

Preliminary Draft. Please do not cite or circulate without permission from the author.

Drawing a thick line: How Poland disposed of a historical legacy[†]

Andreas Backhaus[‡]

Ludwig-Maximilian-University of Munich

August 2015

Abstract

This paper demonstrates that the persistence of economic legacies can be terminated during a relatively short period of time. Rural areas in Poland had been economically burdened during the communist era in a quasi-experimental way with an agronomical structure that turned out to be unviable in the subsequent market economy. However, 20 years past the initiation of the transition process, the economic deficits have to a large extent been redeemed. In addition, only few remnants of the recent past can still be traced in individual attitudes and beliefs.

JEL Classification: N14, N54, P30, P25, P32

Keywords: Poland, Communism, Agriculture, Collectivization, Formerly Centrally Planned Economies, Transition Economies, Comparative Economic History

[†] The paper has benefitted from comments received at the 6th Workshop on Growth, History and Development at the University of Odense. The author is highly indebted to Prof. Andrzej Gawryszewski, Institute of Geography and Spatial Organization of the Polish Academy of Sciences, for sharing his data on collectivization, and to Sophie Straube for providing important literature references.

[‡] Chair for Population Economics, Ludwig-Maximilian-University of Munich, Schackstr. 4 / IV, 80539 Munich, Germany, andreas.backhaus@econ.lmu.de

1. Introduction

The recent years have seen a considerable increase in the quantity of economic literature on the role of various kinds of historical legacies for present-day outcomes. The general statement of this literature can be summarized in the statement that history has persistent effects on economic performance, or simply in the bottom line “history does matter” (Nunn (2014)).

However, while numerous empirical links between the (in many cases very distant) past and the present have been established with credible claims about causality, Nunn (2014) also points out that the compelling follow-up questions why and how a specific historical event has persisted have so far been addressed less profoundly. Most attempts to answer these questions rest on anecdotal and speculative suggestions. Usually, this is due to the long timespan that has elapsed between the historical occurrence of the persistent factor and the contemporary observation of outcomes. This lack of robust evidence is due to a shortage of data which can be utilized to carve out specific channels of persistence.

An important question resulting for social scientists in general and economists in particular concerns the role that the decisions of policy makers and the collective actions of individuals can play in directing such a process of change.

This paper addresses the question whether and under which circumstances historical events have persistent effects. In particular, the paper demonstrates that a historical event can indeed be followed up by a process of profound economic and social change which washes out the direct legacies of the former over a relatively short period of time. The country under consideration is Poland with the focus being placed on its economic transition from the socialist to the market economy. During the socialist rule, Poland represented a rare exception within the eastern bloc in the sense that only a part of its agricultural sector had been forcefully collectivized according to the socialist doctrine in the 1950s, while the rest remained in private hands. This was a consequence of historical contingencies related to the displacement of Germans from territories annexed by Poland after World War II and the repopulation of the latter with Poles from Central and Eastern Poland. About 40 years later, when the socialist economy broke down, the large state-owned farms were cut-off from public subsidies and closed down as part of Poland’s ‘shock therapy’-style introduction of the market economy. Consequently, a considerable rural part of the country was left with a now futile economic structure that had been the main provider of employment for the past decades and which had also dictated a distinct form of social cohabitation. Put differently, the population in the formerly collectivized areas inherited a huge economic burden from the socialist times, which corresponded to an unsettling of their overall social environment.

This setting makes it worthwhile to investigate which traces of this legacy can still be detected to the present day and which appear to have vanished. Fortunately, the time lag between the termination of the socialist economic system and the availability of informative data is relatively short compared to the remainder of the literature, which allows for a deeper and more disaggregated analysis of the processes that took place soon after the historical event had occurred.

The main finding is that surprisingly few direct leftovers of the socialist legacy can still be detected in contemporary Poland. Another recent historical event, namely Poland's accession to the European Union in 2004, appears to have been sufficient to balance economic opportunities across the country such that the inherited economic deficits could be disposed of. The official directive of post-communist Poland stated by the first democratically-elected Prime Minister Tadeusz Mazowiecki therefore seems to have prevailed: "We split away the history of our recent past with a thick line."

Among related research on historical legacies in Central Europe, Becker et al. (2014) find persistent effects of the Habsburg Empire on current levels of trust and corruption in the bureaucracy across the empire's successor states, but cannot reveal the specific mechanisms behind the survival of these effects. Further, Grosfeld & Zhuravskaya (2015) find that present internal differences in religiosity and democratic capital are legacies of the partition of Poland between three different empires that took place around 1800. But on the other hand, many economic, institutional and cultural differences did not persist. The fact that another 100 years have passed between the end of the 'treatment' division in 1918 and the observation of outcomes around the 2000s precludes an appropriate empirical investigation into the question why and how some of the potential legacies were eliminated, while others were not. Nevertheless, the noted heterogeneity in persistence at least suggests that over the course of history, changes must have taken place that prevented some of the potential legacies from manifesting themselves.

Section 2 elaborates on details of the historical context of the paper, while section 3 presents the data which is used to trace the historical events and to test their persistence up to the present respectively. Section 4 outlines in a descriptive manner the contrast between on the one hand the initially strong impact of the socialist legacy on economic well-being up to the early 2000s and on the other hand its near irrelevance only one decade later. The next two sections utilize more elaborate empirical methods in order to comprehend the process at the end of which the socialist legacy did not persist anymore. While section 5 carries out an analysis using cross-county variation in various economic indicators, section 6 exploits the same geographical variation, but in individual opinions and attitudes. Section 7 concludes.

