Democracy, ethnic fractionalisation, and the politics of social spending: Disentangling a conditional relationship

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Abstract
In the past decade, a long list of studies has documented the positive relationship between democracy and social spending. Other studies have shown a negative relationship between ethnic fractionalisation and social spending. So far, the two strands of literature have developed independently of each other. In this article, we present a class-coalition argument that links them, arguing that ethnic fractionalisation influences the effect of democracy on social spending. We test the argument in a large-*N* study. In line with our expectations, the findings show that democracy leads to higher levels of social spending, but only in relatively homogenous countries.

Introduction

Recent years have seen an emerging consensus on the role of democracy as a driver of social spending. Even though the underlying mechanisms may be disputed, a series of studies have documented the positive impact of democracy on spending on social programmes. Simultaneously, but disconnected from this literature, other studies have shown how ethnic fractionalisation dampens redistributive social spending, as citizens disfavour redistribution from one ethnic group to another.

We present an argument that links these distinct empirical observations. In authoritarian regimes, it is mainly high-income groups that are allowed to influence policy. Since social spending implies redistribution from rich to poor, authoritarian regimes are generally less inclined to provide such spending. Democracy, on the other hand, is effectively a regime type in which low-income groups in society are enfranchised and, hence, able to influence the scope of social spending. As low-income groups are interested in high levels of redistribution, democracy will lead to higher levels

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of social spending as a means to obtain this (for example, Adserà and Boix, 2002; Huber et al., 2008a; Nelson, 2007).

However, the basic mechanism of the low-income group forcing the high-income group to expand social spending rests on the assumption that the low-income group is in fact an entity with shared policy goals. If not, the low-income group is unlikely to form a strong political coalition that can influence these political decisions. We argue that low-income groups often fail to constitute a strong political force due to ethnic fractionalisation: low social affinity between low-income individuals across ethnic groups reduces their ability to cooperate (Alesina and Glaeser, 2004; Habyarimana et al., 2007; Luttmer, 2001).

Thus, our core proposition is simple: democracy leads to expanding social spending, but only in comparably ethnically homogenous countries. In countries with high levels of ethnic fractionalisation, democracy has no effect on social spending. To evaluate the argument, we conduct a panel regression on data from 115 countries since 1972, yielding more than 1800 observations. This makes our study one of the most encompassing in the literature. We show that the expected relationship is present, as the impact of democracy depends on the level of ethnic fractionalisation.

Democracy and social spending

The proposition that a prolonged experience of democracy leads to rising levels of social spending is well known in the comparative political economy literature (see Meltzer and Richards, 1981) and has received empirical support from a series of global studies, including OECD countries and developing countries (Adserà and Boix, 2002; Ansell, 2008; Boix, 2001; Dion, 2004; Habibi, 1994; Rudra and Haggard, 2005), and from regional studies of Latin America (Brown and Hunter, 1999; Dion, 2000) and Africa (Stasavage, 2005).

While couched in slightly varying formulations, the basic interpretation of the finding is more or less identical across the studies. In the words of Huber et al. (2008a: 421):

> Only prolonged democratic rule makes it possible for parties to consolidate as organizations and establish connections to civil society. This is particularly true for parties representing the interests of the underprivileged; that is, parties of the left.

The underlying assumption of the literature is that authoritarian regimes represent the interests of high-income groups. Since social spending entails redistribution from the rich to the poor, authoritarian regimes oppose such government intervention. However, democracy gives low-income groups the opportunity to protest and to form political parties and interest organisations, thus increasing the prospects for redistribution via the legislative process.

As the above quote from Huber et al. (2008a) makes clear, democracy should only be expected to matter over a prolonged period. Although the transition from autocracy to democracy may be abrupt, it is unlikely to have an immediate effect on social spending. First of all, it takes time to organise political interests into workable parties and interest organisations, not least when the potential members come from the underprivileged strata of society. It may also be the case that claims of redistribution are initially moderated so as not to provoke an authoritarian backlash by the elite. Furthermore, the passing and implementation of expansionist legislation requires a number of years: budgets are normally passed the year before they take effect and many social schemes (notably, old-age pensions) only mature gradually as an increasing share of the population becomes eligible. Consequently, most of the literature studies the impact of the level of democracy on the level of social spending as this promises to capture long-term effects (for example, Ansell, 2008; Boix, 2001; Huber et al., 2008a; Rudra and Haggard, 2005).

Ethnic fractionalisation and social spending

Alesina and Glaeser (2004) have studied the effect of ethnic fractionalisation on social spending, focusing primarily on the western world and the USA in particular. They find that societies with high levels of ethnic fractionalisation do not provide as high a level of social spending as more homogenous societies.[1] Their explanation is basically one of social affinity: people prefer that social spending is channelled to recipients that resemble themselves. If potential recipients are seen as belonging to a different ethnic group, willingness to support social spending drops significantly.

The macro-level empirics provided by Alesina and Glaeser (2004) are supported by both survey and experimental evidence which emphasises slightly different aspects and does not constitute a coherent theoretical framework. Yet, on the whole, it provides a plausible micro-level basis for the macro-level correlation. Using survey data, Gilens (1999) shows that racial stereotypes are important predictors of support for social spending among white Americans. Many white Americans continue to entertain the stereotype that 'blacks are lazy', which leads them to withdraw support for social spending that is believed to benefit unworthy individuals. Similar findings are reported by Alesina et al. (2001). Also using survey data, Luttmer (2001) shows that when the share of one's own ethnic group among local residents increases, people become more favourable towards social spending.

Habyarimana et al. (2007) refer to a number of studies that show how ethnic fractionalisation reduces the provision of public goods and, using experiments, present an argument on the psychological root causes of these findings. They argue that the willingness of members of ethnic groups to cooperate within their own group rather than with members of other ethnic groups fundamentally stems from inherited norms about who to count on for support. They conclude that

> co-ethnics cooperate because they adhere to in-group reciprocity norms – norms that are plausibly supported by expectations that non-contribution will be sanctioned. (Habyarimana et al., 2007: 724)

Essentially, this corroborates Alesina and Glaeser's macro-level findings (2004). People living in homogenous societies believe, wrongly or rightly, that others are willing to contribute to the common good. This is less so in ethnically fractionalised societies, in which the perception is that one cannot necessarily count on others, which presumably leads to the negative stereotypes documented by Gilens (1999). We expect that these micro-level mechanisms map onto the political process and that countries with ethnically homogenous populations will, all else being equal, experience a higher level of support for parties that advocate increasing redistribution between social groups. In ethnically fractionalised countries, it is likely to be different. Many disfavour social spending on other ethnic groups and, as Habyarimana et al. (2007) point out, since cooperation in general is more difficult, forming political parties and interest organisations to pursue such policies may not even be possible to begin with.

