Comparative Historical Analysis: Some Insights from Political Transitions of the First Half of the Twentieth Century[1]

Pavel Osinsky (osinskyp@appstate.edu) and Jari Eloranta (elorantaj@appstate.edu) (Appalachian State University)

Introduction

Comparisons are a cornerstone of contemporary social sciences and history, and no social inquiry is possible without them.(Slater & Ziblatt, 2013) By examining individuals, families, organizations, or nations we compare them, either deliberately or intuitively, with other individuals, families, organizations, or nations. While some comparisons may be random, indirect, or supplementary to other techniques, there exists a strong tradition of social scientific research where comparative inquiry is the primary method of exploration; that is, comparative historical analysis, which implies a long-standing intellectual project oriented toward explanation of substantively important processes and outcomes by means of systematic and contextualized comparisons. (Mahoney & Rueschemeyer, 2003) Although such a method may be utilized at various levels of analysis, most frequently (and most fruitfully) it has been applied to the processes and outcomes among the nation states. Nation states make rather natural comparative unites, given the abundance of qualitative and quantitative data to perform the various comparisons.

In this paper we summarize the accomplishments of comparative historical analysis, review major developments both in case-oriented and variable-oriented comparative research, identify academic challenges to these methods, and examine how the proponents of these approaches confront these challenges. We also provide two separate, yet linked examples of comparative studies that successfully apply comparative methods to examining major historical transformations. The first study, a war-centered theory of the collectivist regimes develops a new interpretation of the origins of such communist states as the Soviet Union and the People's Republic of China, based on qualitative, small sample analysis. The second study, focusing on the role of democracy as a determinant of military spending during the interwar period, takes a quantitative look at a larger sample, although we will explore the lower limits of such samples, to see what we can learn when the data is limited. Both will feature the use of case studies in order to understand the revolution and evolution of regimes in early 20th century better, and ultimately we will try to point out that qualitative and quantitative methods can be complementary, thereby leading to new insights in the nature of complicated historical processes.

Historical Comparisons as a Strategy of Research

Historical comparisons can serve a plethora of purposes. According to one prominent contributor, Jürgen Kocka, heuristically, the comparative approach allows one to identify questions and

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[1] An abbreviated iteration of the arguments in this chapter is going to be published as a chapter in a book comparing the long-run development of Japan and Finland (forthcoming in 2015).

problems that one might miss, neglect, or not invent otherwise. Descriptively, historical comparisons enable us to clarify the profiles of individual cases by contrasting them with other cases or broader trends. Analytically, the comparative approach is indispensable for asking and answering causal questions about important social processes and their outcomes. Pragmatically, comparisons help to distance oneself from the case one knows best. Because of this, comparisons can have a de-provincializing, an eye-opening impact on the analysis.(Kocka, 2003) By comparing two societies that initially appear quite dissimilar, one may be able to find structures and processes that would be difficult to discern when analyzing just one country or countries with many obvious connections and joint characteristics.

Comparative historical analysis encompasses a variety of methods and techniques. Charles Ragin (1987) identified two primary types of comparative studies: case-oriented comparative research and variable-oriented comparative research. Case-oriented research focuses at one or several instances (i.e., small N) of a certain phenomenon or an occurrence: a democratic transition, an outburst of ethnic violence, or adoption of neoliberal policies, etc. By exploring various occasions of a certain event scientists try to identify their commonalities and the underlying cause that produces such event. By examining different outcomes of processes in similar nations they may wish to ascertain a cause of the divergence.[2] Either way, they treat each case as a whole unit and pay close attention to historical contexts of such occurrences.

From the onset, case-oriented comparative-historical analysis emerged and evolved as a multidisciplinary endeavor with roots in sociology, political science, as well as in the disciplinary fields of history and developmental economics. Originally, historically grounded inquiries involving one or more societies were entwined with the explorations in European modernity and industrial capitalism. It is not surprising that elements of comparative historical research can be found in the classic writings of Alexis de Tocqueville, Karl Marx, Emile Durkheim, Max Weber, Thorstein Veblen and other thinkers of the past. By analyzing massive historical transformations in the most advanced societies of the time, these scholars had constructed the influential interpretations of social change and had left the large number of the analytical building blocks for their intellectual successors. (See e.g. Durkheim, 1912/2008, Marx, 1852/2008, Marx, 1867/1992, Marx, 1871/2012, Tocqueville 1835/2003, Tocqueville, 1856/2008, Veblen 1899/2009, Veblen 1915/2006, Weber, 1905/2002, Weber, 1922/1978)

In the mid-20th century, comparative historical research receded due to predominance of structural functionalism with its ahistorical vision of society. Confronted with the surge of political contention of the late 1950s and 1960s and dissatisfied with a functionalist discourse of modernization that had left little space for analyses of social inequality, conflicts and revolutions, social scientists turned to the classical legacy of Karl Marx and Max Weber in search for answers to the intellectual challenges of the time. Critical engagement with classical legacy which had informed the new analyses of the social transformations resulted in the 1960s and 1970s in the publication of the path-breaking studies of Barrington Moore Jr. (1966), Reinhard Bendix (1964,

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[2] The former method is known as method of agreement and the latter method as method of difference, formulated initially by John Stuart Mill.

1978), Perry Anderson (1974a, 1974b), Immanuel Wallerstein (1974), Charles Tilly (1963, 1975), and Theda Skocpol (1979).

The distinct feature of the "second wave" of the comparative historical analysis was its emphasis on the Neomarxist or Neoweberian structural explanations of social processes and outcomes at the macro and meso levels. In the 1980s and 1990s, however, predominance of structural determinism was challenged by the new approaches that emphasized the role of human agency, cultural interpretations, and identity politics. A lively and extensive dialogue with these perspectives resulted in incorporation of a variety of institutionalist, rational choice, culturalist, feminist, and colonial/postcolonial perspectives in comparative historical analysis and inaugurated the "third wave" of comparative historical analysis. (Adams, Clemens & Orloff, 2005)[3]

This has also been the feature in many of the "new" historical schools that have emerged since the 1950s and 1960s. For example, the study of military history has been evolving ever since the Second World War, especially in the last four decades. Emphasis has been placed on a new set of problems, primarily concerning the ties between war — as well as the military establishment itself — and society. (Howard, 1972, Eloranta, 2002) A so-called "new military history" was greatly influenced by such similar movements as the new social history, new economic history and new cultural history. The main idea behind the new military history seems to be that there are numerous approaches available for a researcher of wars and conflicts, which may not necessarily produce identical results. Another characteristic of this research orientation is that it has not become a dominant part of the field of military history rather than a complementary, yet often vague set of interdisciplinary approaches. The viewpoints and methods involved have differed greatly, but this variety may prove vital in order to understand the different structures and elements of war and peace comprehensively. (See e.g. Paret, 1992, Harrison, 1996, Olábarri, 1995, Iggers, 1984, McCloskey, 1987) In turn, the "new economic historians", or cliometricians, have asked new kinds of questions and challenged long-held assumptions about historical events, such as the economic effects of slavery and the economic importance of railroads. They have brought modelling and quantification into the forefront of economic history analysis since the 1960s. (Eloranta et al., 2010) While new methodological and empirical applications have been at the heart of these "new" histories, most of them have also wholeheartedly embraced comparisons as a useful tool, although an intellectual gap often remains between those using large samples and quantitative methods and those engaged in in-depth historical case studies.

Rationale for and Limits of Small-N Case Studies

The comparative analyses involving two or several nations have varied in their designs. Skocpol and Somers (1980) highlighted three most common strategies of case-oriented comparative research. The first strategy involved engaging comparative history for the parallel demonstration of theory. In such research, social scientists selected a certain historical phenomenon and used several cases to examine how the phenomenon in question manifested itself in several nations.

