Turun yliopisto
University of Turku

ABSTRACT

x	Master´s thesis
	Licentiate´s thesis
	Doctor´s thesis

Subject	Supply Chain Management & Operations	Date	14.11.2017
Author(s)	Oskari Rankamo	Student number	503617
		Number of pages	81 p. + appendices
Title	Transport and ICT sectors in Finnish development cooperation		
Supervisor(s)	D.Sc. Lauri Ojala, D.Sc. Sini Laari.		

Abstract

Many western economies are facing budget cuts and the funds indicated for development cooperation have been under public scrutiny. This has led to debate that country´s development cooperation should provide more opportunities for donor´s private sector while carrying out more traditional development objectives. The purpose of this thesis is to analyze private sector involvement in Finnish development cooperation´s transport and ICT sectors from donor country perspective.

The study is conducted as a qualitative research. The analytical framework is focused on the nature of transport and ICT projects in general and mechanisms, roles and operators of the projects in these sectors. Additionally transport and ICT capabilities and needs in developing countries and role of transport and ICT investments for economic and social development are explored. The empirical data meanwhile is constructed from Finnish expert interviews as primary source and evaluation reports of development cooperation as a secondary source. The interviews are concluded as theme interviews, which enables flexible and dialogical discussion. Empirical research contains also chapter for Dutch and Danish development cooperation in transport and ICT sectors as Finnish cooperation and private sector participation were compared to these European comparison countries.

The findings of this study indicate that Finnish development cooperation is not extensive on transport and ICT sectors and the objectives for Finnish private sector participation in the development policies of the Ministry for Foreign Affairs of Finland are basically none. The promotion of Finnish private sectors is mostly directed to national agencies such as Finnpartnership, Finnfund and Finpro. These are funded totally or partly by government funding.

Finland seems to lag behind Dutch and Danish on how donor country private sector participation is being viewed as a fundamental part of the development policy itself. Finnish development cooperation seems to be heading to the direction were even more multilateral aid is being promoted and this could signify lesser influencing opportunities for the small country such as Finland. The study though suggests that there would be significant need and opportunities for Finnish expertise in transport and ICT sectors in developing countries.

Key words	Development cooperation, private sector, transport, ICT
Further information	

Turun yliopisto
University of Turku

TIIVISTELMÄ

x	Pro gradu -tutkielma
	Lisensiaatintutkielma
	Väitöskirja

Oppiaine	Toimitusketjujen johtaminen	Päivämäärä	14.11.2017
Tekijä(t)	Oskari Rankamo	Matrikkelinumero	503617
		Sivumäärä	81 s. + liitteet
Otsikko	Liikenne- ja ICT-sektorit Suomen kehitysyhteistyössä		
Ohjaaja(t)	KTT Lauri Ojala, KTT Sini Laari		

Tiivistelmä

Julkisen sektorin kustannuksia on leikattu useissa länsimaissa ja kehitysyhteistyöhön suunnatut määrärahat ovat monissa maissa olleet keskustelun ja kritiikin kohteina. Tämä on osittain johtanut julkiseen keskusteluun siitä, että kehitysyhteistyön tulisi tarjota perinteisten kehitystavoitteiden lisäksi esimerkiksi liiketoimintamahdollisuuksia lahjoittajamaalle. Tämän tutkielman tarkoituksena on analysoida lahjoittajamaan näkökulmasta suomalaisen yksityisen sektorin osallistumista Suomen kehitysyhteistyöhön liikenne- ja ICT-sektoreilla.

Tutkimus suoritettiin laadullisena. Analyyttinen viitekehys koostuu liikenne- ja ICT sektorien projektien tarkastelusta yleisellä tasolla sekä niiden mekanismeista, roolista ja osallistujista. Lisäksi tutkitaan kehitysmaiden liikenne- ja ICT-sektorien nykyistä kyvykkyyttä ja tarpeita sekä liikenne- ja ICT-sektorien investointien vaikutusta maan taloudelliseen ja sosiaalisen kehitykseen tutkitaan. Empiirinen tiedonkeräys on toteutettu käyttäen asiantuntija-haastatteluita ensisijaisena tiedonlähteenä ja arviointiraportteja toissijaisena tiedonlähteenä. Haastattelut on tehty teemahaastatteluina, mikä mahdollistaa joustavan ja vuorovaikutteisen haastattelutilanteen. Empiirinen osuus sisältää myös omat kappaleensa Alankomaiden ja Tanskan kehitysyhteistyöstä liikenne- ja ICT-sektoreilla. Suomalaista kehitysyhteistyötä ja lahjoittajamaan yksityisen sektorin osallistumista on verrattu näihin eurooppalaisiin verrokkimaihin.

Tutkimuksen tulokset osoittavat, että suomalainen kehitysyhteistyö liikenne- ja ICT sektoreilla on hyvin pienimuotoista, ja ulkoministeriön harjoittama kehityspolitiikka ei sisällä käytännössä ollenkaan tavoitteita suomalaisen yksityisen sektorin osallistamiseksi. Suomalaisen yksityisen sektorin promootio on pitkälti osoitettu suomalaisille julkisjärjestöille kuten Finnpartnershipille, Finnfundille ja Finprolle. Finnfundia lukuun ottamatta nämä ovat kokonaan julkisrahoitteisia.

Suomi vaikuttaisi olevan Alankomaiden ja Tanskan perässä lahjoittajamaan yksityisen sektorin osallistamisessa ja siinä, miten olennaisena osana tämä nähdään kehityspolitiikkaa. Suomalainen kehitysyhteistyö näyttää siirtyvän entistä enemmän monenväliseen tukeen, mikä voi vähentää suomalaisten vaikuttamismahdollisuuksia entisestään kehitysyhteistyö-varojen käytöstä. Tutkimus kuitenkin osoittaa että suomalaiselle osaamiselle liikenne- ja ICT-sektoreilla olisi merkittävää kysyntää kehitysmaissa.

Asiasanat	Kehitysyhteistyö, yksityinen sektori, liikenne, tieto-ja viestintäteknologia
Muita tietoja	

Turun yliopisto
University of Turku

TRANSPORT AND ICT SECTORS IN FINNISH DEVELOPMENT COOPERATION

Analyzing the private sector involvement from donor perspective

Master´s Thesis
in Supply Chain Management & Operations

Author:
Oskari Rankamo - 503617

Supervisors:
D.Sc. Lauri Ojala
D.Sc. Sini Laari

14.11.2017
Turku

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF ABREVIATIONS

ADB = Asian Development Bank
AfDB = African Development Bank
AfDF = African Development Fund
AfT = Aid for Trade
AIIB = Asian Infrastructure Investment Bank
BMZ = German Ministry for Economic Cooperation and Development
BPS = Business Partnership Support (Finnpartnership)
DAC = Development Assistance Committee
DDP = Digital Development Partnership
DRIVE = Development Related Infrastructure Investment Vehicle (Ministry of Foreign affairs of the Netherlands)
EBRD = European Bank for Reconstruction and Development
EIB = European Investment Bank
EVD = Dutch Agency for International Business and Cooperation
FDI = Foreign Direct Investment
GDP = Gross Domestic Product
GNI = Gross National Income
GSMA = Global Systems Mobile Association
HDI = Human Development Index
IBRD = International Bank for Reconstruction and Development
ICT = Information and communications technology
ICT4D = Information and communication technologies for development
IDA = International Development Association
IDB = Inter-American Development Bank
IFI = International Finance Institution
ILO = International Labour Organization
ITU = International Telecommunication Union
LDC = Least Developed Country
LPI = Logistics Performance Index
MDTF = Multi-Donor Trust Funds
MFA = Ministry for Foreign Affairs of Finland
MMF = Matchmaking Facility (Ministry of Foreign Affairs of Netherlands)
NDB = New Development Bank
NRI = Network Readiness Index
NGO = Non-governmental Organization
ODA = Official development assistance
OECD = Organization for Economic Co-operation and Development

ORET = The Development-Related Export Transactions programme (Netherlands Enterprise Agency)
ORIO = The Development-related Infrastructure Facility (Netherlands Enterprise Agency)
PPDP = Public Private Development Partnership
PPP = (here) Public-private partnership
PSI = Private Sector Investment Programme (Ministry of Foreign Affairs of the Netherlands)
SDG = Sustainable Development Goals (United Nations)
SIDA = Swedish International Development Cooperation Agency
UN = United Nations
WTO = World Trade Organization

1 INTRODUCTION

1.1 Defining infrastructure, development cooperation and their relevant concepts

American business tycoon Michael Bloomberg has stated that it's only possible to create good jobs with smarter investments in infrastructure (New Jersey Politics 27.7.2016). Furthermore McKinsey Global Institute (2013) has estimated that the world needs to scale up infrastructure investment by nearly 60 percent to sustain anticipated economic growth globally. Transport infrastructure would account considerable amount of 42 percent and ICT sector 17 percent from the total required investment.

Infrastructure is a term that creates mental images for everyone. Yet because the definition of infrastructure is so broad, it can easily be challenging to offer comprehensive definition for infrastructure. Even though studies about the impact of infrastructure for economic growth and productivity have been realized, the infrastructure's definition and classification has received less attention (Romp & Haan 2007, 8-9). Attempts have been made by various national entities, financial community, dictionaries, states and municipalities. Almost all of the aforementioned divide infrastructure by the following key characteristics: Interrelated systems, physical components and social needs (Fulmer 2009, 30). Additionally these key characteristics can be further down categorized as "hard" and "soft" infrastructure.

Interrelated systems are defined as systems that attach society to indispensable commodities and are necessary to uphold or improve the standards of living. These include primary infrastructure sectors like transport, electricity, oil and gas, edible and waste water as well as communications.

Physical components meanwhile are physical links and nodes of networks that can be built, touched, enabled and disabled. For example it would be nearly impossible for a seaport to function properly without supporting infrastructure components such as container yards, wharfs, warehouses etc. (Fulmer 2009, 30-31)

Trade facilitation is a term that gets linked often with infrastructure. Organization for Economic Co-operation and Development (OECD) describes trade facilitation as following: *"Trade facilitation covers all the steps that can be taken to smooth and facilitate the flow of trade"* and highlights equipment and infrastructure as the most costly components of trade facilitation (OECD 2005, 5). Portugal-Perez and Wilson (2010, 2-8) meanwhile divided trade facilitation to four different dimensions from which two are related to "hard" dimension and two for "soft" dimension. "Hard" dimension includes 1) physical infrastructure and 2) information and communications technology (ICT) whereas "soft" dimensions are 3) border and transport efficiency and

4) the business and regulatory environment. In trade facilitation, interrelated systems and physical components often get categorized as hard infrastructure since this sort of infrastructure is tangible (Portugal-Perez & Wilson 2010, 2-3)

Societal needs meanwhile describe how interrelated systems and physical components have to be designed to address social needs in order to be categorized as *infrastructure*. Building infrastructure systems is expensive and time-consuming and their focus under normal circumstances is not in individuals, restricted groups or separate companies but on broader society. Clear evidence about society´s dependency on infrastructure are natural catastrophes which have disrupted the whole infrastructure system and therefore commodity flow (Fulmer 2009, 32). Additionally the term "social infrastructure" is used to describe buildings, structures and facilities which are specifically constructed to serve the community at large. Primary examples of social infrastructure would be schools, hospital and community facilities (Han, Yusof, Hai & Ismail 2012). Economic infrastructure is a broader definition that is used throughout this study when categorization for either transport or ICT is not available for the lack of adequate data, which is often a case. Economic infrastructure promotes economic activity and includes electricity, water supply, sanitation etc. in addition to transport and ICT infrastructure (Fourie 2006, 531).

Physical infrastructure measures the level of development and quality of ports, airports, roads and rail infrastructure, alongside with energy lines and water refineries. Information and communications technology (ICT) is interpreted as the extent to which an economy uses information and communication technology to develop efficiency, and productivity as well as to reduce transaction costs. Meanwhile border and transport efficiency targets to define the level of efficiency of customs and domestic transport that can be measured by cost, time and number of documents that are necessary for exporting and importing. Business and regulatory environment signify the level of development of regulations and transparency. Key indicators include irregular payments, government transparency, favoritism and measures to fight against corruption (Portugal-Perez & Wilson 2010, 2-8).

As stated, infrastructure is extremely broad concept and for the subject of this study it is necessary to review some important sub-concepts and fine-adjust some definitions that have already been revised in this Chapter. This study is primary focused on transport and ICT infrastructure and therefore excludes some parts of interrelated systems and hard infrastructure such as energy and water, even though they are time to time involved indirectly through economic infrastructure. Trade facilitation is included since this is very relevant outcome of transport and ICT infrastructure investments to investigate. In this thesis, the concept of infrastructure comprises both the "hard" and "soft" infrastructure. "Hard" in a sense such as roads or communication lines etc. and "soft" in a sense such as transport or ICT policy and legislation.

Development policy in the context of this study is understood as funds and aid directed from developed countries to developing countries with objective of reducing poverty, inequality and to promote sustainable development. Typically development policy is practiced and managed under a country´s ministry of foreign affairs. This is the case with the comparison donor countries. There are various different definitions and no universally agreed-upon criteria of how a developing country or least-developed countries are defined, whether is by Human Development Index (HDI), GDP per capita, GNI per capita or something else. In this study, the listing of International Monetary Fund (2015) serves as a guideline as it makes clear division between 37 advanced economies and 152 developing countries, simplifying the definition for the purposes of this study.

Development cooperation is a broad concept but Alonso and Glennie (2015) have defined it as a activity which has a objective to support national or international development priorities that are not driven by profit and is based on cooperative relationships that pursue to improve developing country ownership. Aid for trade is a term with a similar basic idea than development cooperation but the objectives are more concentrated to build trade capacity and infrastructure for developing countries. In many instances these definitions overlap each other, hence in this study they are used simultaneously.

Ministries of foreign affairs commonly also have various national institutions which are devoted for the promotion of a particular cause or program. Usually these institutions are funded completely, or by partially by development cooperation funds and their objectives share development cooperation and aid for trade objectives. This study focuses on institutions that are concentrated or associated with private sector involvement, these institutions from the comparison donor countries are present in empirical part of the study. In this context private sector involvement means the participation of private sector in projects of the government. However, on many occasions government has the role of serving as an intermediate and facilator between two private sector companies from a donor country and from a developing country.

In the public and private sector co-operation the term public-private partnership (PPP) is essential. The World Bank (2015) defines PPP as a long-term contract between a private party and a government entity. Public institution provides a public asset or service, in which the private party bears significant risk and management responsibility while remuneration is linked to performance.

1.2 The objective and structure of the study

The main objective of this study is to analyze Finnish private sector involvement and its role in Finnish development cooperation´s transport and ICT sectors. Research questions are following:

- What is the nature of the transport and ICT cooperation, investments and projects and their implications?
- What are the possible instruments and mechanisms for the development cooperation and their key characteristics?
- What is the state and role of transport and ICT development for the developing countries?
- Is it possible for Finland to benchmark European comparison countries and their results in private sector involvement in development cooperation and in transport and ICT sectors?

The nature of transport and ICT cooperation, investments and projects as well as instruments and mechanisms for development cooperation in general are revised in Chapter 2. The objective is to understand what is the scale and characteristics of these projects and what are the implications for the division between hard and soft infrastructure. The possible instruments and mechanisms for development cooperation are also reviewed to understand the concepts and to obtain comprehension of the operators such as international financial institutions (IFIs), Non-Governmental Organizations (NGOs) and multi-donor trust funds in transport and ICT projects. Research questions also widen the range to lift the discussion to economic and social benefits of transport and ICT sectors. This is important as financed development cooperation projects typically have to fulfill certain economic and social objectives. It is understandable and totally reasonable that development cooperation in general has many different social and economic development objectives and the magnitude of business opportunities and economic benefits for the donor country get seldomly mentioned, even though this varies greatly depending of a donor country. In later part of this study two European comparison countries, Netherlands and Denmark are compared against Finland in transport and ICT development cooperation and private sector participation to see whether Finland would have benchmarking opportunities from these two larger European economies.

The study is very actual in the current time and space. Finnish development cooperation is going through the largest decreases in its funding since early 1990's depression. Finnish economy has been stagnated since the financial crisis and it saw three consecutive years of constriction between 2012 and 2014 with the outlook for 2017 being slightly more positive. However, the poor economic performance and

continuously increasing public debt has put tremendous pressure for the government to make budget cuts in which development cooperation has not been an exception. At the same time the effectiveness of development policy and cooperation has been questioned. For example The Minister for Foreign Affairs Timo Soini stated last year when announcing the development funding cuts that “We can´t take new debt until forever to aid other countries” and that “Trade policy of Ministry of Foreign Affairs of Finland is in its infancy compared to development policy even though money is made with trade” (Iltasanomat 24.8.2015; Helsingin Sanomat 18.12.2013).

While development cooperation funding is facing cuts, the Finnish exports have also seen a steep drop of 18 percent between 2007 and 2015 and the balance of trade turned negative in 2011 for the first time since the early 1990’s (Statistics Finland 2016). The loss of this amount in Finnish export´s is a huge blow for the country with small economy that is very dependent on foreign trade. The most recent figures in 2017 however have seen the 20 percent increase in exports compared to 2016, this is mostly achieved from EU market where the exports increase has been the fastest growing. Finnish Ministry of Foreign Affairs of Finland has already stated and hinted that the economic benefits and collaboration with private sector will have a more strategic role in the development policy and cooperation in the future. Transport and ICT projects might play a larger role of future development cooperation since they are one of the key factors of the economic infrastructure. Therefore it is relevant and very actual to find out how these sectors can support the social and economic development of a country and what´s the possible private sector involvement and commercial benefit that could be acquired through development cooperation. The following Figure demonstrates the structure of the study.

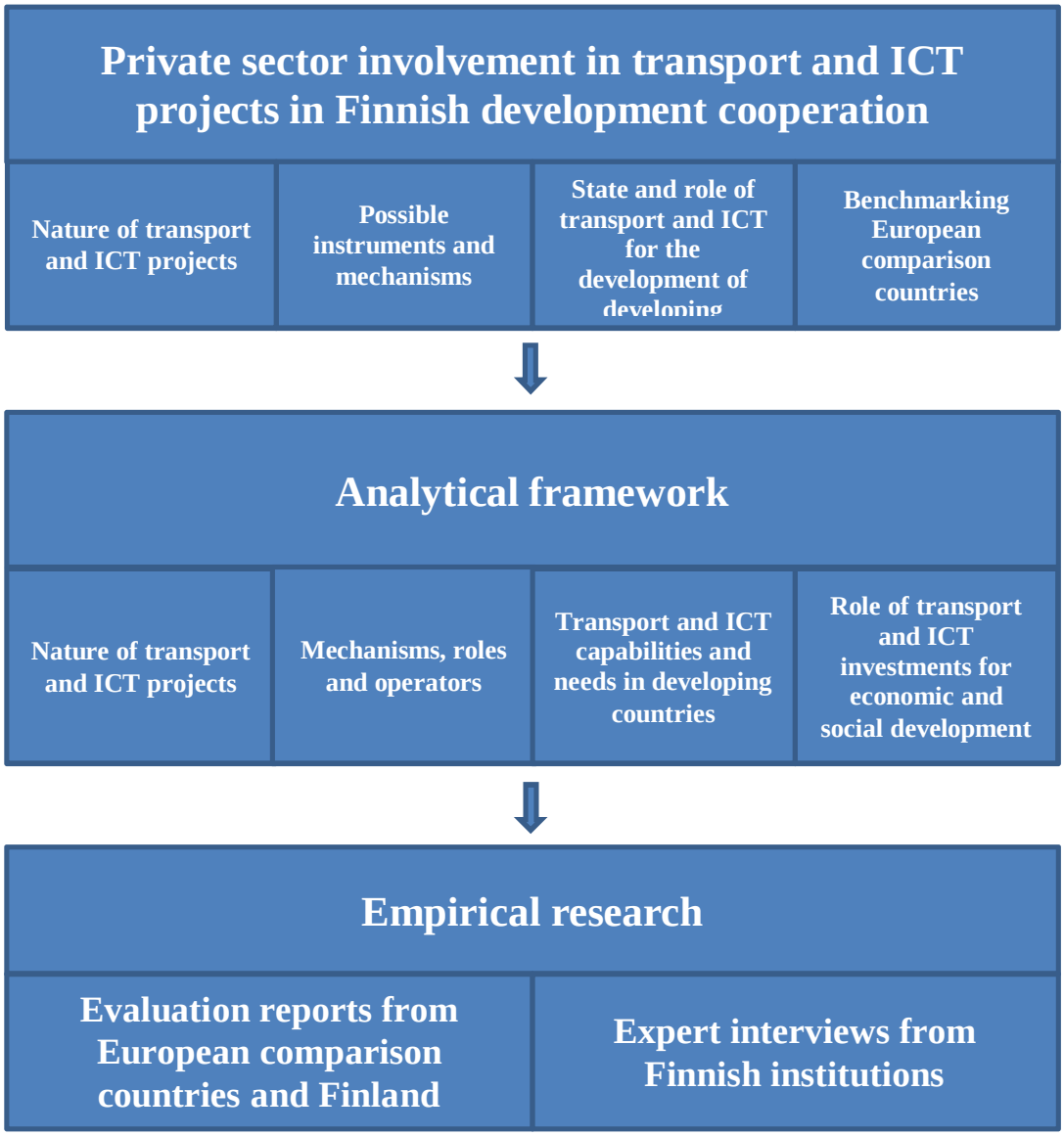

Figure 1 The structure of the study

As mentioned, the main theme of the study is private sector involvement in transport and ICT projects in Finnish development cooperation. The chapters 2 and 3 are focused to examine the operational environment of the projects and investments in these sectors. These chapters provide an understanding about the nature of the transport and ICT projects, multilateral possibilities to practice development cooperation and a brief overview of transport and ICT capabilities and needs in developing countries. In addition why and how these sectors are relevant from economic and social point of views is also examined.. Empirical research comprises from evaluation reports and expert interviews from Finnish institutions. Additionally Dutch and Danish transport and ICT cooperation´s private sector involvement is reviewed through reports from government entities and third-party facets.