The politics of redistribution

The two strands of literature on democracy and ethnic fractionalisation have developed independently of each other. While both seem highly plausible and have been supported by empirical evidence, they share one problem. Figure 1 illustrates our concern. The left-hand side of the figure displays the correlation between democracy (ranging from 0 for least democratic to 6 for most democratic) and social spending as a percentage of GDP (for data sources, see below). Although the positive relationship between the two is clear, it is far from unambiguous. Among the least democratic countries social spending is almost always very low, but among the democratic countries there is a much bigger spread. Some democratic countries spend a lot, others certainly do not.
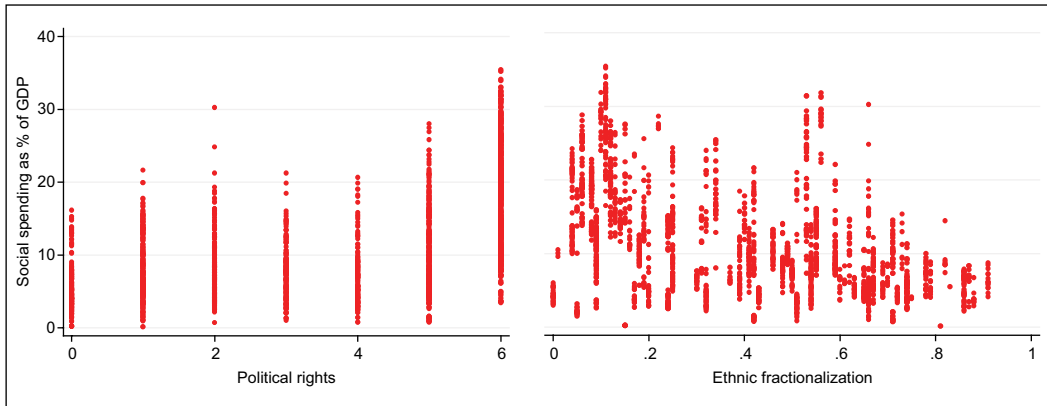
Figure 1. Political rights, ethnic fractionalisation, and social spending.

As the right-hand side of Figure 1 details, much the same can be said about the relationship between ethnic fractionalisation (ranging from 0 for least fractionalised to 1 for most fractionalised) and social spending. In the most fractionalised countries, spending levels are always low, but among ethnically homogenous countries there is great variation. How can we make sense of these puzzling patterns?

Our answer integrates the two sets of literature, drawing in equal measure on their underlying logics. It posits that high levels of social spending are a consequence of strong low-income group pressure mostly manifested in the form of pro-redistributive parties or unions. Compared to countries without such pressure, the high-income elite will face a much more daunting task of ignoring or fighting pro-spending demands. But the emergence of strong and organised advocacy for social spending is conditioned by two factors: democracy and low levels of ethnic fractionalisation.

First, democracy is obviously crucial since authoritarian regimes protect the high-income group in society (Acemoglu and Robinson, 2006; Boix, 2003; Rueschemeyer et al., 1992). With democracy it becomes possible to set up organisations that can mobilise a sufficient number of members and voters to gain a strong platform in the legislative process. It seems to be an underlying assumption in much of the literature on the relationship between democracy and social spending that such mobilisation simply comes about in due course if democracy is introduced.

However, this perspective overlooks the role of ethnic fractionalisation, which may effectively derail such a development. In studies on the origins of welfare states in Europe and North America, authors such as Esping-Andersen (1990) and Huber and Stephens (2001) have emphasised how the mobilisation of workers into a coherent labour movement was conditioned by the degree of fractionalisation in society. To quote Huber and Stephens (2001: 19):

> ethnic divisions are relevant insofar as they form the basis for organizations that may reinforce but more typically divide the constituency of class-based organizations.

There is much to indicate that ethnic divisions still matter in this way. That is, in an ethnically fractionalised country it becomes more difficult to organise parties or unions that can dominate the previous elite. Accordingly, we propose that democracy leads to higher levels of social spending, but only in countries with low levels of ethnic fractionalisation.

Before proceeding to test the argument we briefly address two fundamental assumptions, namely, that ethnic fractionalisation distracts poor voters more than rich voters from having

redistributive opinions according to their economic interest and that poor voters support parties that advocate pro-redistributive policies. With regard to the first point, Shayo (2009) argues that the value of national identity is higher than class identity for the poor (see also Scheve and Stasavage, 2006). Concerning the second assumption–that poor voters support left-wing parties– this is certainly a valid claim in the western world, where newly enfranchised low-income groups have historically voted in big numbers for labour or confessional parties strongly supportive of expanding social protection for workers (Esping-Andersen, 1990; Korpi, 1978, 1983; Stephens, 1979). In a sense, there is little doubt that the 'objective' interests of most low-income groups will be to vote for pro-redistributive parties, which mostly means socialist or social democratic ones. However, and especially related to the Latin American experience, this basic premise has been contested by studies of survey data indicating that divisions between rich and poor are not obvious with respect to dissatisfaction with equality (Cramer and Kaufman, 2011; Kaufman, 2009).

Then again, the reference group for the response to the survey questions is not clear and these studies focus on 'cheap' opinions rather than acts. Actually, evidence from other recent studies tends to refute this claim, since low-income voters can indeed be shown to vote according to their economic self-interests and, arguably as a consequence, for left-wing parties and candidates to a large extent – both in absolute and relative terms (Corral, 2008; Cortina and Gelman, 2006; Lupu and Stokes, 2009; Singer and Rosas, 2007). In short, we believe that the core premise of our argument is valid. But given the possible controversy, we control for any particulars relating to Latin America in the empirical test.

The study

Measurement

In order to test our argument, we have collected data for 115 countries between 1972 and 1999, generating a little less than 2000 observations. The number of country-years covered by our study is thus among the highest analysed so far in the literature. Still, some notorious problems of data quality and comparability remain, which have led us to focus on these countries and this specific time period even though we could have expanded both by including more data that appear less comparable. In particular, the dependent variable (that is, government spending on social protection as a percentage of GDP) may be influenced by unobserved factors such as different accounting methods across space and time as well as deliberate misinformation. These problems are enhanced when we attempt to integrate different data sets that may not use the exact same definitions of spending categories, for example. The backbone of our data on government spending on social protection comes from Easterly (2001a, 2001b), supplemented with data from Rudra and Haggard (2005) – both initially based on the IMF's Government Finance Statistics.

