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Emigrants and Temporary Guest Workers

A different perspective on the Swedish-
American migration 1880-1910

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Jag vill tacka min handledare Per Hallén, som trots att mitt arbete stundtals präglats av obeslutsamhet, omprövningar och förändrad tidplan visat ett milt överseende, och därigenom gett mig det moraliska stöd – utöver goda råd och bra praktiska anvisningar – som jag behövt för att slutföra projektet. Det är jag tacksam för!

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2 Abstract

The general view of the Swedish-American emigration is based on the notion that most emigrants left Sweden for permanent settlement in the United States. Evidence also suggests that this conventional view of Swedish emigration corresponds to the factual situation of the first large Swedish emigration wave during the famine period in the 1860's and early 1870s, when entire families and even larger groups of people from specific regions decided to try a new start as farmers or settlers in the New World.

Over time this dominant trend of permanent emigration of families and groups changed. In the 1860s more than 60 percent of the emigrants were married couples and their children. By the turn of the century this proportion had fallen to 20 percent and the ratio of unmarried young men and women had doubled (80 percent). Both age and gender composition from 1880 to 1910 were characterized by a majority of young men, travelling alone or in groups, part of them returning home after a period. There were as well indications of individuals repeating emigration and return migration cycles for long time periods.

The research hypothesis of this thesis is that for some Swedish-American emigrants during the period of mass emigration, temporary work migration was a plan for funding possible future investments at home, and that remitting funds to Sweden in part was motivated by self-interest and the intention to return. To find support for this, I emphasize a purpose-adaptation of the Implicit Family Loan Agreement theory and the intention to return as the two main components of this plan.

The conclusion of the study is that both modern theory and historic evidence support the research hypothesis. The quantitative analysis also confirms the conclusion of the research question that the extent of emigrants returning home effected the flow of remittances during the studied period.

The basic material in this area is extensive. More studies of records of land acquisitions in connection with returning migrants, records of inheritance and ownership transfers of farms in migrant families etc. could undoubtedly widen knowledge about the benefit of temporary migration for individual returnees and their families, and for the regional development as well as the aggregated effect of remittances for development following the Swedish emigration episode.

Keywords: emigration, return migration, remittances, capital flow, wage differences, American Money

3 Introduction

3.1 Prelude

“The extensive emigration was undeniably a powerful and debilitating drainage to our people, but it was not all negative. On the one hand, our country’s poorly developed industry could not adequately benefit from - and support - a growing population and, on the other hand, we lacked sufficient capital for the utilization of our assets.

.....

Large sums of money were annually transferred from immigrants in the United States to relatives in Sweden. Others returned after several years with savings, and settled down as farmers and entrepreneurs, benefitting from their American earnings”¹.

3.2 Background

During the period 1860-1930 more than 1 million people emigrated from Sweden to America. It is lesser known that around 200 000 emigrants returned during the same period.²

The general view of the Swedish-American emigration is based on the notion that most emigrants left for permanent settlement in the United States. This was the case for many, particularly emigrants in poor situations and/or during periods of poor harvests and famine, economic recession and unemployment, especially of the first large emigration wave during the famine period in the 1860’s and early 1870’s, when entire families, and even larger groups of people from specific regions decided to try a new start as farmers or settlers in the New World. In Emigration theory, this type of emigration is described as “push-driven”. Evidence suggests that this conventional view of Swedish emigration corresponds to the factual situation during first Swedish emigration period.

Over time this dominant trend of permanent emigration of families and groups changed. In the 1860s more than 60 percent of the emigrants were married couples and their children. By the turn of the century this proportion had fallen to 20 percent and the ratio of unmarried young men and women had doubled (80 percent).³ In fact, during the height of Swedish emigration from 1880 to 1910 most of the emigrants were young men leaving home for better work opportunities and higher wages in America, some of them

¹ Karl Magnusson: Så var det den tiden Gleerups förlag 1945

² Records and estimations of emigration and return migration figures differ between different sources and periods. See p. 20 - *Estimating the total emigration and return migration figures*

³ Sundberg (ed) – *The Emigration Inquiry (Emigrationsutredningen)*: Betänkande I emigrationsfrågan och därmed sammanhängande spörsmål med bilagor 1907–1913. p 599.

for good, others planning for future return migration. Both age and gender composition, as well as the proportion of returning migrants during most of this period corresponds to the characteristics of modern emigration from poor countries in the South to richer countries in the North – mostly young men, travelling alone or in groups, part of them returning to their country of origin after a period, or re-migrating to other countries. There were as well indications of individuals repeating emigration and return migration cycles for long time periods.

The research hypothesis of this thesis is that for some Swedish-American emigrants during the period of mass emigration, temporary work migration was a plan for funding possible future investments at home, and that remitting funds to Sweden in part was motivated by self-interest and the intention to return. To find support for this, I emphasize a purpose-adaptation of the Implicit Family Loan Agreement theory and the Intention to Return as two main components of this plan.⁴

Two families affected by the American Fever

The following two family emigration histories illustrate the relevance of the research hypothesis:⁵

In the mid-1870s, the two brothers Petter and Martin Larsson alternately served as farmhands on the family farm and other close-by farms in their home parish of Ärtemark, Dalsland in Sweden. The working conditions were poor and wages low. In 1878, the younger brother Martin took a step to improve his situation. Together with other young men from the same area he walked the approximately 50 kilometers long (short) distance to Norway for work as a railway worker. Temporal work migration between Sweden and Norway was not a new phenomenon in the region. The neighboring eastern part of Norway was one of that country's wealthiest districts, and labor migration from western Sweden had been practiced for generations, especially since the advent of the Swedish-Norwegian Union in 1814. Martin and his friends thus followed a long line of local tradition.

Some years later the American fever reached Ärtemark. In April 1880 Martin's older brother Petter Larsson joined a group of seven men travelling to northern Michigan, where the iron and copper mining companies offered still better wages than the Norwegian Railroad builders. After first returning to work on the family farm Martin joined his brother Petter in America two years later.

Five years after Petter's emigration and two and a half years after Martin had joined him, both brothers returned home. While Martin stayed in Norway, where he married and bought a farm, Petter resumed his work at the family farm, two years later to become the owner. Two younger brothers emigrated to America, never to return.

Not far from the Larsson family, two other brothers, Johan and August Petterson, were considering doing the same trip as their close-to neighbors. In 1883, the older brother Johan made the decision to go to America. He returned after two years, got

⁴ Poirine B - A Theory of Remittances as an Implicit Family Loan Arrangement 1997

⁵ All dates originate from Swedish Census and family records.

married and established a leasehold not far from the family farm. Shortly after Peters return, his younger brother August was already on his way to America.

August Peterson returned for visits twice; first at the death of their father more than twenty years after Augusts emigration. He was in a good financial position, holding a “pro family” position as the chauffeur of one of the most influential industrialist in Minneapolis and living at a very sophisticated address in the city.⁶ August bought out his brother and two nieces from the ownership of the family farm – for a price above the registered taxable value. Evidently, he contemplated the possibility to return for good – but not at the moment. Instead he returned to USA after only three months.

Another sixteen years later, in 1922, August returned for the second time. His employer had died some years previous, but August had kept his position when the son of his former employer succeeded his father. Only one week prior to his departure from the US, August Petersons American citizenship was approved.

This was another stay for three months, apparently with the intention of finally arranging the ownership of the family farm: August sold the farm to his brother for half the registered taxable value – and left the purchase sum as a donation.

It seems as if August Peterson during his stay in America had learned to take legal advice. In the 1914 Inheritance and Gift Tax Ordinance (AGF 1914), the summation rules were expanded to include consecutive gifts, and by first selling the farm at a discount price followed by a lesser valued gift, Johan, the fortunate older brother, could reduce donation tax from this and the previously conducted donation.⁷

Ten years after his second visit August died, leaving no family in the US. Till the end, despite several years of bad health, he had kept his position with the original employer’s family, and he eventually left a considerable inheritance to his family in Sweden.

These two family stories reveal part of the emigration, return migration and remittances patterns in many Swedish yeoman families during the mass emigration period. Both stories strongly indicate the pull factor of emigration, as well as the Implicit Family Loan Agreement theory and the importance of living experience and traditions of temporary labor migration. Most strongly they indicate a pattern of remittances and return migration as a means to redeem the family farm and/or buy farmland property at home – often keeping the traditional inheritance rules of the oldest son taking over the family farm and the younger siblings using the redeeming sum to purchase a farm of their own.

This pattern did not always follow a straight line. August Peterson “kept the door open” for 37 years after his emigration before finally deciding not to return. Other emigrants took opposite decisions after visits at home, or subsequently abandoned any

⁶ US Census Minneapolis 1900

⁷ Du Rietz, Henrekson and Waldenström – Swedish Inheritance and Gift Taxation (1885-2004) p. 9

plans to return without ever going back as their integration into the American society progressed.⁸

3.3 Returning migration and remittances

The heights of the Swedish mass emigration occurred during three time periods – the first half of the 1880's, amid the 1890's and some years after the turn of the nineteenth century. Although Swedish Census figures and other information indicate that poverty as well as other social, political and religious factors may have had some impact on emigration, wage differentials and better work opportunities were the main driving forces behind the emigration during these periods. This assessment is also consistent with classical emigration theory, suggesting that international migration is related to the global supply and demand for labor, where countries with scarce labor supply and high demand due to high wages “pull” immigrants from countries with a surplus of labor.

Both contemporary and modern studies report that a sizable part of emigrants remain for relatively short periods, during which period some managed to accumulate considerable amounts of money, remitting part of it during their stay and returning home with the rest. Return migration figures and estimates of the flow of remittances from the United States to Sweden support the inference that this as well was the case with the Swedish emigration. Moreover, several witness reports in the large *Swedish Emigration Inquiry* (1907-1913) claim that the objective of many emigrants merely were to spend enough time in America to save money in order to get a better financial start in Sweden, returning when the objective was achieved – or due to other factors that hastened the repatriation.⁹

3.4 The economic impact of labor migration and remittances

For long, migration was perceived as a negative factor for the economic development of a country. The view that migration was draining developing countries of their most important resources – labor – dominated the picture, and the term "brain drain" have been used to describe the loss of human resources that international migration could lead to. In addition, it has been widely considered that migration could create an unhealthy dependence, and that remittances were not put into productive use, but mostly spent on unproductive purposes.¹⁰

A common criticism of migrant's remittances has been that most is alleged to support excessive consumption rather than long-term productive investment. Some studies have also found reduced work incentive and employment in households that receive remittances from relatives abroad. Other critics have argued that high expectations of

⁸ An assessment of the size of "home visits" by Swedish-American emigrants during the emigration period is presented in p. 36 and in Table 1 p. 48

⁹ Sundbärg (ed) - *The Emigration Inquiry (Emigrationsutredningen)*: Betänkande I emigrationsfrågan och därmed sammanhängande spörsmål med bilagor 1907–1913

¹⁰ Hammar, Brochmann, Kristor & Faist (Eds.), *International Migration, Immobility and Development: Multidisciplinary Perspectives*. 1997. p. 136.

the potential of remittances, place a heavy responsibility for a country's development on the shoulders of migrants – a responsibility that should rest on Governments.

This perception of remittances gave way during the 1990s. Instead, the contribution of remittances to development and poverty reduction in poor countries were given attention in several empirical studies. From being dismissed as irrelevant or adverse for development, remittances have come to be an important means of development.

In their study *The Economics of Migrants' Remittances*, Rapoport and Docquier (2005) find that migration and the associated remittances tend to have an overall positive effect on origin countries' long-run economic performance.¹¹ On rural development, they refer to *Rozelle et al*, clearing that the short run decline in rural production due to the loss of labor is more than offset by later increases in agricultural productivity as remittances help raise farm investments.¹² *Rapoport and Docquier* also refer to studies indicating that, under certain conditions, entrepreneurial projects started by return migrants tend to be financed through accumulated savings while abroad and that remittances should be expected to have significant positive effects on educational attainments of children from households with migrant members.

In the Swedish case, evidence imply that migrant remittances during and after the mass emigration period played a role in the structural change in farm land and forest ownership, countering the splitting of land that had occurred throughout most of the nineteenth century. During the latter part of the century the growing influx of funds for private purchase of property coincided with institutional changes and practices regarding land ownership and the inheritance rules of farms and homesteads came into effect. In 1863 parliament made it easier to acquire permanent settlements, and regulations on freer rules for homestead cleavage and land parcelling were implemented, which included provisions for the minimum acreage to be stripped off. Additional rules for the parcelling of forest was introduced, which was particularly important in the areas where the combination of agriculture and forestry increased livelihood opportunities in small units.

Particularly in parts of Sweden that were characterized by large emigration, migrant remittances thus played a significant role in forming the ownership structure and the development of farming and forestry.¹³

3.5 Question at issue

Although contemporary studies of migrant's remittances suggest positive impacts on social and economic development in migrant-sending economies, the impact on national economic growth and employment is rather unclear. The crucial issue at hand, is whether the presence of migrant's remittances in the economy increases opportunities for productive investments and thus lead to higher growth.