1.3 Limitations of the study

Scope of this study is limited to transport and ICT sectors. Picking of these two sectors made sense because both are primary infrastructure sub-sectors and this is supply chain management and operations thesis, Finland has a well recognized know-how over ICT and the World Bank frequently applies these two sectors jointly. Limiting the sectors to two seemed appropriate as it would not be convenient giving the time and space to study the whole scope of Finnish development cooperation sectors. However this thesis tries to examine both hard and soft infrastructure aspects of the aforementioned sectors. As examined in the further chapters, transport is one of the largest sectors among

IFIs, NGOs and PPPs. Transport however is rarely emphasized in Finnish development cooperation even though the sector has a profound effect as an employer and trade facilitator. ICT sector meanwhile is relatively new player in development cooperation and still has a minor role in the agendas of multilateral organizations and donor countries. As Finland is one of the world leaders in ICT expertise it is interesting to see how the country has or could capitalize and transfer this knowledge through Finnish private companies to developing countries. For European comparison countries, scope is limited for two: the Netherlands and Denmark. Once again, selection of more than two would have made the studying of comparison countries too superficial. The Netherlands and Denmark were seen as relevant choices as both are a bit larger economies than Finland and they have longer and perhaps more developed private sector involvement practices in their respective development cooperation.

Functional limitation of the study are development cooperation and aid for trade of Finland, European comparison countries and their key national institutions. Criteria is that the financing comes from state and primarily from development cooperation funding. There are few expections with business-to-business programmes and development finance companies such as Finnfund. Their role as private sector involvement catalysts in developing countries for private sector companies is undeniable even though their financing does not come directly from the funds directed for development cooperation. For example, Finnfund´s funding is not entirely covered by public funding.

Some key national institutions like Finpro and and Finnish Funding Agency for Innovation (Tekes) were primarily left outside the study, because they do not have similar development objectives that the selected institutions carry. It has to be noted however that they are important operators for the promotion of Finnish exports around the world. Finpro promotes international business operations and finds business leads for Finnish companies while Tekes gives funds to transform Finnish research-stage ideas into viable business. Tekes is part of Finnish Ministry of Employment and the unlike other Finnish national institutions named in this study.

Geographically there is not limitation to one specific region or continent but rather all the developing countries that are on the receiving end of development cooperation funding in transport and ICT sectors. Temporal limitations were not also necessary as overwhelming majority of the examples and projects are set in the 21st century quite naturally.

1.4 The earlier studies

Studies about Finnish development cooperation are predominantly solely focused on different case studies and different reports of Ministry for Foreign Affairs of Finland and professional service companies such as Finnish Consulting Group and KPMG. While these sort of reports delve profoundly to the development cooperation they can not be regarded scientific and are simultaneously mostly statistical while also written from the stakeholder´s point of view without insightful empirical research. Development cooperation in general has been an important part of the foreign policies for most of the western countries in the last half century. Hence there is a lot of investigation about development policies, the instruments and results both in literature and in the form of reports by institutions such as OECD.

There are considerable amount of studies focused on infrastructure and public policies. Nonetheless when the scope is more particularized to transport and ICT projects alongside with development cooperation the amount of studies decreases. Furthermore when donor country private sector participation and benefits are included, the literature is almost impossible to find. It seems that this sort of research about the small donor country such as Finland and its development cooperation for specific economic infrastructure sectors and their private sector involvements have not been made. In addition, the literature is rarely conducted by in-depth qualitative interviews, but rather it is more concentrated on examining large amount of statistics and more often than not with quantitative methods. Some selected earlier studies are presented in Appendix 1 and the list contains sources that are used as both theoretical and empirical material in this study.

2 THE NATURE OF THE TRANSPORT AND ICT COOPERATION AND PROJECTS

This Chapter focuses on different mechanisms, roles and operators of how transport and ICT cooperation and investments are operated in practice. For a donor country´s development cooperation, there are many different approaches available such as bilateral cooperation between the donor and the recipient, NGOs and private sector inclusion which are all addressed in this Chapter. In addition, various financial institutions have their own significant role in financing the infrastructure projects in developing countries. As mentioned in Chapter 1, aid for trade is a common term for development cooperation that is aimed to strengthen the productive capacity, ability for foreign trade, achieve sustainable economic growth and reduce poverty of developing countries. It is important to acknowledge that around 66 to 75 per cent of aid for trade projects are implemented in the form of bilateral agreements between bilateral development partners and the remains by international organizations or multilateral donors. However the role of financial institutions is significant for providing so-called other official funds which does not necessary meet the requirements of official development assistance. Moreover only less than 25% of these funds are in the form of grants (OECD/WTO 2015).

One of the objectives of this thesis is to assess different instruments and characteristics for Finnish development cooperation in transport and ICT projects. In this Chapter these instruments are reviewed in global scale and later will be compared for Finland´s case, they are also noted in the evaluation of different practices of the European comparison countries. The following chapters are divided between transport and ICT separately but transport focused Chapter also includes a general overview of the theme in question.

2.1 Mechanisms, roles and operators in transport

Economic infrastructure and more specifically transport and storaging is by far the most funded category in aid for trade projects globally. The funds for transport and storage sector have seen significant growth from USD 9,516 million average between 2009 and 2011 to USD 13,091 million in 2013 (OECD/WTO 2015). Gogelia and Talvitie (2011, 780-782) described transport development projects characteristically especially challenging because of the complexity and the fact that everything is connected to everything else. The following Figure of general framework for donor assistance transport projects provides a model to understand how these projects are managed

between donor and recipient countries and to demonstrate what sort of resources are needed from both parties.

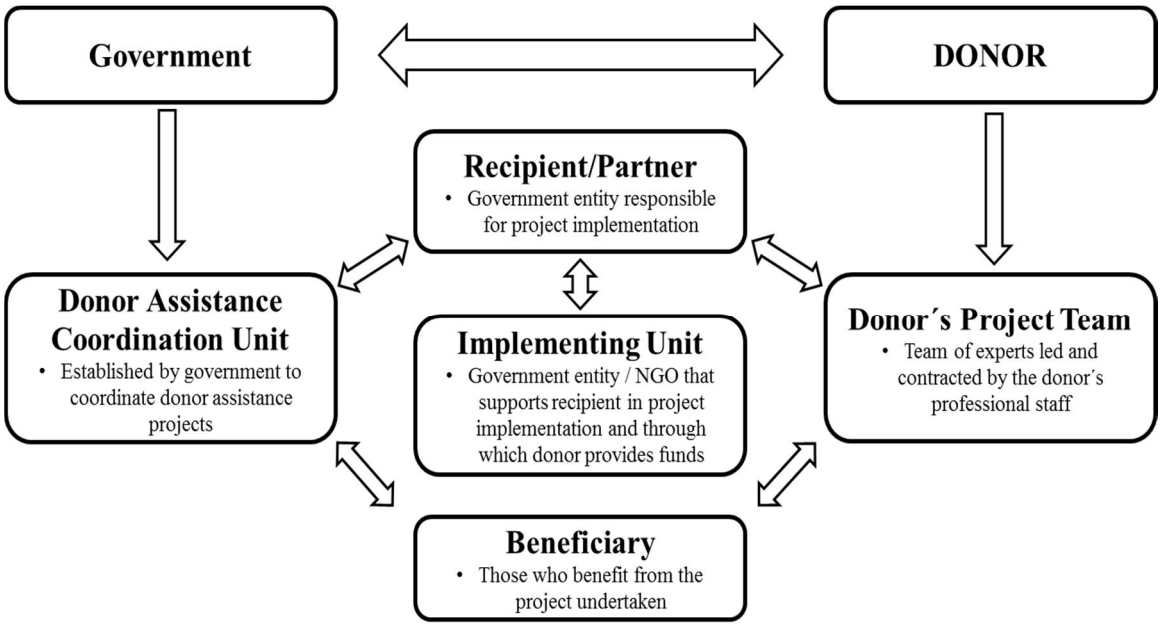

Figure 2 General framework chart for donor assistance transport project management/coordination (Gogelia & Talvitie 2011).

Gogelia and Talvitie (2011, 781) remind that in many cases one or some of the operators displayed in Figure 2 may not exist at all. For example Donor Assistance Coordination Unit or similar operators may be combined for e.g. such as recipient organization and implementing unit. However the authors put a lot of emphasis on recipient country´s responsibility of the outcomes of the cooperation and competence of the recipient country´s entities. They emphasize that the lack of local capacity is the main reason why development projects are often seen as challenging. However the donor´s responsibility to provide the appropriate technical assistance for the developing country when needed is stressed also.

In Chapter 1.1, the terminology and the differences of hard and soft infrastructure were addressed explicating hard infrastructure as physical objects such as roads, ports, airports or even computers and broadband transmitters in ICT while soft infrastructure as institutions and policy making. Curiously Gogelia and Talvitie (2011, 790-791) articulate that in most cases soft infrastructure transport projects such as development of specific industry, ministry or state agency are short-term initiatives and meanwhile

activities that contribute to long-term results are not prioritized. Furthermore the studies such as the World Bank´s (2007) demonstrate that the objectives of hard infrastructure projects are achieved, even with delays, at considerably higher rate that the soft infrastructure projects where institutions are developed. Positive foreign capital effect of soft infrastructure is also notified. However, when examining the economic effects between the hard and soft infrastructure, the literature proposes divergent results. Fung, García-Herrero, Iizaka and Siu (2006, 19) studied the effects of hard infrastructure and soft infrastructure investments for Chinese foreign direct investment (FDI) from U.S, Japan, Hong Kong, Taiwan and South Korea between 1990 and 2002. The results were superior for soft infrastructure in almost all studied cases. Soft infrastructure was shown to attract more foreign capital than hard infrastructure and the authors proposed that for developing economies which are interested to draw out more FDI market reforms appear to be a better alternative.

2.1.1 International financial institutions and non-governmental organizations

The significance of international financial institutions (IFI) and non-governmental organizations (NGO) for development cooperation and aid for trade is unquestionable and transport sector is no exception. In addition to traditional development cooperation and aid for trade it is estimated that there is around USD 190,400 million other official funds which are mostly funded by IFIs, with 80 percent share dividing into building production capacity with 52 percent share and economic infrastructure with 47 percent share. Transport is one of the principal sub-sectors of economic infrastructure with ICT to a lesser degree (OECD/WTO 2015).

Perhaps the most well-known IFI in the world is the World Bank Group. This establishment is significant financier in transport sector as well. In 2013, the institution provided infrastructure lending, technical assistance and advisory services for the transport sector and the commitments for 202 active projects in 2016 which amounted USD 42,600 million (Transportation overview: Strategy 2017). Development of rural and inter urban roads in every continent makes up the largest subsector of funding, however it has to be notified that institutional reforms and capacity building typically have the largest share of development funds. This is an interesting observation considering how Gogelia and Talvitie (2011) notified the challenges of soft infrastructure development projects and argued against the effectiviness of soft infrastructure projects. The World Bank is also focused on large-size projects with the average of USD 70 million for infrastructure projects in 2011. This rate has doubled from 2008. Strategically the institution has shifted its focus towards turning the

resources into fewer but larger projects meaning decrease in the total projects (World Bank 2015).

In addition to truly global financial institutions there are development and investment banks for specific regions and continents. In Africa, African Development Bank (AfDB) contributes to the economic development and social process of African countries and is a financial provider for both African governments and private companies. Finland is also a non-African member country of AfDB. Transport is extremely important for AfDB and their commitments for the sector have been over USD 100 million, which comprises around 50 percent of the institution´s regional operations and over 30 percent of the total project portfolio. While AfDB funds both hard and soft infrastructure projects, only 22 percent of the resources are channeled to governance operations, which are designed to strengthen the capability of state institutions (2015 Annual Report on Transport and Information and communications technology 2016). In Asia, Asian Development Bank (ADB) operates on similar basis as AfDB and transport operations comprise 32 percent of the total lending which is equivalent for USD 3,400 million. Key priorities in transport for ADB are road safety, social sustainability, urban transport, addressing climate change in transport and cross-border transport and logistics. (ADB´s work in Sustainable Transport 2017a). As with AfDB, Finland is also a member country in ADB.

European Union divides different mechanisms of development cooperation and aid for trade related activities to forms of grants, loans or equity investments with grants being historically the most important collective instrument in EU. Apart from individual countries, EU institutions provide almost half of the grants given and over half of the loans issued. Africa is the largest recipient continent of EU´s AfT commitments with the share of 35 percent followed by Europe (26%), Asia (19%) and Latin America (10%). European Bank for Reconstruction and Development (EBRD) and European Investment Bank (EIB) are principal IFIs in transport project funding. EBRD is mainly focused in funding the countries of the former Eastern Bloc, while EIB has a broader range of recipient countries and its funding spans over 150 countries. EBRD is mainly focused in investing private enterprises and its average amount for large private sector projects is USD 30 million. In EIB´s case, transport is advertised as the largest sector of the total funding portfolio. EIB is mainly concentrated in physical urban mobility, rail, aviation, maritime and road projects with special focus on climate-friendlier and environmentally sustainable transport. EIB also offers advising services to support the transport projects. Despite the extensive amount of recipient countries, the vast majority of projects are distributed quite steadily across the Europe (European Investment Bank sectors: Transport 2016a). In addition to the aforementioned IFIs, institutions such as Inter-American Development Bank (IDB), Asian Infrastructure Investment Bank (AIIB) and New Development Bank (NDB), which was formerly referred to as the BRICS

Development Bank, all have strong focus on transport funding. The following Table 1 recapitulates the five relevant IFIs and their transport sector´s funding in the latest available year, share of the total portfolio and few key strategic themes of their transport sector funding.

Table 1 Funding and key themes for transport sector in selected IFIs

IFI	**Latest available funding figures in USD million**	**Year**	**Share of the total portfolio**	**Key themes**
The World Bank	42,600	2016	20 percent	• Hard infrastructure • Large-sized projects
African Development Bank	1,600	2015	Around 30 percent	• Hard infrastructure • One third are multinational projects
Asian Development Bank	3,400	2013	Around 32 percent	• Sustainable transport • Cross-border transport
European Investment Bank	14,900	2015	Single largest sector in the portfolio	• Sustainable transport • Urban mobility
European Bank for Reconstruction and Development	1,260	2016	Around 13 percent	• Sustainable transport • Private sector based transport

Table 1 reveals that transport infrastructure has a substantial and strategic role in every IFI´s portfolio that is reviewed here. Transport projects also tend to be large-sized projects, especially if they are concentrated on hard infrastructure. Sustainable transport is an issue that seems to have aroused in the agendas of many IFIs that strive for more environmentally friendly projects and initiatives.

In development cooperation and aid for trade, NGOs have become extremely influential and the funding of some large international NGOs exceed even some OECD donor countries. A non-governmental organization is a non-profit organization that is independent from states and international governmental organizations. In developing countries, NGOs receive significant funding from donor countries to execute

development work and their influence in policy processes and global governance of aid has been increasing. Authors such as Morton (2013, 328-329) have described that NGOs and donor countries have mutually beneficial relationship. In addition for funding received from donor countries, NGOs permit them to expand their possibilities for operationalizing their own development cooperation objectives and priorities. Trust is a significant factor in the relationship between NGO and donor country. While in most cases NGOs are seen as a low-risk alternative as they possess local knowledge, capability to work through global affiliates and usually comparatively advanced systems for assuring accountability of funds, they still have to demonstrate their fiscal accountability. Interestingly in many western governments budgetary constraints are growing and there is an increasing politic pressure to show more concrete results that development cooperation and aid for trade provides. Therefore typically when the donor funds a NGO, the recipient has already passed the test to provide results, accountability and good governance (Morton 2013, 328-331).

Numerous NGOs are precisely concentrated on humanitarian issues, but in the scope of this study only aid for trade NGOs will be included as these are the ones that have transport and ICT sector activities and private sector impact. There is not much literature available that would specifically study how transport projects operate with NGOs. This is somewhat surprising because transport projects are characteristically one of the primary sectors for NGOs. Nevertheless for the purposes of this study, it is enough to understand what NGOs are, and that they are a relevant instrument for donor countries to practice development cooperation and aid for trade. Additionally to IFIs and NGOs, multilateral organizations such as United Nations (UN) and World Trade Organization (WTO) are significant interest groups in transport sector. UN´s Sustainable Development Goal #9 is linked for developing the adequate economic infrastructure and in many cases these goals and UN´s 2030 Agenda directs the objectives of the donor countries development policies. WTO´s main function meanwhile is to promote free trade but equally it upholds dialogue with NGOs around the world on various matters in international trade.

2.1.2 Private sector participation

Foundation for effective co-operation in international development by principles, commitmens and actions for the private sector involvement are clearly emphasized in OECD´s 2011 Busan Partnership for Effective Development co-operation agreement. Busan Partnership document affirms the enablement of participation of the private sector in designing and implementing of development policies and strategies.

Agreement emphasizes the role of the private sector to foster sustainable growth and poverty reduction.

The agreement further promises to promote aid for trade as an engine for sustainable development and develop financial instruments to mobilize private participation financially (Busan partnership for effective development co-operation 2011). International consulting firm Oxford Analytica (2014) has recently identified four key factors which are driving an increasing private sector participation in development cooperation.

- *Related challenges:* Long-term threats and opportunities associated to market growth and business continuity for private sector are similar of those which governments are engaging in sustainable development.
- *Impatience with government:* For companies that are worried about expenses of poverty are beginning to be increasingly impatient with government inaction.
- *Efficiency gains:* The growing comprehension of similar challenges facing private sector and governments has driven public sector to reach out to the private sector. There´s an increasing belief that efficiency gains and multiplier effects can be reached through public-private collaboration.
- *Aid austerity:* Many western countries are facing budget constraints and this reflects to new pragmatism towards interconnecting with private sector.

The fundamentals of infrastructure investments have considerably shifted in the past few decades. Since the mid-1980s, the governments have introduced policies where private sector delivery and financing for economic infrastructure projects have been promoted. This has been thought to decrease the government´s financial burden, endorse more efficient operations, diversify delivery services and attract foreign and domestic private investment. Therefore privatization has become a major factor for the economic reform programs in many developing countries (Kirkpatrick – Parker & Zhang 2006, 143). Transport has followed a similar trend even though traditionally transport has been seen as a responsibility of large, state-owned enterprises that often times have had monopolies over their respective sectors. Nevertheless in developing countries, the state enterprises have often reflected the legacy of colonialism as no alternatives were found for governments in the past when the colonial authorities and their private partners left the country (Gomez-Ibanez & Meyer 1993, 1-3). The World Bank (2007, 37) has offered a more modern-day view on private sector participation in transport sector arguing that the monopolistic nature, long-term nature and risky financial returns have reduced the commonness of private sector participation to transport projects. Nowadays these perspectives are being challenged by authors such as

Kingombe (2014, 17) who have underlined the participation of private sector as essential for helping designing solutions and new processes for transport and trade facilitation reforms to cope with inefficiencies and to assist the governments with reforms. The World Bank (2007, 39) too has acknowledged that the increased private sector involvement in physical transport infrastructure such as roads, ports and railways has had positive results on both allocative and technical efficiency. However many authors such as Schäferhoff, Campe and Kaan (2009, 459) argue that it is problematic to formulate clear vision of the success rate of PPPs since proponents typically concentrate the successful cases and therefore case selection can easily suffer from selection bias.

