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THE BERNESE EMIGRATION TO THE UNITED STATES, 1870–1930: A QUANTITATIVE ANALYSIS OF ECONOMIC FACTORS

SUMMARY

The United States was the most important destination for emigrants from the Swiss canton of Bern during the period of mass emigration in the late 19th and the early 20th century. The present article looks at the economic factors leading to this mass emigration. Using bivariate correlations, this study demonstrates that quantitative analysis is a powerful tool in historical emigration research. The data underlines the two following theses. First, the better the economy in Bern, the lower the rate of emigration to the United States. Secondly, the better the economy in the United States, the higher the rate of emigration from Bern. Hence, both pull and push factors played an important role determining emigration from Bern to the United States. The most closely related to the rate of emigration were the independent variables emigration to the USA in year $t-1$, the investments in structural engineering in Bern, railroad construction in the USA and the number of Bernese on welfare. The results clearly show that Bernese emigration was primarily a socio-economic mass movement.

KEY WORDS: emigration, economy, Bern, Switzerland, United States, quantitative analysis

I. Introduction

Particularly in the past two decades, the historical research on Swiss emigration has received new scrutiny and substantial rethinking (Anderegg et al., 1987; Goehrke, 1992). Major research projects on the streams of migration from Switzerland to Latin America and to Russia have deepened the historians' understanding of the complexities of emigration processes (Bühler et al., 1985; Bühler, 1991; Ziegler, 1985). A new and often interdisciplinary literature has dealt with special aspects of emigration, such as the assimilation of emigrants and the migration of women (Tschudin, 1990; Anderegg, 1992; Ziegler, 1994). Methodologically innovative approaches were also applied to some of those newer studies. The publications of emigrant communities, Swiss local newspapers or sources from foreign archives were integrated into some of the research. Oral history very much contributed to a more elaborate picture of Swiss emigration, too. Finally, there have also been some studies on Swiss emigration based on quantitative analysis (Ritzmann,

1992; Ritzmann-Blickenstorfer, 1997). However, the quantitative approach has never been thoroughly tested on the regional level. This is especially deplorable in the Swiss case because we know from comparative qualitative research that regional emigration patterns substantially differed from one another (cf. Schelbert, 1976; Ritzmann-Blickenstorfer, 1997).

Grappling with the problem of trying to explain the economic factors behind the mass emigration from the Swiss canton of Bern to the United States in the 19th and 20th century, a quantitative analysis seems to be the only satisfactory approach. Qualitative studies, e.g. analyses of letters from emigrants, may give us some overall idea of possible factors leading to emigration, but they can hardly deliver the “hard” answers on the following questions. Which of the many potential economic factors was the most important one? What set of factors constitutes the best framework for explaining emigration?

First, it is the goal of this article to demonstrate that quantitative analysis is a powerful tool to explain historical emigration processes. This paper clearly fills a research gap because no study exists so far that deals with Bernese emigration (or the emigration from any other Swiss canton) to the United States in a comprehensive quantitative fashion. Secondly, this study is not just a substantial contribution to the history of Bernese emigration, but to the theoretical literature on emigration, too. There is no consensus on the relative importance of different variables driving emigration. John Michael Quigley (1972: 124) argues in his well-known paper that “it is unfair to conclude that the pattern of emigration [from Sweden] during the period 1867–1908 was dominated by economic conditions in the United States”. It is my intention to demonstrate that – at least for the Bernese case – nothing is “unfair” about such a conclusion. I would maintain that the economic conditions in the receiving country, the United States, were an extremely important factor explaining emigration.

I will proceed by giving a short description of the Bernese emigration to the United States. This account is based on the relevant literature and partially on primary sources. I will then talk about the relevant theories explaining emigration and discuss appropriate hypotheses. In the analysis part of this paper, I will present the results of bivariate correlations. In the last part of this article, I will discuss the evidence and give a short summary of the most important findings.

