Territory, Trade and War:

State Size and Patterns of Inter- and Intrastate Conflict

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January 5, 2004

Version 1.3

Prepared for the conference on Globalization, Territoriality, and Conflict, University of California, San Diego, January 16-17, 2004.

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The average size of states within the international system steadily expanded during the 19th century, nearly doubling between 1816 and 1876, and then contracted over the 20th century. In previous work, we found that two key characteristics of globalization, increasing economies of scale and economic openness, as well as regime type, were important explananda for this trend in average state size (Lake and O'Mahony 2003). The rise in territorial size during the 19th century was, in part, the product of a growing number of large, federal democracies made possible by increasing economies of scale in the 19th century, while economic liberalism allowed small, unitary democracies to prosper in the 20th century.

In this paper, we analyze how this trend in average state size affects interstate and intrastate conflict. We predict that as average state size increased in the 19th century, larger national territories should become more valuable, leading to more interstate territorial disputes, while demands for smaller states, in the guise of secessionist movements, should decline. Conversely, as average state size declined in the 20th century, we expect interstate conflict to decline while intrastate conflict becomes more prevalent.

We test these hypotheses on the pattern of interstate and intrastate conflict since 1816 at both the system and regional levels, and on the issues purported to lead to interstate conflict. We find relatively strong support for our expectations in the pattern of interstate wars and the issues underlying those conflicts. The evidence on intrastate conflict is much more mixed. We speculate that territorial issues may be less central to civil wars, although we present no evidence on this score.

We first summarize our earlier investigation into the patterns and causes of average state size since 1815. Section two develops our expectations on the relationship between average state size and conflict, and section three then reviews the empirical evidence. In the final section, we examine changes in the issues that led to interstate war.

State Size

As Figure 1 demonstrates, the average size of states increased dramatically over the 19th century, reached a plateau between 1876 and 1901, and then began an equally dramatic decline over the 20th century. Over the course of two centuries, the average state grew from 832 thousand square kilometers to 1.9 million sq. kilometers, then shrank back to 854 thousand sq. kilometers. Moreover, the variance in state size around this evolving mean has remained essentially constant over time. The trend towards greater size in the 19th century and then smaller size in the 20th century was broadly based. Elsewhere, we document that this is trend is not just an artifact of data availability or states entering the system as new members (Lake and O'Mahony 2003). We are confident that the rise and then decline in average state size over the last two centuries is a real if heretofore unappreciated "fact."

Figure 1 about here.

There is no simple explanation for this trend. State size is, most likely, a product of many factors, subject to contingency and chance, and path dependent. Our interest in this paper is on the consequences of this trend in average state size for inter- and intrastate conflict. Nonetheless, our previous research suggests that economies of scale in

governance, economic openness, and regime type combine in subtle ways to explain, at least in part, this trend. We briefly summarize our earlier results here.[3]

Expansion

Over the 19th century, technology evolved rapidly in ways that greatly expanded the ability of governments to project coercive force and to provide services to citizens over distance. Steam power allowed both military and commercial shipping to travel faster over greater expanses without regard for wind and enabled railroads to open up continental interiors, encouraging new areas of settlement while bringing goods to market at lower cost. The telegraph dramatically cut the time and expense of long-distance communication. These innovations, and many other less celebrated improvements, not only led to the rise of nationally and, to a lesser extent, globally integrated markets and unprecedented levels of migration (O'Rourke and Williamson 2000), but they also allowed governments to exert power, enforce laws, and provide services at greater distances from their national capitals than ever before.

Governments responded to these new opportunities, especially in the latter half of the 19th century, in several ways. In one pattern, for which the United States and Russia are exemplars, states pursued *continental expansion*. Using the new technologies combined with the efficiencies of modern centralized administrative structures, they subjugated indigenous peoples and built massive but relatively integrated political units. On a smaller scale, perhaps because they faced other modern states rather than less developed and organized societies, Germany, Italy, and other powers unified their regions into national-states during this same period.

[3] In Lake and O'Mahony 2003, we test five different explanations against the record of average state size, decisively rejecting transactions costs and preference heterogeneity as possible causes.

In a second pattern, states that faced very high costs of continental expansion, most notably Great Britain, built vast overseas empires. Our data on state size does not include colonial territories. But the history of Europe's overseas empires suggests a similar trend in territorial size, perhaps peaking a decade or two later. The mode of *imperial expansion* differed considerably by European state and peripheral region, but by the end of the 19th century nearly three quarters of the globe was governed directly or indirectly by Europe – including several late-comers, famously Germany, that began to expand overseas only after they had consolidated their newly enlarged continental states. Both continental and imperial expansion appear to have a common root in the technological innovations that allowed states to reach further, faster, and deeper into more distant societies than at any time in the past.

Complementing but analytically distinct from the consequences of technological innovation was the spread of democratic and federal forms of government and the larger states they permitted. Democracies are normally predicted to be and are, ceteris paribus, smaller than autocracies (Alesina and Spolaore 1997, 2003). At the same time, democracies are also more likely to form federations than autocracies. Because they can allocate the provision of public services more efficiently across multiple levels of government, federal states will tend to be larger than unitary states. Where unitary democracies are small, federal democracies are ceteris paribus among the very largest states in the system (Hiscox and Lake 2000).

In a third pattern of territorial enlargement common to the late 19th century, otherwise independent and smaller democracies voluntarily pursued *federation* (Rector 2003). This pattern is distinct from the technological changes noted above, as suggested

by the early creation of the United States from 13 independent colonies. At the same time, however, technological innovation appears to have been required for the larger pattern to take hold. Several early 19th century attempts in Central or South America to emulate the federal model of the United States failed (Gran Colombia, 1819-1830, and United Provinces of Central America, 1823-1838). Only after the middle of the 19th century, once the costs of transport and communication began to fall more rapidly, did federations take hold. Indeed, nearly all of the democratic federal states that endure today were formed in this period, including Switzerland (adopting its modern federal constitution in 1848), Canada (1867), Australia (de facto independent since the 1850s, federated only in 1901), and others. Although there is some variance in the size of federal democracies, as the case of Switzerland indicates, they are all larger than their constituent units (by definition) and, on average, large relative to other types of states in the international system.

Interestingly, globalization does not appear to have played a major role in influencing state size in the 19th century. Theory suggests that economic openness and international exchange should lead to smaller states. As the importance of protected national markets declines, and that of open international markets expands, smaller political units can more readily prosper and, thus, are expected to secede and form new sovereign states comprised of more homogenous populations (Alesina and Spolaore 1997, 2003). This effect, however, is not manifested in the trend in average state size. When the first period of globalization "took off" after 1870, state size was near its zenith and no contraction occurred for three decades. Although globalization was, in part, a consequence of the same technological innovations that permitted continental and

imperial expansion, it is possible that effects of economic openness were simply overwhelmed by the larger and perhaps more direct effects of technology on the state's costs of projecting power. It is also possible that economic openness restrained yet further growth in average state size after 1870, but this is a counterfactual that is difficult to evaluate given the unique nature and complex causal relationships found in the late 19th century.

Contraction

In the 20th century, technological innovation continued, further lowering the costs of projecting state power over distance. The costs of transoceanic shipping declined further with the advent of containerization in the 1960s and 1970s. Similarly, air transport of both people and goods dramatically increased in quantity and decreased in price, especially after World War II. Telephony and, later, the internet, combined to produce virtually instantaneous communications at close to zero cost (Hafbauer 1991). Yet, where technological innovations led to larger states in the 19th century, they do not appear to have had a similar effect in the 20th. Just as globalization's effects were apparently muted in the previous century, technology's impact on state size appears to have been silenced today. Rather, the decline in average state size over the last 100 years is best explained as a function of idiosyncratic factors in the immediate aftermath of World War I, increasing international economic exchange, and an increasing number of (unitary) democracies.

V. I. Lenin (1939) famously described World War I as a competition between the most advanced – and capitalist – states for territory in the periphery of the world economy. Although capitalism, a constant, was undoubtedly not the cause of this conflagration, there is an element of truth to Lenin's characterization of the war as the

culmination of a process of territorial competition – a competition that was reprised 20 years later. The net effect of the war, for our topic here, was to reallocate the territory of the decaying imperial states of the ancient regime, most notably the Austro-Hungarian and Ottoman Empires. Out of these imperial ashes rose a set of new and smaller states in the Balkans and Eastern Europe. Just as the war itself was one of the two last great gasps of the old system of continental and imperial expansion, the new states created after the war may have been the progenitors of the new system of smaller states. These new states may have been premised on expectations of renewed economic openness following the war – expectations that were, of course, quickly dashed by increased protectionism in all the major powers. They may also have been a product of President Woodrow Wilson's call for national self-determination or a sign of the presence of many smaller and sometimes antagonistic ethnic groups in the region. The early cases in this turn in average state size are hard to explain. Yet, this new trend was not limited to Europe. States everywhere had already started to become smaller on average after 1900; the trend merely accelerated after the war.

Over the 20th century, two motors appear to have driven the move to smaller states. First, the world economy began a steady movement toward greater international economic openness after World War II. By the 1960s, levels of trade and overall economic interdependence, migration excepted, had returned to their pre-1913 highs and soon surpassed those levels in a new era of globalization. Theory predicts, and the evidence from the postwar period appears to support the hypothesis, that a world of increasing openness is more hospitable to smaller states. No longer dependent on their national markets, groups and regions are more willing to strike out "on their own" and

assert their independence. This may be especially true for sub-national regions in Europe that have been politically invigorated since the creation of the European Union.

Second, where the 19th century experienced growth in the number of federal democracies, which tend to be large, the 20th century has seen several waves of progressive democratization in which the resulting unitary states tend to be relatively small. Indeed, the switch from federal to unitary democracies in the system is the only variable with sound theoretical foundations that actually correlates closely with actual state size over both the 19th and 20th centuries. Technology explains the increase in state size in the 19th century, but not the decline in the 20th; economic openness explains the contraction in state size in the 20th century, but not the increase in the 19th. Regime type appears to be the best "proximate" explanation of state size. But just as federation may have emerged as a solution to increasing economies of scale in the first period, economic openness may interact with and, indeed, help sustain unitary democracies in a hostile international environment. Democracy helps promote the general interest in free trade over the particularistic interest in protection, and the prosperity engendered by economic openness may help bolster democracy. Regime type may be the best proximate cause, but it is itself a product of deeper causal forces.

In summary, our best estimate of the forces driving the amazing rise and decline in average state size over the last two centuries looks to a combination of technological change and federation to explain the increase in territorial size in the 19th century, and a combination of economic openness and democratization in unitary states to explain the decrease in the 20th century. We now turn to the question of the relationship between average state size and conflict.

State Size and Conflict

Our principal focus in this paper is on the consequences of state size and changes in size on levels of conflict within the international system. *We expect that as pressures for expansion mount and states increase in size, on average, there will be a corresponding increase in interstate conflict. Conversely, as it becomes more attractive for states to contract and states, on average, decrease in size, there will be a corresponding increase in intrastate war.*

Following rationalist models, we conceive of inter- and intrastate war as bargaining failures that arise from private information with incentives to misrepresent that information (Fearon 1995; Powell 1999). Since neither the disputants nor we, as analysts, can know the private information and beliefs of the parties, any actual war is, therefore, essentially a stochastic or random event (Gartzke 1999).

Nonetheless, we expect that the greater the incentives for states to expand, the more disputes they will enter into with the targets of their aggrandizement. Some disputes will undoubtedly be settled peacefully: if neither party believes it can triumph, the status quo will remain, or if both sides believe one side will prevail, then the weaker side may capitulate. Other disputes, however, will not be resolved and war will ensue. The greater the number of disputes in which one state is attempting to acquire control over some or all of the territory of a second, the more likely some bargains will fail and the more likely interstate wars will be on average. Thus, we expect that periods of increasing state size will be more prone to interstate wars than periods of state contraction.