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[3] It is worth mentioning that some analysts (e.g., Lange, 2013, Mahoney, 2006) resist calling this body of research the "third wave," placing rational choice, culturalist and poststucturalist studies outside comparative historical analysis.

The second strategy used comparative history for the contrast of the contexts. Researchers examined how a certain institution could acquire different forms in different societies. The third strategy utilized comparative history for macro-causal analysis. This strategy used historical evidence to identify specific causal conjunctures leading to substantively important historical outcomes. Working along these lines, social scientists produced numerous historically and comparatively grounded analyses of state formation, democratization, ethnic conflicts, economic development, welfare policies, revolutions, nationalism, social movements, race relations, gender regimes, neoliberalism, and globalization.

What are the potential problems in making such comparisons? Despite the impressive contribution of comparative historical analysis to the contemporary social sciences, its theoretical and methodological principles were challenged from several academic quarters. A number of objections was raised by empirically oriented social scientists engaged in quantitative research. Goldthorpe (1991, 1997), for example, noted that most of the comparative historical research is based on secondary evidence (i.e., texts written by historians). He warned that primary data from the past ("the relics") uncovered by historians may be insufficient for making valid inferences and that historians themselves differ in their interpretations of evidence. It is not clear, he noted, why historical sociologists preferred one historical interpretation in favor of another. (also see Lustick, 2006) Lieberson (1991, 1994) has scrutinized Mill's methods of agreement and difference used by comparative historical scientists in a critical fashion. He concluded that such methods utilized a deterministic approach rather than probabilistic one, assumed no error in measurement, postulated existence of only one cause and neglected interaction effects. These assumptions, he stated, were inappropriate since they contradicted a realistic appraisal of most social processes.

Another set of criticisms was formulated by the practitioners of an increasingly influential interdisciplinary perspective in social sciences known as the rational choice theory. Kiser and Hechter (1991, 1998) stated that that comparative historical analysis dispensed with general sociological theory and careful specification of social mechanisms in favor of ad hoc middle-range explanations prioritizing descriptive accuracy over scope and analytic power. By celebrating historical uniqueness of events and relying on vague "explanatory principles," comparativists construct tend to put forth arguments that are essentially untestable. As a remedy to liabilities of historicism, Kiser and Hechter suggested using an alternative, agent-based analytical framework with an arsenal of the universally applicable causal mechanisms developed within the rational choice theory.

Finally, some qualitatively oriented scholars had raised the issue of epistemological limits of comparative explorations that stem from the notion of incommensurability or impossibility of undistorted translation between texts and, correspondingly, cultures. (Keane, 2005, Povinelli, 2001) If we assume that social practices are meaningful, contextualized, culturally constructed and (wholly or partially) untranslatable, we may arrive to a natural inference that experiences and meanings of colonialism and post-colonialism, capitalism, democracy, and globalization would be radically different to representatives of different cultures and cognitively inaccessible to outside observers. For example, the investigator who asks in rural India "about equivalents of 'individuals,' 'social structures,' 'kinship,' 'classes,' 'statuses,' 'rules,' 'oppositions,'

'solidarities,' 'hierarchies,' 'authority,' 'values,' 'ideology,' 'religion,' 'purity,' etc., risks imposing an alien ontology and alien epistemology on those who attempt to answer." (Marriott 1990, 1-2, for a detailed discussion of incommensurability see Steinmetz, 2004)

In their responses to the criticisms, scholars who have practiced comparative historical research usually followed two general strategies. Firstly, some analysts contested claims of evidence-related problems and methodological imprecision implicated in their studies. Mann (1994) argued that macro-sociologists were well-equipped to deal with secondary evidence because they were guided by social scientific theories and knowledge of more than one society. Many of them, he added, did collect primary data in their studies. Calhoun (1996) noted that some important sociological phenomena occurred only in small number of cases that made it impossible to study them by most statistical techniques. Savolainen (1994) pointed out that "deterministic" case-oriented comparative research did not necessarily require the assumption that the outcome *had* to happen and, in contrast to quantitative research, allowed detailed contextualized examination of various causal configurations and interaction terms. Other scholars have gone beyond just countering criticisms. In order to formalize comparative analysis, Ragin (2000) elaborated on a fuzzy-set methodology, a promising strategy of research based on examining degrees of membership in well-defined sets of nations. (see also Pajunen, 2008) George and Bennett (2005) identified a strategy of exploring social mechanisms known as "process tracing." All these scholars advocated methodologically rigorous comparative analysis meeting the standards of the mainstream social science. (Also see Lange, 2013, Mahoney, 2004, Mahoney & Rueschemeyer, 2003, Mahoney & Villegas, 2007, and Slater & Ziblatt, 2013)

Other comparativists chose a different strategy. Instead of trying to move their field closer to the mainstream, they decided to examine the epistemological foundations of the critics' claims. Reacting to Kiser & Hechter's (1991) rational choice theorizing, Somers (1998) noted that their dissatisfaction with the comparativists' alleged neglect of social mechanisms is rooted in their own peculiar understanding of reality composed of discrete agents each endowed with the dispositional power of intentionality where causal mechanisms are seen as universalized patterns of decision-making that are derived a priori from *their* version of theory. In reality, agental intentionality is a variable rather than a constant whereas basic mechanisms of causality are in fact contingent and empirically variable situational arrangements that cannot be postulated a priori. (See also Stinchcombe, 1991)

Responding to Lieberson's (1991, 1994) rejection of small-N comparisons as intrinsically inferior and unscientific, Steinmetz (2004, 2005) had exposed the precarious methodological foundations of positivism in social sciences. According to him, methodological positivism rejects invocation of unobservable entities, assumes constant causal conjunctures of events, and postulates that social world can be studied in the same manner as the natural one. For Steinmetz, such assumptions are untenable. Comparative historical analysis insists on the variability of social-causal structures across time and space and thus rejects the assumption that social patterns are always universal. Shifting constellations of causal mechanisms rather than universal conjunctions, he contends, are the norm in open systems like society. (See also Sewell, 1996)

As for incommensurability concerns, comparative historical analysis acknowledges that social comparison necessarily involves interpretation and translation. Nonetheless, it should be wary with regard to both objectifying "third-person" comparison and "first-person" utterances. Claiming that studies of surface observables usually yield limited results, Steinmetz (2004) advocates comparison across theoretical mechanisms and underlying structural arrangements that may be utilized for juxtaposing events or societies that seem to have little in common at the empirical level. A comparative study of the communist revolutions of the first half of the twentieth century, which is reviewed below, provides an appropriate example of such research.

