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CORRECTING THE IMBALANCE OF THE WORLD HERITAGE LIST: DID THE UNESCO STRATEGY WORK?

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CORRECTING THE IMBALANCE OF THE WORLD HERITAGE LIST:
DID THE UNESCO STRATEGY WORK?·

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Abstract

The official intention of the UNESCO World Heritage List is to protect the global heritage. However, the imbalance of the distribution of World Heritage Sites according to countries and continents is striking. Consequently, the World Heritage Committee launched the Global Strategy for a Balanced, Representative and Credible World Heritage List in 1994. To date, there have not been any empirical analyses conducted to study the impact of this strategy. This paper shows that the imbalance did not decrease, but rather increased over time, thus reflecting the inability of the Global Strategy to achieve a more balanced distribution of Sites.

SHORT BIOGRAPHYS

Bruno S. Frey is Professor of Economics at the University of Zurich and Distinguished Professor of Behavioral Science at the University of Warwick. He is the author of over 600 articles in professional journals and books and belongs to the "Most Highly Cited Researchers" (ISI Web of Knowledge). He received several honorary doctorates in economics, and he is, among others, a Distinguished Fellow of the Association for Cultural Economics. Prof. Frey seeks to extend economics beyond the standard neo-classics by including insights from other disciplines, including political science, psychology, and sociology.

Lasse Steiner is a research economist at Professor Bruno S. Frey's Chair of Economic Policy and Non-Market Economics at the University of Zurich. His main area of expertise is the Economics of Arts and Culture. In particular, his research covers politico-economic aspects of the UNESCO World Heritage List, price-setting mechanism in museums, and the relationship of the arts and happiness.

I.   THE UNESCO WORLD HERITAGE LIST

The UNESCO World Heritage List (hereafter "List") is generally considered an

excellent contribution to saving the globe's common history in the form of cultural

monuments and landscapes worth preserving. The origin of the List dates back to the

1920s, when the League of Nations became aware of the growing threat to the cultural

and natural heritage of our planet. In 1959, UNESCO launched a spectacular and

successful international campaign to save the Abu Simbel temples in the Nile Valley. In

1966, UNESCO also spearheaded an international campaign to save Venice after

disastrous floods threatened the survival of the city. To institutionalize these efforts the

General Conference of UNESCO adopted the *Convention Concerning the Protection of*

the World Cultural and Natural Heritage at its 17th session in Paris in November, 1972.

The Convention "seeks to encourage the identification, protection and preservation of

cultural and natural heritage around the world considered to be of outstanding value to

humanity."[1] To date, 187 state parties have ratified this Convention, and the List

currently has 911 World Heritage Sites (hereafter "Sites"), 704 (or 77 percent) of which

relate to culture;180 to nature; and 27 of which are mixed, combining cultural and

natural heritage.[2] The List has become very popular and many regard the List as "the

most effective international legal instrument for the protection of the cultural and

natural heritage" (Strasser, 2002, p. 215).

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[1] http://whc.unesco.org/en/about, accessed on 20.1.2011
[2] Data is after the 34th ordinary session of the World Heritage Committee, held in Brasília 25th July–3rd
August 2010. Only two Sites have been delisted since the implementation of the List. UNESCO, World
Heritage List, http://whc.unesco.org/en/list, accessed on 20.1.2011.

Accompanying the increasing popularity of the List, a large social science literature on World Heritage and the UNESCO program has emerged. Some studies analyze in depth why cultural heritage should be preserved. It is argued that the past is important to understanding and appreciating the present, and that the past is an important part of the identity of a nation, region or local unit, as well as of the people living therein (Peacock and Rizzo, 2008). Several noteworthy contributions in cultural economics try to capture the impact of heritage sites on individual utility as well as on the utility of preserving the past for future generations (Peacock and Rizzo, 2008; Klamer and Throsby, 2000; Peacock, 1978). Other studies concentrate on more specific aspects, such as the consequences for tourism of being included in the List. It has been demonstrated that once Sites are placed on the List they experience a significant increase in tourists. While this is welcome for firms offering tourist services, in particular hotels and restaurants, there is some concern that too large a number of tourists may negatively affect the heritage sites (e.g., Leask and Yeoman, 2004; Tunney, 2005; Cochrane and Tapper, 2006). While it is clear that more people visit these Sites that now belong to the "common heritage of mankind," it is unclear whether, and to what extent, there is substitution from other nonlisted heritage sites.

The impact on tourism and prestige gained from Site nomination are factors that incentivize applications, potentially distort the process of designation and contribute to the *imbalance* of the List (e.g., Millar, 2006; Cleere, 2006; Harrison and Hitchcock, 2005). For example, the large share of Sites located in Europe (see below) raises the question of whether the Sites selected for the List adequately reflect the common heritage of mankind (see e.g., Byrne, 1991). Recent studies empirically analyze the determinants of getting on the List. They show that political and economic factors

unrelated to the value of heritage have an impact on the composition of the List (Frey et al., 2011; Bertacchini and Saccone, 2011).

We focus on the highly unequal distribution of Sites according to countries and continents. Although 46 percent of the Sites are in Europe, only 9 percent are in Africa. Only 10 countries have a large number of 20 Sites or more, whereas, on the other hand, 38 member countries of the Convention have no Sites at all. This imbalance of Sites according to continents and countries has been present from the beginning, and it has become a subject of major concern within the World Heritage Commission, the World Heritage Centre, UNESCO, and other organizations. The Director of the World Heritage Centre, Francesco Bandarin, even went so far as to call the World Heritage List "a catastrophic success" (Henley, 2001).

As a reaction to this imbalance, in 1994, the UNESCO World Heritage Committee started the Global Strategy for a Balanced, Representative and Credible World Heritage List (hereafter "Global Strategy")[3], which intends to raise the share of non-European Sites on the List. Despite this explicit new strategy and intended strong action, "the immediate success of these efforts is questionable" (Strasser 2002, p. 226).

This paper analyzes in which respects there is an "unbalanced" representation of continents and countries on the World Heritage List. We further address the question of whether the international organization UNESCO is effective in achieving the goal of its own formally ratified resolution. In particular, we test whether the Global Strategy has reached its goal of reducing the inequality in the distribution of Sites.

In order to lay the groundwork, Section II discusses the process of selecting Sites and introduces the political actors involved in the nomination process. The

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[3] http://whc.unesco.org/en/globalstrategy accessed on 26.1.2011

existing literature usually discusses the strategy for a more balanced List and the strategy's outcome without referring to empirical evidence. This paper fills the gap by presenting statistics on the highly unequal distribution of Sites across countries and continents (Section III). The Gini coefficient as a measure of the inequality in the distribution of Sites across the world is increasing over time, depicting an increasing concentration of Sites in a few countries. Further, we analyze the Global Strategy's objectives of reducing the imbalance between cultural and natural Sites as well as reducing the share of Sites located in European and more developed countries. The results suggest that the imbalance of the List has not decreased after the introduction of the Global Strategy. If anything, it has increased further (Section IV). We briefly discuss previous attempts to reform the List (Section V). Section VI concludes.