We are emphatically not predicting that particular territorial disputes are likely to result in war, or that states that repeatedly engage in war necessarily have greater

incentives to expand their territories. Rather, we expect only that the same sources that lead states on average to expand their territories are likely to produce greater conflict throughout the system as states try to accommodate themselves to their evolving environment. Areas with acute and persistent interstate conflict may contain states trying to expand unsuccessfully; the absence of particular territorial changes does not count against out predictions about the incentives of states. Conversely, areas with lots of territorial changes may not experience unusual levels of interstate conflict; weaker parties may simply foresee inevitable defeat and concede. Yet, we expect that, on average, as states responded to their incentives and sought to increase in size during the 19th century, they would produce on average more interstate conflict than in the 20th century. We also expect that, allowing for states to learn about their changing environment, increases in interstate conflict should lag increases in state size on average by up to two decades.

Similarly, we predict that the process of state contraction will occasionally turn violent, and that periods of declining state size will, on average, experience higher levels of intrastate conflict. When smaller states are preferred, groups that had, perhaps, long suppressed aspirations for national autonomy may see new opportunities to press demands for independence. States may or may not choose to meet these demands, and the dispute may or may not turn violent. Likewise, however much it conflicts with the tenets of political realism on state survival and power maximization, states may actually choose themselves to become smaller, jettisoning units that may or may not desire independence and may or may not resist the autonomy that is thrust upon them. By whatever means, we expect periods of state contraction on average to be more prone to intrastate conflict.

Again, this does not imply a close relationship between actual secessionist attempts and instances of civil war, or between the intensity of particular demands for independence and violence. Secessions can be negotiated peacefully; others produce war. As the amazing dissolution of the Soviet Union demonstrates, states can break apart without significant violence – even in the face of reluctance by the now independent "pieces" to stand on their own, exemplified in Belarus' repeated attempts to reattach itself to Russia in some form (Hancock 2001). We have no expectation about the process through which states shrink in size on average. Instead, we simply expect that as states on average grow progressively smaller in the 20th century, they will experience more intrastate conflict than in the 19th century.

Finally, we are – again, emphatically – not claiming that state size or changes in state size *cause* conflict. In a world fraught with bargaining failures and private information, no one-to-one relationship between pressures for expansion or contraction and conflict can be drawn. We are expecting only a tendency for state size and the level and type of conflict to co-vary.

More generally, state size and conflict are intimately bound up in a complex set of relationships. It is even possible and, in fact, consistent with our analysis for conflict to drive territorial change and size. Offense-defense theorists have long claimed that falling costs of war lead to greater conflict and, in turn, larger states (Quester 1977). This is subsumed, in part, in our discussion of technological innovation above. Both territory and conflict are pieces of a larger syndrome of choices about how societies choose to organize themselves for political purposes -- choices influenced in important ways, we suggest, by technology, openness, and regime type, but certainly not limited to these

factors. But we do not claim there that any one factor causes another. Rather, we hope to fit the pieces of a very complex puzzle together so that we can see better the emerging picture – and the better the picture, the more confident we can be of having found the right connections between the pieces.

Patterns of State Size and Conflict

The propositions noted above are expected to hold at both the systemwide and regional levels, occasionally producing tensions and anomalies in the pattern of size and conflict. Although technology and openness are often universal, there is no specific reason why they should affect all areas of the world in identical ways. Investments in technology vary quite widely, with railroads spreading across the several continents at very different times and to very different degrees (see Lake and O'Mahony 2003). The ability of states to project power, as a result, is likely to vary across regions. Similarly, openness to trade is a political decision that, although it may cluster by region, is nonetheless reached at different times by different countries. Although regime type also appears to cluster spatially and temporally (Gleditsch 2002), this too is a national decision that will exhibit substantial regional variation. Thus, there may be important regional variations in state size and, in turn, conflict propensities.

Building on this analysis, in the remainder of this paper we seek to assess the following hypotheses:

> *H_1: As states become larger on average, the level of interstate conflict will increase.*
>
> *H_2: As states become smaller on average, the level of interstate conflict will decrease.*
>
> *H_3: Regions that are smaller on average than the systemwide average will tend to have high levels of interstate conflict.*

H_4: Regions that are larger on average than the systemwide average will tend to have low levels of interstate conflict.

H_5: As states become larger on average, the level of intrastate conflict will decrease.

H_6: As states become smaller on average, the level of intrastate conflict will increase.

H_7: Regions that are smaller on average than the systemwide average will tend to have low levels of intrastate conflict.

H_8: Regions that are larger on average than the systemwide average will tend to have high levels of intrastate conflict.

Our principal research strategy is really quite simple, which is simply to examine levels and changes in average territorial size and interstate and intrastate wars over time and by system and region. This is a variant of an interrupted time series design (Cook and Campbell 1979, 207-32).[4] The narrower the "treatment window" around an event, of course, the more confidence we can have in our estimate of the relationship between territory and conflict. We allow for a substantial lag of up to two decades between changes in the average size of states and conflict levels. Although this limits confidence in our inferences, it seems appropriate, as noted above, given the ambiguous and slowly evolving nature of the environment to which states are responding. Since both territorial change and conflict are relatively rare events, in all the figures below we fit a third degree

[4] In an interrupted time series design, an exogenous change in the "treatment variable" is predicted to lead to a change in the outcome variable within some specified "treatment window." In our case, we expect changes in the trend in average state size will produce a change in the trend in interstate and intrastate conflict. Thus, a change in the trend in average state size (i.e., a change in the sign of the first derivative) is our "treatment," which is expected to have a directed impact on the trend in conflict within a two decade period. Because they rely upon multiple observations of the outcome variable before and after the treatment, interrupted time series designs have high internal validity; in essence, past observations of the outcome variable serve as "control variables." In our analysis below, the system and each region form separate series, so we essentially perform the same test multiple times, providing us with additional

polynomial to the decade average data to highlight better the long term trends in average state size and conflict.

Data

We have recently reconstructed the standard datasets on state size to create more accurate estimates of home territory for the period 1815-present. As we began to work with the existing data, we quickly realized that they were deeply flawed, requiring that we rebuild them from "scratch."[5] The data set we have constructed identifies all sovereign states during this period, applying an essentially juridical definition of sovereignty that focuses on recognition by other states.[6] Territory is defined as home or national land mass, generally a contiguous area governed as a single political unit (as noted, thereby excluding colonial territories), and is measured in square kilometers. Our system begins in 1815 with 35 states, and grows to 46 states in 1890, 63 in 1920, and 154 in 1998. There is, of course, a substantial amount of missing data here. There are

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opportunities for confirmation or disconfirmation of our hypotheses. We supplement this design in the regional analysis with a static cross-sectional study of average state size and levels of conflict.

[5] Territorial data in Banks (1976) and apparently used in the Correlates of War (Singer and Small 1994) and Polity IV (Marshall and Jaggers 2000) data sets do not capture all known territorial changes. We began with Banks (1976) and current World Bank (2001) territorial estimates as our starting point. We reconciled these two territorial size estimates using Goertz and Diehl's Territorial Change Dataset (see Goertz and Diehl 1992) to highlight the timing and magnitude of territorial changes, relying upon the *Statesman's Yearbook* to confirm and elaborate upon each entry in the Goertz and Diehl (1992) dataset. Although there is undoubtedly some measurement error remaining in the data, we expect that it is essentially random; but since this is an ongoing series we nonetheless face the risk that whatever errors do exist compound themselves over time. Nonetheless, this is, we believe, the most complete and accurate series on territorial size now available.

[6] We compiled the list of sovereign states from Arthur S. Bank's Cross National Times Series data set, the Correlates of War project, the Polity IV database, and Gleditsch and Ward (1999). Disagreements between "birth" and "death" dates for states were settled by reference to the *Statesman's Yearbook*, which provides concise explanations for the historical events in question. As to whether mergers of states created new entities (e.g., Germany and Italy in the 19th century) or simply larger but continuing entities (e.g., the Federal Republic of Germany after re-unification), we followed the coding decisions used in the above sources. In using a juridical notion of sovereignty, we thereby include some "semi-sovereign" states, such as Canada or Australia, that might otherwise be excluded and some "divided states," such as China in the early 20th century, that might be disaggregated.

currently 191 members of the United Nations, for instance, but we possess territorial data for their complete histories on only 80 percent of them.

We measure interstate and intrastate war using the Correlates of War Project's data on militarized interstate disputes and intrastate war. For interstate war data, we examine the 102 cases of militarized interstate disputes, occurring between 1822 and 1992, that the Correlates of War Project codes as wars. For intrastate wars, we examine all 213 intrastate wars, occurring between 1816 and 1997, included in the Correlates of War Project intrastate war dataset.

In addition, we use two measures of "conflict" for both interstate and intrastate wars. The simplest measure is the number of new wars begun in any decade divided by the number of countries in the system at the end of that decade.[7] As the number of states grows rather dramatically over the last two centuries, it is important to adjust for this change: five wars in a system of 15 states represents a very different level of conflict than five wars in the system of 150 states. We refer to this indicator as interstate or intrastate *war onset*. Our regional measures are created in an identical fashion, simply replacing the total number of wars in the system with the number of wars in each region and the total number of countries in the system with the number of countries in the region. Our second measure is the number of war years per decade divided by the number of countries in the system at the end of that decade. This captures in an intuitive way not only the number of wars occurring within a given decade but the intensity or magnitude of conflict as well. Wars that last longer, creating a larger number of war years, are more difficult to resolve

[7] Since the number of states rises throughout the period we examine, calculating the denominator only at the end of each decade creates an indicator that makes it less likely that we will find support for our hypotheses.

(almost by definition) and, more importantly, reflect more intense preferences over goals by the belligerents. We refer to this second measure as *ongoing wars* or *war-years*. For interstate conflict, war onset and war-years track one another quite well, with the latter simply exacerbating swings in the trend. To simplify the presentation, we report only on war-years in the text and figures on interstate conflict below. In the case of intrastate wars, the two measures move in different directions, especially in recent decades: although the number of civil wars has declined, those civil wars that do occur have increased dramatically in length. Of the two measures, we believe war-years more accurately and fully captures our conception of conflict. We nonetheless report all intrastate conflict results with both war onset and war-years.

Results on Territory and Size

We begin with the evidence on state size and interstate conflict. At the systemwide level, there is a strong correlation between state size and the pattern of interstate war-years (see Figure 2). As state size increased over the 19th century, levels of interstate conflict also grew, with a particularly noteworthy spike in war-years during the period of most rapid state expansion between 1850 and 1870. Once state size began to decline after 1900, interstate conflict also decreased – although the first and second World Wars form dramatic conflict peaks well after the systemwide trend in size has turned. At the systemwide level, the long term trend in both size and conflict, represented by the second degree polynomials in dark lines, form inverted "U"s, with the peak levels of conflict lagging size by two decades.[8] Overall, our expectations about territorial size and interstate conflict are strongly confirmed at the systems level.

[8] The lag in war onset is slightly greater, approximately three decades, thus falling outside our treatment window.

Figure 2 about here.

There is more variance in the relationship at the regional level, of course, where the numbers of states, territorial changes, and wars are smaller and more episodic. In all the regional graphs, we present average state size in the system and region as well as the level of interstate conflict in the region by decade. With the largest number of countries and wars, Europe closely mirrors the systemwide trends already described above (see Figure 3). Throughout almost the entire period, Europe's states were relatively small compared to those in other regions, but otherwise the pattern over time is the same. State size increases until approximately 1900, and then begins to decline thereafter – although the decrease is less dramatic in Europe than in the system as a whole. Levels of conflict also peak around the time of World War I, lagging state size by, in this case, only about one decade.

