



AID FOR BUSINESS

The motivation behind Germany's Official
Development Assistance to India

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Josephine Valeske

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Members of the Examining Committee:

Howard Nicholas

Karin Astrid Siegmann

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Inquiries:

International Institute of Social Studies
P.O. Box 29776
2502 LT The Hague
The Netherlands

t: +31 70 426 0460
e: info@iss.nl
w: www.iss.nl
fb: <http://www.facebook.com/iss.nl>
twitter: [@issnl](https://twitter.com/issnl)

Location:

Kortenaerkade 12
2518 AX The Hague
The Netherlands

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List of Acronyms

BMWi – Bundesministerium für Wirtschaft und Energie (Federal Ministry for Economic Affairs and Energy)

BMZ – Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung (Federal Ministry for Economic Cooperation and Development)

CRS – Creditor Reporting System

DAC – Development Assistance Committee

DEG - Deutsche Investitions- und Entwicklungsgesellschaft

FDI – Foreign Direct Investment

GDP – Gross Domestic Product

GDR - German Democratic Republic (East Germany)

GIZ - Gesellschaft für Internationale Zusammenarbeit

HIPC - Heavily Indebted Poor Countries

KfW – Kreditanstalt für Wiederaufbau

ODA – Official Development Assistance

OECD – Organisation for Economic Cooperation and Development

PPP – Public-Private Partnership

SITC - Standard International Trade Classification

SMCs – Small and Medium Companies

UN Comtrade - United Nations International Trade Statistics Database

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Abstract

India has been one of the main recipients of German Official Development Assistance (ODA) since the very start of Germany's aid programme. Whereas most aid literature is only concerned with aid effectiveness, this study investigates the motives of Germany as an aid donor to India. It is common knowledge that, in the context of the Cold War, part of this aid was politically motivated. However, contrary to expectations, German ODA to India did not decrease after the fall of the Berlin Wall, which poses the question of what Germany is attempting to achieve with this aid. Recognising the grave importance of manufactured exports for the German economy and the interdependence of development and business interests in Germany, this research paper argues that the rise in German ODA to India after the Cold War is primarily economically motivated. India is an increasingly important market both for sales and procurement of the German export industry. Furthermore, German companies, supported by ODA, are increasingly active in the Indian domestic market, as a case study on renewable energies shows.

Relevance to Development Studies

ODA shapes the relationship between the Global North and the Global South. Whereas most studies conducted about the topic seem to naturally assume an altruistic motivation behind development assistance and thus focus only on its effectiveness, it is essential to also investigate the donors' motives in giving aid. It is in the interest of recipients and scholars to understand the true driving force behind the monetary transfers between the Global North and the Global South. In cases where ODA is primarily used to serve the donors' interests, there is a chance that it will bring about adverse effects for the recipient countries and widen existing inequalities.

Keywords

Official Development Assistance, Aid, ODA, India, Germany, Export Business Assistance, Renewable Energies

1 The Puzzle: Why aid after the Cold War?

1.1 Why India? Background and research objectives

Official development assistance (ODA) - or aid, how it used to be called - is a puzzling phenomenon in a world where it is the norm for states to compete against each other for power, prestige and economic success. It is also a relatively young phenomenon, although it has its roots in the colonising mission of the Global North. One can roughly differentiate between bilateral aid (given by one state to another) and multilateral aid (given by multilateral organisations to states); as well as loans and grants. This thesis will investigate bilateral aid (both loans and grants) given by Germany to India, especially in the period from 1990 to 2017. ODA as we know it today originated after the second World War, when the USA announced the Marshall Plan as a strategy to rebuild Europe - and, of course, to defend its own interests in the context of the Cold War. Western Europe, after being rebuilt, quickly started providing aid to poorer countries, which is how Germany's ODA program commenced in the 1950s. Like all Western countries, it was strictly tied into the Cold War dynamics until the fall of the Berlin wall. Aid was given to developing countries to prevent them from switching sides.

Table 1.1: Top Five Recipients of German ODA

1966-1970	1971-1980	1981-1990	1991-2000	2001-2010	2011 - 2017
India	India	India	China	Iraq	India
Israel	Turkey	Turkey	Egypt	China	China
Pakistan	Bangladesh	Egypt	Indonesia	India	Afghanistan
Turkey	Indonesia	China	India	Nigeria	Morocco
Indonesia	Egypt	Indonesia	Turkey	Cameroon	Turkey

Source: OECD/Geobook 2019

Table 1.1 depicts the main recipients of German bilateral aid over the last decades. Whereas the choice of some of the recipients is easy to understand due to Germany's specific connections to the respective country (e.g. Israel and Turkey), its strategic importance (China) or political events (e.g. Afghanistan), it stands out that India has consistently been one of the main recipients of German ODA over the course of six decades despite not having any immediately obvious relevance to Germany. During the Cold War, India was officially neutral and accepted aid from both blocks. German aid to India can be clearly seen as part of the Western political aid-giving mechanism. However, if this had been the main reason, one would have expected the aid to India to decrease after the fall of the Berlin wall. But that was not the case:

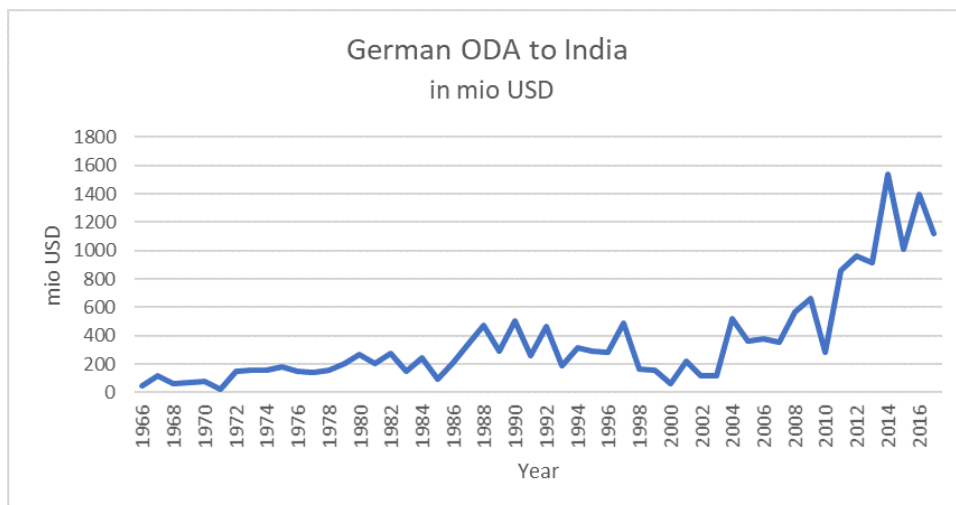


Figure 1.1: German ODA to India in absolute numbers

Source: OECD 2019

Whereas German ODA to India in absolute numbers has risen constantly except for a small slump in the early 2000s (Figure 1.1), aid as a percentage of GDP has been decreasing since the 70s, just to rise again after 2000 (Figure 1.2). It is definitely clear that aid to India after the Cold War has not become insignificant.

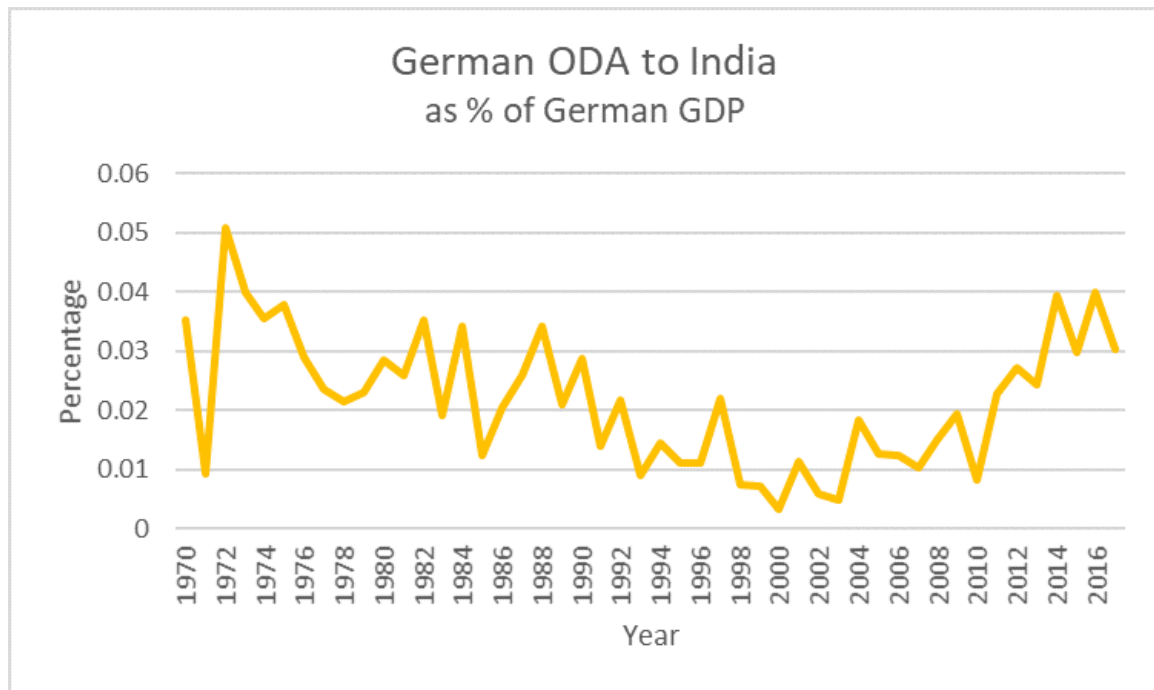


Figure 1.2: German ODA to India as percentage of German GDP
Source: OECD 2019 and World Bank 2019

Thus, the question that I want to answer with this research is the following: Why has Germany been channeling ODA to India in the period since the end of the Cold War? In order to answer this, I want to investigate the following questions first: What is the composition of German ODA to India and which priorities does Germany set? (How) does the structure of Germany's economy explain its interest in India? And (how) does the German ODA benefit certain actors in Germany?

ODA shapes the relationships between the Global North and the Global South. A large part of the mainstream literature is concerned with only the effectiveness of aid. However, effectiveness must always be measured against certain aims. Whereas mainstream studies seem to assume the aim to be economic 'development' or a reduction in poverty, this is not naturally the donors' motivation. Instead, if ODA is more donor- than recipient-oriented, it has to be evaluated from a completely different angle. This is what makes this research relevant: It examines an often-overlooked dimension of a globally important phenomenon that has a major impact on developing countries. Furthermore, those studies that have dealt with aid *motivation* often concentrate only on political determinants of aid flows. However, it is important to also keep the *economic* interests of aid donors in mind. Apart from past research on tied aid, this possibility has not received much attention. This paper intends to contribute to filling this gap.

1.2 Economic interests: Tentative Arguments

The type of aid that Germany gives to India - mostly aid targeted at improving the country's economic infrastructure - suggests that Germany's interests as an aid donor in India are of economic nature. Humanitarian and political motives appear to be less important. Looking at Germany's economic structure, it becomes clear that the country is largely dependent on the exports of manufactured goods. Thus, India is on the one hand relevant as a possible export market, due to its size and growing domestic demand. Official documents that are triangulated with the data confirm this ambition - Germany uses ODA in order to facilitate exports. But not only German exports,

also German imports correlate with aid, suggesting that India has a further relevance to Germany, namely as a manufacturer of intermediate goods. With the German workforce increasingly moving away from manufacturing and into the service sector, the actual production of its industrial goods is being outsourced. It seems that India is one of the countries that now supplies the inputs to German manufacturing, which might be a reason why Germany provides aid to the country. ODA to India, trade with India and the activity of German companies in India all simultaneously rose sharply after 2000. The process of aid-giving thus complements the structural transformation of the German economy.

1.3 Approach and Method

I am using descriptive quantitative data analysis in order to validate my points. I triangulate my data with official government documents as well as case studies in order to support my argument. This approach allows me to use a wide range of qualitative and quantitative data in order to answer my research question, something that would not be possible with more targeted methods such as econometrics.

The ODA data I use is reported to the Development Assistance Committee (DAC) of the Organisation for Economic Co-operation and Development (OECD) by its members. For ODA given from Germany to India, detailed data that makes it possible to break down the ODA to the level of individual projects (so-called CRS data) are only available from 1978 onward. For my case study of renewable energies, project-level data are only available for after 1995, because only since then renewable energy has been recorded as a separate category. The challenge arising from donor-reporting is that donors are incentivised to over-report ODA or include flows into ODA that stretch its definition in order to look more generous. However, this is not an issue for the study at hand that focuses more on general trends in ODA than on exact numbers.

My import and export data stem from the UN Comtrade data collection, which is the largest depository of international trade data, and are available for a longer time period than ODA data. The Comtrade data are all available in USD and thus comparable to the ODA data. I use data from the Standard International Trade Classification (SITC) revision 2, reported by Germany. It is the most accurate and detailed data available, yet measurement or reporting errors cannot be excluded.

Data for FDI and annual turnover of companies stem from the Deutsche Bundesbank and, for the countries I am concerned with, are only available for after 1991. Other data stem from the World Bank. The documents from government officials are limited by their availability to public. In the case studies, parts of companies' annual reports are used. One problem I faced was that Hermes, the major German export insurance that occasionally finances projects counted as ODA, does not publish a list of all the projects it supports, which is why I could not use it as a data source for this research.

1.4 Scope and Limitations

This research paper investigates the motivation behind Germany's ODA to India. Consequently, it does neither deal with the effects this aid has on India nor tries to evaluate the aid's effectiveness. Whether ODA accomplishes its officially stated aims of increasing 'development' (whatever that may be) or not is not relevant for this paper, unless this feeds into Germany's motivation. Similarly, while recognising that India is more than just a passive recipient of aid flows, India's motivation in receiving ODA is not at the forefront of this study. This study is concerned only with The Federal Republic of Germany (Western Germany). All data before 1990 is only data concerning West Germany, excluding the Eastern part, since it is assumed that the united Germany's aid policy matches the former West German strategy much more closely than the East German. As stated before, this research paper is concerned with the time period from 1990 to 2017, assuming that the motivation behind ODA would be different in a post-war context than during the war.

1.5 Chapter Outline

The second chapter will review literature on aid, looking briefly at mainstream literature that mostly deals with aid effectiveness. Then I will review the aid motivation literature that can be further separated into those authors looking at political motivation and those looking at economics, which are less in number, before zooming in on Germany and later India. The third chapter will provide all relevant background information on ODA as well as on Germany's economic structure, and briefly look at Germany's diplomatic relationship with India. Chapter 4 will present the analytical findings that support my argument. It is divided into a section that presents quantitative data and one that presents qualitative data. Chapter 5 is a case study on renewable energies that illustrates my argument and includes examples of companies that indirectly benefit from ODA. The last chapter will present my conclusion.

2 The curtain lifts: Humanitarian, political and economic motives found in the aid literature

2.1 The mainstream: Literature on aid effectiveness

The literature on aid can be separated into several strands. For our purpose, a categorisation into those authors looking at aid effectiveness and those looking at aid motivation is useful. I will give a brief overview over the former, as they are less important for our aim, and then concentrate on the latter. A third strand that will briefly be mentioned looks at aid from a postcolonial perspective. A description of the general history of aid will be provided in chapter 2.1.

Most literature on development aid is concerned with its effectiveness and compares different methods with each other in order to single out the most effective one. Effectiveness is measured against the proclaimed goals of the development discourse that are typically either promoting economic growth or, especially in recent times, alleviating poverty. ODA can be measured with different variables: the absolute amount of ODA given, which is typically used to argue that a lot of money spent has not achieved very much; or ODA as share of a donor's GDP, which is often used by those who argue that not enough ODA is being given. Furthermore, to compare different countries that receive ODA, it can be measured as share of the recipients' GDP or the donor's total ODA. Pedrosa-Garcia (2017) observes that a large part of the aid debate is supported by studies using macro- or microeconomic empirical evidence and typically regression-based methodologies. These methods are used to test the influence of aid on growth (Hansen and Tarp 2001, Rajan and Subramanian 2008), or more poverty-oriented indicators (Kosack 2003), either among a large set of aid recipients or for a specific case study.

There are different opinions about how to increase the effectiveness of aid money given. The most prominent authors on different sides of the argument are Jeffrey Sachs and William Easterly. Sachs (e.g. 2006) and other authors on his side lobby for an increase in the amount of aid and argue for a "big push" that is supposed to lift countries out of poverty. Their central argument is that aid would be useful to cure the world's ills if there was just enough of it.

On the other side of the discourse, William Easterly (e.g. 2006) and his supporters emphasize that the effectiveness of aid hinges more on how it is given or how the projects are implemented rather than on the amount given. They focus on the incentives that aid provides and argue that it is especially important that ownership of aid projects lies in the hands of aid recipients. The important takeaway for this research is that none of these prominent figures in the aid discourse question the motivation of donors. William Easterly is a good example for that. In his seminal work "The White Man's Burden", he writes

[t]he West spent \$2.3 trillion on foreign aid over the last five decades and still has not managed to get twelve-cents medicines to children to prevent half of all malaria deaths. [...] It's a tragedy that so much well-meaning compassion did not bring these results for needy people" (2006:4).

Apart from the slightly patronising tone with which he looks at "the needy people", the phrase "well-meaning compassion" leaps to the eye. This presupposes a benevolent motivation behind aid from the Western donors that is not scrutinised by Easterly. Instead, he – and many other mainstream authors who focus on effectiveness – seem to take it as a given that the officially stated objectives of aid are similar to the real motivations for which it is given.

But there are more radical authors. In the tradition of dependency theorists, they argue that aid in fact served the contrary of its proclaimed purpose and made developing countries worse off than they would have been without it. For example, Veltmeyer and Petras (2005) argue that "aid can be viewed as a catalyst of underdevelopment and regression rather than growth and development". However, they qualify that these consequences are not usually intended by the aid-givers and call them "unintended and inevitable outcome of the conditions of development".

The Kenyan economist James Shikwati, for this reason, wants all development aid to be stopped immediately. He cites a number of reasons from the spectrum of political economy, emphasizing the immense power difference between white development workers and non-white recipients that often only deepens due to the structure of aid projects. On the other hand, proponents of development aid have argued that these criticisms again come from local elites that themselves are not directly

affected by aid projects and not in need of it (Böschel 2010). Finally, Nuscheler (2006), one of the most prominent German academics on aid, explores why it is hard to measure aid's effectiveness: because it operates with a multi-dimensional aiming system.

The question cannot be finally answered, even with a lot of empirical effort: What would have happened, especially in the poorest countries, in which partially half of the investments are financed by outside actors, without these [aid] infusions?

Many critical scholars point out that development aid does nothing to solve the root problem of unequal power hierarchies between the Global North and South. From a critical viewpoint, the development industry, just like the former colonizers, facilitates the destruction of indigenous cultures, the colonisation of minds and economic exploitation. In this view, development aid is just another model used to increase dependency and replace colonial hierarchies (e.g. Escobar 2012, Sachs 2005). Crush (1999) points out that the development sector has never managed to break with traditional power structures like North/South and is thus deeply rooted in colonial exploitation. He commented on the whole discourse, saying that the "development discourse has always reinvented itself as the remedy for all the ills it has caused". Despite a few authors who view the institution of development as a whole and question its essence (such as Arturo Escobar) that inspired a whole range of post-colonial thinkers, the majority of aid literature does not look at the big picture.

All in all, the central question of why aid is given in the first place is being ignored by most seminal works on the topic. Given its immense importance, it is imperative that this question is discussed more prominently. When scholars like Easterly write about the failure of aid to reach its intended goals, which goals are they talking about? From the perspective of self-interested donors, goals might often be reached even if the recipient country does not benefit at all from the ODA.

2.2 The outsiders: Literature on aid motivation

Most of the orthodox authors do not even raise the question of aid motivation. However, there is a sub-group of authors that actually do look at the motives of aid donors. They typically find that aid is primarily given to serve the donor's interests. Roughly, this group can be divided in those pointing to a geopolitical motivation of aid and those pointing to an economic motivation.

Many of these scholars look at the allocation of aid by donors to find a certain pattern that supports their view. Those that look for political patterns seem to be in the majority, and it also seems that official documents, if they offer a glimpse behind the curtain, are much more ready to admit that aid serves political purposes than economic ones. Those authors that do focus on economic motivations, however, often only look at tied aid and miss other important pathways through which aid can serve economic motives, which will be investigated in this paper.

Historic writings were often much more open about the actual purpose of aid than today's governments are. For example, Morgenthau (1962:301) identified six types of aid: "humanitarian foreign aid, subsistence foreign aid, military foreign aid, bribery, prestige foreign aid, and foreign aid for economic development", all of which, except for humanitarian aid, should in his view be used as part of a country's foreign policy in order to advance the country's own interests. His paper argues in favour of using foreign aid as a strategy to serve the US interests abroad. He says that the

United States has interests abroad which cannot be secured by military means and for the support of which the traditional methods of diplomacy are only in part appropriate. If foreign aid is not available they will not be supported at all

The typical approach of those authors interested in political aid motivation is to look at the pattern of aid of a certain donor (i.e., which countries do they provide aid to?) and guess at the political motivation behind it. For example, Hirvonen (2005) criticizes that "[i]nstead of allocating their aid based on where it is most needed, rich countries often favour recipients that are of direct political or economic interest to them." To justify this statement, he points to the fact that most aid goes to middle-income countries and not necessarily to the poorest countries. Others (e.g. Pedrosa-Garcia 2017), however, see this as a sign for more consciousness among donors about giving aid to politically responsible countries and decreasing corruption. Similarly, Radelet (2006) uses the

selection of recipients to support his argument that foreign policy and political relationships are the most important determinants of aid flows. He points out that the two largest recipients of U.S. foreign aid from 1980 until the beginning of the 2000s were Israel and Egypt, and recently Iraq has joined them. Looking at the fact that proportionally to their size, more aid goes to small countries, he points out that “For political reasons, donors generally want to influence as many countries as possible, which tends to lead to a disproportionate amount of aid going to small countries.”

Veltmaier and Petra (2005:130), while recounting the history of foreign aid and its connection to neoliberalism, claim that it is possible to consider foreign aid “as a means of advancing the geopolitical and strategic interests of the governments and organisations that provide this aid, designed to benefit not the recipient but rather the donor.” They describe ODA as originally being a policy for meeting strategic foreign policy requirements of the US state and saying that in retrospect it can be described as an “imperial policy – in the service of the US state”. Kuziemko and Werker (2006) found that US development aid to those countries surges when countries get to hold the rotating seats in the UN security council, thus adding to the evidence that speaks for geopolitical interests behind aid. Looking at recent developments in the Western world, Nuscheler (2006) states that one reason for development policy is and should be mild vested interests in security policy – for European and global security. In his eyes, this explains why aid is becoming more and more prominent again in the context of the war on terror.