II.   SELECTION ASPECTS OF THE WORLD HERITAGE LIST

Nomination Process

The advisory bodies to the World Heritage Committee used a somewhat ad hoc method to determine the Sites to be initially included on the List. The Convention's criterion of "outstanding value to humanity" is noble but proved to be almost impossible to define clearly. An important development has been the establishment of 10 criteria for inclusion in the List, which are specified in detail in the *Operational Guidelines for the Implementation of the World Heritage Convention* (UNESCO, 2005). Nominated Sites must meet at least one of the 10 criteria, which are applied in connection with three comprehensive aspects: uniqueness, historical authenticity, and integrity. Six criteria refer to "Cultural" and four to "Natural" Sites. The former must "represent a

masterpiece of human creative genius" (Criterion i). The latter should "contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance" (Criterion vii). If a Site meets at least one cultural *and* one natural criterion, the property's classification is a mixed Site.

The List is composed by three different bodies: the state parties that nominate the Sites, the two advisory boards that evaluate and propose the Sites for inscription, and the Committee that formally decides on inclusion in the List. The World Heritage Committee meets once a year and consists of representatives from 21 of the member countries. The General Assembly elects the members of the Convention for terms of up to six years. The intention of the Convention is an equitable representation of the world's regions and cultures on the Committee (UNESCO, 2005, Art. 8 [2]). However, the Convention nowhere specifies the means to achieve this goal. The Committee is the final decision-making body whose responsibilities include the World Heritage List, the List of World Heritage in Danger, administering the World Heritage Fund, and deciding on financial assistance. Member governments must propose the Sites to be included on the List. Mayors, district governments, or heritage experts may only make proposals for inclusion on a tentative list. The World Heritage Convention differs from many other international conventions because all substantive powers are designated to the Committee and not the General Assembly. The Heritage Committee is advised by the International Council on Museums and Sites (ICOMOS) for Cultural Sites, by the International Union for Conservation of Nature (IUCN) for Natural Sites, and by the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM). It has been claimed, "the scrutiny of these systems by the two Advisory Boards is now rigorous.…" (Cleere, 2006, p. xxii).

International Organization Research

The central task of the World Heritage Convention – to protect the global public goods of "world cultural and natural heritage" and at the same time to achieve some measure of representatives among continents and countries – links up closely to various topics analyzed in International Organizations research.

The List is compiled by an organization within UNESCO, the World Heritage Center in Paris. It is supported by the World Heritage Committee, which is in turn advised by several councils. The goal is to safeguard and preserve a global public good, the heritage of mankind. This closely links to research in the theory of international organizations. The role of international organizations in the provision of global collective goods or global commons, the respective international cooperation, international regimes and international institutions are examined, for example, by Keohane (2003) and Koremenos, Lipson and Snidal (2001). These studies point out both the necessities and the difficulties of providing public goods in a global context. As long as there is no world government with effective sanctioning power, the provision of global public goods such as preserving mankind's common heritage is uncertain and unstable. In the case of heritage, many nations make a strong effort toward having their national heritage sites put on the List, as they can derive substantial commercial benefit as well as prestige from such listings. However, the question is whether the resulting List really presents a balanced picture of world heritage. This question is a central aspect of this paper's analysis.

International organizations are not necessarily working as intended but may be dysfunctional in regards to the official purpose (see, e.g., Grant and Keohane, 2005; Martinez-Diaz, 2009). The incentives that actors in these organizations face may lead them to pursue their own interests, or the interests of pressure groups, rather than the official goal of the organization (e.g., Peterson, 2010; Carpenter, 2007 in the context of advocacy frameworks and civil society). This is an imminent danger in an organization such as the World Heritage Center, which does not have to report to the UNESCO General Assembly. Even if it had to, there would still be strong forces inducing the decision makers to deviate from the organization's official goal.

The political influence of the national representatives in international organizations has been the subject of studies by, for example, Oatley and Yackee (2004) and Dreher, Sturm and Vreeland (2009). They demonstrate that the career patterns of the national representatives significantly influence their behavior. As long as they are part of the national civil service and aspire to rise in its ranks, they have an incentive to put the interests of their own country first. For the case of world heritage, it has been empirically shown, indeed, that factors unrelated to the value of heritage, such as membership on the UN Security Council, have a systematic impact on the composition of the List (Frey, Pamini and Steiner, 2011).

Political Economy of the World Heritage List

From the point of view of political economy, it may be argued that the *selection* of the Sites is questionable because it is subject to rent-seeking by experts and politicians (Buchanan, 1980; Frey, 1984; Frey et al., 2011). Politicians in their

respective countries and expert representatives on the advisory groups ICOMOS and IUCN strongly influence the selecting of Cultural and Natural Sites for the List. In most cases, the Committee follows the experts' recommendations. Technical experts rely on their knowledge as art historians and conservators, but this "concept…has never been the object of a truly operational definition" (Musitelli, 2002**, p.** 329).

Some scholars go so far as to question the legitimacy of the List. Meskell (2002) argues that the concept of World Heritage is flawed by the fact that it privileges an idea originating in the West, which requires an attitude toward material culture that is distinctly European. Affluent countries seem to have benefited most from the Convention. According to a Report of the World Commission on Culture and Development, the List "was conceived, supported and nurtured by the industrially developed societies, reflecting concern for a type of heritage that was highly valued in those countries" (Olmland, 1997). Moreover, many countries do not have the necessary conservation infrastructure that allows them to prepare nominations for the List at a sufficiently sustained pace to improve its representativeness (Strasser, 2002, pp. 226–227). According to the Convention, the state parties must identify and delineate the property (UNESCO, 2005, Art. 3); in addition, they must ensure the identification, protection, conservation, presentation and transmission to future generations (UNESCO, 2005, Art. 4). These requirements put a heavy burden on countries wishing to put a site on the List. In order to avoid a negative decision, state parties often withdraw a nomination if the Committee or its Bureau is likely to decide unfavorably.

Being on the List is highly desired by many as it brings prominence and monetary revenue. The attention of donors and for-profit firms is attracted, and there is a positive relationship between the number of Sites and the number of tourist arrivals

per country (Lazzarotti, 2000; Yang et al., 2009). One may even speak of a "heritage industry" (Johnson and Thomas, 1995). Indeed, inclusion on the List is considered to be a great honor for the respective nation and, accordingly, gets much attention by the press, radio, and TV (Van der Aa, 2005). It has been highly politicized as many political and bureaucratic representatives of countries consider it a worthwhile goal from which they personally profit. Consequently, the selection is subject to political pressure and it is not solely determined by the 10 official criteria deemed to be "objective." Although the goal of the whole project is to protect Sites of central importance for humanity, national interests dominate global interest: "The rhetoric is global: the practice is national" (Ashworth and van der Aa, 2006, p. 148). Some countries try more actively to secure Sites to be included on the List. Twenty-one nations participating in the Convention have a seat on the World Heritage Committee. However, these members nominated more than 30 percent of the listed Sites between 1978 and 2004 (Van der Aa, 2005, p. 81). This relationship was confirmed by econometric estimations of Bertacchini and Saccone (2011). They find a clear positive and statistically significant correlation of membership in the Committee and the number of listed Sites. One example of a questionable selection occurred in 1997 when 10 Italian Sites were included to the List all at once, and the Committee chair at that time was a compatriot. In addition, the location within the country where the Committee holds its annual meeting seems to have an impact on the number and kind of nominations. indeed, the 1997 meeting was held in Naples, Italy (Cleere, 1998). Francesco Bandarin, the Director of the World Heritage Centre, acknowledges, "Inscription has become a political issue. It is about prestige, publicity and economic development" (Henley, 2001).