A War-Centered Theory of the Collectivist Regimes: A Comparative Historical Case Study

The dramatic experience of the communist modernization in the Soviet Union and the People's Republic of China has inspired generations of scholars. For years, social scientists tried to understand whether these momentous transformations were determined by long-term structural problems of these societies or came about due to unique combinations of contingent events. Historical narratives and sociological interpretations of communist revolutions pointed to a number of structural peculiarities of prerevolutionary development that directed Russia and China towards collectivism. Scholars argued that centralized semi-bureaucratic systems of authority combined with state-dependent gentry, weak bourgeoisie, century-old legacy of rural collectivism, and militant labor movement provided fertile grounds for the twentieth century experiments in collectivist revolutions. (E.g., Foran, 2005, McDaniel, 1988, Moore, 1966, Skocpol, 1979)

Recently, this argument has been challenged by a new set of ideas. A war-centered theory of the collectivist regimes has contended that neither Russia nor China had been predestined to the socialist/communist path of revolution. Economic backwardness, disarticulated social structure, and weakness of democratic institutions were common problems among many underdeveloped societies, especially new democracies. Few of them, however, had experienced cataclysms that resulted in establishing collectivist forms of social organization. Economic and political developments in Russia and China before the revolutions showed encouraging signs. It was the calamitous experience of total war against advanced industrial nations that destroyed the economies of these countries, paralyzed state authorities, and created opportunities for a takeover by the revolutionary state-builders. The processes of modernization in these countries became interrupted by the communist interlude. (Mann, 2012, Osinsky, 2008, Osinsky, 2010, Osinsky and Eloranta, 2014)

In its initial phase, a war-centered theory posited that (1) in a protracted modern war of coalition alliances, belligerent nations launched extensive programs of economic centralization; (2) measures of bureaucratic centralization were likely to be more extensive among the landlocked, interior states than the exterior, coastal states; (3) even far-reaching measures of total economic mobilization could not avert depletion of resources if an interior state was placed under conditions of blockade; (4) deprived of access to international markets, interior states experienced shortages of goods, social unrest, military setbacks, and, due to the combined effect of these conditions, state breakdown; (5) in some cases a total collapse of a central state authority unleashed coercive

redistributive action of the lower classes directed against the better-off groups and a wholesale nationalization of economic assets. A comparative analysis of the economic and political transformations in five nations (Austria-Hungary, France, Germany, Great Britain, and Russia) during the First World War has confirmed the war-centered argument. The exterior nations that maintained access to the world economy (France and Great Britain) survived the total war. The interior states (Austria-Hungary, Germany, and Russia) experienced a breakdown, in varying degrees. In Russia, where the old system of authority had become completely paralyzed, the state collapse resulted in massive redistribution of economic assets and institutionalization of the collectivist form of social organization (Osinsky, 2007).

The next step is to explain why a political collapse of Russia and Germany in the end of the First World War resulted in the ultimate victory of the radicals (the Bolsheviks) and massive expropriation of private property in Russia and in the victory of the moderates (the Social-Democrats) and consolidation of private property in Germany. It was striking how similar revolutionary processes have been in these two countries. However, a careful examination of political dynamic of the post-imperial transitions has allowed us to identify the primary source of divergence: the different measure of coercive capacities of the provisional governments and, consequently, their different ability to withstand the assault of the radical left during the periods of turbulent political transitions. The measure of coercive capacities was determined primarily by support of the army, which, in turn, was contingent upon the provisional governments' decisions to negotiate peace and exit the war. The Russian Revolution of 1917 could have been avoided, had Russia's provisional government ended its participation in war and began the process of social reforms (like it happened one year later in Germany). (Osinsky, 2008)

How does the experience of the Chinese revolution fit into the war-centered theory? Once again, our research points to the centrality of war in creating structural conditions of the revolution in this country. The War against Japan (1937-1945) critical for creating these conditions. First, this war brought in an economic catastrophe in China. The rural economy, undermined by recruitment of man- power, unbearable taxes, and natural disasters, experienced deep crisis. Because the government subsidized its war effort by printing currency, the large amount of money in circulation caused hyperinflation. Second, these dire economic conditions had eroded the small constituency supportive of the Kuomintang (KMT) rule. Chiang Kai-shek alienated the Chinese urban working class during its bloody suppression of the labor movement in the late 1920s and early 1930s. The government antagonized the peasantry, the largest group of the population, by its ruthless recruitment and requisitions campaigns during the war against the Japanese. After the war, the government lost support of the urban middle class, the traditional stronghold of the KMT, which bore the primary burden of inflation. Third, the war undermined the KMT's dominant position in Chinese politics. Even before the war the KMT's administrative grasp was tenuous, particularly at the local level. The Japanese destroyed the KMT's bureaucratic structures and, because the occupiers themselves were not able to penetrate the depth of the society, created a power vacuum underneath their major administrative outposts. The Communists filled the vacuum of authority at the grassroots level and gained support of the masses by providing public goods and benefits. When the KMT, weakened by the war, tried to recover the country after Japan's defeat, Communists had already secured support in many local areas throughout the country.

Finally, the war changed the global geopolitical environment. In the final phase of the war the Soviet Union joined the conflict and occupied Manchuria in August 1945. Protected by the Red Army, the Communist troops poured into Manchuria and took over administration of major cities and towns. (Osinsky, 2010)

Taking power amidst a political turmoil was an obvious achievement for the radicals but defeating enemies in a civil war was even more surprising accomplishment. In our recent article "Why Did the Communists Win or Lose? A Comparative Analysis of the Revolutionary Civil Wars in Russia, Finland, Spain, and China" we examined four civil wars of the first half of the twentieth century. (Osinsky & Eloranta, 2014) Consistently with the war-centered theory, we found out that victories of the revolutionaries in the civil wars in Russia and China became possible under two conditions: breakdown of state authorities during the mass mobilization wars and, in addition to that, existence of an unresolved agrarian problem in the countryside. A protracted mass mobilization war undermined national economies, created massive social dislocations, increased class polarization, and generated mass protests from below. A defeat in such a war delegitimized the existing state authorities and other institutions of the dominant class. In some cases, such as Russia (1914-1917) and China (1937-1945), war resulted in either disintegration or serious weakening of the core institution of the state, the army. In such situations, the radical socialist parties, the marginal political groups in the beginning of war, were able to gain massive support among the poor classes and rise to the position of the primary contenders for authority. In their bid for state power, the revolutionary actors relied, in a most direct and immediate way, on thousands of the rank-and-file soldiers who had been mobilized for combat. The experience in war provided them with the indispensable skills of coordinated action, strict discipline, endurance, and knowledge of how to use arms. In Russia and China, large revolutionary armies, integrated by the centralized command, military discipline, and political guidance, were able to defeat the counterrevolutionary forces.

In the absence of a prior world war and social dislocations caused by it, the dominant class was able to suppress the popular radical movements. The Spanish Civil War provided a vivid example of successful counterrevolutionary mobilization led by General Franco. Despite the fact that the Popular Front government enjoyed popular support, both in the cities and the countryside, it was not able to create a military force that could match the nationalist troops. Politically, the Popular Front remained fragmented into a number of political parties and trade union confederations, each with its own armed militia. The Republican forces fought heroically but had been weakened by low centralization, poor discipline, and lack of military experience.(Osinsky & Eloranta, 2014)

Fragmentation of armed forces due to defeat in war was a necessary but not a sufficient condition. Even in the most extreme cases of the military-political disorganization, such as Russia's breakdown in 1917, the ruling class was able to gather and deploy troops to combat the radical challengers. Most of the urban middle classes, socially and politically associated with the old order, supported the counterrevolutionary forces. If the revolutionaries failed to forge a major military force, they would have been defeated. The only social class which could help radicals in this critical moment was the peasantry. The possession of land was a life-and-death issue in many peasant societies. If distribution of land was manifestly inequitable, like in Russia and China, there would be a strong potential for redistribution of land and peasants' support for a revolution. If, on

the contrary, a land issue was not *the* major social problem, the smallholders would either stay neutral or lend their support to the counterrevolutionary forces. In Finland, the urban-based radicals had little to offer to the peasant farmers as whole, since a third of them already owned their land, and the more affluent farmers did not see any reason to support the radicals. Although many agricultural workers and crofters did join the revolutionaries, the massive social support for radical policies failed to materialize in the Finnish countryside.(Alapuro, 1988)

In general, neither the Russian revolution nor the Chinese revolution may be understood properly outside the context of the mass mobilization wars of the first half of the twentieth century. In either country, war and a subsequent revolution should be viewed as one continuum of crisis. (Holquist, 2002) The fact that the socialist/communist organizations operated in predominantly rural societies turned to their advantage and provided them with a unique social ally. Politically and ideologically, these transformations were far from being peasant revolutions. The struggle was directed by the political actors whose ultimate goals were alien to most peasants. But the peasants were not bystanders either. Once they benefited from the revolutionary policies, such as redistribution of land and liberation from their old oppressors, the farmers would defend their gains and support their benefactors. In this way, the peasantry became the political force whose aggregate choice tipped the power balance in favor of the revolutionary contenders. (Osinsky & Eloranta, 2014)

In sum, we have here brought forward, albeit in a contracted form, a rationale and framework for studying communist (or socialist) revolutions in the first part of the 20th century. While we can infer a lot from in-depth case studies such as those reviewed here (and our other published work on the topic, featuring more depth), we argue that a large-N study of these revolutions, featuring time and cross-section data and quantitative applications, would surely enrich our theory further. However, such analyses have not been performed yet, mostly due to data limitations.