Other authors that argue for a political motivation as the main driver go further and look at not only what determines development aid, but also at what determines the amount of development aid and sometimes also the changes over time. Imbeau (1988) was one of the first scholars to seriously try to find determinants of ODA. He stated four possible hypotheses that might explain the variation of development aid expenditures as a percentage of GNP, and, after testing these with the help of a regression model, found that an instrumental hypothesis - the idea that aid is a means to political goals - has the highest explanation potential. The variables he uses for that are the number of embassies in the country as well as the importance of imports and exports, signifying political importance to the donor.

Alesina and Dollar (2000:33) argue that the “pattern of aid is dictated by political and economic strategies”. Using the OECD data on bilateral aid flows, they assemble a number of variables that could all influence the allocation of aid and then run a regression analysis, finding that the most significant reasons for allocating aid to certain countries are past colonial experiences and political alliances (as marked by the proxy of UN voting patterns). Stone (2010) argues that aid is influenced by the geopolitical interests and foreign policy preferences of the donors. He is one of the rare scholars to look at both motivation and effect of aid. Using Heckman models, he shows that aid effectiveness (which he sees as economic growth) is correlated with donor motivations, and “aid sometimes promotes and sometimes retards growth”. He finds the strongest growth effects when “aid is motivated by security externalities and recipients have high institutional capacity”. Vice versa, donors with commercial and financial motivations are rarely effective at promoting growth. Stone concludes with saying “When aid distribution follows objectives other than development, those other objectives will be accomplished instead.”

Nuscheler (2004 in Ziai 2007:104), one of the most prominent aid academics in Germany, goes along with the definition of aid as a tool of foreign policy. He describes development policy as interest-based policy that is necessarily connected to and part of foreign policy and security policy, and to economic interests. He names it a “multitool”. Vreeland (2011) says that wealthy governments provide more foreign aid to poor governments that offer them political support in order to get elected into financial institutions. In his regression analysis, he finds that Swiss ODA is given in exchange for support with decisions of the IMF, where Switzerland is interested in retaining a strong influence. Looking at different determinants for the total amount of ODA a country gives, Mezger (2007) finds a connection between the status of domestic welfare and ODA, and furthermore shows that the amount of ODA rises with the influence of leftist parties on a particular government. He uses unemployment benefits as a proxy for welfare and finds a correlation between the amount of ODA and welfare services.

There are also a few authors that emphasise economic motivations of aid-giving. However, many of them only focus on tied aid, the most obvious and direct way in which ODA may serve the donor’s economic interest. Hirvonen (2005) argues that during the Cold War, aid had the major function of forging political alliances and preventing countries from changing sides, but even

then, aid also served economic functions. “Many rich nations tie their development assistance to purchases of goods and services from the donor country.” (Hirvonen 2005). Shah (2014) observes that aid is often wasted on conditions that the recipient must use overpriced goods and services from donor countries, namely ‘tied aid’. He furthermore criticizes that most aid does not actually go to the poorest who would need it the most.

Aid amounts are dwarfed by rich country protectionism that denies market access for poor country products, while rich nations use aid as a lever to open poor country markets to their products. [...] Large projects or massive grand strategies often fail to help the vulnerable as money can often be embezzled away.

Tied aid has been massively criticized in the past and is now less and less common. Nath and Sobhee (2007) find that “Between trade interest and international income distribution, the former is found to be a more common consideration in aid allocation”. Radelet (2006) says that “Bilateral aid is often designed at least partially to help support the economic interests of certain firms or sectors in the donor country”, supporting his argument by showing that US aid is often tied to purchases by US companies. Finally, it is important to keep in mind that creating aid dependence has always been an important motive for donors. Seeing that Germany gives most of its ODA to India in the form of loans (ref), this is a point that should not be forgotten.

To sum up, there is a group of authors that, in various contexts and with various empirical tools, have come to the conclusion that the motivations for giving aid are much more complex and also more self-interested than most of the literature that focuses on effectiveness presupposes. The majority of these authors focuses on the various political reasons that might incline countries to provide ODA to other countries, likely due to the fact that ODA originated from political considerations in the Cold War. This almost normalises the practice of providing ODA for political reasons – indeed, sometimes it is even asked why a country gives aid to certain countries that do not share its political agenda. Consequently, economic motivations do not receive that much of attention in the literature, although they definitely do exist, and seem to be less commonly accepted as a motive. If authors investigate economic motivations behind aid, they often only look at tied aid, which visibly and directly benefits the donor country’s economy. More covert tactics are less commonly researched. My research thus aims at closing this gap for the example of Germany and India.

The framework I am going to use was adapted from Schröder et al. (1998) who observed that when looking at the Cold War era aid, those scholars concerned with motivation usually adhered to one of three paradigms: The realist paradigm, that saw ideological reasons and self-preservation as the main factor driving aid; the idealist paradigm that states that aid is given with altruistic motivations; and the neo-Marxist paradigm that is more concerned with the economic realities of aid-giving and receiving. The literature review has shown that most authors can be categorised into one of these three categories.

This categorization in general is useful when looking at aid beyond the end of the Cold War. Whereas the literature on aid effectiveness mostly fits into the idealist paradigm, the literature on aid motivation can be roughly divided between those more concerned with political motives (realist paradigm) and those more concerned with economic motivation (neo-Marxist paradigm), although many studies consider both. Using this framework, I can allocate my study in the context of economic motivation. However, it is important to realise that aid can also serve more than just one purpose. India is an important political power in South-Eastern Asia and thus it is important to Germany to have stable diplomatic ties with it - political motivations should not be excluded from consideration. And although the overriding strategy does not seem to be driven by altruistic motivations, there are various actors in the German development sector, some of which might well be driven by more well-meaning motives. Thus, rather than using Schröder’s framework as an either-or categorisation, we should always assume a mixture of motives. But, as the following argumentation will show, I do believe that in the case of Germany and India, economic motivation (as emphasised by the neo-Marxist paradigm) is the driving factor behind ODA to India.

2.3 Zooming In: Literature on German aid motivation

Just as the main development literature, the literature on German aid can be classified into three groups, corresponding to the categories discussed in the previous section: ”genuine developmental

interests” like reducing poverty; geopolitical interests; and foreign economic interests (Brämer and Ziai 2016:401). This furthermore matches with the framework given by Schröder et al. (1998) described in the previous section.

Firstly, I will consider political motivations. The previous literature review showed that a main motive for ODA given by France and the UK is to remain influential in their former colonies. Germany did not have many colonies, which is why this cannot be a motive for most of its aid recipients. However, it can still be seen from Germany’s aid pattern that the effects of colonialism do play a bit of a role, since Namibia, the successor of Germany’s former colony “Deutsch-Südwest-afrika” is the country that is receiving the highest amount of per-capita ODA from Germany (DNEG 2019). However, since the phenomenon that is to be explained here is India, which was not a German colony, this explanation can be neglected for our cause. Klingebiel (2013) confirms that the Cold War was a decisive factor in the allocation of development aid until the fall of the Berlin wall: “Countries were sanctioned for siding with the Eastern or Western block and they were offered rewards for doing so”. Unger (2012:75) quotes a 1963 memo from the German Foreign Office saying that the work with developing countries had as its goal the “realisation of a number of foreign policy goals of the federal republic, such as reunification, disavowal of the soviet zone and not pulling the developing countries under the influence sphere of the East.”

But not all authors agree to this. Just as in the general literature, literature on German aid is also divided between those emphasising a political motivation and those focusing more on economic motives. McKinlay (1978) tries to identify the motivation of German aid through an analysis of the distribution of West German aid for each of the years 1961-70. He concludes that power-political considerations as well as military influence are *not* decisive for German aid. Humanitarian needs of the recipient also play only a background role. Instead, he argues that trade interests override any others.

Unger (2012:1) reports the same, showing that many West German companies profited from the demand of the recently independent colonies for industrial and consumption goods. She looks at various German actors that influence decisions about aid. About economic actors, she writes: “German firms wanting to expand their exports looked to foreign aid as a vehicle for accelerating their entry into foreign markets in the early years of the aid program, especially when the Ministry of Economy had responsibility for a part of the aid budget.” (2012:187). One example she refers to is the Shanghai subway system as well as the lobbying by major German companies against a proposed reduction of the aid budget in the 1990s because they benefited from the aid. That was in a period when almost 40 percent of the German aid was still officially tied, meaning that it was conditional on being spent on German goods and services. The German financial aid has officially been untied since 2001, unlike technical aid (187).

Brand researches how German development politics is slowly becoming more and more “securitized” and benefits among others arms companies. In an interview, he says that German development politics „pretends to be interested in poor people but actually only does disguised economic promotion in threshold countries.” He explains that the German development politics have always been aimed at business support, but recently the sectors that profit most have changed - leading to recent profits for arms companies (Bartlau 2018).

Lancaster (2007) profiles German aid in a comparative study. According to her, the “profile of German aid over the second half of the twentieth century reflects its three main purposes: development, diplomacy, and commerce.” She notes that the type of aid that German firms were most interested in is that involving engineering and construction projects, the export of heavy equipment, telecommunications, transportation and others that fall under the DAC category of economic infrastructure. Looking at the allocation of aid, she shows that the German Foreign Office has an “informal role in aid decisions, for example, on the broad framework guiding German aid, on activities in sectors of particular diplomatic importance and sensitivity” (185). She points out that Germany gave aid to Israel as compensation for the Holocaust and Turkey because of its strategic position in the middle East and the large number of Turkish “guest workers” in post-war Germany.

Schrade (1997) tests the three most important state models for development policy in international relations for the German behaviour in the 1990s. According to her, West Germany can be conceptualised as a “trade state” rather than a “civil state” or a “power state”, i.e. Germany’s development cooperation is conditioned on the economic importance of the trading partner rather

than their political importance or actual needs. Schrade tests her hypothesis by looking at the choice set of countries that Germany provides development aid to and argues that this choice is motivated by economic aspirations more than power seeking or altruism. Furthermore, she finds that Germany uses much more bilateral than multilateral channels to distribute its aid, which also speaks in favour of trade orientation. Finally, Stone (2010) calls Germany one of the countries whose aid was “most single-mindedly [focused] on promoting domestic economic interests.”

A review of the literature that deals with Germany’s motivation behind giving aid points to the fact that the Cold War played a major role in the allocation of Germany’s ODA in the past, together with economic considerations. Business interests seem to weigh most heavy in recent years. Furthermore, driven by the US, the role of security concerns has increased. It is also clear that compared to other countries that are keener on the political ideology (USA) or retaining influence in their former colonies (Britain and France), Germany’s motivation has from the beginning been more oriented towards its own economy (Barbière et al. 2015).

2.4 Sparse: Literature on Germany and India

There is only sparse literature that specifically looks at the relationship between Germany and India, and almost none for the time after the Cold War. Looking once more at political motivations first, evidence for a political function of ODA to India can be found in official documents: “If India fell prey to communism”, so the Foreign Office in 1963, “the whole situation in Asia would be crucially influenced and the political power relations in the world would be shifted to the West’s disadvantage” (quoted in Unger 2012: 75). Consequently, one of the most important reasons for Germany to start giving aid to India seems to have been the aspiration of keeping the largest officially neutral country from defecting to communism.

Unger (2012) has written extensively about Germany’s past aid history with India. Supporting her arguments through the analysis of government documents from the ministry of economy, the Foreign Office and memos between companies and politicians, she points out that many technical aid projects were ultimately meant for helping Germany’s own economy. She recounts how Germany played with the thought of getting the DIN norm introduced in India in order to boost German exports. Furthermore, she mentions that internships as well as study programs for Indians in Germany were designed in order to combat the lack of highly skilled workers in Germany (Unger 2012:75). She also shows that German observers had “identified India as a promising product market in the 1950s” and were arguing in favour of getting involved in the Indian economy (2012:73). She recounts that the powerplant Rourkela was heavily financed by German aid and built by many German companies.

Lancaster (2007) observes that other recipients of German aid were often large developing countries, for example India, that, in her view, was interesting to Germany because of its “potentially attractive market [...] for German goods and services” and its regional and global influence that made it an interesting diplomatic partner. Hunger (2005) follows the trail of German technical development aid contributed to building up India’s high-quality and world-renowned IITs (Indian Institutes for Technology) for graduate education and research. He observed, however, that most of the IIT graduates chose to move to the USA when they had the computer boom. Thus, Germany’s development aid indirectly benefited the US economy. Terre des hommes et al. (2018:20) do a thorough analysis of German aid and mention that “India, just like China, does not receive ODA because of the amount of poor population, but because of the possibility to mobilise market resources.” Market resources (‘Marktmittel’) is money that the German development bank gets from the capital markets and ‘mixes’ into the development finance together with public resources (BMZ 2019d).

There are only a handful of researchers that have written on India’s and Germany’s aid relationship. They mostly conclude that whereas political motivations played a large role during the cold war, economic motives have always been present and gotten stronger after the end of the war. Using this as a premise for my research and moving within the framework explained earlier, I will in the next section analyse the structure of German ODA and its economy to find indicators as to what ODA to India is supposed to achieve.

3 Tracing the German economic and aid structure

3.1 Born in the Cold War: Background on Aid

The definition of ODA as used by the OECD Development Assistance Committee runs as follows:

Flows of official financing administered with the promotion of the economic development and welfare of developing countries as the main objective, and which are concessional in character with a grant element of at least 25 percent (using a fixed 10 percent rate of discount). By convention, ODA flows comprise contributions of donor government agencies, at all levels, to developing countries (“bilateral ODA”) and to multilateral institutions. ODA receipts comprise disbursements by bilateral donors and multilateral institutions (IMF 2003).

The definition of ODA by the DAC has slightly shifted over time. For example, in 1979 it was decided to include the costs of ‘aid propaganda’ into ODA. Since 1988, student costs, including imputed costs, for students from developing countries studying in DAC donor countries can be counted as ODA – as we will see, this is a large share of the German ODA ‘given’ to India. Since 1988, refugee costs for the first year of a refugee’s stay in the DAC country are also chargeable (OECD 2019a).

Military costs are generally not part of ODA, but there are notable exceptions. For example, ‘technical co-operation and civilian support to security system reform’ can be counted since shortly after 9/11 (Anders 2016). This is, however, not important for the case at hand. For aid flows after (and excluding) 2017, the reporting method has changed so that the different relative weight grants have (as opposed to loans) is better accounted for. Until now, grants and loans were valued in the same way, although grants are usually better for the recipients. The method used for the data in this thesis is, however, still the old one.

Development assistance can be divided in different categories. Firstly, a distinction must be made between private aid, which comprises all donations by individuals, companies, or organisations such as churches and private NGOs to other countries; and official aid. Official aid comprises bilateral and multilateral aid. Bilateral aid is aid given from one country to another, whereas multilateral aid is channelled through international organisations such as the UN, the World Bank or the OECD. The OECD coordinates their aid through the DAC, the Development Assistance Committee, which also registers all the data of official development aid.

History of aid

In the following, I will provide a brief overview over the focus areas of different decades of development aid. The first “official” development aid programme is usually said to have started in 1949 with Truman’s Four-Point Program to rebuild the war-damaged Europe (Easterly 2006:21) and later the Marshall plan. From the 1950s onward, many European countries joined the aid regime, using the same strategies that were used on them. The way aid was perceived at that time was heavily influenced by the Solow model (Solow 1956, Swan 1956) and its idea that capital accumulation would help countries to escape the “poverty trap” and “take off” to become wealthy (Böschel 2010, Pedrosa-Garcia 2017). Behind the official façade, however, development aid from Western countries was mostly used to stave off communism.

At the same time, critical voices of representatives of the ‘dependency theory’ became louder. They were convinced that there is no win-win situation in which development aid can lead to a bigger ‘cake’ for all countries and more wealth for all. Instead, they claimed that the size of the cake was fixed from the offset, and if one side of the world took more than their fair share as was the case with the Global North - that happened at a cost for the other side of the world. The dependency theorists emphasized self-containment and import substitution as strategies for poor regions (or the ‘periphery’) to escape poverty.

The 1970s then saw a number of economic crises due to which lending to developing countries surged (Moyo 2010). The dominant ideology was slowly shifting towards market-friendly neoliberalism, preparing the ground for the 1980s. It was common to “tie” aid, i.e. only allow procurement of products with aid money from the donor country. The 1980s are often called the “lost decade” for development. In the wake of several financial crises, many poor countries saw themselves unable to pay back the loans to the World Bank and the IMF. The countries were often “supported” with

new loans that were conditioned on doctrines of the free market and a disabling of their social security systems, which led to an even larger burden of debt. In total, countries in the Global South had larger capital outflows than inflows for decades after that (Böschel 2010) and many went de facto bankrupt. In the 1990s the focus of development aid shifted to environmental sustainability, as well as democracy and governance. It was also the decade of what Mojo calls "donor fatigue" in which many academics declared a soon-to-be end of development aid.

In 2000 the millennium goals were declared by the UN and the world saw a revival of development business with a focus on poverty alleviation. More emphasis was put on good governance (Harford, Klein Tilma 2004). Apart from that, 9/11 led to a greater emphasis on "security" as both justification and aim of development assistance (Radelet 2006). There is an increasing focus on climate change as well as on the connection between environmental and social issues.

With more and more people questioning whether aid is effective at all (Easterly 2006), a lot of emphasis is now put on guaranteeing aid effectiveness and measuring results. Also, it is often asked that donors coordinate better. In an attempt to achieve this, the OECD made a Declaration on Aid Effectiveness in 2005, basing its efforts on the five principles of Ownership, Alignment, Harmonisation, Results, and Mutual Accountability (Pedrosa-Garcia 2017). Clay et al. point out that tied aid has since then reduced significantly.

Table 3.1: Total bilateral ODA by all DAC countries by major sectors, period averages

Period	Social Infrastructure & Services	Economic Infrastructure & Services	Production Sectors	Multi-Sector/ Cross-Cutting	Action Relating to Debt	Humanitarian Aid	Unallocated/ Unspecified
1968-1979	24.62	16.78	25.01	2.22	4.98	1.11	25.27
1980-1989	30.16	23.30	24.38	3.48	3.10	2.08	13.51
1990-1999	29.78	22.05	12.57	5.44	11.76	5.17	13.22
2000-2009	37.78	14.25	6.40	7.29	14.43	7.48	12.37
2010-2017	37.93	18.09	6.87	10.12	2.11	10.92	13.95

Source: OECD 2019

Table 3.1 depicts the ODA given by all DAC countries on a disaggregated level. Aid supplied for social infrastructure and services makes up the largest share in total aid since the 1990s and has risen steeply after 2001, as has humanitarian aid. On the other hand, ODA given to the production sector has fallen from making up one quarter of all aid in the 1960s to being almost negligible in the 2010s, reflecting a shift away from the modernisation theory and the effort of industrialising developing countries. ODA for economic infrastructure is notably lower than for social infrastructure, which, as we will see later, is different in the case of German ODA to India.

3.2 Export-oriented manufacturing: Background on the German Economy

The German economy has undergone major structural changes in the past centuries. From a mainly agrarian economy in around 1850, Germany rapidly industrialised for a hundred years. In the 1960s, the production sector accounted for more than 60% of Germany's net value added. However, in the following decades that the service sector started to become rapidly more important. Figure 3.1 illustrate the declining share of industry and manufacturing in the last few decades:

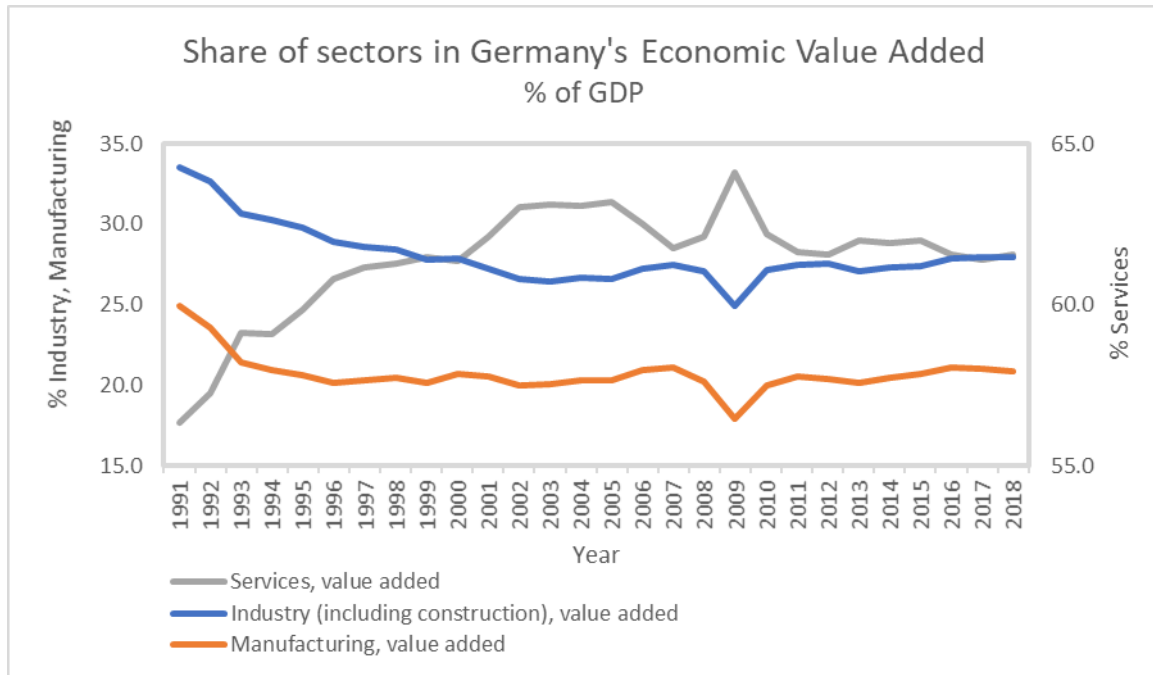


Figure 3.1: Share of sectors in Germany's GDP.
Source: World Bank 2019.

Figure 3.2 shows the occupation of Germany's workforce by sector:

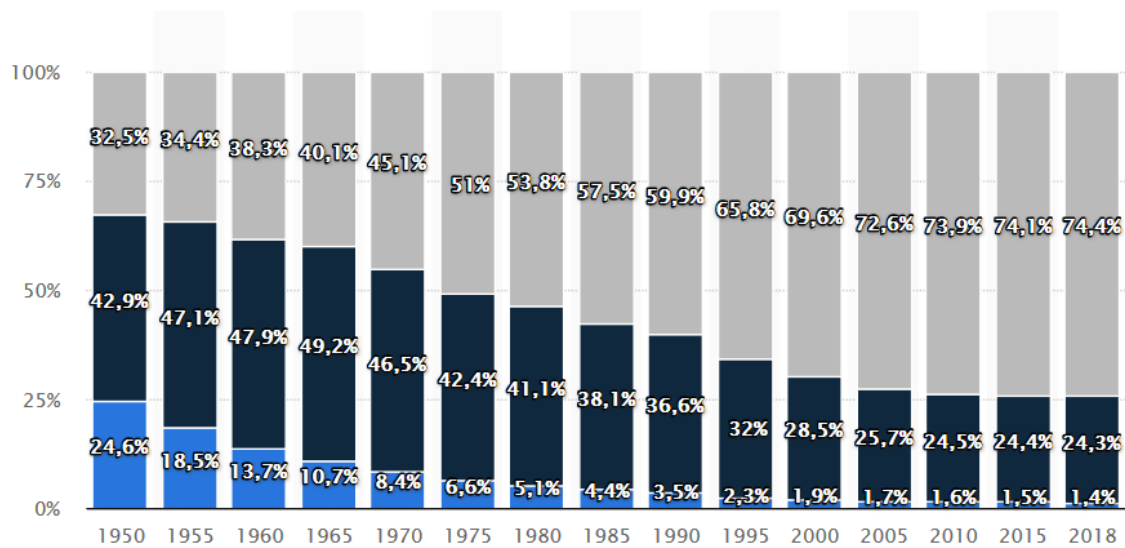


Figure 3.2: Occupation of Germany's workforce by sectors
Blue: Agriculture; Black: Production; Grey: Services. Source: Statista 2019

Three quarters of the German workforce are now employed in services and almost all the rest in industry, compared to a ratio of about 50:50 in the 1960s and 70s.