Égert, Kozluk and Sutherland (2009, 20) studied over 2000 PPPs in OECD countries and found out that the PPP´s are most frequent in transport sector, predominantly with hard infrastructure such as roads. The literature suggests that the popularity of PPPs are particularly on rise in the developing countries. This is due to several factors. First and foremost the developing countries typically have a great pressure on existing infrastructure because of the significant economic growth and urbanization. Additionally the governments are under budget stress to meet the infrastructure demand which drives the governments in developing countries to rely on PPP models to design, finance, construct and operate infrastructure projects through contractual arrangements with private sector co-operation (Sharma 2011, 149-150). Gallegos (2012, 2) listed different PPP approaches and models based on scope of enterprise service offering ranging from limited to wide and ownership and risk fluctuating between public and private sector. Figure 3 Matrix of sample PPP approaches and models (Gallegos 2012)Figure 3 demonstrates the various different PPP possibilities.

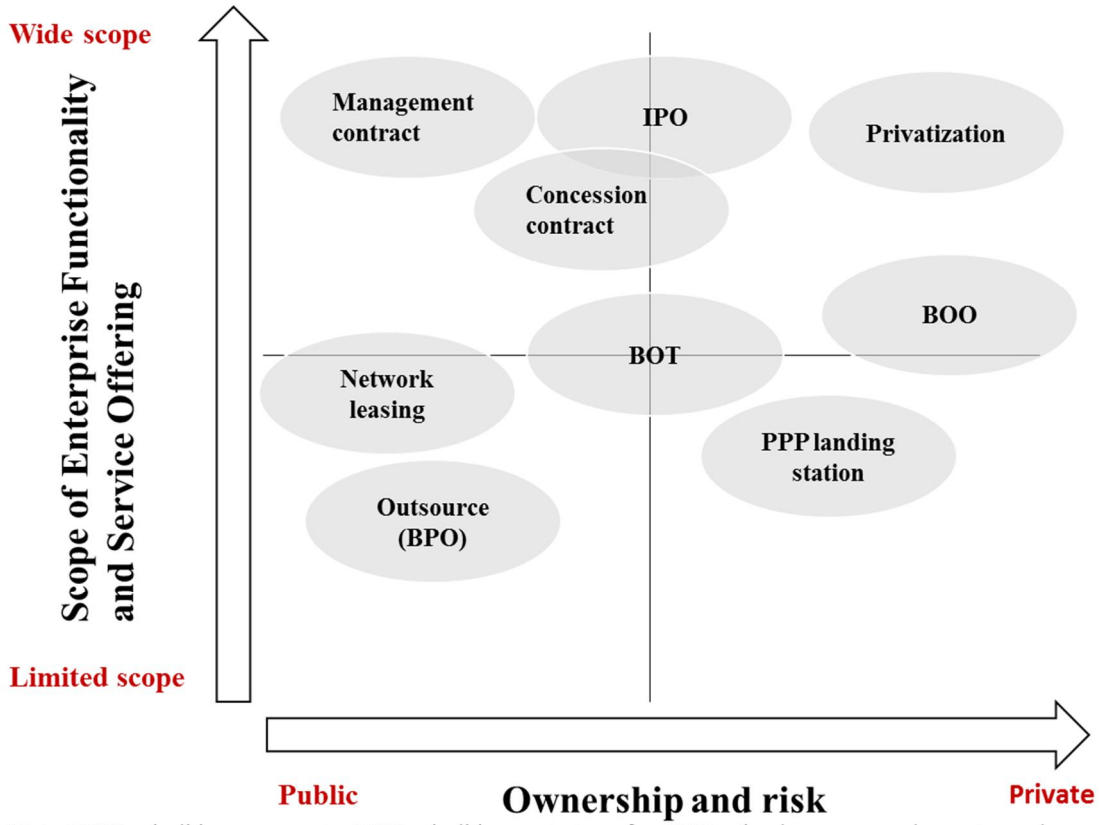

Figure 3 Matrix of sample PPP approaches and models (Gallegos 2012)

Égert, Kozluk and Sutherland (2009, 20) found out that the most frequent PPP approaches in their research were BOO (40 percent) and BOT (10 percent) which would indicate that private sector is willing to take risks with PPPs with medium scope of enterprise functionality and service offering. However the World Bank supported PPP initiatives have displayed that each case has unique circumstances with in-country factors and hence there is no single formula that can be applied for each case (Gallegos 2012, 2). In transport sector, the popularity of PPP´s has been on the rise even though Siemiatycki (2013, 1257) estimated that they still account only between 5 and 20 percent of the transport investments globally. PPPs are also to a great extent obsolete in many developing and low income regions such as Sub-Saharan Africa. Meanwhile for example China is one of the global leaders in transport PPP´s. Even though the benefits such as the shift of financial burden from taxpayers to private sector is acknowledged, it has caused concerns that privately delivered transport infrastructure is more concentrated on “premium connections” meaning that the needs of rural areas could be threatened and are still in need for a public surveillance. This is an interesting matter when evaluating PPP as the possible instrument for development cooperation or aid for trade. Typically development cooperation intents to offer funds and co-operation for the

areas that are most in need, in many parts of the world these areas are especially the rural areas outside the urban concentrations. However in addition to the reasons that Sharma (2011, 149-150) showcased in the last section, the possibility of PPP as more prominent possibility for transport sector in developing countries is increasing as the institutional structures of these countries are developed into more stable ground.

Private sector participation is also possible through NGOs as most organizations recognize the importance of strategic corporate partnerships to fulfill various objectives such as financial resources, technical know-how and access to products and services that are in demand by low income communities. Yet these partnerships do not happen by chance and Jamali and Keshishian (2009, 279) underlined that the following criteria should be taken into account when planning a possible public-private partnership: Connection of values and mission between parties, consignment of management responsibility, commitments of resources, respective areas of competence and even personal relations between the key leaders. Likewise the authors argue that in many cases failures of these partnerships can be traced to the partner selection and planning stages. Regarding the business perspective for private companies Tennyson, Harrison and Wisheart (2008, 12) interviewed over 86 companies from multinational giants to national companies that had experience from partnerships with NGOs and found out that businesses can build greater employee motivation, strengthen stakeholder relations, facilitate operation licenses, provide opportunities for new product/service development and gain organizational learning by partnering with NGOs. Tennyson, Harrison and Wisheart (2008, 22-23) divided the potential partnerships for six following types: Sponsorship, marketing, capacity building, brokering, advocacy, business and others. One common factor with these different types is that most benefits for private companies are intangibles and offer long-term opportunities.

2.2 Mechanisms, roles and operators in ICT

ICT related aid is not a new phenomenon as already back in 1996 authors such as Edet Nkereuwem suggested that aid agencies and organizations should have a substantial role in advancing soft infrastructure ICT capabilities in developing countries. Examples of these are developing technical foundations, education and training of IT and promoting national capability for the development of software and dissemination of indigenous information technologies (Nkereuwem 1996, 29). At the global scale though, ICT is a low priority and small sector in aid for trade compared to transport sector. In 2011, ICT-related aid for trade totaled USD 418 million, which was only a little over one percent of the total aid for trade granted that year. To put this into perspective, it is about 24 times less than the funds given to transport and storaging sector.

The growth ratios in aid for trade disbursements in ICT sector are also lacking behind those of economic infrastructure in general. ICT aid for trade grew 19 percent between 2006 and 2011 and economic infrastructure in general 62 percent. However aid for trade in ICT sector for the least developed countries and African countries grew 48 percent, which is well above average. World Trade Organization (2011, 61-62) has explained the lack of aid for trade initiatives by the fact that the ICT infrastructure investments tend to be more private sector driven which decreases the urgent need for aid for trade disbursements. Meanwhile German Ministry for Economic Cooperation and Development (BMZ) emphasizes that ICT industry is more of a knowledge intensive than capital-intensive. This is contrary to many of the traditional infrastructure sectors which could explain the gaps in funding between the ICT sector and transport (BMZ 2011, 9).

Lui (2016, 17) reasons that in many developing countries the economic activity is driven increasingly by services and that ICT and communication services are the most dynamic sectors of global trade. The author also stresses that ICT related aid for trade is important for both hard infrastructure and soft infrastructure. Hard infrastructure such as developing of network infrastructure in the form of high-quality telecom and soft infrastructure such as strengthening sector-level policy and institutional capacities. Much of the literature is focused on aid for trade of ICT and there is not much material available how ICT fares as a traditional development cooperation sector where social benefits are highlighted alongside with the economic benefits.

2.2.1 International financial institutions and non-governmental organizations

The World Bank has recognized the significance of the potential that ICT possesses for economic development and highlights mobile phones and internet as primary sources of considerable growth in many countries due to their effect on increased productivity. In 2016, the World Bank´s portfolio had special emphasis to expand digital connectivity. Digital platforms and solutions included 32 standalone ICT projects amounting in total around USD 1,600 million. While this amount is only a fraction of the total portfolio, ICT components are increasingly included in the projects across the different sectors such as transport, health sector and public sector management. This is an interesting matter since this thesis has mostly made a division between ICT and transport projects but it is totally reasonable to assume that in many cases the sectors overlap in ever increasing way.

The World Bank has evaluated that between 2003 and 2010 around 60 percent of the funded ICT projects achieved expected outcomes. It has also been estimated that the success rate has been slightly lower in Africa where limited technical capabilities, bureaucracy and authoritarian decision-making process has dropped the success rate to around 50 percent since 2000 (Ochara, Kandiri & Johnson 2014, 320). This seems to be another example that the country specific environment has a significant influence on the outcomes and success rates. Impartial publishers and journalists such as Wayan Vota in ICT Works (2011) stressed that the success rate of the World Bank is highly impressive considering that it is working in extremely challenging business environments that includes often strong resistance for reforms. The World Bank itself has acknowledged challenges in regards to promote universal access to internet for underserved or marginalized groups in developing countries. Nevertheless when the governments have themself been committed to reforms, the operations produced significantly better results. (The World Bank, 2011).

African Development Bank is concentrated on two pillars in ICT funding: Broadband infrastructure in the hard infrastructure side and enabling policy and regulatory environment in the soft infrastructure part. Strategically AfDB has targeted ICT applications in governance, agriculture, education and health to stimulate regional integration, ICT innovations and competitiveness (African Development Bank Group 2012, 15-16). In 2015, AfDB approved 2 projects in ICT sector amounting USD 114 million concentrating on optical fibre infrastructure and digital technology parks. Unsurprisingly this is considerably less than funding on transport infrastructure (2015 Annual Report on Transport and Information and communications technology 2016).

Asian Development Bank (ADB) meanwhile has funded ICT-related loans, grants and technical assistance projects between 2000 and 2015 with USD 11,900 million. These projects are primarily divided between developing ICT infrastructure, ICT

industries, ICT-enabled services and ICT policy. In Asia, most major ICT projects are funded by IFIs such as ADB and the World Bank while others typically support smaller projects which are often related to capacity building. ADB has evaluated that ICT related projects have “typically been successful” although new few failure factors such as too much focus on technological “euphoria” rather than actual needs and ground realities, insufficient understanding of local conditions and resistance from government officers who have fears that their jobs will be threatened by the introduction of ICT have been identified. ADB underlines that partnerships with private sector ICT firms could foster ICT capabilities in developing countries (ADBs work to improve access in information and communication 2017b).

ICT applications have a great emphasis in European Commission´s development cooperation, the activities are mainly focused on Africa in the form of EU-Africa partnerships. For example EU-Africa Partnership on Infrastructure is devoting effort on the digital divide in Sub-Saharan Africa with special attention on improving mobile exposure and decreasing the costs of intra-Africa communications, which are often routed via Europe. Regulatory reforms and institutional capacity-building is also in the spotlight, which is to ensure that private companies can enter the markets in safe circumstances. However European Commission also recognizes that ICT is primary developed by private sector worldwide and the financing of ICT in development cooperation is low compared to other similar sectors such as transport.

The funding of European Bank for Reconstruction and Development (EBRD) is very private sector driven by recipients as 98 percent of its 51 active portfolio projects valued at USD 1,106 million is pointed to private sector with Eastern European countries being principal recipients (Information and communication technologies 2017). EIB offers assistance in the ICT sector through a mix of financing and advisory services. The current global ICT investment portfolio of EIB is over USD 15,000 million and is primarily focused on broadband infrastructure, ICT equipment industry and digital operating software and applications. Additionally EIB is active on cooperating with other IFIs in providing advisory services to develop investment preconditions for public-private partnerships (Bridging the digital divide: EIB pledges to help get 1,500 million people online 2016). The following Table recapitulates the five most relevant IFIs and their ICT sector´s funding in the latest available year, share of total portfolio and few key strategic themes of their transport sector funding.

Table 2 Funding and key themes of ICT sector in selected IFIs

International Financial Institution	**Latest available funding figures in USD millions**	**Year**	**Share of the total portfolio**	**Key themes**
The World Bank	1,600	2016	Less than 1 percent	• ICT components included across the different sectors
African Development Bank	114	2015	Around 2 percent	• Broadband infrastructure • Policy and regulatory environment
Asian Development Bank	793*	2015	Around 5 percent	• Infrastructure, industries, enabled services and policy development
European Investment Bank	1,700	2015	Around 2 percent	• Mix of financing and advisory services • Broadband infrastructure, equipment industry and digital operating softwares
European Bank for Reconstruction and Development	516	2016	Around 5 percent	• Sustainable network expansion • Accelerate privatisation

***Average of the 2000-2015 time period since exact annual information not available.**

From Table 2 it can be identified instantly that ICT sector has significantly smaller percentage share in the portfolios than transport. Perhaps ICT sector is not as traditional sector as transport for the institutions. It has to be noted though that only standalone ICT projects are included. This means that true ICT funding is probably much more as the sector has indirect impact on many different sectors as was mentioned.

NGOs have traditionally served as key actors of promoting ICT and ICT4D (Information and communication technologies for development) applications in developing countries and authors such as Heeks (2009, 14) suggest that local NGOs have an opportunity to work together with rural communities and then partner with international development agencies to provide guidance. Anyhow the success of NGO led projects of ICT4D have been questioned by some researchers such as Chaudhuri (2012, 326) who claim that finding objective third-party evaluations for sustainable and replicable success are hard to find in unambiguous terms. Meanwhile authors like Ejiaku (2014, 64) believe that NGOs play an important role in integrating African and other least developed countries into the global network technology and providing access to necessary ICT infrastructure such as computers. Success stories are still to be found. For example the NGO Trade Mark East Africa has been able to reduce clearance times in some Tanzanian ports by up to 500 percent with investments to trade infrastructure and through the use of innovative ICT systems. Simultaneously Trade Mark East Africa has expressed satisfaction for the partnership that it shares with East-African governments (Trade Mark East Africa 2016). This seems to be a concrete example of how the government adaptiveness can have a crucial significance for the success ICT projects in developing countries.

2.2.2 Private sector participation

As mentioned earlier, ICT infrastructure investments tend to be significantly more private sector driven than other economic infrastructure sectors such as transport. In many developing countries, regardless of the continent, aid for trade disbursements tend to account only around 0.5 to 1.2 percent of private investment into ICT infrastructure. Therefore it is no surprise that private companies have had a major part for example in Africa´s ICT infrastructure emergence in the 1990´s as companies like France Telecom and Vodafone were the largest private investors from OECD area (World Trade Organization 2013, 62). More recently, the World Bank and Microsoft signed an agreement in 2010 for American tech giant to develop programs to support numerous of the World Bank´s main development objectivies across Sub-Saharan Africa including development of local IT skills and software economy and improving remittances technology (Asia News Monitor 2010).

The effects of privatization of telecommunications have been studied. Gasmi, Maingard, Noumba and Recuerdo-Virto (2013, 201-203) researched the impacts of privatization of fixed-line telecommunications operators between 1985 and 2007 and found out that the results vary between different regions in developing countries. The

outcomes of fixed-line deployment, price of fixed line, labor competence and cellular deployment were positive in coastal Africa, Asia and Central America and the Caribbean. Meanwhile the outcomes have been negative in South America and African landlocked countries. Gasmi et al. (2013, 203) reason that in the regions that have seen positive effects have appropriate institutional structures in place and the policy-making processes that facilitate economic competitiveness. Meanwhile in the countries with lesser success, there tends to be inadequate implementation of policies in the infrastructure sector and the lack of aggregate demand.

Unsurprisingly, PPPs are more common in ICT sector than in transport sector. These type of partnerships have received support and are being promoted increasingly by various entities such as international organizations, governments, NGOs and private companies. The advocates of ICT sector PPPs stress that companies are willing to accept the possible low margins in developing markets and that the projects tend to have long-term nature. Similarly PPPs in developing countries can create positive company brand both at home and abroad (Fife & Hosman 2007, 54-56). Gallegos (2012, 2) underlined that the public sector has an opportunity to serve as a catalyst to jumpstart and incentivize investments with the belief that the private sector can expand its role as the business or projects mature. For the World Bank supported PPP initiatives in submarine cable projects, the involvement of public sector was beneficial to alleviate risks and encourage investment especially in fragile states or projects that were too risky or large to be taken by private sector on its own (Gallegos 2012, 2)

2.3 Multi-donor trust funds and the future of IFIs

Multi-Donor Trust Funds (MDTF) are financial instruments between bilateral donors and multilateral agencies which serve in the role of the trustee. These funds offer donors an opportunity to specify the terms of the cooperation and reporting on program results but also a chance for economies of scale and reduced fragmentations. The volume of MDTFs have grown rapidly and in 2012 they accounted around 20 percent of the total volume of multilateral aid. The World Bank, for example, receives nowadays annually USD 4,000 million which amounts around 10 percent of the World Bank´s country operations. Despite the advantages and synergies, which increase when more donors are involved, donors typically have to compromise from their own priorities for e.g. geographically, thematically, sectorally etc. (Reinsberg, Michaelowa & Knack 2015, 3-4).

Authors such as Hoeffler and Outram (2011, 248-249) have found out that donors act out of self-interest when selecting the potential recipient countries and projects, especially trade interests and geo-strategic interests appear to be very important criteria.

In these cases MDTFs do not seem plausible choice, especially for the small and middle-sized donors as their influence to multilateral agency operations is slim beyond their formal voting-power. Typically IFIs determine member state`s voting rights based on the amount of capital each country has pledged to contribute. Some of the most notable examples of MDTFs in the transport sector are World Bank´s Sustainable Logistics fund and Inter-American Development Bank´s Fund for Integration Infrastructure. World Bank´s Digital Development Partnership (DDP) offers a similar example from ICT sector.

The largest International Financial Institutions are facing challenges for the future and have faced challenges in the past from many different sources. In 1960, 70 percent of the U.S capital flows were some form of public assistance. By 2014 that amount had dropped to 9 percent as foreign direct investment, philanthropy and remittances have increased their share as alternatives. In the current economic uncertainty, many traditional donors are reluctant to increase their funding due to budget constraints. Furthermore the likes of the World Bank and other major IFIs are seen by many as bureaucratic, inflexible and conflicted with political interests by the wealthy shareholder countries.

According to some views such as Runde and Savoy (2016), the traditional IFIs tend to avoid operating in frail states and regions that are least likely to be funded by private investments. Counterforce for this has been the rise of the IFIs from developing countries such as NDB and AIIB which pride themselves with the speedy evaluation and approval process which have been constant cause of complain for the World Bank borrowers (Humphrey, Griffith-Jones, Xu, Carey & Prizzon 2015). It´ll be interesting to see whether these new institutions can lure some of the traditional IFIs customers and shake up the old ascendancies in the sector.

2.4 Summary of analytical framework

In this Chapter, the different institutions practicing transport and ICT sector co-operation and investments were identified and private sector participation was examined by different aspects such as PPPs, NGOs and highlighting individual cases. The following Table aggregates the main points from the chapters so that the cross-section of the characteristics of the each instrument can be formed.