The figures we rely on cover total government expenditure on social spending such as provision for old age, unemployment, health care, and education (see IMF, 2001: 97–110).[2] It bears noting that the data only cover outlays by the central government. However, according to Huber et al. (2008b: 1), this is not a major 'problem for social security and welfare expenditures, as these programs in general are uniform across the nation and centrally financed'. Basically, the 'social assistance programs provided by subnational units are not large enough to make a difference'. Furthermore, they point to the fact that (at least with regard to Latin America) 'data series from the IMF and our other sources are very highly correlated (.92 to .96)'.

While it is difficult to get data on the dependent variable, data on our explanatory variables are more readily available. For democracy measures, we rely on the Freedom House (2009) measure of political rights from the Freedom in the World survey because it is very widely used and because

it contains more observations for the period in question than the alternative measures. It bears mentioning, however, that our results are reproduced when we substitute for this measure the polity 2 indicator from Polity IV, which is the other widely used measure of democracy (Marshall and Jaggers, 2009). Gerring et al. (2005a) and Huber et al. (2008a) have argued that the most appropriate measure of democracy for research agendas similar to ours is the cumulative stock of democracy obtained over a period of time rather than yearly observations. They emphasise that if democracy is in fact a prolonged process which only gradually manifests itself in political and civic life, countries that have been democratic the longest should also perform best. The argument is compelling, although it should be noted that the yearly observations on democracy are in fact highly rigid, with a bivariate correlation between political rights in $t–1$ and t that reaches .96. In other words, even if we do not measure the stock of democracy in a country, we still measure the historical impact of democracy. In any event, we have re-estimated our baseline model using a cumulative democracy score for which we aggregated a country's democracy score from 1946 until the year of observation – a procedure similar to that of Huber et al. (2008a). Here we rely on Polity IV (polity 2) despite its lower country coverage because the Freedom House (2009) data series only commences in 1972.

For ethnic fractionalisation, there are no readily available measures with high country coverage that (only) capture ethnic heterogeneity among the poor. Arguably, however, this situation does not represent a serious problem as such a measure would probably be very highly correlated with the ethnic fractionalisation in the general population.[3] Hence, we employ the measure set out by Alesina et al. (2003). It reflects the probability that two randomly selected people from a given country will not belong to the same ethno-linguistic group, and thereby involves a combination of racial and linguistic characteristics. The higher the number, the more fractionalised is the society. Using the alternative measure of ethnic heterogeneity constructed by Fearon (2003) does not alter our results significantly.

Democracy and ethnic fractionalisation are not strongly associated as indicated by the relatively low correlation between the measures of democracy and ethnic fractionalisation (compare Fish and Brooks, 2004). In our data, the bivariate correlation is a modest –.36. This is important because it highlights how our argument adds something new because the two variables individually clearly cannot have an identical impact. Figure 2 scatters the mean values of the two against each other with democracy on the x-axis and ethnic fractionalisation on the y-axis. The purpose is to show that there exist real-life examples of all relevant combinations of our two explanatory variables. That is, in our data we find both democracies and authoritarian regimes that may be both ethnically homogenous and heterogeneous. It is, in short, not an artificial question to ask what happens to social spending in, for example, a heterogeneous democracy or a homogenous dictatorship even if, as noted, there is a modest tendency for democracies to be less fractionalised than authoritarian regimes.

The estimated model also contains various controls. For one thing, it is important to control for the age composition of the population. We therefore include a measure of the proportion of the population aged 15–64 (United Nations, 2008). The level of wealth in a society should also matter for the level of social spending because, all else being equal, it becomes more likely that a greater share of GDP will be allocated to social programmes when the level of wealth is high. We therefore include a measure of GDP per capita in US dollars using 2000 as the base year (Gleditsch, 2002). We also include another widely used measure of the degree of modernisation, namely, the urbanisation rate. This is based on data from the World Development Indicators (World Bank, 2012).

Economic globalisation plays an important role in the determination of social spending across the world (for example, Adserà and Boix, 2002; Boix, 2003). Thus, to ensure that our findings are not driven by economic globalisation, we include a measure of exports and imports as a percentage
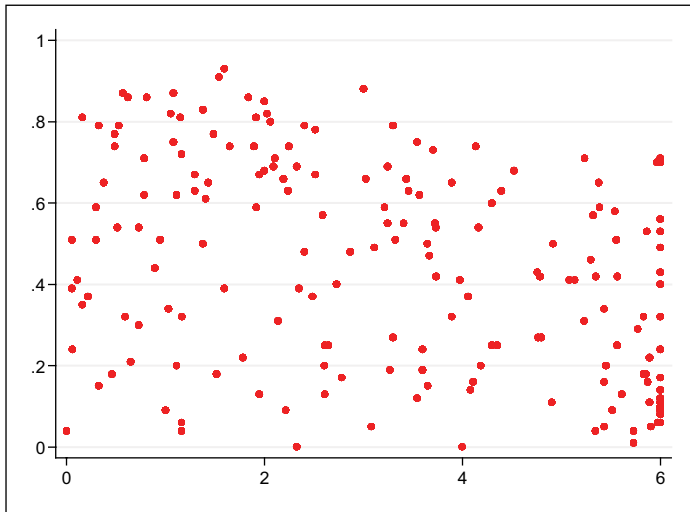
Figure 2. Democracy and ethnic fractionalisation in 116 countries.
Note: Democracy on the x-axis; ethnic fractionalisation on the y-axis. Mean values for all countries.

of the GDP (United Nations Statistics Division, 2009). Population size might also influence spending according to a logic mirroring our core argument. It might be more difficult in large countries than in small countries to establish solidarity on a national level and to organise parties or unions that can influence national politics (Heston et al., 2009). Civil war might also be expected to reduce the room for social spending (and democracy), so controlling for this factor is important too. We use the civil war indicator from the armed conflict data of the UCDP (2012), coded as a dummy (0 for peace and 1 for civil war).

The dependent variable is measured as percentage of the GDP, and we therefore control for changes in the denominator. If we do not, it is effectively impossible to know why the dependent variable rises or falls: as the GDP grows the share that a given amount of social spending constitutes of the GDP automatically drops. Countries with a booming economy will therefore appear to be curtailing social spending compared to countries with a sluggish economy, while this may be an artefact of not controlling for GDP growth (United Nations Statistics Division, 2009). A number of related studies do not control for GDP growth even though they measure their dependent variable as a percentage of the GDP (for example, Adserà and Boix, 2002; Boix, 2001; Huber et al., 2008a; Kaufman and Segura-Ubiergo, 2001), but we believe it to be potentially very important to do so.

