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Does Democratization Spur Growth? An Examination over Time and Space

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ABSTRACT

Many studies have considered how democratization affects economic growth. We expand this work by allowing short and long run effects of democracy upon growth to differ since effects during political transitions need not coincide with those under established democracies. We also allow these short and long run effects to differ across world regions since the effects of democracy upon economic growth need not be the same across countries, either. Using annual, cross-county data from 1960 to 2010, we find that democratizations increased growth rates in sub-Saharan Africa both in the short run and in the long run but lowered them in Europe. Effects in other regions appear less strong. Our results suggest that democratizations could be most beneficial for growth in poorer, less stable regions. We also do not find any evidence of a transitional cost. Finally, some support though mixed suggests that democracy's ability to mitigate effects of ethnic heterogeneity provides a partial explanation for the cross regional heterogeneity.

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1. Introduction

The role of political regimes in economic development has received much attention. Much of the early literature relying on cross-sectional analyses to compare growth outcomes between democratic and nondemocratic regimes reached little consensus.[2] Results either changed greatly depending upon the countries and time windows of the sample or the coefficient upon the democracy measure was not robust to small changes in the empirical specification as in Levine and Renelt (1992). More recent studies, however, such as Papaioannou and Siourounis (2008) [PS], Rodrik and Wacziarg (2005) [RW], and Persson (2005) have often shown a positive effect of democratization upon economic growth. These studies employ fixed effects within panel datasets so that the coefficient upon the democracy variable captures the within-country association between democratization and growth. However, even if democracy is associated with faster growth, other questions arise as to the exact nature of the link between the two. When do any benefits of democratization occur (presuming causality runs from democracy to growth)? Do they arise immediately as rising expectations for greater freedom unleash productive endeavors? Does economic growth fall immediately due to uncertainty or other transitional costs associated with regime change and only later increase?

Consider a second set of questions. Does democracy have different effects among world regions? RW and Sylwester (2009) report greater effects of democracy upon growth in sub-Saharan African [SSA] countries. More germane to the above questions, does the timing as to how democracy affects growth also differ across world regions? Transitional costs of

[2] See Papaioannou and Siourounis (2008), Barro (1996), and Przeworski and Limongi (1993) for more complete surveys of this literature.

democratization could potentially differ according to culture, proximity to other strong democracies, or various historical characteristics. Do they in practice?[3]

This paper considers two time periods – the short run and the long run – following a democratization event and constructs two dummy variables to capture these horizons. The first dummy takes the value one in the first five years following a democratization event but zero for all years following the fifth year. The second dummy takes the value one in all years following the fifth year of a democratization event. We will also allow the coefficients on these two dummies to differ across world regions to allow for the dynamics of political change on growth to differ both in the short run and in the long run. This approach is similar to that in RW who also allow short and long-run associations between democratization and economic growth to differ. Both studies also use a five year threshold to distinguish short and long-run effects. Moreover, they allow associations to differ within SSA compared to a global sample. Nevertheless, key differences between our studies remain. They examine effects upon growth from transitions away from democracy to autocracy while we focus on democratizations. Furthermore, we allow for effects to differ in other regions besides those in SSA. We also go deeper in examining reasons for the cross-regional heterogeneity as well as exploring possible channels from democracy to growth.

Other work also examines the timing of effects from democratization to economic growth. Giavazzi and Tabellini (2005) find that democratization is most beneficial for growth when preceded by economic reforms. Nevertheless, they do not consider whether the effects of democratization differ between the short and long run or across regions. Our work more closely follows that of PS. Although not the focus of their paper, in an extension they allow democracy

[3] Persson and Tabellini (2006) ask a third set of questions, namely if the "type" of democracy matters for growth such as a presidential versus a parliamentarian system.

to affect growth differently over time. They examine the short-run effects of democratization in two three-year windows. Window one contained the first three years following a democratization and window two contained years four, five, and six after the democratization. Long-run effects were captured by a dummy that equaled one if a democratization event occurred seven years or more in the past. They generally find positive coefficients for both windows following democratization and a positive coefficient for the long-run dummy. They find no evidence of any short-run cost of democratization.

Our approach complements these studies in that we allow effects of democratization to differ over time but we also allow these short run and long run effects to differ across world regions. Democratizations in Latin America could produce distinct growth effects from those in SSA due to cultural or historical factors, for example.

Finally, we will consider sources of cross-regional heterogeneity in two ways. We first consider channels through which democratization could affect growth differently across regions or over time? Do short and long-run growth effects stem from changes in investment of physical capital caused by democratization or by changes in total factor productivity (TFP) growth?

The second way involves examining deeper explanations that could be behind regional differences. Location by itself should matter little for how democracy impacts economic growth. Instead, location most certainly serves as a proxy for historical, cultural, or geographic determinants as to how political change could influence growth. We focus on one explanation that has been considered previously, albeit in different empirical specifications. Easterly and Levine (1997) highlight the greater ethnic diversity of SSA and Collier (2000) and Bluedorn (2000) argue that democratization raises growth more in ethnically diverse countries. RW also find that democratization is more favorable to growth in ethnically diverse countries. We focus

on ethnic diversity both because of its consideration in past work as to why the effects of democracy could differ across countries and because of its theoretical underpinnings outlined in the aforementioned papers. To what extent does ethnic heterogeneity appear to drive differences in how democracy affects growth across? To what extent do cross regional differences diminish when we do control for ethnic heterogeneity? Do distinctions arise in the short and long run? Nevertheless, we will also consider other possible determinants to examine how support for ethnic diversity compares to that for other possible explanations.

The following section discusses potential cross-regional heterogeneity in greater detail. Section 3 then presents the empirical methodology and section 4 the results. Section 5 examines the results in greater depth, attempting to uncover why regional variation is important and through what channels it operates. A conclusion follows.

2. Regional Differences

This section briefly discusses the possibility that short and long-run effects of democratization upon growth differ across regions. Durlauf and Johnson (1995) argue that segmented countries follow different growth patterns based on different initial conditions.[4] The potential for cultural, historical, and geographic factors to influence how democratization affects economic growth we take to be plausible, especially given the findings from Rodrik and Wacziarg (2005).

Of course, we recognize that the history and culture of any two countries within the same region differ. The generalities we present below do not mean to imply that conditions are identical or that no exceptions arise within regions. We also recognize that mere location is not a

[4] Bunce (2000) discusses regional differences in terms of how democratization occurred and how these differences made sustaining democratization more or less likely.

factor as to how democratization affects growth. Instead, the culture and history associated with that location are more important. To some extent our methodology considers this distinction as we do not combine Eastern and Western Europe into the same group. Nevertheless, we maintain that a regional breakdown of how democratization affects growth can still be meaningful, both to better uncover what factors could influence such effects and to help predict the effects of future democratizations. For example, if the benefits of democratization are potentially greater for SSA, one might then examine characteristics of SSA to see how they influence effects of democracy upon growth. One might also target such a region as to where democratic reforms could be particularly beneficial. Nevertheless, we will consider various possibilities from the literature in section 4. The remainder of this section briefly presents some reasons why democracy and its effects could differ across regions.

Table 1 reports summary statistics of growth rates across regions and political status. Evidence of heterogeneity clearly arises. "New Democracies" refers to the first five years after a democratization event and "Old Democracies" refers to subsequent years. Section 3 provides further details of these groupings. Although SSA countries grew slower than did the global sample, SSA democracies did better than did the autocratic SSA sample and did better than democracies in other regions. Moreover, no evidence arises that democracy lowered growth in the short run. The nondemocracies of Western Europe (Greece, Portugal, and Spain) all enjoyed high growth rates during the 1960s relative to democratic countries. Established democracies did better than the nondemocratic countries for both Eastern Europe/Central Asia and New World countries although there is also evidence of a transitional cost. Established democracies in East and Southeast Asia than did the nondemocratic sample for this region.

Before proceeding with more formal analysis, we explore explanations for these differences. Consider the democratizations that occurred in Greece, Portugal, and Spain during the 1970's. All three were NATO allies of the U.S. and the latter two were in close proximity to the strong democracies of Western Europe. Presumably, these advantages made the transition to democracy easier. Now consider the democratizations occurring in Eastern Europe and Central Asia arising from the fall of the Soviet Union. Substantial economic reform accompanied political reform, perhaps making transitional costs higher. Except for the Baltic countries, the former Soviet countries had not previously been independent which could have also made transitions to democracy more difficult given their relative newness. On the other hand, these democratizations were often accompanied by mass mobilizations that could have provided more popular support for democratic institutions. Moreover, former dictatorships in these countries still exhibited civilian control of the military, a tradition that could have led to stronger democracies compared to those in Latin America, for example. (See Bunce, 1998).

Many Latin American countries were former Spanish colonies that had been independent for over a century before the beginning of our sample period in 1960. In contrast, Spain had few colonies in the "Old World." Studies such as Grier (1999) explore whether the identity of the colonizer matters for economic growth after independence. Given the interactions between political and economic institutions, perhaps such distinctions also matter as to how democracy affects growth.[5] A second contrast is that many "New World" colonies became independent long before many colonies in the Old World. Bates et al. (2007) compare post-independence outcomes in Africa with those in Latin America after 1820, arguing that many of the post-independence challenges were similar. Presumably, many of these challenges were no longer as

[5] However, Easterly and Levine (2003) argue that it was geography and natural resource endowments that determined the nature of a colony as the English colonies in the Caribbean producing sugar were governed much differently than the settler colonies of the Thirteen American Colonies and Canada.

relevant in post World War Two Latin America as they were in post World War Two Africa. The longer history of Latin American countries as nation-states, we believe, could certainly have influenced how democratic reforms in these countries affected economic growth. In addition, many of these countries had been democratic in some years prior to our sample period and such histories could matter for how subsequent democratizations impacted economic growth (see Gerring et al., 2005).