III. DISTRIBUTION OF SITES

The distribution of Sites on the List across *continents* is highly unequal. Forty-seven percent of the Sites are in Europe.[4] The European predominance is larger for Cultural Sites (54 percent) than for Natural Sites (22 percent). In contrast, (sub-Saharan) Africa has less than 9 percent of all Sites, and the Arabian countries have 7 percent. The Americas and Asia-Pacific are better represented with 17 percent and 20 percent, respectively (see Figure 1).

FIGURE 1

The distribution of Sites across *countries* is also highly skewed. If we look at the world, we see that some countries have a large number of Sites; others have a few Sites, and a considerable number have none. Only 10 countries have 20 Sites (a large number) or more . On the other hand, there are 38 countries with no Sites at all. Some of these countries have been part of the Convention for a long time.[5] As a measure of statistical dispersion a Gini coefficient of 0.55 in 2009 reflects the highly unequal distribution. A completely equal distribution (each country has the same number of Sites or a Gini coefficient of 0) could be supported by the argument that every country should have the same importance with respect to its contribution to the heritage of humankind. This point of view emphasizes that every country should be of equal worth to an

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[4] Continents follow the UN definition.
5 For example, Guyana since 1977 or Monaco since 1978; however, larger countries such as Jamaica (since 1983) or countries with an important heritage, like Bhutan (since 2001) with its Djongs, have been disregarded.

international organization such as the UN and its agency UNESCO. This applies to "culture" in its broadest definition but also to "nature": Each country can be considered to have aspects of Cultural and Natural Sites worth preserving. This particular point of view refrains from any attempt to compare the Sites between countries. Clearly, this is an extreme position because it does not take into account the size of a country as measured by population or geographical extension.

A second position considering the relevant unit of the List is the size of the *population per country* rather than countries as such. This point of view seems to be most appropriate with respect to Cultural Sites: Each person of the world may be taken to have the same capacity to produce cultural goods. These goods may be of extremely different types and forms and would certainly not correspond to what are sometimes called "high" cultures, such as those of classical Egypt, Greece or Rome. However, the cultural production may have occurred far back in the past when the population size was quite different from that of today. This historical population size varies from country to country, therefore we focus on Sites according to present population size. Taking the distribution according to the population as a reference, Europe is still on top with 52 Sites per 100 million persons followed by the Arabian countries, the Americas, and sub-Saharan Africa with 23, 18, and 11 Sites per 100 million inhabitants, respectively. The Asia-Pacific region has much less, 5 per 100 million inhabitants.

A third approach is a balance distribution that relates to the country's size as measured by *area in square kilometers*. The larger a country is, the more likely it is to find some Site worth including on the List. This argument seems to be more convincing for Natural Sites. Most likely, a large country has more different landscapes than does a small one, some of which may fit the UNESCO criteria. The distribution of Sites per

square kilometer is also clearly headed by Europe with 19 Sites per million square
kilometers, whereas all other continents possess between four and five (see Frey and
Pamini, 2010).

The imbalances in the List according to continents and countries have been
present from the very beginning. Inequality does not necessarily mean, of course, that
the selection is incorrect. However, a strongly unequal selection may indicate that
inappropriate aspects play a role. UNESCO accepts this point, and the *imbalance* has
become a subject of major concern within the World Heritage Commission and Centre,
UNESCO, and beyond.

IV. IMPACT OF THE UNESCO GLOBAL STRATEGY

In 1994, 22 years after the adoption of the Convention, UNESCO determined that the
List lacked balance in the type of inscribed properties and in the geographical areas of
the world represented. "Among the 410 properties, 304 were cultural sites and only 90
were natural and 16 mixed, while the vast majority is located in developed regions of
the world, notably in Europe".[6]

Three objective criteria for a more balanced List are available: the distribution
according to *Cultural* and *Natural Sites*, the distribution according to a country's
development, and the distribution according to *continents*. The Operational Guidelines
stipulate in several propositions that a balance in the number of Cultural and Natural
Sites should be achieved (UNESCO, 2005, paras. 6, 15, and 58). Concerning the
distribution of Sites we focus on successful inscriptions on the List instead of

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[6] http://whc.unesco.org/en/globalstrategy accessed on 26.1.2011

applications. If more applications are made by European countries (whether they have more potential Sites or better resources to apply), more European countries will be represented than countries from other continents. However, state parties often withdraw a nomination if there is a chance that the decision might be negative, leading to a distorted selection.[7] To avoid such biases, we do not follow this approach but rather analyze only successful applications.

UNESCO further observed an imbalance with respect to the character of Sites. A global study carried out by ICOMOS from 1987 to 1993 suggested that, in Europe, historic towns, religious monuments associated with Christianity, historical periods, and "elitist" architecture (in relation to vernacular) were all overrepresented on the World Heritage List; whereas, all living cultures – especially *traditional cultures* – were underrepresented.

To support the Global Strategy in achieving greater balance, UNESCO intended to encourage countries to become state parties to the Convention, to prepare tentative Lists, and to advance the nominations of properties from categories and regions currently not well represented on the List. UNESCO intends to raise the share of non-European Sites as well as the share of living cultures included on the List.

Inequality Over Time

The Global Strategy is intended to lower the imbalance, increase the representativeness, and reduce European dominance. The time has come to empirically evaluate the outcome of the Global Strategy.

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[7] Furthermore, data on applications available on the UNESCO homepage is incomplete.

A first indicator of the imbalance is the Gini coefficient as a measure of statistical dispersion. As seen in Figure 2, the Gini coefficient of the distribution of Sites across countries has risen almost monotonously over time from 0.34 in 1979 to 0.55 in 2009. The distribution of Sites is increasingly concentrated in countries that already have many Sites. The calculation does not include countries with no Sites, to avoid biases by countries that become members of the Convention and start with no Sites. Another way to reduce the bias produced by new member countries is to include countries with no Sites but only if they have been members of the Convention for at least two years. The minimum amount of time the Committee needs to decide on a nomination is 12 months (Leask and Fyall, 2001). When including the zero observations, the Gini coefficient is higher; it increased from 0.52 in 184 to 0.65 in 2009. However, it is increasing less strongly than the Gini coefficient that does not include countries without Sites.[8]

Another measure of dispersion is the standard deviation of the number of Sites per country. The standard deviation has risen from around 2.0 to 7.6 with the mean increasing from 1.2 to 4.9 Sites per country in the same period. Here the different calculation methods have little effect on the results. Both dispersion measures suggest that the new Global Strategy clearly did not help to reduce the inequality of the distribution among countries, i.e., relatively fewer countries obtain a larger share of Sites over time.

FIGURE 2

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[8] The decrease in the beginning can be explained by the many countries that had no Sites when the Convention was launched but soon obtained at least some Sites.