2. Context

The origin of the legacy which Poland had to face after the fall of communism can be traced back to the formation of the People's Republic of Poland (PRL) over the course of the first decade after the end of World War II. The then-Secretary General and -Prime Minister Bolesław Bierut pressed ahead with the nationalization of the Polish economy according to the Stalinist doctrine until his death in 1956. While the state's control over Poland's industrial sector was quickly established, its reach remained limited with regard to agriculture. In addition to the widespread perception of the Polish population that socialism represented just another form of Soviet-Russian occupation, the socialist concept of collectivization met especially fierce resistance from the traditional small-scale Polish farmers; a resistance that the regime did not dare to attempt to break, despite its control over the military and the police forces.

The main exception to this opposition was to be found in the formerly German territories that had been annexed by Poland towards the end of World War II as a compensation for the territories east of the Curzon line that Poland had ceded to the Soviet Union. Labelled the "Regained Territories" (Polish: *Ziemie Odzyskane*) by the nationalist-communist propaganda, the neutral designation "Northern and Western Territories" (NWT, Polish: *Ziemie Zachodnie i Północne*) is more common today. While the majority of the German population had already fled the NWT or was in the process of deportation, Polish and Soviet authorities ordered the transportation of about 1.5 million Poles (so-called "Repatriates") from the formerly Polish eastern territories to the NWT, where they were supposed to be resettled. Further, about 2.7 million Poles moved into the NWT from central Poland, i.e. from areas that were part of Poland both before and after World War II. These "Re-settlers" migrated for various reasons, but predominantly because their homes had been destroyed in the course of the war and because propaganda promised them formerly German lands and farms in the NWT ready for occupancy. Finally, 1.1 million people, who had previously been citizens of the German Empire, were verified as "Autochthons" by Polish authorities, which meant that they were attested of possessing some Polish roots. This verification allowed them to remain in the NWT despite the annexation, or, put differently, made it impossible for them to leave Poland at that time. (Eberhardt 2011)

According to Ther's (1999) comprehensive study of the post-war policies towards the displaced persons in Poland and East Germany, this newly-installed population of the NWT was prone for attempts of collectivization because it was mostly still lacking the property rights of the formerly German farms when the Stalinist agenda was about to be carried out. Furthermore, the relocated inhabitants were less able to organize a joint resistance against the state policy compared to farmers in the rest of Poland, while the state was more able to mandate collectivization by force due to a stronger presence that was

supposed to underpin the Polish claim to the NWT. There is on the other hand no indication that the post-war population of the NWT had a preference for selecting itself into collectivization. On the contrary, the “Repatriates” from eastern Poland had already experienced the Soviet-style agricultural organization during the years 1939-41 when the Soviet Union had occupied their homeland and it was reported that they did not hesitate to spread their negative assessment of the Kolkhoz. (Ther 1999)

After Bierut’s death, the process of agricultural collectivization stalled and was not seriously resumed anytime by his successors, who rather transfigured the existence of a private agricultural sector as a specific Polish variety of socialism. The area that had already been transferred into public ownership by that time was from then on cultivated by state-owned farms (PGR, Polish: *Państwowe Gospodarstwo Rolne*). In 1990, they managed 18% of the total agricultural land and employed about 500,000 people. In the course of Poland’s transition to democracy in 1989 and the implementation of the so-called economic “shock therapy”, these farms were abruptly cut off from the public subsidies they had hitherto enjoyed. While short-term credit served as a substitute, it quickly resulted in excessive indebtedness of the farms. In 1992, they were transferred to the newly created special government Agency of Agricultural Property of the Treasury (AWR, Polish: *Agencja Własności Rolnej Skarbu Państwa*) with the purpose of liquidating them. However, the process of transferring the farms into private hands has been hampered by low demand, insufficient capital, legal issues and the exclusion of foreign investors. (Banorska 1996) Together with the general “rationalization” of the Polish economy, the agricultural sector was unable to reabsorb the now redundant workers. This marks the starting point of the following analysis of how Poland dealt with this severe economic legacy.

3. Data

As outlined above, the specific economic burden of the socialist era was to be found mostly, though not entirely, in the agricultural areas of the Northern and Western territories. Precise data on where collectivization had been enforced stems from the 1986 agricultural census and provides the share of publicly-owned agricultural land in this year. Therefore, it reflects the extent of agricultural collectivization shortly before the end of the PRL. In its original form, the data is available at the community (NTS-5, Polish *gminy*) level, though not at higher administrative levels, as no administrative units existed between the levels of provinces (NTS-2, Polish *województwa*) and communities at that time. Because data on outcomes of interest is mostly available only down to the level of counties (NTS-4, Polish *powiaty*), which were re-established by the administrative reform of 1999, the community-level agricultural data is aggregated up to the county level. Within one county, each community’s observation of the share of collectivized land is weighted by the community’s area of agricultural land in 2002. Only

within one county, an accurate aggregation is not possible due to substantial administrative border changes at the community level. Further, the census recorded the share of agricultural land in highly urbanized communities either as missing or zero. Today, these areas are comprised in the 66 Polish cities which are granted the status of a county without incorporating other communities than the cities themselves (NTS-4, Polish *miasto na prawach powiatu*). As the intention of census records was apparently to reflect the absence of agricultural land within these cities, and accordingly the specific economic legacy of closed down state farms could only occur in rural areas, the former consequently excluded from the following analysis. In total, the share of publicly-owned land is available for 313 of the 380 counties of Poland.