SSA presents another case. The vast majority of these countries are poor with comparatively low levels of education. Moreover, Davidson (1992) and Englebert (2000) argue that the modern state in SSA arising out of colonialism lacked historical antecedents. That is, many countries in SSA comprised ethnic groups with no experience of shared governance before colonialism. Leaders lacked strong political foundations. They were forced to appease various interests to remain in power, preventing them from enacting policies that would have increased long run growth. Easterly and Levine (1997) cite SSA's ethnic heterogeneity as an important obstacle to economic growth. Thus, the effects of democratization upon economic growth could certainly differ in these poor, diverse, politically weak states compared to the examples described above although how the effects could differ is not clear. Davidson (1992) sees democracy in SSA as a necessary condition to establish state legitimacy and promote economic growth whereas Kaplan (2000) and Zakaria (2003) are more skeptical that democratization would increase economic growth given SSA's past. In fact, Kaplan (2000) even argues that democratization in such places leads to even more political instability detrimental to economic growth. However, Knutsen (2011) reports that democratization raised growth in SSA, primarily because such political reforms are most beneficial where state capacity is weak.

Like in SSA, many countries of East and Southeast Asia had also recently been former colonies, gaining independence only after World War Two. However, key differences distinguish this region from others. In many of these countries, ethnic diversity was lower and the people of these countries shared histories predating colonization (although Malaysia, Indonesia, and the Philippines provide important exceptions.) Human capital was also higher in many of these countries. Zakaria (2003) positively views cases like South Korea as a model for other countries in that economic growth raises income and enlarges the middle class thereby making transitions to democracy smoother.[6] Moreover, countries in East and Southeast Asia had grown relatively quickly before democratization occurred. Perhaps this fast growth made transitions to democracy easier although these high growth rates could have had greater potential to have been derailed by political change. However, Rock (2009) finds little evidence that democratization slowed economic growth, countering previous claims.

The above discussion and Table 1 consider regional differences as to how the type of political regime is associated with economic growth. The following sections further explore this association with a more formal analysis. It then considers channels for how democracy could affect economic growth. Finally, we consider some of the arguments presented above to examine to what extent the regional classifications are proxies for deeper determinants of how democracy affects growth.

[6] One could also discuss distinctions in South Asia. However, only Bangladesh democratized during the sample period according to PS. Therefore, any differences in results between South Asia and other countries are solely due to characteristics of Bangladesh.

3. Empirical Methodology

A. The Data

We employ annual data for 171 countries during the period 1960 to 2010. These countries are listed in the appendix. Annual real GDP per capita growth [GROWTH] is taken from the Penn World Tables, version 6.3. The data is adjusted for purchasing power parity and is based upon chained GDP.

We consider the following regions: sub-Saharan Africa (SSA), South Asia (SASIA), East and Southeast Asia (ESEA), Eastern Europe and Central Asia (EECA), the New World countries of Latin America and the Caribbean (NEW), and – in the final group – the countries of Western Europe as well as the "neo-Europes" of Australia, Canada, New Zealand, and the U.S. (EUR).[7] However, to more closely focus on developing countries we will remove the "EUR" countries from the sample in some of the specifications.

Democracy [DEM] is measured using the dataset compiled by PS. They do not proffer any specific definition of democracy but they do list four criteria that a democracy must have: free, competitive, and fair elections; elections involving actual transfers of power (as opposed to the military, for example, setting aside the results of an election); broad suffrage in that no sizable part of the population is excluded as was the case in South Africa during apartheid; and political stability in that the democracy is sustained over time. Provided these criteria are met, a democratization episode occurs when Freedom House first designates the country as fully or partially free *and* when the country has a POLITY score above zero (on a -10 to +10 scale)

[7] The Pacific region as well as the Middle East and North Africa region are not included in the above list of six regions since no countries experiencing a democratization (according to PS) during the sample period came from these regions. We follow the World Bank and assign Turkey to ECA although results for the other regions are not dependent upon this assignment. The World Bank, however, combines the Pacific and East Asian regions. We are skeptical that Australia should be grouped with Thailand or Indonesia, for example, and so break this region up as explained in the text.

where POLITY comes from the Polity IV data set from Marshall and Jaggers (2004).[8,9] PS set DEM_{it} equal to one for country i at time t if country i democratized during or before time t.[10]

We use the PS classification for several reasons. It is easy to convert into a time series since all democratization episodes and subsequent years are given the value of one. Second, the incorporation of both the Freedom House and the Polity IV measures creates a stricter standard of democratization thereby diminishing the presence of ambiguous cases in the set of democracies. Finally, both measures have been used extensively in the economic growth literature. Not only are they familiar within this literature but their widespread use makes comparisons with other studies more straightforward. One disadvantage, of course, of using dummy variables relative to a measure that can take on several values is that dummy variables are more coarse measures of political change.[11] However, a benefit is that political classifications of countries are often given as "either/or" and so dummy variables get to the heart of this dichotomy. It is also not clear how one should interpret indices such as the Freedom House indices. Does the 1-7 Freedom House categorization of political rights merely represent ordinal groupings? Or, can its increments be taken literally in that, for example, the move from 3

[8] The Freedom House measure contains two indices: political rights (opportunities to vote in free and competitive elections) and civil liberties (freedom of speech, of the press, etc). Each is measure on a 1 to 7 integer scale with higher values denoting less political freedom. Freedom House then averages these measures to classify countries as free (2.5 or below), partially free (3.0 to 5.0), and not free (5.5 and above).

[9] The PS data only extends to 2003. Therefore, in order to complete the missing years in our sample period we follow their methodology. Most countries do not change status since few countries lost democratic freedoms after 2003. However, an exception is Thailand that suffered a coup in 2007. Therefore, we removed Thailand from the set of democracies. We also removed Pakistan from the set of democracies since the country underwent serious political challenges throughout our sample period.

[10] PS distinguish between "partial" and "full" democratization episodes and generally examine both types together when measuring the effect of democratization upon growth. We also consider both together but our results are robust if we only consider full democratization episodes.

[11] We also took the product of DEM with the difference between the pre and post-democracy levels in the Freedom House and Polity measures, respectively, to account for the degree of political change. Results were robust and are available from the authors upon request.

to 2 represents the same degree of movement towards democracy as a move from 4 to 3? If the Freedom House categorization is merely ordinal, then the direct use of these indices to measure change becomes more problematic. Therefore, due to these concerns we restrict use to binary classifications. As a robustness check, we will also consider the democracy dummy introduced by Alvarez et al. (1996) and extended by Cheibub et al. (2010). Under this definition, a country is democratic if the chief executive or its electors are chosen by popular vote, the legislative is chosen by popular vote, elections are competitive, and power alternates under identical electoral rules. They do not explicitly consider civil liberties in this definition.[12] A key difference is that they also code temporary democratization episodes as "ones" and so use of their measure will also capture transitions away from democracy. Use of this index is appropriate to the extent that movements to and from democracy have symmetric effects on growth.

Since we want to consider short versus long run effects of democratization, we transform DEM into two other measures. Let DEMS = 1 for years zero through five following a democratization event (as defined by DEM) and let DEML = 1 after five years following a democratization event. DEMS hopes to capture short run effects and DEML long run effects. We consider a similar transformation with the Cheibub et al. (2010) democracy measure.[13]

B. Empirical Model

Early research on democracy and growth focused on cross-sectional growth regressions with democracy and various controls on the right hand side. In this paper, we examine the within-country effects of democratization on growth, and we therefore use panel techniques with

[12] See Cheibub et al. (2010) for a criticism of the Freedom House and Polity measures.

[13] RW also consider a five-year threshold. We further considered short-term windows of four and six years. Results are robust and available upon request.

annual data. Following PS, we exploit a difference-in-difference specification in which democratizing countries are the "treated" group whereas countries that did not experience such changes comprise the "control" group.[14] We use annual data to best pinpoint the timing of political reform. Country and time fixed effects are included to capture time-invariant country characteristics and global events, respectively. The specification is:

$$GROWTH_{it} = \alpha_i + \beta_t + \gamma * X_{it} + \sum \rho_j * REG_j * DEMS_{it} + \sum \eta_j * REG_j * DEML_{it} + \varepsilon_{it} \qquad (1)$$

Equation (1) presents the baseline specification where i, t denote country and time respectively. GROWTH is the growth rate of real GDP per capita adjusted for PPP. Fixed effects are denoted by α_i and β_t. Although initially empty, X_{it} will later include time varying covariates that can control for various factors that could be correlated with the political regime and with economic growth. One such variable is TRANS. TRANS equals one for the countries of Eastern Europe or the former Soviet Union between 1990 and 1994. Use of TRAN can control for the unique transitional effects upon growth from the fall of Communism.[15]

[14] Giavazzi and Tabellini (2005) and RW also use similar econometric techniques to identify the effects of political reforms on economic performance outcomes.

[15] Another variable we considered was the measure of trade liberalization (denoted as REFORM) from Wacziarg and Welch (2003) who extend the Sachs and Warner (1995) binary classification. Both Giavazzi and Tabellini (2005) and Hausmann et al. (2005) use this index not only as a measure of trade liberalization but of more general economic liberalization. Trade policy is considered open if each of the five criteria is satisfied: tariffs average less than 40%, non-tariff barriers apply to less than 40% of imports, the economic system is not socialist, the black market premium on the foreign exchange rate is less than 20%, and a state monopoly does not control exports. $REFORM_{it}$ equals one if country i is open at time t and equals zero otherwise. Results were robust with its inclusion despite a 15% reduction in the number of countries due to missing data for REFORM.

