clear indication that they were not able to control what had surfaced in the media. Additionally it was established

[138] Tummala, 2008 p.49
[139] Tummala, 2008 p.50

that even in China, a country where the media is controlled strictly by the government, media deters corruption, so there is no reason to doubt the assumption that Media correlates negatively with corruption in India.

3.2.4 Anti-corruption and corruption in India

The first measures against corruption in India were taken in 1941, when the anti-corruption agency CBA was established with the goal of investigating cases of bribery and corruption in transactions involving the war and supply departments. In 1949 the government reviewed the anti-corruption program a first time and three years later a committee suggested that the anti-corruption activities should be expanded. Following this recommendation an enforcement wing was added in 1953 to handle such offences. Over the years the program was expanded multiple times and adjusted in order to become more efficient.[140]

Everything was going well until new political parties assumed power in the 1990's which withdrew the consent given by their predecessors for the inquiries. The government gave itself the right that whenever they felt that an investigation was politically embarrassing or uncomfortable for them, that they could simply reject it. In other words this means that the politicians at the top of the government can prevent any inquiries against their own departments if they want. This means that the chances to catch people involved in high scale corruption are close to zero. This is also shown by the fact that in the last 40 years not a single case involving a minister has ended in a firm conviction in the court.[141]

The ineffectiveness of the anti-corruption program in India, is also shown in the scores the country gets by Transparency International over the past 10 years.

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[140] Jon S.T.Quah, 2008 p.245
[141] Jon S.T.Quah, 2008 p.246

Figure 13 Corruption rankings for India

Year	CPI ranking	CPI score	No. of countries
1995	35th	2.78	41
1996	46th	2.63	54
1997	45th	2.75	52
1998	66th	2.90	85
1999	72nd	2.90	99
2000	69th	2.80	90
2001	71st	2.70	91
2002	71st	2.70	102
2003	83rd	2.80	133
2004	90th	2.80	146
2005	88th	2.90	159
2006	70th	3.30	163
2007	72nd	3.50	180

[142]

One can see, that the score of India has only slightly improved from 1995-2007 and even in 2014 they only got a score of 3,8. But can this really all be explained by a lack of political will to address the problem?

Researchers agree that the lack of political power is not the only reason, but the main reason why anti-corruption measures in India are so ineffective. If the political leaders fail to provide the adequate resources to fight corruption, comprehensive anti-corruption laws, an independent anti-corruption agency or fail to punish those who are found guilty of committing corrupt acts then the fight against corruption is one that cannot be won. All of these elements lead to the fact that the population loses any trust they have in the anti-corruption agencies. A large part of the population feels that the anti-corruption agency is a pliable tool and can be bribed if necessary. [143]

Like already mentioned, any anti-corruption agency is worthless if they do not have the power to punish those who are found guilty. In India, the CBA has some power but it is very limited which is shown by the low conviction rates. In 1972 the conviction rate was only 22,2 percent and in 1992 only 13,3 percent. The fact that in 2006 the conviction rate was at 62,5 percent on the other hand shows that the situation is improving and that it seems like the government has realized that the fight against corruption has to be taken seriously. And still in a country with the size and the population of India, the CBA seems to be horribly

[142] Jon S.T.Quah, 2008 p.247
[143] Jon S.T.Quah, 2008 p.249

understaffed with only 4,700 workers in 2007. Compared to the population of 1,2 billion, this results in 0,0000004 workers per person. Also budget wise, the CBA is lacking behind other countries like Hong Kong. In India the expenditure per capita is 0,28$ while in Hong Kong it is 12,14$ per capita. With such a huge difference it is clear that the CBA cannot compare with the results of the Hong Kong anti-corruption agency. This has to be kept in mind now that I take a closer look at the implementation of anti-corruption regulations in India, since a lot of them can be explained by the lack of staff and financial support.[144]

In general, there are two phases to deal with corrupt public officials. In a first one, the suspect will be investigated. The institutions which are responsible to conduct these investigations have been the subject of strong criticism over the last few years. In a lot of cases they had not done their job properly and in certain cases they did not do their job at all, depending on who the person to be investigated was. This is also shown by the fact that the investigating institutions often fail to present a complete file on the day a case starts in court. This is even worse if one knows that the court system in India is known to be agonisingly slow.
Additionally, it is super easy to delay court cases in India. Whenever a high ranking official is charged in court, he will claim some sort of medical emergency or disability to stall the proceedings. Often this procedure is then repeated multiple times and after months or even years have passed, the cases are then simply dropped without any public attention.[145]

Another issue was the planned implementation of the so called “Single directive” in which the Indian government decided that if an investigation is to take place about a higher ranking policy making public servant, prior permission has to be obtained from the head of the office concerned. This would have given any public office immunity to prosecution if they wanted to. The rule was close to being implemented, but due to the unveiling of several big corruption cases in 1997 the Indian court rejected it and at the same time gave a lot of

[144] Jon S.T.Quah, 2008 p.250
[145] Tummala, 2008 p.49-51

the power back to the CBA. This can also be seen in the previously mentioned conviction rates which have gone up significantly in the last few years.[146]

Even though this could be seen as the beginning of a new era in India, it is hard to believe that this is true since the government has so far not shown any strong will in combating corruption which is also reflected by all the ineffective measures taken by the CBA. But on the other hand the pressure on the Indian government is getting stronger by the day also because of incidents caused by the media like seen earlier.