II. Bernese Emigration to the United States: An Overview

The first major wave of emigration from the state of Bern to the North American colonies took place in 1710 with the foundation of New Berne in today’s North Carolina by Christoph von Graffenried (Keller, 1953). At the beginning, the colonists were enthusiastic; one of them wrote on April 7th, 1711, to his friends back in Switzerland that he was optimistic of owning more than 100 horses, cows and pigs within a single year. He made clear that he would never want to go back

to Switzerland (Schelbert, Rappolt, 1977: 40–42). But conflicts with the natives soon brought havoc over the small colony. At least 70 settlers were killed in an attack by the natives and most of the settlers' houses were destroyed (Todd, 1973: 136). Graffenried returned to Europe in an attempt to get more support from the king of England, but George I. was not particularly interested in his North American colonies. Graffenried was devastated and returned to Switzerland. New Berne survived as a small Bernese colony, its importance as a destination for emigrants from Bern, however, was rather modest.

During the first ten years of the 18th century, the Bernese government was quite interested in promoting emigration to North America. The main goal of its emigration policy was the deportation of “undesired elements”, especially Mennonites and impoverished individuals (Faust, 1916: 22). But very soon the authorities altered their liberal policy and tried to stop the “Reiss nach Carolinam”, the emigration to the Carolinas (Lerch, 1909: 6). Despite the new restrictive policy emigration continued. About 300 persons left the state of Bern for North America on March 2, 1735, alone (Faust, 1916: 28). In 1742, the government completely banned the emigration to North America, but was not able to entirely stop the flow of emigrants (Faust, 1916: 29).

How many Bernese emigrated to North America in the 18th century is a controversially discussed question. Christian Pfister (1995a: 131) argues that the emigration was “numerically insignificant”. Albert Faust (1916: 43) maintains that between 1734 and 1744 alone approximately 3000 Bernese emigrated to North America. For the whole 18th century, Faust gives the total figure of 6000 emigrants. One can, therefore, safely say that the Bernese emigration to American destinations was of minor importance when considered in the context of overall Bernese emigration in the 18th century.

The relatively modest number of Bernese emigrating to North America can be explained by a number of reasons. First, the voyage to North America often lasted more than half a year and was very dangerous. Before 1850 death rates of between 10 and 25 percent were relatively common (Nugent, 1992: 31). On the other hand, the authorities – not just in Bern, but in almost every other European country – were rather sceptical towards emigration throughout the 18th century. This scepticism was based on the belief of the political leaders that the population was in fact declining and emigration would, therefore, weaken the manpower base of the state even more. This fear was – as Lucienne Hubler (1997) has recently demonstrated for the state of Bern – not founded on real trends in the demographic development, but it remained a standard argument of the authorities against emigration (cf. Körner, 1993: 599). In 1786, for example, a member of the Bernese aristocracy argued strongly for a ban on Swiss military service abroad – Swiss mercenaries were, since the late Middle Ages, very much in demand in armies all over Europe – exactly with the argument that “le pays perdra moins ses meilleurs hommes et la fleur de sa jeunesse”, that the country should and would not lose its best men (Tavel, 1789; cf. Pfister, 1984).

The United States became the most important destination for Swiss and for Bernese emigrants in the 19th and early 20th century (Schelbert, 1976: 230). Between 1821 and 1920 more than 250000 Swiss citizens emigrated to the United States (Arlettaz, 1979: 27). The Bernese emigration to the USA reached a first peak with the hunger years of 1816/17. In the summer of 1816, it rained on more than 50 days, and the crop was almost completely destroyed (Pfister, 1995a). In this state of crisis the communities tried to get rid of the poorest individuals because the welfare benefits had skyrocketed. The communal political leaders were willing to pay the fees for transportation to the United States, a one-time investment which was still much more inexpensive than feeding the poor through the hunger years (cf. Geissbühler, 1998).

A next wave of emigration from Bern to the USA occurred in the 1850s. In 1854, more than 3000 Bernese left their home country for North America. The declining infant mortality in the 1820s had led to an extreme strain on the labor market in the 1840s and 1850s with more and more young people entering an economy that just could not create the necessary number of jobs. The communities still pursued a policy of promoting emigration among the poorest segments of society, too (cf. Matter, 1994).

The third and biggest emigration wave took place in the 1880s, a period marked by a deep recession. Not only the Swiss farmers were hard hit, but the booming railroad companies and the cotton and silk industries as well. Some Bernese communities lost about ten per mil of their population in each year between 1880 and 1888. In 1883, the number of Bernese emigrants to the USA was well over 4000, equaling 9.3 per mil of the overall population (Pfister, 1995a: 138).