Most regional studies of the relationship between democracy and social spending focus on Latin America (Avelino et al., 2005; Brown and Hunter, 1999; Huber et al., 2008a; Kaufman and Segura-Ubiergo, 2001). We want to ascertain that our findings are not driven by any idiosyncrasies of Latin America (or of any other particular region for that matter), but pertain to the entire world, and therefore include a series of regional dummies for Latin America, Africa, Asia, the Middle East, and the post-communist countries (leaving the old, western OECD countries as the reference category). This also has the advantage that we may control for the potential problem arising from Latin American citizens seemingly having opinions on redistribution that do not fit their material interests (regarding which, compare the discussion found above).

Table 1 presents some summary statistics. In general, no serious problems are identifiable and no bivariate correlation exceeds the .70 threshold where multicollinearity is normally said to

Table 1. Summary Statistics.

Name	Mean	SD	% outliers
Social spending	5.46	5.95	0.00
Political rights	3.64	2.13	0.00
Cumulative Polity IV	−51.53	255.88	0.00
Ethnic fractionalisation	0.40	0.25	0.00
Population aged 15–64	58.87	6.32	0.00
GDP per capita	$8781.16	$7794.23	0.10
Urban	53.85	433.3	0.01
Civil war	0.0185	0.1349	11.63
Trade openness	90.47	80.74	1.45
GDP growth	3.76	5.78	1.37
Population size	33,878.98	114,488.30	5.45

Note: The percentage of outliers is calculated using the interquartile range method.

become a potential problem. The last column presents the percentage of the observations which, following the interquartile range procedure in STATA, may be defined as outliers. We see that for most variables outliers are no problems, but for population size, trade openness, GDP per capita, civil war, and GDP growth there are some. Population size outliers are, unsurprisingly, China and India together with countries such as the USA, Brazil, and Indonesia. While statistically speaking these are outliers, obviously they are very much real and important so simply deleting them from the data set would be wrong. The civil war indicator appears to host many outliers, but this is entirely a function of the dichotomous nature of the variable, whereby only a fraction of the country-years are marred by civil war. Kuwait is behind the outliers on the two latter variables. GDP growth was exceptionally high in 1992 after the first Gulf war, indicating that again we are dealing with an outlier that corresponds to a real-life situation. Finally, GDP per capita was exceptionally high (or at least reported as such) in Kuwait during the early 1970s. While Kuwait definitely is among the richest countries in the world, these particular observations give us reason to pause. In the empirical tests performed below we therefore pay some attention to the sensitivity of our results vis-a-vis Kuwait as well as the other outliers.

Analytical technique

Our dependent variable contains a number of unequally spaced gaps ranging from one to nine years. Like recent studies facing similarly unbalanced data, we analyse our data with generalised least square regression estimation (Huber et al., 2008a; Iversen and Soskice, 2006). Our argument explicitly expects the combined influence of ethnic fractionalisation and democracy to be slow moving, only having an effect on social spending in the long run. This entails that we need to estimate a model using the levels of our independent and dependent variables; using first differences of the variables would most likely not capture what we are interested in. This mirrors the set-up of a number of other authors interested in the long-run, or historic, effects of factors such as partisanship and democracy (Ansell, 2008; Boix, 2001; Huber and Stephens, 2001; Huber et al., 2008a; Rudra and Haggard, 2005).

To deal with the problem of first-order autoregressive processes, we include an AR(1) term, which is the most appropriate technique in the current case because there is some trend in the data. Achen (2000) has shown that a lagged dependent variable inappropriately suppresses the

Table 2. Democracy, Ethnic Fractionalisation, and Social Spending.

	Model I	Model II	Model III	Model IV	Model V
Democracy	.1772***	.4004***	.3301***	.3301***	.0070***
	(.0464)	(.1037)	(.1068)	(.1100)	(.0024)
Ethnic fractionalisation	−6.681***	−5.107***	−12.88***	−12.88***	−7.282***
	(1.595)	(1.692)	(3.988)	(1.934)	(1.731)
Democracy x ethnic fractionalisation		−.4649**	−.3649*	−.3649	−.0065
		(.1940)	(.2002)	(.2240)	(.0052)
Controls					
Population aged 15–64	.0727	.0762	.0345	.0345	.0929*
	(.0465)	(.0463)	(.0499)	(.0422)	(.0486)
Urban	.0566***	.0544***	.0368	.0368*	.0642***
	(.0177)	(.0175)	(.0347)	(.0206)	(.0186)
GDP per capita	−.00002	−.00002	−.00005	−.00005	−.00007*
	(.00003)	(.00003)	(.00003)	(.0001)	(.00003)
Trade openness	.0684***	.0673***	.0335*	.0335	.0574***
	(.0162)	(.0161)	(.0177)	(.0220)	(.0175)
GDP growth	−.0125***	−.0123***	−.0116**	−.0116	−.0107**
	(.0047)	(.0047)	(.0047)	(.0241)	(.0048)
Population size	−.000007***	−.000007***	−.00001	−.00001***	−.000007***
	(.000002)	(.000003)	(.000007)	(.000001)	(.000002)
Civil war	.1460	.1511	.1593	.1593	.1257
	(.1528)	(.1528)	(.1529)	(.1396)	(.1547)
Latin America	−6.028***	−5.812***	−4.246*	−4.246*	−5.305***
	(1.174)	(1.154)	(2.446)	(2.533)	(1.252)
Post-communist	.6197	.7640	−6.655*	−6.655	2.103
	(1.232)	(1.211)	(3.696)	(5.081)	(1.388)
Africa	−2.799**	−2.851**	.0740	.0740	−2.481*
	(1.378)	(1.353)	(2.968)	(4.277)	(1.429)
Asia	−6.714***	−6.656***	−3.786	−3.786	−6.423***
	(1.181)	(1.158)	(3.669)	(4.493)	(1.256)
Middle East	−3.803***	−3.709***	−4.942**	−4.942***	−3.251**
	(1.215)	(1.191)	(2.416)	(1.652)	(1.272)
Trend	.0334*	.0315*	.0770***	.0770	.0321
	(.0190)	(.0189)	(.0261)	(.0418)	(.0202)
Constant	−60.18*	−57.39	−140.7***	−140.7*	−57.85
	(36.11)	(35.95)	(48.77)	(76.60)	(38.38)
N	1810	1810	1810	1810	1626
No. of countries	115	115	115	115	104
Common rho	.7967	.7959	.7964	.7964	.8017
R^2	.6454	.6507	.9368	.9369	.6767
Fixed effects	No	No	Yes	Yes	No