To conclude one can say that anti-corruption measures always correlate negatively, even in a country like India, where they might not be the most efficient but to get corruption to an acceptable level there is still a long way to go.

3.3 Comparing the results in China and India

A first result that is very clear is that corruption is an issue which agitates people in China and India and is one of the top items on the political reform agenda. The most recent indices by TI suggest that China is even a bit more corrupt as India, but those indices have to be used with caution, especially when two countries only differ by a few points.

Still, the results were in some cases very surprising and very different in the two countries. The most intriguing result was without any doubt the relationship between wages and corruption in China. While in India the results were as expected and a wage increase clearly decreased corruption, after a short time span in which corruption increased, in China corruption kept increasing even a few years after the wage increase. To point at a specific reason as to why this is the case, is probably impossible but my interpretation of the problem is that in China public wages are so low even after the increases that the money which can be made through illicit behaviour does not justify a reduction in this corrupt behaviour. In some articles I found that officials would make fifty times their official wage trough bribes. This means that even if the salary of the public servants is being doubled, they

[146] Jon S.T.Quah, 2008 p.250

still earn twenty five times their salary with illicit behaviour and this would explain why even major wage increases had no effect on the corrupt behaviour.

In India the results were more as one would expect. Even though the levels of corruption were still very high, corrupt behaviour decreased after the sudden wage increase. An effect which might also play a factor is that the wage increase in India was more sudden, wages nearly doubled from one day to the other, while in China the process of doubling the salary took multiple years. Workers in China might not have felt the full effect of the wage increase because it was done in several small steps.

Then I took a look at education and again the results for China were surprising, since no negative correlation between corruption and education could be observed. As I mentioned before this is very probably still a cultural effect and is very likely to have disappeared in a few years as the more recent studies indicate.

In India the results were very normal and education seemed to have a positive effect (negative correlation) on corruption. This is the normal relationship one can also see in other more developed countries.

The third variable was the media and I was very surprised to see that even in a country where the media is completely controlled by the government like in China, the media still has a strong effect on corruption. I think that this is mainly because of the spreading power of the media. Once something is being published in the media or on the internet, it is impossible to get rid of it. Another factor which was not mentioned is that the media is a global network, which means that corruption scandals which are published in the Chinese media are also noticed in the rest of the world. Since China relies on global trading the government has a lot of interest not to scare away traders due to such corruption scandals.

Although the results for the effects of media on corruption in India were insignificant, I see no reason to doubt that media also correlates negatively with corruption in India, especially after having analysed the two major examples given in that section.

The last variable was anti-corruption regulations and it should be clear that they correlate negatively with corruption but it is very difficult to measure how effectively they deter corruption. Especially in China there is a lot of discussion if their method of combating corruption is very efficient or not efficient at all. Before I give my opinion on this topic, I want to see how economic growth and corruption correlate in China.

As for India it seems very clear that the government still has a long way to go to create an efficient anti-corruption agency. It is sad to see that the anti-corruption agency in India was more efficient 50 years ago then it is now. In this case, the government is the one to blame, since it is the one responsible for taking away the little power the agency had.

4 Economic growth and corruption in China and India

Now that it has been explained how corruption works in general and how it works specifically in China and India, the relationship which I am most interested in will be analysed. How does economic growth and corruption correlate in these two countries. Normally corruption and economic growth should correlate negatively due to the simple fact that corruption hinders the development of a nation. Additionally it was shown that corruption is one of the major issues in China and India and so the logical consequence would be to assume that economic growth is slower in both countries due to corruption. But surprisingly, one faces the fact that both countries are developing at such a fast pace. Another fact which is intriguing, is that perceived corruption in both countries has been increasing after the post-reform decades, which is surprising knowing that a lot of anti-corruption regulation have been installed.[147] To analyse this relationship, I chose 50 countries which obviously include China and India and then compared all of the countries amongst each other with the dependent variable being corruption.

The corruption indices are taken from Transparency International. Then I chose some indicators of economic growth to see how they correlate with corruption in the different countries. It will be interesting to see if there is a general trend within the scatter plot and if there is, it will be even more important to see where China and India are located. Do they

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[147] Bardhan, 2014 p.8

follow the general trend or are they statistical outliers which would indicate that the relation between corruption and economic growth is indeed a special/positive one.

In a first stage I will subdivide all of the countries into 6 categories depending on what CPI corruption scores they got from TI in the year 2014. Countries can score from zero to one hundred points. Since the lowest scoring country has 8 points and the highest score was 92, I subdivided my categories from [8-22] [23-36] [37-50] [51-64] [65-78] [79-92]. The results from this first categorization can be seen in Figure 14.

Figure 14 CPI score index

8-22	23-36	37-50	51-64	65-78	79-92
Chad	Argentina	Bosnia	Lithuania	Austria	Australia
Haiti	Bolivia	Brazil	Malaysia	Bahamas	Denmark
	China	Croatia	Slovenia	Belgium	Germany
	Iran	Egypt	Spain	France	Netherlands
	Kenya	Gabon	Taiwan	Japan	Luxembourg
	Laos	Ghana		UK	Switzerland
	Mali	Greece		USA	
	Mexico	India			
	Nepal	Italy			
	Nigeria	Morocco			
	Paraguay	Panama			
	Suriname	South Africa			
	Russia	Senegal			
	Uganda	Sri Lanka			
	Vietnam				
	Zimbabwe				

So what can be seen in figure 14? First of all, I have to specify that I included most of the countries which are also included in the bribe payer index, since they are supposed to be the countries which have the most economical influence. The rest of the countries were then chosen at random, in order to have a well-diversified sample. There are several things which can be observed immediately. A first one is that the countries which are ranked amongst the best are also some of the most developed countries. The Bahamas are the only country which I was surprised by, but they seem to do exceptionally well in their fight on corruption. Additionally I was surprised that Spain and Italy seem to have quite some problems with corruption, especially Italy which ends up in the same category as Gabon or Ghana. The two most important countries for this paper are obviously India and China and what is very interesting to see is that they are both in the two categories which include the most countries. It seems like it is very difficult for developing countries to get past the score of 50 on the CPI index. Of course this could also just be a side effect of the random selection of countries.