Rationale for and Limits of Large-N Quantitative Comparative Research

As we have already argued, both small-N and large-N approaches have their own merits and problems. Often the dichotomy between small-N qualitative case studies and large-N, statistical studies is overstated.(Jordan et al., 2011, Mahoney and Goertz, 2006) Essentially, they follow the same underlying logic of research. The best way to avoid the pitfalls of each is to engage in both, or combine the strengths of each approach. However, large-N quantitative comparative studies have their own unique advantages. First, they allow rigorous testing of social science theories about broad cross-societal patterns. Second, they provide opportunities for the testing of alternative explanations. Third, they allow to explore causal relationships among large sets of variables. (See e.g. (Barro and Sala-i-Martin, 1992, Barro et al., 1991, Sala-i-Martin, 1996a, Sala-i-Martin, 1996b) One way to improve those types of analyses, especially the lack of long-run data, has been to use panel data sets, which combine both time series and cross-sections. These types of studies have become common place in social sciences, and there have been numerous recent methodological advances. We now know, for example, that if the panel sample to be analyzed has a larger N than the time period, scholars should use panel-corrected standard errors to avoid measurement errors in regressions, and so on.(Beck, 2001, Beck and Katz, 1995, Plümper et al., 2005)

One of the solutions has been to apply the so-called Qualitative Comparative Analysis (QCA) methodology. The QCA procedure starts by examining all the possible combinations of variables and analyzing which combinations are the most meaningful, often via analysis of the inherent starting conditions via theoretical assumptions. The theoretical framework is a crucial building block of the process. The next step is a minimization process, during with the most meaningful causal relationships are analyzed. QCA techniques can make use of small datasets, with for example dummy variables, while exploring complex causal chains.(Berg-Schlosser et al., 2009, Masue et al., 2013) Newer applications of QCA use the so-called fuzzy sets, wherein a particular facet or condition may be party present or absent using continuous base variables that do not need to be dichotomized, depending on the environment.(Järvinen et al., 2009, Ragin, 2008, Ragin, 2009, Thiem and Duşa, 2013) Given that this approach is still fairly new, there is considerable debate over what "good" QCA is and over the new analytical techniques.(See e.g. (Schneider and Wagemann, 2010)

Among historians, the most eager users of large-N techniques have been among economic historians. In fact, the theoretical and even methodological impact of the cliometric approach to economic history, embodying the application of economic theories and the use of quantitative methods has been widely recognized since the 1950s and 1960s. (Lyons et al., 2007, Whaples, 1991, Whaples, 1995, Whaples, 2002) The "new economic historians" have proceeded to ask new kinds of questions and challenged long-held assumptions about historical events, such as the economic effects of slavery or the economic importance of railroads. They brought modelling and quantification into the forefront of economic history analysis. In particular, cliometrics made a breakthrough in the United States, saturating economic history journals in the 1970s and 1980s. Conversely, in Europe cliometrics has enjoyed less success, although in the 1990s and early 2000 a new crop of European economic historians began to show greater appreciation of these methods. (Cipolla, 1991, Cole, 1968, Cole, 1974, Kindleberger, 1990, McCloskey, 1978, McCloskey, 1987, Tilly, 2001)

In general, large-N studies are ubiquitous among social sciences nowadays. Moreover, historians now have unique opportunities in exploring new historical datasets, new time series and panel data techniques, and take advantage of the quick advances in computing power. Large-N studies can shed light on many topics that have not been analyzed in this fashion before. For example, databases such as Richard Bonney et al.'s *European State Finance Database* (http://www.esfdb.org/) and Peter Lindert et al.'s *Global Price and Income History Group* (http://gpih.ucdavis.edu/) offer unique opportunities to study earlier periods in history. Here, however, we will not explore a "true" large-N study rather than the limits of data that is in the form of cross-sections and short time series. We will argue, similar to QCA (while not applying the techniques), that there is something to be learned from smaller datasets too, but only when those insights are connected to deeper case studies. Qualitative and quantitative methods need not be exclusive, and are in fact in many ways similar.(See e.g. Seawright, 2005 on comparisons of QCA and regression analysis)

Evolution of Democracies and Military Spending: Case of Interwar Military Spending

The evidence and debates surrounding the concept of democracy as well as democratic transitions in general have been abundant and, occasionally, disparate. According to one of the key contributors, Samuel Huntington (1991), democratic transitions have taken place in three long waves in the last two hundred years: 1) 1828-1926, a long, slow wave; 2) 1943-1964, a post-conflict wave influenced by the Allies' victory; 3) post-1974 period, following the end of Portuguese authoritarianism. (Huntington, 2012) Between these periods, reversals of these patterns did great harm to democratic values and institutions (Diamond and Lipset, 1995). In any event, the number of democracies has been growing quickly in the last couple of decades, possibly having initiated a fourth wave.

The majority of political regimes in the late nineteenth and early twentieth century had little in common with modern liberal democracies. That is why it is important to study the process of democratization, the dynamics of this change, in a historical perspective, especially the roots of these processes before the Second World War. However, one should be conscious of the fact that the standards for characterizing the process of democratization now and then are hugely different. This is one of the reasons why there has been little reliable data on the economic and societal aspects of regime shifts with respect to the early rise of democracy in Europe, the United States, and other parts of the world.

Here we want to look at this via the impact that democracy had on the fiscal behavior, particularly military spending, of states in the interwar period. It has been suggested both theoretically and empirically in conflict studies that democracies do not fight each other. This framework has often been coined "the democratic peace" argument. While there is a great body of research supporting this notion, there is much less agreement on the theoretical causes of this phenomenon.(De Mesquita et al., 1999, Desposato et al., 2013, Gates et al., 1996, Gowa, 2011, Harrison, 2010) In essence, the explanations can be divided into two variants: 1) The political culture of a democracy imposes the same norms to conflict resolution which are characteristic of its domestic political processes (=the normative explanation); 2) The democratic political structure, with its built-in decision-making constraints, makes it difficult for democratic leaders to move their countries into war (=the structural explanation).(Russett, 1993) The latter argument has been developed further by, for example, Michelle Garfinkel, who argues that electoral uncertainty associated with competition between political parties imparts a negative bias on the nation's military spending.(Garfinkel, 1994)

Mark Harrison and Nikolaus Wolf have examined this issue from a long-run perspective in a recent article.(Harrison and Wolf, 2011) In general, of course, the topic of so-called democratic peace, implying that democracies do not fight one another, is vast and very interdisciplinary.(see e.g. Choi, 2011, Dafoe and Russett, 2013, De Mesquita et al., 1999, Gowa, 2011, Russett, 1993) Harrison and Wolf argue that this widely accepted thesis may not hold always, especially when analyzing the development of states from 1870 onwards. They claim that trade and democracy do not always work to prevent conflicts, but can in fact lead to increasing the capacity for war and the frequency of conflicts.(Harrison and Wolf, 2011) This entry has inspired some debate over the legitimacy of the democratic peace concept.(Gleditsch and Pickering, 2014, Harrison and Wolf, 2014, Eloranta et al., 2014, Pilster and Böhmelt, 2012)