Obviously, one may suspect that the mass population transfers that had taken place within the NWT have given birth to additional legacies of some kind. In fact, the NWT are deliberately excluded from the analysis of Grosfeld & Zhuravskaya (2015) for this reason, but also because their location is not relevant with regard to the imperial borders resulting from the partitions of Poland. In any case, it is necessary to control for the potential influences they may exert. Consequently, the communities and counties that are located within the borders of the Northern and Western Territories are identified by a close comparison of historical maps with contemporary county borders and grouped in a dummy variable. In addition, the previously “Autochthons” are now recognized as a German minority. Their presence in the NWT, mostly concentrated in the province of Opole, is controlled for by using data from the Polish population census of 2002. The same is done for the Kashubian minority within the province of Pomerania and the Belarusian minority within the province of Podlaskie, which is not part of the NWT. Further, the coordinates of the centroid of each county is extracted from GIS data (CODGiK 2014).

With regard to outcomes, two sources of data are used in the following: First, a panel dataset containing economic and population variables on the county level is created from the data of the Central Statistical Office of Poland (GUS). Data is available mostly from the years 2000 or 2002 onwards. Second, the Social Diagnosis panel collected in the years 2003, 2005, 2007, 2009, and 2011 provides a rich set of individual economic, political and other social outcomes. It also contains detailed information on individual- and household-level characteristics that will serve as control variables. Additional to listing both province and county where an individual currently resides, the survey also contains a six-step classification of the size of the settlement the respective respondent lives in, ranging from “village” to “city with more than 500k inhabitants”. In the following, only observations from locations classified as “village” or “city below 20,000 inhabitants” are used in order to focus the attention on the actual rural areas.

4. Some empirical observations on non-persistence

First of all, it is to be demonstrated that collectivization was indeed concentrated in the Northern and Western Territories. Figures 1 and 2 display the share of publicly-owned land in 1986 outside and resp. within the NWT on the level of communities.

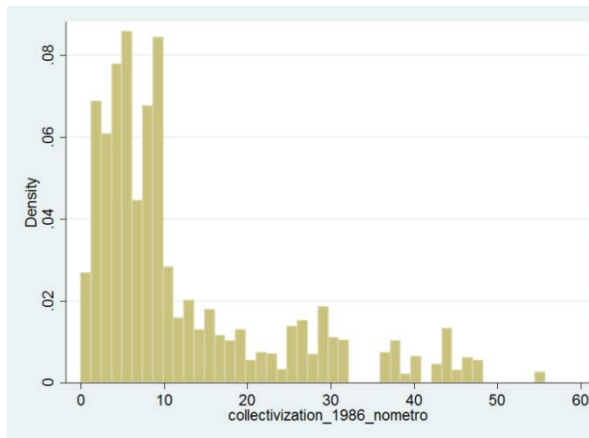


Figure 1: Share of state-owned farmland outside the NWT

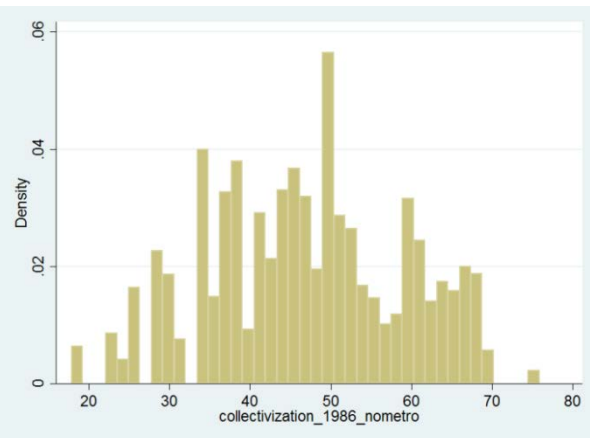


Figure 2: Share of state-owned farmland within the NWT

Further, figure 3 depicts the spatial distribution of collectivized land across Poland. From comparison with figure 4, it is obvious that the NWT did indeed experience the highest degree of collectivization. However, the neighboring Greater Poland voivodeship appears to have also been partially affected by the ability of the state to enforce it within the NWT. To some degree, collectivization also took place in the South-East along the Polish-Ukrainian (or then Polish-Soviet) border, where Polish military and police forces were strongly present after the Second World War due to border conflicts with Ukrainian nationalists.

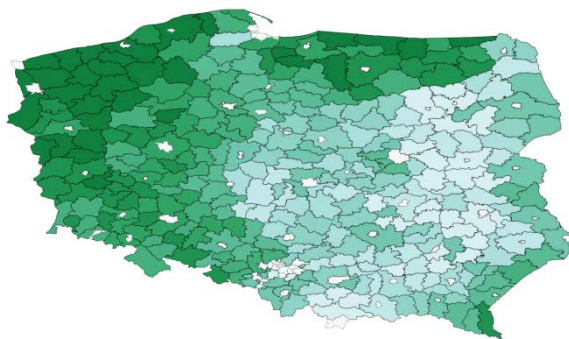


Figure 3: Share of state-owned farmland across Poland

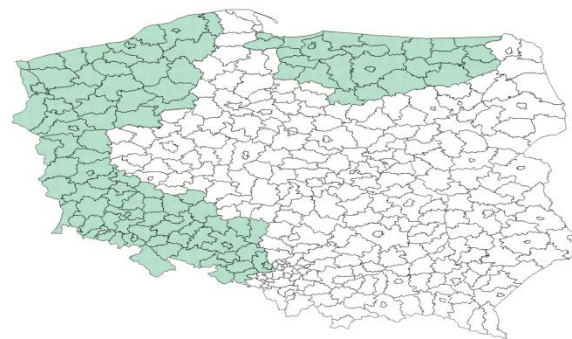


Figure 4: The Northern and Western Territories

After the fall of communism, the first decade of the restored Republic of Poland was marked by the country's overall struggle with high unemployment. But after unemployment had been on a temporary decline after it had already reached 16.1% in 1993, it peaked again at 20% in 2002. This was not due to the business cycle, but much more a result of the unresolved structural consequences of the necessary

rationalization of the economy: Preceding years of economic growth had not implied a simultaneous growth of employment, the service sector remained underdeveloped, and the number of small and medium-sized enterprises was declining. Rural areas in general were still badly affected by unemployment, but the situation was especially dire in the NWT, where the unemployment rate averaged between 20 and 30 percent at the level of provinces. (Gardawski 2002)

This is confirmed by the more detailed county-level data: Figure 5 depicts a scatterplot of the share of agricultural land that had been publicly owned and the unemployment rate in 2002. In non-metropolitan counties where the degree of collectivization had exceeded about 20%, a strong and increasing relationship between the two variables is recognizable.