¹¹ Rapoport & Docquier - *The Economics of Migrants' Remittances*, 2005

¹² Rozelle, Taylor & de Brauw - *Migration, Remittances, and Agricultural Productivity in China* 1999

¹³ Harman Akenson D – *Ireland, Sweden and the Great European Migration 1815-1914*. p. 243

The study is concentrated to the issue of migrant's remittance's during the Swedish emigration period the decades before the turn of the nineteenth century. The theory is that a portion of these remittances were motivated by self-interest, and intended for the referral's own needs, including the ambition to return home to redeem their siblings from the family farm, or to purchase a farm or homestead of their own or start a business. Hopefully it is also possible to find evidence for Harman Akenson's supposition that remittances and returning migration played an important role in forming the ownership structure of farm land and forest property during and after the period of mass emigration.

3.6 Purpose

This thesis has two main objectives: Firstly, to apply modern theories on migration and remittances to a study of the Swedish emigration in the late nineteenth and early twentieth century. The second objective is to study the scope and direction of the flow of migrant remittances from America to Sweden during the period 1880-1910, leading to conclusions about the relationship between remittances and return migration during the studied period.

3.7 Research question / hypothesis

Theories on migrant's remittances suggest that immigrants who plan to return home are remitting more than migrants that plan to stay permanently.¹⁴ Did this also apply to the Swedish emigrants more than one hundred years ago?

It is well known that many Swedish emigrants returned after a few years and that some made several trips after they finally decided to either stay in America - or return to Sweden for good.¹⁵ During some years, the extent of return migration from America were higher than twenty percent of the emigration figures.

Research Question

From this, the Research Question is:

Did the extent of the emigrants returning home affect the flow of remittances during the period of Swedish mass emigration to America?

Hypothesis

Both modern studies and contemporary reports suggest that emigrants planning to return home remit more funds than emigrants who do not have the intention to return¹⁶. In the *Countryside Surveys of the Swedish Emigration Inquiry* there are several anecdotal reports of returning emigrants acquiring a farm or homestead thanks to funds earned during a period as a temporary migrant worker in America.

¹⁴ See Lucas & Stark, 1985 and Hoddinott, 1994

¹⁵ Sundbärg (ed) - *The Emigration Inquiry (Emigrationsutredningen)* Annex V *The Countryside Surveys*.

¹⁶ see Merkle & Zimmerman – *Savings, remittances, and return migration* München 1991 and Rapoport & Docquier – *The Economics of Migrants' Remittances* 2005

The research hypothesis is that - *for some emigrants, temporary migration was a plan for funding possible future investments at home, and that remitting funds was motivated by self-interest and the intention to return.*

3.8 Delimitations

The study comprises Swedish emigration, return migration and migrant's remittances vis-a-vis the United States during the period 1880-1910. Emigration prior to 1880 does naturally effect the scope and size of subsequent return migration and remittances during the studied period, but is not considered in the study. In the same way, it is obvious that return migration and remittances after 1910 were affected by emigration during the studied period, but this is not considered in the study.

Insurance and veteran compensation to repatriated emigrants and incidences of inheritances from emigrants during the studied period are as well left outside of the study.

One of the main parts of the study is whether the decision to emigrate was motivated by self-interest and the intention to return. Although the hypothesis focus on self-interest as a major motivation to emigrate, this does not rule out other motives, but rather implies that a combination of motives is possible.

4 Research Methodology

The objective of the study is to examine the relationship between Return Migration and Remittances; Was the size of Migrant Remittances influenced by the size of the (legged) Return Migration during the studied period?

The study is conducted as an explanatory case study. It is deductive and based on a review of modern migration theory and empirical evidence regarding migration, migrant's remittances, economic growth and convergence, applied on contemporary reports and early knowledge of Swedish emigration, re-migration and the scope and size of remittances between Sweden and the United States during the late nineteenth and early twentieth century.

The quantitative part is a study of the relationships between migrant remittances and return migration to Sweden. Data analysis are based on within-case studies of public records of emigration and return migration, established GDP figures, records of Postal Money Orders between the United States and Sweden and estimates of total remittances during the period in question as well as other quantitative data in the area of the study.

4.1 Scientific Basis

The study is mainly based on Neoclassical Economics Theory of Migration: Three factors behind emigration decision are assessed; differences in wage levels and thus in consumption opportunities, differences in access to employment opportunities and differences in social mobility which provides opportunities for faster economic improvements.

As potential migrants estimate the cost and benefits of emigration by taking the calculated earnings and probability of obtaining a job in the destination country, they also calculate the most profitable way to invest the surplus of the higher income – including the profitability of returning home. For some, the calculations of the cost and benefit of returning precede the original decision to emigrate, while for others it is an ongoing process.

“The second wave” of Swedish emigration had its roots in the lack of livelihood opportunities due to the extensive population growth, the widespread division of productive agricultural land and the delayed industrialization of Sweden during the nineteenth century. From this and evidence showing that districts with high emigration had a history of temporary or seasonal commuting and / or periods of temporary work outside the home districts indicates that part of the emigration can be regarded as temporary labor migration.

While the growing supply of work opportunities in the United States and the excessive wage differential to Sweden can explain the unprecedented level of emigration during the height of the emigration period, declining wage differences and convergence thus could explain the tendency to decreasing emigration and increasing returning migration during the period studied.

4.2 Choice of Method

The approach is twofold: First I do a literature review based on the hypothesis, that *- for some emigrants, temporary emigration was a plan for funding possible future investments at home, and that remitting funds, at least in part, was motivated by self-interest and the intention to return.*

The main objective of the literature study is to perform a discursive summary of knowledge within the area, connecting the Swedish emigration, return migration and remittances to modern migration theory and empirical evidence – not just describe established theory.

The second and decisive part is a quantitative study of the relationships between migrant remittances and return migration. Data analysis are performed as a case analysis of public migration and return migration records, establish GDP figures, records of Postal Money Orders between the United States and Sweden and estimates of the total remittances during the period in question. Other relationships, such as between emigration and wage differentials, emigration and return migration, migrants return visits, remittances and short-term capital movement, municipal expenditure development etc. will as well be studied for illustrating the importance of all variables in the emigration equation.

5 Theory

There are different scientific models of immigration. Most economic models assume that people’s decision to migrate depends on differences in the returns to labor, net of migration costs. In contrast to this approach, sociologists focus on a broader range of

determinants, such as conflict, insecurity, poor governance or discrimination, although important economic factors often are given secondary explanations in the analysis.

5.1 Migration in early Economic Theory¹⁷

Already Adam Smith developed a basis for economic analysis of migration in his most important works – *An Inquiry into the Nature and Causes of the Wealth of Nations*, (1776 [1976], Part I, pp. 83–84):

...the wages of labour vary more from place to place than the price of provisions. The prices of bread and butcher's meat are generally the same or very nearly the same through the greater part of the United Kingdom"

Smith suggests that migration potentially is a response to disequilibrium in labour markets, although wage differences are not the only determinant. This notion was empathized 150 years later by the economic theorist Hicks (1932):

"...differences in net economic advantages, chiefly differences in wages, are the main causes of migration"

From studies of British census data on nativity and statistics and immigration records, the German-English geographer cartographer Ravenstein (1834-1913) established a theory of human migration in the 1880s that still forms the basis for modern migration. The theory outlined seven "laws" of migration: 1) most migrants move only a short distance and usually to large cities; 2) cities that grow rapidly tend to be populated by migrants from proximate rural areas and gaps arising in the rural population generate migration from more distant areas; 3) out-migration is inversely related to in-migration; 4) a major migration wave will generate a compensating counter-wave; 5) those migrating a long distance tend to move to large cities; 6) rural persons are more likely to migrate than urban persons; and 7) women are more likely to migrate than men.

Building on several of Ravenstein's "laws", the statistician George Kingsley Zipf (1902-1950) hypothesized that the volume of migration is proportional to the product of the populations of the origin and destination and inversely proportional to the distance between the two. This hypothesis came to be known as the gravity model of migration. - an application of Newton's law of gravity, predicting the level of attraction between two bodies.

The gravity model of migration bears large similarity with the gravity model of international trade, which describes the level of international trade between two countries to be proportional to the product of their GDPs or populations and inversely related to the distance between the two, has been widely applied in empirical work in the field of international economics.

Jerome, a macroeconomist specializing in business cycle analysis, have studied the extent to which US immigration and emigration are driven by business cycle

¹⁷ See Bødvarsson Ö B & van den Berg H: *The Economics of Immigration: Theory and Policy* 2013

fluctuations, including how migration flows influence the business cycles. His study confirmed a correlation between cyclical changes in employment and cyclical changes in immigration and emigration.

5.2 The Modern Standard Theory of Migration

People migrate for different reasons. Most of the incentives fall into four categories:

- 1) negative incentives that push people to emigrate,
- 2) positive incentives that pull immigrants to the destination country,
- 3) positive incentives that induce people to stay at home, and
- 4) negative incentives that cause people to stay away from a foreign country.

When the “stay” and “stay away” factors are strong relative to the push and pull factors, immigration is unlikely to occur on a large scale. On the other hand, when the push and pull factors are strong relative to the stay and stay away factors, immigration will grow, as has occurred worldwide over the last few decades.¹⁸

Recent literature on the determinants of migration can also be divided into three categories, each corresponding to the motive for migration, regardless of pull or push factors: A migrant can either be (1) a supplier of factor services or a maximizing investor in human capital, (2) a consumer of amenities and public goods, or (3) a producer of her own household goods and services. Most theoretical work is grounded in the human capital approach. The consumption approach is though heavily favored by urban and regional economists and focuses on domestic migration, while the “household production approach” exclusively is an application of the human capital approach.

5.3 The Economics of Migrants Remittances

The economics of remittances and their determinants are strongly linked to the theory of migration. Studies show though, that the characteristics of remittance to some extent are distinct from the characteristics of migration: While the number of migrants and the general economic conditions in two countries could be similar, more households may receive significantly more remittances from relatives abroad in one of the countries than does households in the other country. Two possible explanations are suggested: One is that that migrants self-select differently in the two countries, the other that “remitters” from the two countries self-select differently.¹⁹

Conceptually it is important to distinguish remittances from ordinary capital flows.²⁰ Seen from the national accounts perspective, remittances do not constitute international capital flows in a strict sense: First, remittances are classified as current transfers and appear in the current account of the balance of payments, whereas capital flows belong to the capital or financial account. Current transfers are thus a part of gross national

¹⁸ Bodvarsson Ö B & van den Berg H. p. 6

¹⁹ Funkhouser, E. (1995): *Remittances from international migration: a comparison of El Salvador and Nicaragua*, Review of Economics and Statistics 1995

²⁰ See Buch, Kuckulenz & Le Manchec: *Worker Remittances and Capital Flows* 2002

product (GNP), while capital movements are a part of gross domestic product (GDP) and are thus exclusively a source of financing.

Second, while capital flows between countries are defined as changes in the assets and liabilities of residents vis-à-vis non-residents, remittances are transfers of funds between nationals of a country. Consequently, an inflow of remittances does not constitute a capital import from a foreign country but rather a transfer of funds from nationals living abroad towards those living in the home country.

From a growth perspective, the distinction between capital flow and changes in the current account complicates the analysis of the economic impact of remittances. Still, as migrant's remittances enhance the availability of funds, the incidence of remittances increases the investment potential of the receiver.

The evidence on growth effects of remittances in the source country is not very clear. Most studies of the use of remittances find that remittances are used mostly for consumption, not investment. Comparison studies do though suggest that lack of local investment opportunities rather than the direct effect of remittances causes a high propensity to consume remittance income instead of investing. As economic growth depends on the many variables that influence capital investment, innovation, entrepreneurship, remittances by themselves are not likely to play the decisive role in a nation's economic development.²¹

From a macro-economic perspective, remittances constitute both positive effects and risks; While migrant's remittances have a positive impact on the current account, providing both foreign exchange and additional savings for economic development, the presence of remittances can result in a withdrawal of resources from the traditional tradable sector and into the non-tradable sector, thereby creating a Dutch disease effect.²²

Other potential negative welfare implications of remittances include the encouragement of continued migration of the working age population, create dependence of these funds, and thus perpetuate an economic dependency that undermines the prospects for development.

On the other hand, the presence of remittances influence growth and investment, both directly and indirectly. However, the effects strongly depend on the existence of an economic environment conducive to investment in productive activities.

Welfare implications of remittances have also been derived based on microeconomic models, which stress risk sharing and access to informal loan markets. In 1985, the New Economics of Labor Migration was introduced, focusing remitters behavior by viewing the household as the unit for analysis. NELM argue that market failures such as financial delimitations constrain local production, creating incentives for family members to migrate for work. Migrants thus take the role of financial intermediaries by providing the family of origin with needed capital and income insurance remittances. This theory

²¹ Bödvardsson et al p. 239

²² See Acosta, Lartey & Mandelman – *Remittances and the Dutch Disease*, 2009

stresses risk spreading and the development of a relationship between migration and economic development.²³

The NELM theory suggest that remittances from a life cycle perspective initially are negative as the family bears the costs of migration. Subsequently, remittances increase once the migrant receives a salary abroad. Finally, if the migrants decide to settle down in the host country, remittances will fall. The migrant is then likely to play the role of an income insurer rather than income supporter, remitting only when needed.