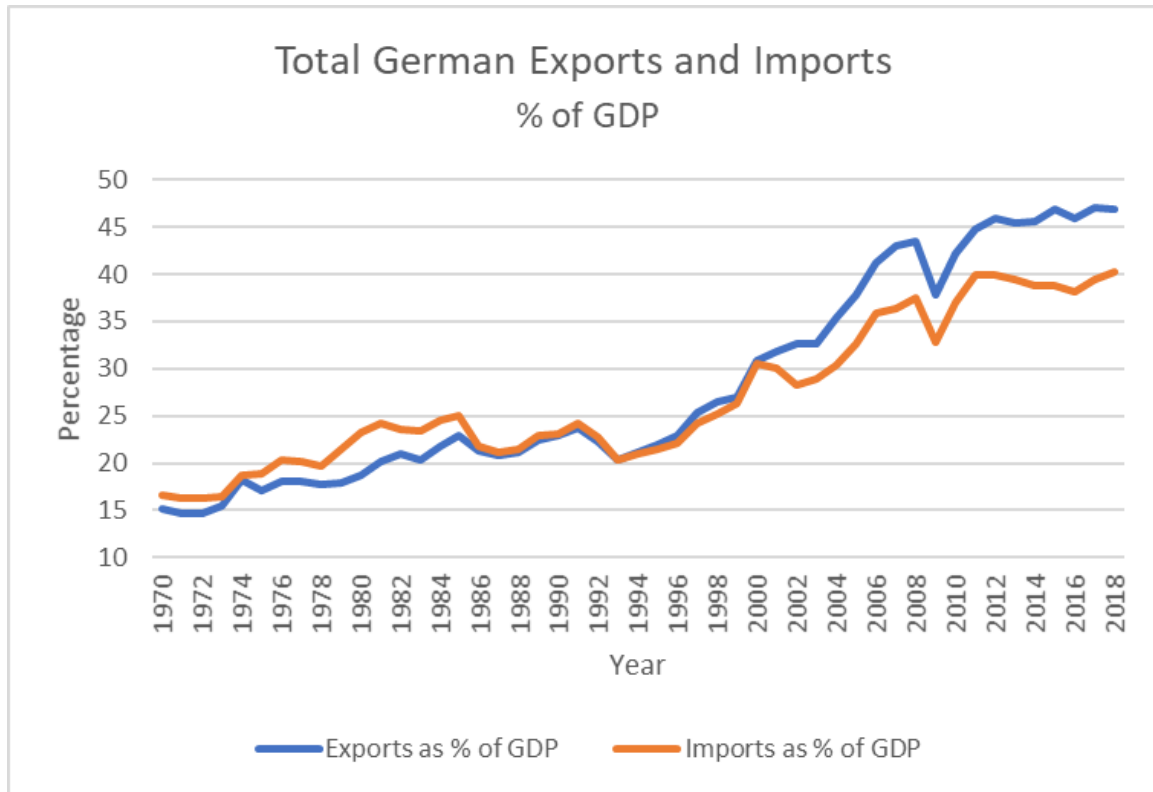


Figure 3.3: Total German exports and imports as percentage of GDP
Source: World Bank 2019

However, as seen in figure 3.3, Germany is also a majorly export-oriented country. The share of exports in the GDP has grown from 15 in 1970 to more than 45 in 2015 – it has more than tripled. Especially after 2000, exports have risen steeply. At the same time, the share of imports only more than doubled.

Table 3.2: Total German exports and imports as percentage of GDP, period averages

Period	Exports (% of GDP)	Imports (% of GDP)
1970-1979	16.7	18.5
1980-1989	21.1	23.1
1990-1999	23.4	23.1
2000-2009	32.3	32.3
2010-2018	45.7	39.1

Source: World Bank 2019

Table 3.2 confirms this development. Germany has been among the three top nations with the largest absolute value of exports for decades, and has had the highest export surplus for the past three consecutive years. This makes Germany majorly dependent on the world economy. Despite the large amount of people that are employed in services, the real driving force behind Germany's economy is the export of manufactured products. It is thus clear that Germany must have shifted the actual production of its products and especially the processing of low-value added inputs into other countries.

Table 3.3: German exports to the world by sectors as percentage of total exports, period averages

Period	Food and live animals chiefly for food	Beverages and tobacco	Crude materials, inedible, except fuels	Mineral fuels, lubricants and related materials	Animal and vegetable oils, fats and waxes	Chemicals and related products	Manufactured goods classified chiefly by materials	Machinery and transport equipment	Miscellaneous manufactured articles	Others
1980-1989	4.3	0.6	1.9	2.7	0.4	12.9	18.7	46.5	10.0	2.1
1990-1999	4.1	0.7	1.7	1.2	0.3	12.7	16.2	48.5	10.6	4.1
2000-2009	3.7	0.7	1.6	2.0	0.2	13.3	13.9	49.2	10.0	5.5
2010-2017	4.5	0.8	1.7	2.2	0.2	14.5	12.5	47.6	10.8	4.8

Source: UN Comtrade 2019

Table 3.3 shows the composition of Germany's exports over the decades. While total exports increased significantly, their composition has remained roughly the same across the different categories. This means that Germany is still exporting mostly machinery and transport equipment (which constitutes almost half of all exports), as well as other manufactured goods and chemicals to the world. However, these are not produced by the German workforce anymore, since - as we have seen above - this workforce has moved to the service sector. Thus, it follows that German companies are increasingly outsourcing the production of semi-manufactured inputs into their products to countries with lower wage levels. Whereas China was once a major destination for outsourcing, Germany companies have in the last decade been pulling out of it due to rising labour costs (Der Spiegel 2008). They are going to the far east – or to India. According to development minister Müller, more than 1,600 German companies were active in India in 2018, many of them in the production sector (BMZ 2017). India has consequently be on top of the annually published world outsourcing index by AT Kearney for the past few years, even before China (Sethi et al. 2019).

Being aware of this structure is very important for the following analysis, as it gives insights into Germany's motives when dealing with developing countries. As a country that is driven by exports, Germany is highly dependent on other countries. In order to keep the German economy successful, Germany needs markets to export to – which makes growing countries like India with a large domestic demand very appealing. Furthermore, Germany needs places to which it can outsource the production of its own manufactured goods, since the German workforce is getting too expensive for doing that. This is a second reason why India is interesting to Germany – it has a workforce that is skilled in technology, but a very low wage level. It makes sense to assume that German companies are increasingly looking at India to set up production units. Lastly, looking at Germany's demography and its ageing population, Germany needs skilled immigrants to join into its own labour market. These are three important reasons for Germany to channel ODA into India. If one looks at aid through this lens, it becomes much clearer why India might be a target of German attention and ODA.

3.3 Economically motivated: Background on German Aid

History of German Aid

After having looked at Germany's economic structure, we will now investigate how aid fits into the picture. There is a debate among researchers about why Germany started to enter the field of development aid as a donor in the first place. Some scholars think that it was forced to do so by the USA (Ziai 2007). Officials say that it was Germany's own desire to help other countries after it benefitted from the Marshall plan. And Dumke (1997), one of the politicians involved in the set-up of the German aid system, claims that it was a “proactive reaction to the Eastern economic offensive”.

Unger (2015) also points out that prestige might have been one of the reasons why Germany started to give development aid: “Excelling economically helped West Germany to reinvent itself as a peaceful, productive nation, regain international respect and freedom of action and enhance its visibility on a global scale.” (Unger 2015) This is reaffirmed by McKinlay (1978: 239). In the 1950s when Germany started to give aid, no institution was yet specifically designated for devising programmes. Instead, aid was mostly given under the foreign policy umbrella and thus by officials from the Foreign Office. The first decade of development aid is described as majorly oriented towards export support. Officially, in the 1950s and throughout the 1960s, the measures were concentrated on increasing economic growth in developing countries through heavy machinery, in line with the modernisation theory (Lüdecke 2017).

In 1961, the BMZ was founded. Ziai (2007) sums that period up under the terms of "anti-communism and market exploration". With it came a policy shift from export-facilitating assistance to more politically motivated aid. The reason for this is described by Unger (2012) as pressure from the US and from rival East Germany that was using aid for political aims. The political orientation of aid also expressed itself through the so-called Hallstein doctrine, which stated that no country that officially recognises the GDR would receive development aid from West Germany. This doctrine was valid until 1973.

Ziai (2007) explains that in the 1980s, Germany gave a lot of economic aid through mixed financing, or so-called 'development partnerships' between the public and the private sector, which helped big companies to attain projects and supported neoliberal IMF policies. Furthermore, in total there have been more than a thousand PPPs (public-private partnership) projects in the development sector in more than 70 countries (Ziai 2007) only in the few years between 1999 and 2002. He quotes Hoering criticising that the money goes exclusively to European and not to local companies and often does not benefit in any way from a development perspective:

All in all, this "development partnership" is a very one-sided idea. The development cooperation is only oriented in the interests and needs of the companies, the risks and the benefits are unequally distributed [...]" (Hoering in Ziai 2007).

Brämer and Ziai (2016) find that most of these PPP projects did not have any developmental effect, just like the Hermes export insurance that was supposed to aid in development. Lancaster (2007) describes the phase after 1990 in the following way:

It was marked by three major changes: the addition of new purposes, such as addressing global problems, much like other aid donors; an initial sharp rise in total aid, above all, aid for countries in transition; and then a dramatic decline in overall aid levels together with a decision to reduce the number of aid recipients.

After unification, Germany quickly became a large donor to the Eastern European states that had turned from a socialist form of government to a more Western style. After 9/11, just like many other Western countries, a lot of German aid went to middle Eastern countries. Recently, ODA has often been justified with the argument of preventing migration. Dirk Niebel from the liberal party FDP, who headed the BMZ from 2009 to 2013, called development policy "explicitly oriented on [German] interests" and said that "It is in our own interest to make sure that in our own front yard, Africa, the people to not get any more reason to flee." (Niebel 2009 in Brämer and Ziai 2016).

It becomes clear that until the fall of the Berlin wall, aid had two clear functions for Germany: Pulling countries onto the side of the Western Block in the Cold War and supporting Germany's economy. In the opinion of most authors, the economic motives seem to weigh heavier than political considerations, although this varied over time. The important take-away for this research is that Germany has a long tradition of supporting its business interests with ODA, although it has become more covert over time. Thus, it makes sense to look at this motive in the Indian context as well.

General features of German aid

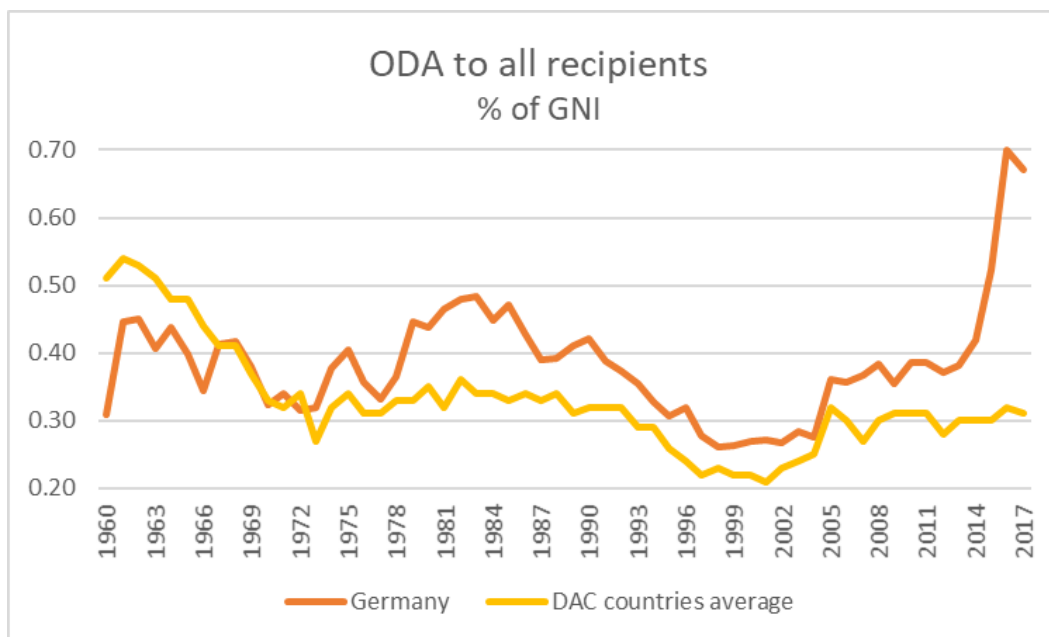


Figure 3.4: German ODA to all recipients in comparison with the DAC average
Source: OECD 2019/Compare your country

Figure 3.4 shows German ODA as a percentage of GNI in comparison with the DAC average. One can see that Germany has been a bit above-average since around 1970, but still far below the 0.7% goal set by the UN. It is also the second largest DAC donor in absolute aid disbursements after the USA. There was a large spike in ODA in 2015, which can be explained by the mostly Syrian refugees that Germany accepted in that year, since the first-year cost of refugee accommodation can be counted as ODA under DAC rules (see the figure below).

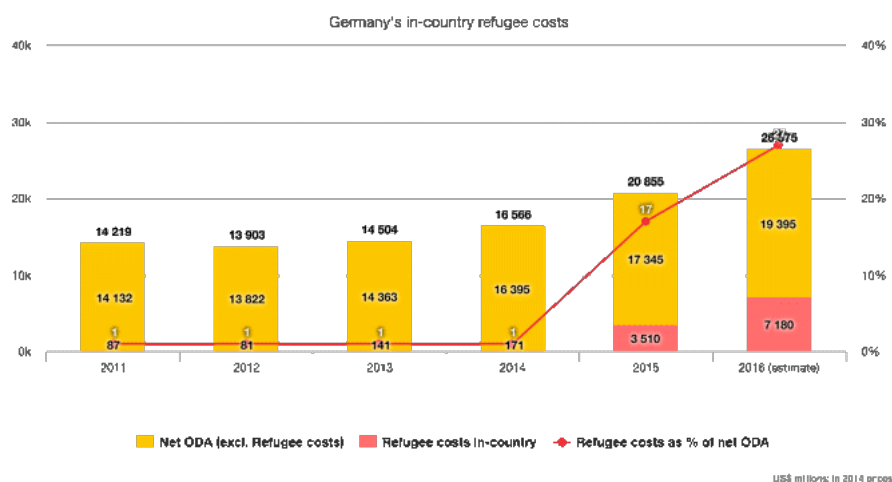


Figure 3.5: Germany's in-country refugee costs
Source: Donortracker 2019

Table 3.4: German ODA, different measurements, period averages

Period	German aid in mio USD (Geobook Data)	German ODA as % of GNI (World Bank Data)	German ODA commitments in % of DAC ODA commitments (Geobook Data)
1966-1969	473.79	0.39	10.78
1970-1979	1,659.28	0.36	13.16
1980-1989	3,537.28	0.44	12.77
1990-1999	5,924.89	0.33	11.82
2000-2009	7,323.80	0.32	8.87
2010-2017	17,050.43	0.45	14.62

Source: OECD/Geobook 2019 and World Bank 2019

Table 3.4 gives an overview over ODA measured by different indicators. Whereas absolute aid has grown a lot, ODA as a percentage of GNI did not increase that much. Because of its large economic power, German aid comprises between around 9 and 15 per cent of the total aid given by the DAC at different times. Germany's self-declared three ODA priorities are migration, climate change and food security. Recently, in the wake of the so-called refugee crisis, Germany has framed its development policy under the title of "fighting the root causes of displacement", with a focus on the Middle East and North Africa (Donortracker 2019).

Germany ranks ninth in a ranking by Easterly and Williamson (2011) in terms of donor quality. It is also important to point out that NGOs and especially the churches have been important for German non-official aid from the beginning, having a say in what aid should be spent on.

Table 3.5: German ODA to all recipients by sectors as percentage share of total, 10-year averages

Period	Social Infrastructure & Services	Economic infrastructure and services	Production sectors	Multisector/ Cross-Cutting	Commodity Aid / General Programme Assistance	Action Relating to Debt	Humanitarian Aid	Unallocated/ Unspecified
1968-1979	19.9	24.0	28.6	1.1	4.8	8.2	0.8	12.7
1980-1989	29.1	29.6	19.0	3.0	4.3	6.3	0.7	7.9
1990-1999	31.9	21.1	10.5	5.6	5.0	9.8	5.0	11.2
2000-2009	37.4	15.7	4.6	10.6	1.1	20.6	3.5	6.4
2010-2017	35.2	26.3	5.3	11.8	1.4	1.5	5.6	13.1

Source: OECD 2019

Table 3.5 shows the composition of Germany's ODA. One can see clearly that social infrastructure and services is the most important subsector. Recalling the composition of the total DAC aid, this is similar to the average of DAC donors. The share of debt relief of total ODA was about 4 to 5 percent from 1995 to 2001. Between 2001 and 2009, it rose quickly due to debt reliefs for HIPC as well as Iraq and Nigeria. Since 2009 it has been falling again. The unallocated as well as humanitarian aid that rose steeply in the last two years is mostly due to the accomodation of refugees.

The majority of BMZ funding goes to two different organisations. The GIZ (Gesellschaft für Internationale Zusammenarbeit) focuses on so-called 'technical cooperation', typically projects with a certain time frame that involve sending German personnel to developing countries, and the KfW (Kreditanstalt für Wiederaufbau), Germany's development bank, which focuses on financing development projects. Germany is also known for engaging with the private sector in many development cooperation projects, as figure 3.6 shows.

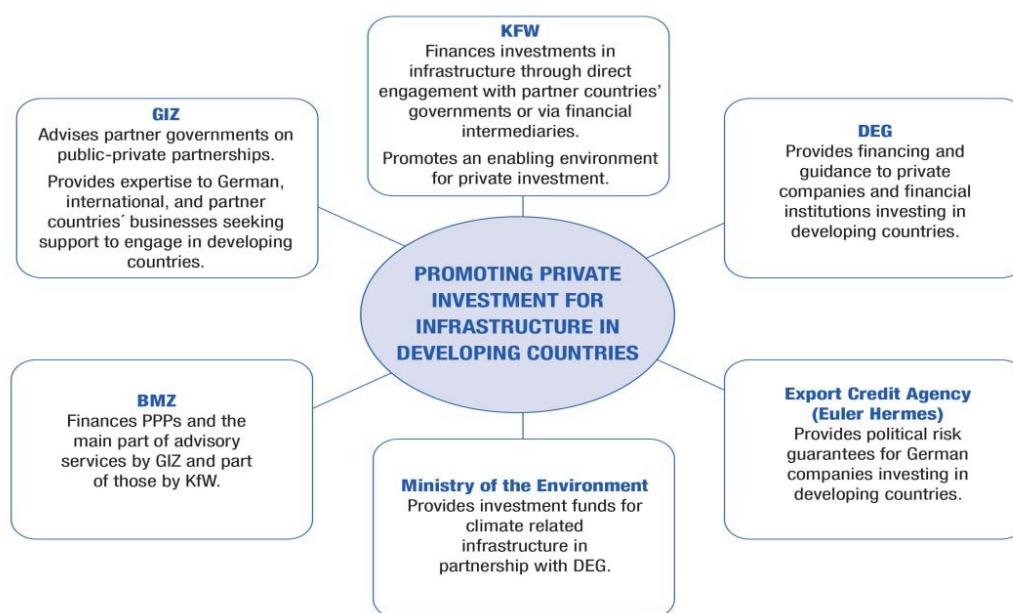


Figure 3.6: German development institutions: engaging with the private sector
Source: Miyamoto and Biousse 2014 in OECD Peer Report 2015: 41

Germany's relationship with India

German and Indian political relations have mostly been positive and comparatively tension-free. Economic and commercial relations between the two countries date back to the 16th century. In 1870, Siemens laid a telegraph line between colonially ruled Kolkata and London. The first wholly-owned subsidiary of Bayer in Asia was set up in Mumbai in 1896. During World War I, there was a group of Indian nationalists and independence fighters supported by German anti-British groups.

After India's independence, India quickly ended the state of war with Germany. It maintained diplomatic relations with both West Germany and East Germany and supported their reunification in 1990. India has been receiving German ODA since the official start of Germany's development aid programme in 1961.

All in all, aid does not play a very important role in India - it reportedly accounts for less than one percent of its GDP (Glennie 2010). After its colonial experience, India has always been ambivalent about aid, not wanting to be too dependent on Western or Eastern powers (Jaishankar and Godbole 2018). It is also a matter of prestige not to look needy. India has in the past repeatedly announced that it wants to stop receiving aid for good and even rejected certain humanitarian aid offers, such as during the Kerala floods in 2018. In the 2003-04 budget speech, India made it clear that it wants to be perceived mostly as an aid donor and not recipient from then on (Fuchs and Vadlamannati 2012).

Table 3.6: GDP growth of India and Germany, period averages

Period	GDP Growth India	GDP Growth Germany
1961-1969	3.9	-
1970-1979	2.9	3.1
1980-1989	5.7	2.0
1990-1999	5.8	2.2
2000-2009	6.1	1.5
2010-2018	7.0	2.1

Source: World Bank 2019

As can be seen from table 3.6, India's economy is rapidly growing, other than Germany's that is

slowly decelerating while still being one of the world's strongest economies.

According to its own information, India has also become a net donor of ODA, giving to countries such as the Philippines, Myanmar, and Nepal (Glennie 2010). India, together with China, is one of the main non-DAC members that give aid. Fuchs and Vadlamannati (2012) describe the country as a 'needy donor', showing that India itself gives mostly tied aid in order to get market access to its recipients and pave the way for investment abroad (which, however, is essentially the same thing Germany is doing in India). The Ministry of External Affairs (2004: 133) openly admits that "[t]he Government has been using development aid, including grants and Lines of Credit (LOCs) on concessional terms as tools for promotion of India's political, economic and commercial interests."