REG_j equals one for region j and zero otherwise and the summations in (1) are taken over the six regions listed in the previous subsection. Finally, ε denotes the error term where E (ε_{it}) = 0 for all i and t. We compute standard errors as in Arellano and Bond (1987).

A concern for using a difference-in-difference model is the possibility of unobserved variables affecting growth differently between the control and treated groups. To the extent that such variables are time-invariant they will be captured by the fixed effects. Insertion of other control variables will also mitigate this concern. However, other time-varying variables could still affect democratization and economic growth and so bias the coefficients upon DEMS and DEML in (1). Such concerns also arise in PS, Giavazzi and Tabellini (2005) and RW.

Another concern is reverse causality such that democratization is driven by economic growth. PS, Giavazzi and Tabellini (2005) and RW all assume democracy to be exogenous and we do likewise to keep our methodology consistent with theirs. But a stronger justification comes from Acemoglu, Johnson, Robinson and Yared (2008) who report that income does not cause democratization once they use fixed effects to control for time-invariant country-specific characteristics (such as geography, history and culture). They find that the same historical factors underlie the promotion of growth and democracy, and this explains the strong association between the two. But once one controls for these characteristics, changes in income do not affect democracy.[16] Murtin and Wacziarg (2011) argue that the fixed effects estimation of Acemoglu et al. (2008) is inappropriate since measurement errors with persistent variables can substantially bias coefficient estimates in fixed effects models. They employ system-GMM from Blundell and Bond (1998) and do find that rising income promotes democracy.

[16] Of course, others suggest that economic growth promotes democracy. See Lipset (1959) and Barro (1999) as examples.

Table 2 re-runs the specifications in the aforementioned papers but with our sample of countries and years. In column 1, we regress DEM upon its lag and the lag of the natural log of GDP per capita. The coefficient upon lagged income is negative but not statistically significant. A similar result arises in column 2 when we replace DEM with the democracy measure, DEM_ACLP, from Cheibub et al. (2010). Acemoglu et al. (2008), however, report stronger results when considering economic crises as such events are associated with political change. Column 3 adds a dummy variable to the specification in column 1. Let RECESS equal one when GROWTH < 0 and equal zero otherwise and so RECESS equals one during recessions. However, neither the coefficient on the lag of income nor that for the lag of RECESS is statistically significant. Another potential concern is the use of a dummy variable as our dependent variable. Columns 4 and 5 repeat the specifications of columns 1 and 3 but replace DEM with FHPOL. FHPOL is the average of the Freedom House political rights index and the POLITY index from the Polity IV data set. Both were transformed from their initial scales to a 0 to 1 scale for consistency when taking their average. We average these two indices to better coincide with the PS approach that takes account of both measures in their political classification. Use of a multi-unit dependent variable also better coincides with the procedure in Acemoglu et al. (2008). Despite these changes, results remain consistent. No evidence arises of a strong association between past income or recession and democratization. Finally, the last two columns consider system-GMM estimation using DEM and FHPOL, respectively, as dependent variables. To avoid an explosion of instruments, we limit the instrument set to be the two-period lags of the endogenous variables. As before, the coefficient on lagged income is not statistically significant. These findings remain robust to removing the high income countries of Western

Europe and the "neo-Europes" of Australia, Canada, New Zealand and the U.S. (available upon request.) Therefore, we continue our analysis taking democracy to be exogenous to income.

4. Results

The baseline results from the estimate of (1) are given in Table 3. Column 1 presents the simplest specification by omitting any control variables aside from the fixed effects and using the largest sample of countries.[17] Column 2 replaces the democracy variables from PS with their counterparts from Cheibub et al. (2010). Column 3 once again considers the PS democracy variables but adds TRANS to the specification to better account for the unique circumstances in Eastern Europe and the former Soviet Union due to the fall of Communism. Column 4 removes the countries for which EUR equals one so as to better focus on developing countries, comparing growth effects from democratization in developing countries to their counterparts that did not undergo similar political transitions during the sample period. The "EUR" countries are also omitted in the table's subsequent columns. Column 5 adds the lagged growth rate to better control for persistent growth shocks.[18] The remaining two columns use the specification from column 5 but remove specific subsamples such as formerly socialist countries and countries that were always democratic. The latter is removed so as to change the control group. In columns one through six, the control group is all countries that did not undergo a democratic transition,

[17] We did, however, drop growth outliers, some of which suggest that income per capita doubled in just one year's time. (For example, the reported per capita growth rate in 1997 for Equatorial Guinea is 122%!) We do not find such annual growth rates plausible. When including such outliers the coefficients on the SSA and EUR interactive terms remained consistent in magnitude and statistically significant.

[18] Nickell (1981) shows that biases from the inclusion of lagged dependent variables on the right hand side are small when the time dimension goes to infinity. Judson and Owen (1999) report that biases on these right hand side variables are less than 3% when using more than 20 periods. We have over 20 years of data for most of our countries. Roodman (2006) also suggests using fixed effects estimators with "large T" panels.

either because they remained nondemocratic or because they were a democracy throughout the sample period. In column seven, the control group comprises only the former group of countries.

The results are generally consistent across columns. For SSA, democratization is associated with higher growth in the long run. The coefficient estimates are also economically large, suggesting that democratization increases economic growth in the long run in SSA by approximately 1.5 to 2 percentage points. The coefficient upon DEMS*SSA is also positive, suggesting that the positive growth effects of democratization occur soon after the event. These results for SSA also somewhat differ from those in RW. They find stronger evidence that growth increases in the short-run after democratization but do not find significant coefficient estimates in the long run.

We find similar results for South Asia, namely greater growth in the long run and some evidence of higher growth in the short run, albeit the coefficient estimates fail to retain significance across specifications. However, the lone democratizing country in South Asia was Bangladesh (according to PS). Because we do not want to overgeneralize conclusions based upon the experience of one country, we do not focus on this result. This is especially important since Cheibub et al. (2010) code Nepal, Pakistan, and Sri Lanka differently than do PS. The smaller coefficients on the South Asian interactive terms in column 2 suggest that growth was not consistent across these additional cases.

For East and Southeast Asia as well as New World countries, no evidence arises that democratization affected growth as coefficient estimates are small and do not always have consistent signs across specifications. Countries like South Korea and Taiwan underwent growth spurts before democratization occurred and so changing political systems could have had few

effects given the growth inertia currently in place. Many of the New World countries are relatively old and so long run growth could be less sensitive to this type of political change.

Results are somewhat mixed for Eastern European and Central Asian countries. In the short run the coefficient estimates are generally negative and large in magnitude, implying a fall in economic growth of around a half of a percentage point. Coefficients upon DEML*EECA do not retain the same sign across specifications nor are they statistically significant. The exception to these results occurs in column six where socialist countries are removed. The lone nonsocialist country in Eastern Europe or Central Asia is Turkey and so the positive coefficient implies economic growth increased in Turkey in the short run following democratization. But as with Bangladesh in South Asia, we do not want to overreach from this one case.[19]

Surprisingly, the region where democracy could have lowered economic growth was in Western Europe (Greece, Portugal, and Spain). Not only is there evidence that growth declined in the short run but also in the long run. The association between democratization and growth in Western Europe weakens in the short run using the Cheibub et al. (2010) data but the coefficient upon EUR*DEML remains large, negative, and statistically significant.

PS also use several additional control variables. These include lags of life expectancy, the share of government purchases in GDP, the investment share, and the trade share. We also considered these additional controls in the matrix X in (1). However, their inclusion did not change the results described above. These results are available from the authors upon request.

Summarizing the results from this section, we find little evidence of any short run cost of democratization outside of Europe. Democratization is positively associated with growth in SSA but negatively associated with growth in Western Europe. Little association is found for New

[19] Removing Turkey from the list of EECA countries does not greatly affect the coefficient estimates in the other columns. They remain large but are often statistically insignificant.

World or East and Southeast Asian countries. Coefficients are large for Eastern Europe and Central Asia but (negative in the short run and positive in the long run) but large standard errors prevent drawing strong conclusions.

To put the coefficient estimates of Table 3 further into perspective, consider a regression of GROWTH upon the fixed effects, DEMS, and DEML and so not allowing for cross regional heterogeneity. The coefficient upon DEMS is 0.18 and that upon DEML is 0.87. The latter is statistically significant. However, such a result hides the wide array of estimates for the various regions.

5. Further Analysis

A. Channels

The results of section 4 showed regional variation in how democracy impacts economic growth. The next question is "why?" Tables 4 and 5 help to answer this question by presenting the same regressions as those in Table 3 but replacing the economic growth rate as the dependent variable with the growth rate of total factor productivity (TFP) in Table 4 and the investment share from the Penn World Tables, version 6.3, in Table 5.[20] TFP data is from Isaksson (2007) and goes from 1960 to 2000.

Several interesting points arise from these two tables. The first is the increase in TFP growth in the long run following democratization in SSA. The benefits upon economic growth from democratization in SSA appear to depend more upon improvements in productivity than they do upon increases in investment. The analogous coefficients in Table 5 examining investment are small, implying that investment was little affected. On the other hand, the

[20] Results are also robust to using the natural log of the investment share.

increase in growth for Bangladesh was entirely due to increases in investment. Democratization in Bangladesh is even negatively associated with subsequent TFP growth.

The case of Eastern Europe and Central Asia is less straightforward than what the coefficient estimates in Tables 4 and 5 imply. Investment fell after democratization, at least in the short run, as shown in Table 5. Perhaps the greater uncertainty commensurate with the substantial economic and political changes lowered investment. Another possibility is that communist countries overinvested relative to optimal levels and so investment decreased after countries democratized. The results from Table 4 imply that TFP increased in EECA. However, data from Isaksson (2007) is missing for many EECA countries and so results are driven by Turkey. Given these missing countries, we do not suggest that TFP generally increased when former communist countries became democratic.