Other theories view migrant remittances as an implicit family loan arrangement, assumed to be the repayment of an informal loan contracted for human capital development. First, the family invests in education expecting return for that investment. Secondly, the “loan” is reimbursable to to finance sibling or other family member’s education and/or future migration. Finally, the next generation’s emigrants repay the loan to the initial emigrant-lenders.

5.4 Theories on migrant remittance decisions

The theory of the determinants of remittances highlighted by *Lucas and Stark* in a study of remittances on a household level to the country of Botswana and hypothesized the main determinants to be “pure altruism”, “pure self-interest” and “tempered altruism/enlightened self-interest”. The latter category comprises contractual arrangements between the migrant and household left behind, i.e. co-insurance, exchange-motives, loan repayment.²⁴

Altruism

Several researchers suggest that altruistic behavior explains the motivation that underlies a migrant’s decision to remit. Altruism is an ethical doctrine coined by the French philosopher Auguste Comte (1852), describing the principle or practice of concern for the welfare of others.

Comte believed that individuals are morally obligated to renounce self-interest and live for others. In his *Catéchisme Positiviste*, Comte argued:

*“[The] social point of view cannot tolerate the notion of rights, for such notion rests on individualism. We are born under a load of obligations of every kind, to our predecessors, to our successors, to our contemporaries. After our birth these obligations increase or accumulate, for it is some time before we can return any service.... This [“to live for others”], the definitive formula of human morality, gives a direct sanction exclusively to our instincts of benevolence, the common source of happiness and duty. [Man must serve] Humanity, whose we are entirely”.*²⁵

²³ See Stark & Bloom – *The New Economics of Labor Migration* The American 1985

²⁴ Lucas & Stark – *Motivations to Remit: Evidence from Botswana*. 1985

²⁵ Wikipedia: *Altruism (ethics)*

Proponents of altruism hypothesis suggest that individual family members are obligated to help each other and that this explains migrant remittance decisions.²⁶ The doctrine suggests that migrants will be willing to transmit resources to make up for the income shortfall of family members for either their consumption or investment. Altruism hypothesis suggests that a migrant will willingly sacrifice his or her own well-being or interest for the sake of the welfare of relations due to the love and concern they may have for their relations' welfare. An altruistic act is not expected to generate any expected or reciprocal benefits.

Tempered Altruism or Enlightened Self-Interest

Lucas and Stark (1985) suggest that the decision to remit can be derived from the mutually beneficial informal contractual arrangements between the migrant and the home. They argue that this implicit arrangement is the result of two major factors, (a) risk and investment and (b) the absence of formal insurance contract and a highly incomplete capital markets.

With respect to the risk and investment factor, *Lucas and Stark* argue that families invest in prospects of migrants and that remittances are the return on the investment for the families concerned.

The second factor relating to risk is a response to the need to diversify income due to the risky milieu in the absence of open market insurance contracts that both families and migrants face. Remittances are thus claims on implicit coinsurance contracts and because such informal contracts are mutually beneficial, they are self-enforcing and ensure that there is no delinquency

Implicit Family Loan Agreement

The hypothesis that migrant remittances are the result of implicit family loan agreements that are entered by migrants during their youth has been put forward by *Poirine*. He argues that migrant remittances result from the existence of internal familial markets which finances the investments in human capital of young family members. Therefore, the repayments of such loan contracts appear as remittances when they are made by family members who reside in different countries. *Poirine* argues that the implicit familial loan arrangements have three phases of remittance flow over time. The first phase involves young migrants implicitly taking out loans from family members to finance their education which makes them more productive in terms of knowledge and skills. The second phase leads to emigration and remittances by migrants back home to fund the education of younger family members until they are also ready to emigrate. The last and third phase involves former emigrant-lenders who have retired to their home country receiving remittances as repayment of their earlier loans.²⁷

According to *Poirine*, the idea behind the theory is that there is an informal, internal financial market among migrant and nonmigrant family members. The main purpose of this informal market is to finance investments in human capital of young family

²⁶ See Becker 1981, 1991; Stark & Lucas 1988; Stark 1995; Rapoport & Docquier, 2006

²⁷ *Poirine B - A Theory of Remittances as an Implicit Family Loan Arrangement* 1997

members. The family acts as a transnational corporation of kin with subsidiaries abroad or in different regions. Informal loans, and repayment of these loans, appear as remittances when they are made between family members residing in different countries/regions, and the parent company lends to the subsidiaries to finance their establishment in a foreign country, where returns on investment seem higher than in the home country.

The Implicit Family Loan Theory is presented in competition to other theories of remittances, such as the tempered altruistic theory and the implicit co-insurance arrangement theory introduced by Stark, especially by the focuses on investment in human capital. The financial arrangements described by Poirine does though constitute an explanation to the sequential order of emigration and return migration that was characteristic for studied period, as well as a motive for remittances.

Intention to Return

Contemporary and historical literature on remittances have found that emigrants planning to return home remit more funds than emigrants who do not have the intention to return.²⁸

Return Migrant Intentions is studied by *Carling et al.* They assess that, in the case of return migration, it is almost a rule of thumb that most migrants initially intend to return but often end up staying in the country of destination. The “*myth of return*” can thus be regarded as collectively held return intentions that remain unfulfilled.²⁹

When migrants contemplate return, they are influenced by two sets of attachments: ties to the country of residence, and ties to the country of origin. The latter ties result from life before migration, or from transnational practices such as return visits or long-distance communication. Among other things, they find return intentions to vary systematically by gender, age and migration history, with lower odds of return intentions among women, the young, the elderly, and the people who have either spent very little or very much of their lives in the destination country.

Intention to return is also often cited as a motive for remitting funds and other resources by migrants to their country of origin.³⁰ The intention to return motive is often ascribed to the motivation to inherit, which suggest that migrants will have the incentive to maintain contact and interest in their origins.³¹

According to *Lucas and Stark* and *Hoddinott*, intention to return often leads to investments, particularly in housing stock. However, anecdotal evidence also suggests that familial relations often are the beneficiaries of such investments as most migrant homes tends to be used by other family members.

²⁸ See Merkle & Zimmerman 1991, Rapoport and Docquier 2005 and others

²⁹ Carling et al – *Return Migration Intentions in the Integration-Transnationalism Matrix* 2014 p.14

³⁰ See Delpierre & Verheyden, 2009 and Collier, Piracha and Randazzo, 2011

³¹ See Lucas & Stark, 1985 and Hoddinott, 1994

5.5 Previous Research and Relevant Theories

Most studies find that Swedish emigration from the 1880s and forward was driven by income differences between the United States and Sweden, and that the most important impact on Sweden appears to have been in the labor market.³²

The most comprehensive study of European Emigration and convergence is done by *Hatton and Williamson* (1994 and 1998). Although they don't specifically analyze the effect on growth and convergence, their work is a wearable source of information to this study: Referring to the empirical work of Abramovitz and Baumol, built on macroeconomic data, they relate the observed "catching up" of post WWII Europe (vis-à-vis the U.S.) to a more general principle of the "leader's handicap" theory of Veblen and the "advantages of backwardness" theory of Gerschenkron, suggesting that countries with lower productivity may exploit the technological gap with respect to the leader, import or imitate best practice technology and, hence, raise labor productivity and living standards.³³

Although most studies of growth and/or convergence due to emigration do not include the specific growth effect of remittances, there are exceptions:

Anecdotal reports by observers to the *Emigration Inquiry* suggested that farmers frequently could clear themselves of debt or to purchase more land because of remittances sent by their children abroad.³⁴ *Harman Akenson* concludes that this means that some of the Swedish remittance money was going to investment, not only rent or lively costs. *Harman Akenson* understands this as an affirmation of the financial importance of remittances to the advancement of Swedish agriculture during the period of mass emigration.

According to *Harman Akenson*, the Swedish agricultural revolution increased the amount of cultivated land by 47,6 percent from 1860 to 1910 and turned the agrarian structure away from hay and pasturage and toward arable activities. Combined with the abolition near the end of the nineteenth century of restrictions in inheritance laws on the sale of freehold land, it became significantly easier to acquire a small, but viable, freehold unit. Relating to the increased number of freeholders and substantial tenants, this confirms the theory that migrant's remittances came to effect agricultural progress, although the macro-economic effect still is an open question.³⁵

Merkle and Zimmerman found evidence that German guest-worker's return migration plans are an important determinant of remittances even when controlling for income effects and the possibility that migrants support close relatives who live in the home country.³⁶

³² See Tomaske 1965, Taylor & Williamson 1994 and 1998, Karlström 1984 and others

³³ Taylor & Williamson – Convergence in the Age of Mass Migration p.3

³⁴ Sundbärg (ed) - *The Emigration Inquiry (Emigrationsutredningen)*: Annex V, pp.307, 335, 410, 422

³⁵ Herman Akenson p. 243

³⁶ Merkle & Zimmerman 1992

6 Empirical evidence

The focus of this thesis is the relation between remittances and return migration during the height of the Swedish-American emigration period. General empirical evidence from that perspective are scarce. From integrating modern theory and modern evidence of remittances, causes and effects with contemporary studies of the Swedish-American emigration in the late nineteenth and early twentieth century, the intention is to find an explanatory pattern for the relation between the size and scope of remittances and the magnitude of the phenomenon of extensive return migration during the studied period.

6.1 Modern theory and empirical evidence

There are no real studies explaining the motivation of remittances during the Swedish emigration period during the late nineteenth and early twenties century. Following the growing South-North migration, the subject is more connected to post-WWII emigration episodes.

The study of the determinants of remittances was ignited by *Lucas and Stark* with their study *Motivations to remit: Evidence from Botswana (1985)*. They hypothesized the main determinants to be “pure altruism”, “pure self-interest” and “tempered altruism or enlightened self-interest”. From this starting point, the literature on the determinants of remittances is lively and growing.

Although the decision to remit is closely linked to the causes of migration, the dominant selection of literature focus on the theories of remittances, regarding general migration theory as given.

Remittances and capital flows

Seen from the national accounts perspective, capital flows between countries are defined as changes in the assets and liabilities of residents vis-à-vis non-residents, while remittances are transfers of funds between nationals of a country. Consequently, an inflow of remittances does not constitute a capital import from a foreign country but rather a transfer of capital from nationals living abroad.

Despite the conceptual differences between remittances and international capital flows, it is useful to regard migrant remittances as a means of enlarging the available funds that can be invested in the recipient country. Except for the effects on the demographic situation, welfare, consumption, savings patterns and financial stability, remittances also have a confirmed positive influence domestic financial development, e.g. that remittances can substitute for a lack of financial development in receiving countries:

Studying international capital flow, *Buch, Kuckulenz and Le Manchec* found volatility of remittances to be lower than the volatility of private and official capital flows. Hence, a high share of remittances relative to capital flows stabilize the overall inflow of funds from abroad, providing a stabilizing element during periods of financial

instability. Independent of recipient usage of the inflow, these findings indicate a positive influence on financial development in the receiving country.³⁷

Remittances and savings

Galor and Stark found differences in savings between natives and migrants by use of an overlapping generation framework.³⁸ They suggest that migrants save more than natives when facing a positive probability of return migration, which constitute larger funds for remittances. Their findings have been confirmed by *Merkle and Zimmerman* and is consistent with the life-cycle theory of consumption: Individuals that expect a considerably lower future income, i.e. migrants having plans for return migration, save more to even their consumption over the life-cycle.³⁹

6.2 The Swedish emigration period

During the mass emigration period most of the Swedish population lived in the countryside. Subsequently, most emigrants originated from rural areas. Emigration statistics from the studied period show that for some years less than 20 percent of the emigrants originated from towns or more urban areas. Although the proportion of urban originated emigrants increased during the period, several sources indicate that this mainly was an effect of secondary migration of people from rural areas.⁴⁰

Total emigration figures and the relative size of returning migration, wage differentials between rural unqualified farm labor in Sweden and equivalent groups in the United states and regional historical traditions of seasonal or temporary labor migration constitute a basis for the assessment of self-interest motivation and the intent of return migration as determining factors of remittances.

Estimating the total emigration and return migration figures

There are several different emigration and return migration figures during the long period of the Swedish-American mass emigration episode. The most common are based on official Swedish census figures.

The official accounting for emigration and immigration was carried out by two different agencies. The responsibility for operating registry office rested upon the local ecclesiastical bodies and the parish priest, who was the person to issue the emigration certificate required. In addition, the County Governors of Stockholm, Gothenburg and Malmö had to approve and register all emigrants prior to boarding ships with foreign destinations.

This dual accounting has led to uncertainty of the actual size of emigration. In general, the local Annual Population Registers reported higher numbers than the County Governors. In 1890, the difference amounted to more than 8 percent of the reported emigration, about 5,000 people.