The era of world wars was, as we have already indicated, a period of tremendous political and economic upheaval. For example, the First World War introduced sweeping political changes for the Western European states. One of the most important reforms brought on by the war — due to especially the necessity of maintaining public support for the massive, usually not preplanned, government spending during the war — was the extension of the voting franchise, also to include women in many countries.(Eichengreen, 1992, Eloranta, 2002, Simmons, 1997) The interwar period political climate of at least Denmark, Finland, the Netherlands, Norway, Sweden, and the United Kingdom was surely influenced by the existence or introduction of universal adult suffrage. Even in the other cases the extension of the franchise as a percentage, compared to the pre- First World War period, was quite apparent. The percentage of population over 20 allowed to vote remained, however, below 50 per cent in the countries that did not have universal adult suffrage. In the Swedish case, the first election under the universal adult suffrage in 1921 brought 87.9 per cent of the age group the right to vote.(Flora, 1938)
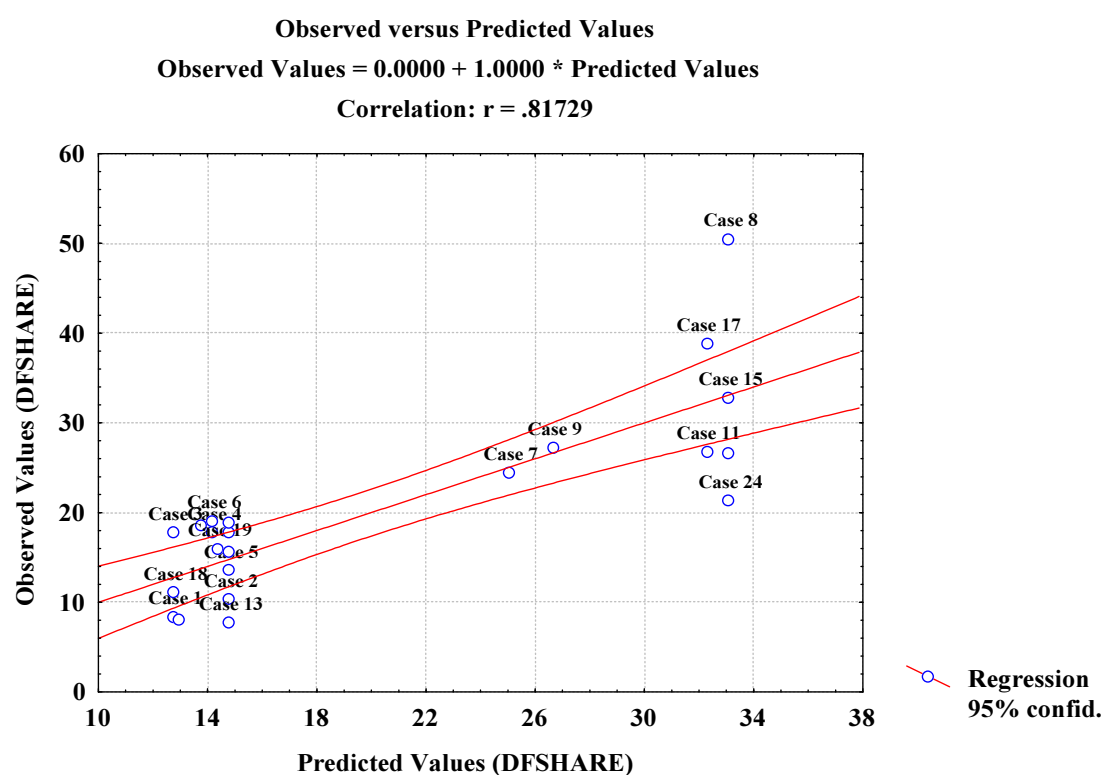
As Juan J. Linz has argued convincingly, a simple dichotomy between democratic and authoritarian (or nondemocratic) regimes is not adequate, especially for empirical purposes. Here we will apply the concept of totalitarianism —referring to some of the most oppressive regimes of the 20th century such as Nazi Germany and Stalin's Soviet Union by Hannah Arendt initially — to describe certain types of extreme forms of authoritarianism in the interwar period.(Linz, 2000) Authoritarian regimes (=autocracies) in turn, imply limited political pluralism, no elaborate or guiding ideology, lacking extensive ability to instigate political mobilization. (Eloranta, 2002, Lee, 2008) We argue that, depending especially on the degree of centralized rule, the variants of authoritarian influence on military spending decision-making should emerge. Quite similar to Linz, we would not refer to Fascist Italy as a totalitarian state, at least until Mussolini was able to consolidate his power in the late 1920s. Moreover, Fascist Italy never achieved such a degree of totalitarianism as for example Nazi Germany.(Linz, 2000, Linz and Stepaan, 1978) Thus, a roughly three-way definitional scheme is adopted here to describe the interwar regimes: democratic, authoritarian, totalitarian. Additionally, the three regime types were either stationary (more or less) or transitional (passing from one category to another in the Polity IV scale) during this period.

What can we conclude from the figures on democracies? Firstly, it seems that there were less than ten democracies, in the modern sense of the word outlined above, in the world before the First World War.(Russett, 1993) Secondly, the number of democracies either doubled or tripled, depending on the series used, by 1920. Thirdly, the 1920s seems to have been the zenith of the democratization process, at least until the latter part of the 20th century. Fourthly, the number of democracies declined again significantly in 1930s.(Jaggers and Gurr, 1995) Thus, roughly this outline seems to agree with the story emerging from the extension of the franchise and voting behavior.

The Polity indices can be used in quantitative applications to differentiate between the levels of democracy achieved — excluding such a weighted impact of the franchise as suggested above — and the types of regimes experienced by the countries in question. Here we will, for example, characterize the larger sample (for the period 1920-1938, based on data availability explained in (Eloranta, 2002)) used in some of the comparisons in the following manner: ten *democracies*,
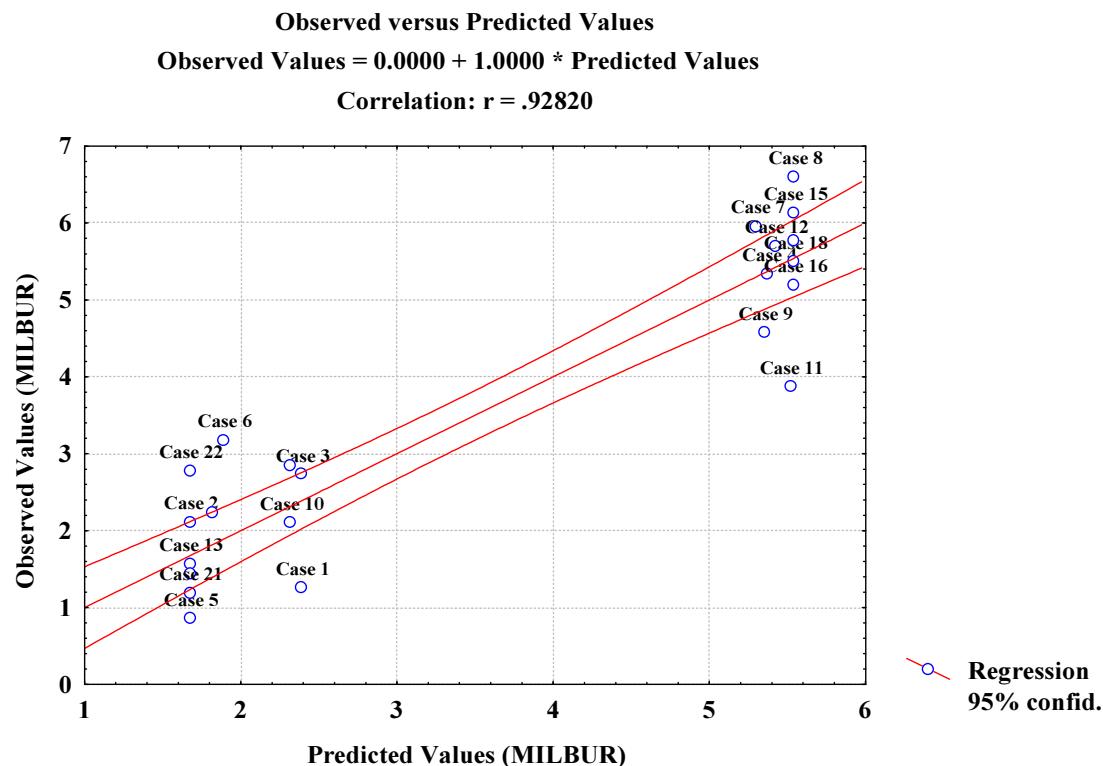
defined as achieving at least a score of six out of ten in the Polity IV democracy index for the whole period (Belgium, Denmark, Finland, France, the Netherlands, Norway, Sweden, Switzerland, the United Kingdom, and the United States**)**; three *transitional democracies*, defined as fluctuating above and below the score of six in the democracy index (Spain, Portugal, and Austria); and four *transitional or stable autocracies* (defined as either maintaining their levels of authoritarian or limited democracy regimes and/or becoming even more repressive), resulting in an autocracy score of at least three (Germany, Italy, Russia/USSR, and Japan). Of the last mentioned, Germany under Hitler and the USSR under Stalin can further be distinguished as totalitarian states.