Although not always significant, the coefficients on DEML*EUR are negative in Table 4. Some evidence arises that TFP growth declined in the three countries that democratized in Western Europe. No evidence arises that TFP increased for these countries. In addition, more evidence arises that democratization lowered TFP in these countries than lowered investment.

The most consistent results of Table 3 were that democratization in SSA raised economic growth but democratization in Western Europe lowered growth. Comparing Tables 4 and 5, one sees that the results with TFP are more congruent with this pattern than those for investment. Exceptions certainly arise. The data from Cheibub et al. (2007) is less supportive that TFP increased in SSA following democratization. In light of this, we do not want to overreach in drawing conclusions. But given this horse race between TFP and investment, distinctions in how democracy affects economic growth appear to be more greatly influenced by how democracy affects TFP than how it affects investment. Perhaps these differences upon growth stem not so

much from the distinctions across investment but from distinctions in how democratization re-allocates resources to more or less efficient uses of them.

B. Explanations behind regional differences

An underlying question behind our analysis is "why should regions matter for how democracy affects growth?" RW also consider why democracy could have different influences upon growth. They report that democracy is more beneficial to growth in low income countries, in ethnically diverse countries, and in SSA countries. Obviously, these characteristics are not disjoint as many African countries fit into all three groups. They can also lead to other questions, just as in our analysis. What about SSA matters? For example, does ethnic heterogeneity matter or only some determinant correlated with ethnic heterogeneity?

To the extent that a regional dummy merely proxies for more important factors, then the inclusion of additional variables that interact the democracy indices with these candidate factors should result in significant coefficients for these newly added interactive terms while driving the coefficients on the regional interactive terms to zero. Of course, numerous candidates arise for inclusion, making analysis of all of them infeasible. Nevertheless, we proceed by considering a factor examined elsewhere, the extent of ethnic diversity.

Not only was this examined by RW but Collier (2000) and Bluedorn (2000) also report that democratization is more beneficial to growth in more ethnically diverse countries.[21] A possible explanation is that democracy could help mitigate friction among these groups whereas an autocrat could have greater incentive to pit one group against another (divide and conquer). To first measure diversity, we employ the ethnic fractionalization measure from Montalvo and

[21] However, Easterly (2001) does not find that democracy is more beneficial to growth in ethnically diverse countries.

Reynal-Querol (2005), denoted as FRAC while also employing a measure from Alesina et al. (2003), denoted as AFRAC, and the first commonly used ethnolinguistic fractionalization index (ELF) from the Atlas Narodov Mira (1964) out of the Soviet Union. Although highly correlated with one another, these indices are distinct. ELF places more weight upon linguistic differences than the other two measures. The *Enclyopedia Britannica* (EB) serves as the primary source for AFRAC whereas Montalvo and Reynal-Querol (2005) rely more heavily on the *World Christian Encyclopedia* (WCE) arguing that the WCE presents a more refined topology than does the EB. The WCE also focuses more on genetic differences across groups rather than geographic separation. For all three measures, higher values denote greater heterogeneity.

Given these differences we employ all three in Table 6, using the specifications in columns three and four of Table 3. Both include TRANS whereas the first contains all countries and the latter omits those where EUR equals one. Results are mixed. For all specifications, the coefficients upon the DEML*SSA are no longer significant whereas they are positive and significant for DEML*FRAC (at the 10% level) and DEML*ELF. The two coefficients for DEML*AFRAC are positive but not statistically significant. Therefore, our findings are somewhat mixed compared to those from RW, supportive when using FRAC and ELF but not for AFRAC. Still, we do find at least some evidence that the positive association between democracy and growth in the long run for SSA is due to the region's greater heterogeneity. Obviously, such findings are tempered since they are not robust across all three specifications. Moreover, the coefficients for the EUR interactive terms also remain significant and so ethnic diversity is unlikely to explain all of the cross country heterogeneity.

Why might ethnic diversity matter for how democracy affects growth? Easterly and Levine (1997) cite one possibility, namely problems of governance caused by such diversity as

distinct groups could find it difficult to co-exist politically. Other scholars consider related though not necessarily identical problems of governance. Englebert (2000) does not cite ethnic heterogeneity per se but rather to cases where post-colonial governing institutions lacked historical antecedents (in which case the country is labeled to be "illegitimate"). This could arise because groups without any shared political institutions before colonization needed to find ways to co-exist after independence. However, if such ethnically diverse groups did co-exist before colonization, then Englerbert does not see such ethnic diversity as retarding growth prospects in this case. New countries might also face governing crises that more established countries put behind them long ago. Bates et al. (2007) describe many of the same governing problems for 19th century Latin America as arose after independence in 20th century Africa when distinct groups attempted to form national unity. In light of these explanations, we next compare ethnic diversity with these other purported impediments to governance.

Table 7 considers other proxies that could be associated with governance. We choose these proxies because they are available across countries and because they presumably are exogenous as they are likely less affected by recent growth and political reform. COLONY equals one if a country is a former colony. Such countries could face governing challenges, especially at independence, as a country attempts to find a new identity apart from the colonizing power. LEGIT equals one if a country is classified by Englebert (2000) as "legitimate". In illegitimate countries, post-colonial institutions clash with precolonial ones and the resulting tensions weaken a leader's political foundation thereby making it more difficult to enact policies that promote growth, especially if such policies entail short run costs or harm the current elite.[22]

[22] Not all colonies are illegitimate. Cape Verde lacked a precolonial population thereby making it impossible for precolonial and post-colonial institutions to clash. The U.S. provides another example. With the precolonial population completely marginalized, the post-colonial population also did not perceive a conflict between the pre and post-colonial institutions.

Finally, since such problems of governance might persist across decades, NEW equals one for countries that achieved independence after World War Two. Examples include not only most SSA countries but also countries of the former Soviet Union.

For both the full and reduced samples, the coefficients on these interactive terms are not generally significant, at least at the 5% level. Comparing these results with ethnic diversity, two possibilities arise. First, these latter three proxies might not capture obstacles of governance, either because they are poor proxies or because they do not create such governing challenges in practice. Or, findings from table 6 could arise not because democracy allows leaders to more effectively govern in diverse societies but for some other reason. Perhaps democracy helps build social trust within and across communities in diverse societies

What this subsection has shown is some support that ethnic diversity explains at least part of the regional variation found in the prior tables. However, less support was found for other indicators purportedly associated with governance. Finally in this section, we consider other historical or geographic indicators to examine if they can explain the cross regional variation. If they cannot, then this provides more justification for focusing upon ethnic heterogeneity. As before, we consider indices that were mostly determined before 1960 so as to diminish endogeneity concerns. These indicators include: the fraction of land area in the tropics (TROPICS), a landlocked dummy (LANDLOCK), the fraction of mining in GDP (MINING) from Hall and Jones (1999), the measure of settler mortality (MORT) from Acemoglu et al. (2001), the Thiel measure of income inequality (II) from the University of Texas Inequality Project, and the natural log of the shortest distance to the U.S., Italy, Germany, or Japan

(DISTANCE).[23] DISTANCE equals zero for a Western European or Neo-European country. These indicators consider geography and a country's potential isolation from others. MORT considers a factor deemed to have been important for both political and economic outcomes. The income distribution also varies across world regions and could be important as to how political change impacts growth.

Table 8 shows results for the restricted sample of removing Western European countries and the "Neo-Europes. What the table shows is that these factors provide less explanation relative to ethnic diversity for the cross regional variation. In most cases, the examined candidate is not strongly associated with how political change impacts growth. The exception occurs with LANDLOCK as these coefficients are negative suggesting that growth benefits of democracy are lower in landlocked countries. However, the coefficients upon the SSA interactive terms remain significant and so this proxy of geographic isolation does not help to explain the results from previous tables. In some cases, the coefficients upon the SSA interactive terms are statistically insignificant but they remain large in magnitude and the coefficients on the candidate interactive terms are insignificant. Correlations between SSA and the respective candidates could be pushing up standard errors resulting in less precise estimates and so statistical insignificance. However, some support was still found for ethnic diversity which is also correlated with SSA. Although not reported, the coefficients upon the EUR interactive terms also remain strong significant when these candidates are considered for the full sample of countries.

We draw three inferences from the results in Table 8. First, compared to other explanations, support that ethnic diversity explains at least part of the cross regional

[23] We only take the distance to one of these four countries but these four cover the vast majority of cases. The omission of considering distance to a country such as Canada, for example, has little practical effect since no developing country is closer to Canada than it is to the United States.

heterogeneity is strong. Second, the fact that the SSA (and EUR in the full sample) interactive terms remain statistically significant in both Tables 7 and 8 despite the numerous candidates considered suggests that "one-size-fits-all" explanations are difficult to obtain. Finally, the fact that regional differences so often persist when these candidates are considered do suggest that regional characteristics remain important despite being difficult to explain.

6. Conclusion

Several findings emerge from our analysis. First, economic growth following democratization varies across regions. Democracy is positively associated with growth in SSA. These findings correspond to those of RW who also find positive effects for this region. Democracy is negatively associated with growth in Western Europe. Little association is found for New World or East and Southeast Asian countries. Imprecise coefficient estimates prevent stronger assertions regarding democratization for Eastern European and Central Asian countries. We find that these regional differences are more likely to be explained by how democratization affects TFP rather than investment. We also find little evidence of a transitional cost. Only for European countries are coefficients on the short run interactive terms negative and economically large, albeit often not significant due to high standard errors.