One could argue that China and India do not seem like outliers in this table because they are classified in categories which include a lot of other developing countries and yet I would argue that especially in the case of China, which is categorised in the same group as Mali or Suriname, that they seem to have a much bigger corruption problem as other countries with the same economical influence. At this point I also have to mention that China has as score of 36 and was thus very close to being classified in the higher category.

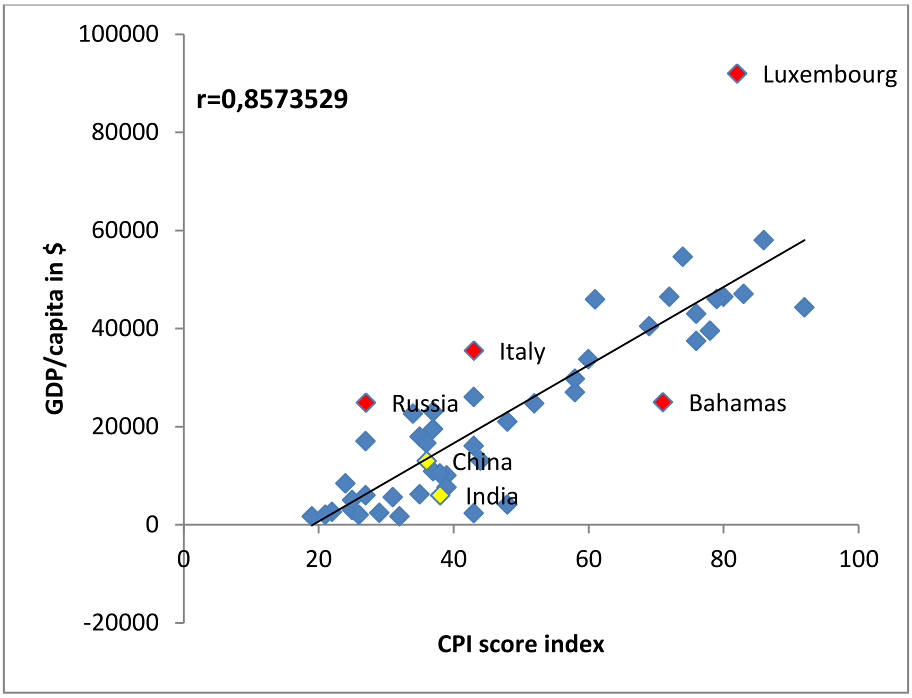
As for India, it seems like it is in a category with a lot of other countries at the same development stage, so at this point it does not seem like the level of corruption in India is out of the ordinary

4.1 Indicators of economic growth and development

4.1.1 Gross Domestic product per capita

The first indicator I used is the gross domestic product (at purchasing power parity) per capita. The data was taken from the International monetary fund, which provides this data every year. The numbers are from 2014.

Figure 15 Scatter plot between CPI index score and GDP/capita



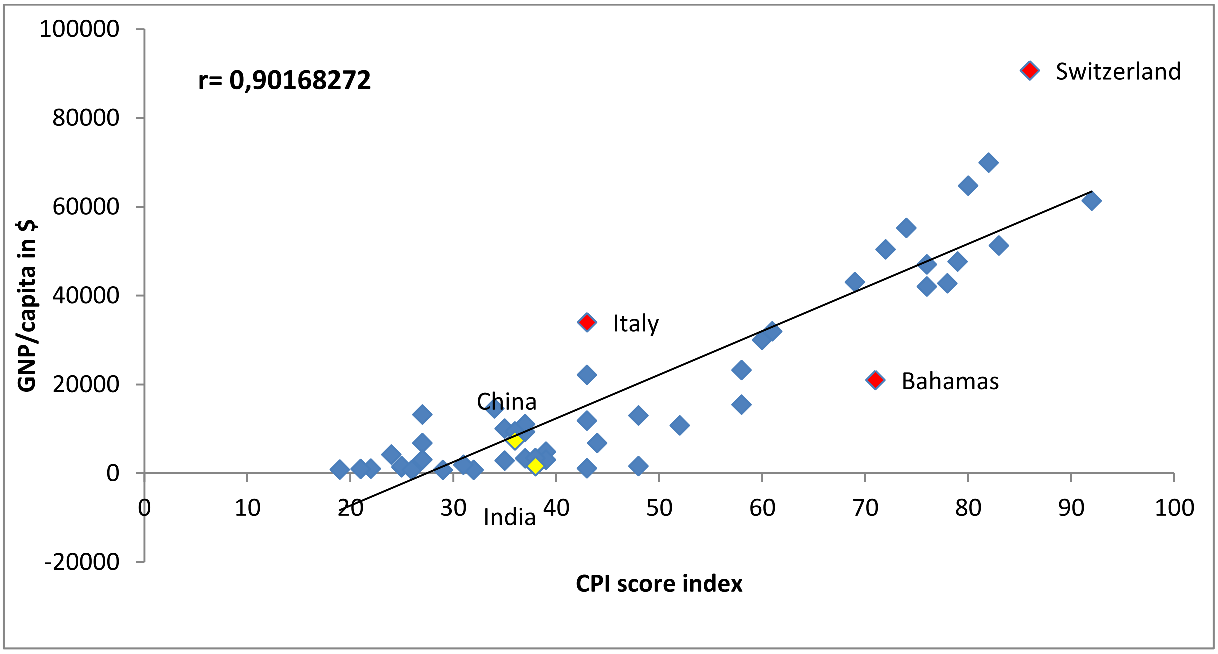
In the first scatterplot, one can see that there is a clear correlation between the CPI corruption scores and GDP/capita. There are only very few outliers with Russia, Italy, the Bahamas and Luxembourg. Russia and Italy are two fully developed countries which are known to be more corrupt than other equally developed countries. As already seen in figure 14, the Bahamas have an exceptionally well CPI score and other countries with similar scores have a clearly larger GDP/capita. This could be an indication that the Bahamas really value the fight on corruption. The only reason why Luxembourg is a statistical outlier here is because their GDP/capita is just so much higher than the ones' of all the other countries. Even with these few outliers, there is a correlation of 0,8573529. The correlation without these 4 countries, it is 0,91694057.