Figure 1. Defense Shares (=Military Expenditures as a Percentage of Central or Federal Government Spending) of Twenty-four Countries Regressed against Their Respective Levels of Democracy, 1935

Sources: see Eloranta (2002), Appendices, Appendix 2 for details. Case 1=Austria; Case 2=Belgium, Case 3=Bulgaria; Case 4=Czechoslovakia; Case 5=Denmark; Case 6=Finland; Case 7=France; Case 8=Germany; Case 9=Greece; Case 10=Hungary; Case 11=Italy; Case 12=Japan; Case 13=the Netherlands; Case 14=Norway; Case 15=Poland; Case 16=Portugal; Case 17=Rumania; Case 18=Russia/USSR; Case 19=Spain; Case 20=Sweden; Case 21=Switzerland; Case 22=the United Kingdom; Case 23=the United States; Case 24=Yugoslavia. Independent variable: individual level of democracy, measured by the Polity IV index. Model: piecewise linear regression with breakpoint.

Figure 2. Military Burdens (=Military Expenditures as a Percentage of GDP) of Twenty-four Countries Regressed against Their Respective Levels of Democracy, 1935

Observed versus Predicted Values

Observed Values = 0.0000 + 1.0000 * Predicted Values

Correlation: r = .92820

Sources: see Eloranta (2002), Appendices, Appendix 2 for details. Case 1=Austria; Case 2=Belgium, Case 3=Bulgaria; Case 4=Czechoslovakia; Case 5=Denmark; Case 6=Finland; Case 7=France; Case 8=Germany; Case 9=Greece; Case 10=Hungary; Case 11=Italy; Case 12=Japan; Case 13=the Netherlands; Case 14=Norway; Case 15=Poland; Case 16=Portugal; Case 17=Rumania; Case 18=Russia/USSR; Case 19=Spain; Case 20=Sweden; Case 21=Switzerland; Case 22=the United Kingdom; Case 23=the United States; Case 24=Yugoslavia. Independent variable: individual level of democracy, measured by the Polity IV index. Model: piecewise linear regression with breakpoint.

We first wanted to see, based on Eloranta (2002), if the democracies and possibly some of the less authoritarian regimes differed from the more authoritarian/totalitarian regimes. Thus, we regressed the individual country defense shares and military burdens against their respective levels of democracy measured by the Polity IV indices. That we are using only cross-section years, we were able to expand the sample even further. Of particular interest are the groupings for the cross-section year 1935[4], in the midst of the rearmament surge. Again, there seemed to be roughly two groups of countries based on their defense shares and the levels of democracy in 1935: the low-spending and the high-spending group. There was quite a bit of dispersion among the high-spending group (see Figure 1), which consisted of France, Germany, Greece, Rumania, Poland, Italy, and Yugoslavia. All but France were authoritarian regimes to some degree. The results on the military burdens were by and large similar. The high-spending group, however, was much more uniform

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[4] The cross-section figures for years 1925 and 1930 can be found in Eloranta (2002), Appendices, Appendix 4.

and consisted of more nations. Included were Germany, Poland, France, Japan, the USSR, Czechoslovakia, Portugal, Greece, and Italy. Only France and Czechoslovakia represented democracies in this group. The five countries that were in the high-spending group in terms of both the military burdens (Figure 2) and the defense shares were Germany, Poland, France, Greece, and Italy. Thus, clearly the impact of the German threat was paramount in explaining the French military spending patterns. Also, it seems likely that both Germany and Italy achieved the level of centralization of authority required to spend heavily on military purposes.[5] Nonetheless, the inferior quality of the data for some of these countries has to be taken into account.

More convincing evidence must, nonetheless, be mustered to prove the validity of this notion. Thus, we decided to use Chow-tests to detect for structural breaks in the time series. Based on such exercises it might be possible to detect structural changes, yet it is also essential to determine the kind of change that took place. Furthermore, it is possible to evaluate the structure of a sample and the impact of the change by employing standard statistical tests as well as the so-called dummy variable approach across a sample of states. Firstly, we should assess the structural qualities of the military spending series used here. Most of the series were found to be stationary, which could influence the time series results, and the panel series tests indicated stationarity. The military spending data of fourteen states, ones with the most reliable data according to Eloranta (2002), was first tested for a breakpoint — with nominal ME and military burden, separately, as regressands, and nominal GDP (or GNP) and GDP per capita as regressors —using the Chow breakpoint test for the years 1929, 1930, and 1931, with the assumption that the onset of the Great Depression and the disruptions in trade and international relations that followed caused changes in the military spending patterns of European democracies. The Chow breakpoint test is designed to fit the equation separately for each subsample and to see whether there are significant differences in the estimated equations.[6] A significant difference indicates a structural change in the relationship. The Chow breakpoint test is based on a comparison of the sum of squared residuals obtained by fitting a single equation to the entire sample with the sum of squared residuals obtained when separate equations are fit to each subsample of the data, using the standard F-distribution. Additionally, a log likelihood ratio statistic was calculated, based on the χ^2 distribution. Both have no structural change as the null hypothesis.[7]

The results of the Chow breakpoint tests pointed again to different directions, both among democracies and between the two different dependent variables. In the cases of Finland, France, Italy, Japan, Sweden, and the UK, it is feasible to suspect that the military spending series of the 1920s and 1930s were structurally different. However, it is likely that the sample size, specification errors, and unit roots in the equations also had an impact on the results. Thus, as we are especially interested in the differences between democracies and the non-democratic regimes in the sample, one should try to estimate the possible timing of the break. One possibility is to use a one-step

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[5] The case of the USSR does not fit the pattern in this manner, yet one has to take into account the unique structure of its central government spending behavior. Thus, the defense share may be poorly representative of its military spending capabilities.

[6] Note: here the regressions were corrected for autocorrelation and/or heteroskedasticity. Also, the variables were not differenced even if unit root tests failed to reject the null, given the weak nature of the evidence.

[7] Rejection of the null was accepted if both statistics indicated it (α=0.05).