We find mixed for ethnic fractionalization as a potential explanation for this regional variation as results are not robust across diversity measures. To the extent, though, that such diversity does matter, perhaps democratic reforms can help mitigate governing problems that such diversity creates. A counter argument, however, is that other proxies presumed to be associated with governance were not strongly associated with how democracy influences growth and so perhaps ethnic diversity affects growth in other ways than through governance. Such

diversity could create societal fissures outside of governance thereby lowering trust across agents and making it more difficult to transact. These possibilities raise interesting questions for future work and warrant further study as to why democracy appears to benefit growth in more diverse societies. Little support was found for other explanations.

Our results also speak to claims regarding where democratization can be of particular benefit or harm. Kaplan (2000) argues that democracy destabilizes poor, less educated countries and especially those where ethnic fissures create potential for strife. Such countries, according to Kaplan, should be least beneficial for these countries. Instead, our results suggest that democracy could be most beneficial for countries that are potentially less unified. Of course, democracies might be more difficult to establish in such nations and this paper does not speak to this possibility but leaves such issues for future work.

Appendix

Table 9 provides the list of countries in the sample as well as their political and regional classifications.

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Table 1: Growth Statistics (1960-2010)

Region	All Countries	New Democracies	Old Democracies	Autocracies
Full Sample				
Number	7183	360	2788	4035
Mean	2.21	1.70	2.69	1.91
Median	2.25	1.76	2.99	1.87
Std. Dev.	7.75	7.30	5.38	9.04
Eastern Europe	620	106	209	305
And	3.32	1.57	4.40	3.19
Central Asia	4.21	2.71	5.00	3.69
	7.43	7.49	5.13	8.55
East and	587	24	98	465
Southeast	3.69	3.01	3.48	3.77
Asia	4.19	2.46	2.92	4.41
	5.51	4.02	4.34	5.80
Western Europe	1107	18	1043	46
And	2.57	2.53	2.43	5.73
Neo-Europes	2.55	1.61	2.46	6.64
	3.33	2.59	3.21	4.57
Middle East	721	0	0	721
and North	2.32			2.32
Africa	2.35			2.35
	10.71			10.71
New World	1439	102	815	522
Countries less	1.95	1.14	2.28	1.60
U.S. and	2.00	1.01	2.21	1.81
Canada	5.64	6.24	5.38	5.93
Pacific Countries	176	0	137	39
Less New	2.48		2.34	2.98
Zealand and	1.32		1.08	1.36
Australia	11.72		12.69	7.49
South Asia	323	6	160	157
	2.59	1.03	2.78	2.46
	2.45	0.87	2.98	1.99
	7.02	2.48	3.08	9.58
Sub-Saharan	2210	104	277	1829
Arica	1.37	1.97	3.39	1.03
	1.07	1.69	3.12	0.70
	9.40	9.17	7.19	9.67

Note: For each block, values denote number of observations, mean, median, and standard deviation. 'New Democracies' consider the first five years after a country became democratic. 'Old Democracies' consider subsequent years that the country was democratic. Democracy is defined as in PS

Table 2: Diagnostic Checks Regressing Democracy on Income
Panel Data Regressions (annual), 1960 - 2010
Dependent variable in each column is a democracy measure

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Estimation method	FE	FE	FE	FE	FE	SYS GMM	SYS GMM
Dependent Variable	DEM	DEM_ACLP	DEM	FHPOL	FHPOL	DEM	FHPOL
Constant	0.099 (0.039)**	0.114 (0.072)	0.100 (0.039)**	0.093 (0.034)***	0.096 (0.034)***	0.064 (0.032)**	0.017 (0.039)
GDP(-1)	-0.007 (0.005)	-0.005 (0.009)	-0.007 (0.005)	-0.004 (0.004)	-0.004 (0.004)	-0.005 (0.004)	-0.001 (0.005)
DEM(-1)	0.927 (0.006)***		0.928 (0.006)***			0.961 (0.018)***	
DEM_ACLP(-1)		0.852 (0.012)***					
FHPOL(-1)				0.893 (0.010)***	0.893 (0.010)***		0.977 (0.021)***
RECESS(-1)			0.005 (0.003)		0.001 (0.003)		
Observations	6668	6638	6607	6556	7351	6668	6556
Number of countries	171	171	171	171	171	171	171
Within R^2	0.90	0.77	0.90	0.85	0.85		
Hansen (p-value)	____	____	____	____	____	0.76	0.11
AR (2) Test (p-value)	____	____	____	____	____	0.25	1.00

Standard errors in parentheses: * significant at 10%; ** significant at 5%; *** significant at 1%. FE denotes fixed effects and SYS GMM denotes system GMM from Blundell and Bond (1998). GDP denotes the natural log of GDP per capita. DEM is the binary democracy variable from PS. DEM_ACLP is its counterpart from Cheibub et al. (2010). FHPOL denotes the average of the Freedom House political rights index and the Polity IV POLITY index. RECESS equals one when the growth rate of GDP per capita is negative and zero otherwise. Hansen denotes the Hansen test that the model is specified appropriately where the null hypothesis is that the model is not overidentified. AR(2) denotes a serial correlation test of the first differences of the dependent variable where the null hypothesis is no serial correlation.

Table 3: Democratization and Economic Growth
Panel Data Regressions (annual), 1960 - 2010
Dependent variable is the growth rate of real GDP per capita (PPP)

	(1)	(2)[a]	(3)	(4)	(5)	(6)	(7)
Sample of Countries	All	All	All	No EUR countries	No EUR countries	No EUR or socialist	No EUR or always democratic
DEMS * SSA	1.65	0.89	1.62	1.53	1.46	1.55	1.38
	(0.51)***	(0.47)*	(0.55)***	(0.56)***	(0.51)***	(0.52)***	(0.52)***
DEML * SSA	2.13	1.41	2.26	1.87	1.78	1.96	1.60
	(0.64)***	(0.69)**	(0.61)***	(0.63)***	(0.58)***	(0.59)***	(0.60)***
DEMS * SASIA	1.12	1.23	0.77	0.56	0.42	0.48	0.30
	(0.26)***	(0.97)	(0.25)***	(0.31)***	(0.29)	(0.28)*	(0.34)
DEML * SASIA	2.83	-0.23	2.97	2.68	2.52	2.69	2.38
	(0.26)***	(0.92)	(0.25)***	(0.31)***	(0.28)***	(0.28)***	(0.32)***
DEMS * ESEA	-0.06	-0.25	-0.14	-0.22	-0.18	0.38	-0.24
	(0.99)	(0.86)	(0.92)	(0.93)	(0.73)	(0.75)	(0.74)
DEML * ESEA	0.30	-0.64	-0.21	-0.52	-0.54	-0.58	-0.70
	(0.74)	(0.56)	(0.75)	(0.76)	(0.73)	(0.91)	(0.73)
DEMS * EECA	-1.20	-1.60	-0.65	-0.72	-0.57	1.75	-0.60
	(1.29)	(1.46)	(1.10)	(1.12)	(1.02)	(0.24)***	(1.03)
DEML * EECA	1.51	0.64	1.04	0.77	0.84	0.27	0.72
	(1.18)	(1.24)	(1.15)	(1.16)	(1.06)	(0.26)	(1.07)
DEMS * NEW	0.07	-0.29	-0.002	0.02	-0.02	0.06	-0.05
	(0.72)	(0.59)	(0.71)	(0.71)	(0.62)	(0.62)	(0.62)
DEML * NEW	0.62	-0.20	0.67	0.42	0.35	0.49	0.21
	(0.48)	(0.55)	(0.48)	(0.52)	(0.47)	(0.48)	(0.48)
DEMS * EUR	-1.79	-0.90	-1.78				
	(0.75)**	(1.72)	(0.75)**				
DEML * EUR	-2.42	-2.00	-2.45				
	(0.43)***	(0.59)***	(0.43)***				
GROWTH(-1)					0.09	0.07	0.09
					(0.02)***	(0.02)***	(0.02)***
TRANS			-4.51	-4.57	-4.14		-4.14
			(1.45)***	(1.47)***	(1.37)***		(1.38)***
Observations	6668	5857	6290	5137	5055	4619	4265
Number of countries	171	148	148	124	124	113	104
R-squared	0.14	0.15	0.13	0.13	0.14	0.13	0.14

Standard errors in parentheses. * significant at 10%, ** significant at 5%, *** significant at 1%. [a]In column (2), the democracy variables from PS are replaced by their counterparts from Cheibub et al. (2010). In columns (3) – (7), countries with less than 20 observations are excluded. All regressions contain country and period specific fixed effects.