³⁷ Buch, Kuckulenz & Le Manchec p. 18

³⁸ Galor & Stark (1990)

³⁹ Merkle & Zimmerman (1991)

⁴⁰ See for instance Runblom & Norman

The differences between the two types of emigration registers had geographical explanations, being more significant in southern counties, where emigrants often preferred to travel from Danish or German ports, and in western counties, whence emigrants often had easier access to Norwegian ports.

Similar differences could as well be found in immigration figures. Whereas the local Annual Population Registers not always distinguished between return migrating Swedes from citizens moving from other Swedish parishes, the Governors registration missed returning migrants through the Danish, German or Norwegian ports.

In 1965 *Ljungmark* introduced an adjusted emigration/return migration time series, considering differences between US Immigration figures and the official Swedish Census. In number, there are significant differences between *Ljungmark* and the census figures, although the correlation between the series is high.⁴¹

Swedish Census report approximately 140 000 more emigrants for the studied period than the *Ljungmark* series, a difference of almost 18 percent. Strikingly, the return migration figures show a reverse difference of more than 90 percent (210 888 for Sw Census and merely 109 943 for *Ljungmark*). The net difference between the two series is thus limited to only 5,5 percent. (Table 2).

My study will be based on the Swedish Census emigration and return migration series, mainly since they are the most known figures, used by most scholars.

Return Migration – Demographic Structure, Length of Stay and Farmland Purchase

In 2013, *Blidberg* examined records of 150 returning migrants to the Glimåkra parish in southern Sweden between 1860 and 1914. Of the returnees, 24 turned back to America after short periods. Another total of 13 returnees died within a few years, assumed by *Blidberg* to have returned due to illness, and 42 later resettled to neighboring districts. In total 102 of the 150 returnees remained in their home district of Glimåkra.⁴²

Blidberg defined a "High Status Group" among the returnees, constituting 44 of the 102 returnees during the studied period. Most became owners of the larger farms of the parish, either taking over their family farms, or in some cases by marriage or purchase. There were also examples of small crofters that managed to buy farmland or full farms thanks to start-up capital from the American trip.

The remaining group of about 60 "Low Status Returnees" in *Blidbergs* study continued their lives as workers, servants or crofters after their return.

Runblom and Norman studied return migration from the US to Sweden during the pre-WWII period.⁴³ Their study is mostly concentrated to the county of Västernorrland in the northern part of Sweden, but has strong references to the overall Swedish emigration history. By studying the different emigration and return migration patterns

⁴¹ Ljungmark - *Den stora utvandringen Stockholm* 1965 p. 179-180

⁴² Blidberg A – Återvändarna. En undersökning av hur det svenska samhället påverkades av återvändande emigranter 1860-1940 Visby 2013 p. 19

⁴³ Runblom & Norman - *From Sweden to America – A history of the Migration* 1976

between agricultural parishes and industrialized parishes they found that most returning emigrants made their way back to their previous home wards. They thus concluded that there is no evidence that the emigration-return migration process should be regarded as a part of the urbanization process that occurred during the same period.

Runblom and Norman also found return migration to be a male phenomenon. During all three ten-year periods of their study, the male domination was prevailing. They also found that high shares of married persons among emigrants and return migrants by no means indicated the previous pattern of “whole family emigration”. Contrary, figures of returning migrants to the district of Sundsvall during the period of 1875 to 1913 revealed that most of the returning married men travelled without their families, indicating the strong migrant labor strain in return migration.⁴⁴

Most return migrants only spent a few years overseas. More than 70 percent during the period 1880-1913 spent less than five years in America. (Table 3)

Runblom and Norman also found indications that return migration and the length of stay was socially selective, referring to studies showing that returning farm owners sons orderly bought farms at home by money saved during their stay in America.⁴⁵

The same conclusion is drawn by *Wyman*: He perceives the predominance of return migration to agricultural districts, together with evidence of comprehensive purchase of farms or farmland by returning migrants as an affirmation of “*what had become a basic truth, that land was a major goal of return migration*”.⁴⁶

Estimates of the magnitude of remittances

Although the study of the impact of remittances for the development of Third World countries has increased during the last decades, there are few studies of migrant remittances during the mass emigration period before WWI. Most of the abundant literature regarding migration during this period barely mention transfers of money from migrant workers to their families, giving the impression that the incidence of large financial migrant remittances is a new phenomenon. Yet, it is a fact that an important part of modern money transfer business has its origin in the wave of labor flows that occurred before WWI, indicating not only commercial, but also considerable private transfers during this period.

Both formal and informal channels were used. In addition to postal orders and telegraphic transfers offered by post offices, remittances were sent via banks, insurance companies and news agencies. To a high extent other means of money transfers were also used. Money notes (and even coins) were regularly enclosed in ordinary letters or small packages and sent through the regular mail, as well as the use of “family and friends network” by entrusting money to acquaintances travelling home for visits or permanent repatriation.

⁴⁴ Ibid. p. 224

⁴⁵ Ibid. p. 225-226

⁴⁶ Wyman - *Round-trip to Amerika: The Immigrants Return to Europe 1880-1930*, p. 132

It is obvious that it is difficult to accurately estimate the total amount of funds sent. However, several assessments have been made, both contemporary and modern, giving a relatively reliable overall picture.

Source country (USA) estimates – the Dillingham Reports

In the *American Congressional Immigration Commission Report* of 1907-1911 (the Dillingham Reports) a special *Report on Immigration Banks* was published, describing the widespread structure of remitting channels as well as an assessment of the quantitative scale of migrant remittances during the period before WWI.⁴⁷

The report contained a description of specific intermediaries within the area of migrant's remittances, described as "immigrant bank" – nondescript, unchartered institutions which flourished in every part of the United States where immigrants gathered in considerable numbers. The report depicted both the formal and the informal structure of the institutional methods applied, as well as the practical and legal conditions associated with migrants' remittances of money to their home countries. It did not, though, include purely individual transactions of remittances, conducted by ordinary postal letters, by help from returning friends or family members or personal trips to the country of origin.⁴⁸

Based on actual figures obtained from reliable sources, the Commission estimated that \$275 Mill was remitted by immigrants in 1907. More than \$200 Mill of this sum was accounted for in the figures of various banks and the Post-Office Department had presented. The estimate for the three Scandinavian countries amounted to \$25 Mill, representing about 9 percent of the total value of migrant remittances that year.

The report underlined that these transmittals of money didn't include foreign commercial payments from import or the expenditures of tourists, but only savings withdrawn from circulation in the US and sent abroad for the support of families, for payment of debts contracted prior emigration, for investment, or for accumulation for future expenditures in the countries of origin.

Convention for the Exchange of Money orders

In 1869, the United States Postal Service introduced a system of international money orders, which allowed for a cheap and safe way of transferring small amounts of money. Fifteen years later, in 1885, an agreement between the US Postal Service and the Swedish General Post Board (Generalpoststyrelsen) were signed, institutionalizing the whole process from the sending part to the receiving part of the transaction.

The *Annual Statistical Reports from the Swedish General Post Board* reported all registered Postal Money orders during the studied period. As indicated in the *Dillingham Report* these Money orders represent a significant part of the remittances, but not the total amount. The *Annual Reports* does thus merely show trends in scope, flows and

⁴⁷ The Dillingham Report – The United States Immigration Commission was a bipartisan special committee formed in February 1907 by the United States Congress, to study the origins and consequences of recent immigration to the United States. It was known as the Dillingham Commission after its chairman, Republican Senator William P. Dillingham of Vermont.

⁴⁸ The Dillingham Report – *Abstract of the Report on Immigrant Banks* p. 409-437

direction of the remittances during the surveyed years, and require quantitative calculations to be applicable as a basis for assessing the overall level of the remittances flows.⁴⁹

The receiving country (Sweden) - two different estimates

In 1937 *Lindahl, Dahlgren and Kock* provide estimates of total remittances for Sweden using the annual *Statistical Reports of Postal Money orders*.⁵⁰ Unlike other authors, who calculate gross flows, their estimations for Sweden are net. They consider not only remittances *from* the United States (the main destination country of Swedish emigrants before WWI), but also the Money orders *sent to* the US. To offset the lack of information about “invisible” remittances, such as bank orders or orders passing through other financial intermediaries or agents, returnees etc. they multiply the difference between the Postal Money orders from the United States and those sent from Sweden by three. The calculations are based on data regarding fares and amount of cash brought, extracted from various relevant investigations., i.e. from the fact that emigrants often received travelling money from relatives or friends in America. This method was used to construct contemporary balance-of-payment series.

Esteves et al used information on two reference years for their estimate.⁵¹ First *the Dillingham Report* assessment of the total remittances sent by ‘Scandinavians’ in 1907 (25 m dollars). The same source breaks down this amount by banks, international money orders, and an adjustment based on extra “figures obtained from reliable sources”. By dividing this total amount by the number of emigrants, they followed three steps.

(1) Division of the common value of banking remittances according to information on the per remitter amount of banking transfers gathered by the Commission from a sample of banks. The amount for Sweden was estimated to \$25.03.

(2) Adding up the values of international money orders, which were reported by country.

(3) Applying the same proportional adjustment used by the reporters of the Commission to convert the invisible amounts to the total remittances.

The second reference year used by *Esteves et al* refers to *Beckman* estimates (quoted in *Hovde 1937*), using data from American banks, whereas Sweden received around \$3 Mill (11.2 Mill SEK) in 1882.

The difference between the two remittances estimations are considerable: While the *Lindahl et al* series amount to almost 400 mill SEK (\$105 mill) for the studied period,

⁴⁹ Comments about postal orders: Statistics Sweden give detailed information on the value of incoming as well as outgoing Postal Money Orders of the years 1885 (from April) until 1910. During the period 1904-1910, the number of incoming money orders annually amounted to 21 - 26 percent of the ten years cumulative number of emigrants each year. To obtain an average amount per money order for other years (1880-1903), I have calculated the number of postal orders for the relevant years by multiplying the cumulative number of emigrants by 0.25.

⁵⁰ *Lindahl, Dahlgren & Kock – Wages, cost of living and National Income of Sweden 1860-1930* Volume III Stockholm Economic Studies (1937)

⁵¹ *Esteves R & Khoudour-Casteras – Remittances, capital flows and financial development during the mass migrations period 1870-1913*. *European Review of Economic History* 2011. p. 41 and p.276

the Esteves et al estimates reach a total of more than 700 mill SEK (\$185 mill). It is though interesting to notice that the correlation between the estimate series are high, more than 0,77.

Based on the possibly larger degree of uncertainty of the Esteves series – based only on two reference years – I choose to use the Lindahl et al estimation series for the study.

Emigration and the Industrialized Economy

Most Swedish emigrants had a rural background with no experience from other labor than farm work, at best supplemented with some experience of forestry work, stone masonry, simple installation jobs like digging or shoveling, or various craft work. This was as well the kind of work offered low-skilled Swedish emigrants during the first wave of emigration, directing most of the emigrants to follow the agricultural frontline westward. Within the span of a few decades this changed, as the US was transformed from a predominately rural agrarian society to an industrial economy centered in large metropolitan cities – also changing the possibilities for unskilled labor migrants.

The rapid growth of the manufacture sector was made possible from a combination of several important features of the American industrial revolution; the large-scale development and expansion of the railroads – in combination with technical advancements, financial, organizational and managerial progress, the exploitation of economics of scale and the developments of the factory system, under which the minute subdivision enabled an extensive use of machinery.⁵²

This great transformation, particularly the technical improvements and the subdivision of the work process, meant that unskilled workers literally could be taught their work duties from one day to the other, without experience or long apprenticeships.⁵³

Wyman underscores the relevance of this by quoting the British labor historian Hobsbawm, claiming that “*the bulk of industrial workers in all countries began, like America’s, as first-generation immigrants from pre-industrial societies*”.

Wages differentials United States vs. Sweden

The transformation of the American economy from a predominantly agricultural society to an industrialized economy was the prerequisite to the large wage differential between America and rural Sweden. Although the proportion of urban originated emigrants increased during the period, several sources claim that this mainly was an effect of secondary migration of people from rural areas.

The relevant point of studying the general differentials is the general wage statistics for unqualified farm labor in Sweden and equivalent labor groups such as lumbers, mining laborers – as well as industrial laborers in the United States.

⁵² See Boyce G & Vill S – *The Development of Modern Business* Palgrave 2002

⁵³ Wyman – *Round-trip to Amerika: The Immigrants Return to Europe 1880-1930* 1993 p. 45

During the studied period the Day rates for Swedish farming-hand (agricultural laborer) increased from \$0,25 (0,95SEK) in 1880 to \$0,53 (2,00SEK) in 1910.⁵⁴ The equivalent Day rate for the US in 1880 was \$2,13 (8,03SEK) and £3,29 (12,36SEK) in 1910⁵⁵. American wages did thus constitute more than 8,5 times the equivalent Swedish wage level at the start of the studied period, decreasing by almost 20 percent to 6,2 times in 1910.