The stream of emigration receded with the growing economy of the 1890s. The depression after World War I and the “Great Depression” of the 1930s caused formerly unknown levels of unemployment in Switzerland, too. However, emigration to the United States was not a very advantageous alternative to the economic hardship in Europe because the American economic crisis was even more profound and the unemployment rates higher (cf. Hauser, 1961).

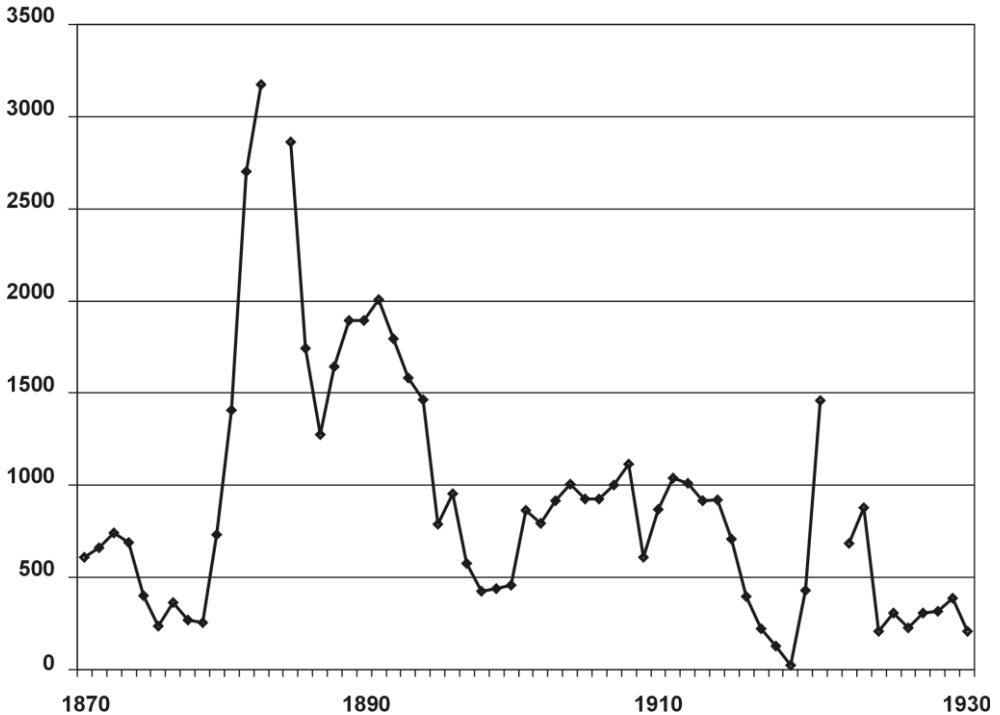
III. Economic Factors: Hypotheses and Operationalization

The dependent variable for the statistical analysis was given: the Bernese emigration to the United States by years. The numbers were adopted from the Swiss statistical yearbooks and from the 1917 cantonal statistical communication (cf. *Kantonales statistisches Bureau*, 1917). Unfortunately, no data was available for 1883 and 1921. The following graph illustrates the development of emigration from Bern to the USA.

More complex was, of course, the choice of the independent variables. First of all, the statistical material available is not abundant. Switzerland was one of the latest countries in Western Europe to start detailed statistical surveys (Pfister,

1995b). Secondly, some factors promoting or impeding emigration are practically not measurable. The promotion of emigration by single communities is such an example. We have no data whatsoever on the sums the communities spent for emigration, and it is in fact almost impossible to reconstruct the aggregate expenditure of all Bernese communities on emigration for each year. However, there is still a number of potentially relevant variables. These are primarily, but not solely, economic indicators (cf. Bade, 1995). As Ritzmann-Blickenstorfer (1997) has shown, economic indicators predict Swiss overseas emigration outstandingly well. In fact, I would argue that the likelihood of emigration is very closely related to projected differences in economic well-being (Quigley, 1972: 114). Thirdly, it is worth noting that there is no overall encompassing theory of emigration (and immigration) (cf. Portes, 1997). By concentrating on one single theoretical approach, a scholar may be tempted to construct a single pattern in which variables may be arranged. Those variables not fitting the matrix are ignored or not thoroughly evaluated. Therefore, it makes sense to develop hypotheses from several theories.