The number of Sites on the List has continuously grown over time. On average, about 30 properties have been added to the List each year. The growth rate has even accelerated, from 26 Sites per year 1978–1994 to 36 Sites per year afterward. The e List now contains over 900 Sites. As shown in Figure 1, today, the European countries hold almost half of all Sites. This European dominance was one of the reasons for launching the Global Strategy. Surprisingly, the number of new European Sites per year exhibited a strong increase after 1990, which lasted until the year 2000. Even recently, the European countries have been granted more additional new Sites in almost every year than have all the other continents. Consequently, the share of total Sites belonging to Europe rose even after the introduction of the Global Strategy (see Figure 3).

FIGURE 3

As argued above, the relevant unit for consideration on the List could be the size of the population or area per country. Figure 4 shows the number of total Sites per one million square kilometers for each continent.

FIGURE 4

Europe has by far the most Sites per area, and Europe's number of Sites compared to all other continents is increasing over time. Here, we show the development after 1990 when the last major change of the area occurred after the U.S.S.R. joined the Convention in 1988. It is also the most relevant time range for our analyses. There are no indications that the introduction of the Global Strategy in 1994

had any effect. The European countries also lead the distribution of Sites per person. As shown in Figure 5, in 2007, the European continent had about 50 Sites per 100 million persons, whereas all other continents ranged between 5 and 23 Sites per 100 million persons.

FIGURE 5

Distribution According to Cultural and Natural Sites

The distribution of Sites according to Cultural and Natural Sites is very unequal. Today 77 percent of the Sites are Cultural and only 20 percent are Natural. This imbalance clearly favors the European countries, which are more successful in obtaining Cultural Sites than are countries from other continents. The Operational Guidelines stipulate that an equal distribution of Cultural and Natural Sites should be achieved (UNESCO, 2005). In 1980, the United States delegate to the Committee suggested establishing a working group on the balance of Cultural and Natural Sites (Strasser, 2002). One goal of the Global Strategy is to approximate the share of these two types of Sites. Figure 6 depicts the development of the number of Cultural, Natural, and Mixed Sites. Although the number of Mixed Sites has increased the least, the number of Cultural Sites has increased much faster than the number of Natural Sites. In relative terms, the ratio of Cultural to Natural Sites tends to increase monotonously over time. This reflects an increasing share of Cultural Sites – even after the introduction of the Global Strategy.

FIGURE 6

Simultaneous Analysis of the Impact of the UNESCO Strategy

The next step is to investigate the impact of the Global Strategy on the distribution of Sites by simultaneously controlling for different factors. Here, we focus on two factors explicitly mentioned in the Global Strategy: the European predominance and the impact of the development level of a country on the number of Sites.

First, we perform cross-section regressions to estimate the impact of the continents and GDP per capita (1,000 USD per capita) as a measure for economic development. The dependent variable is the total number of Sites a country had before the Global Strategy (1993) and the number 14 years later (2007). Because the number of Sites is a count variable, we use negative binomial regressions to estimate the partial correlations.[9] We control for the factors introduced above: *area* (one million square kilometers) as a proxy for natural potential, and *population* (100 million persons) as a proxy for cultural production potential. As a technical control variable, we add the number of years that a country has been part of the Convention, limiting its potential to get Sites (tenure). Table 1 shows the estimated coefficients for the years 1993 and 2007 and for the new Sites obtained in the period between 1993 and 2007.

TABLE 1

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[9] For count data, one can also estimate Poisson regression models. In our case, these models lead to qualitatively and quantitatively very similar results. In Stata, count data models can be compared with the "countfit" command. A comparison of the mean differences, the sum of the Pearson statistic, and the AIC and BIC statistics suggest applying negative binomial regressions to our data. Thus, we only show the results of these estimations.

Although the coefficients of area and population remain similar, the coefficient for tenure decreases, which reflects the increasing number of countries in the Convention. The more years a country has been a member of the Convention, the more Sites it obtains. This relationship was less strong in 2007 than in 1993 because of new member countries with more recent tenure obtaining Sites.

With Europe as a reference category, the coefficients of most continent dummies have not changed in a statistically significant way between 1993 and 2007. Even when controlling for the size of a country and tenure in the Convention, non-European continents did not catch up with Europe in terms of the number of Sites. The only continent that shows a significant change is Asia-Pacific but in the unintended direction: Countries on this continent obtained even fewer Sites compared to Europe than before the Global Strategy was started. The size of the coefficients can be interpreted by computing the exponent of the estimated coefficient to get the so-called incidence rate ratio (IRR), which indicates the factor change in the expected count of Sites for a unit increase in the independent variable. In column (2), the African countries have, for instance, an IRR $= e^{-1.283} = 0.277$. This means that being located in Africa is accompanied with a relative decrease of the expected number of Sites of IRR $-1 = -72.3$ percent compared to the European countries.

Moreover, the Global Strategy is intended to increase the share of Sites in less developed regions. When GDP per capita is used as a measure for economic development, the estimated coefficients reveal that the Global Strategy also failed with respect to this objective. Although in 1993, before the introduction of the Global Strategy, the coefficient of GDP per capita was not statistically significantly correlated with the number of Sites, 14 years later the correlation was positive and significant.

More developed countries obtained more Sites after the introduction of the Global

Strategy. An increase in GDP per capita by 1,000 USD leads to a relative increase of

2.14 percent in the expected number of Sites. We also estimate the impact of the

determinants mentioned above only for the Sites obtained *after* 1993. The results in

Table 1, column (3), support our previous results.

In a second step, we test for a structural break by using the panel structure of the

data and introducing a Global Strategy dummy taking the value one after 1993.

Interaction effects of the Global Strategy dummy and the determinants reveal whether

the slope of these determinants changed after 1993, which would be an indicator for the

success of the Global Strategy. Again, we use the total number of Sites of a country up

to a certain year as the dependent variable with panel data structure and random

effects.[10] In the basic setting without interaction effects, the results from the cross-

section estimations hold (see Table 2, column (4)).

TABLE 2

In Table 2, column (5), we introduce interaction effects. The Global Strategy

dummy is positive and significant. Sites are almost never delisted, so the Stock is

increasing continuously after 1993. The interaction coefficient of the Global Strategy

and tenure is negative and statistically significant, which indicates that after the Global

Strategy was introduced the relationship of tenure and total Sites is less positive than

before (but still positive in absolute terms). This reflects the increasing number of

member countries. Because the growth of the List is limited, more countries induce a

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[10] The total number of Sites in year t is correlated with the number of Sites in year t-1. However, the Random Effects model permits serial correlation in the model error.

slower increase of the Stock per country. The interaction term of Strategy and GDP per capita is positive and strongly significant. After the Global Strategy was introduced, the Sites distribution became increasingly biased toward the more developed countries. The interaction effects with the continent dummies of Africa, the Americas, and the Arabian countries are significant and negative. The Sites distribution became increasingly biased toward the European countries after the Global Strategy was introduced.