Comparing *real wage differentials* gives though a slightly different picture. Per Bohlin and Eurenus, the Swedish/US real wage differential *increased* by almost 30 percent between 1881 and 1910, taken into account Swedish regional wage differences and cost of living indexes.⁵⁶

Cyclical patterns in emigration, return migration and remittances

The Emigration Inquiry analyzed the question of cyclical patterns in the Swedish-American emigration.⁵⁷ The conclusion was a temporal association between US immigration curve and the US business cycles, but that the European business cycles upturns did not discourage emigration. This phenomenon was called "business cycle migration" (konjunkturmigration).

The explanatory model for the Swedish emigration process in the Emigration Inquiry was simple and straightforward: an American economic boom seemed attractive to the Swedish labor force resulting in increased emigration, while a Swedish recession had a repelling effect, also resulting in increased emigration.

Bohlin and Eurenus refer to Jerome and Kuznets, both arguing that upswings in the US business cycles were the most decisive causal factor explaining the fluctuations in emigration, whereas "push" forces in sending countries were of lesser importance. For the case of Sweden Dorothy Swain Thomas, though argued for the importance of push factors, still arguing that the most consistent increase in emigration occurred when pull and push coincided.⁵⁸

Historical tradition of seasonal labor migration

Seasonal or temporary labor migration with different orientation has been of great importance for both technical and economic development, the spread of new ideas, and not least for the local rural livelihoods. Temporal Swedish work migration to the continent dates to the early Middle Ages and have had great importance for the spreading of new ideas from Europe. Typographers and glovemakers are examples of crafts occupations that early worked on a joint German-Scandinavian labor market. Another category where education was a constituent part of the migration process comprise

⁵⁴ Referring to the Markegång Returns in *Wages: Cost of Living and National Income in Sweden 1860-1930*, Stockholm 1935. (Markegång was historically a means to determine the value of money in taxes, fees, earnings or donations provided for in goods or performance.)

⁵⁵ *History of Wages in the United States from Colonial Times to 1928*: United States Department of Labor No. 604 1934 (1880 = Average wage miners Michigan/Minnesota)

⁵⁶ Bohlin & Eurenus - *Why they moved – emigration from the Swedish countryside to the United States 1881–1910* (2009) p. 17

⁵⁷ Sundbärg (ed) - *The Emigration Inquiry (Emigrationsutredningen)*: Annex XVIII. 1910.

⁵⁸ Bohlin & Eurenus, p. 6

Swedish engineers travelling to Germany to acquire knowledge during industrialization earliest stage.⁵⁹

In some areas of the country the custom of seasonal and temporary labor migration to other parts of the country had a long history. Census records reveal that temporary labor migratory certificates often were issued in conjunction to casual labor migration within the country. This was particularly common during the great railway construction period during the second half of the nineteenth century.

When labor migrations had its peak in the 1800s, locals had for long been travelling far distances for centuries in search for work as temporary workers in floating, carpentry, wood-working, stone quarrying and other kinds of work for which they had specific skills. In this context, it is not farfetched to mention sailor traditions in the coastal areas, where fishing and shipping always have been an integral part of the livelihood - also for the farming population. Seasonal labor migration had thus subsequently evolved to become an important element of the mass emigration that took off from the mid-1800s:

"The transition from domestic seasonal migration to the American emigration was not difficult: Crofters and the smallest yeomen and their children emigrated mostly for good; although many hoped to be able to return with sufficient capital to buy a better piece of land at home. The slightly larger yeomen mostly traveled with the intention to return home and improve the farming, as many farmers had done before".⁶⁰

Investment decisions

The question on how remittances are spent is a controversial question in migration/remittances literature. Are migrant households likely to spend their income, including remittances, on unproductive consumption, or are migrant households more likely to invest in productive investments. Studies find that migrant households are more likely to invest part of their income from remittances on land and businesses.⁶¹

During the studied period, Sweden had a rapidly growing current account deficit due to very high international borrowing. Around 1910, Sweden was probably the world's most indebted nation per capita.⁶² Despite the conceptual differences between remittances and international capital flows, undoubtedly the flow of remittances was a mean of enlarging available funds form investment during this period of shortage of other means of financing, such as bank loans or mortgages.

It is important to realize that investment decisions not just depend on potential money available, but also the investment opportunities available. As mentioned above,

⁵⁹ Vernersson-Wiberg - Migration och Identitet. En studie av utvandringen från Blekinge till Danmark och Tyskland 1860–1914

⁶⁰ Sundbärg (ed) - *The Emigration Inquiry (Emigrationsutredningen): The Countryside Surveys*, Annex V Öland p. 14

⁶¹ Hagen-Zanker - *Effects of remittances and migration on migrant sending countries, communities and households* 2014, p.19

⁶² Schön – *En modern svensk ekonomisk historia. Tillväxt och omvandling under två sekel*, SNS 2000

increasing numbers of farm bankruptcies and foreclosures following “abandoned” and indebted farmers following parcelling, farm land division and high emigration, broadening the opportunities for other farmers to increase their means of livelihood by acquiring nearby farms or farmland. The influx of capital from remittances and return migration thus came to coincide with a contemporary increase of investment opportunities available.⁶³

Remittances over the business cycle

During the 1880s, more than 320 000 people emigrated to America. The peak years were 1880 – 1882 and 1887 – 1888, as the booming economy in the US brought a strong demand for labor. After a slight emigration decline in the 1890s, another economic boom brought a new emigration peak after the turn of the century. Interestingly, both remittances and return migration increased during that booming period.

Supriyo De et al have studied the behavior of remittances over the business cycle and their potential to stabilize business cycle volatility during the period 1990-2012.⁶⁴ They identify four findings, of which three can be assessed in this study of remittances during the Swedish-American emigration episode: 1) that remittances are less volatile than other foreign currencies flows, but that 2) transfers do not appear to systemically move in parallel to business cycle fluctuations, and 3) that remittances are relatively stable even during episodes of sharp business cycle volatility. These findings correspond to the explanatory model for the Swedish emigration process presented in the *Emigration Inquiry*, assessing that remittances remained relatively stable during business cycles.⁶⁵

Visits at home

The Dillingham report examined in 1907 the proportion of immigrants who had visited the country of origin (been abroad) after emigration.⁶⁶ From Census figures it is obvious that some of the visitors ended up as returnees, although most evidence support the perception that visits home was a part of the final decision process on whether to stay or to return. Of the just over 1,000 Swedish employees in iron and steel industry, about 20 per cent reported that they had been visiting the home. The majority, about 18 percent, had only made one visit, but there were also emigrants who had made three or more trips home during his stay in America. (Table 1)

Convergence offset by demographic forces

Several studies have identified a long run cycle in Scandinavian emigration, rising from mid-century to a peak in the late 1880s / early 1890s, then drifting downwards. Taylor and Williamson identified the economic and demographic forces of these trends, finding that demographic forces and the rising migrant stock more than offset the effects

⁶³ Countryside Surveys of the Emigration Inquiry (Fryksdals härad i Värmland p. 33)

⁶⁴ Sypriyo, Islamaj, Kose & Yousefi – *Remittances over the Business Cycle: Theory and Evidence*. KNOMAD Working Paper 11 2016 p. 10-11

⁶⁵ Sundbärg (ed) - *The Emigration Inquiry (Emigrationsutredningen)*, Annex XVIII, Svenska vetenskapsmän

⁶⁶ The Dillingham Report – Immigrants in Industry. Part 2: Iron and Steel Manufacturing, Vol II

of the falling real wage ratio.⁶⁷ While the growing supply of work opportunities in the United States and the excessive wage differential to Sweden can explain the unprecedented level of emigration during the height of the emigration period, declining real wage differences and economic convergence and counterfactual demographic factors could as well explain the tendency to decreasing emigration and increasing return migration during the period studied.

Anecdotal reports of remittances during the mass migration period

In the *Countryside Surveys*, several illustrations are presented, showing how "American money" affected the social and economic situation in rural exodus areas. Some of these suggests that farmers frequently managed to clear themselves of debt and others to purchase more land thanks to money sent by children from abroad – or earned during self-rendered emigration periods. Other examples refer to returning emigrants managing to buy out siblings from the inheritance or purchasing of the family farm, or to finance the acquisition of neighboring farms.

Several of these statements are implying the structural importance of remittances and returning emigrants to the development of farm ownership, including returning as an original intention before emigration. Others affirm the social significance of the remittances for the support of the "left behind". In the Öland report letters from America were said to be "*the most precious and dearest that come to the island*".⁶⁸

Others refer to the records or register Postal Money Orders sent to the local post stations and/or the deposits in local banks: To Högby post office in Öland, money orders of totally 59 000 SEK (\$15 650) were deposited in 1907, while deposits from America of 30 000 SEK (\$7 960) was made at the local office of the Southern Sweden Bank Corporation in Borgholm the same year.⁶⁹

An indication of the consistency of the size and regularity of money remittances came from western Sweden. In the report from Vedbo and Nordmarken, the magnitude of remittances at the post station of Fjella is reported to be annually approximately 25 000 SEK (\$6 630), some of them intended for the issuers own account.⁷⁰

The intention of returning and the financial effect of returning emigrants is a regular feature of the reports, especially in Western Sweden and on the island of Öland: In the Vedbo and Nordmarken report it is stated that it could be put as a rule, that most emigrants at their departure had the intention only to stay a few years to earn funds and then return home, and that all over the district there were numerous of Swedish-Americans having brought saved assets and thus being able to take over the family property - or buy a property of their own. In the Öland report it is asserted that most of the now at-home living Swedish-Americans "*seems to have traveled out with the definite*

⁶⁷ Taylor A M & Williamson J G – Convergence in the Age of Mass Migration. National Bureau of Economic Research Cambridge MA 1994

⁶⁸ Sundbärg (ed) - *The Emigration Inquiry (Emigrationsutredningen)* –The Countryside Surveys, Annex V Öland p. 81

⁶⁹ Ibid. p. 82

⁷⁰ Ibid. The Countryside Surveys, Annex V, Vedbo and Nordmarken p. 36

*intention of coming back after having gathered the capital needed for the redemption of siblings at the seizure of the family property or sufficient to allow a reasonably secure existence in old days”.*⁷¹

Some reports quote estimations of the proportion of returning emigrants, supplemented with information about the financial status before and after emigration, e.g. the Öland report, which states that nearly 60 landowners, over a third of the entire number in a specific district, were returning emigrants, having bought their farms with “*American money*”.

Some reports estimate the effects on agricultural developments from remittances and returning emigrants, testifying that returning Swedish-Americans “*and their American money*” contributed to an initial shake-up of the farming in the area, as a result of the fact that a large number of the landowners previously had been in America and brought greater working drive and a greater wealth and initiatives at the return, improving the farming conditions in the area.⁷²

The returnees, their line of work and the American money

In 1961, 60 previously returning migrant from southern Sweden were interviewed regarding the line of work during their stay in America, and the amount of money that were sent or brought in connection with their return, including information on how they were spent. The respondents represented about 10 percent of the total number of the returnees to that region during the whole of the emigration episode.

In average the respondents had stayed approximately ten years in the US during the period after the turn of the century. Approximately 80 percent of the returnees had farm work prior to emigration, and more than 60 percent returned to farming after their return, consistent to the fact that the large majority of them used their money to purchase a farm. During their stay in America, however, most had completely different work; more than 80 percent report that they worked in forestry, railway construction, mines and smelters or in manufacturing industries, and only 8 percent in farming.⁷³

The information given in the interviews reveal that the average sum of 10 000 SEK (\$2 000 - \$2 600) were remitted or brought back in conjunction with their return, the largest total of 60 000 SEK (\$12 000 - \$16 000). Approximately thirty percent of the money were sent prior to the return and the rest was brought at the return. The overall majority of the respondents used their “*American funds*” to buy farms or farmland. One of the interviewed returnee had started a business, while the rest had deposited their American money in bank accounts.⁷⁴

⁷¹ Ibid The Countryside Surveys, Annex V, Öland p. 80

⁷² Sundbärg (ed) - *The Emigration Inquiry (Emigrationsutredningen)* The Countryside Surveys, Annex V, Vedbo and Nordmarken p. 36

⁷³ Långasjö emigrantcirkel, p. 814

⁷⁴ Ibid. p 816-815

It is difficult to assess the relevance of the amounts specified to the emigration and remittance period before the turn of the century. However, the information on how the money were spent seems relevant and comparable to the previous emigration period.

Parcelling, farm land division, emigration and remittances

Before the advent of industrialization in the Swedish countryside there were no other means of livelihood than agriculture in rural areas. The extensive population growth increased the need for more farming land. Land reclamation took off, but was not enough to feed the rapidly growing population. Different forms of extrajudicial land division emerged, and the need for sustainable and controlled property division rules increased. In 1827, a long period of land division started as the institution of parcelling was introduced, comprised regulation for selling a certain, decided piece of land without any other legal device.