Graph: Bernese Emigration to the USA (1870-1930)



Pull Factors

Tradition of emigration (BERNEMIG). In order to be considered as a possible destination by potential emigrants, a region or country must be known and within reach. Emigration from Bern to North America in the 16th or 17th century, for example, was very unlikely. In this context, the tradition of emigration is crucial. Pioneer emigrants tended to write letters to their relatives back home and often tried to get them to emigrate, too (Schelbert, 1973: 463; Bade, 1995: 511). The (good) news from abroad could become an important pull factor and lead to a phenomenon called chain migration (cf. Blocher, 1976; Anderegg et al., 1987: 307; Nugent, 1992: 34f.; Baines, 1994: 527). Ritzmann-Blickenstorfer (1997: 61) writes that the variable “emigration in the year $t-1$ ” in fact measures the influence of “trendsetters” on the migration patterns of the masses. Hatton (1995a: 559) talks about a “friends and relatives effect” that lowered both the costs of migration “through remittances of cash or tickets from relatives abroad” and the “search costs on arrival in the country of destination” (Hatton, 1995b: 408f.).

Hypothesis: *The higher the emigration from Bern to the USA in year t , the higher the Bernese emigration to the USA in year $t+1$* (cf. Ritzmann, 1992; Ritzmann-Blickenstorfer, 1997).

Railroad construction in the USA (RAILROAD). Railroad construction was an important pull factor for emigration especially in the 19th century (cf. Ritzmann-Blickenstorfer, 1997). We know from the literature on the economic development of the United States that the railroads were of tremendous importance in creating a national market and in giving impulses to other industrial sectors (Cashman, 1984: 26–34). Therefore, railroad construction was a good indicator for overall economic development in the 19th century. Interestingly enough, people in 19th century Europe clearly “knew” about the influence of American railroad construction on emigration (Ritzmann-Blickenstorfer, 1997: 58). Finally, it is important to note that this and some of the other independent variables in this analysis are used with one year lag. It is not surprising that very often “ Y responds to X with a lapse of time” (Gujarati, 1995: 585). Ritzmann-Blickenstorfer (1997) maintains – and I would follow his argument – that the economic situation in the USA in the 19th and early 20th century could not be known immediately in Europe, but with a certain lag.

Hypothesis: *The more miles of railroad constructed in the USA in year t , the higher the Bernese emigration to the USA in year $t+1$* (for the data: Bureau of the Census, 1960: 428).

Unemployment rates in the USA (UNEMP). Unemployment has been chosen as a second indicator for overall economic development. The argument goes that an emigrant would not want to emigrate to a country in economic turmoil with high unemployment rates. Hatton (1995b: 408) has underlined that the unemployment rate in the receiving country is an essential factor explaining emigration patterns. The problem with the U. S. unemployment rates is that more or less credible numbers exist only for the 20th century (cf. Smiley, 1983). However, newer studies

have tried to estimate the unemployment rates for the second part of the 19th century, too. The data for the period between 1870 and 1900 is based on such a study (Vernon, 1994).

Hypothesis: *The higher the unemployment rate in the USA in year t , the lower the Bernese emigration to the USA in year $t+1$* (for the data: Bureau of the Census, 1960: 73; Vernon, 1994).

Wholesale price index for all commodities in the USA (1926=100) (PRICE). As a third economic indicator, the price index for the years between 1890 and 1931 was chosen. Again, I would argue that the macroeconomic development in the USA had a profound effect on Bernese emigration. The better the status of the American economy, the higher the Bernese emigration.

Hypothesis: *The higher the price index in the USA in year t , the lower Bernese emigration in year $t+1$* (for the data: Bureau of the Census, 1960: 116f.).

Push Factors

Bernese on welfare per 1000 inhabitants (BEWEL). Several variables measuring economic performance in the canton of Bern were chosen as push factors. The first of these indicators is the number of Bernese on welfare per 1000 inhabitants. In periods of crisis the number of people on welfare always rose dramatically. This is especially obvious in the 1880s (cf. Geissbühler, 1998). Almost everyone who could try to leave areas of poverty as soon as possible. A lot of peasants migrated to the cities and some of them to the USA (cf. Pfister, 1995a).