4 Hand in hand: Aid and trade between Germany and India

4.1 “Made for each other”: Official documents

It became clear in the previous chapters that the motivation behind aid is often more than the officially declared goals. The first step to analyse Germany’s motivation in giving aid to India is thus to go through official documents and official statements by politicians and see whether any hints can be found on what aid is actually supposed to accomplish. This is what will be done in the following part.

Official Strategy

The official German development strategy regarding India is, maybe a bit surprisingly, not focused on poverty alleviation - despite the high number of financially poor people in the country. Instead, the official focus lies more on the role India can play in alleviating climate change. The BMZ website for India (BMZ 2019b) states the following:

India has a key function in solving global challenges, for example in climate protection and for reaching global development goals of the Agenda 2030. This is why the country is one of the ‘global development partners’ of German development cooperation.” Further, it is said: “The emphases of German-Indo cooperation are on the topics of renewable energies and energy efficiency, sustainable city development and climate and resource protection. A large share of the cooperation is aimed at projects in climate protection.

It is further explained that India is characterised by a large gap between energy demand and supply, but is nevertheless already the world’s third largest CO₂ emittant (although in absolute numbers, which is not mentioned explicitly). “The Indian economic and environment politics thus have a direct influence on the development of the world’s climate.” Consequently, Germany wants to invest in climate protection and furthermore support India with “sustainable city development”, especially “climate-friendly urban mobility” (ibid).

During a state visit at the beginning of November 2019, Germany pledged to invest 1 billion USD into green urban mobility in India and 200 million into the bus sector of Tamil Nadu for electrification (The Hindu 2019). Merkel furthermore emphasised that India can play an important role in solving international conflicts and announced that she wants to restart negotiations for a Free Trade Agreement between the EU and India. It was also agreed that Germany will again provide investment guarantees for investments in India (Die Bundesregierung 2019). To sum up, the official strategy declares that Germany gives ODA to India priorily in order to mitigate climate change. If this was the only aim, one might ask why Germany would not start this endeavour within its own borders - considering that it has much higher per-capita CO₂ emissions than India and, looking at it from a Utilitarian perspective, could probably achieve much more if it was to invest the same amount of money into mitigating climate change in Europe. Thus, it seems that there is more behind ODA than just good will and concern for the environment.

Looking into the past, it quickly becomes clear that apart from the Cold War aspirations not to have India defect to the Eastern bloc, Germany has always had an economic motivation to give aid to the country because of India’s market size. Unger (2012:75) quotes Ludwig Erhard, the former German minister of economy, saying in 1958: “If we want to keep our sales markets, then we have to help the countries of Asia to industrialise, else we will lose them for sure. [...] Trade follows technical aid.” It is also clear that the German government pressured other governments, among them the Indian one, to grant aid-financed projects to German companies. For example, in 1959 this happened for an Indian fertiliser production factory (Unger 2012). When the war between China and India broke out in 1962, Germany gave India a loan of 76 million Deutsche Mark in order to buy military equipment from Germany (Unger 2012).

Unger furthermore states that foreign policy, development policy and export support were interwoven with each other in the years after World War II in Germany as well as in the US. Through decolonisation, new markets for foreign companies had opened that they were actively seeking to use, especially countries like Germany that had not been a large colonial power before. Unger speaks of an “intense interdependence” between foreign policy, development aid and export support. It seems that this motivation behind ODA has persisted until today. In a press address

(BMZ 2017), the German development minister Gerd Müller announced that "Germany and India are taking new paths" in climate protection. He called the cooperation in this field a "win-win situation", since German companies have the knowledge needed for investing into renewable energies, which would benefit poor people as well as create jobs for the Indian population. He further emphasised that India and Germany are connected by more than 60 years of development cooperation and through trade, since Germany is India's largest trade partner in Europe. "More than 1600 German companies are active in India - in one of the world's largest growth markets."

Here it becomes obvious that the actual reason behind ODA is more market- than environmentally oriented. Müller also calls for more private investments into India, especially from German SMCs. "We support private engagement for development through risk coverage, guarantee instruments and feasibility analyses. We want to provide targeted incentives to companies." Another German government declaration states the following:

Germany and India agreed that strategies like "Make in India" will offer German companies possibilities to invest into India. Both governments agreed on fast track procedure for German companies in industrial policies. This procedure allows both sides to discover problems for German companies and investors during their business in India and to find solutions (Die Bundeskanzlerin 2015).

The OECD 2015 peer reviews confirms the connections between development aid and the private sector:

Germany is at the forefront in using public development finance to leverage engagement and investment from the private sector for sustainable development, seeking to build synergies among the various German stakeholders at home and in partner countries. It mobilises a wide range of instruments – from concessional loans to risk capital provision and guarantees – and has developed some innovative approaches for engaging with local, German and international companies.

It furthermore says:

Engaging with the private sector is a long-standing feature of Germany's development co-operation. Recognising this feature, the 2010 peer review recommended that Germany develop its private sector programme to encourage foreign and domestic investments in areas aligned to partner countries' development strategies [...].

But why India? The answer might be found in a strategy paper by the BMWi (2016). There, it says that as export world champion, Germany has to stay competitive and thus strengthen its brand "Made in Germany" in foreign markets. According to the ministry, large infrastructure and industrial projects are especially important for that purpose. It is further explained that Asian governments heavily support their industries, and Germany is urged to do the same. India is mentioned as one market where the German presence needs to be increased. The strategy paper states that a „project-accompanying use of instruments of development cooperation for projects abroad is in the strategic interest of Germany". In other words, the economy ministry says that development assistance should be used strategically to further economic interests.

In a 2004 discussion paper by the German Institute for Development Policy, Stamm characterizes India as an "anchor country", i.e. a country that has an important role to play in the regional context in terms of its politics or economy. He recommends Germany to stay an "attractive partner" for those anchor countries and makes offers to them that emphasise the specific strengths of Germany. He recommends that the German government work together with the private sector and scientific researchers for that aim and focus on environmental technology. Thus, it seems that India is relevant for the BMWi especially because of its market size and importance in the region.

Der Spiegel, a major Germany political magazine, debates whether India might one day become the new US for Germany, since the USA are shutting their markets off and Germany needs to look for new places to export to except for China (Der Spiegel 2017). Löhde et al. (2017) write that the Chinese and Indian markets are the largest in Asia and grew a lot during recent years. He emphasises that many German companies invest there because they are getting stable growth rates despite fluctuations in the global economy. The repeated attempts of major German car companies to set foot in India speak in favour of the theory that Germany is interested in the

Indian market. The Indian car market has a high growth potential but is up till now dominated by Japanese companies because they are much cheaper. Still, VW recently tried another time to sell its vehicles there (Dorna 2018). From 2019 to 2021, VW subsidiary Skoda will invest one billion Euro into India to increase their production base and also to build up a division that is supposed to develop car models for India. German companies are also interested in expanding into India's train sector.

During all this, India is not a passive recipient - instead, the Modi government is actively advertising for more investments. Modi's "Make in India" campaign calls for more manufacturers to produce in India. In a common statement at the industrial fair 'Hannover Messe', Merkel and Modi said their objective is

to encourage greater synergies between German engineering, experience in sustainable development, innovation and skills, and the new opportunities available in India through 'Make in India', 'Clean India', Digital India' and other initiatives towards achieving economic growth and sustainable development (GIZ, n.d.a).

During a 2017 visit to Germany, Modi said that the "German industry plays a very important role in India's development. Investments from Germany are being supported. In the future we'll be concentrating on middle-class investments." He added: "We'd like to be seen as a positive partner, and we're always willing to work together with you. We're practically made for one another." (Chase 2017). Modi has frequently been criticised for his pro-industry stance that neglects the country's social issues. Accepting ODA that brings more German companies into the country seems to fit well into his programme.

Official programmes that blur the border

Although development assistance and export support are officially separated and located in two different ministries, this division only goes so far. On the website of the development ministry BMZ, German companies are directly addressed under the heading "Offers to the private sector":

"Are you planning to invest in developing or threshold countries? [...] Rely on us as your partner [...]. The BMZ will support you not only through political development work, which improves the investment climate in the target countries – we furthermore offer you our regional and subject-related expertise as well as an attractive range of financing instruments, investment-accompanying measures, as well as consulting and cooperation possibilities" (BMZ 2019c).

Here it becomes clear that the BMZ – although its official mandate is to support developing countries - is interested in helping German companies abroad and will even support their exports financially. A BMZ programme called ExperTS is a good example for the connection between export business promotion and development assistance. Under this programme, professionals in different offices all over the world get remunerated from the BMZ for helping German companies get connected to the local market (GIZ 2016).

Another programme is called "develoPPP", under which the BMZ provides private companies with up to two million euros of funding for implementing projects in the field of development. The explicit objective of the programme is "supporting measures by German and other European companies that invest in developing and transition countries" (KfW AR 2011). Two thirds of the develoPPP projects deal with resource conservation, climate protection or the energy sector. One example for such a project is the BMZ giving Microsoft money in order to educate garbage pickers on how to pick garbage more efficiently (BMZ 2016a).

Under the ministry for education and research project „Nachhaltige Produktion – Grüne und Saubere Technologien" in cooperation with the Indo-German Science and Technology Centre, the German government provides money to green energy companies to invest in India (BMBF 2018). When it was headed by Dirk Niebel, the BMZ introduced so-called "development assistance scouts" that act as connecting people between the BMZ and chambers of commerce in developing countries, and increased the budget for "development partnerships with the private business community" by around 80% between 2009 and 2013 (VENRO 2013 in Ziai and Brämer 2016).

India is aiming at developing 100 "smart cities" in the coming years, a project that is being supported through loans by the KfW (KfW 2017) especially in the sectors mobility, water and

wastewater management. At the same time, the Indian Minister of State of Commerce and Industry, Chaudhary, actively advertised for German companies to invest in the smart city project (Financial Express 2019). Under the programme “Make in India Mittelstand”, more than 1.2 billion euros were given to German medium-sized companies in order to encourage investments in India (Die Bundesregierung 2019).

All these programmes do directly benefit German companies and only indirectly reach the Indian population. Thus, the idea that German ODA to India is actually meant to support the German economy is being supported by this analysis. In the following part, I will attempt to confirm this with the help of data.

4.2 Intertwined: Data on ODA, trade, and investment

Recalling the introduction, German ODA to India rose significantly after around 2000 both in absolute numbers and as share of GNI.

Table 4.1: ODA to India as percentage of ODA to all recipients, period averages

Period	% of all ODA
1980-1989	7.13
1990-1999	5.35
2000-2009	4.48
2010-2017	6.00

Source: OECD 2019

Table 4.1 depicts German ODA to India as share of the total German ODA, which signifies the relative importance India has as an aid recipient compared to other countries. Despite being among the top three recipients since the start of Germany’s aid programme, the relative share of aid decreased until about 2000 before rising again significantly. This section will try to find an explanation for that. For this, we firstly have to look at the composition of German ODA to India:

Table 4.2: ODA to India by sectors as percentage of total ODA to India, period averages

Period	Social Infrastructure and services	Production Sectors	Multi-Sector/ Cross-cutting	Commodity Aid	Humanitarian Aid	Unspecified	Economic Infrastructure and Services
1995-2000	28.2	42.1	2.1	0.5	0.3	0.1	26.6
2001-2005	36.9	8.9	15.1	0.0	2.3	1.3	35.5
2006-2010	30.1	8.5	5.4	0.3	0.2	0.0	55.5
2011-2017	18.8	2.3	6.2	0.0	0.1	0.0	72.6

Source: OECD 2019

Table 4.2 provides an overview over the different sectors that German aid flows to in India. It is immediately visible that aid given for economic Infrastructure and services takes by far the largest share and has risen significantly over the decades. This is interesting, since we have seen in the previous chapter that the largest share of total German ODA is given to the social sector, which makes India a special case. The second largest share, with quite a bit of lag, is social infrastructure and services. However, this post has reduced in relative importance since the 1990s. It is furthermore interesting to note that the production sector, which constituted nearly half of the ODA between 1995 and 2000, has subsequently fallen in importance until it is barely receiving ODA anymore.

From this, we can infer Germany’s shifting priorities. Whereas the largest share of total German ODA to the world goes to social infrastructure, the emphasis for India lies on economic infrastructure. This confirms the idea that Germany provides ODA to India in order to facilitate trade.

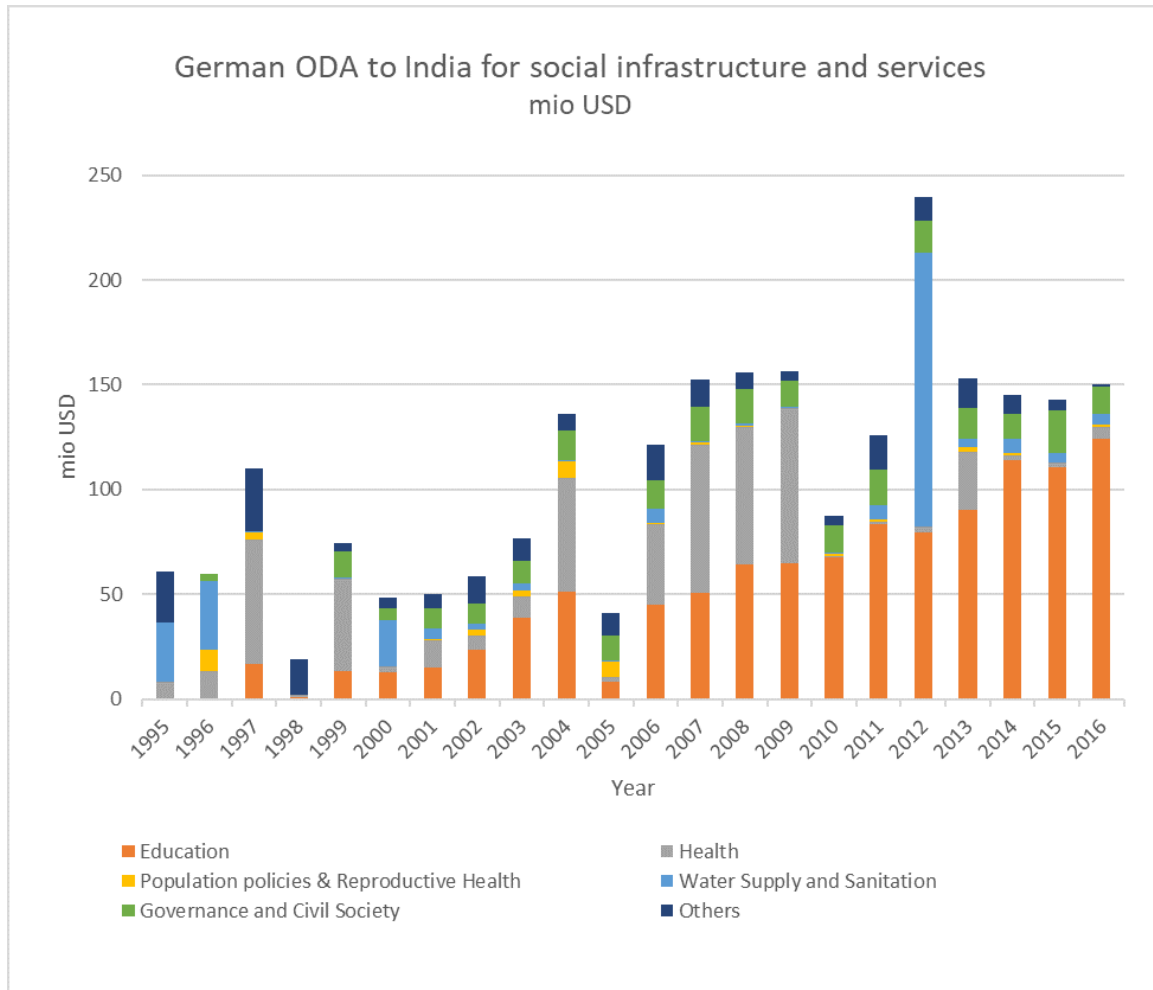


Figure 4.1: German ODA to India for Social Infrastructure and Services disaggregated
Source: OECD 2019

Figure 4.1 looks briefly at the category of social infrastructure at a disaggregated level. One can see that education now constitutes the largest share of this category, whereas earlier health was more important. It is to be noted that Germany counts study costs for Indian students studying in Germany as ODA, which is mostly what the education sector is made up of. This accounts for 96 per cent of the ODA given by the German federal states (Bohnet et al. 2018).

The reason for attracting Indian students is that Germany wants to fill its gap of skilled workers in technical jobs. More than 9,000 Indians currently study in Germany, while around 800 German students are studying or doing their internships in India. Indians are the most foreign natural science and technical academics in Germany, with about 7000 Indians working in the country. The GIZ even has a special project for attracting professionals to Germany, which is called “Make it in Germany”. It runs in three pilot countries, one of which is India (GIZ AR 2013).

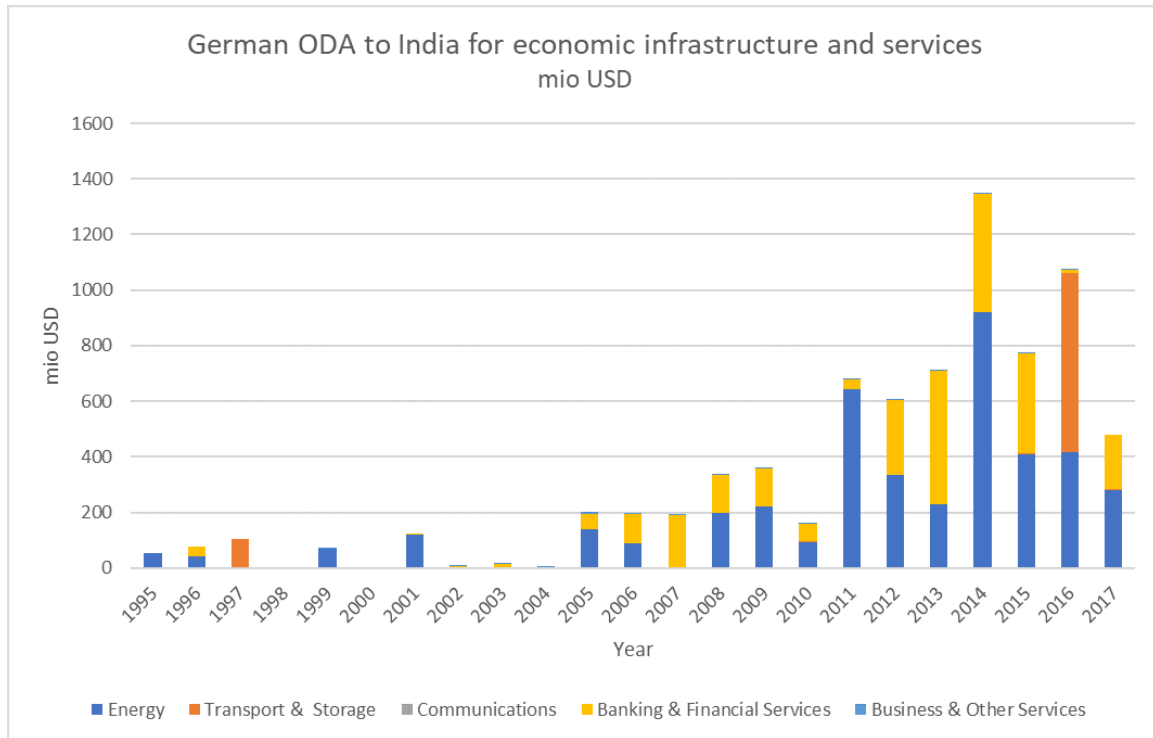


Figure 4.2: German ODA to India for Economic Infrastructure and Services disaggregated
Source: OECD 2019

Figure 4.2 disaggregates economic infrastructure ODA to India. It is visible that the share of ODA given to energy is most important in this category. Banking and financial services rank second, and transport and storage has only become important in 2016, when the KfW gave large loans for the metro in Nagpur and a water transport system in Kochi. Due to its significance, it makes sense to focus part of the analysis on energy, which will be done in chapter 5.

ODA and Exports

To substantiate the theory that ODA is given for economic reasons, I will now look at ODA together with trade data (exports and imports) as well as production data of German companies in India (FDI and annual turnover data).

Table 4.3: Exports to India as percentage of exports to all, period averages

Period	% of all exports
1980-1989	0.51
1990-1999	0.46
2000-2009	0.57
2010-2017	0.88

Source: UN Comtrade 2019

This table shows that German exports to India as share of exports to world stayed more or less stable since 1980 and then rose sharply after around 2000, just as ODA did, as we saw in the previous section. Looking at exports to India in this way shows that their relative importance for Germany's economy has increased after 2000.

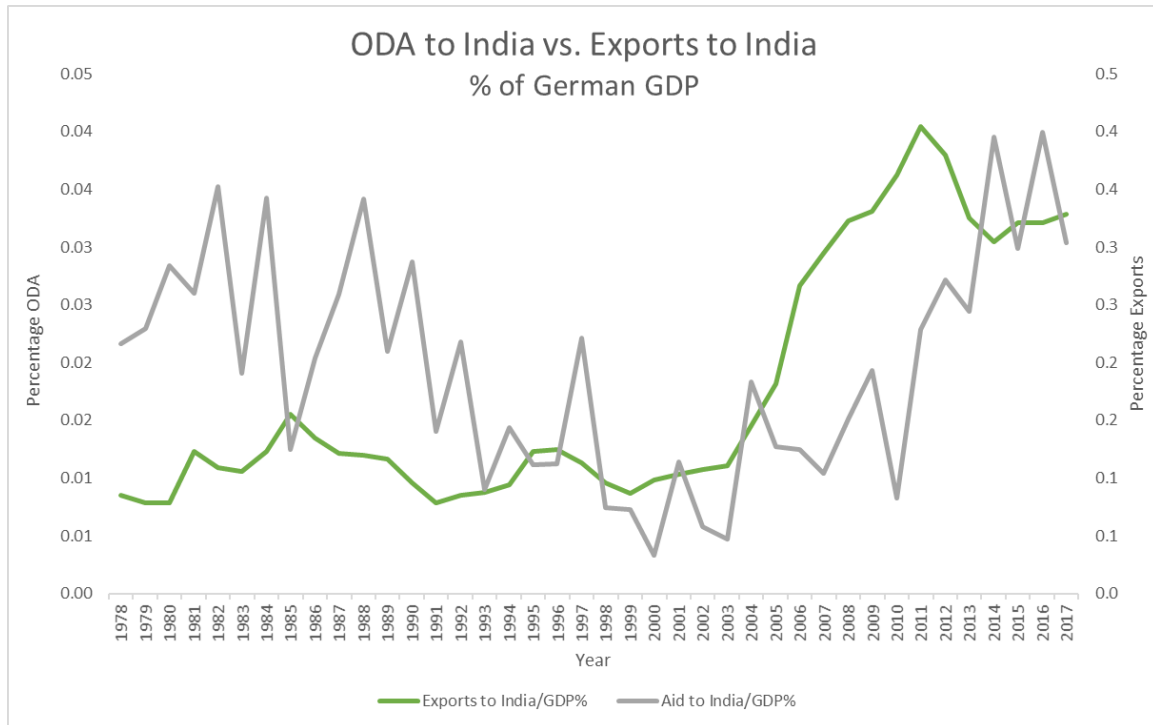


Figure 4.3: ODA to India vs. Exports to India as percentage of German GDP
Source: OECD 2019 and UN Comtrade 2019

Looking at ODA and exports as a percentage of GDP in figure 4.3, we can observe the same phenomenon – both of them rose in importance after 2000.