Table 3 Summary of development cooperation institutions and their activities

	International Financial Institutions	**Non-Governmental Organizations**	**Public-Private Partnerships**
Role	• Serve as a financial provider for public entities and private companies	• Intermediary for development cooperation between a donor and a receiving country	• Privatization a major factor in economic reform programs. • Frequent in both transport and ICT sectors.
Mechanisms	• Infrastructure lending • Technical assistance • Advisory services • Multi-donor trust funds	• Executor of development projects and work • Possible special tides with rural communities	• Different approaches listed in Figure 3
Meaning for private sector	• Chance to serve as providers for funded projects	• Possible partnerships with NGOs as financial resources, technical know-how and access to products and services are in demand	• Every case has to be treated individually and take into account country specific factors. • In ICT sector companies tend to be willing to accept low-margin returns for long-term benefits.
	Private sector partners can engage as funders, buyers or implementing partners.		

Alongside with identifying possible mechanisms and institutions for development cooperation from a donor country perspective, this Chapter examined the characteristics of transport and ICT projects. It is also convenient to summarize key findings in the following Table 4 of these characteristics based on the research questions of this thesis.

Table 4 Key characteristics of transport and ICT infrastructure projects and cooperation

	Transport	**ICT**
Key characteristics	• In many institutions the largest funding sector with large scale projects especially on hard infrastructure. • Privately delivered projects might be only concentrated on "premium connections".	• Developing technical foundations, promotion of national capability and education and training of IT or hard infrastructure such as network infrastructure. • In some occasions more knowledge intensive than capital intensive. • Limited aid for trade funding.
Successes	• Increased private sector participation has yielded positive allocative and technical efficiency results.	• The results have varied between different regions. • Success rate of around 50 percent for the World Bank.
Challenges	• Complexity. • Recipient country´s entities and lack of local capacity.	• Institutional structures and policy making-processes of the recipient country might pose a challenge. • Technological "euphoria", insufficient understanding of local conditions and resistance of ICT.
Commercial possibilities	• The frequency of PPP depends greatly on region. • Economic Rate of Return (ERR) higher for road projects than for rail and port projects (the World Bank). • Projects with NGOs tend to produce intangible and long-term business benefits.	• Results of ICT4D related projects divides authors since unambiguous terms are questioned • ICT components could be exploited beyond the traditional industry lines for e.g. in health, education and transport sectors. • Companies often willing to accept possible low margins against long-term opportunities.

In Chapter 3, the state and role of transport and ICT infrastructure in selected developing countries is reviewed. The Chapter also enlightens the effect that transport and ICT sector related development cooperation and investments can have for a developing country, both economically and socially.

3 THE STATE AND ROLE OF TRANSPORT AND ICT INFRASTRUCTURE IN DEVELOPING COUNTRIES

In Chapter 2, the different mechanisms, roles and operators of how transport and ICT investments and cooperation worked in practice were examined. This Chapter studies the current state of transport and ICT sectors in the large context, examining the differences between different regions and taken reviewing examples across the developing countries. Additionally the role and benefits of transport and ICT development and investments for economic and social development of a developing country are reviewed.

Opinions tend to cohere in literature that infrastructure services, including transport and ICT, are essential requirements for economic growth and sustainable development. However Kirkpatrick, Parker and Zhang (2006, 144) argue that in most countries, the potential contribution of infrastructure for economic growth and poverty reduction have not been entirely accomplished. Furthermore existing infrastructure services and their current level fall far short of the prerequisites. Fulmer (2009, 32) mentions that infrastructure needs are noticeable evident in emerging economies and developing countries. These countries have a tremendous need to build systems that commence infrastructure services in rural areas and respond to growing demand in urban communities. In the scope of this thesis it is only possible to offer a snapshot of the capability and needs by the help of available metrics and ratings. It would not be appropriate nor possible to include all transport and ICT infrastructure needs of all the countries in the world.

3.1 Transport and ICT capabilities and needs in developing countries

This Chapter is focused for the needs and the current capabilities of transport and ICT infrastructure in developing countries. The Chapter covers these capabilities and needs in a very general regional level as it would not be convenient for the purposes of this study to assess developing countries one by one. Logistics Performance Index (LPI) of the World Bank and Networked Readiness Index of World Economic Forum are appropriate metrics to evaluate and offer a snapshot of the current level of transport and ICT infrastructures in the different regions. LPI is constructed as a worldwide survey for logistic operators, both express carriers and global freight forwarders, and these provide feedback of the logistics friendliness of the countries in which they operate. In this study, the most recent Logistics Performance Index ratings and report is used from 2016. The comparison between different regions is also possible since the data is available for 160 countries.

The following Table 5 is divided into two parts: Domestic quality of infrastructure and international LPI score. For the Domestic LPI surveyed logistics professionals assess the logistics environments of their own countries. In international LPI, logistics professionals that operate in particular foreign country were asked estimate the quality of trade and transport. The metric includes six key dimensions but in the scope of this thesis, only quality of trade and transport related infrastructure (e.g. ports, railroads, roads and information technology) was chosen as a primary metric to include to this study. In total 1,051 logistics professionals participated in the survey given more than 7000 country assessments. Figures in domestic LPI are percentages of the respondents and the scale in international LPI is from lowest score to highest score between 1 and 5. In Table 5, green color indicates that the continent fares better compared to comparison regions in that specific category while red signifies lower performance. As mentioned, it would be hard and probably irrelevant to include individual countries into the Table. Meanwhile the Table presents the regional differences between the continents.

Table 5 Domestic quality of infrastructure Logistics Performance Index and international infrastructure Logistic Performance Index scores regionally (Arvis et al. 2016)

Quality of Infrastructure (Domestic LPI)		**East Asia and Pacific**	**Europe and Central Asia**	**Latin America and Caribbean**	**Middle East and North Africa**	**South Asia**	**Sub-Saharan Africa**
Low or very low	Ports	35	29	45	35	25	33
	Airports	31	10	20	34	36	30
	Roads	45	36	53	32	53	39
	Rails	54	49	86	64	63	61
	Communications and IT	35	7	36	30	11	28
High or very high	Ports	23	27	21	33	18	25
	Airports	37	48	22	35	25	23
	Roads	20	24	12	24	5	18
	Rails	21	22	3	20	3	17
	Communications and IT	27	50	34	36	65	32
Infrastructure LPI score (International LPI)							
2007		2.46	2.26	2.38	2.21	2.11	2.07
2012		2.66	2.60	2.57	2.40	2.39	2.29
2016		3.02	3.16	2.46	2.78	2.42	2.29

According to the Table and the selected results of domestic and international LPIs, the least developed regions by transport and ICT capabilities appear to be Sub-Saharan Africa, South Asia, Middle East and North Africa and Latin America and Caribbean. It is then perhaps no surprise that the overwhelming majority of the countries in these regions are considered as developing countries and overwhelming majority of the least developed countries are located in the regions. LPI results provide interesting observations, quality of railway infrastructure is seen considerably lower than other infrastructure forms, communications and IT fare relatively well, especially in Asia. Almost all developing countries regions have had some development over time even though regional differences have grown over time which puts developing countries into disadvantage.

It is appropriate to put focus on some regions which are especially relevant for Finnish development cooperation. Sub-Saharan Africa and South Asia seem to fare the worst from the comparison regions, even though domestically Africans tend to think that their capabilities in Communications and IT are in the better level than for example

East Asia and Pacific, Latin America and Caribbean and Middle East and North Asia. Foreign respondents do not seem to think the same way if International LPI is used as a metric. Interestingly Latin American and Caribbean region seem to be self-critical in their assessment since the Domestic LPI and International LPI results appear to differ a bit from one another.

The World Economic Forum´s Network Readiness Index (NRI) assesses the inclination for countries to exploit the opportunities presented by ICT sector. It consists from four components: The environment for ICT to thrive (political, regulatory, infrastructure), the preparedness of the country´s key stakeholders to use ICT, the usage of ICT among the stakeholders and ICT´s impact in both economic and social terms. Regionally divided elaborate data is not available but some clear trends for developing countries can be identified. Sub-Saharan Africa lags considerably behind the other regions as current investments have not been sufficient to compete with the pace of increase in usage and affordability, insufficient infrastructure and skills remain considerable barriers. Emerging and Developing Asia, Latin-America and Caribbean and Middle-East and North Africa confront similar challenges but to a smaller degree (Baller, Dutta & Lanvin, 2016). NRI draws a picture that differences in exploitation of ICT opportunities are significantly larger than domestic LPI suggested in the previous Table.

There are studies that exert the key challenges and needs in transport and ICT sectors in developing countries. Fajiir and Fidan (2016, 23-28) studied transport challenges in Nigeria and Egypt, where challenges are similar as in several developing countries in which expansion of external trade has put increased pressure and demand for better transport infrastructure. Authors highlight poor road network, regulatory planning, strategic planning, understanding of logistics and high dependence on public sector as main obstacles. In ICT sector, Enakrire and Onyenania (2007, 16-18) highlighted that in Sub-Saharan African countries, where the ICT capabilities are scarce, inadequate technical personnel cooperation, poor availability of indigenous people with appropriate skill set, unreliable telecommunication infrastructures and obsolete regulatory framework stall ICT development. It is noteworthy that key capability deficiencies and most urgent needs appear to include both hard and soft infrastructure elements.

3.2 The role of transport and ICT development and investments for economic development

In literature, the relationship between transport and ICT investments for an economic growth is a well investigated issue. Economic growth in this context is understood as a process of annual increases in per capita income, productivity and employment.

Aschauer´s "Is public expenditure productive"? (1989, 197-198) is one of the most well-known papers between infrastructure investments and economic growth. In the paper it was found that public investments in United States between 1949 to 1985 to core hard infrastructure such as highways, ports and airports produced significantly higher increase of productivity than investments to general office buildings, hospitals or educational buildings. The study also suggested that countries that develop the infrastructure have to adapt to support this changing pattern of demand, as the shares of roads and telecommunications in the total stock of infrastructure increase. The World Development Report of The World Bank (1994) concluded that 1 percent increase in infrastructure stock lead to 1 percent growth in GDP across all comparison countries in the early 1990s.

Égert, Kozluk and Sutherland (2009, 11) underlined that while the direct relationship between economic growth and infrastructure investment is hard to pinpoint, infrastructure usually has positive growth effects through various channels such as facilitation of division of labor, adoption of new organizational practices and access to larger markets and new resources. Infrastructure investments were also under special scrutiny during 2016 US Elections as democratic nominee Hilary Clinton's over USD 300,000 million infrastructure program were one her key economic proposals. American think tank Economic Policy Institute estimated that USD 300,000 million annual investment to traditional infrastructure projects such as transport until 2020 would lift country´s GDP by almost USD 500,000 million and add 3 million new jobs already at the end of the first year (Bivens 2014, 3-4).

The World Bank (2014) noted recently that the increased investment on infrastructure has been one of the principal drivers for stable economic growth in Sub-Saharan Africa in recent years. Despite this Ondiege, Moyo and Verdier-Chouchane (2013, 69) argued in World Economic Forum´s "The Africa Competitiveness Report 2013" that insufficient infrastructure decreases Africa´s aggregate growth up to 2 percent annually and with sufficient infrastructure African firms could gain productivity gains up to 40 percent. Teravaninthorn and Raballand (2009) found in their study that in different parts of Africa, transport quality can be up to 40 percent more inefficient based on LPI than in advanced economies, simultaneously average transport price per tkm being almost 50 percent more expensive.

The research has been expanded not to only include the economic effects of transport investments. Banister and Berechman (2000, 12-13) reminded that transport infrastructure investment is more of a complement to other essential underlying conditions that have to be met if economic development is to happen and capital drawn transport projects are only justifiable, when they produce real transport benefits. Therefore the investments should be executed on the basis of social rate of return.

Productivity and performance are important themes when addressing economic benefits of transport investment.

Hong, Chu and Wang (2011, 737-738) compiled that investing in transport infrastructure grows demand for goods and services, reduces travel times which leads direct reduced costs for passenger and freight transporters and expands the possible physical branch of activity. Hence the transport investments can attract foreign direct investment and expedite industrial agglomeration. Several studies such as the one of Lindfors, Hämäläinen, Siitonen and Vähätörmä (2013) part of the Baltic Sea Region programme have found similar type of conclusions. Additionally Hong, Chu and Wang (2011, 750-751) investigated the impact of transport infrastructure investment for economic growth in China between 1998 and 2007 and found that both land transport and water transport had a significant positive impact for economic growth while in China´s case air transports had a slightly lesser impact. Intriguingly for development cooperation land transport contributed more to economic growth in areas that had poor transport conditions. The study also suggested that economic policies for expansion and improvement in the most poor and rural areas might include the higher growth payoff.

It is broadly understood and almost universally agreed that information technology will play even more growing role in economic growth and as a facilitator of productivity in more integrated economies. The former Secretary-General of the United Nations, Kofi Annan proclaimed that ICT can be a powerful tool for economic growth and poverty reduction that can facilitate the economic integration of African countries into the global markets (Annan 2002). Just like transport infrastructure, ICT infrastructure has different dimensions such as broadband and telephone networks. Katz (2012, 4-12) divided the economic impacts of broadband to investment in infrastructure deployment and the direct benefits, which are further divided to residential penetration and enterprise penetration. From these two, especially the latter contributes to increased total factor productivity. There have been various researches that have estimated that 10 percent increase in broadband penetration yields an additional 1-1.5 percent GDP growth. For low and middle income economies this figure seems to be on the high end of the maring close to 1.5 percent. Thompson and Garbacz (2008, 10) investigated the labor efficiency in 46 US States between 2001 and 2005 and estimated that a 10 percent increase in broadband penetration grew efficiency aggregately 3.6 percent. These findings support the reckoning of Katz (2012, 4-12) about the efficiency growth of broadband penetration.

Chakraborty and Nandi (2009) studied the relation between a country´s tele-density and GDP per capita and discovered that in developing countries these two variables are integrated in the long-term. The study suggests that telecommunications infrastructure could be critical factor for developing countries to catch developed countries economically. Additionally the authors suggest that the countries that are comparatively

less developed also demonstrate the potential to achieve the greatest growth returns by telecommunication investments. Similarly Ward, M.R. and Zheng, S. (2015, 99-100) estimate that increase in mobile subscriptions has contributed in average 2.12 percent for China´s 10.1 percent annual GDP growth between 1991 and 2000 and 0.82 percent for 11.0 percent growth between 2001 and 2010.

Poverty reduction and the creation of new jobs is one of the principal economic objectives to achieve in most development cooperation agendas. According to International Labor Organization (ILO 2014), an estimation of 6.6 percent of the labor force of developing countries are on transport and communications sectors. That is aggregate number and obviously the figures form country to country vary, it still quite clear how much of a direct impact these sectors can have on the labor market of a country.

International Labor Organization has noticed this and has emphasized the need for investment in physical infrastructure and the development of labor skills in these sectors. Broadband penetration increase have also been found to have positive influence on employment alongside with its efficiency gains. Katz (2012, 59-60) discovered that in comparison countries which included the countries such as Brazil, Chile, India and Saudi Arabia, 1 percent increase in broadband penetration led to decrease on unemployment rate between 0.04 percent in Brazil up to 0.24 percent in Saudi-Arabia.

3.3 The role of transport and ICT development and investments for social development

While most of the literature is focused on economic benefits of the transport and ICT investments, the social benefits are recognized as well. British Royal Town Planning Institute (2014, 5) claims that one of the outcomes of transport investment such as improved connectivity, can promote greater social and economic inclusion while distributing effects of growth farther and broader. Furthermore social benefits such as providing access to integral services such as healthcare, education and authorities is recognized. In personal level, one of the most vital social benefits of ICT technology is increased access to information. This is beneficial for developing countries since they have traditionally lagged behind in access for information. Deb (2014, 27-28) notifies that information technology provides a platform for electric and distant learning in education. Rampersad and Troshani (2013, 545-547) suggested that benefits of high-speed broadband could be made in healthcare sector in tele-radiology and tele-diagnosis. The connectivity that broadband provides can also advance community development through social inclusion. However there do not seem to be particular research about the scale of the aforementioned possible benefits in developing countries especially in rural communities.

Direct economic and social benefits of the rise of ICT has been discussed as a possible instrument for political development in the developing countries. Alozie, Akpan-Obong and Foster (2011) investigated three kind of ICT technologies (phone, computer and internet) for political development in sub-saharan Africa and found out that the development level of these technologies can explain political development variations across the region´s countries. From three different aforementioned dimensions the effect of phone (both fixed-line and mobile subscriptions) appeared to be the most significant.

One of the sub-objectives of this thesis is to examine the role and benefits of transport and ICT investments for economic and social development of a country. The following Table 6 summarizes the theoretic findings of this Chapter.

Table 6 The role and benefits of transport and ICT investments for an economic and social development of a country.

	For transport / economic infrastructure in general	**For ICT**
Economic development	• Core transport infrastructure investment has indicated to produce high increase in productivity. • 1 percent increase in infrastructure stock can lead up to 1 percent increase in GDP. • Transport investments are seen as one of the key economic proposals to boost US Economy under the 2016 elections. • Africa is estimated to lose 2 percent annual GDP growth because of insufficient economic infrastructure.	• 10 percent increase in broadband penetration has been calculated to contribute close to almost 1.5 percent GDP growth for developing countries and 3.6 percent increase in labor productivity. • Broadband penetration growth suggests to raise employment. • Mobile subscription increase has been evaluated to contribute up to 2.12 annual GDP growth in China between 1991 and 2000.
Social development	• Improved physical connectivity can promote social inclusion and improved access to essential services.	• Increased access to information and civilization. • Exploitation opportunities in education and healthcare. • ICT development has been noted to interrelate with political development in sub-Saharan Africa.

The theoretical findings of this Chapter can serve as an argument and as an empirical proof when the relevancy and feasibility of transport and ICT projects are being evaluated in the development policy of a country. This is crucial nowadays, as many western governments are facing budget constraints and development cooperation funding is under review. It is also interesting to find out that for more developed countries such as China, the investment in economic infrastructure has been a huge factor for economic growth meanwhile the less developed African peers are deemed to lose a significant amount of their growth because of their insufficient infrastructure. This contrast could deserve further research. In addition to economic significance it is important to notice that investments produce both economic and social benefits. This is crucial, since in many occasions the objectives of development policy are not only limited to economic aspirations but to achieve positive social effects in the recipient country.

4 RESEARCH DESIGN

4.1 Research approach

The choice of the appropriate research approach is an essential decision and one of the most typical divisions in social sciences is the divide between qualitative and quantitative as the possible research approaches. The selection of the method should be always derived from the nature of the problem and research questions (Wellington & Szczerbinski 2007, 22-23). Qualitative business research allows a researcher a possibility to concentrate on complex phenomena in their own contexts and offer an analytical and reflective interpretation about the social word of business and its core processes, meaning that many qualitative approaches are concerned with clarifications and understanding (Eriksson & Kovalainen 2008, 4-9). Qualitative research is also typically focused in a small amount of cases and the scientific criteria is the quality over the quantity. Research material is in the form of text, the lack of research hypothesis also allows the researcher to conclude his work without the existing prejudices (Eskola & Suoranta 1998, 15). The reality in quantitative research is subjective and socially constructed as facts and values that are inextricably linked (Wellington & Szcerbinski 2007, 21). The results of qualitative research can be applied as complimentary when researching something that is articulated in words and is difficultly interpreted as numbers (Eriksson & Kovalainen 2008, 4-9).

Quantitative research meanwhile is focused on numbers and the research relies on measuring variables and analytical methods such as statistical correlations while testing of the hypothesis or theory, which are stated explicitly and then confronted with data. The aim of quantitative research is explaining, predicting and controlling of the social phenomena while qualitative research aims to understand it (Wellington & Szcerbinski 2007, 22-23). However it is recognized that the use of quantitative methods have been used in some qualitative research and vice-versa and these two approached are not mutually exclusive, and can be applied in triangulation comprising a mixed methods – study (Tashakkori & Teddlie 2010, 28-29).

The selection of the appropriate research approach should be based on what the researcher wants to know in his or hers research. This thesis is concentrated on the examination of private sector involvement of Finnish development cooperation´s transport and ICT projects. The research questions center around the execution and the characteristics of these projects, the theoretical empirical qualitative research approach seemed natural as the focal point of the objectives is to seek understanding under the complex circumstances and the results can be seen as complimentary. Theoretical chapters guide and offer the concepts for the research but there is not exactly one

prevailing theory or reason to conclude hypotheses about this subject which would then be tested by the empirical data collection. The nature of this study is descriptive as it was best suited to describe the world as it exists and the information is collected without changing the environment nor by the use of random selection or assignment methods. The use of cases was considered early on in the research process but this idea was later replaced by bringing the Netherlands and Denmark into the study instead of just focusing in Finland. This meant that in the time and space of the thesis the cases were not seen as an appropriate option. The challenge for information gathering for relevant cases was also recognized since there are very little data available in literature for concrete examples. This would have meant that the the vast majority of the interview time would have had to be devoted to go through the cases and this was an unattractive option.