A somewhat different approach is to use the new Sites per year a country gets as a dependent variable. These estimations of the flow of Sites confirm our previous results (see Table 2, column (6)). The only difference is the negative coefficient of tenure. Countries that have been members for a longer time obtain fewer Sites *per year*. However, in this specification, the only significant interaction-term coefficient is the one of the Global Strategy and tenure (see Table 2, column (7)). This coefficient is positive and significant, indicating that after the Global Strategy was introduced the more tenured countries obtained *relatively* more Sites than did countries with lower tenure. This is contradictory to UNESCO's aim to support countries that recently joined the Convention.

Overall, our results indicate that the Global Strategy did not help to increase the balance and representativeness of the List with respect to continents and development. If anything, the distribution of Sites has become even more biased, considering the objectives set by UNESCO.

V.   REFORMING THE LIST

Some of the shortcomings of the List have been noticed by the Convention, and proposals for reform have been discussed. One shortcoming is the unbalanced distribution of Sites, which was the aim of the Global Strategy, as discussed above. UNESCO intends to increase the *representativeness* of the List but struggles to find appropriate criteria (e.g., chronological periods, cultural criteria, or regional distribution). However, underrepresented state parties are encouraged to apply to change the composition of the List. Considering the *imbalance* of the List, UNESCO has developed a priority system, which prefers state parties with no Sites. Moreover, the number of Sites per country and year is limited to one, in an effort to decrease the imbalance (Strasser, 2002). However, these measures have not had a significant effect so far. In addition, van der Aa (2005) proposes opening the nomination process: Every country, organization, or individual should be allowed to nominate Sites. Many more Sites would be nominated, so the selection process within a country would probably be less biased. However, the evaluation by the Committee would have to be much stricter.

A second major shortcoming is that the number of Sites on the List has continuously grown over time. The Convention does not set a numerical limit for the List, and this *overextension* of the List imposes problems whereby the Committee has to monitor the state of conservation and management of the Sites (Benhamou, 1996). Imposing a time restriction or making a reevaluation after a certain time obligatory would mitigate this problem because these changes simplify the delisting of Sites. This sunset clause is successfully applied within the European Diploma for Protected Areas. The Convention discussed this proposal, but it received little support. In 2003, a maximum number of total new Sites per year (30) was introduced.

Another suggestion for reform is to introduce an overall maximum number of Sites. Doing so would solve the problem of overextension. Monitoring the Sites would be facilitated significantly. Sites would be listed according to their quality but also according to their state of maintenance. Compared to the actual situation, a competition for the best protection would arise in order to be listed (Frey and Steiner, 2011).

VI. CONCLUSIONS

The effort of UNESCO through the World Heritage Commission to establish a World Heritage List containing the most treasured Sites of humanity's culture and landscapes constitutes a great step forward toward preserving one of the most important global public goods on our planet. The List now contains more than 900 Sites, and its number has been steadily increasing since its establishment almost 40 years ago.

The selection of Sites, however, is questionable. It is subject to rent-seeking, not only by the national interests pursued by politicians and bureaucrats but also by the commercial heritage industry. To mitigate the high imbalance of the List in 1994, UNESCO launched the Global Strategy for a Balanced, Representative and Credible World Heritage List. Three of the main goals mentioned by the Global Strategy were lowering the overrepresentation of developed countries and the European continent and increasing the share of Natural compared to Cultural Sites.

Although there is some literature about the Global Strategy and the unequal distribution of Sites, there is a lack of empirical evidence evaluating the development of

the imbalance, the impact of the Global Strategy, and therewith the effectiveness of this particular international organization to achieve a more balanced distribution. This paper intends to fill this gap. Surprisingly, all indicators suggest that the List has become, if anything, even more imbalanced since the Global Strategy was introduced. The share of Cultural to Natural Sites has continued to increase, exacerbating the goal of a balanced distribution of these categories. The Gini coefficient reveals that the distribution of Sites is now more concentrated than ever. The number of Sites in Europe compared to the other continents continued to increase after 1993. Moreover, economically more developed countries obtained relatively more Sites. Furthermore, in contrast to the intention of the Global Strategy, countries with more tenure obtain relatively more Sites per year. Possible measures to lower the imbalance of the List include limiting the number of Sites per country and year or opening the nominations to everyone until the imbalance is reduced.

The positive effects of the List on global heritage protection cannot be doubted. However, the striking imbalance of the List reflects a biased nomination process. It is very likely that not all Sites deserving this label are a part of the List. The fact that the decision makers of UNESCO itself realized the unequal distribution and launched the Global Strategy supports this view. However, as we show empirically, the Global Strategy was not successful in reducing European predominance. This paper intends to attract attention to the persisting imbalance of the List, and it can serve as a starting point for further discussion about possible reforms to protect our global heritage.

Appendix

Figure 1

The World Heritage List according to types of heritage and continents 2009

Note: 21 Heritage Sites go across two countries each, one Site goes across 10 countries. This and all further tables count Sites as many times as the number of countries involved. We do not count the Old City of Jerusalem (ID 48) because it is associated with no country. Sites given to the Socialist Federal Republic of Yugoslavia are still counted under Serbia, although they now are listed under Croatia, Macedonia, Montenegro, and Slovenia. Itchan Kala (ID 543) is counted under Russia because in 1990 Uzbekistan still was part of it. We do not count the Bialowieza Forest (ID 33) for Belarus because in 1979 neither Belarus nor the USSR was in the World Heritage Convention. We do not count the Historic Center of Rome (ID 91) for the Holy See because in 1980 it was not yet a member of the World Heritage Convention.
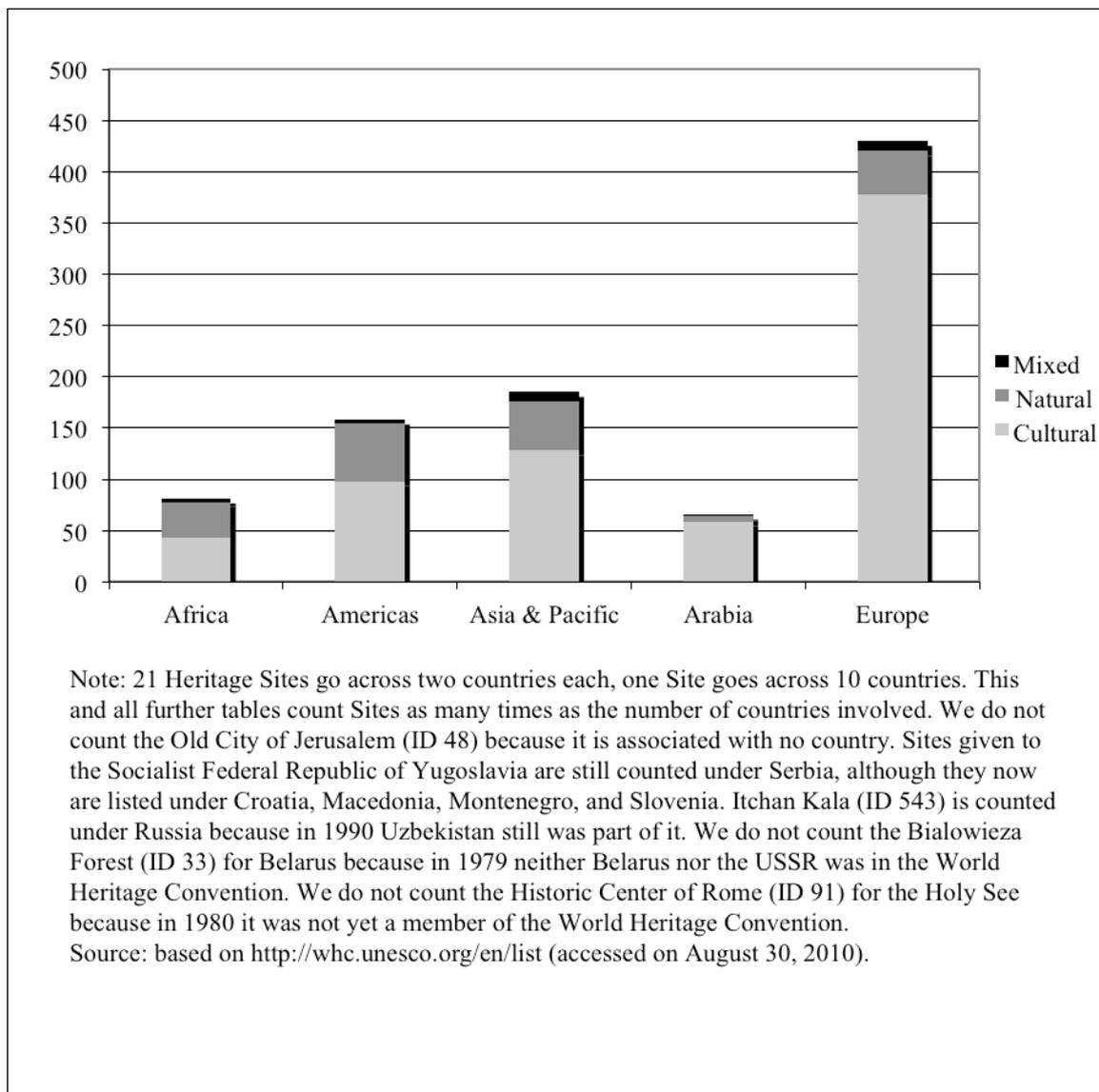Source: based on http://whc.unesco.org/en/list (accessed on August 30, 2010).