The faith in the power of small agricultural units grew during 18th century, and the arguments for free land division rules grew. Many saw land parcelling and other forms for land division as a solution to poverty and inefficient farming. Others, though, argued that previous illegal land allocation had contributed to the high population growth, and that freer land division rules would bring hasty marriages without stable economy, and thus further increasing numbers of poor.

Gradually, more liberal views emerged, and the right to establish new homesteads and legal requirements to split farms into smaller units were introduced, entailing the possibility for siblings to divide the family farm instead of applying to the traditional practice that farms and homesteads were inherited by the eldest son.

In 1863 parliament made it easier to acquire permanent settlements and regulations on freer rules for Homestead-cleavage and land parcelling were implemented, which included provisions for the minimum acreage to be stripped off. An additional rule for the parcelling of forest was introduced, which was particularly important in the areas where the combination of agriculture and forestry increased livelihood opportunities in small units. Consequently, the price of farmland and forest increased in parallel to an increase in acquisition and sales of homesteads.

The situation changed completely with the liberalization of business laws and the introduction of industry in rural areas. In addition to the possibility to earn a livelihood from farming, it thus became possible to take employment in a related industry or earn income from the previously almost unusable forest.

The combination of population growth, extensive farm land division, changes in inheritance laws and other institutional changes came to play important roles in the development of both emigration, re-migration, and the extent of money remittances in the late nineteenth and early twentieth century. While the extensive population growth and strong land divisions had been instrumental to the large emigration-wave, the liberalization of land division laws stimulated emigrants to return, and thus to increase remittances.

Structural and institutional change in farming and forestry

According to Nils Wohlin, the Swedish agricultural revolution from 1860 to 1910 increased the amount of cultivated land by 47,6 per cent (from 1860 to 1910) and turned the agrarian structure away from hay and pasture and toward arable activities. At the same time, the medium size of homesteads decreased, especially in the most rural areas: The Countryside Surveys of the Emigration Inquiry refers to several detailed examples of how land division and parcelling came to bring a large increase in the number of farm units - and the consequent reduction of the cultivated area per unit. In one parish in Vedbo District (Dalsland), the number of homesteads increased from 285 to 475 between 1865 and 1900, about 60 per cent in only 35 years.⁷⁵

Although silviculture historically has been of significant economic importance for Sweden, forestry was not of major interest for most farmers until the second half of the nineteenth century. As technology and transport infrastructure development around the 1850s made the expansion of sawmill industry possible, and private ownership of forest became more profitable. Following the extensive parcelling and farm land division, using forestry resources as sideline income came to play an increasingly important part of most small farmer's livelihood. The combination of increasingly smaller farm sizes and the growing demand for timber from the sawmill industries induced many small farms to sell forestry land, decreasing future means of livelihood.⁷⁶

To reverse the trend of poorer forest stands, new forest legislation was introduced by the end of the century, demanding harvesting to be carried out in combination with measures to satisfactory regrowth. To expansion-prone farmers and/or migrant returnees this situation offered investment opportunities. Contrary to the development that previously drew young people without enough land to emigrate, the upcoming situation at the turn of the century thus broadened the opportunities for temporary migrating farmers to increase their means of livelihood by acquiring nearby forestland.

The influx of new capital from remittances and return migration came thus to counter the splitting that took place in earlier periods. This was particularly the fact in parts of the country where emigration and return migration reached high figures.

7 Analysis

The role of migration and migrant remittances to economic development is complex. Numerous studies of modern emigration and remittances episodes during the last 50 years has brought a theoretical base and empirical evidence explaining the background as well as the impact of emigration and remittances in both sending and receiving countries. This base is also applicable to the great Swedish emigration to America more than 100 years ago.

⁷⁵ Sundbärg (ed) - *The Emigration Inquiry (Emigrationsutredningen)* The Countryside Surveys, Annex V, Vedbo and Nordmarken p. 36

⁷⁶ Ibid p. 36

7.1 The effect of remittances on migrant sending countries

This study is concentrated on the effects of worker migration and remittances to Sweden, a migrant sending and remittances receiving country. The hypothesis, that for some emigrants, temporary emigration was a plan for funding possible future investments at home, and that remitting funds, at least in part, was motivated by self-interest and the intention to return, does not rule out other reasons for sending money to family member at home. The objective is to investigate the scope and direction of migrant remittances, leading to conclusions about the relationship between remittances and return migration and changes in the agricultural and forest ownership due to remittances and returning migration, including signs of economic convergence during the studied period.

But there are other factors of migration and remittances, explaining the total extent of the large sums sent: Hagen-Zanker have presented an overview of literature and relevant theories of the scope of effects of migrants remittances on the micro-level, as well as the Meso- and Macro levels; household-income/poverty, household labor allocation, access to service, investment decisions (the micro-level); gender relations (the meso-level); labor market, economic growth, inflation, Dutch disease (macro-level).⁷⁷ This study involves some of these effects.

7.2 The Size of Remittances Flow

In modern history, sending money back to the family left behind have been part of the normal migration pattern. The size of the remittances flow depends on economic, cultural and social and other factors and differs in time and between countries. The objective and motives of sending funds home, though, seems to have been the same.

Modern times

In 2015, worldwide remittance flows are estimated to have exceeded \$601 billion. Of that amount, developing countries are estimated to receive about \$441 billion, nearly three times the amount of official development assistance. The true size of remittances, including unrecorded flows through formal and informal channels, is believed to be significantly larger.⁷⁸

High-income countries are the main source of remittances, and the United States has by far been the largest source of migrant remittances, at least since the start of the mass-immigration period of the eighteenth century. Large countries with high emigration numbers are top recipient of recorded remittances. Measured by the share of GDP, however, smaller countries with high emigration rates are the largest recipients. The top 10 remittance recipients in 2014 (percentage of GDP): Tajikistan (41.7%), the Kyrgyz Republic (30.3%), Nepal (29.2%), Tonga (27.9%), Moldova (26.2%), Liberia (24.6%), Bermuda (23.1%), Haiti (22.7%), Comoros (20.2%) and Gambia (20.0%). (*Figure 1*).

⁷⁷ Hagen-Zanker - Effects of remittances and migration on migrant sending countries, communities and households 2014, p.19

⁷⁸ World Bank – Migration and Remittances Factbook 2006

Sweden during the mass emigration period

Between 1860 and 1930 the total Swedish emigration to the United States amounted to 1 280 460 people, according to Swedish Census figures. During the first 15 years, there are no figures on return migration. During the studied period of 1881-1910 approximately 880 000 people emigrated. About 24 percent, app. 211 000 people returned.

The first estimates of remittance figures are hard to assess. The first available estimates start in 1880. Using Lindahl et al figures, total calculated remittances amounted to approximately 445 mill SEK (\$117 mill), increasing from slightly more than 2 mill SEK (\$0,5) in 1880 to 38 mill SEK (\$38 mill) in 1910.

Compared to modern time figures, the size of migrant remittances during the mass emigration period seems small. Despite the dramatic growth during the studied period the total amount never reached higher levels than slightly more than 1 percent of GDP. Using the Lindahl et al figures, Calculated Remittances by its share of GDP increased from 0,14% in 1881 to 1,16% in 2010. Esteves et al though found Calculated Remittances in relation to GDP to range between 0,53% and 1,66%, reaching the highest figure in 1890.

The magnitude of remittances relative to other measures

Although remittances measured as share of GDP was limited in relation to modern times, evidence still show the importance of the financial influx to the Swedish economy at the time, not least from the financial stability point of view: Regarding the findings on remittances and international capital flow of *Buch, Kuckulenz and Le Manchec*, remittances are less volatile and more stable than all other external flows. They found that remittances have been stable during episodes of financial volatility even when capital flows fell sharply. Therefore, remittances help counter-balance fluctuations caused by weakening of capital flows to developing countries.⁷⁹ Moreover, both as a means of poverty reduction of remaining family members and as a means of physical and human capital investment the extent of the resource contribution through remittances was significant.

Short Term Capital Movements (STCM)

In the latter part of the nineteenth century, Sweden developed a rapidly growing current account deficit due to a very high international borrowing. Around 1910, Sweden was probably the world's most indebted nation per capita.⁸⁰ Despite the conceptual differences between remittances and international capital flows, undoubtedly the flow of remittances was a mean of enlarging the available funds for investment during this period of shortage of other means of financing, such as bank loans or mortgages.

⁷⁹ Buch, Kuckulenz & Le Manchec p. 18

⁸⁰ Schön – *En modern svensk ekonomisk historia. Tillväxt och omvandling under två sekel*, SNS 2000

During the studied period, the total sum of calculated migrant's remittances amounted to almost eight times the net of the Short-Term Capital Movement⁸¹, while equalizing the high volatility that characterizes international capital movements (*Figure 2*).

Household income / poverty and labor allocation

It is obvious that migration have positive effects on migrant-sending households. Overall, the literature tells us that remittances reduce poverty. A comparison between the total size of remittances to Sweden during studied period and the annual municipal expenditure reveal that the calculated sum of the remittances already 1880 constituted 12 percent of the total municipal expenditure that year, exceeding the municipal expenditure for public health, poor relief and child welfare with almost 60 percent. The final year of the study, 1910, total remittances amounted to 74 percent of total municipal expenditure and 649 percent, 6,5 times the municipal expenditure for public health, poor relief and child (*Figure 3*).

Migration also affects household labor allocation, as migration implies the absence of one or more household members. Migrants leaving the household, means there is a "lost labor effect", i.e. there are fewer people to work locally, to tend the land or to look after children. This potential result of emigration is mentioned in the *Countryside Surveys*, affecting both the livelihood of elderly parents, the maintenance of the farms and growing depth, sometimes leading to increasing number of bankruptcies and/or foreclosures, when family member migration was not followed by subsequent remittances or return migration.⁸²

Investment decisions

The question on how remittances are spent is controversial in migration/remittances literature. The question whether migrant households are more likely to spend their income, including remittances, on unproductive consumption or in productive investment is the central issue in the study of the economic effects to receiving countries. Some studies find that most is spent on consumption, while others find that remittances as well are spent in productive investments. Overall, studies find that migrant households are likely to invest part of their income from remittances on land and businesses.⁸³

It is important to realize that investment decisions not just depend on potential money available, but also the investment opportunities available. As mentioned earlier, increasing numbers of farm bankruptcies and foreclosures following "abandoned" and indebted farmers following parcelling, farm land division and high emigration, broadening the opportunities for other farmers to increase their means of livelihood by acquiring nearby farms or farmland. The influx of capital from remittances and return

⁸¹ Lindahl et al p.612

⁸² Sundbärg *The Emigration Inquiry, Annex V*

⁸³ Hagen-Zanker - *Effects of remittances and migration on migrant sending countries, communities and households* 2014, p.19

migration thus came to coincide with a contemporary increase in investment opportunities available.⁸⁴

Remittances over the business cycle

Supriyo De et al studied the behavior of remittances over the business cycle and their potential to stabilize business cycle volatility during the period 1990-2012.⁸⁵ They identify four findings, of which three can be assessed in this study 1) that remittances are less volatile than other foreign currency, but 2) that flows do not appear to systemically co-move with business cycle fluctuations, and 3) that remittances are relatively stable even during episodes of sharp business cycle volatility. These findings correspond to the explanatory model for the Swedish emigration process presented in the *Emigration Inquiry*, that the American economic boom seemed attractive to the Swedish labor force resulting in increased emigration, while Swedish recession had repelling effects, also resulting in increased emigration, but that remittances remained relatively stable during business cycles.⁸⁶

During the 1880s, more than 320 000 people emigrated to America. The peak years were 1880 – 1882 and 1887 – 1888, as the booming economy in the US brought a strong demand for labor. After a slight emigration decline in the 1890s, another economic boom brought a new emigration peak after the turn of the century. Interestingly, both remittances and return migration figures increased during that booming period.

Visits at home

The Countryside Survey of the 1907 Emigration Inquiry and other sources report growing numbers of visiting emigrants during the height of the emigration period. As indicated in the Dillingham report previously, some made regular visits during long periods after the emigration. From Census figures it is obvious that some of the visitors ended up as returnees, although most evidence support the perception that visits home was a part of the final decision process on whether to stay or to return. The August Peterson story in the Introduction chapter (p. 5) is an example of this: August “kept the door open” for 37 years after his emigration before finally deciding not to return. Other emigrants took opposite decisions after visits at home, or subsequently abandoned any plans to return without ever going back as their integration into the American society progressed.

The Dillingham report mentioned previously, give an estimate of the number of visitors abroad (at home). Although limited, this estimate give a proportion of immigrants who had visited their country of origin which can be used as an estimate: If calculated by the total number of Swedish immigrants in the United States that year (1907), the annual number of visits home would amount to high figures. From using cumulative numbers of ten years’ Swedish emigration no less than 200 000 people would

⁸⁴ Countryside Surveys of the Emigration Inquiry (Fryksdals härad i Värmland p. 33)

⁸⁵ Sypriyo, Islamaj, Kose & Yousefi – *Remittances over the Business Cycle: Theory and Evidence*. KNOMAD Working Paper 11 2016 p. 10-11

⁸⁶ Sundbärg (ed) - *The Emigration Inquiry (Emigrationsutredningen)*, Annex XVIII, Svenska vetenskapsmän

be expected to have returned for at least one visit, and about 60 000 for more than one visit. Although not statistically significant, this assessment confirms the information about frequent visits mentioned by the Emigration Inquiry and in other contexts, and strengthens the indications that many emigrants maintained close ties to their Swedish family for long periods of time.