4.2 Data collection and analysis

The sources of data may be divided between primary sources and secondary sources and both were applied in this thesis. There are several different methods available for the data collection within primary sources such as observation, experimentation, interviewing and simulation (Satyaprasad & Krishnaswami 2010, 90). In this thesis it was reasonable to combine interviews and evaluation reports as the primary and secondary source data collection methods. Expert interviews offered more in-depth approach to the themes and results that might have already appeared in the evaluation reports. The use of expert interviews was planned and executed in the late stage of the research process as the theory also suggests, for an interviewer is a necessity to build up interview topics thoroughly (Meuser & Nagel 2009, 31). The potential interviewees were first approached by email and then called by phone to arrange the practicalities of an interview. The approval percent for the interview was 100 percent and therefore the right people from the right organizations were obtained for the interview. The use of references in the initial email and then personal contacting through a phone call was seen beneficial to build trust and personal relationship before the interview. All the interviewees hold a key position in their respectable organizations, have worked relatively long time in their organizations and have broad international experience.

The expert interviews were performed as theme interviews with the combination of neopositivist and romanticist approach (Qu & Dumay, 2011 241) This meant that even though interview was seen as a tool for collecting data, the participants were encouraged to share real life experiences and complex social reality. Theme interview, meanwhile enabled more flexibility and dialogue and was seen as a convenient approach since it allowed the interviewees to focus on matters that they specifically had the most

knowledge. This was also communicated and emphasized to interviewees before the interview as well as during it. As all the interviewees shared Finnish as their native language, the interviews were held in Finnish. The interview questions and the layout are available in both English and Finnish in Appendix 3.

Table 7 Table of interview participants

Interviewee			Interview	
Name	**Organization**	**Position in organization**	**Date and place**	**Lenght and language**
Mr. Mika Vehnämäki	Ministry for Foreign Affairs of Finland	Senior Advisor for Development Policy (Private Sector Development	10.5.2017 Department for Development Policy, Helsinki	59 min Finnish
Mr. Aki Enkenberg	Ministry for Foreign Affairs of Finland	Senior Advisor, Information Society and STI for Development	10.5.2017 Department for Development Policy, Helsinki	59 min Finnish
Mr. Mikko Kuuskoski	Finnfund	Associate Director, Special Operations	14.6.2017 Finnfund Helsinki Office	58 min Finnish
Ms. Siv Ahlberg	Finnpartnership	Programme Director	20.6.2017 Skype interview	30 min Finnish

One of the acknowledged benefits of the use of secondary data was utilized in this thesis as through the evaluation reports of Dutch and Danish private sector participation practices were benchmarked against the primary data concluded by expert interviews and additional secondary data of Finnish evaluations. The use of secondary data was seen advantageous as it allowed wider geographical area and longer reference periods without any cost and material easily available. The downside of evaluation reports was a diminutive amount of precisely transport and ICT related evaluations as these sectors

were only briefly mentioned, if at all. Extensive field visits and e-surveys are commonplace in many evaluation reports that examine effectiveness, relevance and additionality of development cooperation, however considering the scale and resources of this study these were disregarded as possibilities for data collection.

Perhaps the biggest challenge for concluding the research was the lack of actual transport and ICT development cooperation, especially regarding Finland. For the European comparison countries it was also difficult to find specific examples from these sectors. This meant that in many occasions the elements of private sector participation had to be reviewed in more general terms. This meant the use of best possible alternative such as economic infrastructure. This was a common challenge in both expert interviews and evaluation reports, perhaps even more apparent in transport sector than ICT.

4.3 Evaluation of the research

It is seen indispensable to offer the research to critical scrutiny to test the robustness of the findings. There are several different concepts that can be applied when evaluating the quality of a qualitative research. For example Stenbacka (2001, 551) argued that the typical quality concepts for a quantative research are not applicable directy to qualitative research. Therefore Stenback had selected four generally accepted quality concepts to form the basic of discussion for qualitative quality concepts: Validity, reliability, generalizability and carefulness. Yet the applicability of some of the aforementioned concepts to qualitative reserach have been further challenged. Horsburgh (2003, 307) claimed that quantative conceptualizations such as validity and reliability are unsuitable for an evaluation of qualitative research as they were not developed for this purpose. There is also alternative instead of focusing on concepts such as validity and reliability. Lincoln and Guba (1985, 347) famously reasoned that a research´s trustworthiness is the key when evaluating it´s worth. Trustworthiness involves establishing: Credibility, transferability, dependability and confirmability.

In the end, the research of Halldórsson and Aastrup (2003, 321-332) about the quality criteria for qualitative inquiries in logistics felt the most appropriate when evaluating the quality of this particular study. The study presents three concepts to be applied in qualitative logistics research: Truth-value, transferability and trackability and explicity. Truth-value significies that there is no one single objective reality, whether this is by correspondence or researcher as correspondences tend to have interpreted realities too. For transferability and contextualism, the authors suggest that to explain a phenomenon, it must be dealt with the specific context and this makes generalization across different contexts problematic. Trackability and explicity suggests that the

researcher should use practicality when providing the necessary information about the process of the study. Therefore it is not necessary to provide for example full transcribed interviews for the scope of this study but rather explain how the research approach and data collection analysis came to be and was conducted.

For the truth-value of the study it is pretty clear that all the interviewees had their own interpreted reality and their point of views might not be objective. Truth-value is tightly associated with credibility, which is also one of the concepts of Lincoln and Guba (1985, 347). For this particular research, the interviewees were experts of their respective organizations and institutions, which increases the credibility and truth-value of their statements. However the bias are still a relevant concern regarding the interviews. It is noteworthy that there could have been a possibility to receive more unbiased views from the expert interviews if for e.g. third-party person would have been contacted. One of the doubts for this though would have been whether this person would have adequate understanding and knowledge about the issues of this study.

The evaluation reports too can sometimes have bias when presenting their findings. This can be especially problematic if the report itself is not produced by unbiased third-party. To counter this issue, the reports undertaken by third-party organizations were preferred in this study whenever it was possible.

Regarding the transferability and contextualism, Halldórsson and Aastrup (2003, 321-332) state that much of logistics research is based on the belief of “best practice” approach and this includes the risk of running into overgeneralizing the findings. The alternative would be to take transferability into account and that the applicability to other contexts is determined by the reader.

In research approach and data collection and analysis chapters the process of the research was reviewed. Based on the criteria of Halldórsson and Aastrup, the sufficient amount of data for trackability and explicity of the study is to offer information on how the empirical part of the study was concluded and how for example the interviewees were approached and interviewed. It also felt important to explain the reasoning and decision-making choices behind the key choices for the research design.

5 ANALYSIS OF TRANSPORT AND ICT COOPERATION OF THE EXAMINED COUNTRIES

European countries are one of the largest donors of development cooperation funds globally. In 2015, the EU countries part of OECD´s Development Assistance Committee (DAC) and EU institutions combined funded in total USD 86,000 million for development assistance. This is almost threefold the amount that United States financed and it is over one and a half times larger than the whole national budget of Finland in that given year. The focus of this Chapter is to gain the understanding of the practices, channels, stakeholder participation and results of the Netherland´s and Denmark´s development cooperation and aid for trade experiences. ICT and transport sectors, and their divide between hard/soft infrastructure and the development cooperation instruments have been highlighted if it has been possible with the available material.

As referenced earlier, there are some common factors for these two chosen European comparison countries: The Netherlands and Denmark. Both are larger development cooperation and aid for trade donors than Finland. It is also often understood, at least in the common discussion that their foundations, especially in the private sector participation aspect of development cooperation have a solid ground and they have thrived on it. This stereotype seems to be prevailing within Finnish people and even the personnel that are familiar with development cooperation. Both countries also have an extensive experience about foreign trade lasting for centuries, which makes them differ from Finland.

5.1 Dutch development policy and development cooperation

The Netherlands was the seventh largest donor country in the world by volume in 2014. 61 percent of the country´s development cooperation is mainly project-type interventions, followed by 17 percent technical assistance share and 20 percent contribution to pooled programmes and funds. Economic infrastructure with a strong focus on business and other services is a key sector. Over half of the Netherlands´ bilateral development assistance was allocated to social and economic infrastructure and services. However economic infrastructure is not further divided into transport and ICT sectors. The country uses several different channels such as international organizations (EU, World Bank and UN), civil society organizations (various NGOs), development organizations and private sector based development cooperation in which government

believes that public-private partnerships are an effective way of facilitating development (Government of the Netherlands 2016).

Around 30 percent of the Dutch development cooperation goes to multilateral organizations including IFIs. The effectiveness results of multilateral aid are mixed, variations between the organizations are high and the high bureaucracy is a case of complain with some organizations, however these are not particularly specified. The idea for Dutch multilateral aid is that these funds tend to be less susceptible for the interests of donors and typically stem from the perception that some issues require global strategy (Spitz, Muskens and Ewijk 2013, 22-23, 40). This could indicate that the Dutch private sector inclusion could be less of a principal objective of development cooperation through IFIs. Likewise Dutch evaluation reports emphasize that the country has strong economic focus in its development cooperation so therefore future cuts for bilateral aid are seen unlikely as it has been recognized that it offers better commercial opportunities for Dutch businesses (Spitz, Muskens and Ewijk 2013, 22-23, 40).

Dutch themselves like to use the phrase “Dutch approach” where supporting development through private sector makes the markets accessible for both developing country and Dutch companies. As a developing country is progressed out of the poverty, Dutch hope to eventually work with them as equal economic partners (Ministry of Foreign Affairs of the Netherlands 2016a). This is demonstrated by three different development cooperation relationships: Pure aid relationships, transitional relationships where economic growth is boosted and trade relationships consisting of OECD countries and countries such as South Africa and Vietnam with whom the country used to share aid relationship with but have since advanced in the hierarchy. Especially in ICT sector the Netherlands is a minor donor even though in 2015 they had 12 ongoing projects in infrastructure development projects but this sum includes water and energy (Ministry of Foreign Affairs of the Netherlands 2016a).

PPPs in Dutch development cooperation are mostly targeted for water, food security, and health and energy sectors and therefore there are no available examples of transport and ICT sector PPPs. This was found to be quite surprising and can be partly seen as fault of lack of adequate data (Ministry of Foreign Affairs of the Netherlands 2016b). Recently Dutch government has channeled 5 million more for private sector development in its development cooperation budgetary framework for 2017. This is noteworthy because apart from women´s right, all the other funding destinations are facing budget cuts (Ministry of Foreign Affairs of the Netherlands 2016c) Based on Dutch Approach, this can also be seen as an investment for providing Dutch private sector more opportunities in developing countries.

Dutch Approach and their desire to find and increase opportunities for Dutch private sector transpires in Dutch´s Ministry of Foreign Affair´s “A New Agenda for Aid, Trade and Investment” (2013) report. The report states “We encourage trade and

investment mainly in our own interests. Where aid and trade meet, we will act out of both solidarity and enlightened self-interests. Our aim in the longer term is to build trade relationhips with as many countries as possible". Dutch believe that private sector development in the recipient country is a starting point for trade relationship between the two parties. Dutch aim to contribute investing and developing business climate in low- and middle-income countries and hope that in the long term Dutch firms and entrepreneurs will gain access to their local markets. This trade-off can come off as Dutch expertise being used for example to develop and constructs roads and ports in developing countries. In return, Dutch private sector receives a foothold in these growing markets.

The Netherlands have had several intiatives to facilitate investments in infrastructure projects in developing countries. It´s relevant to review these because of the direct impact for the Dutch private sector, even though these are outside of the traditional scope of development cooperation with solitary humanitarian objective. The Development-related Infrastructure Facility (ORET), The Development-related Infrastructure Facility (ORIO) and more recently their successor Development Related Infrastructure Investment Vehicle (DRIVE) are financial vehicles of Netherlands Enterprise Agency. Transport has a 12 percent share of the total distribution of allocated grants and telecommunications have 7 percent, making both relevant part of the vehicle. Transport sector projects such as airport renevation in Tanzania by Dutch company Interbeton and large-scale bus renovation in Ghana by Dutch company VDL have fared quite well in assessment of impact and effectiviness compared to other sector´s project. However there are no available information of whether these projects have spanned long-term commercial partnership and what has been the return on investment (Ministry of Foreign Affairs of the Netherlands, 2013). Interestingly and perhaps surprisingly for DRIVE, transport nor ICT gets mentioned when specifying the most prioritized sectors, which include food security, water, health rights and climate.

Dutch Ministry of Foreign Affairs executed subsidy program for innovative investments projects run by the Netherlands Enterprise Agency to developing countries from 1998 to 2015 named Private Sector Investment Programme (PSI). The program financed firms to create innovative pilot investments in collaboration with a local partner. Public sector supported the program as the Dutch Agency for International Business and Cooperation (EVD) had the responsibility of selecting new projects and monitoring these projects as well as providing support services such as communication and marketing, human resources and legal. Independent consultancy firm Triodos Facet estimated in 2010 that 69 percent of the projects were successful at the end of the project period and 57 percent of the projects resulted long-lasting commercial activity, as they prevailed 7-10 years after the project had started. Based on the sample of 60 completed projects, the average follow-up investment at completion was around 526

thousand euros, which amounts to multiplier effect of 1.2. However there were substantial variations in results between different countries and even between projects in the same country. The matchmaking programme (MMF) did not achieved the expected outcomes and dependency on embassies as the main pipeline developers was questioned (Triodos Facet 2010). Effectiveness, relevance and additionality of PSI projects was assessed in Triodos Facet´s evaluation report. There were two examples of hard infrastructure transport projects from Ghana and one from Suriname. The projects earned good ranks in all categories all though deep conclusions and revaluations are hard to conclude from the available information. ICT projects were not part of the evaluations as the share of ICT projects is minor.

5.2 Danish development policy and development cooperation

Like Finland, Denmark has made budgetary cuts to its development cooperation. Despite this, in 2016 the country was still the 13th largest development assistance provider by volume and 4th largest in terms of funds as a percentage of GNI. Denmark´s development cooperation is very project focused as 75 percent of disbursements are project-type interventions, 18 percent contributions for pooled programmes and funds and only 1 percent are technical assistance. Direct contributions for economic infrastructure accounted 11 percent in 2015 (OECD 2016). 70 percent of the Danish development cooperation is through bilateral development cooperation and around 30 percent by multilateral development cooperation including multilateral organizations such as the UN and the World Bank (Danida 2016).

Grants for multilaterals including IFIs has declined significantly in the last few years. Influencing opportunities for Denmark in many mutual trust funds, such as the ones of the World Bank are seen slim even though a number of Danish supported trust funds are aligned with Danish priorities. However as with Dutch, private sector involvement in transport and ICT sectors at least formally does not appear to be one the top priorities in funding through IFIs and multilaterals as more humanitarian objectives are emphasized (Ministry of Foreign affairs of Denmark 2013, 119, 59). Meanwhile Hansen and Rand (2014, 9-10) studied Danish exports to 144 countries from 1981 to 2010 and found that Danish bilateral aid has had a positive and statistically significant effect on Danish exports to the beneficiary countries. In average, one aid dollar has brought export return of about 30 cents. Unfortunately the aid has not been categorized by sectors so the effects of transport and ICT sector can not be tracked down.

Denmark´s former Minister for Foreign Affairs, Kristian Jensen stated in 2015 that “Our focus is to cut aid and focus more on areas of trade and investment”. Furthermore the report, The Government´s Priorities for the Danish Development Cooperation 2016-

2019 states that alongside with the reduction of poverty through economic freedom and private investments, the Danish want to direct their contributions to projects which have strategic significance for the country. The business instruments applied must promote engagements of Danish companies´ in development countries benefiting both private sector in developing countries but also Danish companies. The Government´s objective is also to hear Danish businesses and financial institutions for feedback in order to adjust and improve the business instruments (The Danish Government 2015).

Danish International Development Agency (Danida) has had a program called "Danida Business-to-Business Programme" to support the development of business environment in Danida´s partner countries but also to promote Danish firms in transfering business experience, technology and leadership competence for local private sector partners. Between 2006 and 2011, the business-to-business programme financed roughly 420 Pilot projects from which 215 continued to project phase and 205 ended. ICT sector was the second largest business sector by almost 80 projects as it was almost exclusively driven by Danish companies looking lower production costs through outsourcing. The sector included variety of different business models like software production, web-design and mobile applications. Transport sector meanwhile only had a minor portion with around 10 projects. Interestingly, the B2B portfolio was dominated by smaller companies with less than 50 employees (Evaluation Department, Ministry of Foreign Affairs of Denmark 2014). It would made sense that the multinational corporations have resources without the financing of Danida, but likewise it would be interesting to further evaluate what are the capabilities for these microsized companies to carry out transport and ICT projects.

Evaluation Department of Ministry of Foreign Affairs of Denmark assessed in "Evaluation of Danida Business-to Business Programme 2006-2011" (2014) that the programme has failed to succeed in providing considerable financial benefits for Danish private sector and many Danish enterprises have registered financial losses with their involvement. There are some exceptions especially in ICT sector, which are remarked without further details. It is acknowledged however, that the programme attracted companies that would not otherwise have done business in the particular developing country. This could have lead to opportunistic behavior, as the risk of entering an unknown market is covered by Danida.

There are few contextual factors that have influenced positively for the outcomes of the partnerships. It seemed that knowledge-based services (such as ICT) tend to fare better. Strong linkage between intersts and competences of Danish embassies, establishment of trade and investment in a partner country and lobbying chances of a local company further had a positive effect. Additionally, the size of a local company does not seem to be a factor, more established Danish companies show slightly better outcomes and previous international experience tends to be more important factor for

local partners than Danish companies. Despite the mixed financial outcomes, the companies have described that partnerships have had other benefits such as sense of learning and personal development. Just as in the Netherlands, the Danish embassies have facilitated the matchmaking and creation of partnerships but their resources to assist with the actual concepts and applications of the process have been inadequate. The report acknowledges that only few companies possess the capability to apply for partnership support without any advising assistance and others were dependent on assistance throughout the whole process.

5.3 Finnish development policy and development cooperation

Finnish Ministry for Foreign Affairs (MFA) declares development cooperation as one of the key functions of the Finnish foreign- and security policy (MFA 2016). Finland supports the development of developing countries by both political advocacy and financing with the responsible facet being The Department for Development Policy. Much like the European comparison countries, Finnish development cooperation is comprised by bilateral cooperation with partner countries, multilateral cooperation with international organizations and development finance institutions. Additionally Finland has different instruments and institutions for private sector cooperation such as Finnfund, Finnpartnership, Finpro and BEAM (Business with impact), from which this thesis is most concetrated on Finnfund and Finnpartnership. The following Figure 4 illustrates the development of overall development assistance of Finland between 2004 and 2014 and yearly disbursements for economic infrastructure in the same time period. The Figure uses constant prices using 2014 as the base year to remove the effect of inflation. It has to be also noted that specific categorization for transport or ICT sectors is not available, but they are both being part of economic infrastructure sector. Official development assistance (ODA) is a term by Development Assistance Committee (DAC) to measure aid. It is the key measure used in partically all aid targets and assessments of aid performance (OECD 2017).