Figure 3 about here.

Africa also confirms expectations, even though state size in this region follows a different pattern than in the system as a whole (see Figure 4). Throughout, African states are smaller on average than elsewhere, and state size peaks in the period from 1920-1960, declining thereafter. With relatively small states – and, we want to stress, relatively few states because of continuing colonialism in the region – Africa experienced no interstate war before the 1920s. Significant levels of interstate conflict in Africa occur only during the period when states were, by standards of the continent, relatively large. As states declined in size after 1960, conflict also dropped off. Once again, the long term trends in average state size in the region and levels of interstate conflict coincide nicely, with peak levels of conflict lagging size by approximately 15 years. Although these results support

our expectations, they should be interpreted cautiously for the decades before 1960 due to a very small number of sovereign states in the region.

Figure 4 about here.

The Western hemisphere is a slightly more complicated case. States in North and South America start the 19th century considerably larger than those elsewhere, largely Europe during this period (see Figure 5). They decline in size, then rebound, closely tracking the systemwide average at its peak. Although average size falls slightly after 1900, states in the Western hemisphere remain well above the system mean thereafter. In turn, the greatest period of conflict in the Western hemisphere is in the 1860s, when state size is once again growing from its historic lows in the 1840s. Once state size stabilizes after 1870, the level of interstate conflict drops and then oscillates around a mean of 1.64% for the period 1880 to the present. The slight uptick in the polynomial in recent decades is, in our view, largely an artifact of the fitting method. Despite the relative lack of change in average state size since 1870, the Western hemisphere still largely confirms our expectations.

Figure 5 about here.

Asia is less supportive. Before the 1950s, Asian states are huge relative to those in other regions (see Figure 6). As we expect, levels of interstate conflict are extremely low, with no conflict registered in the region prior to the 1870s. Contrary to expectations, however, as state size dips in the 1890s and then falls dramatically after 1920, conflict spikes. As in Europe, World War II may constitute the last gasp of the expansionist era, but in Asia it falls relatively late compared to the trend in state size. As state size drops closer to the systemwide average, interstate conflict falls. This is, at best, a mixed picture,

especially the increase in conflict starting at about the time state size is beginning to decline in the region.

Figure 6 about here.

Finally, the Middle East disconfirms our expectations. Middle Eastern states are initially quite large, decline in size to the system average by the 1870s, and then decline more rapidly than others from 1900 on (see Figure 7). In both the 1850s and after 1900, conflict spikes at the same time average state size declines. We speculate that the patterns in both state size and interstate conflict are heavily influenced by the gradual breakup of the Ottoman Empire, a somewhat anomalous political entity in the modern states system, but this requires additional research. The Middle East is also characterized by relatively few sovereign states during most of this period, so we must again be cautious in interpreting these results.

Figure 7 about here.

In general, however, the relationship between state size and interstate conflict confirms our expectations both at the systemwide level and in three of the regional cases. With the exception of the ambiguous case of Asia and the disconfirming case of the Middle East, the regions differ in timing and pattern but support hypotheses one through four.

The relationship between average state size and intrastate war is more ambiguous. Interpreting conflict trends is also more difficult because of important differences in our indicators. We are hesitant to conclude that the evidence disconfirms our expectations, but are clearly aware that hypotheses five through eight receive at best mixed support.

The different patterns in civil war onset and civil war-years are highlighted in Figures 8a and b, which depict the systemwide trends in average state size and intrastate conflict. The most important difference lies in the period since 1950, in which civil war onset declines fairly consistently (Figure 8b) while civil war-years explodes exponentially (Figure 8a). Higher levels of intrastate conflict in the system clearly arise not from more civil wars but from longer wars. Similar differences between the two measures arise in the Western hemisphere, Asia, and the Middle East. As noted above, we believe war-years is a better measure of levels of conflict, but emphasize that our results are not robust to choice of indicators.

Figures 8a and b about here.

Systemwide, civil war-years grows during the first half of the 19th century, witnessing two spikes -- one when average state size is falling in the 1820s and 1830s, and one when size is expanding in the 1870s. The general increase during this period is broadly based and generally disconfirming. Civil war onset follows a somewhat similar pattern during this period. Civil war-years declines as expected after the 1880s, when average state size reaches its zenith, and then explodes dramatically after 1950 as states decrease in size. This evidence supports our expectations, although the lag time from peak size to the trough of the war-years polynomial is longer than predicted. Civil war onset, however, undergoes a very different pattern. Although it falls in the late 19th century in accordance with expectations, the early 20th century experiences a large number of new civil wars. Together with the early spike in the number of wars, this produces overall the now familiar – but, in this instance, disconfirming – inverted "U"

polynomial. Overall, the relationship between average state size and intrastate conflict neither confirms nor fully disconfirms our predictions.

At the regional level, Africa most clearly fits our expectations. Throughout the period from 1841 to 1950 when average state size is increasing, intrastate conflict is virtually non-existent (Figures 9a and b). Civil war-years, however, begin to increase rapidly in the same decade that states, on average, start to become significantly smaller, and then continues to rise throughout the remainder of the century. Civil war onset follows a similar course. Again, however, we must emphasize that there are only a handful of sovereign states in the region before 1960, so any generalizations about size or conflict must be treated cautiously.

Figures 9a and b about here.

The Middle East is also largely confirming for our predictions. Average state size in the region falls steadily over the last two centuries, dropping somewhat more rapidly in the 1850s and 1860s, and then again after 1900 (Figures 10a and b). Two large spikes in intrastate conflict coincide with these periods. As state size falls to its lowest levels after 1940, civil war-years begins to increase exponentially, again confirming expectations. The increase in civil war onset is less dramatic, producing a long term trend that is essentially flat over the two centuries; but a careful reading of the actual trendline also shows a sharp increase in the number of civil wars beginning after 1930. As with Africa, the small number of states should induce caution in interpreting these results.

Figures 10a and b about here.

The pattern for the Western hemisphere is mixed, but not inconsistent with our expectations. In the early decades of the 19th century, average state size in the Americas

is larger than in the system, indicating a possibility that states were "over large" and open to fragmentation (Figures 11a and b). The large number of lengthy civil wars between 1830 and 1870 is thus not unexpected, even though state size on average declines and then rises in absolute terms over this same period. After 1870, state size is almost constant, but still generally larger than the system average. Civil war-years declines as expected, but civil war onset continues to oscillate during this period. As the system wide average falls, indicating again that states in the Americas are potentially "too large," civil wars not only break out (civil war onset) but increase in duration (civil war-years). Although more open to interpretation than other possible regions, evidence on the Americas on balance supports our predictions.

Figures 11a and b about here.

Europe and Asia are inconsistent with our expectations. Although smaller, Europe generally tracks the systemwide average in state size, reaching its peak at approximately the turn of the last century (Figures 12a and b). Both civil war-years and war onset generally decline from the start of the period to the 1950s. Only in the 1970s, long after our "treatment window," does intrastate conflict reappear on the continent. In Asia, average state size begins large relative to the systemwide mean and declines steadily throughout (Figures 13 a and b). This should have produced a high level of intrastate conflict, especially in the 19th century, but we observe such conflict only between 1850 and 1880. The spike in civil war onset in the early 20th century, and to a lesser extent in civil war-years, that coincides with the dramatic drop in average state size is consistent with our hypotheses, as is the increase in civil war-years as average state size continues to

fall and equal the systemwide average. But overall, the absence of significant civil war in Asia during the 19th and early 20th centuries counts against our predictions.

Figures 12a and b and 13a and b about here.

In summary, the link between territory and interstate war appears to conform to our expectations. Although there are regional exceptions, as states become larger on average interstate conflict increases, and as states become smaller on average interstate conflict decreases. Civil wars do not follow expectations as closely. This could be interpreted as disconfirming evidence for the predicted effect of territory on conflict. But as we argue in the next section, interstate wars have often been fought over territorial issues. Civil wars may respond to a different logic, reflecting issues of autonomy, national self-determination, and ethnicity more than territory per se. To the extent that territory is less central to intrastate wars, our predicted relationship will break down or, at the least, be more difficult to uncover. We return to this speculation in the conclusion.

Conflict Issues

In this final substantive section, we examine patterns in the issues that led to interstate war between 1815 and 1989.[9] Following the rationalist model of war discussed above, we do not posit that issues led directly to war. Rather, we claim only that these issues were central to the disputes that eventually led to larger bargaining failures. Nonetheless, tracking the distribution of issues over time can help reveal the salience of territory to interstate wars. *Our primary hypothesis is that issues of territory were more frequent in disputes that led to interstate war during the period of expansion in average state size, and that territorial issues have been less frequent in disputes that led to war*

[9] Unfortunately, we do not know of similar issue-data for civil wars.

during the period of decline in average state size. Specifically, we expect the salience of territory to decline after approximately 1900.

We employ a "pattern-matching" non-equivalent dependent variables research design in this test (Trochim 2001, 231-34). The power of a NEDV design comes from the predicted effects of a treatment on some outcome variables but not others. The other outcomes serve as controls for alternative causes. Thus, we predict that the rise and then decline in average state size will affect the frequency of territory as a issue in disputes, but will not be correlated with the frequency of other types of issues that led to war. Although not commonly employed in political science, NEDV designs have strong internal validity.

Holsti (1999) has coded all interstate wars in this period for the issues that were salient for the original combatants. His method is inductive, building from what diplomats of the period and subsequent scholars have identified as the key issues in the dispute. Unfortunately, Holsti does not define his issues very completely. Rather, he creates inductively broad common categories that are left purposely open-ended. Lacking formal definitions for the various issues he identifies, we each coded separately and before analyzing the data the Holsti's issues into four broad categories: territory-related, foreign interests, economic interests, and realpolitik. We concurred on almost all codings, and then resolved the few differences through discussion. There is, no doubt, room for argument on some of our codings. Our classification of the issues is presented in Table 1, along with Holsti's findings on the distribution of issues that generated wars. Since there can be multiple issues involved in any war, the number of issues in any period is greater than the number of wars.

We aggregate the distribution of issues by category in Table 2. As we predict, the frequency of territory as an issue in interstate wars declined significantly between the 19th and 20th centuries. Although Holsti's periods do not align exactly with ours, the trend nonetheless supports expectations. In the period 1815-1914, territory-related issues constituted 51 percent of all issues that led to war, declining to 43 percent between 1918-1941 and 38 percent between 1945-1989. Importantly for our NEDV design, there is no evident relationship between the trend in average state size and the frequency of other, non-territorial issues. This suggests, as we expect, that the trend in average state size is related to territorial issues but not others.

Tables 1, 2, and 3 about here.

By Holsti's construction, wars can involve more than one territory-related issue, thus the evidence in Table 1 contains "double-counting." In Table 3, we recalculate Holsti's war-by-war codings and present the percentage of all wars in which one or more territory-related issue was at stake. In 1815-1914, 84 percent of all wars involved at least one territory-related issue. Between 1945 and 1989, only 74 percent of all wars involved one or more such issues. As others have claimed, territory is still obviously an important issue in many wars – indeed, it is the most frequent issue leading to war (Vasquez 1993, 1995; Hensel 2000; Huth 2000). But as we expect, territory is less often an issue today than in the past.

The evidence here also supports expectations. The distribution of issues that led to war reinforces our earlier finding that the rise and decline in the average territorial size of states appears to be related in important ways to the level of interstate conflict in the

international system. As the average size of states in the system has declined, territory has become less salient as a cause of war.