Convergence, decreasing emigration and increasing return migration

In the earlier period of Taylor & Williamson study, 1873-1893, convergence of the Swedish on the American real wage would have reduced the emigration rate by as much as 5 per thousand but the rising migrant stock, the increasing size of lagged birth cohorts, and the fall in the marriage rate more than offset this. In the later period, 1893-1913, the weaker negative effect of the relative wage was assisted by the cohort effect and the marriage rate in driving down the emigration rate and this was only slightly offset by the slowly rising migrant stock.⁸⁷

Following Taylor and Williamsons findings, the growing supply of work opportunities in the United States and the excessive wage differential to Sweden can explain the unprecedented level of emigration during the height of the emigration period, while declining wage differences, economic convergence and contrafactual demographic factors could explain the tendency to decreasing emigration and increasing return migration during the period studied.

7.3 The relationship between Remittances and Return migration

The analytical part of this study concerns the relationships between remittances and return migration to Sweden during the era of mass emigration using modern theory and empirical evidence. Data analysis are based on within-case analysis of public migration and return migration records, established GDP/NDP figures, two different estimates of remittances during the period in question as well as other quantitative data in the area of the study.

The main objective is to examine the relationship between Return Migration and Remittances; The research question is whether the size of the (legged) Return Migration is affecting size of Migrant Remittances during the studied period?

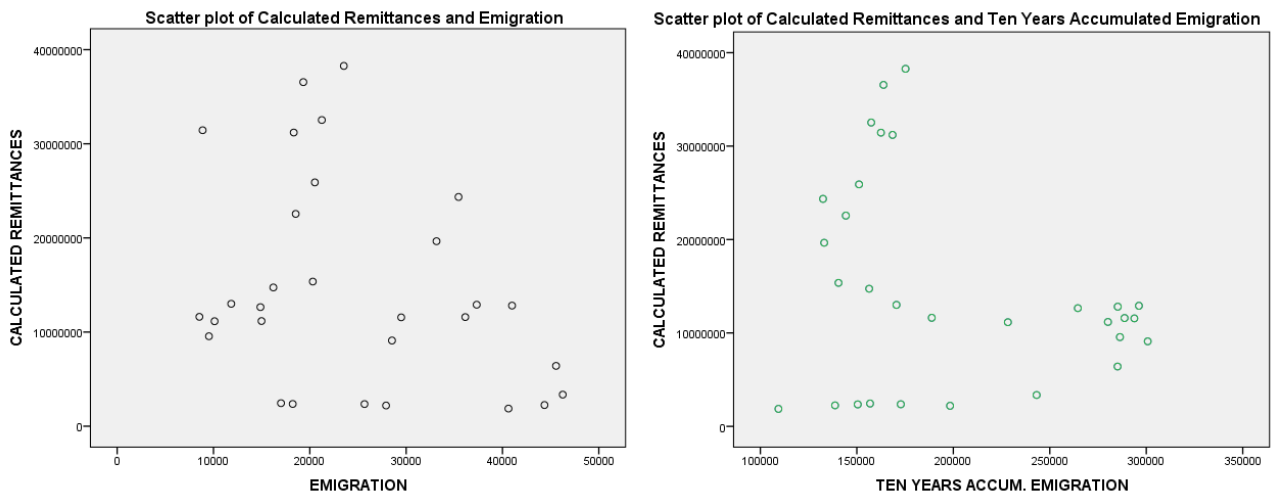
7.4 Quantitative analysis

The quantitative analysis of the variables (Emigration, Ten Years Accumulated Emigration, Return migration and Calculated Remittances) is done in four steps: First, correlation analysis for all variables are conducted. The variable with the highest correlation to Calculated Remittances is chosen for autoregression analysis. If/when non-stability is detected the variables are transformed to logarithmic scale. Finally, the correlation for the chosen variables will be analyzed.

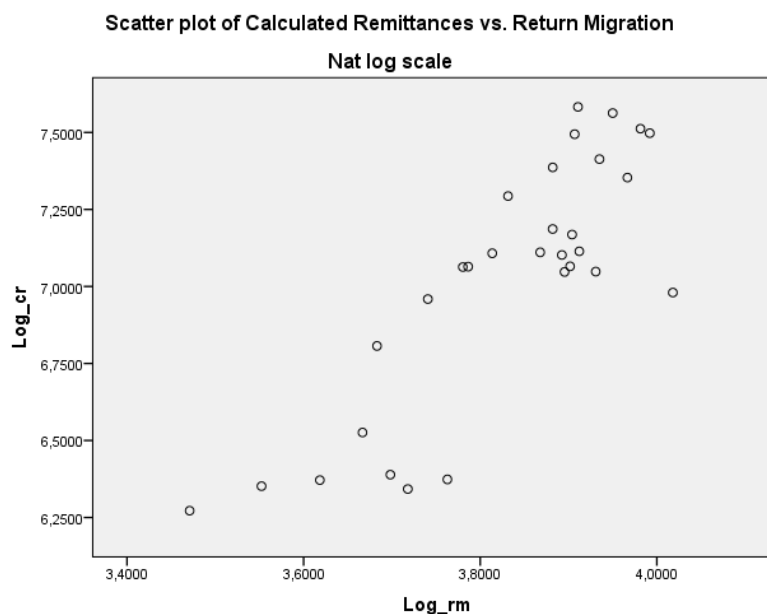
7.4.1 Scatterplot

⁸⁷ Taylor A M & Williamson J G .

To find out whether correlation analysis is appropriate, I first test if the scatter plot of the different variables form a straight line or not. If I get a scatter that is approximately straight, Pearson's correlation would be appropriate. If the scatter marks curvature, it is likely that a rank correlation would be a better descriptor. Either way, calculating a correlation is at best a step towards modelling.



The first test is finding out the linearity between Calculated Remittances and three different variables; Emigration, Ten years accumulated Emigration and Return Migration: As shown in the two plots above, the variables Emigration and Ten Years Accumulated emigration fail to show linear patterns plotted against Calculated Remittances. The third variable, Return migration, show a more linear figuration to Calculated Remittances, and is thus more appropriate for Pearson's correlation analysis; After transforming to logarithmic scale the linearity improves further.



Correlation

Correlation indicates the extent to which two or more variables fluctuate together. A positive correlation shows the extent to which the variables increase or decrease in parallel, whereas a negative correlation indicates the extent to which one variable increases as the other decreases.

The correlation coefficient measures the degree to which changes to the value of one variable predict change to the value of another.

Correlation does not imply causation as, for example, unknown factors can influence both variables similarly. To find causation, correlation analysis must be followed up with other techniques.

The correlation analysis is based on the following formula:

$$r_{xy} = \frac{\sum_{i=1}^n (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum_{i=1}^n (x_i - \bar{x})^2 \sum_{i=1}^n (y_i - \bar{y})^2}}$$

Where:

Σ (Sigma) is the symbol for "sum up"

correlation formula is $(x_i - \bar{x})$ each x-value minus the mean of x

correlation formula is $(y_i - \bar{y})$ each y-value minus the mean of y

Correlation between Annual Emigration, Ten years Accumulated Emigration, Return Migration and Remittances

Analyzing the correlation between Calculated Remittances, Return Emigration, 1 year lagged Return Emigration, 2 years lagged Return Emigration and 3 years lagged Return Emigration (logarithmic scales). All four Return Emigration variables show high correlation to the Calculated Remittances. The highest score is the non-lagged variable, but the differences in scores between the four Return Migration variables are small.

Correlations

		Log_cr	Log_rm	LAGS (log_rm_1)	LAGS (log_rm_2)	LAGS (log_rm_3)
Log_cr	Pearson Correlation	1	,839**	,815**	,823**	,819**
	Sig. (2-tailed)		,000	,000	,000	,000
	N	30	30	29	28	27
Log_rm	Pearson Correlation	,839**	1	,915**	,812**	,726**
	Sig. (2-tailed)	,000		,000	,000	,000
	N	30	30	29	28	27
LAGS(log_rm_1)	Pearson Correlation	,815**	,915**	1	,914**	,814**
	Sig. (2-tailed)	,000	,000		,000	,000
	N	29	29	29	28	27
LAGS(log_rm_2)	Pearson Correlation	,823**	,812**	,914**	1	,919**
	Sig. (2-tailed)	,000	,000	,000		,000
	N	28	28	28	28	27
LAGS(log_rm_3)	Pearson Correlation	,819**	,726**	,814**	,919**	1
	Sig. (2-tailed)	,000	,000	,000	,000	
	N	27	27	27	27	28

** Correlation is significant at the 0.01 level (2-tailed).

Source: Own calculations

When Pearson's r is close to 0, there is a weak relationship between the two variables. This means that changes in one variable are not correlated with changes in the second variable.

When Pearson's r is positive, it means that as one variable increases in value, the other variable also increase in value. Similarly, as one variable decreases in value, the other variable also decreases in value. In this case, all Pearson's r are positive, and we can thus conclude that when Return Migration increase, Calculated Remittances also increase.

When Pearson's r is close to 1 there is a strong relationship between the two variables, meaning that changes in one variable are strongly correlated with changes in the other variable. In this example, for Pearson's r for correlation between all Return migration variables and Remittances are between 0,815 and 0,839 which all are relatively close to 1. For this reason, I can conclude that there is a relatively strong relationship between Calculated Remittances and Return migration. We cannot make any other conclusions about these relationships, based on these numbers.

Sig (2-Tailed) value tells if there is a statistically significant correlation between the two variables. If the Sig (2-Tailed) value is greater than 0,05 there is no statistically significant correlation between the variables, meaning that increases or decreases in one variable do not significantly relate to increases or decreases in your second variable. If the Sig (2-Tailed) value is less than or equal to 0,05, there is a statistically significant correlation between the two variables. This means that change in one variable do significantly relate to corresponding change in your second variable.

For the correlation between all four Return migration variables and Calculated Remittances, the Sig. (2-tailed) value is 0.000, meaning that there is a statistically significant correlation between these two variables (which as well goes for the other correlation measures in the table).

All these four correlation figures are positive, meaning that as the value of any of them increase, the value of the other variables also increase. Knowing that these

variables are strongly associated with Remittances, we can predict that they all would be statistically significant predictor variables in a regression model.

The number of cases used for each correlation is determined on a "pairwise" basis, for example there are 29 valid pairs of data for *LAGS(log_rm_3)* and *Remittances* meaning that the correlation of 0.819 is based on 27 observations.

Both qualitative and quantitative analysis indicate the relationship between remittances and return migration during the studied period. This result is supported by the fact that the size of the remittances show a negative correlation to emigration size (actual or lagged) and the accumulated number of emigrants remaining in America. Indications of home visits prior to final return and the fact that the remittances flow only to a small degree was affected by business cycles confirms the presence of a predetermined intention of return migration and the associated remittances.

8 Conclusions

I find in this study that both modern theory and historic evidence support the hypothesis that *for some emigrants, temporary migration was a plan for funding possible future investments at home, and that remitting funds was motivated by self-interest and the intention to return*. Moreover, the quantitative analysis of the correlation between Remittances and Return Migration confirms the conclusion of the research question: *The extent of emigrants returning home did effect the flow of remittances during the studied period*.

The general theory of wage differentials as a dominant motive for migration is confirmed by the wage comparisons during the period. Public records of comparable wage levels in Sweden and America reveals that American wages constitute more than 8,5 times the equivalent Swedish wage level at the start of the studied period, only decreasing to 6,2 times in 1910.

The issue of work opportunities for unskilled labor in the expanding American economy is given a genuine explanation by *Wyman*; The great transformation of the American industrialization, particularly the technical improvements and the subdivision of the work process, meant that unskilled workers literally could be taught their work duties from one day to the other, without experience or long apprenticeships.

Several important modern studies in emigration, return migration and remittances support the conclusions of the study; By expounding the determinants of remittances, *Lucas & Stark* introduce self-interest as an agent for remitting funds to the country of origin, giving a theoretical base for the hypothesis of my study. *Galor & Stark* as well as *Merkle & Zimmerman* highlight the relation between savings and remittances for emigrants facing a positive probability of return migration.

While the basic classic assumption of emigration as driven by wage differential is supported by the factual wage gap between Sweden and America during the studied period, several modern studies specifically confirm the relation between remittances and return migration, supporting the general theory of the thesis; Both *Carling, Lucas & Stark and Hoddinott* strongly focus this question, confirming the theory of self-interest

as a motive of remitting. This is also supported by *Vernersson-Wiberg* in so far as she underlines the importance of experience or tradition of temporal or seasonal work migration for the emergence of the emigration-return migration cycle that came to characterize the emigration episode. Her findings support the general theory of the thesis.