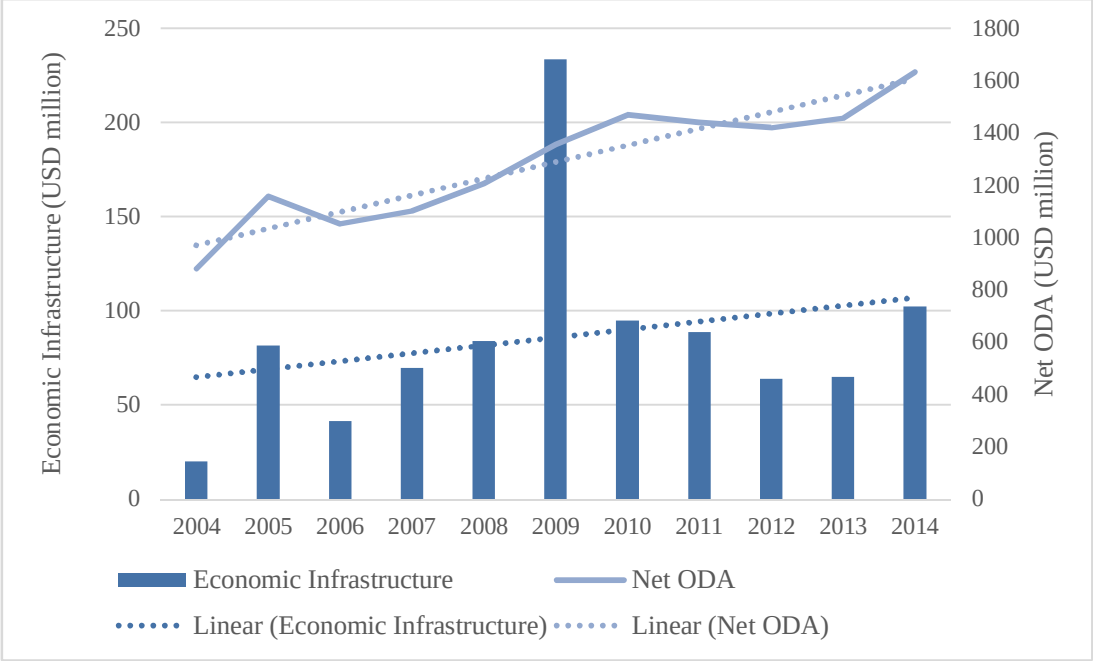

Figure 4 Evolution of Finnish Official Development Assistance and economic infrastructure funding between 2004 and 2014 (OECD 2016b)

The overall development cooperation funding has been growing quite steadily over the evaluation period decade for which the similarity of linear and annual funding is a clear demonstration. Variation of annual economic infrastructure disbursements is greater and even though there has been an increase linearly, the growth of economic infrastructure has been slightly lesser than the overall development cooperation funding. The share of economic infrastructure is relatively small alternating mostly between 5 and 7 percent annually. This is considerably lower percentage that the European comparison countries the Netherlands and Denmark are investing, not to even mention the significance and weight of economic infrastructure in the portfolios of IFIs. This seems surprising given that Finland is well-known for its engineering expertise and ICT know-how, which account significantly for economic infrastructure. It is noteworthy, that the Figure does not stretch to the recent development cooperation cuts and their possible impact on economic infrastructure funding.

The following Figure displays how the percentage shares of development cooperation is divided between multilateral organizations including IFIs, NGOs and bilateral cooperation between 2008 and 2015. The destination region is also addressed between Sub-Saharan African countries and other Least Developed Countries (LDC). It is notable that nearly all of Finnish development cooperation is directed to LDCs. United Nations describes LDCs as low-income countries facing severe structural obstacles to sustainable development (United Nations 2017).

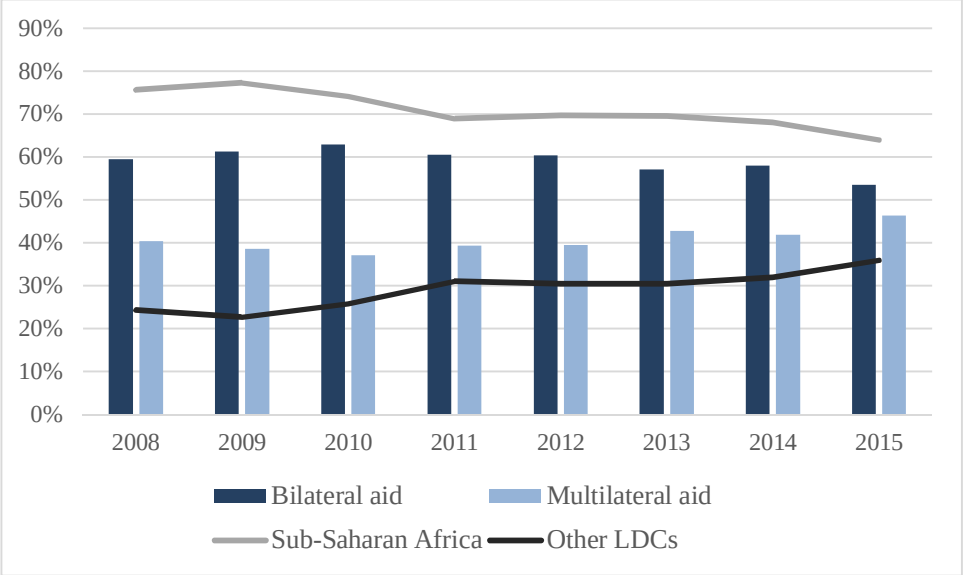

Figure 5 Evolution of percentages of bilateral/multilateral Finnish development cooperation between 2008 and 2015 (Ministry for Foreign Affairs of Finland 2017)

Interestingly multilateral aid tends to have a significantly larger portion of development cooperation in Finland than in Denmark and the Netherlands. This share appears to be growing recently, which is almost an opposite of what is happening in European comparison countries. The vast majority of the multilateral aid is directed to UN, EU and the World Bank respectively, but regional IFIs especially African Development Fund (AfDF) also receive a significant portion annually. Van Gerwen, Poutiainen, Weitzenegger, Alanoca and Efraimsson (2016) of Finnish Consulting Group interviewed stakeholders such as embassies for their experiences of multilateral aid for trade and experiences were mixed. Even though projects were implemented to a satisfactory level, embassy staff members were less content with the international projects as they are typically not involved in implementation process though they are consulted in designing phase. The alignment of specific regional or sectoral objectives to multilateral projects was also questioned as well as the implementation capacity of international organizations on the ground level.

Most of the long-term Finnish bilateral aid partner countries are Sub-Saharan African countries such as Tanzania, Mozambique, Zambia, Kenya and Ethiopia which are among the top recipients of disbursements. In bilateral aid, 62 percent of the funding are project-type interventions, 25 percent contributions to pooled programmes and funds, 12 percent budget support and only 1 percent technical assistance (OECD 2016b). The percentage of pooled programmes is higher than that of both the Netherlands and Denmark. Therefore combined share of project-type interventions and

technical assistance is lesser than the two comparison countries have. Transport and ICT sectors are not categorized separately in extensive evaluations reports by independent organizations when the disbursements to bilateral aid partner countries are assessed. But given that the sectors are not independently categorized in the figures is a sign that payments and projects are marginal.

As a small donor and small economy Finland uses frequently multi-donor trust funds across the different sectors to support its development cooperation objectives. However the voting and influence power of Finland is very limited. For the World Bank´s International Bank for Reconstruction and Development (IBRD) and International Development Association (IDA) Finland holds 0.51 percent and 0.65 percent of the votes respectively. Annual financial contribution of Finland for aforementioned has been around USD 30 to 60 million. While the evaluation reports have not assessed the influence possibilities in these multi-donor trust funds, they do not seem the most plausible channel to include Finnish private sector because of the limited voting power. This could be especially true for transport projects, where the investments and projects tend to be very capital intensive.

Likewise with European comparison countries, Finland has key national institutions that contribute to endorse and support Finnish private companies and development objectives in developing countries. Finnpartnership is a similar programme to Dutch "Private Sector Investment Programme" and Danish "Danida Business-to-Business Programme". Mission of Finnpartnership is to increase commercial cooperation between Finland through partnerships and by providing grants and free of charge services for Finnish companies who are exploring partnerships in developing countries for achieving development effects. The program is supported by Finnish development cooperation funds and the services include business partnership support (BPS), matchmaking services and advisory services. ICT is by far the most important segment for BPS, between 2010 and 2015 17 percent of the projects approved were of ICT sector. Transport was not categorized as its own segment.

The efficiency and results of Finnpartnership have been researched by independent organizations such as KPMG (2012) and Finnish Consulting Group (2016). KPMG´s report found that 61 percent of the participating companies felt that Finnpartnership´s business partnership support has enabled the build of long-term partnerships in developing countries and there´s an indication that over 50 percent of the funded projects were successful. Van Gerwen et al. (2016) inquired 78 companies spanning from different sectors that had received BPS support from Finnpartnership. 40 percent of the companies stated that their revenues had increased due to BPS project while 15 percent reported losses, the pattern is similar in the effects on exports. Unfortunately these figures are not categorized in order to draw conclusions upon transport and ICT sectors.

Van Gerven et al. (2016) acknowledged that even though Finnpartnership is one of the few business facilitators of Finnish development cooperation, the organization itself is not well linked to other relevant support channels and facilities. The authors argue that cooperation with other Team Finland counterparts exists, but it transpires only with trade missions and country visits while information sharing is inadequate. The BPS disbursements against commitments is also on a low level meaning that because of lack of funding, a lot of BPS projects do not materialize. Finnpartnership´s BPS support seems to be having more of "additional" than "enabling" factor and many companies have stated that the projects would have started without Finnpartnership´s support, even though perhaps on smaller scale.

Finnfund comprises 19 percent of aid for trade budget of Finnish Ministry for Foreign Affairs. The institution invests primarily in projects of Finnish companies and their associates in developing countries. This means Finnfund provides finance for companies in developing countries and the projects might involve input of Finnish companies in the form of technology suppliers, designers or operators especially in low-income country infrastructure projects. Mechanisms of Finnfund are serving as a minority stakeholder, lending and providing mezzanine instruments such as subordinated loans and preferred shares. Finnfund is more focused on larger investments or investment funds and unlike Finnpartnership does not provide funding for Finnish SMEs. Finnfund´s operations are labeled as Aid for Trade as it´s part of the Finnish government´s AFT portfolio and is partly financed by MFA´s development cooperation budget.

Van Gerwen et al. (2016) described that Finnfund has an overall positive rate of return in its portfolio but this is not more specified and the concrete commercial benefits for Finnish companies has not been addressed. By December 2015 Finnfund had 3 telecommunications and 1 transport projection funded. In transport sector Finnfund financed new airport cargo center in Kotoka International Airport (Ghana) of which steel structure was designed by Finnish company Mafi. Telecommunication projects are divided between China, Ethiopia and India by companies Avain Technologies, M-Birr Ltd. and Nokia Siemens Network respectively (Finnfund 2017).

Van Gerwen et al. (2016) argued that much like with Finnpartnership, the possible synergies with MFA in private sector support and trade operations are commonly not applied. The authors also notified that there seems to be a clear gap of how the Finnpartnership and Finnfund instruments reach Finnish companies, especially SMEs who would be interested to start up and expand their business in developing countries. Finnpartnership serves small enterprises while Finnfund is more concentrated to invest large amounts to more mature projects and destinations. Ultimately though, it is recognized that Finnfund has been able to support and finance investments in

developing and least developed countries, where the lack of funding is a serious bottleneck for development.

5.4 Views on Finnish private sector involvement in Transport and ICT sector development cooperation

5.4.1 Profile of the projects and cooperation in transport and ICT sectors

It is very common that the IFIs such as the World Bank make a clear division between different sectors, this includes transport and ICT. However most of the interviewees felt that there is not this sort of divison in their respectable organizations. ICT is the sort of sector that spans the traditional sector lines and one interviewee concluded that nowadays ICT contributes to every sector and can be found everywhere. It became very obivious during the interviewees that there is very little activity in transport sector both in Finnish development cooperation but also in Finnish private sector participation. One interviewee stated that there could be solutions to be financed where Finnish companies could offer service based transport solutions in the future, but so far there has not been examples of this. Another point raised is that infrastructure projects such as transport often times offer unattractive return on investment. The private sector drivenness of ICT also became apparent clearly, therefore it is easier also for Finnish private sector to find funding for ICT projects.

In the division between hard and soft infrastructure, Finnish development cooperation is almost solely based on soft infrastructure.

> "*Our intention is to develop human infrastructure and the operations of key institutions in the target country. There has been some technical assistance regarding the ICT, but not in the large-scale and we have not invested in the exportation of technology nor for e.g. building of information networks. We differ in that sense from the larger donors.*" (Senior Advisor 10.5.2017)

It was acknowledged that the history of Finland probably has affected Finnish development cooperation. One interviewee mentioned that Finland does not have colonialization history as for example Dutch have and the country does not have the same resources that Sweden has. One interviewee also recognized that trend in development cooperation funds is to grant general budget aid to partner countries or organizations. This reduces the influence opportunities of the donor country since the recipient has the power to designate how the funds are to be used.

The final objectives between MFA, Finnpartnership and Finnfund tend to differ slightly from each other. For pure development cooperation, the primary objective is to reduce poverty and support the fulfillment of human rights. Finnfund meanwhile had traditionally only invested to Finnish companies but nowadays the company can either be Finnish or foreigner, but Finnish development cooperation objective must be met with the investment. In Finnpartnership, the recipient of BPS must be linked to Finland in some way for example by ownership, licensing or franchising, the development objectives must be also be fulfilled.

5.4.2 Cooperation with partners and use of development cooperation mechanisms in transport and ICT projects

Most interviewees agree that there has been a shift in cooperation with the local partners in developing countries. Before they used to be more of government officials, but nowadays local private sector is more and more present and significant partner. For the national institutions, there is a wide array of relevant partners ranging from NGOs both in Finland and local country all the way to chambers of commerce. IFIs and trust funds were also addressed.

> *"Our influence in IFIs have been decreasing as our development cooperation funding has been cut. If we are to have influence, we would have to offer our knowledge and expertise. This is especially relevant in ICT sector, where we could have influence this way particularly in trust funds."* (Senior Advisor, 10.5.2017.)

All the interviewees felt that Finnish embassies are very important partner for Finnish private sector to support their endeavours in the developing countries. It was highlighted that often times they have the best knowledge about the local network and market. However it was noted that the role and "export friendliness" of the embassies vary a lot from country-to-country and is also ambassador dependent. Another variable is the resources of the particular embassy. One interviewee noted that in the countries where Finland has great development cooperation traditions and bilateral aid relationships, the resources tend to be also higher. Team Finland concept has also seen to increase the cooperation between different internal partners. This network of operators offering export related services includes the likes of Finpro, Tekes and Finnvera.

5.4.3 Sectoral and regional selection process

All the interviewees agree that in their respective organizations there is not any regional distinction, more important criteria tends to be the actual development/poverty level of the particular country and this is where LDCs are being emphasized. Every interviewee believes in the economic future of Africa and has seen growing interest and enthusiasm among Finnish private companies for the continent in the past few years. However there are still very limited amount of Finnish companies that actually have operations in Africa, this is true in transport and ICT projects as well. MFA commented the selection process and Finnish private sector influence followingly:

"Normally we do not ask Finnish private companies for opinion on how we should do operate development cooperation. But we have had hearing rounds in our country programmes for Finnish private sector. It might be possible that Finnish companies are interested more about middle-income countries than the least developed countries." (Senior Advisor, 10.5.2017.)

Finnfund and Finnpartnership have a bit different selection process and they constantly take feedback from their customers, meaning Finnish private sector, into account. For Finnfund and Finnpartnership the selection process is dominated by the general terms that the recipient has to fulfill to receive BPS, or in Finnfund´s case the outlook and future opportunities of the particular business.

5.4.4 End-results

As mentioned, The Minister of Foreign Affairs and the national institutions have different objectives on how to evaluate end results. For Department for Development Policy, the development objectives such as creation of jobs and reduced poverty are important metrics but they are not connected directly to the end results of Finnish private sector. Finnish embassies meanwhile follow more closely the creation of partnership with Finnish pricate sector and local partners in their own country programs. For Finnpartnership, it was estimated that around half of business partnership support recipients eventually start cooperation with the local partner and 25 percent can state they have been successful after two years of collaboration. These figures have not been divided between different sectors, so unfortunately examination for transport and ICT sectors specifically is not possible. Finnfund states that in most projects the results have been positive, these examples are mostly from Asia, only one-fifth of the projects fail completely.

I´d say that there´s still around few tens of thousands companies in Finland that could be potential customers for our offering and could benefit from our funding to search new business opportunities from the developing countries. At the end of the day, the instruments available can not make decisions behalf of the companies itself. (Senior Advisor, 10.5.2017.)

The interviewees mentioned that in some occasions a particular company would not have entered to foreign developing country without the assistance that the national institutions provided. In these occasions Finnfund or Finnpartnership provided funding and assistance made the project more efficient and punctual. Ideal relationship of Finnish private sector and development cooperation was discussed. While there was not any large revelations, most interviewees acknowledged that the optimum would be that the two parties would share close and small bureaucracy relationship. All the interviewees were optimistic about the outlook of the growing interest among Finnish private companies towards the developing countries.

6 CONCLUSIONS

6.1 Connecting the analytical framework with the empiria

The objective of this study was to analyze Finnish private sector involvement and its role in Finnish development cooperation´s transport and ICT sectors. Analytical framework suggested that transport projects in general tend to be large-scale projects with heavy capital investment. Increased private sector participation in transport sector has indeed yielded positive allocative and efficiency results. However transport projects are almost completely obsolete in Finnish development cooperation and there is a very limited amount of examples from Finnpartnership and Finnfund for transport cases. This could be because of few factors. Perhaps there just is not much supply from Finnish companies or the feasibility capabilities for large-scale hard infrastructure projects is insufficient. The resources of Finnish national institutions might also be inadequate to support large-scale transport infrastructure projects. It seems that the characteristics of ICT projects would suit better for Finnish development cooperation and private sector participation. In many cases the projects are more knowledge based and there are a lot of soft infrastructure options, ICT components could be exploited beyond traditional sector lines and long-term opportunities are present. Therefore it was perhaps no surprise that there were a lot more examples of ICT related private sector participation than transport related.

Analytical framework suggests that the objectives of hard infrastructure projects were achieved in significantly higher rate than soft infrastructure (The World Bank 2007), even though soft infrastructure projects were seen to attract more FDI for Asian countries (García-Herrero, Iizaka & Siu 2006, 19). However the straight comparison for Finnish development cooperation is hard because of the scale of the projects, for Finland it would not be feasible to execute this sort of large-scale hard infrastructure projects by themselves.

There are several different operators in the sector of development cooperation: Donor countries, IFIs and NGOs. There also exists several mechanisms for a donor country to practice it´s development cooperation: Bilateral aid, multilateral aid, multi-donor trust funds and PPPs. IFIs and NGOs are relevant partners for Finnish development cooperation and cooperation itself is executed through either bilateral or multilateral aid. However it seemed that PPPs had a lot more significance in analytical framework but were almost obsolete from the empiric part. It is possible to perceive the cooperation of Finnpartnership and a private finnish company as a PPP, but typically the local partners in a developing country are private sector operators and not public sector. This might not be surprising given the fact that privatization is a major factor in economic reform

programs for transport and ICT sectors in developing countries. However, it would have been very interesting to connect PPP related analytical framework to real-life examples.

Multi-donor trust funds are important mechanism for Finnish development cooperation. Reinsberg, Michaelowa and Knack (2015, 3-4) argued that donors have to compromise for their own priorities in MDTFs, especially when more donors are involved. This seems to be an issue especially for smaller donors such as Finland who tend to have less funding resources available especially when their funding resources are more and more scarce. There were no reference in empiria regarding the argument by Hoeffler and Outram (2011, 248-249) that donors would act out of self-interest in MDTFs and that trade interests would be a top-priority.

The state of transport and ICT infrastructure is alarming in the regions such as Sub-Saharan Africa where Finland is active in its development cooperation. In the meantime there are several studies that both suggest that infrastructure investments contribute positively to economic growth (Égert, Kozluk & Sutherland 2009, 11) and that least-developed regions of the world such as Africa lose approximately 2 percent annual GDP growth because of insufficient economic infrastructure (Ondiege, Moyo & Verdier-Chouchane 2013, 69). Nevertheless transport and ICT are nowhere near the top priorities in Finnish development cooperation´s agenda. If reduction of the poverty and fullfilling of human rights are the top priorities it might be reasonable to think that transport and ICT only contribute to these objectives indirectly. This would mean that it is easier to sell food aid, health aid and education as more humanitarian sectors to influence and contribute of reaching those objectives even though transport and ICT´s developments positive economical effects are undeniable.

Spitz, Muskens and Ewijk (2013, 22-23, 40) emphasized that bilateral aid has been recognised to offer better trade and influencing opportunities for Dutch. Similarly Hansen and Raid (2014, 9-10) found that bilateral aid has had positive effect on Danish exports to the beneficiary countries. The following Table 8 summarizes some key divisions of how development funds have been allocated between European comparison countries. Table is based on sources of Chapter 5 and the figures are percentages of total development cooperation funding including all the sectors. The Table applies latest annual data.