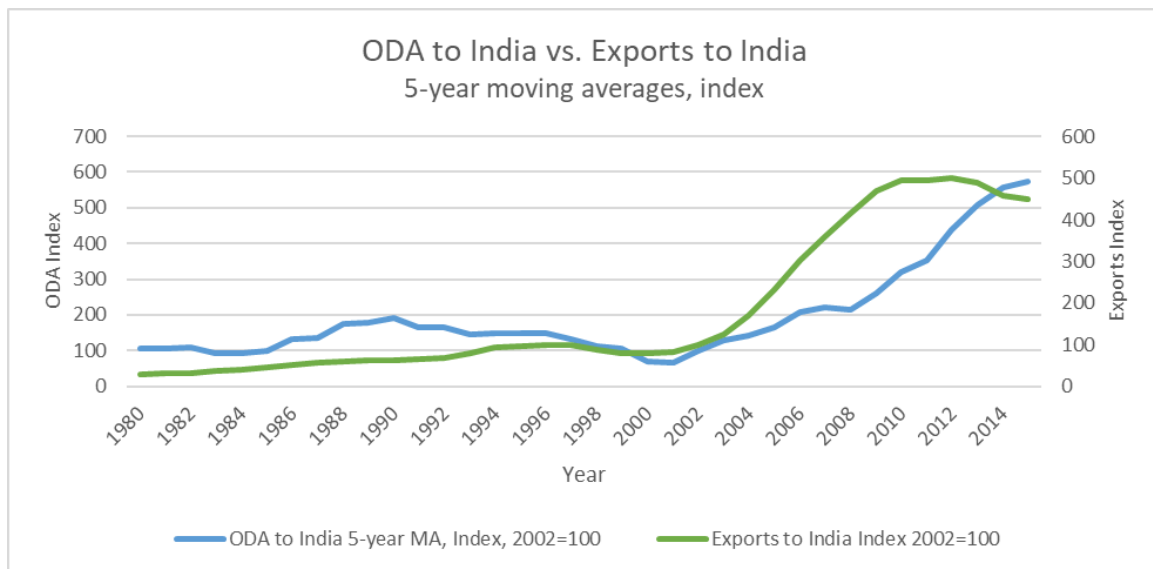


Figure 4.4: ODA to India vs. Exports to India, 5-year moving average
Source: OECD 2019 and UN Comtrade 2019

After indexing the data and smoothing the noise through 5-year moving averages, the same result can be observed. It is definitely clear that exports and ODA both started picking up speed after 2000.

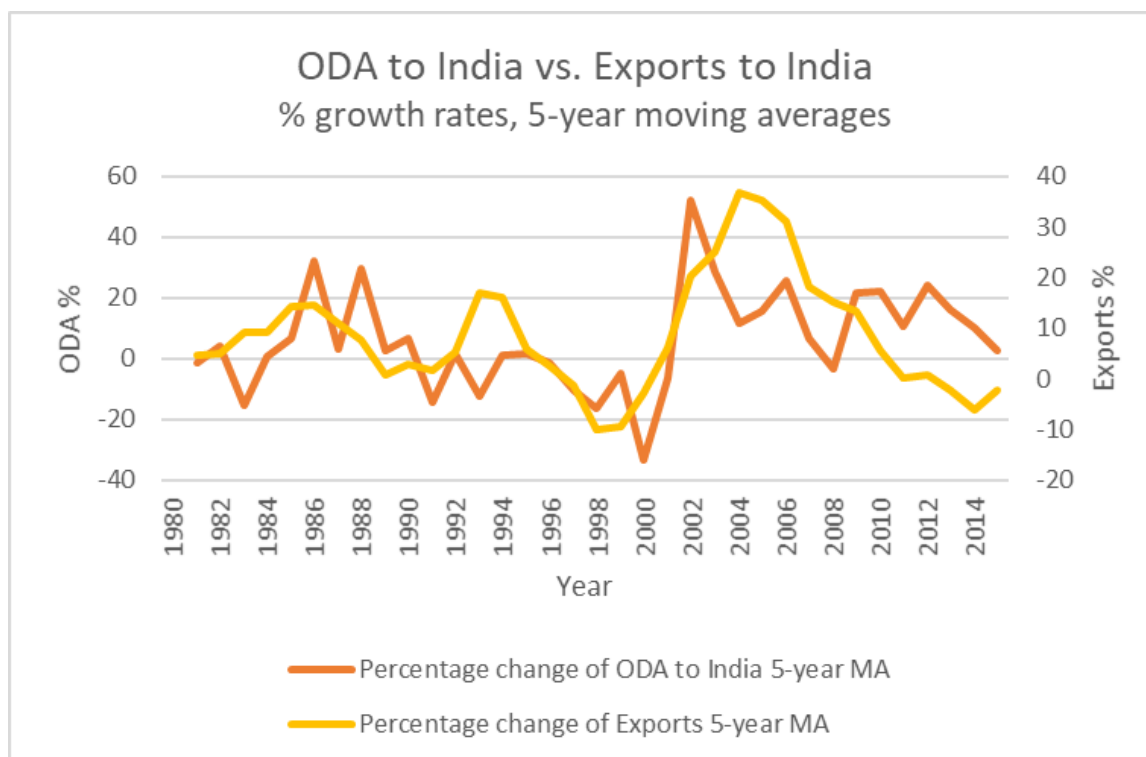


Figure 4.5: ODA to India vs. Exports to India, growth rates
Source: OECD 2019 and UN Comtrade 2019

The relationship becomes even more obvious when we look at the growth rates of ODA and exports, which definitely correlate.

Table 4.4: Exports to India by sectors as percentage of total exports, period averages

Period	Food and live animals chiefly for food	Beverages and tobacco	Crude materials, inedible, except fuels	Mineral fuels, lubricants and related materials	Animal and vegetable oils, fats and waxes	Chemicals and related products	Manufactured goods classified chiefly by materials	Machinery and transport equipment	Miscellaneous manufactured articles	Others
1978-1987	3.1	0.0	1.3	0.5	0.7	14.1	24.1	49.5	6.7	0.1
1988-1994	0.8	0.0	1.5	0.8	0.2	13.8	20.8	53.8	6.5	1.0
1995-2000	0.2	0.0	1.6	0.7	0.7	13.1	15.0	58.9	7.2	1.6
2001-2005	0.2	0.0	2.2	0.6	0.0	14.6	15.5	52.5	9.8	2.2
2006-2010	0.1	0.0	2.3	0.6	0.0	10.7	12.9	58.0	8.9	5.4
2011-2017	0.3	0.0	2.7	0.6	0.1	14.1	12.0	55.2	10.0	4.7

Source: UN Comtrade 2019

Finally, looking at the composition of exports from Germany to India, one can see that most are in the area of manufactured goods. About half the exports are of machinery and transport equipment, a number that has risen by six percentage points over the last 40 years. Manufactured goods chiefly classified by materials – i.e. low-value inputs – made up a quarter of all exports during the 1980s but have since then reduced by half, whereas miscellaneous manufactured articles (of higher value added) have almost doubled. Chemicals, the only other notable export good that is being exported to India, have stayed about same. If we recall that Germany is an economy that is largely dependent on the export of manufactured goods, it becomes clear that it is important for the country to secure buyers of these goods all around the world. India is one of these buyers.

To sum up, Germany gives ODA mostly in the area of economic infrastructure and services, and has increased this ODA sharply since 2000. At the same time, Germany exports mostly manufactured goods to India, which also rose steeply after 2000 and are exactly the type that might be needed while using the ODA that goes to the sector of economic infrastructure. Furthermore, Germany is exporting increasingly high-value goods to India. Thus, together with the statement quoted earlier, we can infer that one of the reasons Germany provides (economical) ODA to India is in order to stimulate demand and support its own export business.

ODA and Imports

Exports are not the only part of trade that is interesting. If we look at imports from India to Germany, we see a similar story:

Table 4.5: Imports from India as percentage of imports from all countries, period averages

Period	% of total imports
1980-1989	0.35
1990-1999	0.50
2000-2009	0.56
2010-2017	0.80

Source: UN Comtrade 2019

Imports to India increased slightly in relative importance after the 1980s and then rapidly after the 2000s.

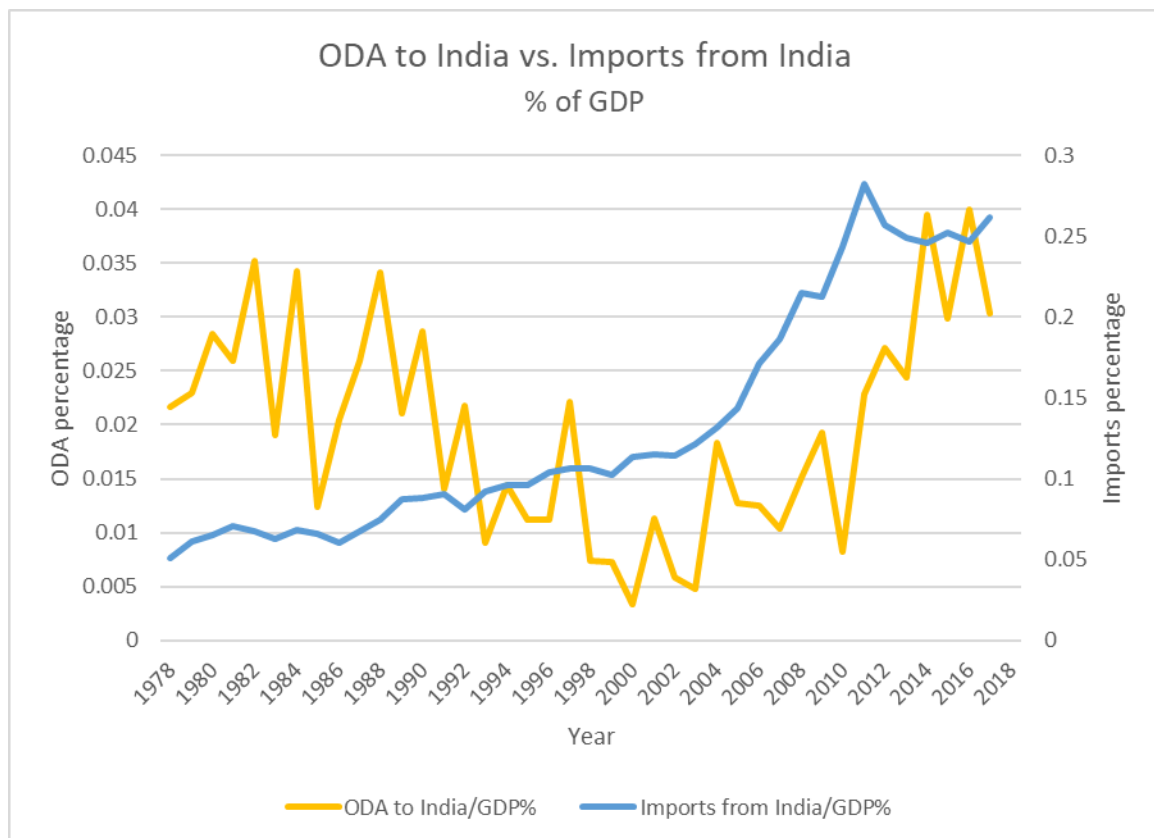


Figure 4.6: ODA to India vs. Imports from India as percentage of German GDP

Source: OECD 2019 and UN Comtrade 2019

The rise in imports is also visible if one looks at them as a share of GDP, as in figure 4.6. It coincides with a rise in ODA.

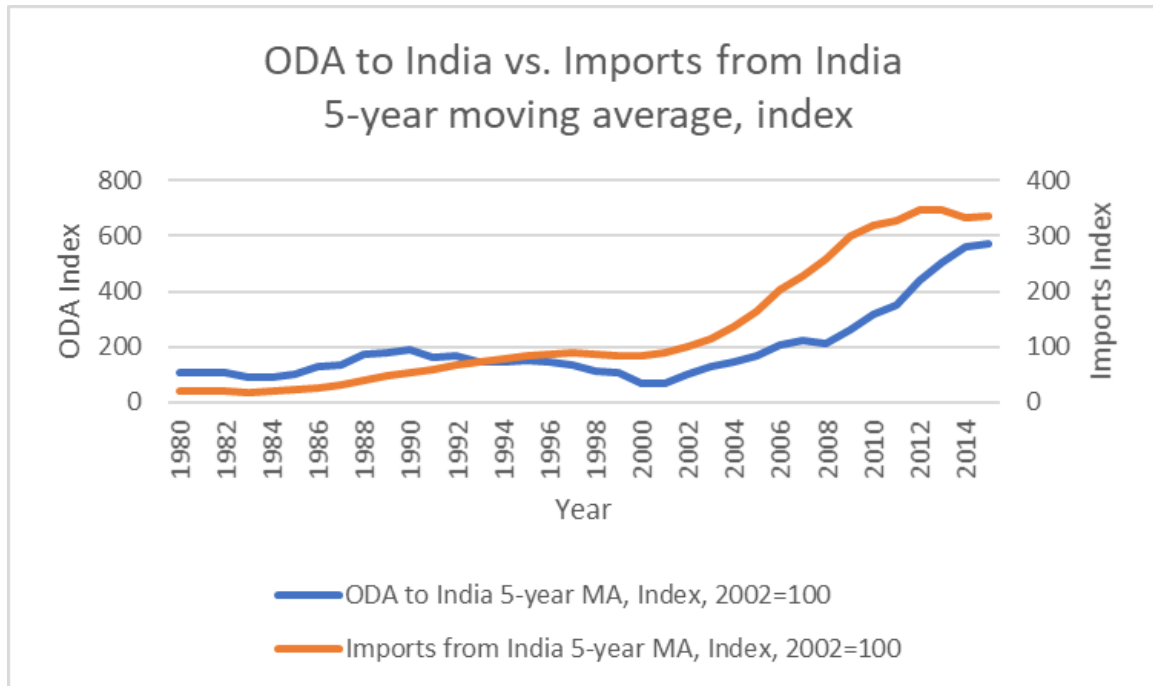


Figure 4.7: ODA to India vs. Imports from India, indexed
Source: OECD 2019 and UN Comtrade 2019

Looking at indexed 5-year averages of imports and ODA as in figure 4.7, one can see that the developments correlate.

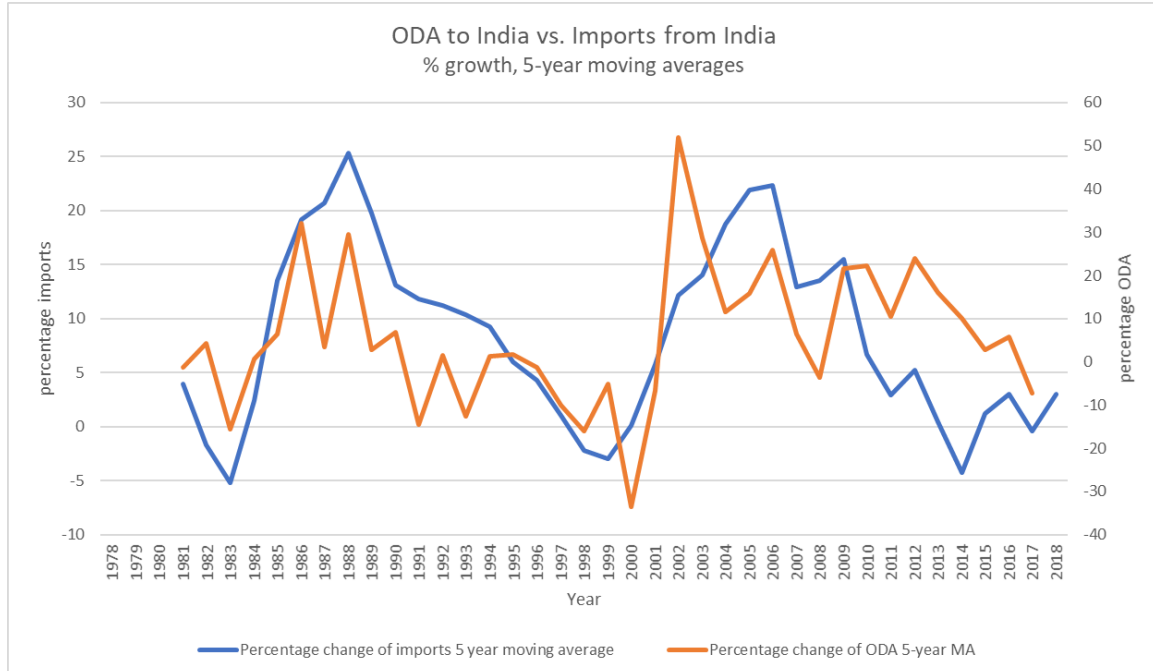


Figure 4.8: ODA to India vs. Imports from India, growth rates
Source: OECD 2019 and UN Comtrade 2019

Furthermore, the growth rates of both ODA and imports are also correlating (figure 4.8). To see whether this change concerns only certain imports, we can look at their composition:

Table 4.6: Imports from India by sectors as percentage of total imports, period averages

Period	Food and live animals chiefly for food	Beverages and tobacco	Crude materials, inedible, except fuels	Mineral fuels, lubricants and related materials	Animal and vegetable oils, fats and waxes	Chemicals and related products	Manufactured goods classified chiefly by materials	Machinery and transport equipment	Miscellaneous manufactured articles	Others
1978-1987	10.3	0.2	5.5	0.5	0.4	2.0	48.1	2.9	29.9	0.1
1988-1994	6.1	0.4	3.2	0.8	0.4	3.8	37.6	3.6	43.3	0.7
1995-2000	7.8	0.5	4.0	0.0	1.0	7.9	29.6	9.7	39.5	0.0
2001-2005	6.1	0.4	2.6	1.6	1.2	12.7	25.1	16.1	33.6	0.6
2006-2010	5.1	0.5	2.4	0.9	1.0	14.6	23.1	21.1	30.2	1.1
2011-2017	6.3	0.5	2.2	0.3	1.0	18.3	19.8	21.3	29.3	1.0

Source: UN Comtrade 2019

We can see that imports from India are also concentrated in the sector of manufactured goods, just like exports. Here, low-value manufactured goods (manufactured goods classified chiefly by materials) constituted almost half of the imports in the 1980s. This number has continuously fallen to about 20 per cent in recent years. At the same time, machinery and transport equipment imports, or higher-value products, have risen from only three to more than 20 percent, as have chemicals. Thus, one can observe the shift from India delivering low-value inputs for German products to slowly upgrading to higher-value inputs. This is important to note when we recall Germany's economic development over the last few decades.

It seems that India is not only important to Germany as a possible market for its manufactured goods, but also as a supplier of the inputs for these goods. We have seen in chapter 3.2 that less and less of actual manufacturing is taking place in Germany, although the country still exports mostly manufactured high-value goods. This means that Germany needs other countries that produce the semi-manufactured inputs for its products. It seems that just as Germany has earlier outsourced its production to China, it is now also outsourcing parts of it to India. This might be another reason for Germany to provide ODA to India (especially in the sector of economic infrastructure): to ensure that India keeps producing inputs for the German manufacturers and to increase the production there as production in other countries is getting increasingly expensive.

ODA and FDI

Looking at FDI, this idea is confirmed.

Table 4.7: Share of FDI to India as percentage of FDI to world, period averages

Period	% of total FDI
1990-1999	0.19
2000-2009	0.35
2010-2017	0.77

Source: Deutsche Bundesbank 2019

Table 4.7 shows that the FDI Germany gives to India, compared to FDI that flows into all countries, has risen significantly in importance, from 0.2 to 0.8 percent within 30 years. Just as imports and exports, the drastic rise came in the period after 2000, especially after 2010 – at about same time when ODA also rose drastically.

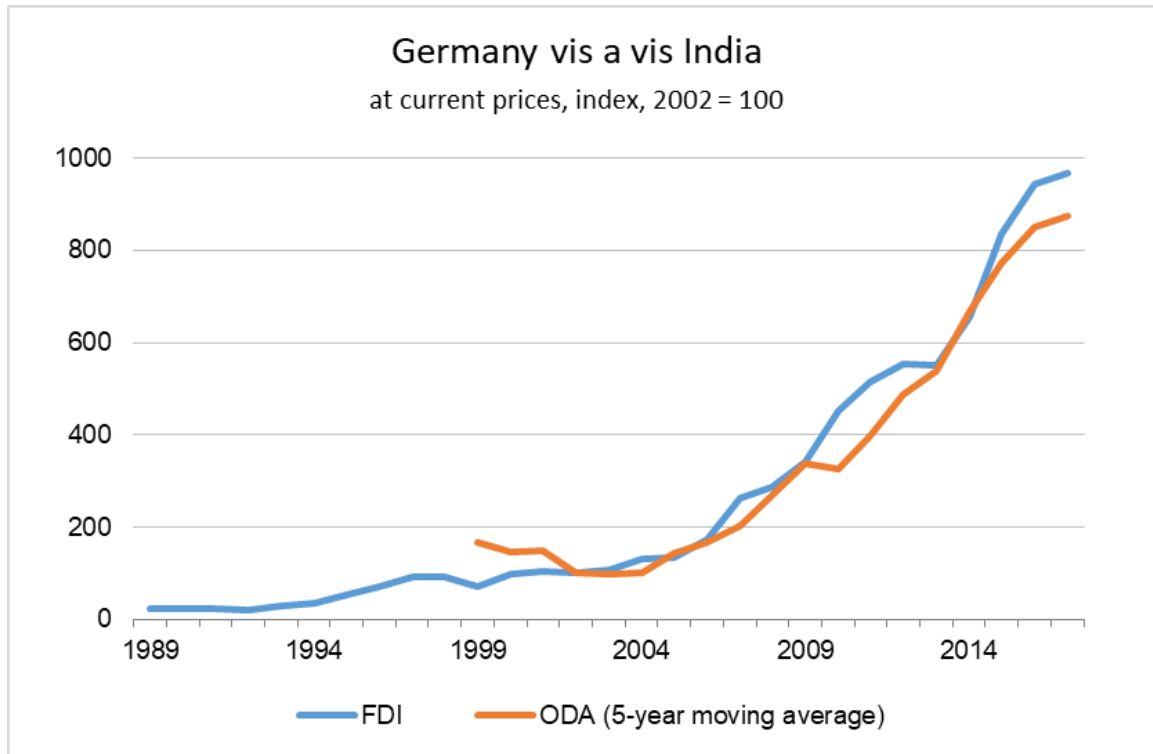


Figure 4.9: ODA to India vs. FDI to India, 5-year moving average
Source: OECD 2019 and Deutsche Bundesbank 2019

Figure 1.9 compares ODA and FDI indexed absolute amounts. The correlation becomes even clearer.