Even though I was surprised by this high correlation, it was even more surprising to me that China and India are nowhere close to being statistical outliers. Especially China is exactly on the trend-line. I would have expected both countries to be clearly above the trend-line, but India is even below it. Since this first variable did not yield any significant results I will now take a look at how the corruption variable interacts with GNP/capita.

4.1.2 Gross National product per capita

I would not expect the results to be very different from the GDP ones' but it is a good possibility to control the previous results. This data was taken from the World bank.

Figure 16 Scatter plot between CPI index score and GNP/capita

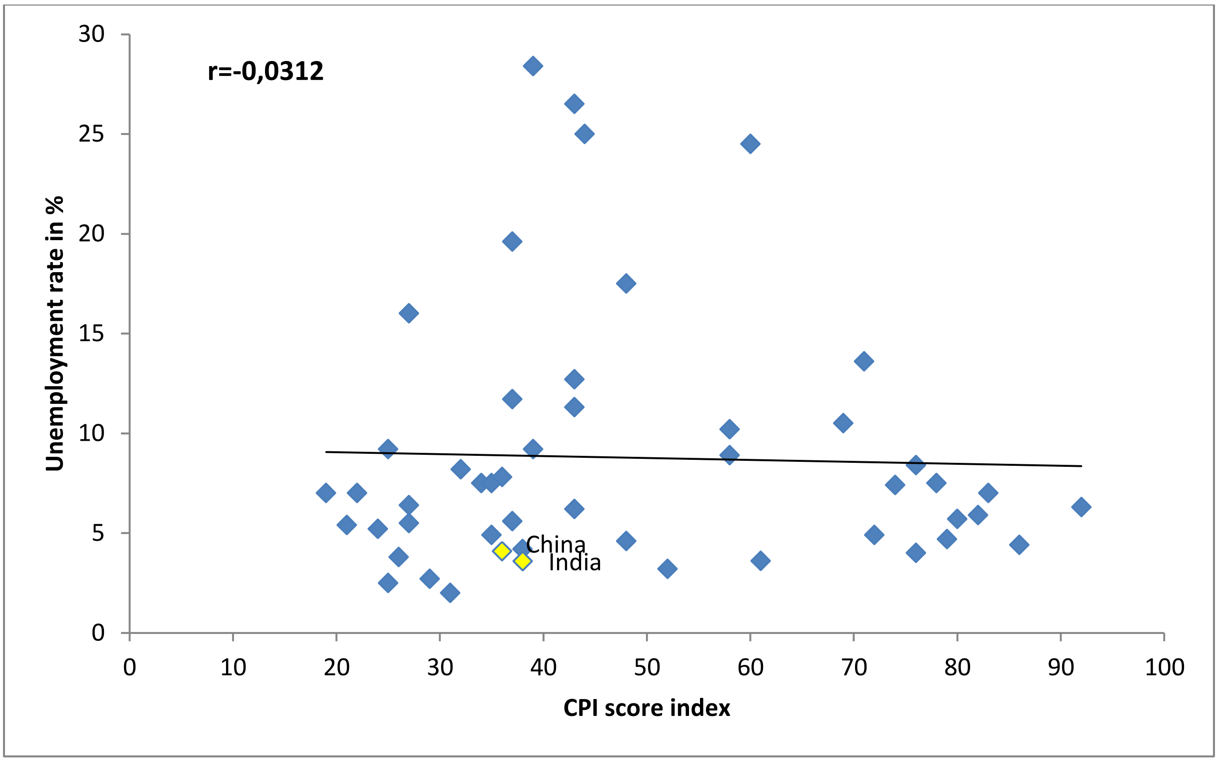


As expected there are no big surprises in figure 16. The main statistical outsiders remain the same, except that Luxembourg is closer to the trend-line as it was for GDP/capita. China once again is positioned exactly on the trend-line, while India is below it. The correlation is also quite high with 0,90168272. So far I have not found any indication which would suggest that the relationship between corruption and economic growth is a positive one in China or India.