Figure 2

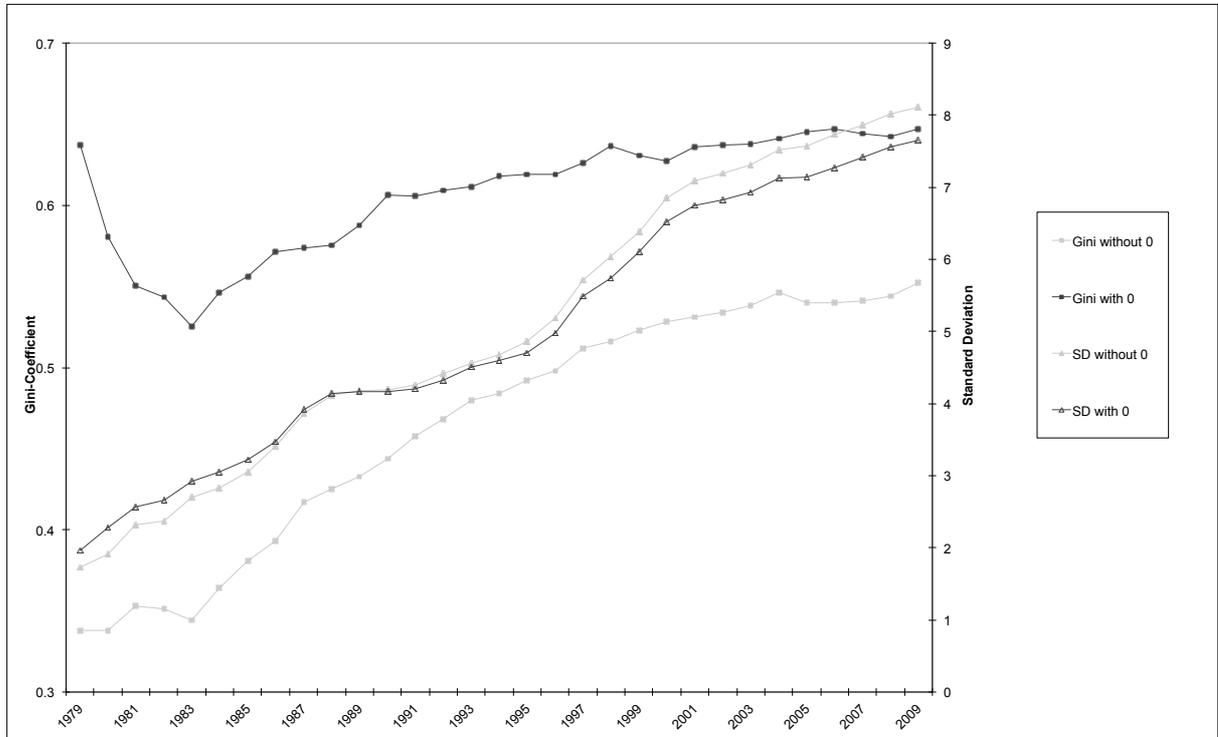Dispersion of World Heritage Sites according to countries 1979–2009

Figure 3

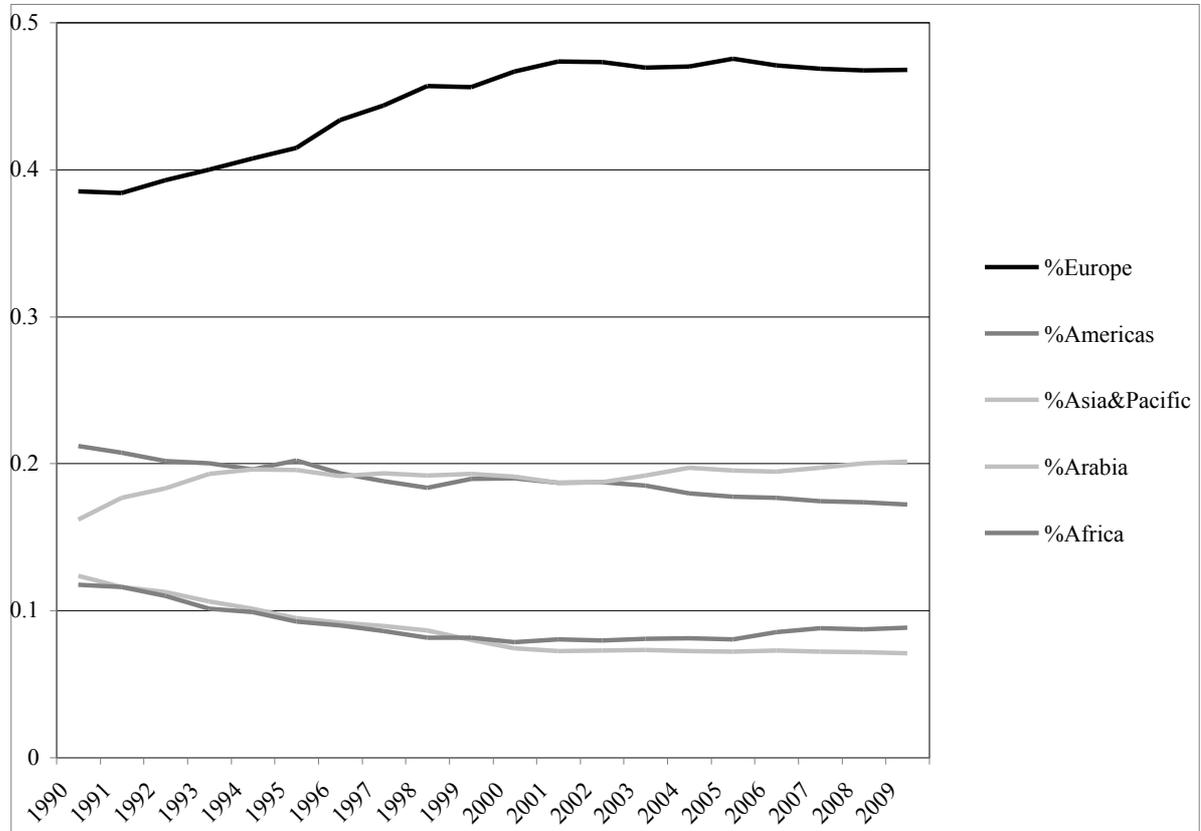Share of total Sites per continent 1990–2009