Hypothesis: *The higher the number of Bernese on welfare (per 1000 inhabitants), the higher the Bernese emigration to the USA* (for the data: Pfister et al., 1994).

Investments in Transportation Systems in Switzerland (INVTRANS). In the late 19th century, investments in transportation systems, especially railroads, were extremely important for the Swiss economy and created jobs all over the country. No data on investments in transportation systems in the canton of Bern is available. However, we can safely argue that the total national investments positively influenced the Bernese economy, too.

Hypothesis: *The higher the investments in transportation systems in Switzerland, the lower the Bernese emigration to the USA* (for the data: Schwarz, 1981: 60f.).

Investments in structural engineering in Bern (INVSTRUC). Structural engineering is again an important indicator for the overall economic development.

Hypothesis: *The higher the investments in structural engineering in Bern, the lower the Bernese emigration to the USA* (for the data: Beck, 1983: 24f.).

Index of total industrial production in Switzerland (1913=100) (INDPROD). Unfortunately, no index of the total industrial production in Switzerland exists prior to 1913. However, the data available is still very useful, because it gives an overall idea of the growth of the industrial sector.

Hypothesis: *The higher the index of total industrial production in Switzerland, the lower the Bernese emigration to the USA* (for the data: Ritzmann-Blickenstorfer, 1996: 629)

Mortality rate in Bern (MORTAL). In the late 19th century, mortality rates became relatively low and stable. But there were still years with dramatically higher rates of mortality. Examples are 1870/71 and especially 1918, when the “Spanish Flu” killed almost 5000 people in the canton of Bern alone (Pfister, 1995a: 122f.). In such crisis’ years with high mortality rates, the tendency towards emigration should have been higher, too.

Hypothesis: *The higher the mortality rate in Bern (deaths per 1000 inhabitants), the higher the Bernese emigration to the USA* (for the data: Pfister et al., 1994).

IV. Economic Factors: Quantitative Analysis

The quantitative analysis consists of bivariate correlations between the dependent and the nine different independent variables (see *Table 1*). It is the goal of this analysis to find out which of the variables are most closely related to the dependent variable (cf. Blalock, 1979: 396–403).

Among the four *pull factors*, the emigration in the year $t-1$ shows a near-perfect correlation with the emigration in year t . This result should not surprise us much; Ritzmann-Blickenstorfer (1997) found similarly strong relationships. However, it is noteworthy that the correlation with all the other three variables produced results that point in the expected direction, too.

Table: Economic Factors: Bivariate Correlations

Variables	Pearson's r	Years
<i>Pull Factors</i>		
<i>BERNEMIG</i>	0.821**	1870–1930
<i>RAILROAD</i>	0.453**	1875–80/1894–1926
<i>UNEMP</i>	-0.203	1870–1930
<i>PRICE</i>	-0.365*	1891–1930
<i>Push Factors</i>		
<i>BEWEL</i>	0.404**	1871–1915
<i>INVTRANS</i>	-0.344*	1870–1914
<i>INVSTRUC</i>	-0.508**	1870–1913
<i>INDPROD</i>	-0.180	1913–30
<i>MORTAL</i>	0.313*	1870–1930

Notes: The dependent variable is the Bernese emigration to the USA. All the coefficients are Pearson's r. The correlations are between -1 (perfect negative correlation) and 1 (perfect positive correlation). Significance: ** $p < 0.01$; * $p < 0.05$.

Railroad construction is positively, unemployment (not significant) and the price index negatively correlated with Bernese emigration to the USA. Apparently, there is a strong relation between economic development in the USA and Bernese emigration.

Four of the five *push factor* variables produced highly significant results. The number of Bernese on welfare and the mortality rate in Bern are both positively, the investments in transportation systems in Switzerland, the investments in structural engineering in Bern and the index of total industrial production (not significant) negatively correlated with Bernese emigration to the USA. Again, economic factors are closely related to the rate of emigration from Bern to the USA.