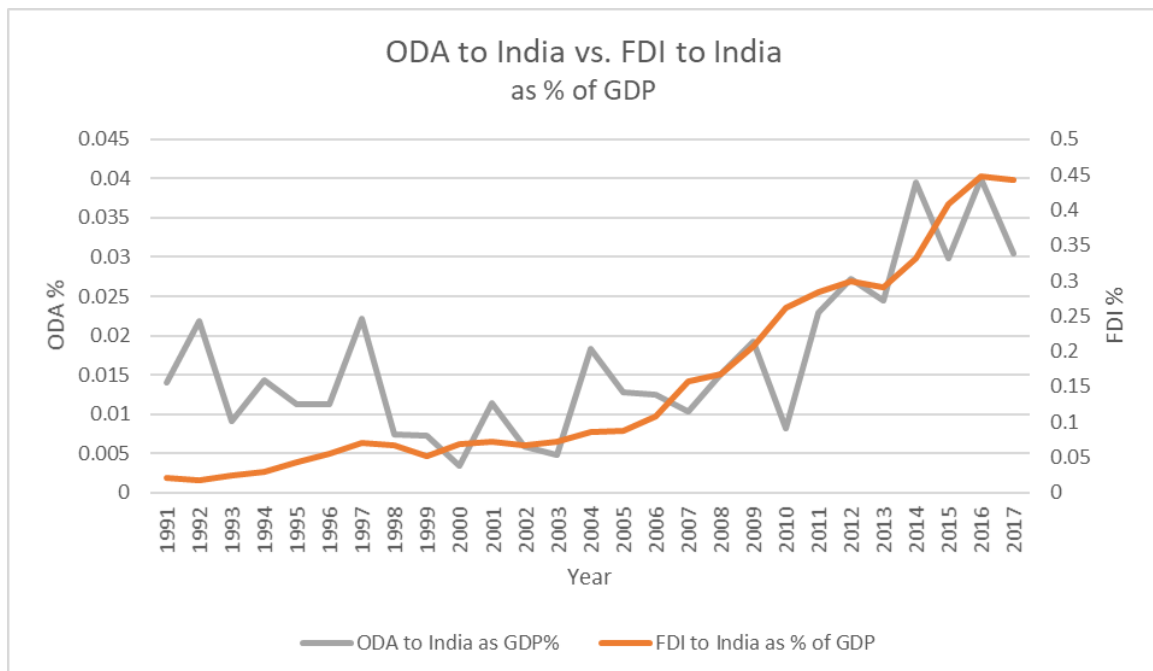


Figure 4.10: ODA to India vs. FDI to India as percentage of GDP
Source: OECD 2019 and Deutsche Bundesbank 2019

Looking at ODA and FDI as share of GDP in order to confirm their relative importance, it is clear that there is a correlation as well. This means that India has indeed become much more interesting

as a production place for German companies in the last decades, to which Germany outsources the manufacturing of its products. Hence, it makes sense to assume that this is one of the reason for the ODA.

ODA and company turnover

Lastly, the same can also be observed for the annual turnover of companies in India. It is important to consider this variable because there are many German companies active in India that do not only produce for export or for German products, but actually for sale inside of India. Company turnover is the closest we can get to seeing how much German companies actually produce, including for the domestic market in India.

Table 4.8: Turnover of German companies in India as percentage of total turnover abroad, period averages

Period	% of total turnover
1990-1999	0.34
2000-2009	0.49
2010-2017	1.00

Source: Deutsche Bundesbank 2019

Table 4.8 shows that the share of German company turnover in India has risen significantly within the last 30 years. Just like FDI, the turnover rose very steeply after 2010, more than doubling in importance within seven years. This shows that India is becoming more important to German companies as a destination to produce goods.

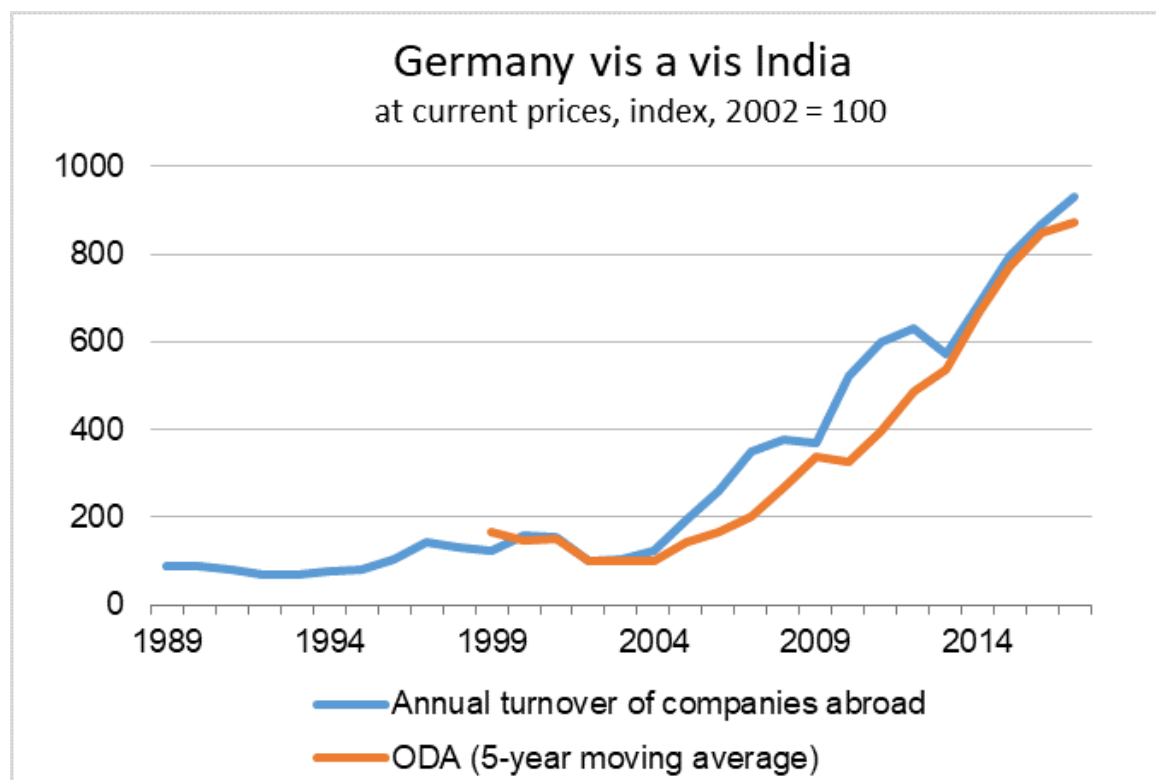


Figure 4.11: ODA to India vs. Annual turnover of German companies in India, indexed
Source: OECD 2019 and Deutsche Bundesbank 2019

Figure 4.11 depicts the correlation between ODA and annual turnover as indexed and smoothened data. It confirms the results from the previous analysis.

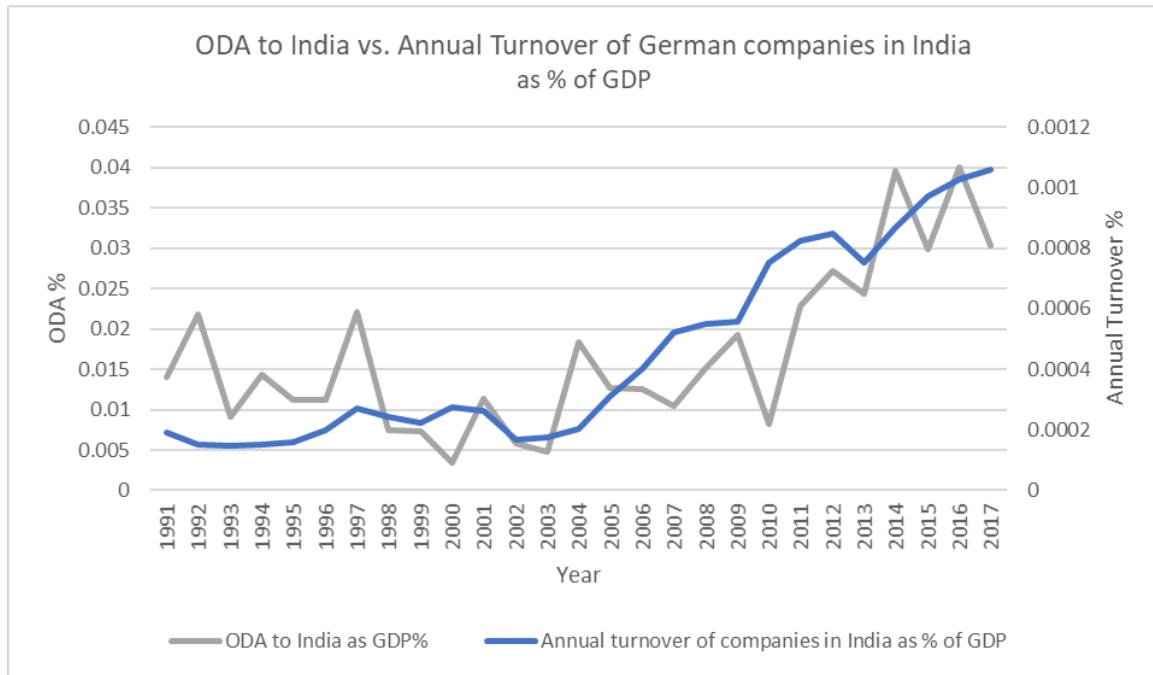


Figure 4.12: ODA to India vs. Annual turnover of German companies in India as share of German GDP

Source: OECD 2019 and Deutsche Bundesbank 2019

Seen as a percentage of GDP, ODA and annual turnover correlate as well. Thus, it confirms the theory that Germany is trying to produce inputs for German engineering products in India, which are then exported all over the world or sold on the Indian domestic market. The empirical data shows a shift to exports and the production of intermediary goods after 2000, which coincides with the increase in ODA. Since exports constitute Germany's economy, it is crucial for the country to have markets to export to – and India, as shown in section 4.1, is one of the potentially growing markets that Germany is looking at. But it is also essential to have places where the inputs into the products are manufactured in the context of rising labour costs in other countries. Together with German companies producing for the local Indian market, this seems to constitute a good reason for Germany to give ODA to India in the past two or three decades. It also explains the concentration of ODA in the area of economic services and infrastructure.

5 Case Study: Renewable Energy

5.1 Germany's growing interest in Indian renewables

As seen in the previous chapter, most of Germany's ODA to India goes to the sector of economic infrastructure and services. Most of that ODA in turn has been increasingly concentrated in the energy sector, especially on renewable energies, as the data will show. This sector is quite illustrative for the interconnection between ODA and business interests and will thus be used as a case study in order to complement the analytical arguments made in the previous chapter.

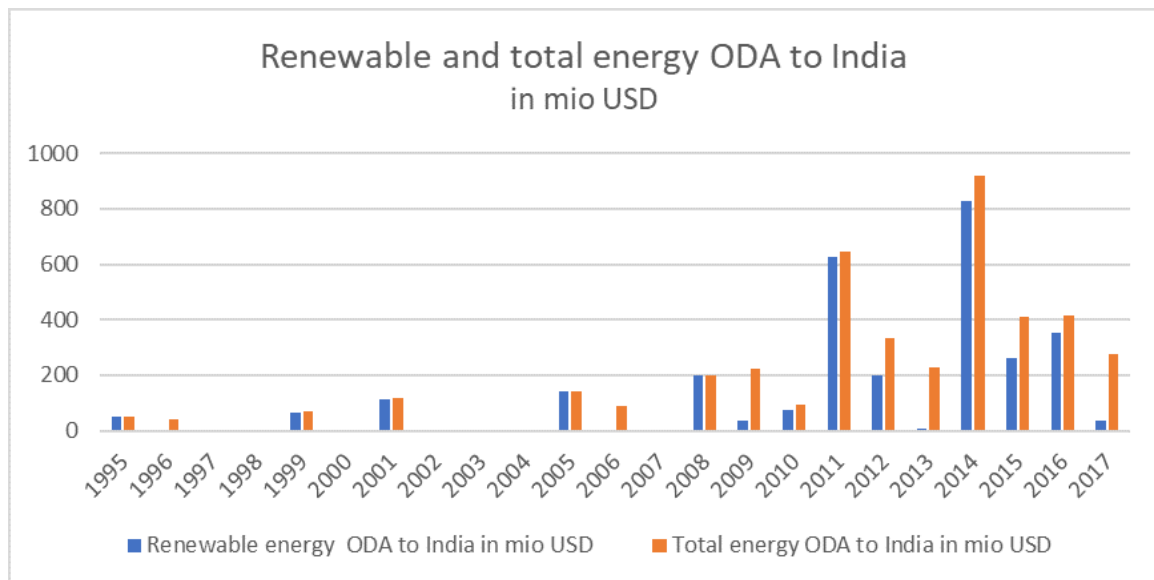


Figure 5.1: German ODA for the Indian energy sector, renewable and total
Source: OECD 2019

Figure 5.1 shows that ODA for the Indian energy sector in absolute numbers has increased rapidly since the first record of the category in 1995. Most of the ODA that was given to India's energy sector was targeted at renewable energies, either for generation or distribution of clean energy.

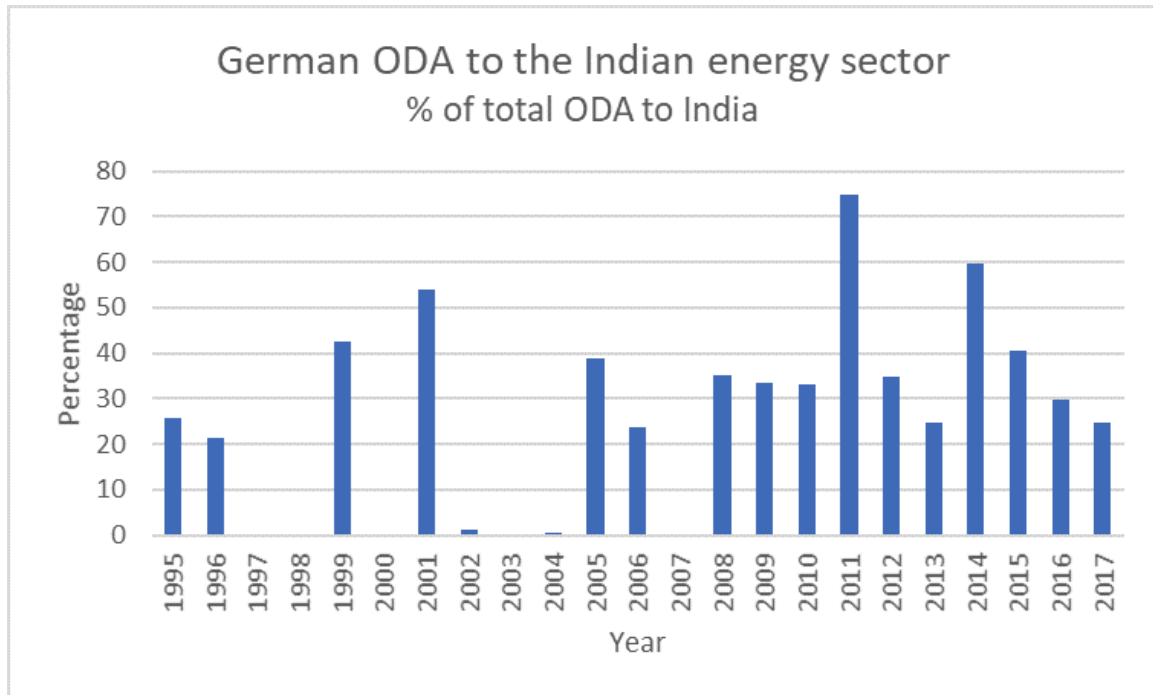


Figure 5.2: German ODA to the Indian energy sector as share of total ODA to India
Source: OECD 2019

Figure 5.2 depicts the ODA for energy that Germany has given to India since 1995 as a share of total ODA. One can observe a clear growth over time with two large spikes in 2011 and 2014 respectively. Coincidentally, 2011 is also the year in which Germany decided to exit nuclear energies and started to concentrate stronger on renewable technologies.

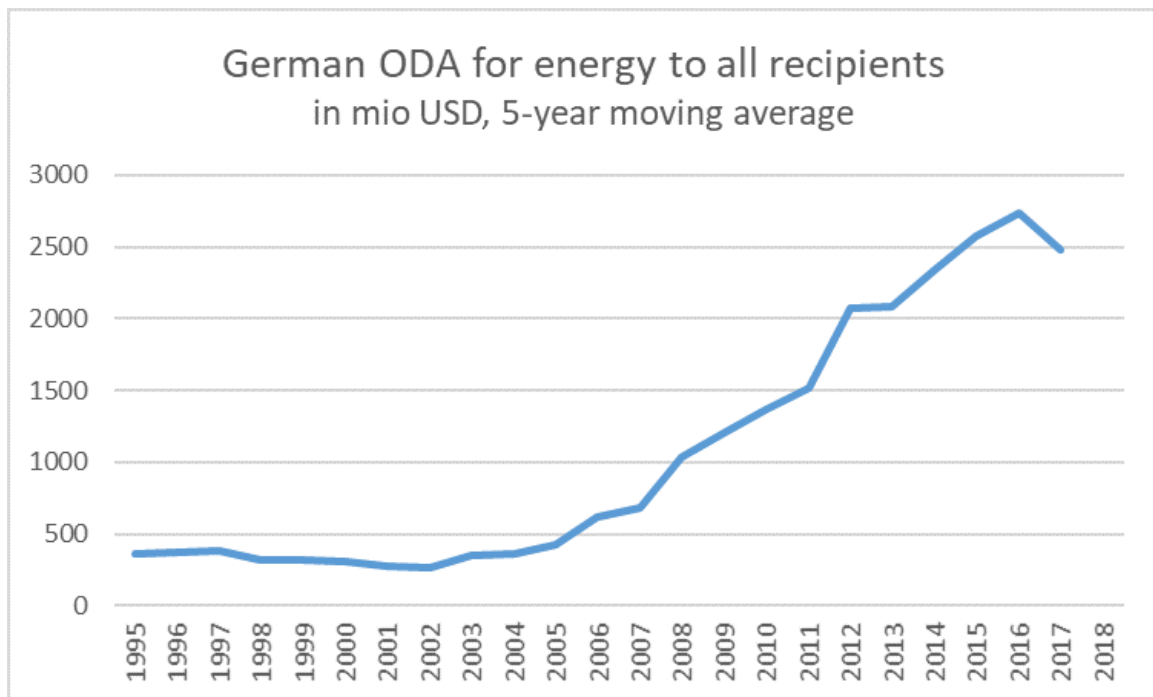


Figure 5.3: German ODA the energy sector, all recipients

India is not the only recipient of ODA targeted at energy. Figure 5.3 shows Germany's ODA for

the energy sector to all recipients. A clear trend is visible – more and more ODA is allocated for that purpose. Here we also see a spike in 2011.

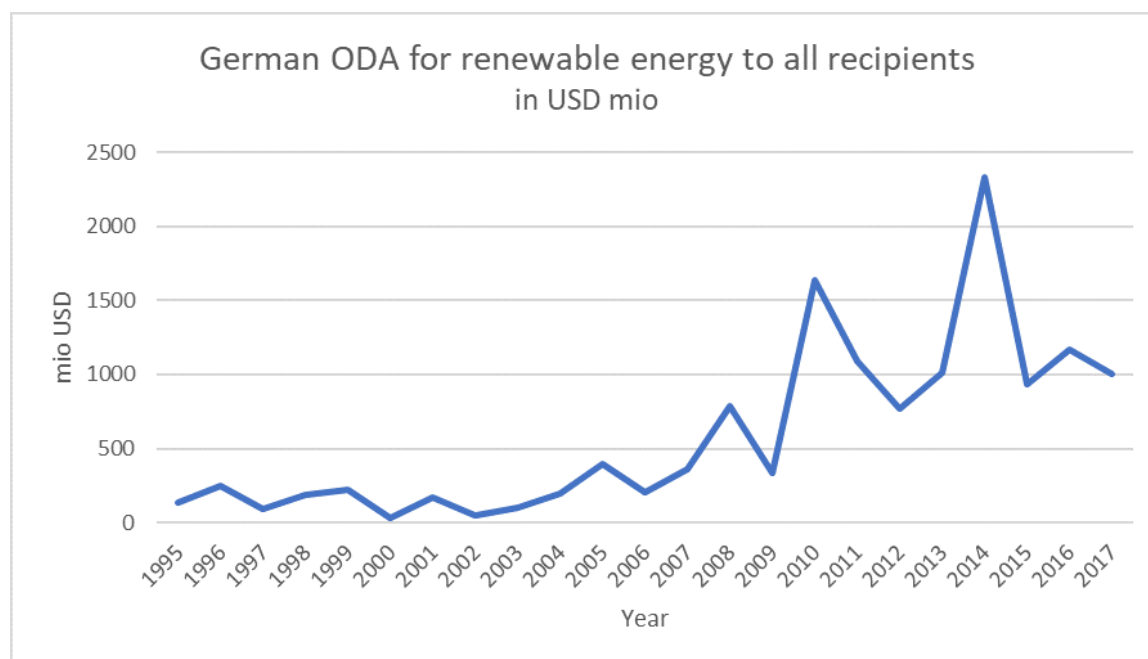


Figure 5.4: German ODA for renewable energies, all recipients

Figure 5.4 shows the aid given for renewable energies to all developing countries, and again it is visible that there has been a growing trend to concentrate ODA in that field, especially since after 2010.

These data suggest that after Germany decided to exit nuclear energy and switch to renewable energy, its companies started to become active in international markets as well, prompting Germany to allocate more ODA for that purpose. India is one of the recipients of this ODA. Evidence for this comes from official sources. In a meeting in 2017, the German and Indian government declared renewable energies a focus of their development cooperation. In 2014, the KfW started financing a project called "green energy corridors" under which Germany funds a lot of channels for renewable energies to be integrated into the Indian electricity network. In 2015, they founded the German-Indian Solar Partnership (Die Bundesregierung 2017). During the fifth German-Indian government consultations in November 2019, German chancellor Angela Merkel visited among others a project of a self-sustaining photovoltaic model. In the joint government declaration after her visit, it was stated that both governments agreed on supporting the climate-friendly development of Indian and German energy markets (Die Bundesregierung 2019). A BMZ statement confirms the notion that renewable energies are important:

Priority areas of German-Indian development cooperation are renewable energies and energy efficiency, sustainable urban development, environmental protection and resource conservation. All in all, a significant proportion of development funding and effort goes to projects that support climate protection (BMZ 2019b)

The OECD peer report (2015) observes that Germany

increasingly supports green investments in middle-income countries such as the People's Republic of China, India and Turkey, where KfW provides loans and technical advice to local public and private banks to support environmentally friendly projects (e.g. on renewable energy).