Figure 4

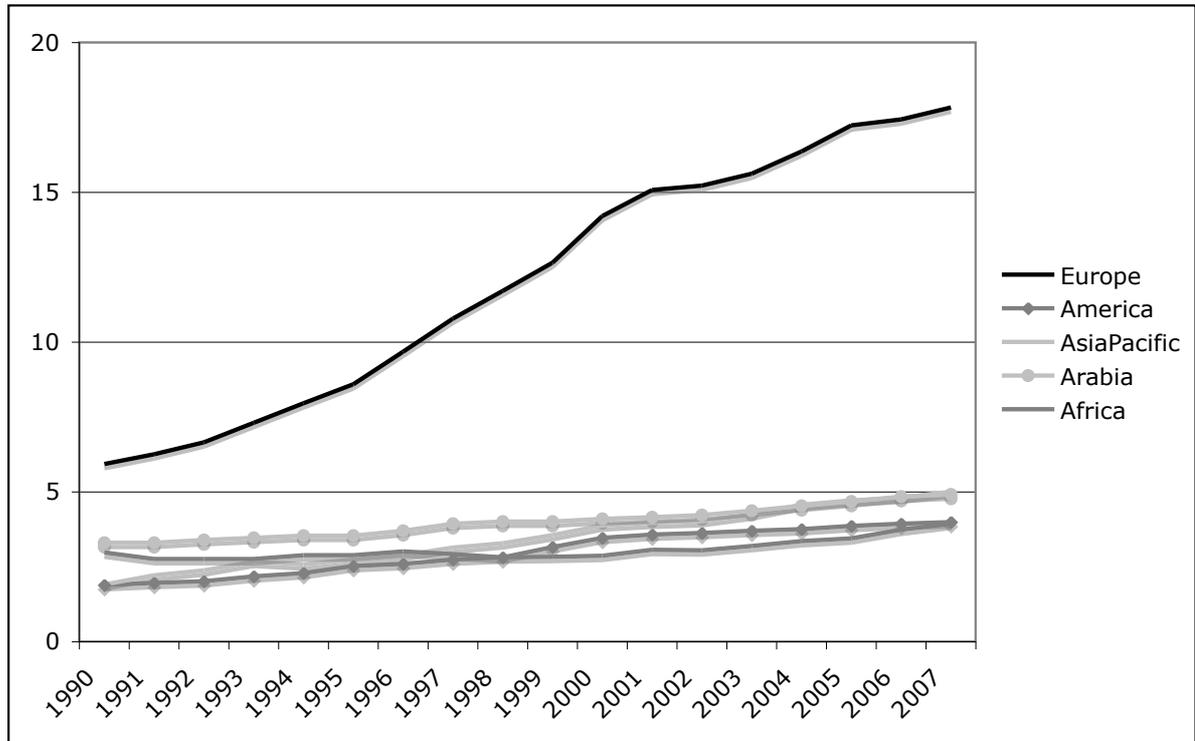Number of Sites per area and continent 1990–2007

Figure 5

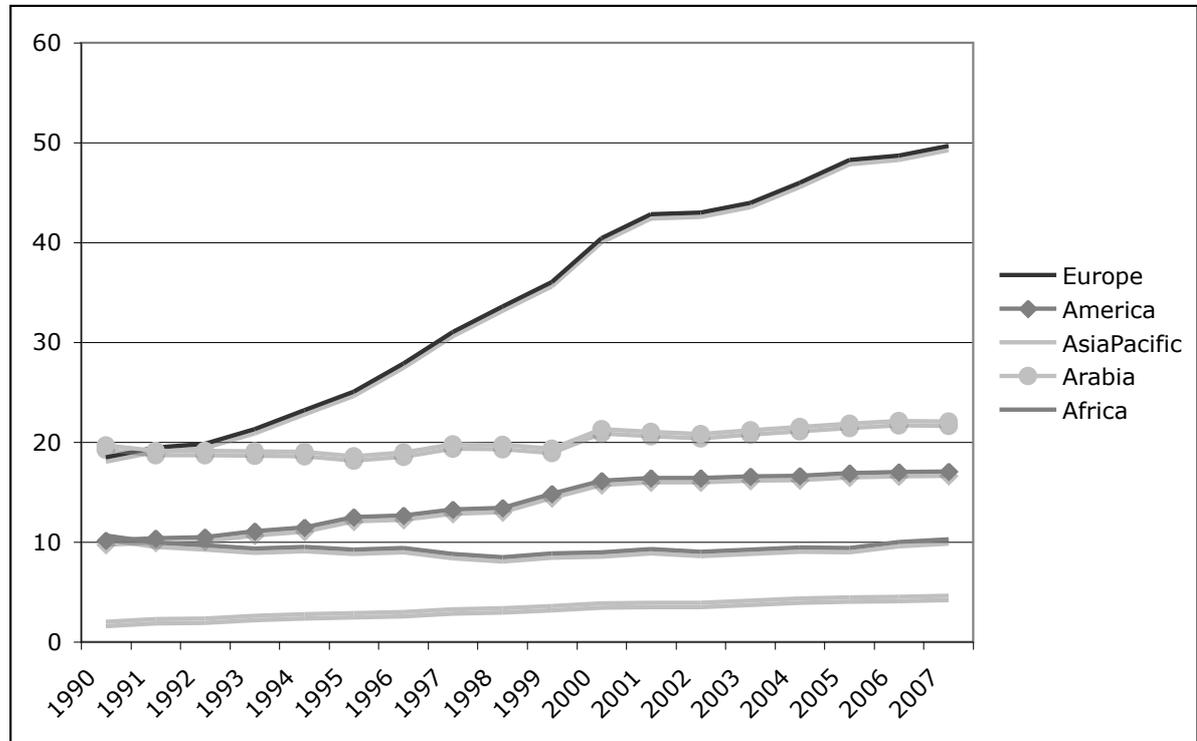Number of Sites according to population and continent 1990–2007