4.1.3 Unemployment rate

The next variable I took a look at was unemployment. A problem with this variable is that the data is not available for every country for the year 2014. Most of the data was taken from "The World Bank", "Trading economics" and "Eurostat".

Figure 17 Scatter plot between CPI index score and unemployment rate

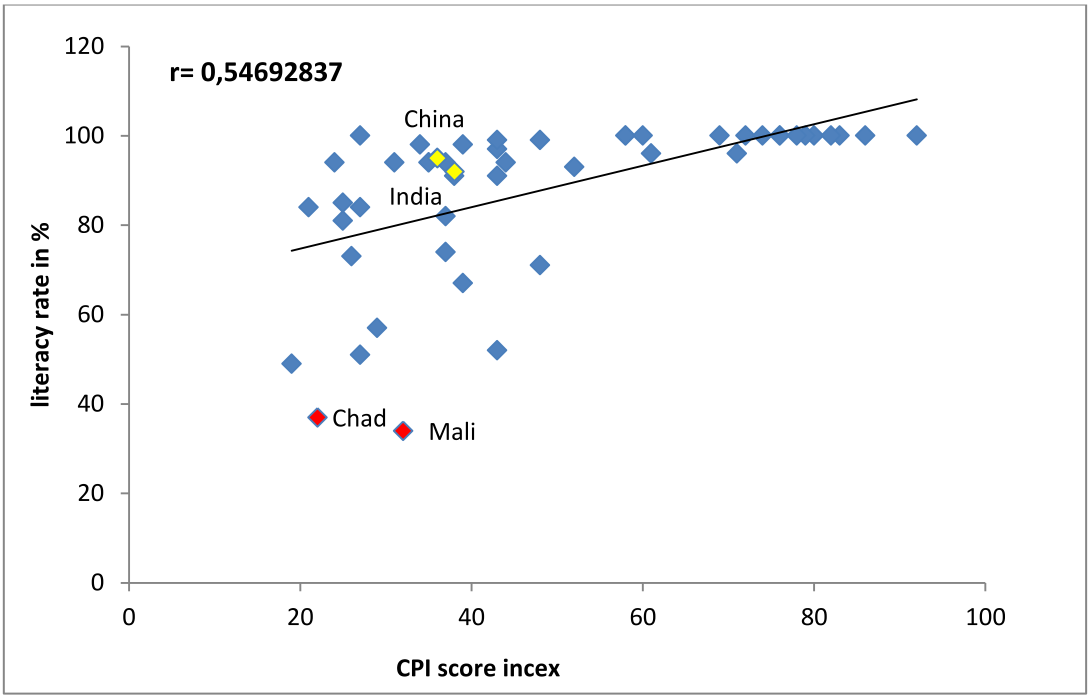


As can be seen in figure 17 there is close to zero correlation between the CPI scores and the unemployment rate. This had to be expected since many of the developed countries like Italy, Spain or Greece are struggling to keep unemployment at low levels. Additionally a lot of developing countries do not have employment problems, since their economies are growing and they can use all the manpower they get, especially in China or India, where complete cities are being built all over the country. This is also observable in the scatter plot where China and India are clearly below the trend-line, which indicates the low unemployment rate. Here again there is no reason to assume that the relationship between corruption and economic growth is a positive one.

4.1.4 Literacy rate and school enrolment

So far there have been no indications that China or India have a different relationship between corruption and the economic growth indicators as other similarly developed countries. Now I will take a look at some education indicators, namely the literacy rate and primary school enrolment.

Figure 18 Scatter plot between CPI index score and literacy rate

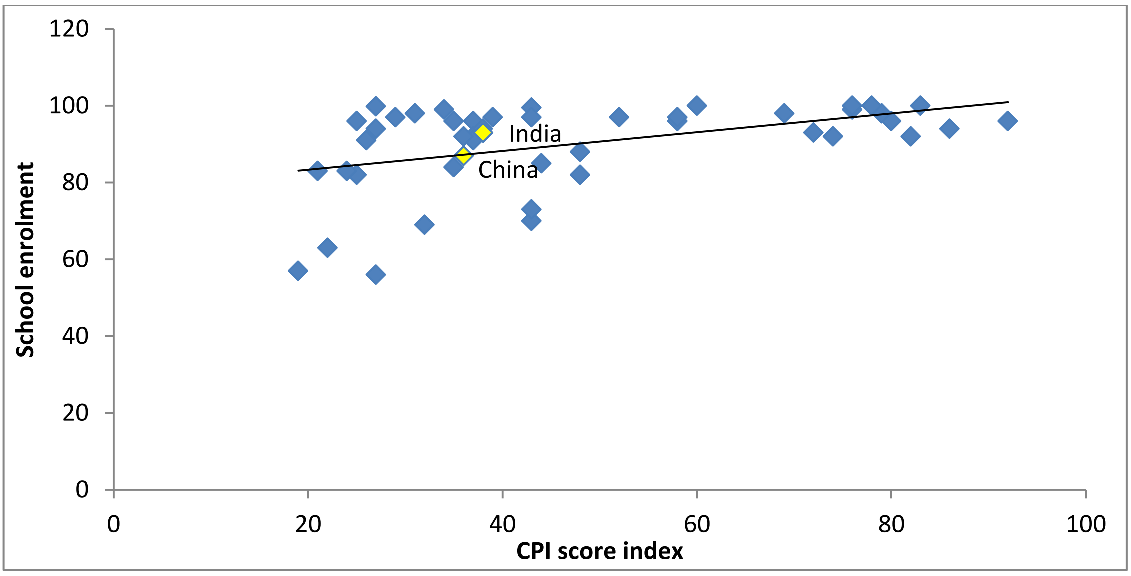


One can see that except for a few nations, nearly every country has a literacy rate of over 85% and even countries with lower corruption scores might have close to 100% literacy rate. Nearly every country with a CPI score of 50 or higher has a 100% literacy rate. India and China are slightly above the trend-line, but again they are not statistical outsiders. Now we take a look at school enrolment.