According to the review, the share of Germany's bilateral aid focusing on climate change mitigation and adaptation reached 28% in 2015, almost twice as much as the DAC country average of 16%.

It further says that "capacity building and technology transfer are key components of Germany's support. Germany also uses official development finance to leverage engagement and investment from the private sector", essentially confirming the idea that business and development interests go hand in hand in the energy sector.

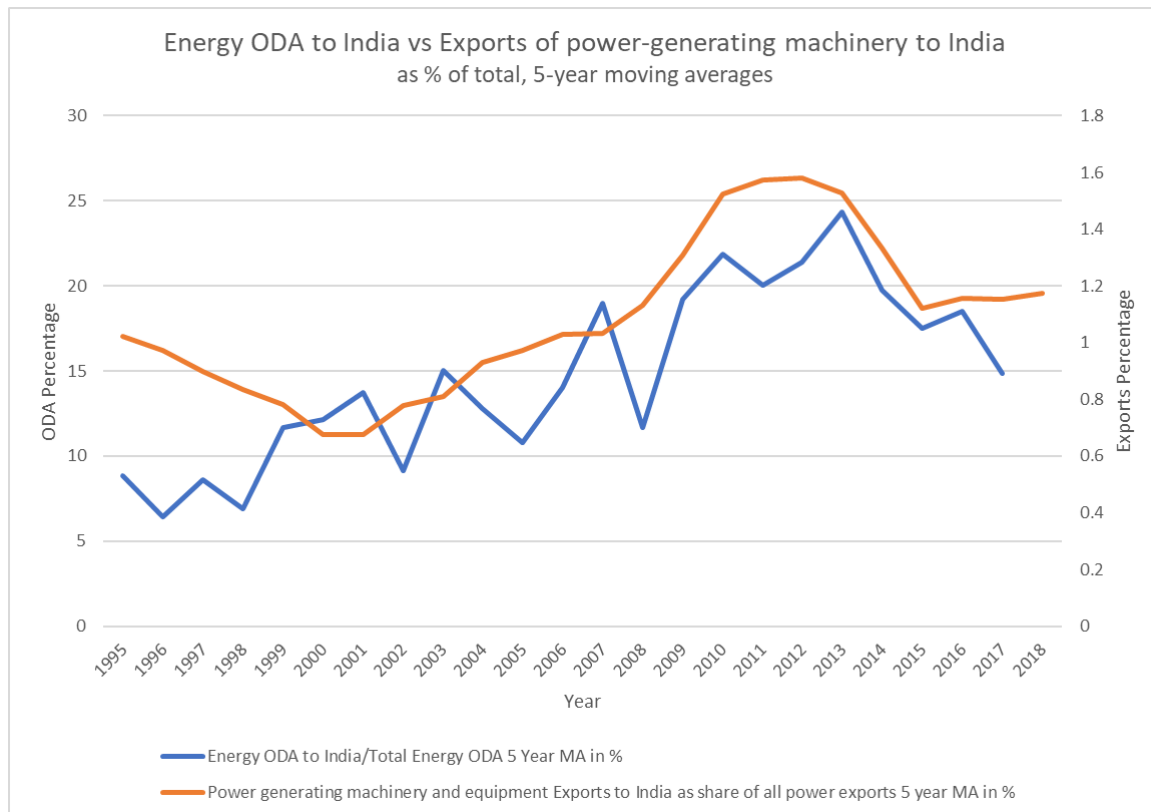


Figure 5.5: German ODA for the Indian energy sector vs. exports to the energy sector
Source: OECD 2019 and UN Comtrade 2019

Looking at exports, Figure 5.5 depicts the German exports of power generating machinery and equipment to India, together with aid given to the Indian energy sector. The relative importance of each of them is shown by using percentages of the total. It is visible that both indicators correlate.

The German government offers a lot of support, partly by using development money, for companies in the energy sector that want to invest in India. For example, the BMZ-funded Indo-German Energy Forum is a platform that brings together the public and private sector with research experts on renewable energies from both countries in order to increase their cooperation. The forum has been lauded by chancellor Merkel for its effectiveness. Business opportunities are one of the intended outcomes of the platform that hosts many events for private companies (GIZ 2012). For example, during a conference session on "Market Potentials and Business Applications for Renewable Energies Energy Efficiency in India", German companies could gain first-hand information about the Indian market on renewable energies (IBEF 2019). At the Renewable Energy India Expo 2016 in Delhi, the director of the Energy Watch Group said "It looks like India will become one of the big names in renewable energies besides the US and South America" (Energiezukunft 2016). It seems that Germany is all set up to harness this growing market.

The BMWi started an 'export initiative energy', directed at SMCs developing technology related to renewable energies. The ministry supports these companies in exporting abroad, with the official aim to spread German energy technologies further around the globe (BMW 2019). The export initiative is "complementary to the activities of export support and the development cooperation of the BMZ" (GIZ, n.d. b). This is another good example for the interdependence of business and development interests. India is one of the declared targets countries of this initiative. These examples have clearly shown the interdependence of business and development in the sector of

energy. Looking at evidence from the previous section, it can be assumed that similar interwoven relationships exist in other sectors. Since Germany wants to stay competitive in the field of renewable energies in the future and a growing economy like India is predicted to have a huge demand of clean energy, it makes sense that Germany would give ODA to India in order to master this transition. At the same time, German companies are active in India in the field of renewable energies and indirectly profit from this aid.

5.2 Who is involved, who profits? Examples from the ground

In the following, a few micro-level examples show how organisations and companies active in the environment and renewable energy are involved in the arrangement, thus complementing the case study.

Government institutions as facilitators

The KfW development bank, the world's largest of its kind, is responsible for the financial cooperation between Germany and developing countries. It is fully owned by the German government and has two subsidiaries that are also active abroad: the KfW IPEX bank, which is responsible for international project and export finance, and the DEG that provides financing and consulting to companies investing in the Global South (Mohinga n.d.). All three institutions are active in the environment sector. For example, KfW IPEX's website reads:

KfW IPEX-Bank's financing products are also particularly aimed at companies from the energy and environmental areas in order that the innovative technologies can be applied around the globe. Extensive knowledge of the relevant industries, structuring skills and regional presence in important growth markets for the domestic export industry help the bank to make its offering attractive. (KfW n.d.)

Furthermore, it says:

Employment and prosperity in Germany and Europe are greatly dependent on the success enjoyed by the domestic export industry on the international markets. Lending a hand at this stage and supporting German and European companies in their global business is one of the underlying ideas of the KfW Group's legal mandate – and a task taken on by KfW IPEX-Bank.

This underlines the point that the KfW, one of Germany's main development institutions, was mostly set up in order to support the German economy, a function now taken over by the KfW IPEX, which has been an independent subsidiary since 2008. The DEG has been a subsidiary of the KfW since 2001 - before that, its projects were also executed by the KfW itself. DEG is very active in climate protection and has e.g. established 'climate partnerships with the private sector', a programme within the framework of Germany's International Climate Initiative (Whitney and Mohanty 2013).

KfW started its business in 1958, providing 'politically motivated foreign loans' and commercial finance for projects. They have been active in India from the beginning: The construction of the Indian steel plant Rourkela in the 1960s helped German exporters of plant components, and as far back as in 1976, the KfW gave loans to Korean, Indian and South African airlines so that they could buy German airbus planes (KfW IPEX n.d.). In 2005, KfW IPEX arranged another loan for the Indian airlines to buy Airbus aircraft that were assembled in Germany. In 2008, KfW IPEX financed the modernization and expansion of the Indira Gandhi International Airport in Delhi, thereby supporting the German Fraport AG that holds stake in the project company DIAL (KfW AR 2008: 89). In 2009, KfW IPEX financed the expansion of a Bhushan Power and Steel plant. The delivery of components worth 60 million euros directly benefitted the German companies SMS Siemag, Siemens and Linda. Another project the KfW financed is a two-billion dollar loan for the Indian petro-chemical giant "Reliance" in order to expand its production. In their annual report 2012, KfW IPEX announces that "more than 40 medium-sized export companies in Germany" benefit from that. In 2015, KfW supported the Berlin-based company Mobisol that leases solar homes to people in developing countries, also in India.

Recently, the KfW has been responsible for a lot of renewable energy finance to India. Among the largest projects are a "solar partnership" under which Germany provides India with one billion euros in investment money for solar parks and solar roof top panels until 2022. Another current project are the "green energy corridors", which provide more than one billion euro for connecting renewable energy plants with the Indian electricity grid. The KfW furthermore created a fund for financing photovoltaic roof top installations in India for small and medium companies that could not receive credits for that from the credit market. The initial fund is 16.8 million US Dollar (KfW 2019a). In September 2019, the KfW gave a large loan to Tamil Nadu, a South Indian state, to enable it to buy electric buses for its transport system (Mariappan 2019). As we have seen earlier, this development finance coincides with German companies targeting India to invest in renewable energies, often aided by initiatives set up through the BMZ and BMWi – thus, the Germany business sector indirectly profits from a higher involvement of India in renewable energies, stimulated by German ODA.

The GIZ as the implementing organisation of German development projects must not be forgotten. One third of the GIZ's current budget is going into projects related to cutting down greenhouse gas emissions in more than 30 countries, India being one of them (GIZ 2014). The GIZ supports the German export initiative for environmental projects that runs from 2019 to 2021 and is aimed at five trial countries, one of which is India. The stated aim is to "create conducive conditions in certain countries for implementing modern environment and climate change technologies", as well as "create concrete conditions so that innovative technologies will be demanded." The GIZ states that the initiative works complementary to both development cooperation and export business assistance.

German companies as beneficiaries

In the following, a few examples of companies that indirectly profit from this development finance will be provided. Siemens is one of the German companies that have been longest active in India. Apart from its activities in many other sectors of the Indian economy, it has been very active in renewable energies during the past few years. Siemens is active in solar energy, which is also funded by German ODA, as described previously. For example, in 2017 Siemens India launched "a new generation of photovoltaic inverters" (Siemens 2017). In addition, a rooftop solar photovoltaic project was initiated in Kalwa to generate power for captive consumption.

Siemens also won an order from Power Grid to supply a 200-km long connection for voltage between Tamil Nadu and Kerala. They are furthermore working on one of the world's largest Static Synchronous Compensator projects, which is part of the Indian grid system (Siemens 2017a). Siemens provided 127 wind turbines for a project in Gujarat and 143 for one in Karnataka, which will start to be delivered in 2020. Siemens also owns a number of renewable energy subsidiaries in India, as can be seen in figure 5.6 below.

Anantapur Wind Farms Private Limited, Chennai/Indien	100	Stand: 30.09.2018	Kapitalanteil in %	Stand: 30.09.2018	Kapitalanteil in %
Bapuram Renewable Private Limited, Chennai/Indien	100				
Beed Renewable Energy Private Limited, Chennai/Indien	100	Kurnool Wind Farms Private Limited, Chennai/Indien	100	Siemens Ltd., Mumbai/Indien	75
Bhuj Renewable Private Limited, Chennai/Indien	100	Kutch Renewable Private Limited, Chennai/Indien	100	Siemens Postal Parcel & Airport Logistics Private Limited, Neu-Mumbai/Indien	100
Bytemark India LLP, Bangalore/Indien	100	Masi Renewable Energy Private Limited, Chennai/Indien	100	Siemens Rail Automation Pvt. Ltd., Neu-Mumbai/Indien	100
Bytemark Technology Solutions India Pvt Ltd, Bangalore/Indien	100	Mathak Wind Farms Private Limited, Chennai/Indien	100	Siemens Technology and Services Private Limited, Neu-Mumbai/Indien	100
CALYPTO DESIGN SYSTEMS INDIA PRIVATE LIMITED, Neu-Delhi/Indien	100	Mentor Graphics (India) Private Limited, Neu-Delhi/Indien	100	Sindhur Renewable Energy Private Limited, Chennai/Indien	100
Channapura Renewable Private Limited, Chennai/Indien	100	Mentor Graphics (Sales and Services) Private Limited, Neu-Delhi/Indien	100	Thoothukudi Renewable Energy Private Limited, Chennai/Indien	100
Chikkodi Renewable Power Private Limited, Chennai/Indien	100	Nandikeshwar Renewable Energy Private Limited, Chennai/Indien	100	Tirupur Renewable Energy Private Limited, Chennai/Indien	100
Devarabanda Renewable Energy Private Limited, Chennai/Indien	100	Neelagund Renewable Private Limited, Chennai/Indien	100	Tuljapur Wind Farms Private Limited, Chennai/Indien	100
Dhone Renewable Private Limited, Chennai/Indien	100	Neelore Renewable Private Limited, Chennai/Indien	100	Umrani Renewable Private Limited, Chennai/Indien	100
Dresser-Rand India Private Limited, Neu-Mumbai/Indien	100	Nirlooti Renewable Private Limited, Chennai/Indien	100	Uppal Renewable Private Limited, Chennai/Indien	100
Enlighted Energy Systems Pvt Ltd, Chennai/Indien	100	Osmanabad Renewable Private Limited, Chennai/Indien	100	Vempalli Renewable Energy Private Limited, Chennai/Indien	100
Fast Track Diagnostics Asia Private Limited, Chennai/Indien	100	PETNET Radiopharmaceutical Solutions Pvt. Ltd., Mumbai/Indien	100	Viralipatti Renewable Private Limited, Chennai/Indien	100
Flomerics India Private Limited, Mumbai/Indien	100	Poovani Wind Farms Private Limited, Chennai/Indien	100	Zalki Renewable Private Limited, Chennai/Indien	100
Gadag Renewable Private Limited, Chennai/Indien	100	Powerplant Performance Improvement Ltd., Neu-Delhi/Indien	50 ¹	P.T. Siemens Indonesia, Jakarta/Indonesien	100
Gagodar Renewable Energy Private Limited, Chennai/Indien	100	Preactor Software India Private Limited, Bangalore/Indien	100	PT Dresser-Rand Services Indonesia, Cilegon/Indonesien	100
Gangawathi Renewable Private Limited, Chennai/Indien	100	Rajgarh Windpark Private Limited, Chennai/Indien	99	PT Siemens Gamesa Renewable Energy, Jakarta/Indonesien	95
Ghatpimpri Renewable Private Limited, Chennai/Indien	100	Rangareddy Renewable Private Limited, Chennai/Indien	100	PT Siemens Mobility Indonesia, Jakarta/Indonesien	100
GM Navarra Wind Energy Private Limited, Chennai/Indien	100	Rayachoty Renewable Private Limited, Chennai/Indien	100	PT. Siemens Industrial Power, Kota Bandung/Indonesien	100
Gudadanal Renewable Private Limited, Chennai/Indien	100	RSR Power Private Limited, Chennai/Indien	100	Accorad Co., Ltd., Okinawa/Japan	63
Hattarawat Renewable Private Limited, Chennai/Indien	100	Sankarur Renewable Energy Private Limited, Chennai/Indien	100	Mentor Graphics Japan Co., Ltd., Tokio/Japan	100
Haveri Renewable Power Private Limited, Chennai/Indien	100	Saunshi Renewable Energy Private Limited, Chennai/Indien	100	Siemens Gamesa Renewable Energy Japan K.K., Kanagawa/Japan	100
Hungund Renewable Energy Private Limited, Chennai/Indien	100	Shivamogga Renewable Energy Private Limited, Chennai/Indien	100	Siemens Healthcare Diagnostics K.K., Tokio/Japan	100
Jalore Wind Park Private Limited, Chennai/Indien	100	Siemens Factoring Private Limited, Neu-Mumbai/Indien	100	Siemens Healthcare K.K., Tokio/Japan	100
Jamkhandi Renewable Private Limited, Chennai/Indien	100	Siemens Financial Services Private Limited, Mumbai/Indien	100	Siemens K.K., Tokio/Japan	100
Kadapa Wind Farms Private Limited, Chennai/Indien	100	Siemens Gamesa Renewable Energy Engineering Centre Private Limited, Neu-Mumbai/Indien	100	Siemens PLM Software Computational Dynamics K.K., Yokohama/Japan	100
Kanigiri Renewable Private Limited, Chennai/Indien	100	Siemens Gamesa Renewable Power Private Limited, Chennai/Indien	100	Mentor Graphics (Korea) Co., Limited, Bundang-gu, Seongnam-si, Gyeonggi-do/Korea	100
Kintech Santalpur Windpark Private Limited, Gujarat/Indien	99	Siemens Gamesa Renewable Energy Private Limited, Mumbai/Indien	100	Siemens Gamesa Renewable Energy Limited, Seoul/Korea	100
Kod Renewable Private Limited, Chennai/Indien	100	Siemens Healthcare Private Limited, Mumbai/Indien	100	Siemens Healthineers Ltd., Seoul/Korea	100
Kollapur Renewable Private Limited, Chennai/Indien	100	Siemens Industry Software (India) Private Limited, Neu-Delhi/Indien	100	Siemens Industry Software Ltd., Seoul/Korea	100
Koppal Renewable Private Limited, Chennai/Indien	100	Siemens Industry Software Computational Dynamics India Pvt. Ltd., Bangalore/Indien	100	Siemens Ltd. Seoul, Seoul/Korea	100
				Siemens Mobility Ltd., Seoul/Korea	100

Figure 5.6: Siemens' subsidiaries in the renewable energy sector in India

Source: Siemens Annual Report 2018: 137-138

Consequently, if the BMZ provides ODA to India's energy sector, this can mean that demand for Siemens' products rises – Germany thus indirectly supports its own businesses. The same is true for other companies. SAP India is the fastest growing subsidiary of SAP SE, which is a German company developing software for businesses. It has been active in India since 1996 and is present in all major Indian cities. It is currently one of the fastest growing divisions of SAP, with SAP Labs India is SAP's largest Research and Development center outside its headquarters in Germany (SAP n.d.). One of the emphases of German ODA in India is on so-called "Climate Smart Cities", a development project that runs from 2018 to 2022, commissioned by the BMU and executed by the GIZ. The objective is to find "[c]limate-friendly solutions for urban infrastructure projects and area-based development" (GIZ n.d.b). Interestingly, SAP is also active in the area of smart cities in India (SAP 2018).

Bosch Limited, a company majorly owned by the German firm Robert Bosch, is also contributing to the smart cities concept. More importantly, they are active in the field of renewable energies, especially in solar energy, which Germany finances heavily. "We constantly reinvent to provide better energy solutions and become the go-to energy partners for enterprises across India." They are furthermore involved in electric mobility (Bosch 2019), another focus point of German development finance. Voith is another German company active in establishing renewable energy in India. It has been awarded a contract to deliver four turbines and generators, together with auxiliary equipment, for the Pakal Dul hydropower plant in the Indian state of Jammu and Kashmir (Compelo 2019).

All of these taken together show that German companies indirectly profit from the shift towards renewable energies that India is taking, supported by German ODA. These examples illustrate the trends shown at the macro-level in chapter 4 – the interdependence of ODA and business interests. Although ODA does not support the German economy as overt as it used to at the beginning phase of Germany's development cooperation when the ministry actively lobbied for projects being awarded to the German business sector, ODA seems to essentially still serve the same purpose.

6 Conclusion: Aid for Business

This study started out with the objective to understand why India has been one of the main recipients of German ODA after the Cold War. Both the literature review as well as the data and document analyses point to the idea that the reason behind Germany's ODA to India is that Germany is attempting to indirectly support its own business sector.

Operating within a framework that presupposes the existence of a variety of interests for development aid, some of which are self-serving, I have argued that the German ODA given to India after the end of the Cold War was mostly motivated by economic interests. During the Cold War, the motives were mainly of political nature. However, India has been one of the main recipients of German ODA over the last six decades, and if German ODA was only motivated politically, it would have been expected to fall after the Cold War. That was not the case - instead, ODA increased sharply after 2000.

This increase coincides with an increase in exports, imports, FDI and turnover of German companies in India, which shows that the relative importance of the country for Germany is increasing and supports the idea that business interests drive ODA. The German interest in India can be explained with the observed structural changes in the German economy over the last decades. Germany's performance is more and more dependent on exports, especially the export of manufactured goods. India is thus relevant as a possible sales destination for the German products because of its size and rapid economic growth.

Secondly, the German workforce has largely moved out of production and shifted into services. This means that the low-value inputs for the manufactured products that Germany exports are no longer manufactured in Germany and instead outsourced to lower-income countries. Thus, India is also interesting as a possible supplier of inputs for German manufactures. This argument is supported by an observed shift of imports from lower-value to increasingly higher-value manufactured goods that flow from India to Germany.

The structure of German ODA to India has shifted over the years and is now mostly concentrated in economic infrastructure and services. This speaks for an economic motivation, since ODA goes directly to the sectors in which German companies are active, such as renewable energies. My case study illustrated this argument by tracing the interdependence of business and development interests in the sector of renewable energies. It showed how German development institutions are indirectly benefitting German companies operating in India. It thus makes sense to say that one of the reasons why Germany keeps providing ODA to India is in order to tie India closer to its own market and indirectly support its own economy. This theory is confirmed by recurring official statements indicating that Germany's main interest in India is of economic nature. However, this statement does not exclude the possibility that other motives also play a role.

The strength of this research lies in connecting quantitative and qualitative data to answer the main question of what drives German ODA to India. However, without more case studies for different sectors apart from energy and more research that also focuses closely on political events, I can only conclude that there exists evidence that economic considerations are the main reason for Germany providing aid to India, but not claim to have uncovered the complete motivation. In order to do this, more research would be needed.

One reason why this study is significant is that it shows that despite divergent official rhetoric emphasising altruistic motives behind aid, German ODA is still used to support its own economic interests, at least in the case of India. Further research for other countries would be required to see whether that is true for all cases, but the review of documents in this paper makes it plausible to assume that this is a recurring pattern. Furthermore, this paper has concentrated on Germany's side of the story - in order to investigate the actual effects of ODA, more research is required that examines the relationship from India's perspective. Generally, looking at the literature on aid, it can be concluded that much more systematic research on aid motivation is needed. In order to judge whether ODA is useful or not, it is firstly essential to know what aims the donors of ODA are pursuing. For the case of Germany and India, it has been shown that economic self-interest seems to be the main driver. Any research dealing with ODA, and, more importantly, any country at the receiving end of ODA, should consequently look much more closely at the donor country's motivation.