Figure 6

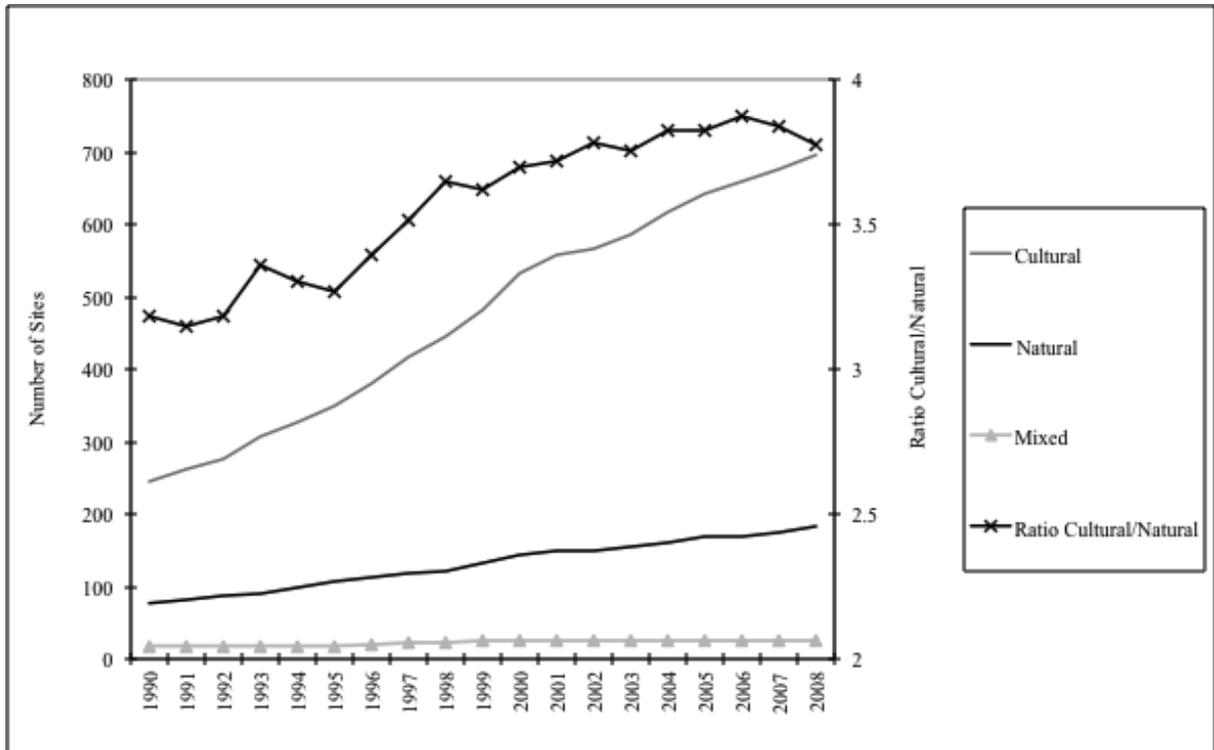Development of number of Cultural, Natural and Mixed Sites 1990–2009

Table 1

Determinants of World Heritage List Inclusion

	Sites per country 1993	Sites per country 2007	Growth of Sites per country 1993–2007
	(1)	(2)	(3)
AREA	0.0803**	0.0887**	0.0950**
	(2.083)	(2.511)	-2.035
POPULATION	0.165**	0.184***	0.191**
	(2.275)	(3.041)	-2.46
TENURE	0.130***	0.0839***	0.0411***
	(7.150)	(8.147)	-3.255
GDPPC	0.00858	0.0212***	0.0296***
	(0.676)	(2.738)	-2.933
AFRICA	-1.284***	-1.283***	-1.324***
	(-4.272)	(-5.479)	(-4.412)
AMERICA	-0.933***	-0.965***	-0.956***
	(-3.477)	(-4.416)	(-3.398)
ASIA-PACIFIC	-0.565*	-0.805***	-0.942***
	(-1.939)	(-3.744)	(-3.476)
ARABIA	-0.999***	-1.084***	-1.554***
	(-2.911)	(-3.591)	(-3.500)
EUROPE		(reference continent)	
Constant	-0.0930	-0.145	0.173
	(-0.357)	(-0.550)	(0.546)
Observations	127	166	166

Note: Cross-section estimations. z-statistics in parentheses: *** p<0.01, ** p<0.05, * p<0.1

Table 2

Testing for a Structural Break in 1994 – Panel Estimations of Stock and Flow

Determinants

VARIABLES	Sites up to year t	Sites up to year t	Sites per year	Sites per year
	(4)	(5)	(6)	(7)
AREA	0.207***	0.230***	0.125***	0.141***
	(2.787)	(2.858)	(4.102)	(4.073)
POPULATION	0.0805**	0.0622	0.149***	0.120**
	(2.572)	(1.108)	(3.386)	(1.982)
TENURE	0.0588***	0.121***	-0.0157***	-0.0377***
	(33.92)	(29.12)	(-2.769)	(-2.625)
GDPPC	0.0129**	-0.00971	0.0231***	0.0197
	(2.364)	(-1.057)	(3.122)	(1.470)
AFRICA	-1.374***	-1.312***	-1.118***	-0.891***
	(-4.878)	(-4.280)	(-5.318)	(-2.879)
AMERICA	-1.047***	-1.081***	-0.724***	-0.498**
	(-3.425)	(-3.299)	(-3.788)	(-1.990)
ASIA-PACIFIC	-0.946***	-0.967***	-0.891***	-0.642**
	(-3.264)	(-3.139)	(-4.531)	(-2.171)
ARABIA	-0.959***	-0.981**	-0.989***	-0.675**
	(-2.668)	(-2.558)	(-3.985)	(-1.982)
EUROPE		(reference continent)		
STRATEGY		0.924***		-0.00749
		(12.50)		(-0.0312)
Strat*Area		0.00211		-0.0266
		(0.249)		(-1.064)
Strat*Pop		0.00622		0.0364
		(0.428)		(0.819)
Strat*Tenure		-0.0757***		0.0278*
		(-18.63)		(1.759)
Strat*Gdppc		0.00956***		0.00302
		(2.689)		(0.252)
Strat*Africa		-0.350***		-0.378
		(-4.261)		(-1.118)
Strat*America		-0.134**		-0.409
		(-2.005)		(-1.641)
Strat*Asia		-0.0968		-0.371

		(-1.237)		(-1.230)
Strat*Arabia		-0.164*		-0.545
		(-1.948)		(-1.375)
Constant	17.01	16.91	-0.246	-0.228
	(0.145)	(0.139)	(-1.266)	(-0.883)
Observations	3,458	3,458	3,458	3,458
Number of id	176	176	176	176
Log likelihood	-5339	-5116	-1818	-1813

Notes: Dependent variable (4) & (5): Accumulated total number of Sites of per country

up to year t.

Dependent variable (6) & (7): Total number of new Sites per Country in year t.

Random effects estimates 1978–2007.

z-statistics in parentheses: *** p<0.01, ** p<0.05, * p<0.1

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