It would have been helpful to estimate regression models in a second step in order to be able to predict the dependent variable from more than just one independent variable. There were, however, three major problems. First of all, most of the data is incomplete. Secondly, most of the independent variables are highly correlated with each other. Thirdly, the lagged endogenous regressor BERNEMIG (emigration in $t-1$) poses the problem of serial correlation and might lead to “seriously misleading results” in an OLS regression (Gujarati, 1995: 603). Because of these obstacles, I had to do without a regression model.

V. Conclusion

Without a doubt, quantitative analysis is a powerful research tool for emigration history. In this paper, I have tried to analyze the economic factors leading to the Bernese emigration to the United States between 1870 and 1930. Such macrostructural analyses are “critically important because they give us important ideas and insights about the dynamics of such population movements that we need to understand” (Kleiner, 1986: 307).

The correlation analysis revealed that both push and pull factors played an important role in determining Bernese emigration to the USA. The by far strongest correlation exists between the Bernese emigration in year t and the emigration from Bern in year $t-1$. Highly significant correlations were also discovered between the Bernese emigration to the USA and investments in structural engineering in Bern, railroad construction in the USA and Bernese on welfare. Two correlations produced results which were statistically not significant, but these findings may be due to incomplete data. If complete longitudinal data had been available, it would have been stimulating to estimate a regression model. Due to the lack of such data, a regression model could not be estimated in this paper.

But even without a regression model we were clearly able to demonstrate empirically that the emigration from the Swiss canton of Bern to the USA in the late 19th and early 20th century was first of all caused by fundamental economic changes in both the “sending” and the “receiving” country. Emigration was determined by an economic decision to move for the prospect of higher income or ear-

nings (Hatton 1995b: 408). Bernese emigration was primarily a socio-economic mass movement.

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ISELJAVANJE IZ BERNA U SJEDINJENE DRŽAVE, 1870.–1930.: KVANTITATIVNA ANALIZA EKONOMSKIH ČIMBENIKA

SAŽETAK

Sjedinjene Države bile su najvažnije odredište švicarskih emigranata u vrijeme masovnog iseljavanja u 19. stoljeću i na početku 20. Oko 250.000 Švicaraca emigriralo je u SAD u tom razdoblju. SAD su bile najvažniji cilj za većinu emigranata i iz švicarskog kantona Bern. Christoph von Grafenried je 1710. godine osnovao malu koloniju Novi Bern i time je Sjeverna Amerika postala privlačnija za emigrante iz Berna. Međutim, taj projekt kolonizacije bio je samo djelomično uspješan. Broj stanovnika Berna koji su iselili u Sjevernu Ameriku ostao je malen tijekom 18. stoljeća. Bernska vlada podupirala je restriktivnu emigracijsku politiku i pokušavala spriječiti iseljavanje iz Berna ili je katkada potpuno zabranila iseljavanje u