Table 4: Democratization and Total Factor Productivity
Panel Data Regressions (annual), 1960 - 2010
Dependent variable is Total Factor Productivity (TFP) growth

	(1)	(2)[a]	(3)	(4)	(5)	(6)	(7)
Sample Countries	All	All	All	No EUR countries	No EUR countries	No EUR or socialist	No EUR or always democratic
DEMS * SSA	0.08	-0.63	0.08	-0.12	-0.16	-0.16	-0.37
	(0.71)	(0.75)	(0.71)	(0.74)	(0.71)	(0.71)	(0.72)
DEML * SSA	2.09	0.55	2.08	1.92	1.80	1.80	1.49
	(0.57)***	(0.86)	(0.57)***	(0.62)***	(0.59)***	(0.59)***	(0.64)**
DEMS * SASIA	-0.45	0.75	-0.45	-0.75	-0.78	-0.75	-0.82
	(0.26)	(0.90)	(0.26)	(0.33)**	(0.32)**	(0.32)**	(0.37)**
DEML * SASIA	-1.33	-0.36	-1.34	-1.50	-1.47	-1.48	-1.77
	(0.29)***	(0.74)	(0.29)***	(0.37)***	(0.36)***	(0.36)***	(0.42)***
DEMS * ESEA	0.44	0.32	0.45	0.18	0.23	0.22	0.24
	(0.38)	(0.38)	(0.38)	(0.42)	(0.43)	(0.43)	(0.45)
DEML * ESEA	0.50	0.77	0.49	0.31	0.37	0.36	0.09
	(0.81)	(0.55)	(0.81)	(0.82)	(0.81)	(0.81)	(0.85)
DEMS * EECA	1.91	0.90	1.91	1.95	1.83	1.83	1.83
	(0.20)***	(0.37)**	(0.20)***	(0.24)***	(0.24)***	(0.25)***	(0.26)***
DEML * EECA	-1.26	-1.78	-1.90	-2.06	-2.02	-1.47	-2.30
	(0.21)***	(0.35)***	(0.27)***	(0.34)***	(0.31)***	(0.24)***	(0.38)***
DEMS * NEW	-0.12	-0.16	-0.12	-0.22	-0.21	-0.20	-0.37
	(0.60)	(0.68)	(0.60)	(0.61)	(0.58)	(0.58)	(0.60)
DEML * NEW	-0.64	-0.49	-0.64	-0.88	-0.88	-0.89	-1.08
	(0.76)	(0.54)	(0.77)	(0.78)	(0.76)	(0.76)	(0.79)
DEMS * EUR	0.35	0.11	0.35				
	(0.95)	(0.60)	(0.95)				
DEML * EUR	-0.64	-0.75	-0.64				
	(0.24)***	(0.42)*	(0.24)***				
TFP(-1)					0.034	0.034	0.038
					(0.025)	(0.024)	(0.026)
TRANS			1.54	1.32	1.32		1.71
			(0.24)***	(0.37)***	(0.36)**		(0.39)***
Observations	3949	3949	3949	3109	3055	3016	2541
Number of countries	107	107	107	86	86	85	71
R-squared	0.10	0.10	0.10	0.09	0.09	0.09	0.08

Standard errors in parentheses. * significant at 10%, ** significant at 5%, *** significant at 1%. [a]In column (2), the democracy variables from PS are replaced by their counterparts from Cheibub et al. (2010). In columns (3) – (7), countries with less than 20 observations are excluded. All regressions contain country and period specific fixed effects.

Table 5: Democratization and Investment
Panel Data Regressions (annual), 1960 - 2010
Dependent variable is the Investment share of GDP

	(1)	(2)[a]	(3)	(4)	(5)	(6)	(7)
Sample Countries	All	All	All	No EUR countries	No EUR countries	No EUR or socialist	No EUR or always democratic
DEMS * SSA	-0.78	-2.24	-0.73	-1.14	-0.04	-0.01	-0.10
	(3.04)	(2.01)	(3.03)	(3.06)	(0.63)	(0.64)	(0.62)
DEML * SSA	0.21	0.19	0.07	-0.45	-0.06	0.02	-0.11
	(2.74)	(3.13)	(2.74)	(2.81)	(0.49)	(0.49)	(0.49)
DEMS * SASIA	4.63	1.38	4.65	4.33	1.62	1.60	1.42
	(0.69)***	(3.07)	(0.69)***	(0.85)***	(0.25)***	(0.26)***	(0.27)***
DEML * SASIA	12.29	3.06	12.23	11.95	2.05	2.16	1.92
	(0.77)***	(2.99)	(0.78)***	(0.97)***	(0.30)***	(0.32)***	(0.33)***
DEMS * ESEA	-2.82	-0.55	-2.79	-3.13	-0.08	0.78	-0.12
	(7.62)	(6.60)	(7.60)	(7.60)	(1.16)	(1.19)	(1.10)
DEML * ESEA	-2.51	-4.40	-2.61	-3.23	-0.66	-0.55	-0.71
	(6.34)	(5.85)	(6.35)	(6.33)	(0.44)	(0.56)	(0.43)
DEMS * EECA	-7.27	-8.18	-9.64	-10.08	-1.29	1.51	-2.42
	(3.08)**	(3.23)**	(3.37)***	(3.41)***	(0.93)***	(0.23)***	(1.14)**
DEML * EECA	-4.02	-6.01	-4.33	-4.80	-0.44	0.37	-1.34
	(3.09)	(3.14)*	(3.38)	(3.42)	(0.60)	(0.24)	(0.95)
DEMS * NEW	-0.32	-2.19	-0.29	-0.86	0.14	0.17	0.09
	(1.05)	(1.07)	(1.05)	(1.14)	(0.32)	(0.32)	(0.33)
DEML * NEW	-0.60	1.94	-0.67	-1.36	-0.14	-0.08	-0.21
	(2.59)	(2.02)	(2.59)	(2.68)	(0.49)	(0.50)	(0.49)
DEMS * EUR	-4.82	-4.86	-4.82				
	(1.19)***	(1.11)	(1.18)***				
DEML * EUR	-3.02	-5.56	-3.06				
	(3.17)	(3.52)	(3.17)				
INVEST(-1)					0.83	0.83	0.84
					(0.02)***	(0.02)***	(0.02)***
TRANS			0.46	0.56	-1.61	1.64	-1.62
			(1.51)	(1.54)	(1.05)	(0.25)***	(1.05)
Observations	6668	6669	6290	5137	5137	4691	4340
Number of countries	171	171	148	124	124	113	104
R-squared	0.61	0.62	0.62	0.63	0.88	0.88	0.89

Standard errors in parentheses. * significant at 10%, ** significant at 5%, *** significant at 1%. [a]In column (2), the democracy variables from PS are replaced by their counterparts from Cheibub et al. (2010). In columns (3) – (7), countries with less than 20 observations are excluded. All regressions contain country and period specific fixed effects.

Table 6: Explanations for Regional Variation – Ethnolinguistic Fractionalization
Panel Data Regressions (annual), 1960 - 2010
Dependent variable is the growth rate of real GDP per capita (PPP)

	(1)	(2)	(3)	(4)	(5)	(6)
Sample Countries	No EUR	No EUR	No EUR	All	All	All
Z Variable	FRAC	AFRAC	ELF	FRAC	AFRAC	ELF
DEMS * SSA	1.97	4.63	1.89	2.14	4.76	2.12
	(0.98)*	(1.31)***	(1.18)	(0.96)**	(1.27)***	(1.16)*
DEML * SSA	0.84	1.11	-0.33	1.18	1.43	0.15
	(0.76)	(1.12)	(0.74)	(0.72)	(1.07)	(0.71)
DEMS * SASIA	0.68	0.77		0.91	0.98	
	(0.32)**	(0.31)**		(0.26)***	(0.26)***	
DEML * SASIA	2.83	2.64		3.09	2.93	
	(0.32)**	(0.31)***		(0.25)***	(0.25)***	
DEMS * ESEA	0.88	1.30	0.14	1.05	1.40	0.36
	(1.16)	(0.89)	(1.31)	(1.11)	(0.87)	(1.27)
DEML * ESEA	-1.40	-0.63	-1.83	-1.13	-0.34	-1.43
	(0.70)**	(0.84)	(0.57)***	(0.66)*	(0.81)	(0.53)***
DEMS * EECA	-0.34	0.45	-0.65	-0.33	0.53	-0.52
	(1.05)	(1.11)	(1.15)	(0.99)	(1.09)	(1.12)
DEML * EECA	0.56	0.56	0.12	0.77	0.80	0.47
	(0.64)	(1.16)	(1.17)	(0.62)	(1.14)	(1.15)
DEMS * NEW	0.41	2.03	0.50	0.44	2.04	0.51
	(0.86)	(1.14)	(0.89)	(0.85)	(1.12)*	(0.88)
DEML * NEW	-0.19	0.07	-0.58	0.02	0.28	-0.27
	(0.68)	(0.82)	(0.59)	(0.64)	(0.77)	(0.54)
DEMS * EUR				-1.63	-0.85	-1.51
				(0.70)**	(0.56)	(0.70)**
DEML * EUR				-2.65	-2.62	-2.91
				(0.46)***	(0.51)***	(0.49)***
TRANS	-1.98	-4.63	-4.48	-1.89	-4.57	4.41
	(1.27)	(1.43)***	(1.43)***	(1.24)	(1.40)***	(1.40)***
DEMS*Z	-0.67	-4.47	-0.87	-0.86	-4.54	-1.12
	(1.37)	(1.91)**	(1.69)	(1.34)	(1.86)***	(1.66)
DEML*Z	1.80	0.72	2.68	1.81	0.82	2.68
	(0.96)*	(1.34)	(0.75)***	(0.93)**	(1.28)	(0.72)***
Observations	4438	5104	4348	5591	6267	5462
Number of countries	104	123	99	128	147	122
R-squared	0.10	0.13	0.11	0.13	0.14	0.12

Standard errors in parentheses. * significant at 10%, ** significant at 5%, *** significant at 1%. In all columns, countries with less than 20 growth observations are excluded. All regressions contain country and period specific fixed effects. ELF is the ethnolinguistic fractionalization index from the Atlas Narodov Mira (1964), FRAC is the ethnic fractionalization measure from Montalvo and Reynal-Querol (2005) and AFRAC is the measure of ethnic diversity from Alesina et al. (2003).