Conclusion

The average territorial size of states and interstate conflict appear to be related, as we expected, at the macro-historical level. As state size on average increased and then decreased over the last two centuries, interstate conflict rose and fell as well. A similar pattern is found across several regions. Moreover, territorial issues were more frequently associated with war during the period of state expansion – and less frequently associated with war during the period of contraction. The evolution in state size is a slow, incremental process, but one that nonetheless appears to be associated with the overall pattern of interstate war.

Intrastate wars appear to differ. Although we found some limited support for a relationship between average territorial size and the pattern of civil wars, intrastate conflict does not appear to be simply the inverse of interstate conflict. Even as they expand in size on average, states fight civil wars, and as they contract on average, they do not necessarily experience more internal violence. Although we do not have systematic data on the issues involved in civil wars, we suspect that territory might play a lesser role in these conflicts and, thus, account for the weaker relationship we find between average state size and intrastate wars. Even though territory is less often at issue in interstate wars today than a century ago, nearly three-quarters of all wars through 1989 still possessed some territorial dimension. Civil wars are fought on territory, but they may not be fought about territory. This is purely speculative, of course, and borders on ad hoc hypothesis

saving. Since this musing does have important implications for this project and other research, though, it may be worth investigating further.

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Table 1. Distribution of Issues that Generated Interstate Wars, 1815-1989, as a percent of all Wars

Issue	1815-1914	1918-1941	1945-1989
Territory-Related			
Territory	42	47	24
Territory (border dispute)	-	-	7
Strategic territory	13	30	21
Empire creation	10	20	-
Colonial competition	3	-	-
National unification/consolidation	26	-	17
Maintain integrity of state/empire	55	30	28
Ethnic/religious unification/irredenta	6	17	12
Colonialism	-	-	7
Foreign Interests			
National liberation/state creation	29	13	28
Secession/state creation	-	-	7
Ethnic liberation/state creation	-	-	-
Protect ethnic/religious confreres	26	7	9
Dynastic/succession claims	10	-	-
Government composition	13	17	28
Ideological liberation	10	10	14
Population protection/ peacekeeping	-	-	9
Prevent population movement/refugees	-	-	5
Economic Interests			
Commerce/resources	-	20	9
Compensation/reparation for incident	-	7	-
Protect nationals/ commercial interests	3	17	9
Commerce/navigation	13	-	3
Realpolitik			
National security/ immediate threat	-	-	7
Balance of power	3	1	-
Regime/state survival	6	37	21
Test of strength	3	-	-
Maintain regional dominance	10	7	5
Autonomy	6	7	7
National/crown honor	6	-	-
Defend/support ally	-	10	16
Revise treaty terms	-	10	-
Meet treaty obligations/ enforce treaty terms	-	-	7
Preserve alliance unity	-	-	3
Enforce treaty terms	3	30	-

Source: Holsti 1999: Tables 7.2, 7.3, 9.2, 9.3, 11.2, and 11.3.

Table 2. Distribution of Issues that Generated Interstate Wars, 1815-1989, as a percent of all issues

Issue Categories	1815-1914	1918-1941	1945-1989
Territory-related	51	43	38
Foreign interests	28	14	32
Economic interests	5	13	9
Realpolitik	12	31	21
Total (varies due to rounding errors in Holsti)	96	101	100

Source: compiled by categories defined in Table 1 and from Holsti 1999: Tables 7.2, 7.3, 9.2, 9.3, 11.2, and 11.3.

Table 3. Percent of all Wars in which One or More "Territory-Related" Issues were Present, 1815-1989

Period	Percent of all wars in which territory was an issue
1815-1914	84
1918-1941	77
1945-1989	74

Source: compiled by categories defined in Table 1 and from Holsti 1999: Tables 7.1, 9.1, 11.1.