For this, I once again took the data from the World bank and used School enrolment primary (net %) which is "the ratio of children of official school age who are enrolled in school to the population of the corresponding official school age. Primary education provides children with basic reading, writing, and mathematics skills along with an elementary understanding of such subjects as history, geography, natural science, social science, art, and music".[148]

[148] World Bank, 2014

Figure 19 Scatter plot between CPI index score and school enrolment

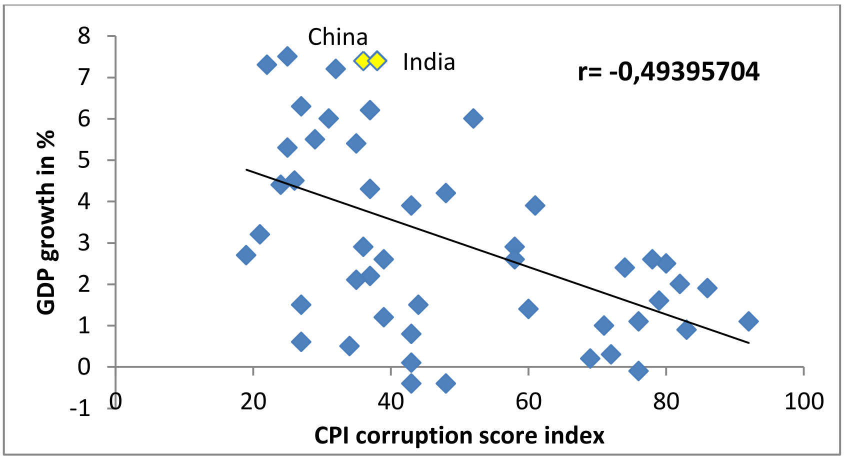


Once again, China could not be closer to the statistical average. Also India is very close to the trend-line and in the midst of a cluster of similar countries. After GDP/capita, GNP/capital and unemployment, the education variables have not shown any different results for China or India compared to other countries.

4.1.5 GDP growth

Since the traditional economic growth indicators have not yielded any results which would suggest that the relationship between corruption and economic growth is special in China or India, I will now take a look at two more future oriented indicators, namely GDP growth and foreign direct investment. These are two ideal development indicators which are likely to favour countries which are going to play a bigger role in future economic development. This data was also taken from the world bank and the numbers are from 2014.

Figure 20 Scatter plot between CPI index score and GDP growth

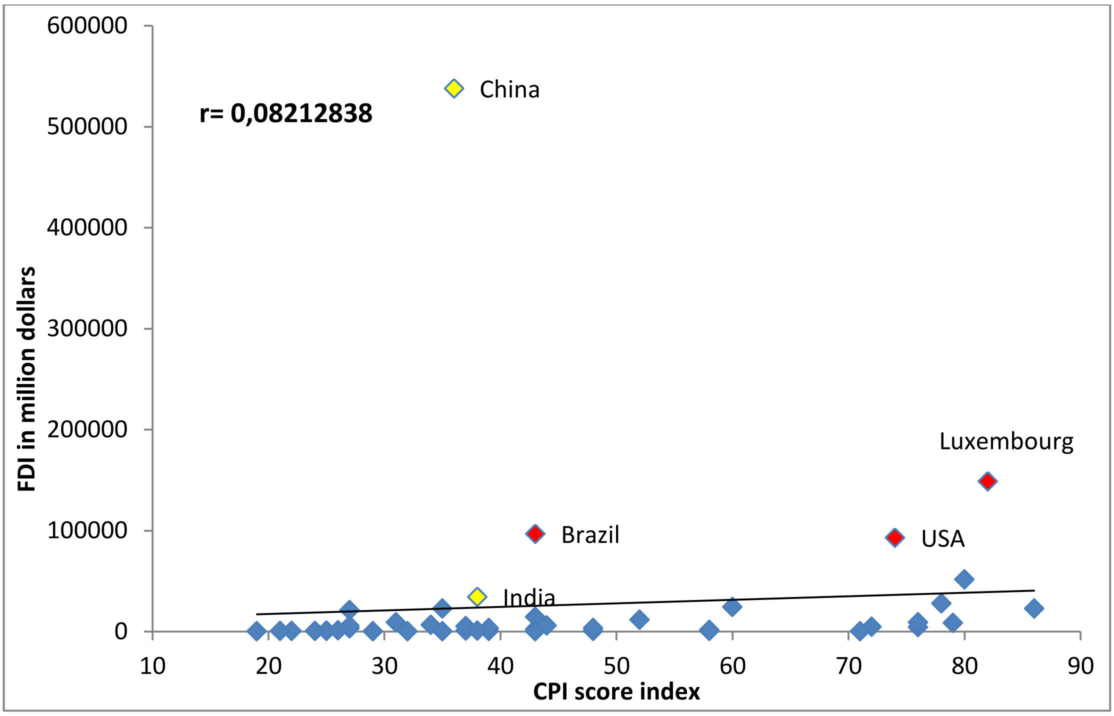


As I expected, the more developed countries, which play already a major role in the economy tend to have smaller GDP growth. This also means that countries like China and India have very high GDP growth. But so do a lot of the other countries with lower CPI scores, so again there is no indication that China or India are different as other similar countries.