Table 7: Explanations for Regional Variation – Governance Indicators
Panel Data Regressions (annual), 1960 - 2010
Dependent variable is the growth rate of real GDP per capita (PPP)

	(1)	(2)	(3)	(4)	(5)	(6)
Sample Countries	No EUR	No EUR	No EUR	All	All	All
Z Variable	COLONY	LEGIT	NEW	COLONY	LEGIT	NEW
DEMS * SSA	-0.22	1.28	0.18	-0.20	1.35	0.11
	(1.16)	(0.62)**	(1.36)	(1.08)	(0.61)**	(1.35)
DEML * SSA	1.21	1.88***	0.88	1.63	2.24***	1.23
	(1.17)	(0.63)	(0.84)	(1.18)	(0.61)	(0.84)
DEMS * SASIA	0.57	-0.59	-0.90	0.76	-0.45	-0.89
	(0.31)*	(0.70)	(1.45)	(0.25)***	(0.69)	(1.45)
DEML * SASIA	2.68	2.54	1.61	2.97	2.80	1.87
	(0.31)***	(0.75)***	(0.81)**	(0.25)***	(0.73)***	(0.82)**
DEMS * ESEA	-1.59	-0.79	-1.35	-1.57	-0.74	-1.42
	(0.80)**	(0.88)	(1.29)	(0.78)**	(0.87)	(1.27)
DEML * ESEA	-1.03	-0.58	-1.36	-0.68	-0.29	-1.07
	(1.03)	(0.85)	(1.05)	(1.09)	(0.83)	(1.05)
DEMS * EECA	-0.73	-1.88	-0.72	-0.66	-1.88	-0.65
	(1.12)	(1.32)	(1.12)	(1.10)	(1.31)	(1.10)
DEML * EECA	0.74	0.63	0.77	1.02	0.87	1.04
	(1.13)	(1.42)	(1.17)	(1.11)	(1.41)	(1.15)
DEMS * NEW	-1.78	-0.88	-0.13	-1.88	-0.94	-0.17
	(1.23)	(0.64)	(0.67)	(1.21)	(0.64)	(0.67)
DEML * NEW	-0.23	0.30	0.32	0.07	0.53	0.57
	(1.16)	(0.69)	(0.51)	(1.17)	(0.67)	(0.47)
DEMS * EUR				-1.78	-3.02	-1.79
				(0.75)**	(1.00)***	(0.75)**
DEML * EUR				-2.45	-2.62	-2.46
				(0.43)***	(0.81)***	(0.43)***
TRANS	-4.56	-4.46	-4.57	-4.49	-4.49	-4.49
	(1.47)***	(1.47)***	(1.47)***	(1.45)***	(1.45)***	(1.45)***
DEMS*Z	1.80	1.18	1.47	1.88	1.23	1.67
	(1.08)*	(0.61)*	(1.44)	(0.98)*	(0.62)**	(1.43)
DEML*Z	0.65	0.15	1.08	0.60	0.16	1.11
	(1.06)	(0.68)	(0.74)	(1.08)	(0.68)	(0.77)
Observations	5137	5137	5137	6290	6251	6290
Number of countries	124	124	124	148	147	148
R-squared	0.13	0.13	0.13	0.13	0.14	0.14

Standard errors in parentheses. * significant at 10%, ** significant at 5%, *** significant at 1%. In all columns, countries with less than 20 growth observations are excluded. All regressions contain country and period specific fixed effects.

Table 8: Other Explanations for Regional Variation
Panel Data Regressions (annual), 1960 - 2010
Dependent variable is the growth rate of real GDP per capita (PPP)

	(1)	(2)	(3)	(4)	(5)	(6)
Sample Countries	No EUR	No EUR	No EUR	No EUR	No EUR	No EUR
Z Variable	TROPICS	MINING	LANDLOCK	DISTANCE	II	MORT
DEMS * SSA	2.85	1.49	2.08	1.79	3.87	1.31
	(0.96)***	(0.61)***	(0.53)***	(1.19)	(2.33)	(2.23)
DEML * SSA	1.73	1.65	2.23	1.36	2.82	1.07
	(0.91)*	(0.68)**	(0.67)***	(1.06)	(2.35)	(1.50)
DEMS * SASIA	1.34	0.54	0.53	0.76	2.87	0.02
	(0.56)**	(0.30)*	(0.31)*	(0.94)	(2.09)	(1.96)
DEML * SASIA	2.60	2.92	2.68	2.08	3.45	2.22
	(0.51)***	(0.31)***	(0.31)***	(0.70)***	(2.20)	(1.50)
DEMS * ESEA	0.57	0.26	0.27	0.01	2.52	-1.79
	(1.15)	(1.13)	(0.81)	(0.91)	(2.47)	(2.38)
DEML * ESEA	-0.57	-0.70	-0.27	-0.78	0.52	-1.21
	(0.85)	(0.93)	(0.87)	(0.78)	(2.66)	(1.81)
DEMS * EECA	-0.72	-1.27	-0.44	-0.50	1.67	
	(1.12)	(0.92)	(1.11)	(1.09)	(2.13)	
DEML * EECA	0.77	-0.13	0.94	0.73	1.71	
	(1.16)	(0.83)	(1.17)	(1.07)	(1.88)	
DEMS * NEW	1.17	-0.003	0.27	0.35	2.40	-0.32
	(1.03)	(0.69)	(0.69)	(0.90)	(2.52)	(2.18)
DEML * NEW	0.30	0.43	0.56	-0.18	1.28	-0.07
	(0.90)	(0.55)	(0.52)	(0.71)	(2.46)	(1.68)
TRANS	-4.57	-3.84	-4.49	-4.18	-4.18	
	(1.47)***	(2.02)*	(1.49)***	(1.34)***	(1.34)***	
DEMS*Z	-1.55	2.08	-2.11	0.37	-0.05	0.05
	(1.00)	(11.86)	(0.69)***	(0.57)	(0.05)	(0.45)
DEML*Z	0.16	4.01	-1.15	-0.84	-0.01	0.05
	(0.81)	(4.25)	(0.65)*	(0.72)	(0.05)	(0.34)
Observations	5137	4599	5137	5137	4370	3294
Number of countries	124	109	124	124	105	74
R-squared	0.13	0.13	0.13	0.08	0.10	0.07

Standard errors in parentheses. * significant at 10%, ** significant at 5%, *** significant at 1%. In all columns, countries with less than 20 growth observations are excluded. All regressions contain country and period specific fixed effects. Tropics denotes the percentage of land area in the tropics. MINING is the share of the mining sector in GDP. LANDLOCK equals one for a landlocked country and zero otherwise. DISTANCE is the minimum distance to the U.S., Japan, Germany, or Italy. II denotes the Thiel measure of income inequality. MORT is settler mortality rate.

Table 9: Country Characteristics

Country	Country classification	Region
Afghanistan	Always Autocratic	SOUTH ASIA
Albania	Democratization, 1992	EASTERN EUROPE OR CENTRAL ASIA
Algeria	Always Autocratic	MIDDLE EAST OR NORTH AFRICA
Angola	Always Autocratic	SUB-SAHARAN AFRICA
Antigua and Barbuda	Always Democratic	NEW WORLD
Argentina	Democratization, 1983	NEW WORLD
Armenia	Democratization, 1998	EASTERN EUROPE OR CENTRAL ASIA
Australia	Always Democratic	WESTERN EUROPE or "NEO-EUROPES"
Austria	Always Democratic	WESTERN EUROPE or "NEO-EUROPES"
Azerbaijan	Always Autocratic	EASTERN EUROPE OR CENTRAL ASIA
Bahamas	Always Democratic	NEW WORLD
Bahrain	Always Autocratic	MIDDLE EAST OR NORTH AFRICA
Bangladesh	Democratization, 1991	SOUTH ASIA
Barbados	Always Democratic	NEW WORLD
Belarus	Always Autocratic	EASTERN EUROPE OR CENTRAL ASIA
Belgium	Always Democratic	WESTERN EUROPE or "NEO-EUROPES"
Belize	Always Democratic	NEW WORLD
Benin	Democratization, 1991	SUB-SAHARAN AFRICA
Bhutan	Always Autocratic	SOUTH ASIA
Bolivia	Democratization, 1982	NEW WORLD
Bosnia and	Always Autocratic	EASTERN EUROPE OR CENTRAL ASIA
Botswana	Always Democratic	SUB-SAHARAN AFRICA
Brazil	Democratization, 1985	NEW WORLD
Brunei	Always Autocratic	EAST AND SOUTHEAST ASIA
Bulgaria	Democratization, 1990	EASTERN EUROPE OR CENTRAL ASIA
Burkina Faso	Always Autocratic	SUB-SAHARAN AFRICA
Burundi	Always Autocratic	SUB-SAHARAN AFRICA
Cambodia	Always Autocratic	EAST AND SOUTHEAST ASIA
Cameroon	Always Autocratic	SUB-SAHARAN AFRICA
Canada	Always Democratic	WESTERN EUROPE or "NEO-EUROPES"
Cape Verde	Democratization, 1991	SUB-SAHARAN AFRICA
Central African Rep.	Always Autocratic	SUB-SAHARAN AFRICA
Chad	Always Autocratic	SUB-SAHARAN AFRICA
Chile	Democratization, 1990	NEW WORLD
China	Always Autocratic	EAST AND SOUTHEAST ASIA
Colombia	Always Democratic	NEW WORLD
Comoros	Always Autocratic	SUB-SAHARAN AFRICA
Congo, Dem. Rep.	Always Autocratic	SUB-SAHARAN AFRICA
Congo, Republic of	Always Autocratic	SUB-SAHARAN AFRICA
Costa Rica	Always Democratic	NEW WORLD
Cote d`Ivoire	Always Autocratic	SUB-SAHARAN AFRICA
Croatia	Democratization, 1990	EASTERN EUROPE OR CENTRAL ASIA
Cuba	Always Autocratic	NEW WORLD
Cyprus	Always Democratic	WESTERN EUROPE or "NEO-EUROPES"
Czech Republic	Democratization, 1993	EASTERN EUROPE OR CENTRAL ASIA
Denmark	Always Democratic	WESTERN EUROPE or "NEO-EUROPES"
Djibouti	Democratization, 1999	SUB-SAHARAN AFRICA