Sjevernu Ameriku. Sve u svemu, u 18. stoljeću u Sjevernu Ameriku nije emigriralo više od 6000 stanovnika Berna. Situacija se bitno promijenila u 19. stoljeću, kada su SAD postale najvažnije odredište bernskih emigranata. Prvi iseljenički val krenuo je tijekom dramatičnih gladnih godina 1816/17., drugi u pedesetima, a treći i daleko najveći tijekom recesije u osamdesetima. Ekonomskim oporavkom u devedesetima iseljavanje u SAD se smanjilo i nikada više nije doseglo razinu iz prethodnoga desetljeća. U ovom članku autor pokušava objasniti emigraciju iz Berna u SAD između 1870. i 1930. Zato je u žarište stavljena kvantitativna analiza ekonomskih čimbenika. Kao prvo, namjera je članka pokazati da kvantitativne metode mogu biti neobično moćno sredstvo u povijesnom istraživanju iseljavanja. Kvalitativne studije također su važne, ali je prosuđivanje različitih čimbenika koji su doveli do procesa iseljavanja teško zadržati u okviru plana kvalitativnog istraživanja. Na pitanje o korelacijama može se mnogo bolje odgovoriti kvantitativnom analizom. Drugo, autor želi pokazati da su i potisni i privlačni čimbenici imali važnu ulogu u određivanju iseljavanja iz Berna. Autor smatra da je važno naglasiti da se ne smiju zanemariti ni ekonomski čimbenici u zemlji primitka, odnosno u SAD. Osnovu kvantitativne analize čini devet hipoteza. Autor tvrdi da su tradicija emigracije (emigracija u godini $t-1$), gradnja željezničkih pruga u SAD, broj primatelja socijalne pomoći u Bernu i stopa smrtnosti pozitivno korelirali s iseljavanjem iz Berna u SAD. Negativne korelacije očekuju se između bernske emigracije i stope nezaposlenosti u SAD, ulaganja u transportni sustav u Švicarskoj, ulaganja u strukturnu strojogradnju u kantonu Bern, švicarskog indeksa ukupne industrijske proizvodnje i američkog indeksa cijena. Rezultati analize bivarijantnih korelacija potvrđuju sedam hipoteza. Dvije se hipoteze moraju odbaciti. Iseljavanje u godini $t-1$ naj snažnije korelira s iseljavanjem iz Berna (pozitivno). Zatim slijede varijable ulaganja u strukturnu strojogradnju (negativno), gradnja željezničkih pruga u SAD (pozitivno) i broj stanovnika Berna primatelja socijalne pomoći (pozitivno). Korelacije između iseljavanja iz Berna i američkog indeksa cijena (negativna), švicarska ulaganja u transportni sustav (negativna) i stopa smrtnosti u Bernu (pozitivna) također su važne. Nevažne su samo korelacije između stope nezaposlenosti u SAD i indeksa ukupne industrijske proizvodnje u Švicarskoj i iseljavanja iz Berna. Stopa iseljavanja očito ovisi o ekonomskom razvoju, kako u Bernu tako i u SAD. I potisni i privlačni čimbenici imaju važnu ulogu u određivanju stope iseljavanja. Na žalost, zbog nepotpunih podataka i problema nezavisne varijable iseljavanja koja zaostaje u godini $t-1$, u ovom članku nije načinjena procjena za model regresije. Svakako bi bilo zanimljivo kada bi se takve regresivne analize mogle provesti u drugim studijama na regionalnoj razini s boljom bazom podataka. Međutim, i u ovom članku autor je uspio pokazati da kvantitativne metode mogu biti vrlo korisno sredstvo u povijesnom istraživanju emigracija i da je iseljavanje iz Berna u SAD između 1870. i 1930. bilo ponajprije društveno-ekonomski masovni pokret.