4.1.6 Foreign direct investment

The last indicator which I think is optimal in the case of India and China is foreign direct investment. This indicator shows in which country investors see future potential. Due to this, I would assume that China and India will be way above the trend-line. Again I used the data provided by the world-bank. In their data, they calculate foreign investment as new investment inflows less disinvestment. In this case, I excluded the countries with a negative foreign direct investment value which were Denmark, France, the Netherlands as well as Suriname and Taiwan because the data for these countries was not available.

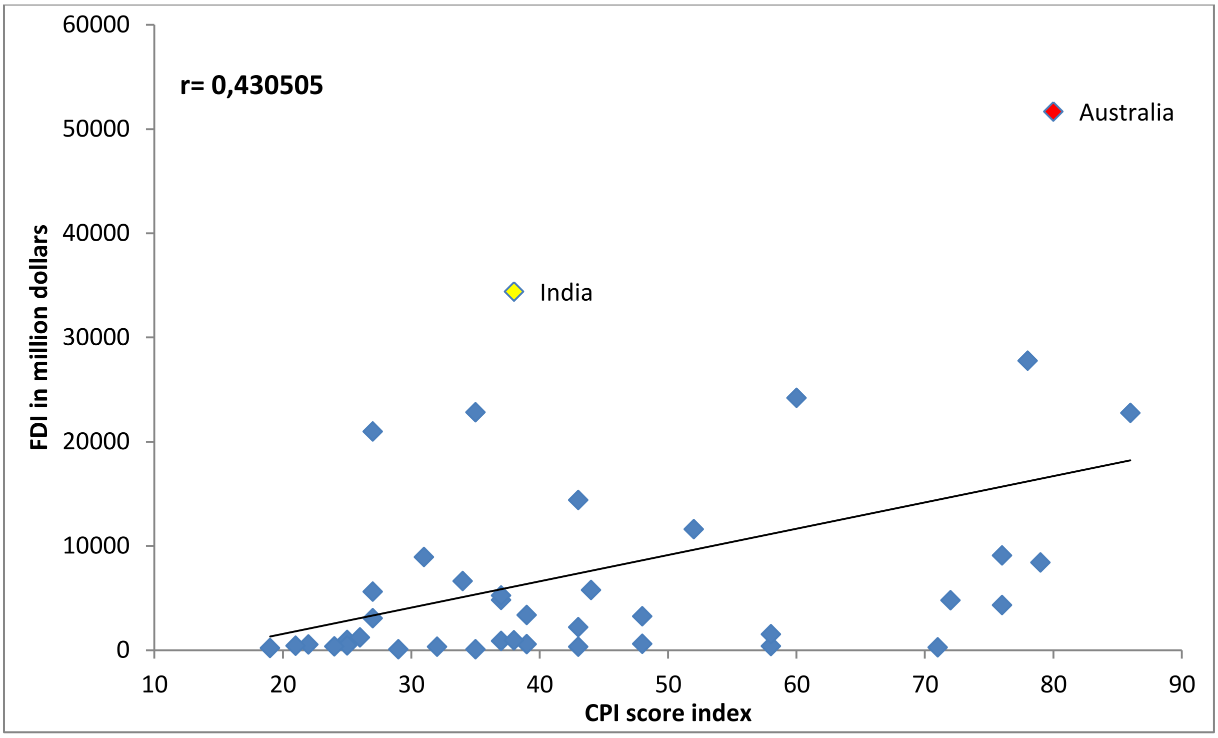
Figure 21 Scatter plot between CPI index score and foreign direct investment



Like I assumed before, in this category China is just a complete outsider. The FDI in China is only 20% less than the FDI of all the 44 other countries combined. Unfortunately this doesn't tell us a lot about the relationship between economic growth and corruption, since no other country compares to China. Even the most developed countries do not come close to such a high level of investment. The closest countries are Luxembourg, Brazil and the USA. One of the main reasons why FDI is at such a high level in China is certainly due to the large population. International firms see a huge potential sales market in China, that's one of the main reasons why they are investing into it.

But what about India? In this graph it is really hard to see, but India is still a statistical outsider and has much more foreign direct investment than other countries with the same CPI score. In order to show this more clearly, I created the same scatter plot one more time but excluded China, Luxembourg, Brazil and the USA.

Figure 22 Scatter plot between CPI index score and FDI without China Luxembourg Brazil and USA



In this second plot, it becomes more visible that India also has a very high FDI level. Additionally in this plot the correlation is much higher than in the first one. The correlation of 0,44 is not the highest but it lets us assume that there might be some connection between the CPI scores and FDI. I know that FDI might not be a good measure to compare the actual situation in the different countries at the moment but I think that it gives us a clear indication which countries will play major economical roles in the future and in this regard China India and Brazil are the three developing countries which clearly stand out, even though all of them have pretty bad CPI scores.