The idea that emittances often were used for productive investments, as indicated in several reports from the Emigration Inquiry, is supported by *Hagen-Anker*. This idea is also confirmed by *Wyman, Rapoport & Docquier* and *Harman Akenson*, the latter suggesting that the American emigrant's remittances also came to influence agricultural progress in Sweden during the studied period.

The correlation analyzes between Calculated Remittances and Return Emigration, and the 1-3 years legged Return migration variables (logarithmic scales) all show strong correlations to Calculated Remittances. Interestingly, the highest score is the non-legged variable. A possible interpretation of this is, that migrants planning to return regularly sent money home, and not only just before returning.

The conclusion from the evidence I have found in this study is that part of the Swedish migrants during the time studied considered themselves as temporary labor migrants, and that their intention to return is reflected in the remittances flow.

This conclusion is consistent with the view of two of the investigators in the Emigration Inquiry (Annex VII):

"Most emigrants with whom I came in contact, were sons of yeomen, still working on the family farm, or recently left for work as farm hands, artisans or industrial workers. The reasons for their exodus was that "there was no room for them on the farm". Remarkably, the farms in most cases were remunerative and out of debt, but too small to provide work and livelihood for all siblings.

The plans for these emigrants were to return to Sweden after a few years in America with large enough funds to be able to buy their own farm."

Gösta Bagge (The Emigration Inquiry, Annex VII p. 8-9)

"There is a specific category of farmer's sons, in whom the cause of emigration cannot be solely characterized as a lack of livelihood space. The fathers farm gives good livelihood, and pays off comparatively good. The children's inheritance prospects are not small, but one or more of the sons are not satisfied with this lot but want to buy reasonably large farms without having to incur too much debt. And they believe that a period of hard work and thrift in North America could provide them with the conditions for realization these plans. It was mainly among yeoman sons I found them, who only considered themselves as temporary migrants."

E.H. Törnberg (The Emigration Inquiry, Annex VII p. 14)

9 Closing discussion

The issues of returning emigrants and the existence of significant remittances of financial resources during the Swedish emigration episode are well-known, also mentioned in contemporary literature - not least in the large Emigration Inquiry. It is surprising that in-depth research on the scope and significance of this financial flow largely is lacking, although there is relatively extensive source material within the area.

The study show large cohesion between the conclusions of modern theory and empirical findings on the issue of migration, return migration and remittance and the conditions that characterized the Swedish emigration during the period under review, both conditions of importance for the general economic development as well as circumstances of importance for the personal welfare of returning migrants and their families.

The basic material used in the study is extensive, and could be elaborated by using more advanced statistical methods than I have had the opportunity to use. For example, the fact that correlation reflect the strength and direction of the relationship between variables, and not imply causation, suggest follow ups with other statistical techniques.

In addition to the material used in this study, further studies of censuses and records of the emigration and return migration could possible reveal more about the situation of returnees after their return. For example, deeper analyzes of records of land acquisitions in connection with returning migrants, records of inheritance and ownership transfers of farms in migrant families etc. could provide further knowledge of the financial relevance of the temporary migration incident to individual returnees, regional development as well as the aggregated economic development during and following the Swedish emigration episode.

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11 Figures and Tables

Figure 1

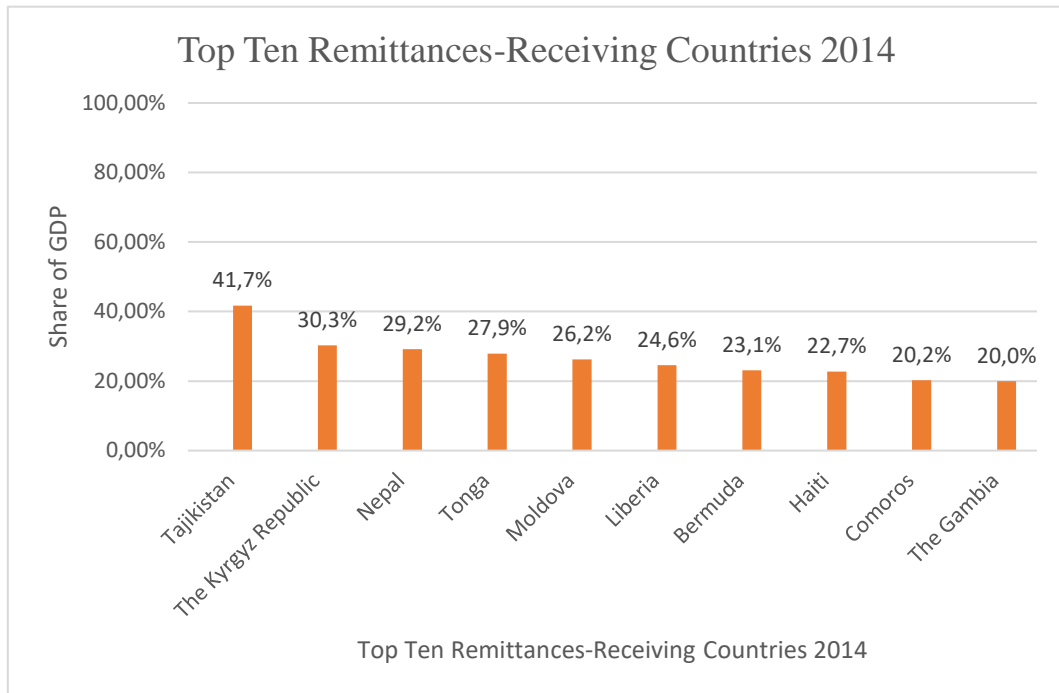


Figure 1: Measured by the share of GDP smaller countries with high emigration are the largest recipients of remittances.

Source: World Bank 2016

Figure 2

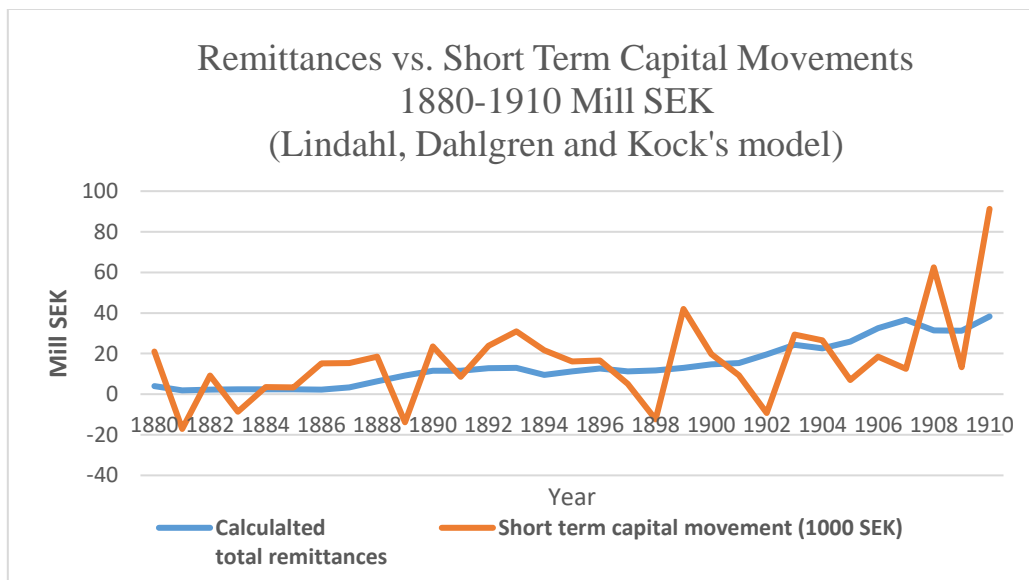
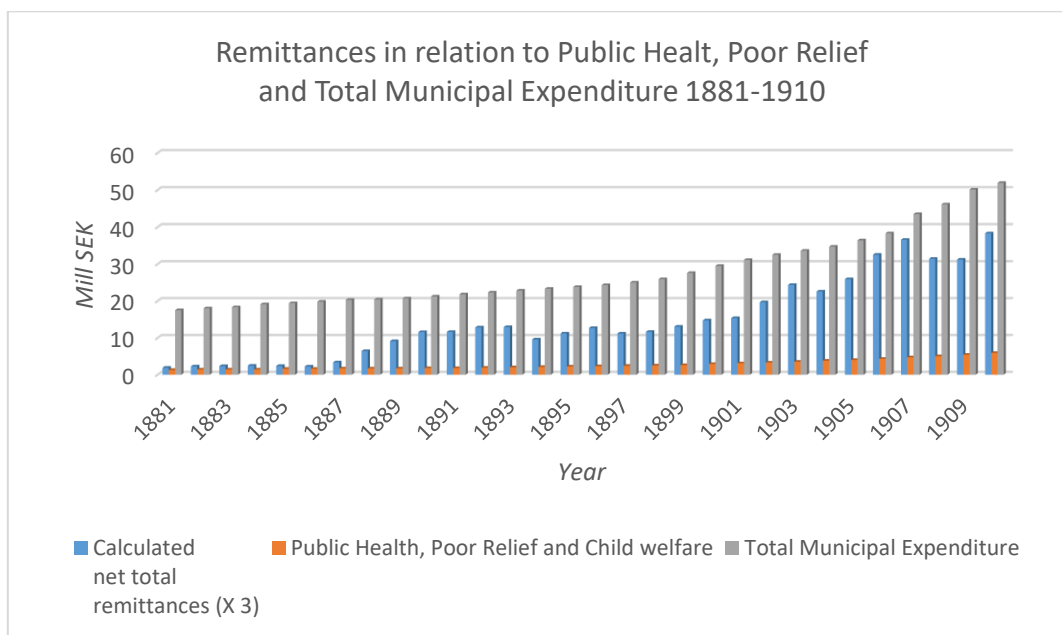


Figure 2: The total sum of remittances amount to almost eight times the net of the annual Short Term Capital Movement, equalizing the high volatility that characterizes international capital movements.

Source: Lindahl et al

Figure 3



Source: Lindahl et al

Figure 3: Remittances 1880 constituted more than three times total municipal expenditure for Public Health, Poor Relief and Child Welfare 12 percent of the total Municipal Expenditure. In 1910, total remittances amounted to 74 percent of total Municipal Expenditure and 6,5 times Municipal Expenditure for Public Health, Poor Relief and Child Welfare

Table 1

Visits at home (abroad) vs. length of stay in America for Male Employees in the Iron Industry (Percent)

Length of stay in years	Number of respondents	No visit	1 visit	2 visits	3 or more visits	Total
<i>Under 5 years</i>	124	93,5%	5,6%	0,0%	0,8%	6,5%
<i>5-9 years</i>	203	76,4%	22,7%	1,0%	0,0%	23,6%
<i>10 and over</i>	678	77,1%	19,0%	2,8%	1,0%	22,9%
<i>Total</i>	1005	79,0%	18,1%	2,1%	0,8%	21,0%

Source: The Dillingham Report

Table 1: Of 1 005 interviewed Swedish employees in iron and steel industry (US Midwest District 1907), 21 percent reported that they had been visiting at home (abroad) since immigration to US. The majority, about 18,1 percent, had only made one visit, but there were also responders that had made three or more return trips after emigration.

Table 2

Emigration series

	<i>Sw Census</i>	<i>Return migration</i>	<i>net</i>	<i>Ljungmark</i>	<i>Return Migration</i>	<i>net</i>
1881-1890	376 401	47 681	328 720	324 285	18 776	305 509
1890-1900	246 772	78 783	167 989	200 524	47 138	153 386
1901-1910	257 671	84 424	173 247	219 613	44 029	175 584
Total	880 844	210 888	669 956	744 422	109 943	634 479

Source: Sw Census and Ljungmark

Table 2: Swedish Census report approximately 140 000 more emigrants for the studied period than Ljungmark, a difference of almost 18 percent. Strikingly, the return migration figures show an reverse difference of more than 90 percent (210 888 for Sw Census and merely 109 943 for Ljungmark). The net difference between the two series is thus limited to only 5,5 percent.

Table 3

Length of stay in America

Percent								
Length of stay in years	1880- 1884	1885- 1889	1890- 1894	1895- 1899	1900- 1904	1905- 1910	1910- 1913	1880- 1910
1 - 4	84%	70%	90%	60%	63%	74%	69%	71%
5 - 9	8%	28%	7%	34%	26%	21%	24%	23%
10 ≤	8%	2%	4%	6%	11%	5%	7%	6%
Total	100%	100%	100%	100%	100%	100%	100%	100%

Source: Runblom et al (Sweden Statistics)

Table 3: Lengths of Stay in America for Male Pricipal Persons Who Emigrated from Västernorrland to North America and Remigrated from 1881-1910: Studying return migration to Västernorrland county, Runblom et al found that most return migrants only spent a few years overseas. During the whole period from 1880 to 1910 more than 70 percent spent less than five years in America. The volatility of the figures was large with longer stays during the boom periods of the American economy and shorter stays during recession periods.