Notes: * = p-value ≤.10; ** = p-value ≤.05; *** = p-value ≤.01. Standard errors are shown in parentheses.

explanatory power of other independent variables in this situation. Like Gerring et al. (2005b: 574), we 'include a time trend variable to control for spurious correlation between any pair of

similarly trended dependent and independent variables; this should be signed in whatever direction a given dependent variable is trended, on average, over time'. The issue of whether to include fixed unit effects is a tricky one. Our data are predominantly time invariant, meaning that fixed unit effects will tend to (1) eliminate any variation in the dependent variable that is caused by time-invariant factors, (2) reduce substantially the coefficients of variables that mostly vary between countries rather than over time, and (3) '*completely absorb* differences in the *level* of the independent variables across the units' (Plümper et al., 2005: 331, original emphasis). This, of course, is especially a problem when it comes to the cumulative measure of democracy, which is even more time invariant than the yearly measure. In what follows, we therefore estimate models both with and without fixed unit effects for the yearly measure of democracy.

Findings

Table 2 presents our main results. Model I begins by looking at the effect of democracy and ethnic fractionalisation on their own. The average effect of democracy is positive, while the average effect of ethnic fractionalisation is negative. Both are highly significant. This is, of course, in line with the literature and means that we can have considerable confidence in the findings. Model II introduces the interaction term and the top-left graph in Figure 3 displays the corresponding marginal effects. It is evident that our argument receives strong support. At very low levels of ethnic fractionalisation a standard deviation change in democracy leads to an approximately 0.45 percent higher level of social spending. A homogeneous country that moves from fully undemocratic to fully democratic will thus experience a 1.2 percent increase in social spending, which is rather substantial given that the average level of social spending is around 5.4 percent. As the level of ethnic fractionalisation rises, the positive effect of democracy decreases and at around 0.60 on the ethnic fractionalisation scale the effect disappears. A third of all countries are located in this segment, so it is a substantially quite relevant distinction.

Model III includes the fixed unit effects, which effectively allows us to gauge the within-country effect of democracy conditioned by the level of ethnic fractionalisation. The effect is roughly of similar magnitude as in the previous model (see the top-right graph in Figure 3). Next, Model IV reports the results from a jackknife analysis, as a way to see how sensitive the results are to outliers. This is done by calculating a new set of 'jackknifed' standard errors, which is robust to individual observations. The standard errors of the interaction term increases slightly, meaning that the coefficient turns insignificant. Yet, as Brambor et al. (2006: 74) note, 'it is perfectly possible for the marginal effect of X on Y to be significant for substantively relevant values of the modifying variable Z even if the coefficient on the interaction term is insignificant'. So, we once again calculate marginal effects and report them in the bottom-left graph of Figure 3. It turns out that the substantive effect is the same as before.

Model V reruns the estimations with the cumulative democracy measure. As emphasised previously, we expect that democracy will only have an impact on social spending in the long run. As such, the measure of the historically accumulated 'stock' of democracy in a country is theoretically highly valid even though the ordinary, or yearly, measure of democracy is so rigid that it ought roughly to capture the same thing. The number of observations drops because we now have to rely on the Polity IV measure. Nonetheless, we see that the basic pattern persists: democracy leads to more social spending, but only in countries that are relatively homogeneous. It even turns out that the impact of the cumulative measure is considerably bigger than the yearly measure. A standard deviation change in the cumulative democracy measure implies a 3 percent change in social spending compared to a 0.45 percent change if the yearly measure is used. We cannot say for sure if this
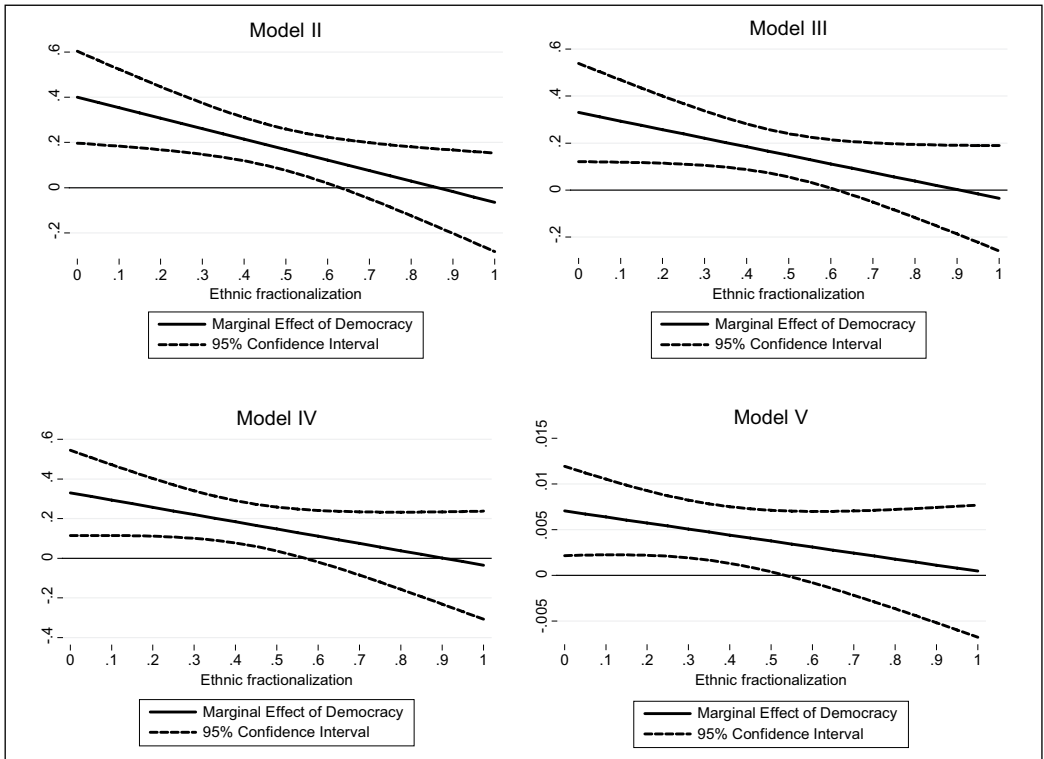
Figure 3. The marginal effect of democracy at various levels of ethnic fractionalization.
Note: The marginal effects are calculated based on the interaction models reported in Table 2 (model II [top left side] and III [top right side], model IV [bottom left side], and model V ([bottom right side]). The full lines represent the point estimates and the dashed lines represent the 95percent confidence intervals.

is due to the different data sources, but it would seem reasonable to suspect that the cumulative measure actually does capture some of the historical legacies that the yearly measure, however rigid, does not.