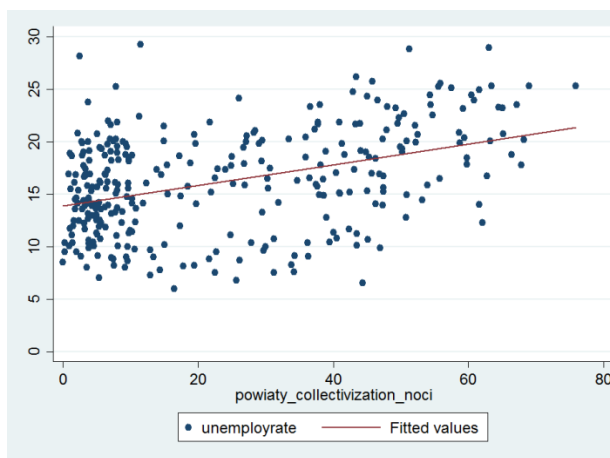


Figure 5: Collectivization and unemployment in 2002

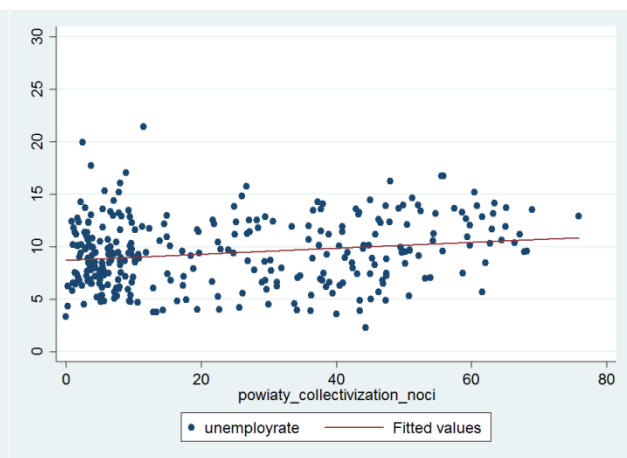


Figure 6: Collectivization and unemployment in 2010

Accordingly, the correlation coefficient of the two variables comes to 0.41 in 2002, and a t-test comparing average unemployment rates between areas with more and with less than 20% of collectivized agricultural land reveals a highly significant mean difference of 2.96 percentage points.

Eight years later, however, the relationship between the two variables has flattened considerably, as can be seen from figure 6. The correlation coefficient has dropped to 0.18, and the mean difference in unemployment rates, while still significant at the 5% level, only amounts to 0.8 percentage points and is therefore of much less economic importance. This already hints at the substantial economic growth and corresponding employment creation that has taken place in Poland during the 2000s, as also the average unemployment rate across all counties dropped by 6.8 percentage points during this time span. Thus, also in relative terms, the areas on which the economic legacy of formerly state-controlled agriculture had been imposed appear to have benefited more from the positive economic trend after 2002.

The convergence induced by this catch-up process is also reflected in the individual-level Social Diagnosis data: The log of average household income in 2011³ is regressed on a dummy for the NWT, another dummy for past collectivization that comprised more than 20% of the agricultural land of the respective county, and a broad set of individual and household characteristics (four age groups, years of education, gender, marital status, the main source of the household’s income (eight classifications), and the number of children within the household). The breakdown of the respondents into the different age groups allows examining whether any observed effects are related to the span of life spent during the socialist era and the transition period respectively, similar to Alesina & Schündeln (2007). The model also controls for the presence of ethnic minorities within the respective county. Table 1 reports the results from regressing log household income, individual satisfaction with the financial situation of one’s family, and individual perception of one’s life on the explanatory variables. Past collectivization is not significantly related to any of these three indicators of material and non-material well-being. Residence in the NWT has a positive⁴ effect on financial satisfaction and is also positively related to a more positive perception of an individual’s life. As reported in column 1 of table 1, neither residence in the NWT in general nor residence in those counties where collectivization precisely took place has a significant impact on household income.

Table 1 – Income, financial satisfaction and perception of life in 2011

	household income	financial satisfaction	perception of life
collectivization	0.0224 (0.039)	0.0367 (0.076)	0.0438 (0.053)
north_west	-0.1022 (0.070)	-0.1588* (0.089)	-0.1485* (0.077)
R-squared	0.211	0.165	0.118
N	14316	14316	14305
rmse	0.5288689	1.205467	0.9341943
F	67.27176	39.38432	36.45993

Notes: OLS regressions. Standard errors clustered at county level and displayed in parentheses.

*** Significant at, or below 1 percent. ** Significant at, or below 5 percent. * Significant at, or below 10 percent.

However, the Social Diagnosis data confirms the sensible expectation that the agricultural sector is less an important source of employment nowadays where it was previously crippled by the closure of the state-owned farms: The probability that an individual is employed in the agricultural sector is significantly lower (table 2, column 1) in counties with a strong history of collectivization, while

³ In each wave, the Social Diagnosis survey asks for the average household income of the previous year. In order to avoid confusion, the income is reported as that of the respective wave year.