Table 8 Development cooperation funding allocation between European comparison countries

	Finland	Netherlands	Denmark
	2015	**2013**	**2016**
Bilateral aid	53 %	70 %	70 %
Multilateral aid	47 %	30 %	30 %
	2016	**2016**	**2016**
Project-type interventions	62 %	61 %	75 %
Pooled programmes and funds	25 %	20 %	18 %
Technical assistance	1 %	17 %	1 %
	2004 - 2014	**2014**	**2015**
Economic infrastructure proportion	6 %*	50 %	11 %

***Average of the 2004 and 2014 time period**

The statistical division seems to leave Finland in an unfavourable position compared to other European comparators regarding the opportunities for private sector participation in general and in transport and ICT sectors in particular. The share of multilateral aid and pooled programmes and funds for Finland is significantly higher compared to Netherlands and Denmark while the economic infrastructure proportion is considerably lower. Once again this could be tracked down to historial reasons, variations in development cooperation objectives or the sheer supply and expertise of a country.

There are notable differences how development cooperation is approached in general. Dutch approach is known for its trade interest, developing countries are raised from poverty by intensive private sector development support and subsequently the desire is to work with the countries as economic partners. The objective is eventually to make the markets easily accessible for Dutch companies. Danish have also placed considerably higher emphasis on promotion of self-interests in the form of endorsing Danish companies in developing countries and developing a dialogue with them to develop ideal business instruments for this. In Finnish MFAs development cooperation, Finnish private sector does not hold much of a importance and this objective is more reserved for Finnpartnershp and Finnfund.

The national institutions of the comparison countries have had varying results. It is noteworthy that the Netherlands and Denmark have had more variation in their business instruments while Finland has been quite stable with Finnparnership´s and Finnfund´s services. Based on losses that Danish companies had in Danida´s business-to-business programme it could be evaluated that Finnish instruments have fared quite well against the comparison countries. In available examples, transport and ICT projects have relatively strong showing in these business instruments when assessing the impact and effectiviness compared to projects in other sectors but lack of precise data proposes a challenge to pinpoint exact end-results for donor country´s private sector.

6.2 The practical implications and suggestions for further study

As the economic and social benefits of transport and ICT sectors are undeniable, it was perhaps surprising that transport and ICT sectors have such a minor role in Finland´s development cooperation. It is highly unlikely that the importance of these sectors as facilitators of trade and technological advancement will decrease in the developing countries for foreseeable future. Finnish export agency, Finpro has 17 growth programs from which 5 are related either to transport or ICT sectors (Finpro 2017). These growth programs include Finnish private sector based knowledge and offering from maritime and offshore, intelligent vehicle and traffic growth, ICT and Digitalisation and industrial internet. In June 2017, Ministry of Transport and Communications announced new growth program to advance export-based growth in soft-infrastructure based transport solutions. The objective is to offer tools and support for Finnish private companies to compete for international investments and EU financing.

There seems to be available Finnish solutions for the urgent needs in developing countries and it´s hard to imagine that the lack of economic infrastructure and especially transport development cooperation would be caused by inadequate Finnish expertise or knowhow. One issue could be that Finnish solutions are too high-end and complicated for the urgent needs of developing countries and would need to be deployed first in the more advanced business environments. Choosing of advanced western economies as target markets for aforementioned Finpro´s growth programs could indicate this. Finland could also quite easily be subject to "technological euphoria" that was mentioned in analytical framework.

Growing trend for allocation of Finnish development cooperation seems to be in multilateral aid even though its influencing opportunities for self-interests have been questioned several times in this study. This is also a different path compared to the Netherlands and Denmark who have much greater focus on promoting their own trade interest alongside with traditional humanitarian objectives of development cooperation. Strategic shift to concentrate for more bilateral aid and benchmarking some princriples from recognized "Dutch Approach" could serve Finland in long-term as a small, export dependent information society and economy. The foundations are definitively ready in the form of respectable pool of long-term partner countries especially in Africa and Asia.

Private sector participation responsibility of Finnish development funds is predominantly placed upon Finnpartnership and Finnfund and there is no doubt about the importance of these two national institutions in prodiving assistance and finance for Finnish companies in developing countries. There seems to be two bottlenecks however: The insufficient BPS disbursement financially for Finnish private companies and the lack of instruments to serve Finnish SMEs. Obliviously increasing BPS

disbursement is an investment for Finnish Ministry of Foreign Affairs, but it could be argued that if the Finnish private companies contribute for positive development effects while advancing their own business ambitions, it is a win-win situation in several ways. Finnish SME enterprises have generated most of the job creation in the country for last decade. Tekes has the objective to twofold rise in Finnish exports by SMEs from 2015 to 2020 and has laid a six step model to achieve this objective. This list includes the growth and reneval of business subsidies (Tekes 2015). It is crucial that there is appropriate business instruments for Finnish SMEs to start their businesses in developing countries and enter these markets. This would be beneficial for the whole economy and it would be adventagous that the whole internal Team Finland network, including local Embassies which would have integral role supporting this advancement.

As mentioned, it is reasonable to believe that more active participation and integration of donor country´s private sector into development cooperation will continue to be increasingly actual theme. Therefore it is likely that Finnish MFA and other relevant European countries will continue to produce evaluation reports to estimate results, effectiveness and private sector participation of development cooperation. In scientific literature however the theme is underresearched and it is hard to find objective, extensive and normative studies of how a donor country´s private sector have and could contribute to development objectives, meanwhile growing its own business and therefore commercial interests of a donor country. Strict limitations sector-wise could increase complexity of further studies as they did in this study. For further studies it would be reasonable to widen the sources for empiria, most preferiably to include third-party industry experts and private companies, that have had development cooperation or national institution supported projects in a developing country.

Perhaps there will be more available cases and examples to be studied in transport and ICT sectors in the next decade and finally these sectors gain more importance in Finnish development cooperation. It has been estimated that African population will double by 2050 and it´s well known that most of the future population growth will happen in developing countries. This could raise the demand for easily scalable solutions for which especially ICT could have lot to offer. Therefore demand in developing countries is definatively present, the need to make Finnish balance of trade positive again is crucial and development cooperation´s objectives could be fulfilled through transport and ICT sectors. There is definitely unexploited potential.

REFERENCES

Africa mobile observatory 2011: Driving economic and social development through mobile services. GSMA. <http://www.gsma.com/publicpolicy/wp-content/uploads/2012/04/africamobileobservatory2011-1.pdf>, retrieved 6.10.2016.

Africa: World Bank and Microsoft sign partnership agreement to promote development in Africa (2010) Asia News Monitor 4.2.2010.

African Development Bank Group (2016) 2015 Annual Report on Transportation and Information and communications technology (ICT). < https://www.afdb.org/fileadmin/uploads/afdb/Documents/Generic-Documents/OITC_annual_Report_2015.pdf>, retrieved 17.2.2017.

African Development Bank Group (2012) Review of the Bank´s ICT Operations Strategy & Action Plan for the Medium Term 2012-2014. <http://www.afdb.org/fileadmin/uploads/afdb/Documents/Policy-Documents/Rev%20ICT%20Operations%20Strategy%20Review.pdf> retrieved 13.12.2016.

African Development Bank Group (2016) 2015 Annual Report on Transportation and Information and communications technology (ICT). < https://www.afdb.org/fileadmin/uploads/afdb/Documents/Generic-Documents/OITC_annual_Report_2015.pdf>, retrieved 17.2.2017.

Aid for Trade and Value Chains in Information and Communication Technology (2013) World Trade Organization. <https://www.wto.org/english/tratop_e/devel_e/a4t_e/global_review13prog_e/ict_28june.pdf>, retrieved 7.12.2016.

Alonso, J.A. – Glennie, J. (2015) *What is development cooperation?* 2016 Development Cooperation Forum Policy Briefs, Februrary 2015, No.1.

Alozie, N.O. – Akpan-Obong, P. & Foster, W.A. (2011) Sizing up information and communications technologies as agents of political development in Sub-Saharan Africa. *Telecommunications Policy.* Vol.38 (8), 752-763.

Annan, K.A. (2002) Information and communications technologies: A priority for Africa´s development. In: *Information and communication technologies for African development,* eds. J. Okpaku. New York: United Nations ICT Task Force.

Arvis, J.F. – Saslavsky, D. – Ojala, L. – Shepherd, B. – Busch, C. – Raj, A. – Naula, T. (2016) Connecting to Compete 2016. The World Bank. <https://wb-lpi-media.s3.amazonaws.com/LPI_Report_2016.pdf>, retrieved 4.10.2016.

Aschauer, D.A. (1989) Is public expenditure productive? *Journal of Monetary Economics.* Vol. 23 (2), 177-200.

Asian Development Bank (2017a) ADB´s work in sustainable transport. < https://www.adb.org/sectors/transport/overview>, retrieved 17.02.2017.

Asian Development Bank (2017b) ADB´s work to improve access to information and communication. <https://www.adb.org/sectors/ict/overview>, retrieved 18.12.2017.

Asian Development Bank (2014) Promoting Information and Communication Technology in ADB Operations. Asian Development Bank, 2014.

Baller, S. – Dutta, S. – Lanvin, B. (2016) The Global Information Technology Report 2016. < http://www3.weforum.org/docs/GITR2016/GITR_2016_full%20report_final.pdf>, retrieved 23.3.2017.

Banister, D. – Berechman, Y. (2000) The Economic Development Effects of Transport Investments. *Paper for presentation at the TRANS-TALK workshop, Brussells, November 2000.* <https://www.academia.edu/1566990/The_Economic_Development_Effects_of_Transport_Investments>, retrieved 11.10.2016.

Bivens, J. (2014) The short- and long-term impact of infrastructure investments on employment and economic activity in the U.S economy. Economic Policy Institute. <http://www.epi.org/files/2014/impact-of-infrastructure-investments.pdf>, retrieved 12.10.2016.

BMZ (2011) Aid for Trade in German Development Policy. <https://www.bmz.de/en/publications/archiv/type_of_publication/strategies/Strategiepapier308_07_2011.pdf>, retrieved 14.12.2016.

Busan Partnership for Effective Development Co-operation (2011) 4th High Level Forum on Aid Effectiveness, 29.11-1.1.2011, Busan, Korea.

Chakraborty, C. – Nandi, B. (2009) *Telecommunications adoption and economic growth in developing Countries: Do levels of development matter?* 4th Communication Policy Research, South Conference, Negombo, Sri Lanka.

Chaudhuri, A. (2012) ICT for Development: Solutions seeking problems? *Journal of Information Technology*. Vol. 27, 326-338.

Danida (2016) Activities of Denmark´s development cooperation. < http://um.dk/en/danida-en/activities/>, retrieved 30.12.2016.

Deb, S. (2014) Information technology, it´s impact on society and it´s future. *Advances in Computing*. Vol. 4 (1), 25-29.

Development cooperation. Government of the Netherlands. <https://www.government.nl/topics/development-cooperation>, retrieved 29.12.2016.

Donou-Adonsou, F. – Lim, S. & Mathey, S.A. (2016) Technological progress and economic growth in Sub-Saharan Africa: Evidence from Telecommunications Infrastructure. *International Advances in Economic Research.* Vol. 22 (1), 65-75.

Égert, B. – Kozluk, T. – Sutherland, D. (2009) *Infrastructure investment: Links to growth and role of public policies.* OECD Economics Department Working Papers, No. 686, OECD publishing.

Ejiaku, S.A. (2014) Technology Adoption: Issues and Challenges in Information Technology Adoption in Emerging Economies. *Journal of International Technology and Information Management.* Vol. 23 (2), 59-68.

Enakrire, T.R. – Onyenania, O.G. (2007) Factors Affecting the Development of Information Infrastructure in Africa. *Library Hi Tech News.* Vol. 24 (2), 15-20.

Estrin, S. – Pelletier, A. (2015) Privatisation in developing countries: What are the lessons of experience? <https://assets.publishing.service.gov.uk/media/57a08977ed915d3cfd000264/Topic_Guide_Privatisation_Nov.pdf>, retrieved 19.12.2016.

Eriksson, P. – Kovalainen, A. (2008) *Qualitative methods in business research.* SAGE Publications Ltd.

Eskola, J. – Suoranta, J. (1998) Johdatus laadulliseen tutkimukseen. Vastapaino, Tampere.

European Bank for Reconstruction and Development (2017) Information and Communication Technologies. <http://www.ebrd.com/information-and-communication-technologies.html>, retrieved 17.12.2016.

European Investment Bank (2016a) Sectors: Transport. <http://www.eib.org/projects/sectors/transport/index.htm>, retrieved 21.10.2016.

European Investment Bank (2016b) Bridging the digital divide: EIB pledges help get 1.5 billion people online. <http://www.eib.org/infocentre/press/releases/all/2016/2016-094-bridging-the-digital-divide-european-investment-bank-pledges-to-help-get-1-5-billion-people-online.htm>, retrieved 20.02.2017.

Evaluation of Danida Business-to-Business Programme 2006-2011. Evaluation Department, Ministry of Foreign Affairs of Denmark.

Evaluation PSOM/PSI 1999-2009 and MMF. Triodos Facet BV, the Netherlands.

Fajiir, A. – Zidan, Z.H. (2016) An analysis of the issues and challenges of transportation in Nigeria and Egypt. *The Business and Management Review.* Vol. 7 (2), 18-29.

Fife, E. – Hosman, L- (2007) Public Private Partnerships and the Prospects for Sustainable ICT Projects in the Developing World. *Journal of Business Systems, Governance, and Ethics.* Vol. 2 (3), 53-66.

Finnfund (2017) Finnfund lyhyesti. < https://www.finnfund.fi/yritys/fi_FI/brief/>, retrieved 15.3.2017.

Finpro (2017) Team Finland Growth Programs. < http://www.exportfinland.fi/web/eng/services/programs>, retrieved 9.8.2017

Fourie, J. (2006) Economic infrastructure: A review of definitions, theory and empirics. *South African Journal of Economics*. Vol. 74 (3), 530-556.

Full text of Michael Bloomberg´s speech at DNC 2016. *New Jersey Politics.* 28.7.2017

Fulmer, J.E. (2009) What in the world is infrastructure? *PEI Infrastructure Investor* (7/8), 30-32.

Fung, K.C. – García-Herrero, A. – Iizaka, H. – Siu, A. (2005) Hard or soft? Institutional reforms and infrastructure spending as determinants of foreign direct investment in China. *Japanese Economic Review.* Vol. 56 (4), 408-416.

Fölscher, A. – Katila, M. – Venäläinen, R. – Lister, S. – Turner S. – Maunder, N. – Visser, M. – Loveday, L. (2016) *Evaluation of Finland´s development cooperation country strategies and country strategy modality.* Ministry for Foreign Affairs of Finland.

Gallegos, D. (2012) *Partnerships for Broadband.* The World Bank: ICT Policy Notes. Note number 02, Washington D.C.

Gao, P. – Lee, H. – Lyytinen, K. – Wang, K. (2014) Special issue on information technology in China. *Journal of Information Technology.* Vol. 29 (3), 206-207.

Gasmi, F. – Maingard, A. – Noumba, P. – Recuero Vital, L. (2013) The privatization of the fixed-line telecommunications operator in OECD, Latin America, Asia and Africa: One size does not fit all. *World Development*, Vol. 45, 189-208.

Global Employment Trends 2014. International Labour Organization. < http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_233953.pdf>, retrieved 11.10.2016.

Global Information Technology Report 2016. World Economic Forum. <http://reports.weforum.org/global-information-technology-report-2016/>, retrieved 10.10.2016.

Gogelia, T. – Talvitie, A. (2011) Some managerial and technical issues in transport sector development projects. *Transportation.* Vol. 38, 779-798.

Gomez-Ibanez, J. – Meyer, J. (1993) *Going private: The international experience with transport privatization.* The Brookings Institution, Washington D.C.

Halldórsson, Á, - Aastrup, J. (2003) Quality criteria for qualitative inquiries in logistics. *European Journal of Operational Research.* Vol. 144, 321-332.

Han, W.S. – Yusof, A.M. – Hai, T.K. – Ismail, S. (2012) *A conceptual review of social infrastructure projects.* IBIMA Publishing, King of Prussia, PA.

Hansen, H. – Rand, J. (2014) *Danish exports and Danish bilateral aid*. Copenhagen: Ministry of Foreign Affairs of Denmark. Danida.

Heeks, R. (2009) *The ICT4D 2.0 Manifesto: Where Next for ICTs and International Development?* Development Informatics: Working Paper Series paper no. 42. Institute for Development Policy and Management.

Hoeffler, A. – Outram, V. (2011) Need, merit, or self-interest – what determines the allocation of aid? *Review of Development Economics,* Vol. 15 (2), 237-250.

Hong, J. – Chu, Z. – Wang, Q. (2011) Transport infrastructure and regional economic growth: Evidence from China. *Transportation,* Vol. 38 (5), 737-752.

Horsburgh, D. (2003) Evaluation of qualitative research. *Journal of Clinical Nursing.* Vol. 12, 307-312.

Humphrey, C. – Griffith-Jones, S. – Xu, J. – Carey, R. – Prizzon, A. (2015) Multilateral development banks in the 21st century. Overseas Development Institute. <https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/10097.pdf>, retrieved 28.2.2017.

International LPI 2016. The World Bank. <http://lpi.worldbank.org/international>, retrieved 4.10.2016.

International Monetary Fund (2015) World Economic Outlook. < http://www.imf.org/external/pubs/ft/weo/2015/01/pdf/text.pdf>, retrieved 22.3.2017.

International: Public-private development links grow (2014) Oxford Analytica Daily Brief Service. <http://search.proquest.com/docview/1514319220?accountid=14774>, retrieved 24.10.2016.

Jamali, D. – Keshishian, T. (2009) Uneasy Alliances: Lessons learned from partnerships between businesses and NGOs in the context of CSR. *Journal of Business Ethics,* Vol. 84 (2), 277-295.

Kamps, C. (2004) *New estimates of government net capital stocks for 22 OECD countries 1960-2001.* IMF Working Paper.

Katz, R. (2012) *The impact of broadband on the economy.* International Telecommunication Union, broadband series, Switzerland Geneva, April 2012.

Kingombe, C. (2014) Hard and Soft Infrastructure Development in Africa. *Presented in multi-year WTO expert meeting on transport, trade logistics and trade facilitation,* Geneva, Switzerland, 1-3 July, 2014, 1-39.

Kirkpatrick, C. – Parker, D. – Zhang, Y.F. (2006) Foreign direct investment in infrastructure in developing countries: Does regulation make a difference? *Transnational Corporations,* Vol. 15 (1), 143-171.

KPMG (2012) Evaluation of Finnpartnership Programme. <http://www.enterprise-development.org/wp-content/uploads/Finnpartnership_Evaluation_Report_2012.pdf>, retrieved 15.3.2017.

Limão, N. – Venables, A.J. (2000) Infrastructure, Geographical Disadvantage, Transport Costs and Trade. *World Bank Economic Review.* Vol. 15 (3), 451-479.

Lincoln, Y.S. – Guba, E.G. (1985) *Naturalistic inquiry.* Newbury Park, CA: Sage.

Lindfors, J. – Hämäläinen, P. – Siitonen, H. – Vähätörmä, E. (2013) The wider economic impacts of transport investments. Bothnian Green Logistic Corridor. <http://www.helsinki.fi/ruralia/asiantuntijapalvelut/ytp_fin/pdf/BGLC_WP_53_report_Final_12022014.pdf>, retrieved 12.10.2016.

Lui, D. (2016) Tailoring Aid for Trade to the services economy. *Bridges Africa.* Vol. 5 (4), 16-21.

McKinsey Global Institute – Infrastructure productivity: How to save $1 trillion a year. <http://www.mckinsey.com/~/media/McKinsey/Industries/Capital%20Projects%20and%20Infrastructure/Our%20Insights/Infrastructure%20productivity/MGI%20Infrastructure_Full%20report_Jan%202013.ashx>, retrieved 19.10.2016.

Measuring the Information Society Report 2015. International Telecommunication Union.<http://www.itu.int/en/ITU-D/Statistics/Documents/publications/misr2015/MISR2015-w5.pdf>, retrieved 6.10.2016.

Meuser, M. – Nagel, U. (2009) The expert interview and changes in knowledge production. In: *Interviewing experts*, ed. by Bogner, A. – Littig, B. – Menz, W., 1-13, Palgrave MacMillan, Hampshire.

Ministry for Foreign Affairs of Finland. Development policy and development cooperation. <http://formin.finland.fi/Public/default.aspx?nodeid=49273&contentlan=2>, retrieved 21.9.2016.

Ministry for Foreign Affairs of Finland. Funding and disbursements of development cooperation between 1989 and 2015. <http://formin.fi/public/download.aspx?ID=156762&GUID={07EA50D0-D02C-421D-B596-4D742B68D0DA}>, retrieved 13.3.2017.