The controls are consistently applied across all the models reported in Table 2. A rising urban population leads to higher levels of social spending, while greater trade openness also leads to higher levels of social spending, indicating the validity of the so-called compensation hypothesis (Cameron, 1978). Moreover, several of the regional dummies are significant with a negative sign, indicating that their spending levels are underestimated by our specification. The negative effect of GDP growth indicates how it corrects for changes in the denominator of the dependent variable, which is taken as a percentage of GDP.

All of the reported models turn out the expected results, namely, that countries will experience increasing levels of social spending if they are ethnically homogeneous, but not otherwise. We can thus have considerable confidence in the findings from a statistical point of view, but are the effects big enough for them to be visible 'in real life'? Figures 4 and 5 illustrate that we are dealing with an important phenomenon. These figures report the development over time in social spending and political rights in a country which is highly homogeneous (South Korea) and another which is very fractionalised (Zambia). The two countries were selected from the pool of homogenous and heterogeneous countries, respectively, because they fulfilled the twin criteria
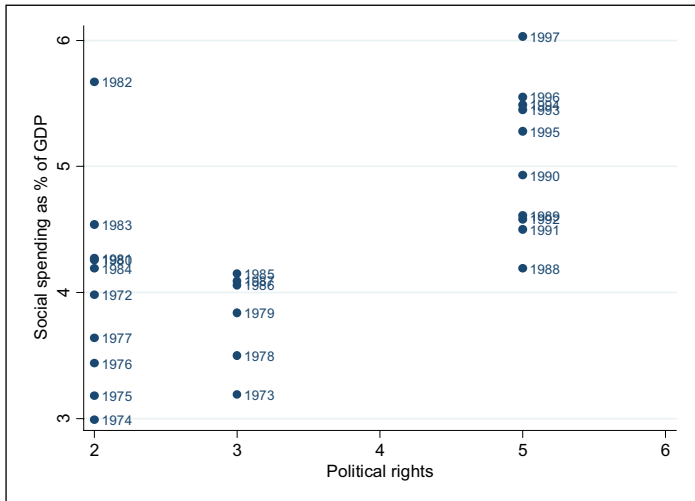
Figure 4. Social spending and political rights in South Korea.
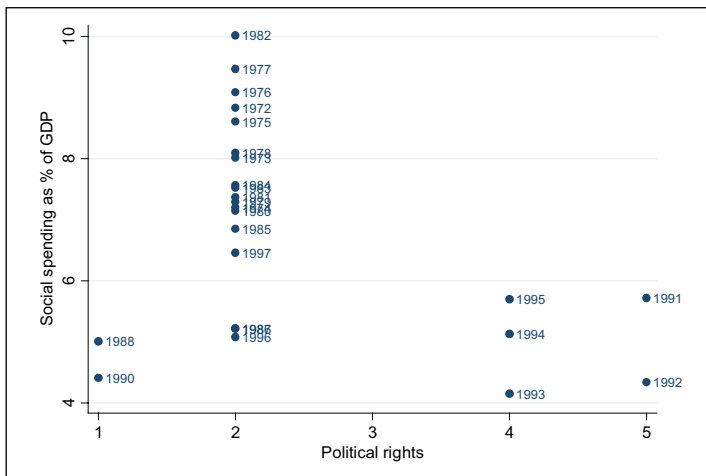

Figure 5. Social spending and political rights in Zambia.

of having experienced a shift in democracy and there being data available documenting social spending patterns before and after that change. Although the two countries are dissimilar on a number of counts aside from their ethnic composition, the fact that we have already estimated regression models with a wide variety of controls means that we can compare them with some confidence. The findings, certainly, are clear-cut. Apart from a single outlier, social spending in South Korea was consistently low before the transition to democracy, but then took off. On average, social spending before democracy was 3.9 percent of GDP, but 5.1 percent after (an increase of 1.2 percent). In Zambia, on the other hand, no such pattern emerges. Although social spending varies a great deal, there is no relationship with the level of democracy. Rather, there simply appears to be a downward-sloping trend over time.

Conclusion

We have examined the role of democracy and ethnic fractionalisation on social spending. We have argued that prolonged experience of democracy leads to expanding social spending, but only in ethnically homogenous societies. In ethnically fractionalised countries, it is much more difficult to establish a strong consensus on redistribution, meaning that organisations representing the low-income group will not achieve much support in the democratic struggle against the high-income elite. Hence, we have integrated two sets of literature that so far have lived separate lives, but which we believe supplement each other very well.

Do our results tell us anything about the dynamics of the third wave of democratisation that has taken place during the period examined in this article? Philippe Schmitter (2010) has recently taken stock of these developments. Among the most important conclusions, he mentions that democratisation has had less redistributive consequences than expected. We are able to provide a partial explanation of this puzzle. First, many new democracies took hold in formerly communist countries characterised by relatively high levels of social spending. Second, a significant number of the countries have been affected by democratic transition despite low levels of economic development. Lastly, and linked to our main finding, a lot of the fledgling democracies are ethnically heterogeneous, meaning that the prospects for increased social spending have been low.

Moving forward, various questions arise. First of all, does democracy have an effect on actual redistribution or does the effect pertain to social spending only? Data on redistribution are much scarcer than data on social spending, but finding an identical effect using the former measure would be a nice complement to our results. Another line of enquiry relates to more qualitative data on the relationship between democracy, ethnic fractionalisation, and social spending. Case studies on how the hypothesised mechanisms work 'on the ground' are an obvious task for future research.

Apart from such studies, another important topic is the relationship between the argument presented here and economic globalisation. A burgeoning strand of literature has documented how economic globalisation and democracy interact in highly interesting ways (Adserà and Boix, 2002; Ansell, 2008; Avelino et al., 2005; Boix, 2001; Kaufman and Segura-Ubiergo, 2001; Rudra and Haggard, 2005). In this article, we have simply chosen to control for economic globalisation in order to focus more exclusively on the relationship between democracy and ethnic fractionalisation. Yet, one may speculate that economic globalisation (and perhaps economic development more generally) also in fact plays a role in our set-up. Economic growth may lead to increasing social spending, although conditioned by the level of democracy and ethnic homogeneity. Probing these highly complex relationships is beyond the scope of this article, but definitely worthy of closer inspection.