⁴ The questionnaires of the Social Diagnosis survey are designed such that a lower score in most cases implies a higher positive assessment of the respective issue, e.g. “1” indicating a “delighted” and “7” indicating a “terrible” perception of a respondent’s life.

conversely the probability of employment in the private non-agricultural sector is significantly higher (column 2). The dummy for residence in the NWT appears to pick up some of the negative effect, which can be attributed to the partial overlap of the NWT and the areas of intense collectivization, but the significance of the effect is driven by the presence of formerly state-owned farms. This might express the difficulties that came along during the attempts to privatize the state-owned agricultural assets and to consequently create new jobs in the agricultural sector.

Table 2 – Sector of employment in 2011

	agricultural sector	private sector
collectivization	-0.0701** (0.027)	0.0663** (0.031)
north_west	-0.0670* (0.036)	0.0369 (0.039)
R-squared	0.131	0.109
N	7799	7799
rmse	0.3871613	0.4719039
F	25.0685	40.50647

Notes: OLS regressions. Standard errors clustered at county level and displayed in parentheses.

*** Significant at, or below 1 percent. ** Significant at, or below 5 percent. * Significant at, or below 10 percent.

Likewise, in 2008 the agricultural sector employs on average only 24% of all employees in counties where intensive collectivization took place, compared to an average of 44% in counties without a relevant history of collectivization. The missing 20% in the formerly collectivized counties are equally distributed among the industrial and the service sector. The county-level sectoral shares of employment in 2008 are very similar to those recorded in 2003 for the first time, which indicates that the three sectors benefited equally from the reduction in unemployment after the prior negative shock to agricultural employment in the counties burdened by past collectivization.

In summary, it can be said that the results in table 1 do not show a persistent effect of past collectivization on present material and non-material outcomes despite the high unemployment in the early 2000s that had resulted from the closure of the state-owned farms. Further, the results from table 2 can be interpreted as an assurance that the utilized measure of past collectivization is sufficiently accurate and does not yield zero results throughout. More importantly, they also provide another indication that the present irrelevance of past collectivization for individual well-being should be interpreted as the result of a notable process of economic and sectoral change that has taken places in the affected areas of Poland.

5. Evidence on non-persistence from economic indicators

This section intends to shed more light on the economic dynamics that have taken place in Poland's rural areas over the course of the 2000s and how the former can be related to the apparent demise of the economic burden that parts of the country had inherited from the socialist era. Table 3 presents results from running a fixed-effects regression on the county-level unemployment rate. Clearly, this does not only wipe out any time-constant unobservables, but it also makes it impossible to estimate the coefficients of time-constant observables like collectivization and location in the NWT. However, keep in mind that the 2000s also saw Poland's accession to the European Union in 2004, which implies an economic integration of the country into the common market. As the NWT and consequently most formerly collectivized counties are located relatively close to the German border, with the exception of the area that once formed East Prussia, they have gained a locational advantage over the rest of Poland in terms of e.g. transportation costs to and from western markets, or attractiveness for FDI. A smooth measure of distance to the German and therefore the EU-15 border is obtained by calculating the Euclidean distance of each county's centroid to the border using GIS data (CODGiK 2014). Then it is possible to employ an empirical procedure similar to the one that Redding & Sturm (2008) use in order to test the differential effect of the German division on population growth in cities closer to the inner German border. While distance to the EU-15 border is also a time-invariant variable and its coefficient could therefore not be recovered from a fixed-effects model, it can be interacted with year dummies, such that the effect of distance in years relative to the base year can be estimated despite distance itself being time-invariant. In addition to the distance-year interactions, the population density, as well as public revenues and expenditures per capita are included as time-varying controls. The results provide a number of informative insights: First, the year dummies themselves reflect the country-wide macroeconomic trends, as they indicate positive 'shocks' to unemployment around the year 2002, but then reverse to more substantial and negative shocks after the year 2005.

Table 3 – Effects on unemployment over time

collectivization	omitted (.)	north_west	omitted (.)
2000	omitted (.)	distance#2000	omitted (.)
2001	2.320*** (0.098)	distance#2001	-0.002*** (0.000)
2002	2.834*** (0.156)	distance#2002	-0.004*** (0.000)
2003	2.367*** (0.187)	distance#2003	-0.004*** (0.001)
2004	1.203*** (0.215)	distance#2004	-0.004*** (0.001)
2005	-0.368 (0.238)	distance#2005	-0.002*** (0.001)
2006	-3.195*** (0.266)	distance#2006	0.001 (0.001)
2007	-6.522*** (0.309)	distance#2007	0.003*** (0.001)
2008	-7.537*** (0.347)	distance#2008	0.003*** (0.001)
2009	-5.357*** (0.369)	distance#2009	0.002*** (0.001)
2010	-5.263*** (0.403)	distance#2010	0.002*** (0.001)
Constant	14.882*** (1.065)		
N	3433		
rmse	1.222		
F	244.07		

Notes: Fixed-effects regression. Year dummies included. Standard errors clustered at county level and displayed in parentheses. *** Significant at, or below 1 percent. ** Significant at, or below 5 percent. * Significant at, or below 10 percent.

Second, during the crisis years around 2002, closeness to the EU was not of advantage, but rather quite the opposite, as a greater distance to the border was associated with a lower rate of unemployment. This clearly reflects the presence of the formerly state-owned farms along the border and the accompanying economic deficits at this time. Third, the effect of distance to the border begins to reverse in 2004, becomes insignificant in 2006 and is from then on significant and positive, implying a lower rate of unemployment the smaller the distance to the EU. This reversal is explicitly depicted in Figure 7.

