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What matters for growth in Europe? Institutions versus policies, quality versus instability

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We study the how the quality and instability of institutions and policies affect economic growth in 35 European countries. While stability entails valuable predictability, instability can reflect reforms that offer positive long-run consequences. We construct measures of quality and instability for a panel of countries for 1984–2009. Results suggest that the quality of policy is growth-promoting. Notably, this positive effect becomes larger the more unstable policies are. The findings suggest that for European countries, the benefits of policy flexibility – due to experimentation and learning or making rent seeking more difficult – dominate the costs of reduced predictability.

Keywords: Growth; institutions; policies; instability; reforms; Europe; institutional change

JEL Classifications: B52, D80, O11, O17, O43

1. Introduction

‘To me, it is quite striking what political stability means for economic development when you consider the Chinese example.’ – Swedish Prime Minister Göran Persson, on Swedish Radio, 4 November, 1996

Europe has seen many changes in institutions and policies since the early 1980s – most spectacularly in the countries that transitioned from communism to market economies, but also, albeit to a lesser degree, in most other countries. Across the OECD, governments are seeking to undertake structural reforms to strengthen economic growth (OECD 2009). This brings to the forefront the important question what effects these changes have had on economic growth. To study this issue, we conduct an empirical analysis in which we look at how two aspects of institutions and policies – their respective quality and instability – affect growth. The basic idea is that countries, in order to arrive at quality levels that are growth-promoting, must endure a period of change and instability, the growth effects of which are largely unknown. Documenting these effects is particularly important, since the European Commission (2012) stresses the need for continued reforms. For example, the Commission suggests a need to change the rules and regulations facing European companies to facilitate their expansion and growth and also a need to improve the quality, independence and efficiency of judicial systems.

It is widely accepted that institutional quality is an important determinant of long-run economic growth.¹ As Rodrik *et al.* (2004) put it, ‘institutions rule’, which implies that formal rules are more important than other determinants of growth, such as geographical factors and education.² The fact that Europe is relatively rich is arguably the result of high institutional quality for hundreds of years (North and Thomas 1973). For shorter time horizons, policies arguably influence growth as well.

But not only quality levels matter. To improve quality, a country must go through a series of changes and thereby a period of institutional instability and policy uncertainty. While high-quality institutions and policies can be expected to be growth-enhancing because they reduce uncertainty and transaction costs, entail incentives for productive behaviour and structure government incomes and expenditures in such a way as to stimulate productive outcomes, the growth effects of change and instability are theoretically ambiguous. On the one hand, instability that entails change conducive to growth in the long run may come with transitional costs of a size that hampers growth in the short run. On the other hand, if the *status quo* is associated with what Olson (1982) called ‘sclerosis’, change may also have positive effects on growth, by doing away with growth-hampering, rent-seeking structures.

We estimate the growth effects of both quality and instability. We analyse 35 European countries over five five-year periods, from 1984 to 2009, and construct new measures of institutional and policy quality by means of principal factors analysis (PFA) of annual data for the 12 components of the political risk index from the International Country Risk Guide (ICRG). The resulting three orthogonal measures are readily interpretable as social harmony, legal-administrative quality and policy quality. Instability is measured by the coefficient of variation (the standard deviation divided by the mean) in each of these dimensions within each five-year period.

A related literature looks at the economic effects of political and policy instability. The former refers to the instability of the governments in power (i.e. how often they are replaced), and the latter refers to the instability of macroeconomic policy or certain macroeconomic variables (which is a somewhat different type of policy measure than ours). Previous studies that use measures of political instability generally find a negative relationship with investments or growth.³ Studies looking at macroeconomic policy instability likewise mostly find a negative relationship.⁴ Our approach also includes looking at certain policies and political features, but also institutional and

social factors. Moreover, we investigate the *concurrent* growth effects of quality and instability, and we focus on Europe.

Our main findings are that the quality of policy is growth-promoting and that this effect is independent of policy instability. In a setting with unstable policy, further improvements are good for growth, even if they increase instability. In contrast, the growth effects of the instability of the legal-administrative framework seem to depend on its initial quality. We find no robust results for the social harmony dimension. For European countries, the benefits of flexibility in the institutional framework dominate the costs, in terms of a loss in predictability.⁵

2. Theoretical considerations

We consider the growth effects of institutions and policies. Institutions are ‘the rules of the game in a society or, ... the humanly devised constraints that shape human interaction’ (North 1990, p. 3). Following North (1990, pp. 6, 83–84), we define the quality of the institutional framework as the degree to which institutions reduce uncertainty for economic decision-makers and offer incentives for productive and innovative behaviour. Higher certainty implies lower transaction costs, which makes economic projects more profitable and hence more likely to be undertaken. By affecting the expectations of economic agents, it also allows agents to use a longer time horizon, through the stability that institutions provide. By offering incentives for productive behaviour, high-quality institutions stimulate individuals to engage in actions where the private return is close to the social return (Demsetz 1967). The quality of policies can be defined as the degree to which they are conducive to investment activity, counteract unemployment and poverty and allow the government to act in accordance with its democratic mandate. That is, it entails favourable business conditions, attention to avoiding socioeconomic problems and a well-functioning democratic practice.⁶

As noted by North (1990), stability is not enough for efficiency. The quality of institutions and policies can be low but stable, and to improve quality, institutions and policies must be changed, causing at least some instability. While the growth effects of quality may seem clear cut, those of instability are theoretically ambiguous. On the one hand, we expect a negative effect from the mere fact that instability increases uncertainty, increases transaction costs and shortens the time horizon for producers, investors and innovators. Thus, instability, *even when caused by quality improvements*, could entail transitional costs that lower growth in the short and medium run. Hence, a J-curve-like growth effect could arise from uncertainty in a period where confidence in institutional and policy innovations is built. It could also be that instability, especially of policies, reflect interest-group influence. If such groups manage to intervene in the policy process, causing frequent policy changes that worsen the quality of policies, the instability may be related to lower growth.