Dominica	Always Democratic	NEW WORLD
Dominican Republic	Democratization, 1978	NEW WORLD
Ecuador	Democratization, 1979	NEW WORLD
Egypt	Always Autocratic	MIDDLE EAST OR NORTH AFRICA
El Salvador	Democratization, 1994	NEW WORLD
Equatorial Guinea	Always Autocratic	SUB-SAHARAN AFRICA
Eritrea	Always Autocratic	SUB-SAHARAN AFRICA
Estonia	Democratization, 1991	EASTERN EUROPE OR CENTRAL ASIA
Ethiopia	Democratization, 1995	SUB-SAHARAN AFRICA
Fiji	Always Democratic	PACIFIC
Finland	Always Democratic	WESTERN EUROPE or "NEO-EUROPES"
France	Always Democratic	WESTERN EUROPE or "NEO-EUROPES"
Gabon	Always Autocratic	SUB-SAHARAN AFRICA
Gambia, The	Always Autocratic	SUB-SAHARAN AFRICA
Georgia	Democratization, 1995	EASTERN EUROPE OR CENTRAL ASIA
Germany	Always Democratic	WESTERN EUROPE or "NEO-EUROPES"
Ghana	Democratization, 1996	SUB-SAHARAN AFRICA
Greece	Democratization, 1975	WESTERN EUROPE or "NEO-EUROPES"
Grenada	Democratization, 1984	NEW WORLD
Guatemala	Democratization, 1996	NEW WORLD
Guinea	Always Autocratic	SUB-SAHARAN AFRICA
Guinea-Bissau	Always Autocratic	SUB-SAHARAN AFRICA
Guyana	Democratization, 1992	NEW WORLD
Haiti	Always Autocratic	NEW WORLD
Honduras	Democratization, 1982	NEW WORLD
Hungary	Democratization, 1990	EASTERN EUROPE OR CENTRAL ASIA
Iceland	Always Democratic	WESTERN EUROPE or "NEO-EUROPES"
India	Always Democratic	SOUTH ASIA
Indonesia	Democratization, 1999	EAST AND SOUTHEAST ASIA
Iran	Always Autocratic	MIDDLE EAST OR NORTH AFRICA
Iraq	Always Autocratic	MIDDLE EAST OR NORTH AFRICA
Ireland	Always Democratic	WESTERN EUROPE or "NEO-EUROPES"
Israel	Always Democratic	MIDDLE EAST OR NORTH AFRICA
Italy	Always Democratic	WESTERN EUROPE or "NEO-EUROPES"
Jamaica	Always Democratic	NEW WORLD
Japan	Always Democratic	EAST AND SOUTHEAST ASIA
Jordan	Always Autocratic	MIDDLE EAST OR NORTH AFRICA
Kazakhstan	Always Autocratic	EASTERN EUROPE OR CENTRAL ASIA
Kenya	Always Autocratic	SUB-SAHARAN AFRICA
Kiribati	Always Democratic	PACIFIC
Korea, Republic of	Democratization, 1988	EAST AND SOUTHEAST ASIA
Kuwait	Always Autocratic	MIDDLE EAST OR NORTH AFRICA
Kyrgyzstan	Always Autocratic	EASTERN EUROPE OR CENTRAL ASIA
Laos	Always Autocratic	EAST AND SOUTHEAST ASIA
Latvia	Democratization, 1991	EASTERN EUROPE OR CENTRAL ASIA
Lebanon	Always Autocratic	MIDDLE EAST OR NORTH AFRICA
Lesotho	Democratization, 1993	SUB-SAHARAN AFRICA
Liberia	Always Autocratic	SUB-SAHARAN AFRICA
Libya	Always Autocratic	MIDDLE EAST OR NORTH AFRICA

Lithuania	Democratization, 1991	EASTERN EUROPE OR CENTRAL ASIA
Luxembourg	Always Democratic	WESTERN EUROPE or "NEO-EUROPES"
Macedonia	Democratization, 1993	EASTERN EUROPE OR CENTRAL ASIA
Madagascar	Democratization, 1993	SUB-SAHARAN AFRICA
Malawi	Democratization, 1994	SUB-SAHARAN AFRICA
Malaysia	Always Autocratic	EAST AND SOUTHEAST ASIA
Mali	Democratization, 1992	SUB-SAHARAN AFRICA
Malta	Always Democratic	WESTERN EUROPE or "NEO-EUROPES"
Mauritania	Always Autocratic	SUB-SAHARAN AFRICA
Mauritius	Always Democratic	SUB-SAHARAN AFRICA
Mexico	Democratization, 1997	NEW WORLD
Moldova	Democratization, 1994	EASTERN EUROPE OR CENTRAL ASIA
Mongolia	Democratization, 1992	EAST AND SOUTHEAST ASIA
Morocco	Always Autocratic	MIDDLE EAST OR NORTH AFRICA
Mozambique	Democratization, 1994	SUB-SAHARAN AFRICA
Namibia	Always Democratic	SUB-SAHARAN AFRICA
Nepal	Always Autocratic	SOUTH ASIA
Netherlands	Always Democratic	WESTERN EUROPE or "NEO-EUROPES"
New Zealand	Always Democratic	WESTERN EUROPE or "NEO-EUROPES"
Nicaragua	Democratization, 1990	NEW WORLD
Niger	Always Autocratic	SUB-SAHARAN AFRICA
Nigeria	Democratization, 1999	SUB-SAHARAN AFRICA
Norway	Always Democratic	WESTERN EUROPE or "NEO-EUROPES"
Oman	Always Autocratic	MIDDLE EAST OR NORTH AFRICA
Pakistan	Always Autocratic	SOUTH ASIA
Panama	Democratization, 1994	NEW WORLD
Papua New Guinea	Always Democratic	PACIFIC
Paraguay	Democratization, 1993	NEW WORLD
Peru	Democratization, 1980	NEW WORLD
Philippines	Democratization, 1987	EAST AND SOUTHEAST ASIA
Poland	Democratization, 1990	EASTERN EUROPE OR CENTRAL ASIA
Portugal	Democratization, 1976	WESTERN EUROPE or "NEO-EUROPES"
Qatar	Always Autocratic	MIDDLE EAST OR NORTH AFRICA
Romania	Democratization, 1990	EASTERN EUROPE OR CENTRAL ASIA
Russia	Democratization, 1993	EASTERN EUROPE OR CENTRAL ASIA
Rwanda	Always Autocratic	SUB-SAHARAN AFRICA
Sao Tome and Principe	Democratization, 1991	SUB-SAHARAN AFRICA
Saudi Arabia	Always Autocratic	MIDDLE EAST OR NORTH AFRICA
Senegal	Democratization, 2000	SUB-SAHARAN AFRICA
Seychelles	Always Autocratic	SUB-SAHARAN AFRICA
Sierra Leone	Always Autocratic	SUB-SAHARAN AFRICA
Singapore	Always Autocratic	EAST AND SOUTHEAST ASIA
Slovak Republic	Democratization, 1993	EASTERN EUROPE OR CENTRAL ASIA
Slovenia	Democratization, 1992	EASTERN EUROPE OR CENTRAL ASIA
Somalia	Always Autocratic	SUB-SAHARAN AFRICA
South Africa	Democratization, 1994	SUB-SAHARAN AFRICA
Spain	Democratization, 1978	WESTERN EUROPE or "NEO-EUROPES"
Sri Lanka	Always Democratic	SOUTH ASIA
Sudan	Always Autocratic	SUB-SAHARAN AFRICA

Suriname	Democratization, 1991	NEW WORLD
Swaziland	Always Autocratic	SUB-SAHARAN AFRICA
Sweden	Always Democratic	WESTERN EUROPE or "NEO-EUROPES"
Switzerland	Always Democratic	WESTERN EUROPE or "NEO-EUROPES"
Syria	Always Autocratic	MIDDLE EAST OR NORTH AFRICA
Tajikistan	Always Autocratic	EASTERN EUROPE OR CENTRAL ASIA
Tanzania	Democratization, 1995	SUB-SAHARAN AFRICA
Thailand	Always Autocratic	EAST AND SOUTHEAST ASIA
Togo	Always Autocratic	SUB-SAHARAN AFRICA
Tonga	Always Autocratic	PACIFIC
Trinidad &Tobago	Always Democratic	NEW WORLD
Tunisia	Always Autocratic	MIDDLE EAST OR NORTH AFRICA
Turkey	Democratization, 1983	EASTERN EUROPE OR CENTRAL ASIA
Turkmenistan	Always Autocratic	EASTERN EUROPE OR CENTRAL ASIA
Uganda	Always Autocratic	SUB-SAHARAN AFRICA
Ukraine	Democratization, 1991	EASTERN EUROPE OR CENTRAL ASIA
United Arab Emirates	Always Autocratic	MIDDLE EAST OR NORTH AFRICA
United Kingdom	Always Democratic	WESTERN EUROPE or "NEO-EUROPES"
United States	Always Democratic	WESTERN EUROPE or "NEO-EUROPES"
Uruguay	Democratization, 1985	NEW WORLD
Uzbekistan	Always Autocratic	EASTERN EUROPE OR CENTRAL ASIA
Venezuela	Always Democratic	NEW WORLD
Vietnam	Always Autocratic	EAST AND SOUTHEAST ASIA
Yemen	Always Autocratic	MIDDLE EAST OR NORTH AFRICA
Zambia	Democratization, 1991	SUB-SAHARAN AFRICA
Zimbabwe	Always Autocratic	SUB-SAHARAN AFRICA

Note: Year in column 2 denotes when democratization event occurred. Classification comes from PS.