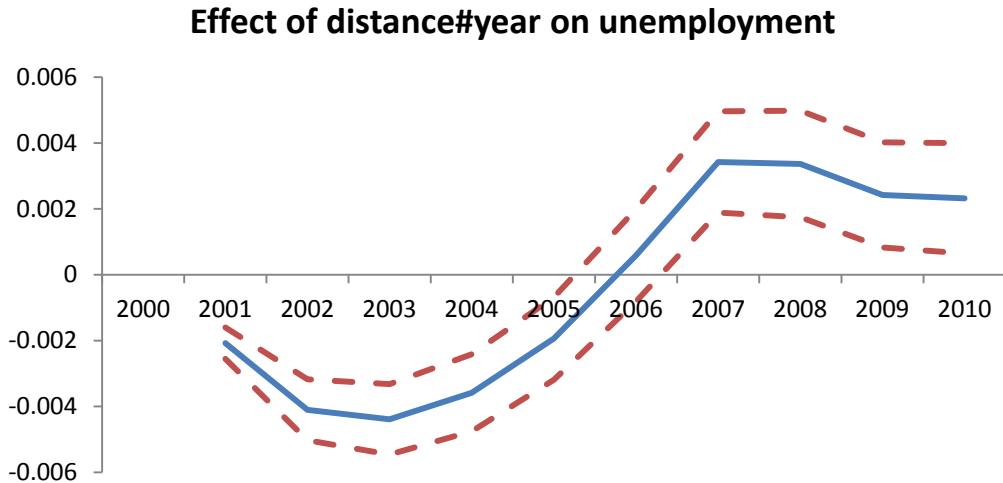


Figure 7: Plot of interaction effects over time

Obviously, past collectivization or the NWT could also be interacted with year dummies and would pick up some of the presented effect. This would suggest that specific characteristics established by the resettlements after WWII or the period of collectivization have begun to exert an altering effect around 2005. However, distance has proven to be the most robust measure of spatial advantages across different model specifications and outcomes. Further, any effect of distance could reflect some persistent effect e.g. from the partitions of Poland on work attitudes. But this effect should then be rather time-invariant and not exhibit such a strong reversal only due to the EU membership.

In accordance with the reduction of unemployment, counties located closer to the EU-15 border have begun to exhibit a higher number of business entities per 10,000 inhabitants since the year 2004, which indicates that the economic improvements do indeed reflect some employment-creating process and not just e.g. mass retirement of the unemployed. Estimates of the fixed-effects model are reported in table 4.

Table 4 – Effects on the number of business entities

north_west	omitted (.)
collectivization	omitted (.)
distance#2002	omitted (.)
distance#2003	0.001 (0.010)
distance#2004	-0.077*** (0.019)
distance#2005	-0.111***

	(0.023)
distance#2006	-0.156***
	(0.027)
distance#2007	-0.173***
	(0.028)
distance#2008	-0.144***
	(0.031)
distance#2009	-0.170***
	(0.035)
distance#2010	-0.191***
	(0.035)
pop_density_km	1.274**
	(0.560)
public_expen_percap	0.019
	(0.035)
public_reven_percap	-0.02
	(0.044)
Constant	1031.606***
	(59.203)
N	2819
rmse	49.9
F	255.87

Notes: Fixed-effects regression. Year dummies included. Standard errors clustered at county level and displayed in parentheses. *** Significant at, or below 1 percent. ** Significant at, or below 5 percent. * Significant at, or below 10 percent.

Further, the GUS county data contains information on whether people removed from the pool of the unemployed found jobs, or are removed for rather unspecified other reasons. Obviously, a stronger removal into employment is an indicator for the presence of a stronger local job creation process. First, the results in table 5 show that in general, a reduction in unemployment can be understood mostly as a result of job creation, as a one per cent increase in the total number of people removed from unemployment is associated with a 0.7% increase in the number of those who found a job.

Table 5 – Effects on the reason for removal from unemployment

unemployment rate	0.02362***
	(0.004)
2000#distance_germany_1000	omitted
	(.)
2001#distance_germany_1000	-0.00005
	(0.000)
2002#distance_germany_1000	0.00003
	(0.000)
2003#distance_germany_1000	-0.00014
	(0.000)

2004#distance_germany_1000	-0.00029*** (0.000)
2005#distance_germany_1000	-0.00011 (0.000)
2006#distance_germany_1000	0.00004 (0.000)
2007#distance_germany_1000	0.00011 (0.000)
2008#distance_germany_1000	0.00006 (0.000)
2009#distance_germany_1000	0.00017* (0.000)
2010#distance_germany_1000	0.00020* (0.000)
log_removed_unemployment	0.71323*** (0.025)
N	3433
rmse	0.175
F	165.45

Notes: Fixed-effects regression. Year dummies, population density and public budget controls included. Standard errors clustered at county level and displayed in parentheses. *** Significant at, or below 1 percent. ** Significant at, or below 5 percent. * Significant at, or below 10 percent.

Second, the job creation process does not seem to differ systematically over time with regard to a county's distance to the German border, as only three out of ten coefficients of the interactions are statistically significant. Two of the three indicate that job creation was higher in counties farther away from the border in the years 2009 and 2010, but they are only weakly significant and one would have expected such an effect to appear, if at all, during and shortly after the peak in unemployment when job creation was more difficult.