Figure 1
Average State Size, 1815-1998

Figure 2
Interstate War-Years

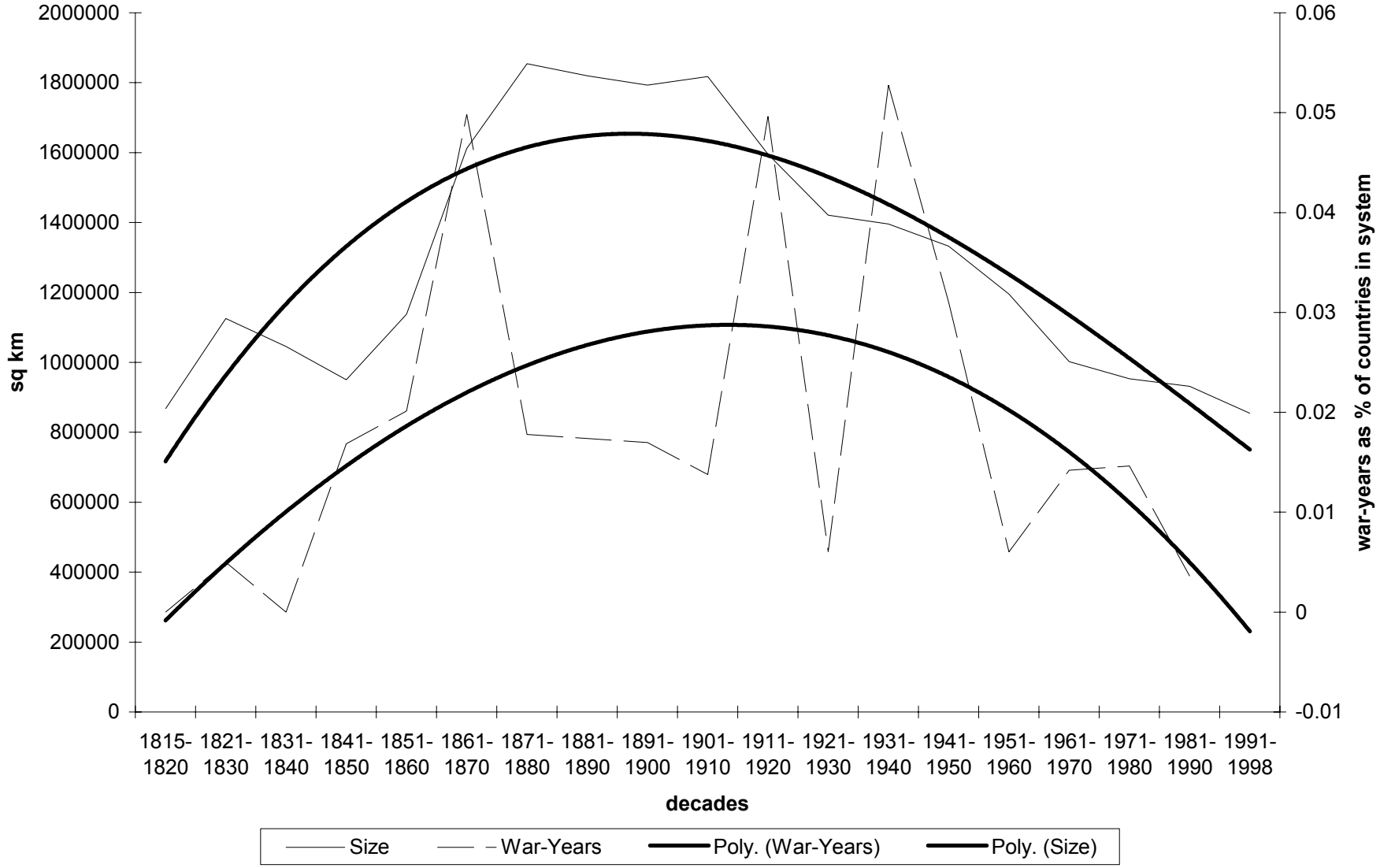

Figure 3
Europe: Interstate War-Years

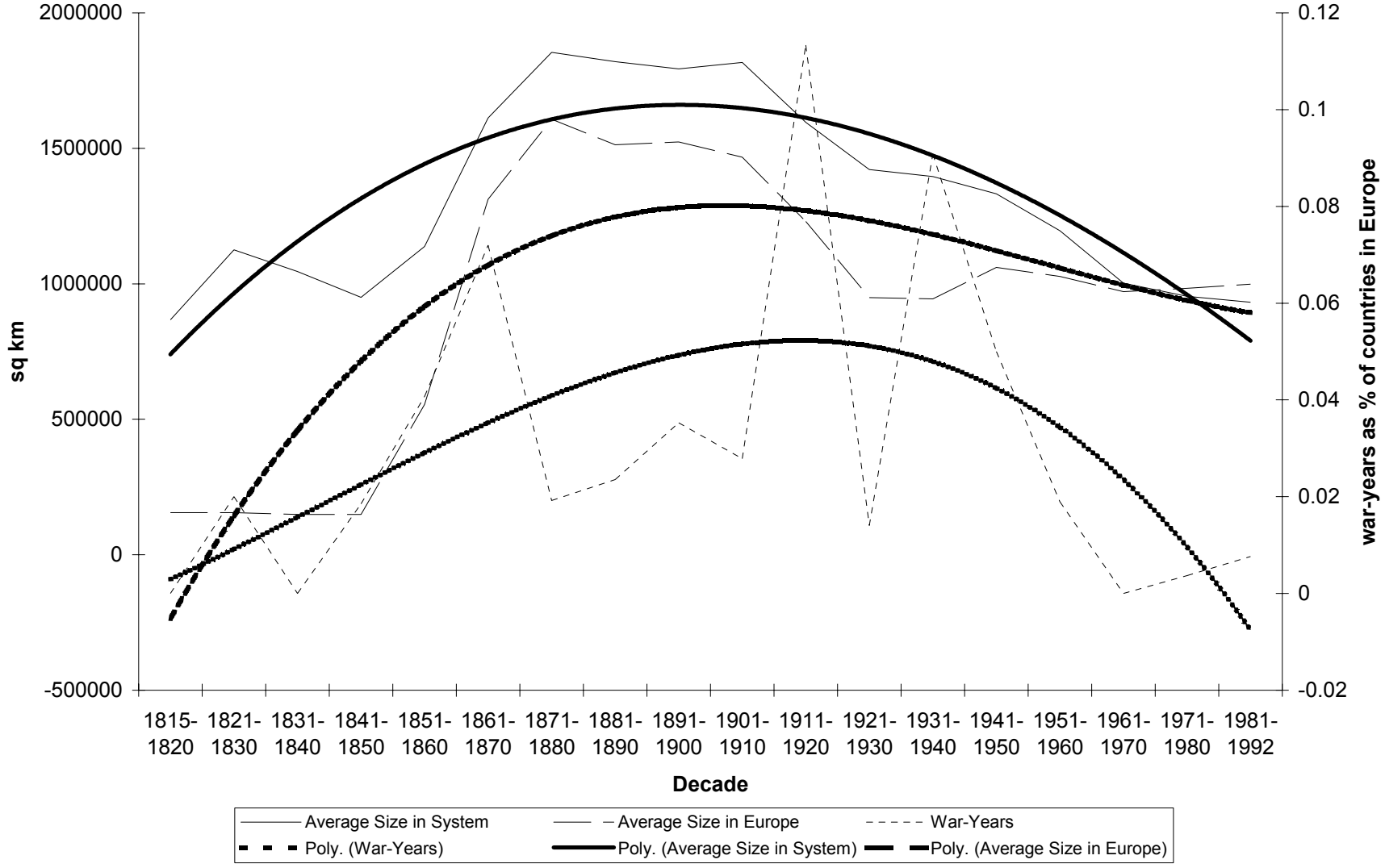

Figure 4
Africa: Interstate War-Years

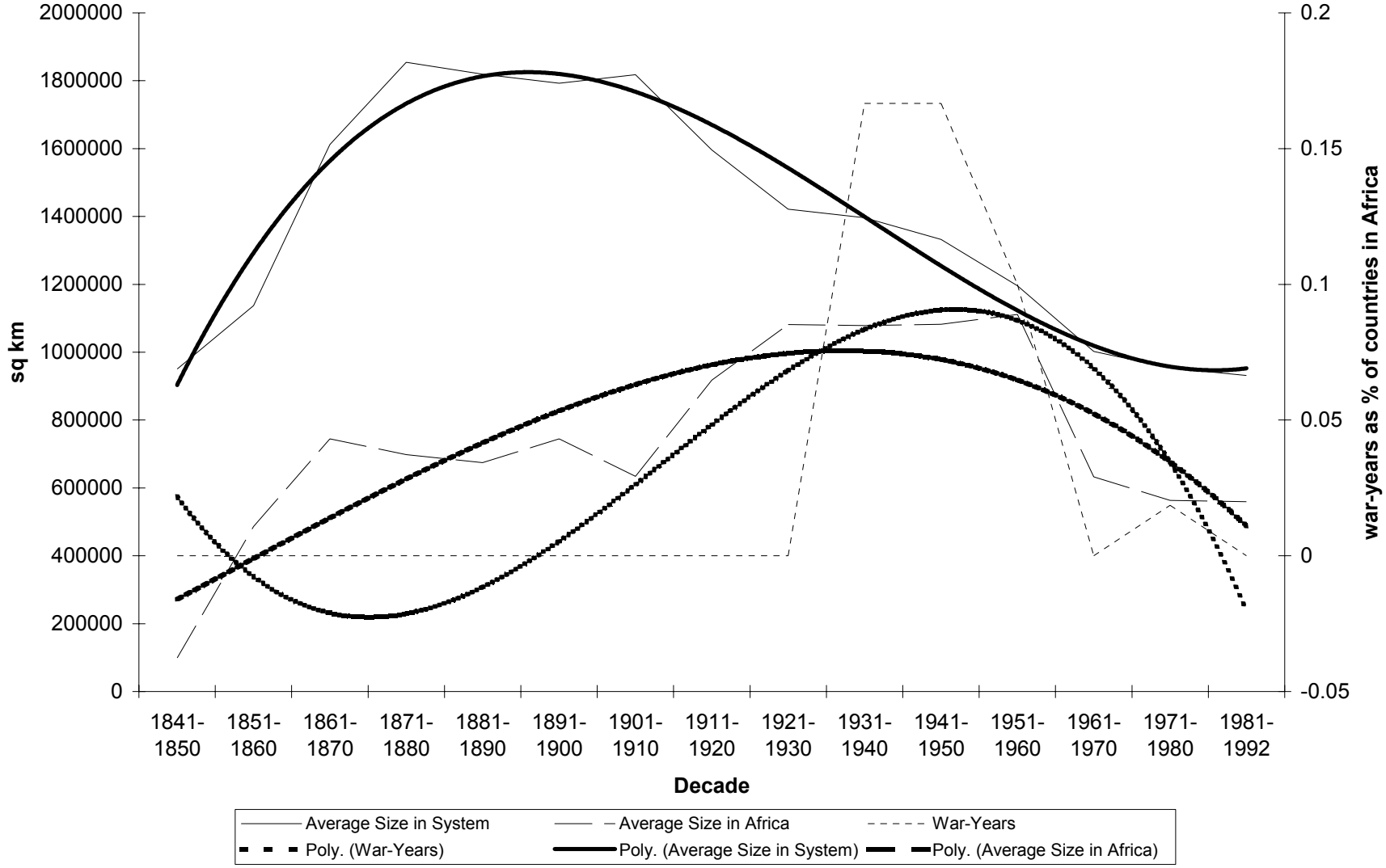

Figure 5
Western Hemisphere: Interstate War-Years

Figure 6