Ministry of Foreign Affairs of Denmark. Danish multilateral development cooperation analysis. <http://um.dk/da/~/media/UM/Danish-site/Documents/Danida/Samarbejde/Int-org/Danish%20Multilateral%20Development%20Cooperation%20Analysis.pdf>, retrieved 1.3.2017.

Ministry of Foreign Affairs of Denmark. Evaluation of Danida business-to-business programme 2006-2011 – Synthesis Report. <http://um.dk/en/danida-en/results/eval/Eval_reports/publicationdisplaypage/?publicationID=ACCBE665-4946-4842-ABF7-43B60DE2524D>, retrieved 3.1.2017.

Ministry of Foreign Affairs of Netherlands. Evaluation of ORET programme: Investing in Public Infrastructure in Developing Countries. < https://www.government.nl/binaries/government/documents/reports/2015/07/01/iob-work-in-progress-evaluation-of-the-oret-programme-investing-in-public-infrastructure-in-developing-countries/work-in-progress-%E2%80%93-evaluation-of-the-oret-programme-%E2%80%93-investing-in-public-infrastructure-in-developing-countries.pdf>, retrieved 3.8.2017.

Ministry of Foreign Affairs of Netherlands. A World to Gain: A New Agenda for Aid, Trade and Investment. <https://www.government.nl/binaries/government/documents/letters/2013/04/05/global-dividends-a-new-agenda-for-aid-trade-and-investment/a-world-to-gain-en.pdf>, retrieved 3.8.2017.

Ministry of Foreign Affairs of the Netherlands. Developing the private sector, trade and investment, strengthening sustainable economic growth. <https://www.government.nl/binaries/government/documents/leaflets/2016/04/12/strengthening-sustainable-economic-growth-developing-the-private-sector-trade-and-investment/1.-en-factsheet-developing-the-private-sector-trade-and-investment.pdf>, retrieved 29.12.2016.

Ministry of Foreign Affairs of the Netherlands. Private sector development. < http://www.dutchdevelopmentresults.nl/wp-content/uploads/sites/1034/2016/09/7328-BUZA-Printversie-thema_PRIVATE-SECTOR-5.pdf>, retrieved 29.12.2016.

Ministry of Transport and Communications (2017) Suomalaiset yritykset globaalien liikennemarkkinoiden edelläkävijöiksi liikennealan kasvuohjelmalla. < https://www.lvm.fi/-/suomalaiset-yritykset-globaalien-liikennemarkkinoiden-edellakavijoiksi-liikennealan-kasvuohjelmalla-946545>, retrieved 9.8.2017.

Morton, B. (2013) An overview of international NGOs in development cooperation In: *Working with civil society in foreign aid: Possibilities for South-South cooperation?* eds. United Nations Development Programme, 325-352. UNDP China.

Net ODA from DAC countries from 1950 to 2015. OECD. <http://www.oecd.org/dac/stats/documentupload/Long%20term%20ODA.xls>, retrieved 22.9.2016.

Nkereuwem, E, E. (1996) The utilization of aid organizations in the development of information technology in developing countries. *Library Management.* Vol. 17 (5), 25-30.

Ochara, N.M. – Kandiri, J. – Johnson, R. (2014) Influence processes of implementation effectiveness in challenged information technology projects in Africa. *Information Technology & People.* Vol. 27 (3), 318-340.

OECD (2017) Official development assistance – definition and coverage. < http://www.oecd.org/dac/stats/officialdevelopmentassistancedefinitionandcoverage.htm>, retrieved 7.10.2017

OECD (2016a) Development co-operation report 2016: The sustainable development goals as business opportunities. OECD Publishing, Paris.

OECD (2016b) Net ODA and ODA by sector. < https://data.oecd.org/oda/net-oda.htm>, retrieved 11.3.2017.

OECD/WTO (2015) *Aid for Trade at a Glance 2015: Reducing Trade Costs for Inclusive, Sustainable Growth*, OECD Publishing, Paris.

Ondiege, P. – Moyo, J.M. – Verdier-Chouchane, A. (2013) Developing Africa´s infrastructure for enhanced competitiveness. African Development Bank. <http://www3.weforum.org/docs/ACR/2013/ACR_Chapter2.2_2013.pdf >, retrieved 10.10.2016.

Perussuomalaisilta vaadittiin todisteita kehitysapuväitteistä (2013) *Helsingin Sanomat* 18.12.2013.

Portugal-Perez, A. & Wilson, J.S. (2010) *Export performance and trade facilitation reform: Hard and soft infrastructure.* World Bank Policy Research Working Paper 5261, 2010.

Portugal-Perez, A. & Wilson, J.S. (2009) Why trade facilitation matters to Africa? *World Trade Review.* Vol.8 (3), 379-416.

Qin, Y. (2016) China's transport infrastructure investment: Past, present and future. *Asian Economic Policy Review.* Vol.11 (2), 199-217.

Qu, S,Q. – Dumay, J. (2011) The qualitative research interview. *Qualitative Research in Accounting & Management.* Vol.8 (3), 238-264.

Rahkonen, J. (2016) Kehitysyhteistyön mielipidemittaus 2016. Taloustutkimus Oy. <http://formin.finland.fi/public/default.aspx?contentid=348804&nodeid=49540&contentlan=1&culture=fi-FI>, retrieved 26.9.2016.

Rampersad, G. – Troshani, I. (2013) High-speed broadband: Assessing it´s social impact. *Industrial Management & Data Systems.* Vol.113 (4), 541-557.

Reinsberg, B. – Michaelowa, K. – Knack, S. (2015) Which donors, which funds? The choice of multilateral funds by bilateral donors at the World Bank. World Bank Policy Research Working Paper 7441, 2015.

Romp, W. - Haan, J. (2007) Public capital and economic growth: A critical survey. *Perspektiven der Wirtschaftspolitik.* Vol.8 (1), 6-52.

Runde, D.F. – Savoy, C.M. (2016) Reforming the Multilateral Development Banks. Consensus for Development Reform. <http://www.developmentreform.org/reforming-the-multilateral-development-banks/>, retrieved 1.3.2017.

Satyaprasad, B.G – Krishnaswami, O.R. (2010) *Business research methods*. Himalaya Publishing House.

Schäferhoff, M. – Campe, S. – Kaan, C. (2009) Transnational public-private partnerships in international relations: Making sense of concepts, research frameworks, and results. Vol.11 (3), 451-474.

Sharma, C. (2011) Determinants of PPP in infrastructure in developing economies. *Transforming Government: People, Process and Policy*. Vol.6 (2), 149-166.

Siemiatycki, M. (2013) The Global Production of Transportation Public-Private Partnerships. *International Journal of Urban and Regional Research.* Vol. 37 (4), 1254-1272.

Skärvall, L. (2012) Does Swedish aid help or hinder bilateral trade: An empirical study on the effect of official development assistance and aid for trade. <http://www.diva-portal.org/smash/get/diva2:491628/FULLTEXT01.pdf>, retrieved 29.12.2016.

Soini puolusti kehitysavun leikkauksia vitsaillen (2015) *Iltalehti* 24.8.2015.

Spitz, G. – Muskens, R. (2013) The Dutch and development cooperation. NCDO. < https://www.ncdo.nl/sites/default/files/Report%20Analysis%20The%20Dutch%20and%20Development%20Cooperation%20FINAL%202013%2003%2004.pdf>, retrieved 1.3.2017.

Statistics Finland (2015) Finland in Figures – Trade <http://www.stat.fi/tup/suoluk/suoluk_kotimaankauppa_en.html>, retrieved 27.9.2016.

Stenbacka, C. (2001) Qualitative research requires quality concepts of its own. *Management Decision.* Vol. 39 (7), 551-555.

Tashakkori, A. – Teddlie, C. (2010) SAGE handbook of mixed methods in social & behavioral scenes. SAGE cop, Thousand Oaks, CA.

Tekes (2015) Tekes themes: Towards economic growth. < https://www.tekes.fi/en/programmes-and-services/campaigns/Tekes-themes/>, retrieved 7.10.2017

Tennyson, R. – Harrison, T. – Wisheart, M. (2008) Emerging opportunities for NGO-business partnerships. Accenture Development Partnerships, International Business Leaders Forum and World Vision International. < http://thepartneringinitiative.org/wp-content/uploads/2014/08/Emerging-opportunities-for-NGO-business-partnerships1.pdf>, retrieved 15.12.2016.

Teravaninthorn, S. – Raballand, G. (2009) Transport prices and costs in Africa. < https://openknowledge.worldbank.org/bitstream/handle/10986/6610/461810PUB0Box3101OFFICIAL0USE0ONLY1.pdf?sequence=1&isAllowed=y>, retrieved 23.3.2017.

The costs and benefits of trade facilitation (2005) OECD. <http://www.oecd.org/trade/facilitation/35459690.pdf>, retrieved 20.9.2016.

The Danish Government (2015) The Government´s Priorities for the Danish Development Cooperation 2016-2019. <http://um.dk/en/~/media/UM/English-site/Documents/Danida/Goals/Government%20priorities/The%20Governments%20priorities%20for%20the%20danish%20development%20cooperation%202016-2019.pdf>, retrieved 8.8.2017.

The International Bank of Reconstruction and Development (1994) World development report 1994. < https://openknowledge.worldbank.org/bitstream/handle/10986/5977/WDR%201994%20-%20English.pdf>, retrieved 23.2.2017.

The transport situation in Africa (2009) United Nations Economic and Social Council. <http://www1.uneca.org/Portals/ctrci/6th/TransportSituation-inAfrica.pdf>, retrieved 6.10.2016.

The World Bank (2007) A decade of action in transport: An evaluation of World Bank assistance to the transport sector, 1995-2005. <http://lnweb90.worldbank.org/oed/oeddoclib.nsf/DocUNIDViewForJavaSearch/739A5D66544C563F852572C7007B5329/$file/transport_evaluation.pdf>, retrieved 18.10.2016.

The World Bank (2014) Africa´s growth set to reach 5.2 percent in 2014 with strong investment growth and household spending. <http://www.worldbank.org/en/news/press-release/2014/04/07/africas-growth-set-to-reach-52-percent-in-2014-with-strong-investment-growth-and-household-spending>, retrieved 12.10.2016.

The World Bank (2016) An Evaluation of World Bank Group Activities in Information and Communication Technologies. <https://openknowledge.worldbank.org/bitstream/handle/10986/2370/653750PUB0v10B0BLIC00ict0evaluation.pdf?sequence=1&isAllowed=y>, retrieved 13.12.2016.

The World Bank (2017) Transportation overview: Strategy. <http://www.worldbank.org/en/topic/transport/overview#2>, retrieved 20.12.2017.

Thompson, H. – Garbacz, C. (2008) Broadband impacts on state GDP: Direct and indirect impacts. *Paper presented at the International Telecommunications Society 17th Biennial Conference, Canada.*

Trade Mark East Africa (2016) World´s largest Aid for Trade programme transforms trade in East Africa. <https://www.trademarkea.com/press-releases/worlds-largest-aid-for-trade-programme-transforms-trade-in-east-africa-through-improved-infrastructure-trading-environment-and-increased-opportunities-for-businesses/>, retrieved 14.12.2016.

Transformation through infrastructure (2015) World Bank Group infrastructure strategy update 2012-2015.<http://siteresources.worldbank.org/INTINFRA/Resources/Transformationthroughinfrastructure.pdf>, retrieved 20.10.2016.

Transport infrastructure investment: Capturing the wider benefits of investment in transport infrastructure. Royal Town Planning Institute (2014). <http://www.rtpi.org.uk/media/816110/capturing_the_wider_benefits.pdf>, retrieved 14.10.2016.

United Nations (2017) Least Developed Countries (LDCS). < https://www.un.org/development/desa/dpad/least-developed-country-category.html>, retrieved 7.10.2017.

Van Gerwen, F. – Poutiainen, P. – Weitzenegger, K. – Alanoca, S. – Efraimsson, A. (2016) *Evaluation of Finnish Aid for Trade 2012-2015.* Ministry for Foreign Affairs of Finland.

Vietnam 2035: Toward Prosperity, Creativity, Equity and Democracy (2016) The World bank and Ministry of Planning and Investment of Vietnam. <https://openknowledge.worldbank.org/bitstream/handle/10986/23724/VN2035English.pdf?sequence=10&isAllowed=y>, retrieved 10.10.2016.

Vota, W. (2011) A Great Success: World Bank has 70% failure rate with ICT4D projects to increase universal access. *ICT Works* 17.8.2011.

Ward, M.R. – Zheng, S. (2015) Mobile telecommunications service and economic growth: Evidence from China. *Telecommunications Policy.* Vol. 40 (2-3), 89-101.

Wellington, J.J. – Szczerbínski, M. (2007) *Research methods for the social sciences.* Continuum International Publishing Group, New York, NY.

What are Public Private Partnerships? (2015) The World Bank. < http://ppp.worldbank.org/public-private-partnership/overview/what-are-public-private-partnerships>, retrieved 24.10.2016.

World Population Prospects: The 2015 Revision. United Nations. <https://esa.un.org/unpd/wpp/publications/files/key_findings_wpp_2015.pdf>, retrieved 5.10.2016.

APPENDIX 1: REVIEW OF EARLIER STUDIES

Author(s), year	Purpose	Methodology	Main findings
Theoretical studies			
Gogelia, T. – Talvitie, A. 2011	To raise efficiency of donor funded transport projects in developing countries.	Case examples from authors based on years of work experience from transport sector development projects in various countries.	Transport projects challenging because of their complexity. Donor-recipient relationship does not include "one-size-fits-all" model. The inclusion of local experts is significant for the outcomes of the projects as they serve as a bridge between recipient, donor and possible consultants.
Égert, B. – Kozluk, T. – Sutherland, D. 2009	How much infrastructure (transport, ICT, energy, water) contributes to economic growth.	Exploring available indicators of the volume and quality of infrastructure. Examining empirical links between physical infrastructure and growth.	Infrastructure investment has had positive effects on economic growth of OECD economies. Evidence that the impact of infrastructure output is hard to pin down and the effects vary between different countries. PPPs can possibly utilize private sector provision of infrastructure.
Tennyson, R. – Harrison, T. – Wisheart, M. 2008	Explore emerging opportunities for NGO-business partnerships.	Interviews of 86 companies from multinationals to SMEs and 34 NGOs from national to international.	Business partners have leveraged NGO partnerships to bring a new product to low-income market, organizational learning, facilitate operation licenses and build greater employee motivation. Most benefits for private companies are intangibles
Triodos Facet BV 2010	To examine whether Dutch Private Sector Investment programmes have delivered anticipated results.	Desk study on 60 completed projects, telephone interviews on 25 stopped projects and field visits to 32 projects in six countries	PSI programme has been successful in generating jobs and follow-up investments despite strong variations between countries. Two thirds of the projects are appropriate on the amount of constant job creation, growing sales and follow-up investments.

Ministry of Foreign Affairs of Denmark 2014	Assessing and documenting of the Danida B2B programme and offer recommendations for future implications.	Desk review of B2B portfolio, case studies through field visits, E-survey to partner companies, interviews with stakeholders.	Programme failed to provide significant financial benefits for Danish companies. Knowledge based sectors such as ICT fared better and displayed some success stories, although with large variation. Danish companies explored lower production costs through out-sourcing and off-shoring.
Van Gerwen, F. – Poutiainen, P. – Weitzenegger, K. – Alanoca, S. – Efraimsson, A. 2016	To provide evidence based data on the success of Finnish aid for trade.	Mixed methods data collection toolbox. Field methods included interviews with key stakeholders, site visits and validation workshops.	Finnfund´s investment portfolio has had a positive rate of return. Limited collaboration between ministry, embassies and external partners remains a challenge. ICT is a largest singular sector of Finnpartnership´s Business Partnership Support programme.

APPENDIX 2: RESEARCH OPERATIONALIZATION TABLE

	Research questions	Analytical framework	Interview framework
The objective of this study is to *analyze private sector involvement and its role in Finnish development cooperation´s transport and ICT sectors.*	(RQ1) The nature of the transport and ICT cooperation, investments and projects and their implications.	Chapter 2: - Mechanisms, roles and operations in the sectors	Theme 1: Profile of the projects and cooperation in transport and ICT sectors.
	(RQ2) The possible instruments for the cooperation and their key characteristics.	Chapter 2: - Mechanisms, roles and operations in the sectors	Theme 2: Cooperation with stakeholders and use of mechanisms in transport and ICT projects
	(RQ3) State and role of transport and ICT development for the developing countries.	Chapters 3: - Transport and ICT capabilities in developing countries - The role of transport and ICT development and investments for an economic and social development	Theme 3: Process of destination selection for cooperation and Finnish offering for possible private sector involvement
	(RQ4) Benchmarking European comparison countries and their results in transport and ICT sectors.	Chapter 5.1 and 5.2: - Practices and outcomes from the Netherlands and Denmark from private sector participation	Theme 4: End-results of the transport and ICT projects and cooperation with commercial perspective

APPENDIX 3: INTERVIEW QUESTIONS

In English

Background:

- Job description
- Role and/or experience in Finnish Development Cooperation / National institution

Theme 1: **Profile of the projects and cooperation in transport and ICT sectors**

- Primary objectives of the projects and cooperation from the Finnish perspective
- The scale and nature of the projects
- Divide between hard / soft infrastructure and its implications
- Nature of the possible Finnish private sector participation

Theme 2: **Cooperation with partners and use of development cooperation mechanisms in transport and ICT projects**

- Instruments and channels (IFIs, NGO´s, PPP´s, partner countries, local partners etc.)
- Key experiences and takeaways from working with external partners such as aforementioned
- The supporting role of the internal Finnish partners such as embassies

Theme 3: **Selection process for cooperation in transport and ICT sectors and Finnish offering for possible private sector involvement**

- Key criteria for selection process. For e.g. regional or sectoral developmental objectives and their impact
- Significance of Finnish private sector on selection process for e.g. commercial possibilities
- Future possibilities geographically in transport and ICT sectors for development cooperation and possible private sector involvement

Theme 4**:** **End-results of the transport and ICT projects and cooperation with commercial perspective for Finnish private companies.**

- Evaluation of the outcomes, challenges and benefits for Finnish private sector companies
- Short term/long term commercial effects
- Role of the Finnish development cooperation institutions in facilitating commercial possibilities
- Ideal relationship between Finnish development cooperation / institutions and Finnish private sector

Original questions in Finnish

Taustat:

- Työnkuva
- Rooli ja kokemus Suomen kehitysyhteistyöstä / julkisyhteisöstä

1 teema: **Kehitysyhteistyön ja projektien luonne liikenne- ja ICT sektoreilla**

- Yhteistyön ja projektien ensisijaiset tavoitteet Suomen näkökulmasta
- Projektien mittakaava ja luonne
- Jako pehmeän / kovan infastruktuurin välillä ja sen implikaatiot
- Suomalaisten yksityisen sektorin potentiaalisen osallistumisen luonne

2 teema: **Yhteistyö sidosryhmien kanssa ja kehitysyhteistyön toteuttamistavat liikenne- ja ICT sektoreilla**

- Toteuttamistavat ja kanavat (IFIs, NGOs, PPPs, kumppanimaat, paikalliset kumppanit yms.)
- Avainkokemukset ulkoisten sidosryhmien kanssa toimimisesta
- Sisäisten sidosryhmien kuten suurlähetystöjen tukeva rooli

3 teema: **Valintaprosessi yhteistyölle liikenne- ja ICT sektoreille sekä Suomalainen tarjoama yksityisen sektorin osallistumiselle**

- Kriteeristö valintaprosessille. Esimerkiksi alueelliset tai sektorilliset kehitysyhteistyö tavoitteet ja niiden vaikutus
- Suomalaisen yksityisen sektorin merkitys valintaprosessille. Esimerkiksi potentiaaliset liikenne- ja kauppamahdollisuudet
- Tulevaisuuden mahdollisuudet alueellisesti kehitysyhteistyölle ja yksityisen sektorin osallistumiselle liikenne- ja ICT sektoreilla

4 teema: **Liikenne- ja ICT sektorien projektien ja yhteistyön lopputulokset**

Suomalaisen yksityisen sektorin osallistumisen näkökulmasta

- Tulosten, haasteiden ja hyötyjen arviointi suomalaiselle yksityiselle sektorille
- Lyhyen ja pitkän aikavälin kaupalliset vaikutukset
- Suomalaisten kehitysyhteistyötä harjoittavien instituutioiden rooli kaupallisten mahdollisuuksien fasilitoimisessa
- Suomen kehitysyhteistyön instituutioiden ja suomalaisen yksityisen sektorin ideaalinen suhde