References

- Alesina, A. and D. Dollar (2000): 'Who gives foreign aid to whom and why?', *Journal of Economic Growth* 5 (1): 33–63.
- Anders, M. (2016) 'ODA redefined: What you need to know', *devex* 23 February. Accessed 03 November 2019 <https://www.devex.com/new/s/oda-redefined-what-you-need-to-know-87776>.
- Barbière, C. D. Sarmadi, F. Heller, G. Gotev and M. Briggs (2015) 'Europäische Staaten konzentrieren Entwicklungshilfe auf ihre Ex-Kolonien', *Euractiv* 22 April. Accessed 02 November 2019 <https://www.euractiv.de/section/entwicklungspolitik/news/europaische-staaten-konzentrieren-entwicklungshilfe-auf-ihre-ex-kolonien/>.
- Bartlau, C. (2018) 'Wenn Entwicklungshilfe die Rüstungsindustrie subventioniert'. Accessed 02 November 2019 <https://web.de/magazine/politik/entwicklungshilfe-ruestungsindustrie-subventioniert-32245202>.
- BMBF (2018) 'Bekanntmachung'. Accessed 03 November 2019 <https://www.bmbf.de/foerderungen/bekanntmachung-2094.html>.
- BMWi (2016) 'Neue Impulse für den internationalen Wettbewerb um strategische Großprojekte – Chancen für Deutschland verbessern', Strategiepapier. Accessed 03 November 2019 <https://www.bmwi.de/Redaktion/DE/Downloads/E/eckpunktepapier-exportstrategie.pdf?__blob=publicationFile&v=6>.
- BMWi (2017) 'Parlamentarischer Staatssekretär Dirk Wiese: Wirtschaftspolitische Beziehungen mit Indien sind im strategischen Interesse Deutschlands'. Accessed 03 November 2019 <https://www.bmwi.de/Redaktion/DE/Pressemitteilungen/2017/20170621-wiese-wirtschaftspolitisch-beziehung-mit-indien.html>.
- BMZ (2016a) 'Komplott gegen Elektroschrott'. Accessed 03 November 2019 <https://www.developpp.de/projekte-erfolge-erfolgsgeschichte-n-des-developppde-foerderprogramms/giz-microsoft-indien/>.
- BMZ (2017) 'Deutschland und Indien gehen neue Wege bei globalem Klimaschutz'. Accessed 03 November 2019 >http://www.bmz.de/de/pr/esse/aktuelleMeldungen/2017/mai/170530-pm-068-Deutschland-und-Indien-gehen-neue-Wege-bei-globalem-Klimaschutz/index.jsp>.
- BMWi (2019) 'Außenwirtschaftsförderung'. Accessed 03 November 2019 <https://www.bmwi.de/Redaktion/DE/Dossier/aussenwirtschaftsfoerderung.html>.
- BMZ (2019a) 'Die Geschichte des Ministeriums'. Accessed 03 November 2019 <https://www.bmz.de/de/ministerium/geschichte/index.htm l>.
- BMZ (2019b) 'India. An important partner in international cooperation'. Accessed 03 November 2019 <https://www.bmz.de/en/countries _reg ions/asien/indien/>.
- BMZ (2019c) 'Unser Angebot für die Wirtschaft.> Accessed 03 November 2019 <http://www.bmz.de/de/mitmachen/Wirtschaft/index.jsp>.
- BMZ (2019d) 'Einsatz von Marktmitteln in der finanziellen Zusammenarbeit'. Accessed 04 November 2019 <https://www.bmz.de/de/them en/entwicklungsfinanzierung/innovativefinanzierung/marktmittel/index.html>.
- Bohnet, M., S. Klingebiel and P. Marschall (2018) 'Die Struktur der deutschen öffentlichen Entwicklungszusammenarbeit', die Discussion Paper 15/2018. Bonn: Deutsches Institut für Entwicklungspolitik.
- Bosch (2019) 'Annual Report 2018-19'. Accessed 03 November 2019 <http://annual-report.boschindia.com/energy/>.
- Böschel, Hubertus (2010) 'Geschichte der Entwicklungspolitik', *Docupedia-Zeitgeschichte*. Accessed 03 November 2019 <http://docupedia.de/ zg/Geschichte-der-Entwicklungspolitik>.
- Brämer, J. and A. Ziai (2015) 'Die deutsche Entwicklungspolitik unter Niebel: Eine handlungslogische Analyse des FDP-geführten BMZ, PERIPHERIE No. 35(140): 400-418.
- Chase, J. (2017) 'Indian PM Modi tells Merkel India and Germany 'made for one another'', *deutsche welle* 30 May. Accessed 03 November 2019 <https://www.dw.com/en/indian-pm-modi-tells-merkel-india-and-germany-made-for-one-another/a-39043653>.
- Clay, E.J., M. Geddes, and L. Natali (2009) *Untying Aid: Is it working? An Evaluation of the Implementation of the Paris Declaration and of the 2001 DAC Recommendation of Untying ODA to the LDCs*. Copenhagen: OECD.
- Compare your country (n.d.) 'Official Development Assistance 2018 – Preliminary Data'. Accessed 03 November 2019 <https://www2.comp areyourcountry.org/oda?cr=20001&cr1=oeecd&lg=en&page=1>.
- Compelo (2019) 'Voith to equip Pakul Dul plant, India', *International Water Power and Dam Construction* 14 March. Accessed 03 November 2019 <https://www.waterpowermagazine.com/news/newsvoith-to-equip-pakul-dul-plant-india-7040080>.
- Crush, Jonathan S. (ed.) (1999) *Power of development*. Reprinted. London, New York: Routledge. DEG invest (2010) 'DEG unterstützt Energieeffizienz in Indien'. Accessed 03 November 2019 <https://www.deginvest.de/Presse/News/Pressemitteilungen-Details.5951.html>.
- Der Spiegel (2017) 'Warum Indien nicht als USA-Ersatz taugt', 25 May. Accessed 03 November 2019 <https://www.spiegel.de/wirtschaft/in dien-so-wichtig-its-das-land-als-handelspartner-fuer-deutschland-a-1149701.html>.
- Der Spiegel (2018) 'One in Five German Firms Leaving China', 04 August. Accessed 03 November 2019 <https://www.spiegel.de/internatio nal/business/when-outsourcing-fails-one-in-five-german-firms-leaving-china-a-569861.html>.
- Deutsche Bundesbank (2019) 'External Sector'. Accessed 04 November 2019 <https://www.bundesbank.de/dynamic/action/en/statistics/t ime-series-databases/time-series-databases/743796/743796?treeAnchor=AUSSENWIRTSCHAFT&statisticType=BBK_ITS>.
- Deutsch-Namibische Entwicklungsgesellschaft (2019): 'Das Land'. Accessed 02 November 2019 <https://www.dnegg.de/namibia/das-land/>.
- Die Bundeskanzlerin (2015) 'Bekanntnis zu strategischer Zusammenarbeit'. Accessed 08 November 2019 <https://www.bundeskanzlerin.de/ bkin-de/angela-merkel/terminkalender/reiseberichte/bekanntnis-zu-strategischer-zusammenarbeit-605368>.
- Die Bundesregierung (2017) 'Gemeinsame Erklärung zu den 4. Deutsch-Indischen Regierungskonsultationen vom 30. Mai 2017', Press Release No. 189/17. Accessed 03 November 2019 <https://www.bundesregierung.de/breg-de/aktuelles/gemeinsame-erklaerung-zu-den-4-deutsch-indischen-regierungskonsultationen-vom-30-mai-2017-420244>.
- Die Bundesregierung (2019) 'Gemeinsame Erklärung anlässlich der 5. Deutsch-Indischen Regierungskonsultationen am 1. November 2019 in New Delhi', Press Release No. 358/19. Accessed 04 November 2019 <https://www.bundesregierung.de/resource/blob/997532/1687590/c07fe349 52229baa94221a1f6c1e34a1/2019-11-01-erklaerung-deu-ind-reg-konsultationen-data.pdf?download=1>.
- Donortracker (2019) 'How does Germany spend its ODA?'. Accessed 03 November 2019 <https://donortracker.org/country/germany>.
- Dorna, W. (2018) 'VW wagt dritten Billigauto-Anlauf', *Manager Magazin* 03 July. Accessed 03 November 2019 <https://www.manager-magazin.de/unternehmen/autoindustrie/volkswagen-billigauto-dritter-anlauf-in-indien-nicht-mehr-super-low-cost-a-1216452.html>.
- Dumke, Horst (1997): 'Anfänge der deutschen staatlichen Entwicklungspolitik. Eine Korrektur des politischen Bildes' Accessed 03 November 2019 <https://www.kas.de/einzeltitel/-/content/anfaenge-der-deutschen-staatlichen-entwicklungspolitik>.
- Easterly, W. and C. R. Williamson (2011) 'Rhetoric versus Reality: The Best and Worst of Aid Agency Practices', *World Development* 39 (11): 1930–1949.
- Easterly, William (2006) *The white man's burden. Why the West's efforts to aid the rest have done so much ill and so little good*. New York, NY: Penguin Press.
- Energiezukunft (2016) 'Meldungen über Indien und erneuerbare Energien', *energiezukunft* 21. Accessed 03 November 2019 <https://www.enr giezukunft.eu/fileadmin/user-upload/Magazin-PDFs/energiezukunft/energiezukunft_2016-21.pdf>.
- Escobar, Arturo (2012) *Encountering Development. The Making and Unmaking of the Third World*. Princeton, N.J.: Princeton University Press.
- Fuchs, A. and K. C. Vadlamannati (2013) 'The Needy Donor: An Empirical Analysis of India's Aid Motives', *World Development* 44: 110-128.
- GIZ (2012) *Company Report 2012*. Bonn and Eschborn: GIZ.
- GIZ (2014) *Company Report 2014*. Bonn and Eschborn: GIZ.
- GIZ (2016) 'Indien: Kernkompetenz Klimaschutz – Weiterbildung zum Energiemanager'. Accessed 03 November 2019 <https://www.wirtsc haft-entwicklung.de/fileadmin/user-upload/SBayoumi/10.PDFs/Referenzen-EZ-Scouts-und-ExperTS/BestPractice-ExperTS-Indien_D.060716 _pdf>.
- GIZ (n.d.) 'Globalvorhaben zur Unterstützung der Exportinitiative Umwelttechnologien'. Accessed 03 November 2019 <https://www.giz .de/de/weltweit/78869.html>.
- GIZ (n.d.a). 'IGEF explores Market Potentials for Renewable Energy in India: Hannover Messe'. Accessed 04 November 2019 <https://www .giz.de/en/worldwide/32449.html>.
- GIZ (n.d.b) 'Climate Smart Cities'. Accessed 12 November 2019 <https://www.giz.de/en/worldwide/75009.html>.
- Glennie, J. (2010) 'If India doesn't 'need' aid, why do foreign governments still give it?', *The Guardian* 08 November. Accessed 03 November

- 2019 < <https://www.theguardian.com/global-development/poverty-matters/2010/nov/08/india-aid-economic-development>>.
- Hansen, H. and F. Tarp, (2001) 'Aid and growth regressions', *Journal of Development Economics* (64)2: 547-570.
- Harford, T., M. Klein and K. Tilma (2004) 'Donor Performance: What Do We Know, and What Should We Know?', *Public Policy for the Private Sector* Note 278.
- Hirvonen, P. (2005) 'Stingy Samaritans', *Global Policy Forum*. Accessed 03 November 2019 <<https://www.globalpolicy.org/home/240-international-aid/45056-stingy-samaritans.html>>.
- Hunger, U. (2005) 'Vier Thesen zur deutschen Entwicklungshilfepolitik für Indien', *Aus Politik und Zeitgeschichte* 27/2005: 12-18.
- IBEF (2019) 'Solar energy generation in India: Lighting lives!', *IBEF Blog* 17 January. Accessed 03 November 2019 <<https://www.ibef.org/bl ogs/solar-energy-generation-in-india-lighting-lives>>.
- Imbeau, L. M. (1988) 'Aid and ideology', *European Journal of Political Research* (16): 3-28. IMF (2003) External Debt Statistics: Guide for Compilers and Users – Appendix III, Glossary, IMF: Washington DC.
- Jaishankar, D. and S. Godbole (2018) 'Aid wars: U.S.-Soviet competition in India', *Brookings* 01 March. Accessed 03 November 2019 < <https://www.brookings.edu/blog/up-front/2018/03/01/aid-wars-u-s-soviet-competition-in-india/>>.
- KfW (2008) *Annual Report 2008*. Frankfurt (a.M.): KfW Bankengruppe.
- KfW (2019) 'KfW Projektdatenbank'. Accessed 03 November 2019 <https://www.kfw-entwicklungsbank.de/Internationale-Finanzierung/KfW-Entwicklungsbank/Projekte/Projektdatenbank/index.jsp?query=*&page=1&rows=10&sortBy=relevance&sortOrder=desc&facet.filter.language=de&facet.filter.country=%22Indien%22&facet.filter.focus=%22Energie%22&dymFailover=true&groups=1>.
- KfW (2019a) 'KfW gründet Solarfonds für Indien'. Accessed 03 November 2019 <https://www.kfw-entwicklungsbank.de/Internationale-Finanzierung/KfW-Entwicklungsbank/News/News-Details_528512.html>.
- KfW DEG (2019) 'Büro Neu-Delhi'. Accessed 03 November 2019 <<https://www.deginvest.de/Internationale-Finanzierung/DEG/%C3%9Cb er-uns/Unsere-Standorte/Indien/>>.
- KfW IPEX (2009) *Annual Report 2009*. Düsseldorf: KfW IPEX.
- KfW IPEX (2012) *Annual Report 2012*. Düsseldorf: KfW IPEX.
- KfW IPEX (n.d.) 'History of KfW IPEX-Bank'. Accessed 03 November 2019 < <https://www.kfw-ipex-bank.de/About-us/History-of-KfW-IPEx-Bank/>>.
- Klingebiel, S. (2013) *Entwicklungszusammenarbeit – Eine Einführung*. Deutsches Institut für Entwicklungszusammenarbeit: Bonn.
- Kosack, S. (2003) 'Effective aid: how democracy allows development aid to improve the quality of life', *World Development* 31(1): 1-22.
- Kuziemko, I. and E. Werker (2006) 'How Much Is a Seat on the Security Council Worth? Foreign Aid and Bribery at the United Nations', *Journal of Political Economy* 114(5): 905–930.
- Lancaster, C. (2007) *Foreign aid. Diplomacy, development, domestic politics*. Chicago: University of Chicago Press.
- Löhde, A. S. K., A. Calabrò and G. Campopiano (2017) *Behavioral and Cultural Aspects of German Family Firms Internationalizing to China and India*. KfW DEG and WIFU: Witten Herdecke.
- Lüdeke, C. and T. Aufmolkolk (2017) 'Deutsche Entwicklungshilfe'. Accessed 03 November 2019 <<https://www.planet-wissen.de/schaft /wirtschaft/deutsche-entwicklungshilfe/index.html>>.
- Mariappan, J. (2019) 'Tamil Nadu receives Rs 1,600 crore loan from German aid agency', *Times of India* 27 September. Accessed 03 November 2019 <<https://timesofindia.indiatimes.com/city/chennai/tamil-nadu-receives-rs-1600crore-loan-from-german-aid-agency/articleshow/71319 544.cms>>.
- McKinlay, R. D. (1978) 'The German Aid Relationship: A Test Of The Recipient Need And The Donor Interest Models Of The Distribution Of German Bilateral Aid 1961 -70', *European Journal of Political Research*, 6 (1978): 735-257.
- Mezger, S. (2007) 'Determinanten der Höhe staatlicher Entwicklungshilfe', diploma thesis. Konstanz: KOPS.
- Ministry of External Affairs (2017) 'Foreign Aid Received By India In The Last Ten Years', Annexure-III to Question No.3245 Foreign Aid, Lok Sabha 22 March. Accessed 03 November 2019 < <https://mea.gov.in/Images/attach/ANNEXURE.111.lu3245.pdf>>.
- Mohinga (n.d.) 'KfW Entwicklungsbank'. Accessed 03 November 2019 < <https://mohinga.info/en/profiles/organisation/KfW/>>.
- Morgenthau, H. (1962) 'A Political Theory of Foreign Aid', *American Political Scientific Review* 56 (02): 301–309.
- Moyo, D. (2010) *Dead aid. Why aid is not working and how there is a better way for Africa*. New York: Farrar, Straus and Giroux.
- Nath, S. and S. K. Sobhee (2007) 'Aid Motivation and Donor Behavior', *American Review of Political Economy* 5(1): 1-13.
- Nuscheler, F. (2006) 'Entwicklungszusammenarbeit'. Accessed 03 November 2019 <<http://www.bpb.de/apuz/30079/wie-geht-es-weiter-mit-der-entwicklungspolitik?p=all>>.
- OECD (2015) *OECD Peer Review Germany*. OECD Publishing: Paris.
- OECD (2019) 'OECD Stats'. Accessed 04 November 2019 < <https://stats.oecd.org/>>.
- OECD (2019a) 'What is ODA?'. Accessed 04 November 2019 <<https://www.oecd.org/dac/stats/What-is-ODA.pdf>>.
- Pedrosa-Garcia, J. A. (2017) 'Trends an Features of Research on Foreign Aid: A Literature Review', Munich Personal RePEc Archive (MPRA) Paper No. 82134.
- Radelet, S. (2006) 'A Primer on Foreign Aid', SSRN Journal Working Paper No. 92.
- Rajan, R.G. and A. Subramanian (2011) 'Aid, Dutch disease, and manufacturing growth', *Journal of Development Economics* 94(1): 106-118.
- Rostow, W. (1960) *The Stages of Economic Growth: A Non-Communist Manifesto*. Cambridge: Cambridge University Press.
- Sachs, J. (2006) *The end of poverty. Economic possibilities for our time*. London: Penguin Books.
- Sachs, W. (ed.) (2005) *The development dictionary. A guide to knowledge as power*. 11. impression. Johannesburg: Witwatersrand Univ. Press.
- SAP (2018) *Better India with SAP Smart Cities Solutions*, 20 June. Accessed 12 November 2019 <<https://www.youtube.com/watch?v=sj6DFyRL 5zA>>.
- SAP (n.d.) 'About SAP India'. Accessed 03 November 2019 <<https://www.sap.com/india/about.html>>.
- Saran, S. (2014) 'India's Foreign Aid: Prospects and Challenges'. Harvard University, Cambridge, 16.02.2014.
- Schrade, C. (1997) 'Machtstaat, Handelsstaat oder Zivilstaat', *Zeitschrift für Internationale Beziehungen* 4(2): 255-294.
- Schröder, P. J., S. W. Hook and B. Taylor (1998) 'Clarifying the Foreign Aid Puzzle: A Comparison of American, Japanese, French, and Swedish Aid Flows', *World Politics* 50(2): 294-323.
- Sethi, A., J. Gott and V. Suman (2019) 'The 2019 A.T. Kearney Global Services Location Index'. Accessed 03 November 2019 < <https://www.atkearney.com/digital-transformation/gsl/2019-full-report>>.
- Shah, A. (2014) 'Foreign Aid for Development Assistance', *Global Issues* 28 September. Accessed 03 November 2019 <<http://www.globalissue s.org/article/35/foreign-aid-development-assistance>>.
- Siemens (2017) 'Siemens übernimmt die elektrotechnische Installation und Netzanbindung von zwei Photovoltaik-Kraftwerken.' Accessed 03 November 2019 <<https://www.siemens.com/press/pool/de/pressemitteilungen/2017/energymanagement/PR2017110071EMDE.pdf>>.
- Siemens (2017a) 'Siemens to manufacture new generation of photovoltaic inverters in India'. Accessed 03 November 2019 <http://www.siem ens.co.in/en/news_press/index/siemens-to-manufacture-new-generation-of-photovoltaic-inverters-in-india.htm>.
- Solow, R. M. 1956 'A Contribution to the Theory of Economic Growth', *The Quarterly Journal of Economics*, 70(1): 65-94.
- Stamm, A. (2004) 'Schwellen- und Ankerländer als Akteure einer globalen Partnerschaft. Überlegungen zu einer Positionsbestimmung aus deutscher entwicklungspolitischer Sicht', *DIE Discussion Paper* 1/2004. Bonn: Deutsches Institut für Entwicklungspolitik
- Statista Research Department (2019) 'Anteil der Wirtschaftssektoren an der Nettowertschöpfung in Deutschland 1850-1989'. Accessed 03 November 2019 <<https://de.statista.com/statistik/daten/studie/250092/umfrage/anteil-der-wirtschaftssektoren-an-der-nettowertschoepfung-in-deutschland/>>.
- Statista Research Department (2019a) 'Anteil der Wirtschaftsbereiche an der Gesamtbeschäftigung in der Bundesrepublik Deutschland von 1950 bis 2018'. Accessed 06 November 2019 <<https://de.statista.com/statistik/daten/studie/275637/umfrage/anteil-der-wirtschaftsbereiche-an-der-gesamtbeschaeftigung-in-deutschland/>>.
- Stone, R. W. (2010) 'Buying Influence: Development Aid between the Cold War and the War on Terror'. University of Rochester.
- Swan, T. W. (1956) 'Economic Growth and Capital Accumulation', *Economic Record* 32(2): 334-361.
- Terre des hommes, Deutschland e. V. & Deutsche Welthungerhilfe e. V. (eds.) (2019) *Kompass 2019*. Bonn: Offset-Druck Schönesenfen.

- The Hindu (2019) 'Germany to invest 1 billion for green urban mobility in India', 04 November. Accessed 04 November < <https://www.thehindu.com/news/national/germany-to-invest-1-billion-for-green-urban-mobility-in-india/article29862342.ece> >.
- Unger, C. (2012) 'Export und Entwicklung: Westliche Wirtschaftsinteressen in Indien im Kontext der Dekolonisation und des Kalten Krieges' in Ziegler, D. (ed.) *Jahrbuch für Wirtschaftsgeschichte / Economic History Yearbook* pp. 69–86.
- Unger, C. (2015) *Entwicklungspfade in Indien. Eine internationale Geschichte 1947-1980*. Göttingen: Wallstein Verlag.
- United Nations (n.d.) UN Comtrade Database. Accessed 04 November 2019 <<https://comtrade.un.org/>>.
- Veltmeyer, H. and J. Petras (2005) 'Foreign Aid, Neoliberalism and US Imperialism' in Johnston, D. and A. Saad-Filho (eds.) *Neoliberalism. A critical reader*. London: Pluto Press.
- Vreeland, J. R. (2011) 'Foreign aid and global governance: Buying Bretton Woods – the Swiss-bloc case', *The Review of International Organizations* 6(3-4): 369-391.
- Whitney, S. and R. Mohanty (2013) 'Germany's private climate finance support: Mobilising private sector engagement in climate compatible development', Overseas Development Institute Background Note February 2013.
- World Bank (2019) 'World Bank Open Data'. Accessed 04 November 2019 <<https://data-worldbank-org.eur.idm.oclc.org/>>.
- World Bank (2019a) 'Industry (including construction), value added (% of GDP) – Germany'. Accessed 04 November 2019 <<https://data-worldbank-org.eur.idm.oclc.org/indicator/NV.IND.TOTL.ZS?locations=DE>>.
- World Bank (2019b) 'Manufacturing, value added (% of GDP) - Germany'. Accessed 04 November 2019 <<https://data-worldbank-org.eur.idm.oclc.org/indicator/NV.IND.MANF.ZS?locations=DE>>.
- Ziai, A. (2007) *Globale Strukturpolitik? Die Nord-Süd-Politik der BRD und das Dispositiv der Entwicklung im Zeitalter von neoliberaler Globalisierung und neuer Weltordnung*. Münster: Westfälisches Dampfboot.