Asia: Interstate War-Years

Figure 7
Middle East: Interstate War-Years

Figure 8a
Intrastate War-Years

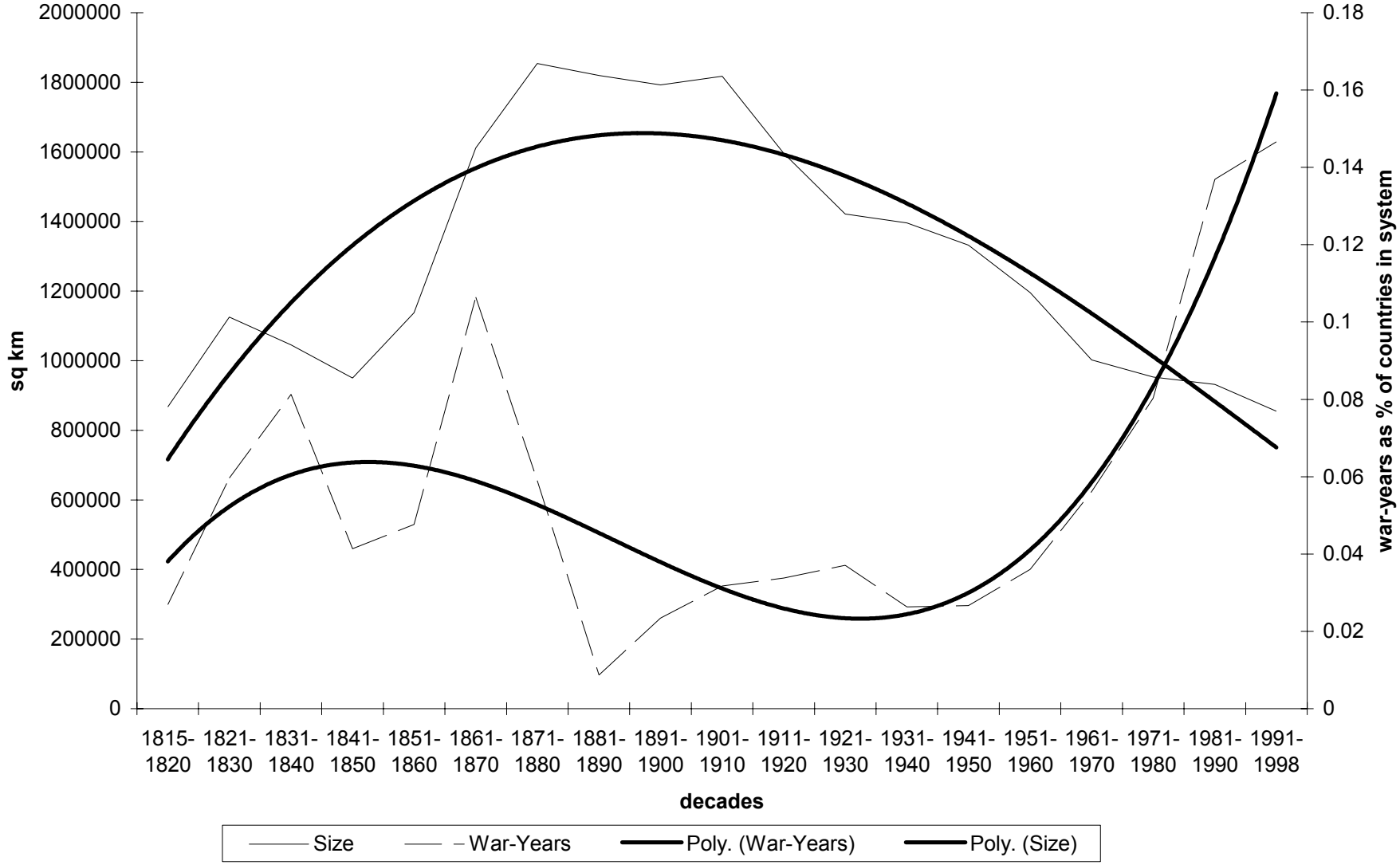

Figure 8b
Intrastate War Onset

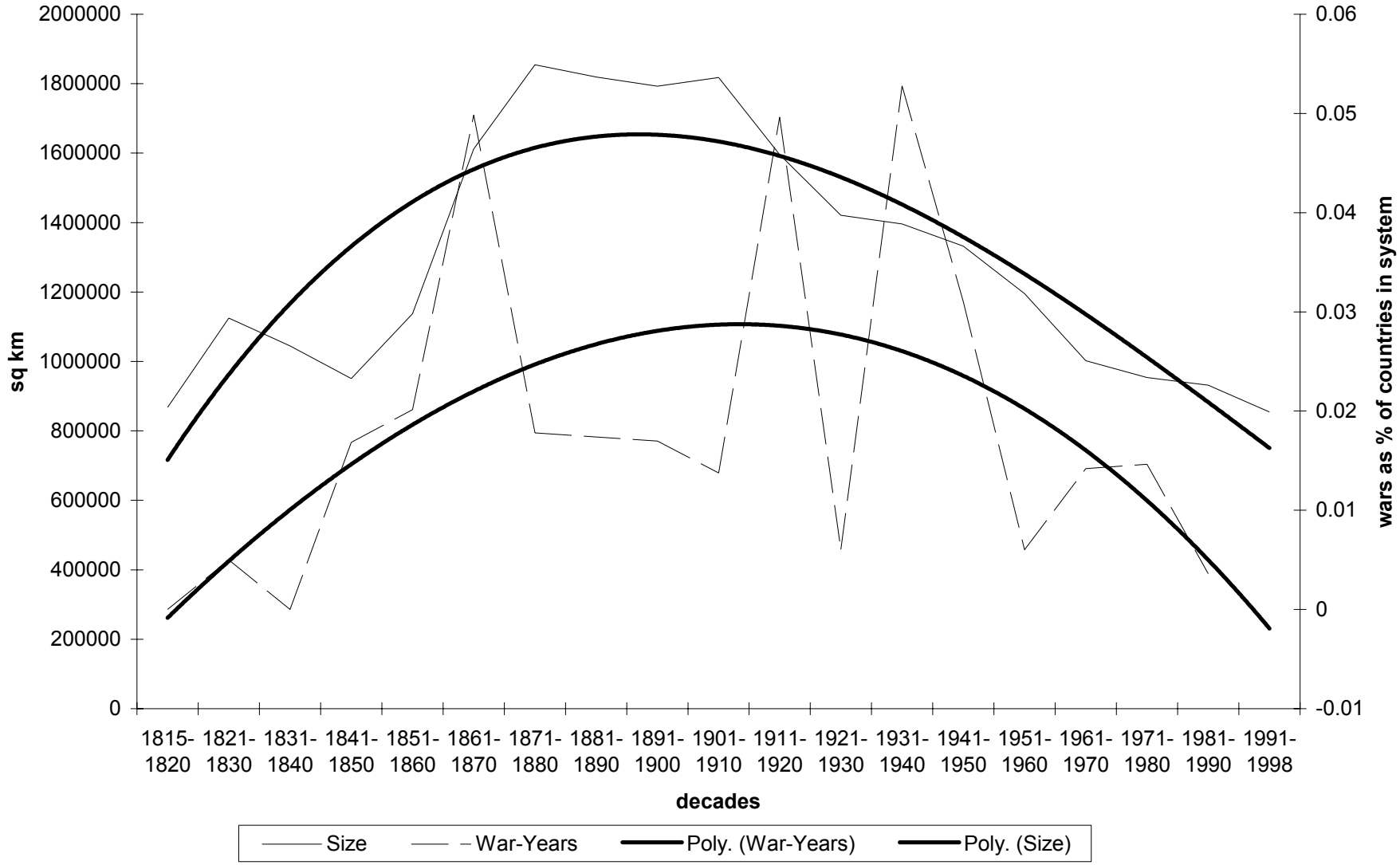

Figure 9a
Africa: Intrastate War-Years

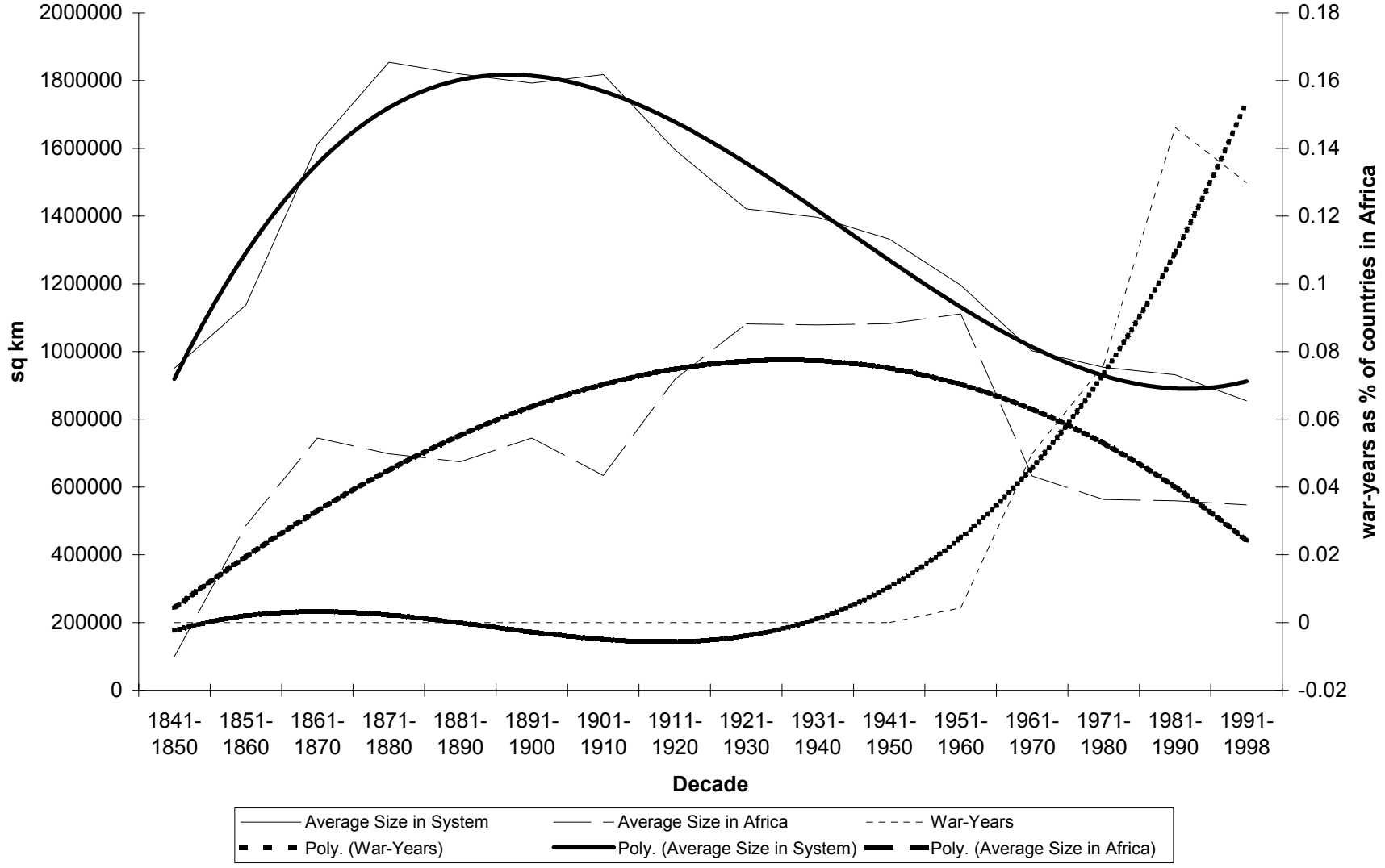

Figure 9b
Africa: Intrastate War Onset