Notes

1. For similar results, see Mueller and Murrell (1986) and McCarty (1993).
2. More particularly, the figures are for a combination of three general spending categories: health, education, and social security and welfare. If only the latter IMF indicator (which, arguably, has the most redistributive effect) is used as the dependent variable, the results tend to be similar to (or somewhat stronger than) the results reported for combined social spending.
3. Actually, using the European Social Survey (round 4) there is a negative correlation between income and self-reported membership of an ethnic minority. Although not conclusive evidence, it does indicate that the well off tend to be less ethnically diverse than the poor.

References

Acemoglu, Daron and James A Robinson (2006) *Economic Origins of Dictatorship and Democracy*. Cambridge: Cambridge University Press.

Achen, Chris (2000) Why lagged dependent variables can suppress the explanatory power of other independent variables. Paper presented at the annual meeting of the Political Methodology Section of the American Political Science Association, Los Angeles, CA, USA.

Adserà, Alisia and Carles Boix (2002) Trade, democracy, and the size of the public sector. *International Organization* 56: 229–62.

Alesina, Alberto and Edward Glaeser (2004) *Fighting Poverty in the U.S. and in Europe: A World of Difference*. New York: Oxford University Press.

Alesina, Alberto, Arnaud Devleschawuer, William Easterly et al. (2003) Fractionalization. *Journal of Economic Growth* 8: 155–94.

Alesina, Alberto, Edward Glaeser and Bruce Sacerdote (2001) Why doesn't the US have a European-style welfare system? *Brookings Papers on Economic Activity* 2: 187–278.

Ansell, Ben W (2008) Traders, teachers, and tyrants: Democracy, globalization, and public investment in education. *International Organization* 62: 289–322.

Avelino, George, David Brown and Wendy Hunter (2005) The effects of capital mobility, trade openness, and democracy on social spending in Latin America, 1980–1999. *American Journal of Political Science* 49: 625–41.

Boix, Carles (2001) Democracy, Development and the Public Sector. *American Journal of Political Science* 45: 1–17.

Boix, Carles (2003) *Democracy and Redistribution*. New York: Cambridge University Press.

Brambor, Thomas, William Clark and Matt Golder (2006) Understanding interaction models: Improving empirical analyses. *Political Analysis* 14: 63–82.

Brown, David and Wendy Hunter (1999) Democracy and social spending in Latin America, 1980–92. *American Political Science Review* 93: 779–90.

Cameron, David (1978) The expansion of the public economy: A comparative analysis. *American Political Science Review* 72: 1243–61.

Corral, Margarita (2008) Is Latin America Going Left? Latin American Public Opinion Project. Vanderbilt University. Available at: http://sitemason.vanderbilt.edu/files/hcwpQ4/Corral.pdf.

Cortina, Jeronimo and Andrew Gelman (2006) *Income and vote choice in the 2000 Mexican presidential election*. Working paper. Available at: http://www.stat.columbia.edu/~gelman/.

Cramer, Brian and Robert Kaufman (2011) Views of inequality in Latin America. *Comparative Political Studies* 44: 1206–37.

Dion, Michelle (2000) Public health, education, and social security expenditures in Latin America, 1980–1994. Paper presented at the Southern Political Science Association Annual Meeting, Atlanta, GA, USA, 8–11 November 2000.

Dion, Michelle (2004) Globalization, political institutions, and social spending change in middle income countries, 1980–1999. Paper presented at the American Political Science Association Annual Meeting, Chicago, IL, USA, 2–5 September 2004.

Easterly, William (2001a) *The Lost Decades: Developing Countries' Stagnation in spite of Policy Reform 1980–1998*. Washington, DC: World Bank.

Easterly, William (2001b) Global Development Network Growth Database. *Washington, DC: World Bank*. Available at: http://go.worldbank.org/ZSQKYFU6J0.

Esping-Andersen, Gøsta (1990) *The Three Worlds of Welfare State Capitalism*. Cambridge: Cambridge University Press.

Fearon, James D (2003) Ethnic and cultural diversity by country. *Journal of Economic Growth* 8: 195–222.

Fish, M Steven and Robin S Brooks (2004) Does diversity hurt democracy? *Journal of Democracy* 15: 154–66.

Freedom House (2009) Freedom in the World. Available at: http://www.freedomhouse.org/template.cfm?page=15.

Gerring, John, Philip Bond, William T Barndt et al. (2005a) Democracy and economic growth: A historical perspective. *World Politics* 57: 323–64.

Gerring, John, Strom Thacker and Carola Moreno (2005b) Centripetal democratic governance: A theory and global inquiry. *American Political Science Review* 99: 567–81.

Gilens, Martin (1999) *Why Americans Hate Welfare: Race, Media, and the Politics of Anti-Poverty Policy*. Chicago, IL: University of Chicago Press.

Gleditsch, Kristian S (2002) Expanded trade and GDP data. *Journal of Conflict Resolution* 46: 712–24.

Habibi, Nader (1994) Budgetary policy and political liberty: A cross-sectional analysis. *World Development* 22: 579–86.

Habyarimana, James, Macartan Humphreys, Daniel Posner et al. (2007) Why does ethnic diversity undermine public goods provision? *American Political Science Review* 101: 709–25.

Heston, Alan, Robert Summer and Bettina Aten (2009) Penn World Tables, Version 6.*3*. Philadelphia, PA: Center for International Comparisons of Production, Income and Prices.

Huber, Evelyne and John D Stephens (2001) *Development and Crisis of the Welfare State: Parties and Policies in Global Markets*. Chicago, IL: University of Chicago Press.

Huber, Evelyne, Thomas Mustillo and John D Stephens (2008a) Politics and social spending in Latin America. *Journal of Politics* 70: 420–36.

Huber, Evelyne, Thomas Mustillo and John D Stephens (2008b) Appendix for Politics and Social Spending in Latin America. Available at: http://journals.cambridge.org/action/displaySuppMaterial?cupCode=1&type=4&jid=JOP&volumeId=70&issueId=02&aid=1818152.

IMF (2001) Government Finance Statistics Manual. Available at: www.imf.org/external/pubs/ft/gfs/manual/pdf/all.pdf.