5 Conclusion

The goal of this paper was to analyse the relationship between economic growth and corruption. Because growth is at such high levels in China and India I expected that economic growth indicators would be much higher than in other countries with similarly low corruption scores. The first variables GDP and GNP/capita did not confirm my assumptions but showed that China was exactly on the trend-line and India was even below the trend-line for both variables. Then I analysed the unemployment rate, but unfortunately the correlation level was close to zero and the results were meaningless. Since in previous parts I had analysed the effect of education on corruption, I also analysed the correlation between literacy rate and corruption as well as primary school enrolment and corruption. But yet again, China and India were in a cluster with other similarly developed countries.

Since the traditional growth indicators were not showing any results which supported my assumption, I decided to analyse some more future oriented variables. For this, I started with economic growth. At first sight it looked like for the first time China and India were both far above the trend-line, which would support my hypothesis, but it quickly became clear that also a lot of other countries with similar corruption scores were above the line. Also a decreasing trend-line can be observed, which suggests that countries with lower corruption scores have a larger economic growth. So even if the relationship between GDP growth and corruption was above average, there is no indication that China or India are special in this perspective compared to other similar countries.

As a second future oriented growth indicator, I chose foreign direct investment and for the first time, the results for China were completely of the scale. With an FDI level which is nearly 5 times as large as the second largest country, China can definitely be considered a statistical outsider. On one hand this would be the first indication that my assumption could be right, but on the other hand, there is no country which compares to China, so it is very difficult to point out as to why FDI is so high and if this really guarantees that the country will play a major role in future economics.
After taking away the four largest countries regarding FDI it becomes visible that India also has a very high FDI level compared to the other countries. But then again this is nowhere

close to being enough evidence that the relationship between corruption and economic growth is special in either one of the countries.

So all in all I have to admit that I did not find enough evidence to support my assumption and this means that we can expect the relationship between corruption and economic growth to be a negative one like in other countries. An important implication of this is that the fight on corruption is even more important because of this. Since there is a negative relationship between corruption and economic growth, anti-corruption regulation can not only decrease corruption but also increase economic growth.
This also increases my scepticism about the Chines style anti-corruption. Since the campaigns do not aim to eliminate corruption but only to bring it to an “acceptable” level, I am not sure if this “acceptable” level is not hurting their economy. But the advantage is that this means that with more efficient anti-corruption regulations China should be able to get rid of the excess corruption.

The problem in India is a little bit different since corruption is seen as part of their culture and it may be very hard to lead a successful fight against something which is seen as part of a culture.

Finally it can be said that I did not find any evidence that corruption can be profitable to the economic growth of a country which is why the fight on corruption should be one of the points of emphasis in any country, but even more in the developing ones’.

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7 Deutschsprachiges Abstrakt

Korruption ist ein Thema mit dem man in Europa nur selten konfrontiert wird, jedoch ist es in anderen Regionen der Welt eine ganz normale und alltägliche Sache. „Transparency International“ ist eine Agentur die jeder Jahr einen „Corruption Perception Index“ veröffentlicht in dem sie alle Länder darauf bewertet, wie korrupt sie sind. Generell kann man sagen, dass die besser entwickelten Länder hierbei besser abschneiden. Zwei Länder die vergleichsweise schlecht abschneiden sind China und Indien. Da man unter Wissenschaftlern generell davon ausgeht dass es einen negativen Zusammenhang zwischen Korruption und wirtschaftlicher Entwicklung gibt, ist es sehr erstaunlich, dass zwei Länder mit einer solchen rasanten wirtschaftlichen Entwicklung so schlecht abschneiden.

Diese wissenschaftliche Arbeit beschäftigt sich damit die Frage zu beantworten wieso diese beiden Länder scheinbar ein anderes Verhältnis zwischen Korruption und wirtschaftlicher Entwicklung haben als das was man generell annimmt. Zu diesem Zweck führe ich eine Analyse durch, in der ich herausfinden will wie verschiedene wirtschaftliche Indikatoren mit Korruption in diesen beiden Ländern korrelieren. Des Weiteren versuche ich festzustellen ob das Verhältnis zwischen Korruption und wirtschaftlicher Entwicklung wirklich ein besonderes ist oder ob dies nur auf den ersten Blick so zu sein scheint.

8 English abstract

Corruption is a topic with which one is only rarely confronted here in Europe, but in other regions of the world corruption is a daily topic and is integrated into everyday live. Every year the agency Transparency International releases their so called “Corruption Perception Index”. In this index, the agency rates every country on how corrupt it is. One of the general patterns that can be observed is that more developed countries tend to have better scores than less developed ones’. Two countries which caught my attention were China and India. They are two of the fastest developing countries and yet they have very low corruption scores. This was surprising to me because researchers generally agree that corruption and economic growth correlate negatively.

This paper will focus on the question, why these two countries seem to have a different relationship between corruption and economic growth than the one which can generally be observed in other countries. For this I perform an analysis in which I compare how corruption correlates with several economic growth indicators in these two countries. With the help of this, I hope to be able to explain if and why the relationship between corruption and economic growth in China and India is different as the one in other countries.

9 Curriculum vitae

9.1 Education

10.2013-07.2015	**University of Vienna** Master of Science in International Business Administration Specialisation: Industrial Management
10.2010-07.2013	**University of Vienna** Bachelor of Science in International Business Administration
10.2008-07.2010	**University of Trier** Studies in political economics
10.2001-07.2008	**Lycee Robert Schuman,** Luxembourg (High school)

9.2 Language skills

Luxembourgish: C2

Dutch: C2

German: C2

French: C2

English: C2

Italian: A2