Finally, the reduction in unemployment could have been achieved by excessive emigration from the affected areas. Emigration from Poland in general has been very high during the 2000s (see Dustmann et al. (2015) for a useful overview) and living closer to the German border implies lower migration costs for the local population. As reported in column 1 of table 6, individuals in the Social Diagnosis survey report significantly more often that they have worked abroad at least once during the years 2007-2011 when they reside within the NWT. On the other hand, column 2 reports the effect on the ratio of emigrants to immigrants at working age that moved towards or from international destinations, whereas data is only available since 2005. Using 2010 as base year, there is no significant effect of distance to the border in any of the available years. Interestingly, the unemployment rate is also not associated with an overhang of international emigration over immigration. In addition, there is no notable effect of distance over time

on the ratio of inter-county emigrants to immigrants, as reported in column 3. Although this is no nearly complete picture of the migration processes that have taken place, it does not confirm the concern that the reduction in unemployment has been mostly a result of mass emigration.

Table 6 – Work experience abroad, international and inter-county migration

	has worked abroad	international migration ratio	internal migration ratio
collectivization	0.002 (0.009)	omitted (.)	omitted (.)
north_west	-0.039** (0.019)	omitted (.)	omitted (.)
distance	-0.000 (0.000)	omitted (.)	omitted (.)
unemployment rate		0.022556 (0.076)	-0.008581*** (0.003)
distance#2000			0.000073 (0.000)
distance#2001			0.000056 (0.000)
distance#2002			-0.000077 (0.000)
distance#2003			-0.000054 (0.000)
distance#2004			-0.000066 (0.000)
distance#2005		-0.000182 (0.001)	-0.000156* (0.000)
distance#2006		0.00131 (0.002)	0.000044 (0.000)
distance#2007		0.000675 (0.001)	0.000055 (0.000)
distance#2008		0.001081 (0.001)	0.00001 (0.000)
distance#2009		0.000661 (0.000)	0.000118 (0.000)
distance#2010		omitted (.)	omitted (.)
R-squared	0.048		
N	14722	1855	3433
rmse	0.196	2.5	0.162
F	14	38.31	4.38

Notes: OLS regressions. Standard errors clustered at county level and displayed in parentheses.

*** Significant at, or below 1 percent. ** Significant at, or below 5 percent. * Significant at, or below 10 percent.

6. Evidence on non-persistence on the micro level

While the previous sections have focused on the process of disappearance of the economic legacy in the formerly collectivized areas, the Social Diagnosis data also allows it to look out for traces of the economic process that has worked against the socialist legacy among individual characteristics and attitudes. The fact that the panel starts in 2003, i.e. before Poland's accession to the EU, makes it possible to exploit within-respondent variation in order to identify the effect of the EU enlargement while controlling for time-varying individual characteristics and eliminating time-fixed. Consequently, interactions of year dummies with the distance measure do again form the explanatory variables of interest.

Table 7 presents results from regressing the model on a score that respondents assigned to their satisfaction with their future prospects in each year. The year dummies themselves show a strong and positive effect on this aspect of individual satisfaction in all years following the EU enlargement, thereby confirming the conjecture of a general positive effect of the latter on Poland's population. Further, the interactions reveal that this effect is weaker in every post-accession year for individuals living in greater distance to the EU border. For example, the positive effect in 2005 is diminished by about one-third when increasing the distance by 150 km above its mean. Thus, the finding from the previous section that the economic gains of the EU enlargement have been unequally distributed across Poland, favoring areas closer to the border, is confirmed by this inspection of individual satisfaction with future prospects that are most likely related to economic opportunities.

Table 7 – Satisfaction with future prospects

collectivization	omitted (.)
north_west	omitted (.)
distance	omitted (.)
2003	omitted (.)
2005	-0.2157*** (0.074)
2007	-0.5932*** (0.080)
2009	-0.6955*** (0.090)
2011	-0.6804***

	(0.087)
distance#2003	omitted (.)
distance#2005	0.0005** (0.000)
distance#2006	0.0005** (0.000)
distance#2009	0.0007*** (0.000)
distance#2011	0.0006** (0.000)
N	42693
rmse	0.683
F	20.895

Notes: Fixed-effects regressions. Standard errors clustered at county level and displayed in parentheses.

*** Significant at, or below 1 percent. ** Significant at, or below 5 percent. * Significant at, or below 10 percent.

Further, the Social Diagnosis data contains direct information on the evaluation of political processes and their perceived effects like the accession to the EU and the political and economic transition after 1989. However, not all indicators are available in each wave of the panel. One that has been continuously surveyed represents an assessment of the success of the reforms implemented in Poland after the end of socialism. In general, these reforms have a poor reputation among the respondents even still in 2011: Roughly 40% consider them as unsuccessful, 50% find it hard to make a clear assessment, and only slightly more than 10% consider them as successful.

Table 8 – Assessment of the reform process after 1989

collectivization	omitted (.)
north_west	omitted (.)
distance	omitted (.)
2003	omitted (.)
2005	-0.1343*** (0.032)
2007	-0.0853** (0.036)
2009	0.5376***

	(0.037)
2011	0.5816***
	(0.042)
distance#2003	omitted
	(.)
distance#2005	0.0002**
	(0.000)
distance#2006	0.0001
	(0.000)
distance#2009	0.0003***
	(0.000)
distance#2011	0.0003**
	(0.000)
N	43399
rmse	0.37
F	122.882

Notes: Fixed-effects regressions. Standard errors clustered at county level and displayed in parentheses.

*** Significant at, or below 1 percent. ** Significant at, or below 5 percent. * Significant at, or below 10 percent.

Interestingly, the first two waves collected after the EU enlargement show a general improvement of this assessment, while the two subsequent ones reflect a strong worsening, as it is expressed by the coefficients of the year dummies in table 8. Nevertheless, the year-distance interactions still indicate that the evaluation of the post-socialist reform process is worse the greater the distance of a respondent's location to the EU border is in almost every wave after the accession in 2004. Thus, the recent economic improvements in the Western parts of Poland seem to have at least some positive effect on reconciling the population there with the initially austere outcomes of the reforms.