Iversen, Torben and David Soskice (2006) Electoral institutions and the politics of coalitions: Why some democracies redistribute more than others. *American Political Science Review* 100: 165–81.

Kaufman, Robert (2009) The political effects of inequality: Some inconvenient facts. *Comparative Politics* 41: 359–79.

Kaufman, Robert and Alex Segura-Ubiergo (2001) Globalization, domestic politics and social spending in Latin America: A time-series cross-section analysis, 1973–1997. *World Politics* 53: 553–87.

Korpi, Walter (1978) *The Working Class in Welfare Capitalism: Work Unions and Politics in Sweden*. London: Routledge and Kegan Paul.

Korpi, Walter (1983) *The Democratic Class Struggle*. London: Routledge and Kegan Paul.

Lupu, Noam and Susan Stokes (2009) The social bases of political parties in Argentina, 1912–2003. *Latin American Research Review* 44(1): 58–87.

Luttmer, Erzo (2001) Group loyalty and the taste for redistribution. *Journal of Political Economy* 109: 500–28.

McCarty, Therese A (1993) Demographic diversity and the size of the public sector. *Kyklos* 46: 225–40.

Marshall, Monty G and Keith Jaggers (2009) POLITY IV Project: Political Regime Characteristics and Transitions, 1800–2008. Available at: http://www.systemicpeace.org/polity/polity4.htm.

Meltzer, Allan and Scott Richards (1981) A rational theory of the size of government. *Journal of Political Economy* 89: 914–27.

Mueller, Dennis C and Peter Murrell (1986) Interest groups and the size of government. *Public Choice* 48: 125–45.

Nelson, Joan (2007) Elections, democracy, and social services. *Studies in Comparative International Development* 41: 79–97.

Plümper, Thomas, Vera E Troeger and Philip Manow (2005) Panel data analysis in comparative politics: Linking method to theory. *European Journal of Political Research* 44: 327–54.

Rudra, Nita and Stephan Haggard (2005) Globalization, democracy, and effective spending in the developing world. *Comparative Political Studies* 38: 1015–49.

Rueschemeyer, Dietrich, Evelyne Stephens and John D Stephens (1992) *Capitalist Development & Democracy*. Chicago, IL: University of Chicago Press.

Scheve, Kenneth and David Stasavage (2006) Religion and preferences for social insurance. *Quarterly Journal of Political Science* 1: 255–86.

Schmitter, Philippe C (2010) Twenty-five years, fifteen findings. *Journal of Democracy* 21: 17–28.

Shayo, Moses (2009) A model of social identity with an application to political economy: Nation, class, and redistribution. *American Political Science Review* 103: 147–74.

Singer, Matthew and Guillermo Rosas (2007) *Perceptions of economic inequality and presidential approval: Evidence from Argentina*. Working Paper Series 5. Center for Latin American Studies, University of Miami.

Stasavage, David (2005) Democracy and education spending in Africa. *American Journal of Political Science* 49: 343–58.

Stephens, John (1979) *The Transition from Capitalism to Socialism*. Urbana and Chicago: University of Illinois Press.

UCDP (2012) Uppsala/PRIO Armed Conflict Dataset. Available at: http://www.pcr.uu.se/research/ucdp/program_overview/.

United Nations (2008) World Population Prospects: The 2008 Revision. Available at: http://esa.un.org/unpp/.

United Nations Statistics Division (2009) National Accounts. Available at: http://unstats.un.org/unsd/nationalaccount/.

World Bank (2012) World Developmental Indicators. Available at: http://data.worldbank.org/data-catalog/world-development-indicators.

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Appendix

Country list

Afghanistan, Albania, Algeria, Andorra, Angola, Antigua and Barbuda, Argentina, Armenia, Australia, Austria, Azerbaijan, Bahamas, Bahrain, Bangladesh, Barbados, Belarus, Belgium, Belize, Benin, Bhutan, Bolivia, Bosnia-Herzegovina, Botswana, Brazil, Brunei, Bulgaria, Burkina Faso, Burma, Burundi, Cambodia, Cameroon, Canada, Cape Verde, Central African Republic, Chad, Chile, China, Columbia, Comoros, Congo (Brazzaville), Congo (Kinshasa), Costa Rica, Cote d'Ivoire, Croatia, Cuba, Cyprus (Greek), Cyprus (Turkish), Czech Republic, Czechoslovakia, Denmark, Djibouti, Dominica, Dominican Republic, East Timor, Ecuador, Egypt, El Salvador, Equatorial Guinea, Eritrea, Estonia, Ethiopia, Fiji, Finland, France, Gabon, Gambia, Georgia, Germany, East Germany, West Germany, Ghana, Greece, Grenada, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Hungary, Iceland, India, Indonesia, Iran, Iraq, Ireland, Israel, Italy, Jamaica, Japan, Jordan, Kazakhstan, Kenya, Kiribati, Kuwait, Kyrgyzstan, Laos, Latvia, Lebanon, Lesotho, Liberia, Libya, Liechtenstein, Lithuania, Luxembourg, Macedonia, Madagascar, Malawi, Malaysia, the Maldives, Mali, Malta, the Marshall Islands, Mauritania, Mauritius, Mexico, Micronesia, Moldova, Monaco, Mongolia, Montenegro, Morocco, Mozambique, Namibia, Nauru, Nepal, the Netherlands, New Zealand, Nicaragua, Niger, Nigeria, North Korea, Norway, Oman, Pakistan, Palau, Panama, Papua New Guinea, Paraguay, Peru, the Philippines, Poland, Portugal, Qatar, Romania, Russia, Rwanda, St Kitts and Nevis, St Lucia, St Vincent and the Grenadines, Samoa, San Marino, Sao Tome and Principe, Saudi Arabia, Senegal, Serbia, Serbia and Montenegro, the Seychelles, Sierra Leone, Singapore, Slovakia, Slovenia, Solomon Islands, Somalia, South Africa, South Korea, Spain, Sri Lanka, Sudan, Suriname, Swaziland, Sweden, Switzerland, Syria, Taiwan, Tajikistan, Tanzania, Thailand, Togo, Tonga, Trinidad and Tobago, Tunisia, Turkey, Turkmenistan, Tuvalu, Uganda, Ukraine, United Arab Emirates, United Kingdom, United States of America, Uruguay, USSR, Uzbekistan, Vanuatu, Venezuela, Vietnam, North Vietnam, South Vietnam, Yemen, North Yemen, South Yemen, Yugoslavia, Zambia, Zimbabwe.