KLJUČNE RIJEČI: iseljavanje, ekonomija, Bern, Švicarska, Sjedinjene Države, kvantitativna analiza

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DIE BERNER AUSWANDERUNG IN DIE VEREINIGTEN STAATEN, 1870–1930: EINE QUANTITATIVE ANALYSE ÖKONOMISCHER FAKTOREN

ZUSAMMENFASSUNG

Die Vereinigten Staaten waren im 19. und im frühen 20. Jahrhundert die wichtigste Destination der schweizerischen Auswanderer. In dieser Zeitspanne emigrierten rund 250,000 Schweizer in die USA. Auch für die meisten Emigranten aus dem Kanton Bern stellten die Vereinigten Staaten das primäre Ziel dar. Schon 1710 hatte Nordamerika mit der Gründung der kleinen Kolonie New Berne durch Christoph von Graffenried eine gewisse Attraktivität für Berner Auswanderer gewonnen. Allerdings blieb diesem Kolonisationsprojekt nur ein beschränkter Erfolg beschieden. Der Anteil der Nordamerika-Auswanderer an der Berner Emigration insgesamt blieb im 18. Jahrhundert denn auch gering. Die Obrigkeit vertrat eine restriktive Politik und versuchte Massenauswanderungen gesetzlich zu erschweren oder verbot sie bisweilen sogar vollständig. Gesamthaft emigrierten im 18. Jahrhundert kaum mehr als 6000 Berner nach Nordamerika. Im 19. Jahrhundert änderte sich dies grundsätzlich. Die USA wurden im Verlauf des 19. Jahrhunderts zur wichtigsten Destination für die Berner Emigranten überhaupt. Eine erste Auswanderungswelle fand um 1816/17 während einer einschneidenden Hungerkrise statt. Eine zweite Welle lässt sich für die fünfziger Jahre nachweisen. In einer schwierigen wirtschaftlichen Situation entschieden sich Tausende von Bernern zu einer Auswanderung in die Vereinigten Staaten. In den 1880er Jahren, in einer Zeit einer schweren Rezession wanderten wiederum sehr viele Berner in die USA aus. Mit dem wirtschaftlichen Aufschwung in den neunziger Jahren verebbte die Auswanderung wieder und erreichte auch nach dem Ersten Weltkrieg nie mehr den enorm hohen Level der achtziger Jahre. Im vorliegenden Aufsatz wird der Frage nachgegangen, wie die Berner Auswanderung in die USA zwischen 1870 und 1930 erklärt werden kann. Im Zentrum der Untersuchung steht die quantitative Untersuchung ökonomischer Faktoren. Erstens ist es die Aufgabe dieses Aufsatzes, zu demonstrieren, dass quantitative Methoden für die historische Emigrationsforschung außerordentlich befruchtend sein können. Qualitative Studien zur Auswanderung sind zwar wichtig, aber ermöglichen kaum eine Gewichtung verschiedener Bestimmungsfaktoren der Auswanderung. Die Frage nach der Stärke von Zusammenhängen lässt sich besser mit einer quantitativen Vorgehensweise beantworten. Zweitens möchte der Autor aufzeigen, dass sowohl Push- als auch Pull-Faktoren wichtig waren. Dabei ist es ihm besonders wichtig, zu illustrieren, dass die wirtschaftlichen Faktoren im "aufnehmenden" Land, also in diesem Fall in den USA, als Bestimmungsfaktor der Auswanderung nicht vernachlässigt werden dürfen. Die Grundlage der quantitativen Auswertungen bilden neun Hypothesen. Positiv auswirken auf die Berner Auswanderung in die USA sollte sich demnach die Emigrationstradition (Emigration im Jahr $t-1$), der Eisenbahnbau in den Vereinigten Staaten, die Anzahl Berner, die von der Sozialhilfe abhängig sind, und die Mortalitätsrate. Ein negativer Effekt wird demgegenüber für die Variablen Arbeitslosigkeit in den USA, Investitionen in Transportsysteme in der Schweiz, Investitionen in den Hochbau im Kanton Bern, Höhe des schweizerischen Index für industrielle Produktion und Höhe des Preisindex in den USA erwartet. Die Resultate der bivariaten Korrelationen bestätigen sieben Hypothesen. Lediglich zwei Hypothesen müssen eindeutig verworfen werden. Die Emigration im Vorjahr korreliert klar am stärksten mit der Berner Auswanderung (positiv). Dahinter folgen die Investitionen in den Hochbau (negativ), der Eisenbahnbau in den USA (positiv) und die Anzahl von der Sozialhilfe abhängigen Berner (positiv). Ebenfalls signifikant sind die Zusammenhänge zwischen der Berner Auswanderung und dem amerikanischen Preisindex (negativ), den Schweizer Investitionen in Transportsysteme (negativ) und die Mortalitätsrate im Kanton Bern (positiv). Nicht signifikant sind lediglich die Zusammenhänge zwischen der Berner Emigration in die USA und der amerikanischen Arbeitslosenrate sowie dem Index für industrielle Produktion in der Schweiz. Die Berner Auswanderung in die Vereinigten Staaten hängt also sehr stark mit der wirtschaftlichen Entwicklung im Kanton Bern und in den USA zusam-

men. Sowohl Pull- als auch Push-Faktoren sind wichtige Bestimmungsfaktoren. Leider konnte aufgrund der lückenhaften Zeitreihen und der Probleme mit der “gelagged” unabhängigen Variablen Emigration im Jahr $t-1$ keine Regressionsanalyse durchgeführt werden. Es wäre jedoch zu begrüßen, wenn in anderen Studien auf der regionalen Untersuchungsebene, bei denen sich die Datenlage günstiger präsentiert, nicht nur Korrelationen berechnet, sondern auch Regressionsmodelle geschätzt würden. Trotzdem konnte die vorliegende Studie aufzeigen, dass quantitative Methoden für die historische Auswanderungsforschung sehr hilfreich sind und dass die Berner Emigration in die USA zwischen 1870 und 1930 primär eine sozioökonomische Massenbewegung war.

SCHLÜSSELWORTE: Auswanderung, Wirtschaft, Bern, Schweiz, Vereinigten Staaten, quantitative Analyse