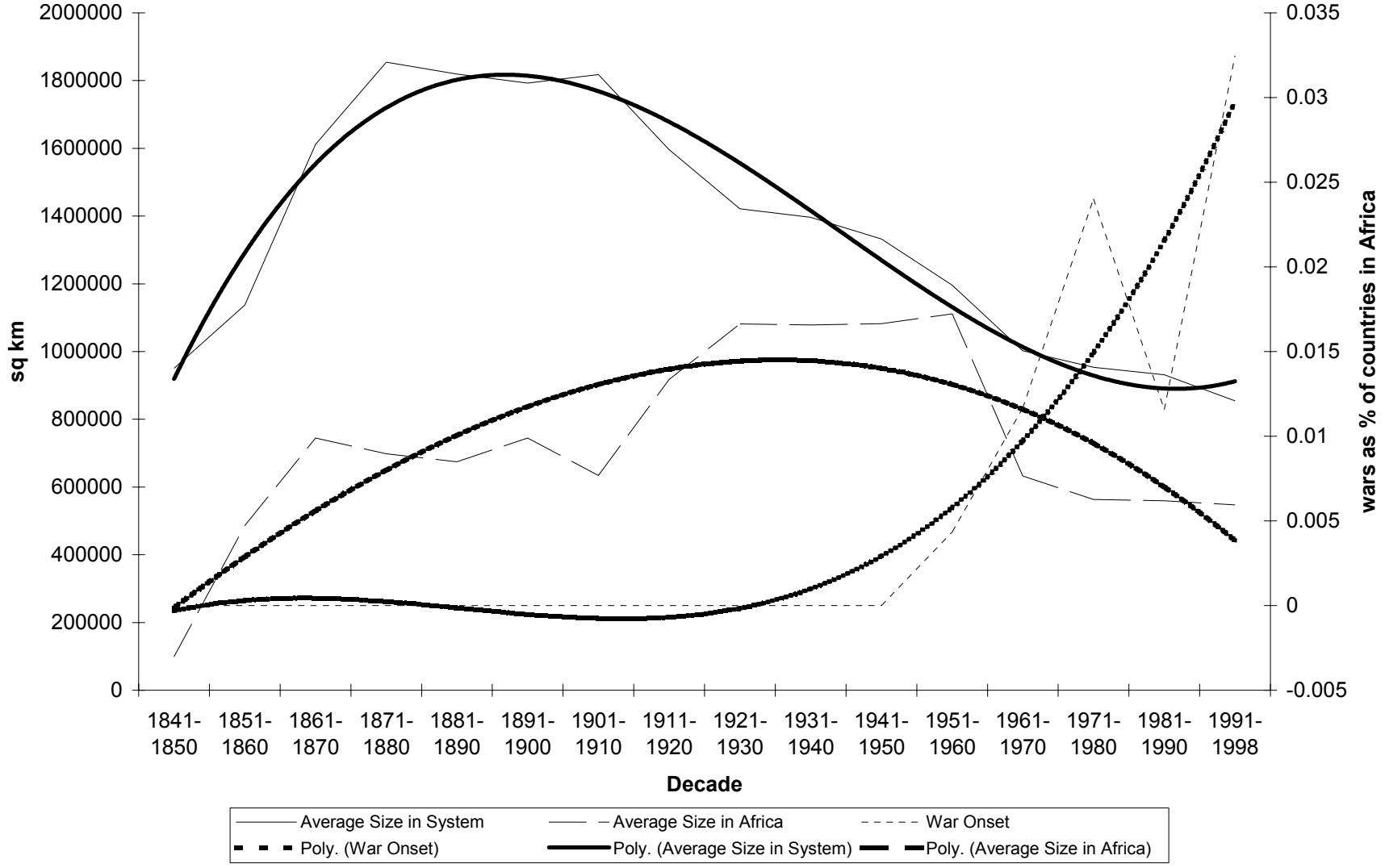

Figure 10a
Middle East: Intrastate War-Years

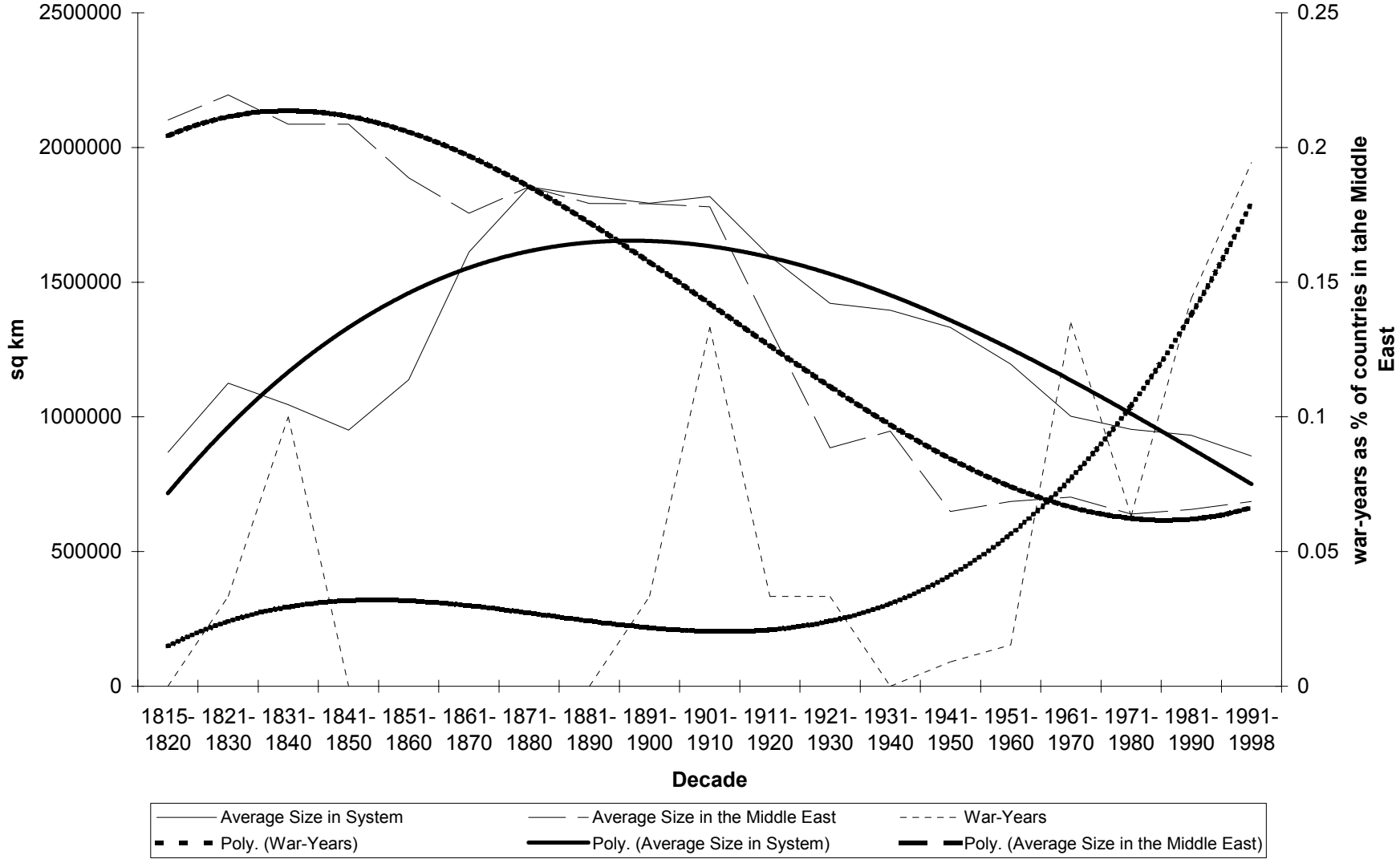

Figure 10b
Middle East: Intrastate War Onset

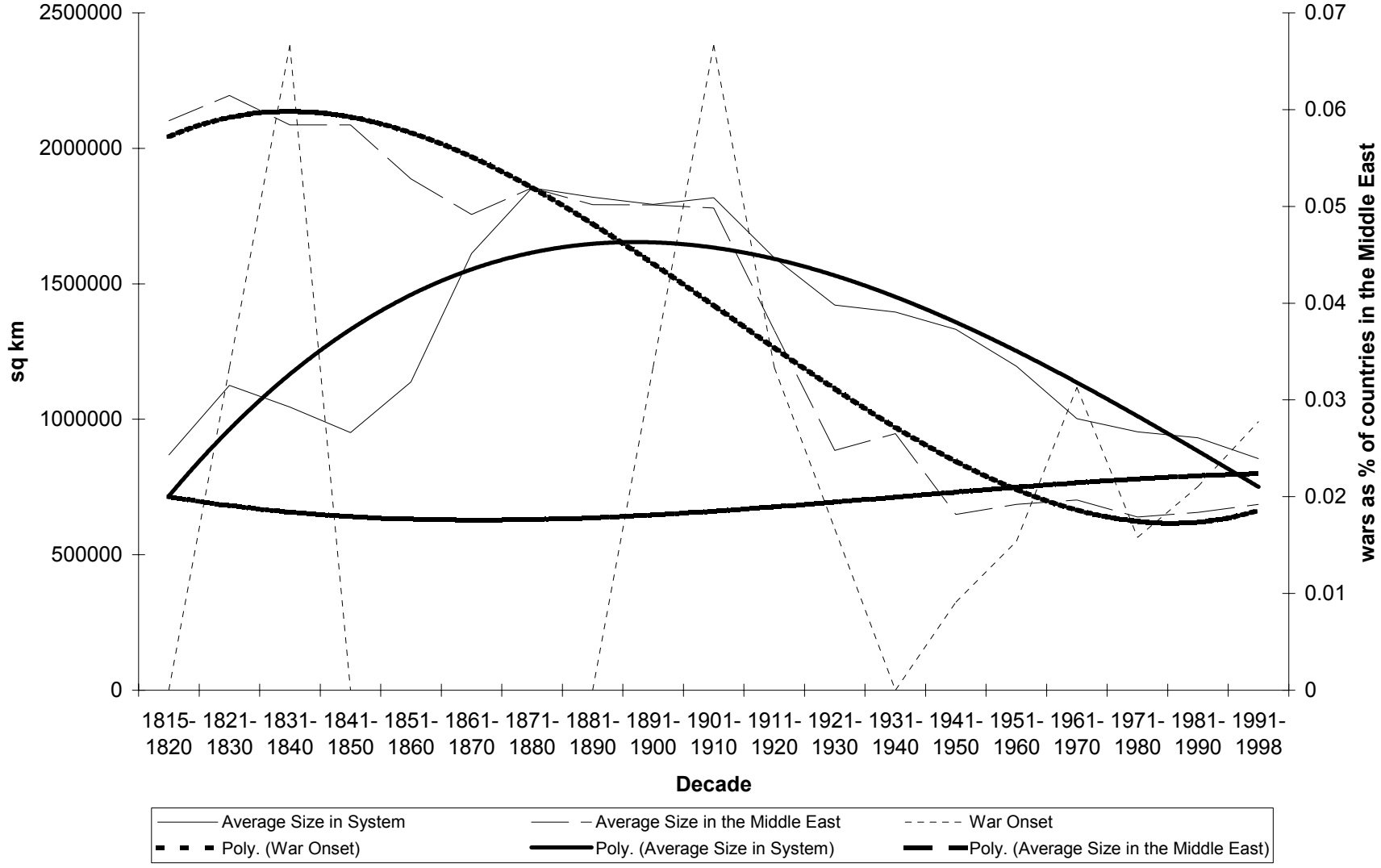

Figure 11a
Western Hemisphere: Intrastate War-Years

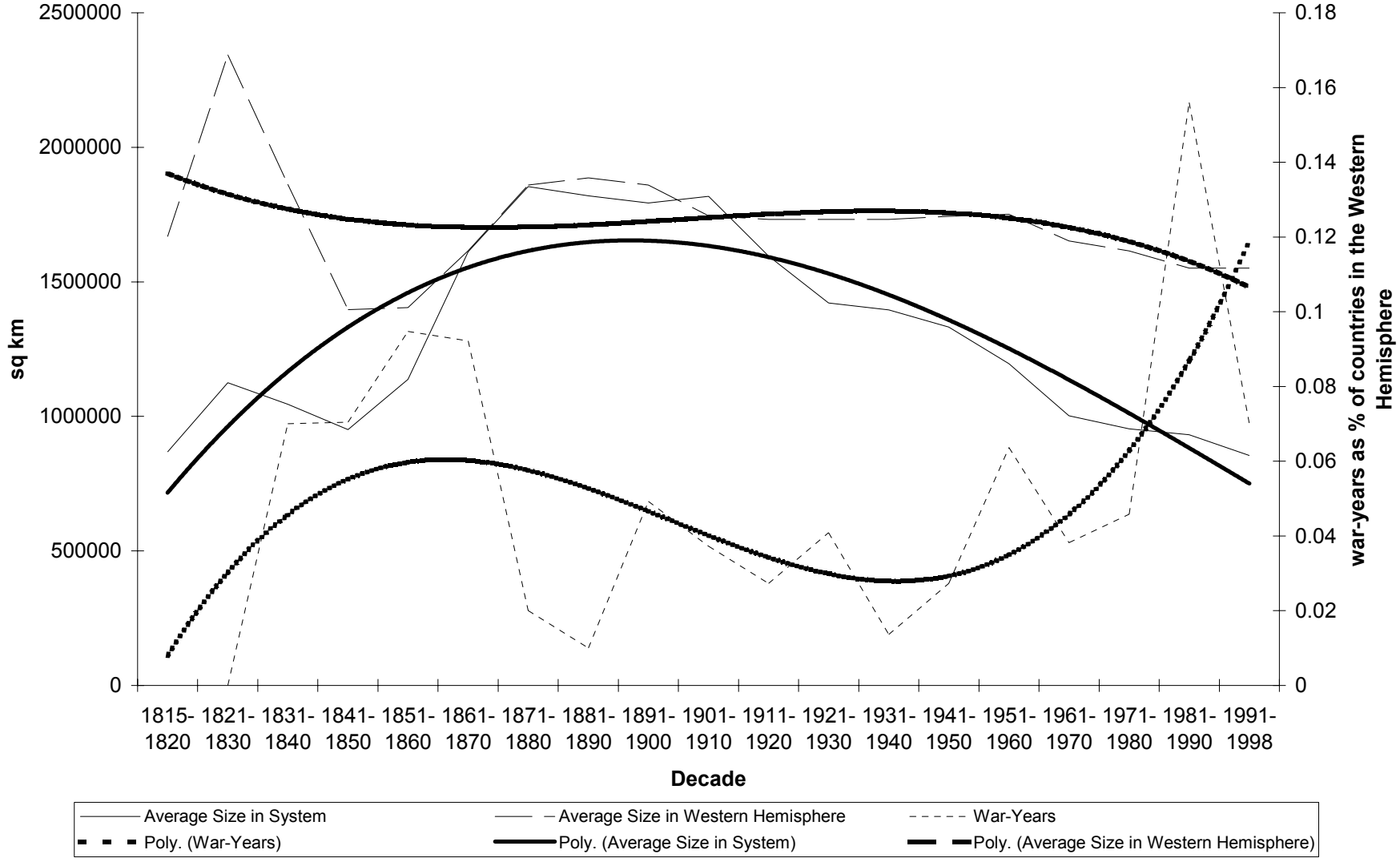

Figure 11b
Western Hemisphere: Intrastate War Onset