Chow forecast[8] test, in which each recursive residual is the error in a one-step ahead forecast. To test whether the value of the dependent variable at a particular year might have come from the model fitted to all the data up to that point, each error can be compared with its standard deviation from the full sample. Here we are particularly interested in the possible dating of breaks in the military spending series of the non-democratic regimes.

First, however, we need to consider when the authoritarian phase actually began. For example, in the Italian case, there are several possible choices for the dating of the beginning of the Fascist period. The first is October 1922 when the Fascists marched to Rome under Mussolini's leadership (although he did not participate in person) and he was appointed prime minister. However, Mussolini did not ultimately win his fight with parliamentarism and the political parties until 1925—1926, to become *il Duce* of Italy. From the point of view of public finances, the budget year 1924—1925 marked the return to a balanced budget, after serious public spending cuts had been implemented.(Eloranta, 2002, Zamagni, 1993) Thus, here we decided to compromise and follow Banks (1976) to consider the year 1924 (also the year of last elections) as the first year of authoritarian rule, especially from the perspective of public finances.[9] We tested test both Italian military spending series (defense share and military burden) for structural breaks, and then did the same with the Portuguese and the Spanish data.

One-step Chow tests on the Italian defense share and military burden pointed towards different conclusions. Whereas the defense share, respective of economic development, did not seem to reveal structural changes in the period, the one-step Chow tests on the military burden indicated breaks in 1936 and 1937. This result is not surprising for the mid-1930s, since the Italian military spending grew strongly as a result of Italy's colonial adventures. Although the results were not exactly the same for both series, it is possible to suspect that at least one structural break took place in the mid-1930s. These results have to be, of course, treated with a degree of caution. The choice of the military spending series to be used has a large impact on the findings.(Eloranta, 2002) In comparison, for example in the Portuguese case, the results are not as straightforward to interpret. In Portugal, the period starting from 1926 until the 1974 could be characterized as authoritarian period, with Salazar *gradually* becoming the dictator after his nomination as prime minister in 1932.

The one-step Chow tests implied structural breaks in 1927 and 1935 for the Portuguese series, suggesting a possible change in the statistical relationship. The latter year is more probable as a breakpoint, perhaps resulting from Portugal's rearmament and the changed international climate. In the Spanish case, Primo de Rivera's dictatorship 1923-1930 did not seem to have any structural effect on either of the military spending variables.(Eloranta, 2002) All in all, there is some evidence that the structural changes in these three countries' military spending behavior were not caused by the regime shift. Therefore, these authoritarian regimes, perhaps also including Fascist Italy, were not able to achieve such sweeping centralized powers required to undertake massive arms

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[8] The Chow forecast test estimates the model for a subsample comprised of the first set of observations. The estimated model is then used to predict the values of the dependent variable in the remaining data points. A large difference between the *actual* and predicted values casts doubt on the stability of the estimated relation over the two subsamples.
[9] Dummy variables, based on Banks (1976), were assigned to equal one for the years of non-parliamentary rule in the dummy variable regressions.

buildups. Compared to for example Germany and Japan, the Italian military burden in the late 1930s was quite meager, as seen in the previous chapter.

The results of these statistical tests are inconclusive, however, due to the small sample bias, yet suggestive nonetheless. The larger the N, the more robust the results become. Nonetheless, based on the unit root tests and breakpoint tests, it seems that some of the states endured structural changes in their military spending behavior during this time period. In fact, there are statistical techniques to overcome small sample problems. Most of those that did experience such changes in their spending behavior were authoritarian nations. For example, did the authoritarian regime shift increase military spending? Or, did authoritarian nations as a whole spend more than democracies?

Table 1. Spearman Rank Correlations on the Relationship between Military Spending Variables and Levels of Democracy across a Cross-section of Twenty-four Countries, 1925, 1930, 1935

Cross-section Year	Variables	N	Spearman R	p
1925	MILBUR, DEMOC	22	-0.45	0.04
1930	*MILBUR, DEMOC*	24	-0.43	0.04
1935	MILBUR, DEMOC	24	-0.56	0.00
1925	DFSHARE, DEMOC	24	-0.10	0.64
1930	DFSHARE, DEMOC	24	-0.08	0.71
1935	DFSHARE, DEMOC	24	-0.36	0.09
1925	MILBUR, DEMDUM	22	-0.42	0.05
1930	MILBUR, DEMDUM	24	-0.53	0.01
1935	MILBUR, DEMDUM	24	-0.45	0.03
1925	DFSHARE, DEMDUM	24	-0.17	0.43
1930	DFSHARE, DEMDUM	24	-0.26	0.22
1935	DFSHARE, DEMDUM	24	-0.30	0.16
1925	MILBUR, AUTOC	22	0.50	0.02
1930	MILBUR, AUTOC	24	0.50	0.01
1935	MILBUR, AUTOC	24	0.45	0.03
1925	DFSHARE, AUTOC	24	0.23	0.27
1930	DFSHARE, AUTOC	24	0.28	0.18
1935	DFSHARE, AUTOC	24	0.33	0.12
1925	MILBUR, AUTDUM	22	0.39	0.08
1930	MILBUR, AUTDUM	24	0.49	0.02
1935	MILBUR, AUTDUM	24	0.51	0.01
1925	DFSHARE, AUTDUM	24	0.24	0.25
1930	DFSHARE, AUTDUM	24	0.33	0.11
1935	DFSHARE, AUTDUM	24	0.43	0.04

Sources: see Eloranta (2002), Appendices, Appendix 2 for details. **MILBUR**=military burden; **DFSHARE**=defense share; **DEMOC**=level of democracy, measured by the Polity IV scale; **DEMDUM**=democracy dummy, set to 1 when the level of democracy measured by the Polity IV scale is six or more, otherwise 0; **AUTOC**= level of democracy, measured by the Polity IV scale; **AUTDUM**=autocracy dummy, set to 1 when the level of autocracy measured by the Polity IV scale is three or more.

It is possible to assess the size and significance of the impact of regime type on military spending better among a group of countries in a cross-section by utilizing nonparametric statistical tools. As seen in Table 1, there seems to be quite clear support for the idea that the level of authoritarian rule increased the respective military burden for the country in question. The more repressive a regime was, the more of its economic resources it allocated for its defense throughout the period. Equally, a threshold level of authoritarian rule (here: three on the Polity IV scale) seemed to be required for a country to behave in such a manner.

Moreover, it seem that the less oppressive autocratic regimes were unable to concentrate any more resources for military purposes than the democracies. This was confirmed with the democracy dummy results as well. Moreover, this was the conclusion emerging from the preceding analyses of the structural characteristics of the time series. Furthermore, the more democratic a regime was, the less of its economic resources it allocated for military purposes; although this can only be confirmed for 1935: Democracies were slow to rearm in the 1930s, at least in comparison with the strongly authoritarian regimes.

In order to provide further support for these findings, given the relatively small sample, we can also utilize the same cross-sections as above by using the dummy variable approach suggested by, among others, Gujarati (1995). The dummy variable approach is simple and intuitive. For estimating the relationship between military spending (for example, military burden as the dependent variable) and economic development (real GDP per capita as the independent variable), one would also include an intercept dummy D_1 and a slope dummy $D_1 \cdot INCOME$ in the regression.

$$ME_{it} = \beta_1 + \beta_2 D_{1it} + \beta_3 INCOME_{it} + \beta_4 (D_{1it} \cdot INCOME_{it}) + u_{it} \tag{1}$$

in which D_1 is either the democracy or autocracy dummy mentioned in the table above. *ME* is either the defense share or the military burden; *INCOME* equals real GDP per capita. β_1 is the intercept of the original equation (covering the whole time period); β_2 indicates the significance of the change in the intercept in the period affected by the dummy (i.e., the whole intercept, if both β_1 and β_2 are found to be statistically significant with standard t-tests, for the non-democratic period is $\beta_1 + \beta_2$); β_3 is the coefficient of the *INCOME* variable for the whole period; and β_4 is the differential slope coefficient in the period affected by the dummy (i.e., $\beta_3 + \beta_4$ if they are both found to the statistically significant). Individual country cases discussed in Eloranta (2002) supported the idea that regime shifts towards more authoritarian rule occurring in more authoritarian countries such as Italy and Japan produced structural changes in a different manner than for, for example, Portugal and Spain.