7. Conclusion

Modern and contemporary history has certainly left its marks on Poland as a country and on its population, which is also confirmed by recent research efforts. Indeed, as Wittenberg (2013) points out, *every* present condition necessarily results from some prior state of the world. However, he also stresses that the presence is not solely affected by the survival of the past, but actually reflects both persistence and change. Hence in the case of Poland, it is particularly interesting to study the persistence of historical events, given that over the past 200 years, Poland has been the scene of some of the most drastic political and economic upheavals across Europe: The nation had been split among neighboring powers; it had fought for its independence; it regained it for 21 years, but was then devastated by World War II.

Afterwards, millions of foreign and autochthonous people were relocated across and within Poland's shifted borders. While it officially commanded its own territory after 1944, it was forced to pledge loyalty towards the communist Eastern bloc and the Soviet Union as the latter's predominant power, which implied the formation of a totalitarian dictatorship which lasted over 45 years.

This study demonstrates that not every historical event has left the persistent mark on the presence one might expect. Quite the opposite: While the formal abolition of the socialist state-owned agriculture had already been implemented in the course of the downfall of socialism, leaving a considerable part of the country behind with an idle economic structure, a drastic economic realignment took place around the time of Poland's accession to the European Union, which washed away the economic debris from the communist era. Empirically, this process of change has been affirmed to be tractable both in various indicators of economic performance, as well as in individual attitudes and expectations.

The next step after observing the non-persistence of the communist legacy is to consider the conditions and actions that encompassed its disappearance. First of all, after the fall of communism, Poland became a democracy in political and a market economy in economic terms. Both of these institutional changes implied an expansion of the space for potential individual action compared to the dictatorial command economy. However, this alone did not suffice to overcome the structural deficits left behind by the latter; at least according to the presented empirical findings. A macroeconomic boost was necessary – and it was found in the accession to the European Union, which basically meant integration into a large and highly liberalized market. Note that this development was essentially a straight forward result of the institutional changes implemented in Poland after 1989; not only because the country since then pursued policies that qualified it for membership, but also because the Polish people directly and overwhelmingly voiced their approval of this move in a referendum in 2003. Finally, it has to be kept in mind that communism is and has been extremely unpopular in Poland. The already mentioned political determination to dispose of any communist remnants and the popular support this course of actions has been enjoying can together be interpreted as indication of a refusal of the Polish society to accept the communist legacies as unalterable elements of their post-communist reality.

In summary, the case of Poland suggests that the non-persistence of history is at least possible when persistence is undesired in the eyes of a majority of a country's citizenry, and when this majority has both the democratic and economic means at its disposal to translate its desire for history not to matter into political and economic actions. To what extent this collection of conditions for non-persistence is complete and whether these conditions tend to be rather necessary or sufficient is left as the subject of further research.

8. Bibliography

Alesina, Alberto, and Nicola Fuchs-Schündeln (2007): Goodbye Lenin (or Not?): The Effect of Communism on People. *American Economic Review*. Vol. 97. No. 4. pp. 1507-1528.

Baborska, Bożena (1996): The Fate of State-Owned Farms in Poland. In: *Argumenta Oeconomica*. No. 2. pp. 133-142.

Becker, Sascha O. & Kathrin Boeckh & Christa Heinz & Ludger Woessmann (2014): The Empire Is Dead, Long Live the Empire! Long-Run Persistence of Trust and Corruption in the Bureaucracy. Forthcoming in *The Economic Journal*.

Buchowski, Michał (2009): Property Relations, Class, and Labour in Rural Poland. In: László Kürti and Peter Skalník (eds.): *Postsocialist Europe. Anthropological Perspectives from Home*. New York: Berghahn Books, pp. 51-75.

Centralny Ośrodek Dokumentacji Geodezyjnej i Kartograficznej (CODGiK) (2014): Państwowy rejestr granic i powierzchni jednostek podziałów terytorialnych kraju - PRG - jednostki administracyjne. Available online: <http://www.codgik.gov.pl/index.php/darmowe-dane/prg.html>

Dustmann, Christian & Tommaso Frattini & Anna Rosso (2015): The Effect of Emigration from Poland in Polish Wages. Forthcoming in *The Scandinavian Journal of Economics*.

Eberhardt, Piotr (2011): *Political Migrations on Polish Territories (1939-1950)*. Polish Academy of Sciences. Stanislaw Leszczycki Institute of Geography and Spatial Organization. Monographies. No. 12.

Gardawski, Juliusz (2002): The dynamics of unemployment from 1990 to 2002. Available online: <http://eurofound.europa.eu/observatories/eurwork/articles/the-dynamics-of-unemployment-from-1990-to-2002>

Grosfeld, Irena & Ekaterina Zhuravskaya (2014): Cultural vs. economic legacies of empires: Evidence from the partitions of Poland. *Journal of Comparative Economics*. Vol. 43. No. 1. pp. 55-75.

Nunn, Nathan (2014): Historical Development. In: Aghion P., Durlauf S.: *Handbook of Economic Growth*. Vol. 2A. North-Holland. pp. 347-402.

Redding, Steve & Daniel M. Sturm (2008): The Cost of Remoteness: Evidence from German Division and Reunification. *American Economic Review*. Vol. 98. No. 5. pp. 1766-1797.

Ther, Philipp (1998): Deutsche und polnische Vertriebene. Gesellschaft und Vertriebenenpolitik in der SBZ/DDR und in Polen 1945-1956. *Kritische Studien zur Geschichtswissenschaft*. No. 127.

Wittenberg, Jason (2013): What is a Historical Legacy? Department of Political Science. University of California, Berkeley. Working Paper.