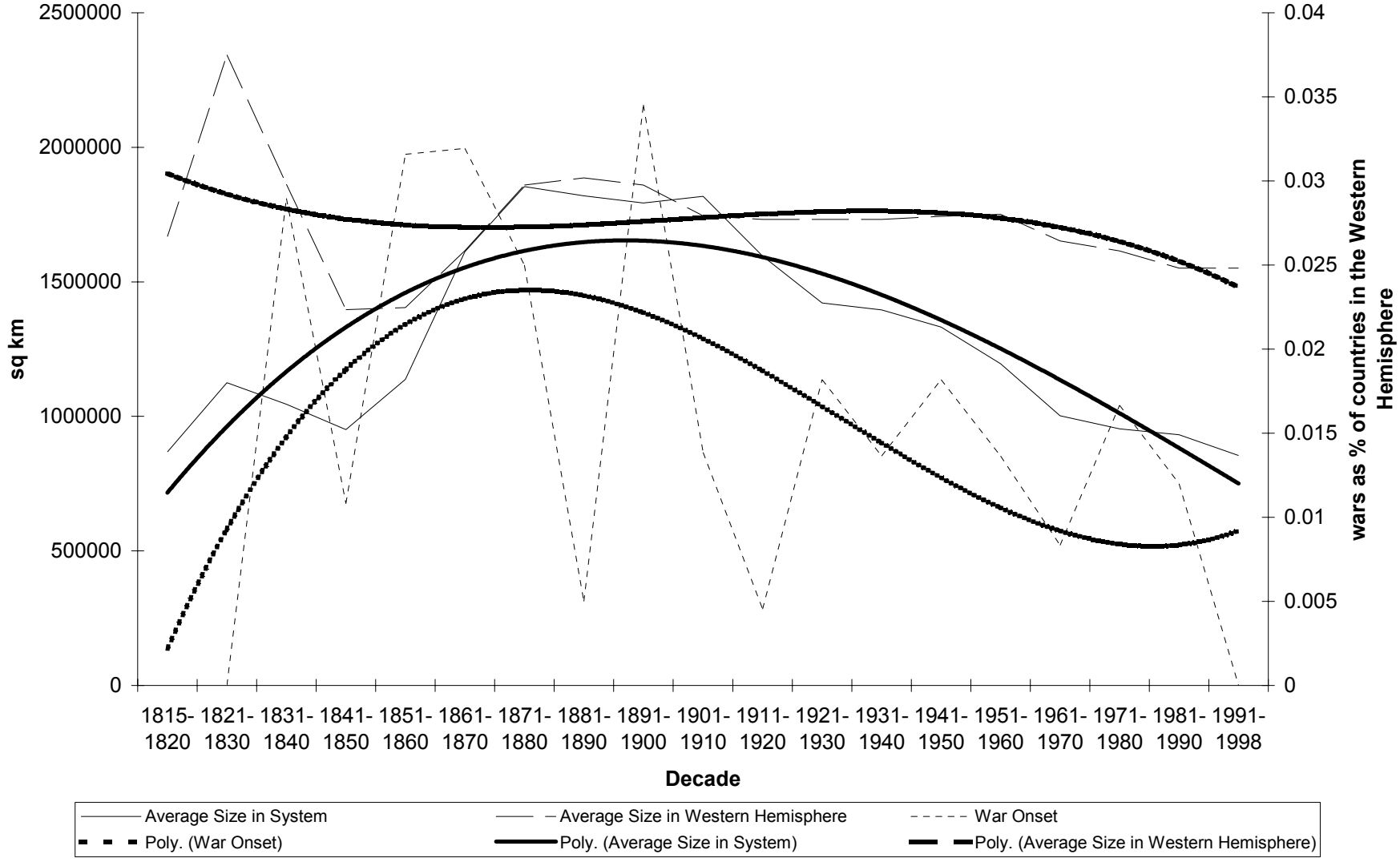

Figure 12a
Europe: Intrastate War-Years

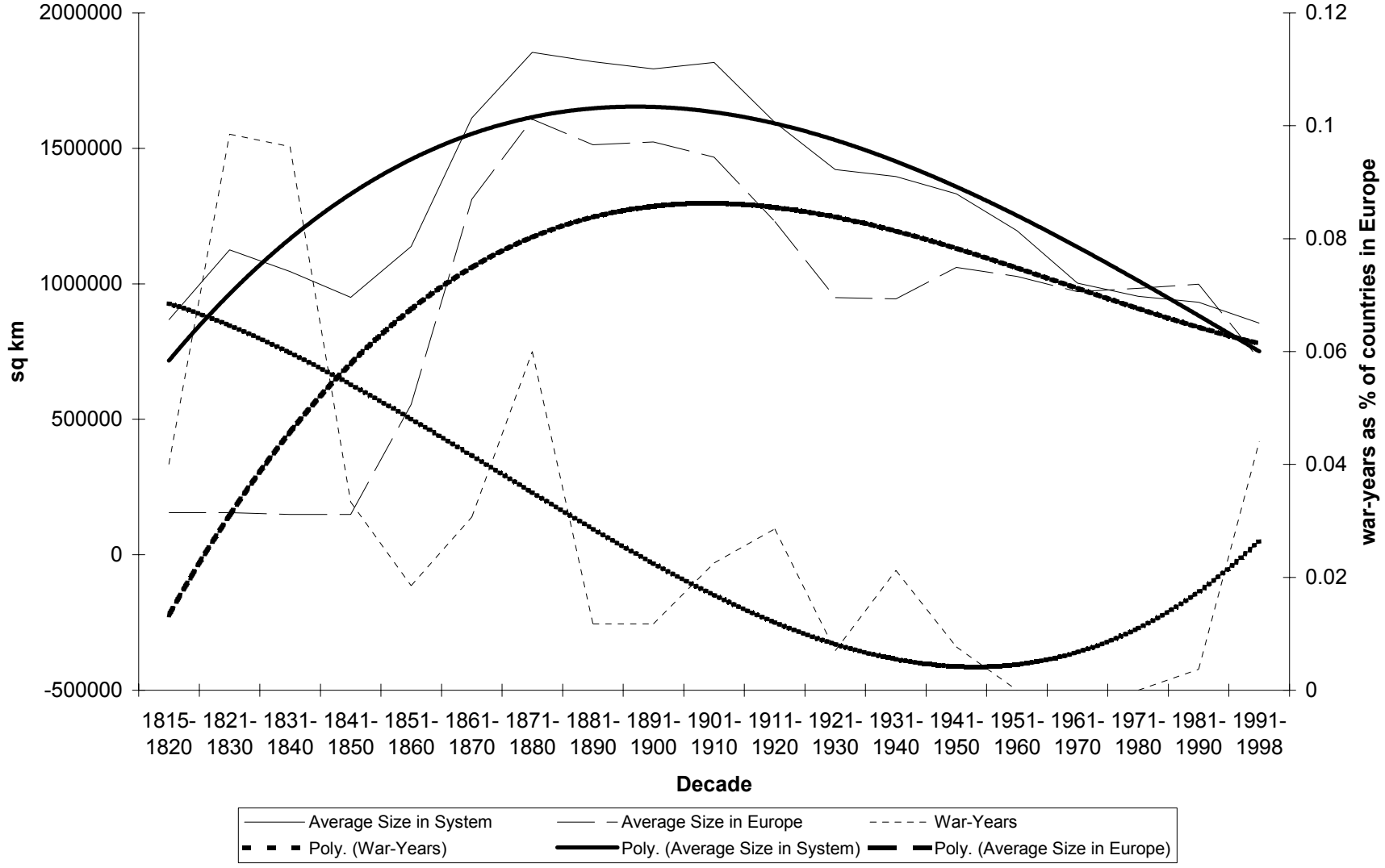

Figure 12b
Europe: Intrastate War Onset

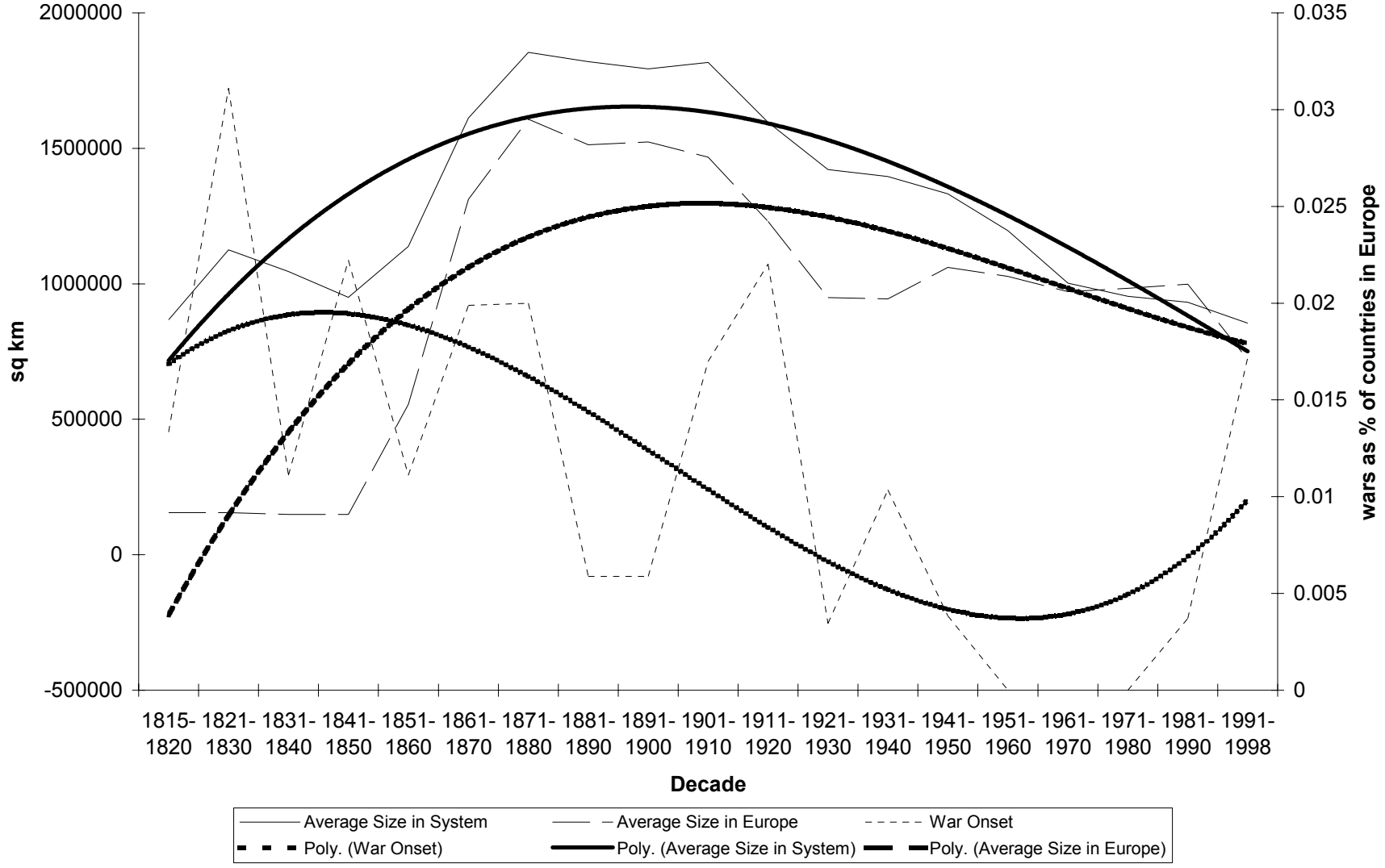

Figure 13a
Asia: Intrastate War-Years
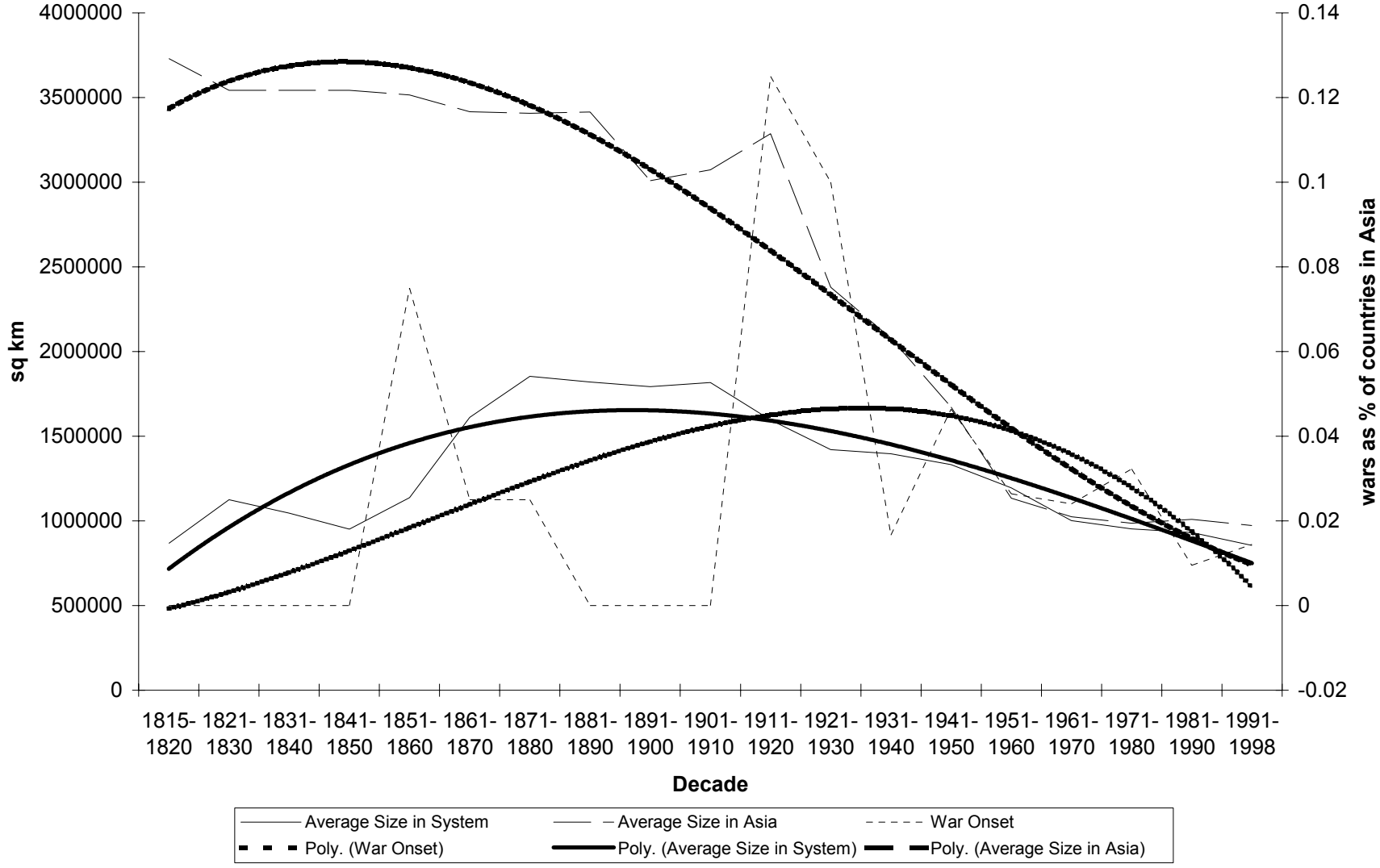
Figure 13b
Asia: Intrastate War Onset