For the three cross-section years utilized before - 1925, 1930, and 1935 - the results (Table 2) arising from the analysis are quite clear. Firstly, the inclusion of Portugal and/or Spain in the democratic "camp", despite apparent authoritarian rule, seemed to improve the coefficient estimates. Second, the earlier findings about democracies spending less seem to have merit on the basis of the dummy variable estimates. For example, whereas the regression line for autocracies (including Spain) in 1925 had, if we account only for statistically significant variables, an intercept of –0.91 and slope intercept of 0.42; thus, as economic resources increased also their military

spending increased. In contrast, the intercept for democracies was 2.77 and the slope intercept was –0.72, indicating decreasing ME as the level of economic development increased.

Table 2. Impact of Regime Type on the Military Burden across a Cross-section of Twenty-four Countries, 1925, 1930, 1935

Year	Independent Variable	Intercept	Dummy Variable	Real GDP per Capita	Slope Dummy
1925	MILBUR	1,62**	AUTOC: 0,15*	-0,39*	-
1925	MILBUR	2,77***	†AUTOC: -3,67**	-0,72***	1,14***
1930	MILBUR	0,15	DEMOC: 2,31*	0,09	-0,72**
1930	MILBUR	-0,11	†DEMOC: 2,98**	0,17	-0,90***
1935	MILBUR	1,02	DEMOC: 3,73*	-0,13	-1,10*
1935	MILBUR	0,91	†DEMOC: 3,53**	-0,10	-1,04**

Sources: see Eloranta (2002), Appendices, Appendix 2. Real GDP per capita from Maddison 1995. Slope dummy, with dummy variable times real GDP capita. * = null hypothesis of zero coefficient rejected at 10 per cent level; ** = null rejected at 5 per cent level; *** = null rejected at 1 per cent level. All variables in logs. Differencing as in Eloranta (2002) (to avoid potential spurious regressions. *Note*: †=Portugal and/or Spain included in the democracy group in the dummy, despite having a three or more in the Polity IV autocracy index. Only the best outcome is listed in the table.[10] (See also Godfrey et al., 1988)

All in all, the results of the various inquiries in this section and Eloranta (2002) suggest the following: 1) Democracies were different from autocracies, relative of income, in their military spending behavior; 2) Less authoritarian regimes were more like democracies than autocracies in their military spending behavior; 3) Increased centralization and repression in an autocracy, emerging through the autocracy index, implied higher military spending; 4) A shift towards an authoritarianism had an impact on the country's military spending only when a centralized form of authoritarian rule was consolidated, resulting in a structural break in the time series; 5) The more democratic a regime was, the less of its economic resources it dedicated for military purposes; 6) The more repressive a regime was, the more of its economic resources it dedicated for military purposes; 7) Democracies spent less of their economic resources on defense as their level of development increased; 8) Autocracies spent more of their economic resources on defense as their level of development increased.

These results have to be taken with a grain of salt, however, due to the small sample problems involved in these exercises. However, here we have mainly dealt with data that still exhibits some of the small N problems, although we were still able to do quantitative testing with the data. The next step to improve the results and introduce other variables would be to testing with panel data, i.e. data that has both the cross-section and time series dimensions. Some of these ideas were explored in Eloranta (2002), and would require much more space than we can dedicate here. Moreover, these results are not conclusive since we did not engage in qualitative analysis of the political economies in question, which would flesh out some of the idea better, for example when

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[10] The results passed the LM serial correlation test. The Breusch-Godfrey LM serial correlation test is used to test the null hypothesis that there is no serial correlation up to lag order *p*, where *p* is a pre-specified integer. In addition, the so-called Q-statistics were used. Also, an AR(1) term was included in some of the equations.

authoritarian nation becomes one that spends more on their military than other regimes.(See e.g.Eloranta, 2002, Eloranta, 2009)

Conclusion: Towards a Framework for Effective Historical Comparison

Typically the most cited and read contributions of historical analysis employ a wide range of methods and sources to make the comparisons meaningful and informative. They utilize both qualitative, historical comparisons of various institutions and policies as well as quantitative approaches to analyzing the development of the societies or groups in question. Thus, the comparisons are strengthened by going beyond the historical narratives, even if the focus is still on small-N type comparisons. In fact, the strength in these comparisons is the use of historical time series, to reveal the longer-run dynamics of change and continuity. We would argue that good quantitative study of history is very similar to qualitative scholarship, and both methods can support one another if used properly. The basic principles in good historical comparisons include: 1) critical use of primary and secondary sources, and systematic and transparent application of said sources; 2) framing the research with appropriate theoretical models and proper "testing" of the models, whether quantitatively or qualitatively (or both); 3) recognition of the historical contexts and limits of historical comparisons.

Good, informative comparisons avoid needless juxtaposition of historical case-study based approaches and quantitative variable-based comparisons as opposites, thus often producing interesting and novel insights. As we have argued here, historical case studies can produce useful insights about societies and a small N is not necessarily a hindrance, as long as the case studies are done in a rigorous fashion. Here the comparative perspectives reinforce the results. Moreover, we would maintain that the ability to mesh various interdisciplinary approaches often leads to new results and increases the ability to reach broader approaches.(See also Eloranta et al., 2010) It is not always necessary to compare nations of similar size either, since the proper set up of the research can overcome the inherent problems in such comparisons – the scholars simply need to find relevant points of comparisons, either similarities or differences, or actual interactions.

Our first case in point here focused on the world wars as the key component in launching successful Communist revolutions. We argued that the conditions created by the total war exacerbated other factors to push certain states toward a revolution and/or civil war. Often military setbacks led to a collapse of the state. And if the revolutionaries were able to co-opt the peasantry for the uprising, then the revolution was likely to be successful beyond the initial conditions. We used a small sample of countries to make a case for a theory about Communist (or Socialist) revolutions using qualitative historical evidence. Our second case, in contrast, was a study of democratic transition and military spending in the interwar period, this time using quantitative methods. While most such studies, for example focusing on the idea that democracies are inherently less violent (=the democratic peace argument), use large samples and quantitative methods suited for them, we decided, mostly due to absence of data and ability to construct large panels, to analyze this phenomenon using statistical techniques suited for smaller samples. We came to the conclusion that very authoritarian nations (or totalitarian polities) were more aggressive, whereas transitional

or nations with limited authoritarian regimes did not. Democracies were, at least from the perspective of military spending, less aggressive in the interwar period.

A longer time period utilized in many studies, compared to the large-N comparisons over a shorter period, allows the authors to investigate structural changes over time and to observe both things that change as well as phenomena that stay the same. This approach is analogous with the NIE approach, that we should analyze both formal and informal institutions (as well as the organizations that play the game), especially since informal institutions change slowly over time. The longer time perspective allows the contributors to investigate the impact of exogenous and endogenous shocks for the historical polities in question, their impact, thereby revealing societal structures better. In general, though, qualitative and quantitative methods are not mutually exclusive, and we can come to deeper understanding of various phenomena using such methods, especially when engaging in comparative research. Moreover, many newer approaches, such as the QCA, are narrowing this gap somewhat. Most scholars have always recognized the importance of an *a priori* theory to set up a successful scholarly journey.

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