On the other hand, instability might contribute to positive growth rates, and to explain why, we make use of two ideas, by Olson (1982) and Hayek (1973, 1978) respectively. As for the Olson mechanism, while institutional quality directly contributes to economic growth, it also creates a favourable environment for the growth of interest groups that are prone to influence the government to implement low-quality policies. These policies, in turn, reduce growth rates, possibly resulting in a kind of economic ‘sclerosis’. The net effect of institutional quality on growth could therefore be negative.⁷ Already Smith (1776/1930, p. 130) noted that ‘[p]eople of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices.’ Indeed, Horgos and Zimmermann (2009) and Coates *et al.* (2010, 2011) provide recent evidence of this type of interest-group influence.

However, when we turn to instability, *institutional* instability can make it more difficult for interest groups to function (as uncertainty increases and as the legal scope for rent-seeking might be

reduced) and form (as they require stability and time to overcome the logic of collective action – see Olson, 1982, p. 41). This change in interest-group strength loosens their grip on economic policy, which induces *policy* instability.⁸ This in turn can be expected to increase growth, if it carries with it efficiency-enhancing policy reform. Thus, institutional instability could be beneficial for growth by changing the balance of power, which opens up for policy instability of an efficiency-enhancing kind. This mechanism, going from institutional to policy instability, highlights how instability can entail higher growth rates also in settings with high quality to begin with. A complementary mechanism that concerns policy instability directly is that when policies change, this makes it more difficult for interest groups to identify and evaluate current policies and also more difficult to gain strength through lobbying efforts and alliance-building, as these activities take time. Again, this points at a possible positive growth effect of instability, through the Olsonian channel.

Second, Hayek could be taken to suggest that regardless of the short-run effect of instability, institutions and policies are improved through a process of experimentation. As institutions tend to be much more stable than policies, this mechanism most clearly applies to policy instability. While policy reforms are sometimes ‘directly’ growth-enhancing, in order to ascertain such an outcome, policymakers need knowledge about how particular reforms work. This knowledge can arguably be produced in a trial-and-error process, where policy changes reveal which ones work and which ones do not. In other words, noting that the economic environment continuously changes, such piecemeal experimentation could often reflect adjustments in policies (and sometimes institutions) which entail instability but which may result in (expectations of) higher policy quality and higher institutional quality and improved long-run growth rates. This mechanism most clearly illustrates how instability can entail higher growth rates in settings with low quality to begin with – *but since even high quality can almost always be improved*, it also applies to such contexts.

It is evident that an empirical test of the growth effects of instability should acknowledge the multidimensionality of quality and allow effects of instability to vary with the trend. The next section describes how our empirical strategy tries to meet these challenges.

3. Data and empirical method

3.1. The dependent variable and control variables

Following Temple (1999), we run panel regressions with time- and country-fixed effects. The dependent variable is the annual growth rate of real GDP per capita, arithmetically averaged over five-year periods. Simply put, this means we are estimating the effects of institutional instability on growth using variation within countries over time. However, given that the quality of legal-administrative institutions, in particular, changes only slowly over time, we may not identify all long-run effects as the inclusion of country fixed effects is likely to capture the influence all approximately time-invariant factors (Sobel and Coyne 2011).

There is no complete agreement on what control variables to include in growth regressions. We use a standard set including initial GDP, investment rate, openness (as measured by the trade share of GDP), government size and education (secondary-level completion among people above the age of 25).⁹ This full set of control variables is included in all regressions, even when not shown to save space (except when we report results from excluding investment rates and education). Table 1 gives variable description and sources for the data we use, and Table A1 in the Appendix contains descriptive statistics. In the next section, we describe our variables of interest, measuring institutional quality and instability.

Table 1 about here

3.2. Variables of interest: quality and instability

Aron (2000, p. 115) stresses the importance of using measures characterizing institutions, policies and social conditions carefully as many studies in the growth literature employ an ‘often-arbitrary aggregation of different components’. We share this concern and use principal factors analysis (PFA) to explore the dimensionality of ‘quality’ and minimize this problem. PFA is a statistical technique used to detect structure in data, allowing researchers to reduce the number of variables by combining several variables into one (hopefully) interpretable factor.

To construct measures of quality and instability, we use the International Country Risk Guide (ICRG 2012), which because of the rich availability of yearly data (where these data are the averages of monthly observations for each year) is the most useful measure to test the theory by means of panel-data analysis. Using yearly data since 1984 for 35 European countries – the 27 member states of the European Union and eight other, economically similar European countries – we quantify instability through the coefficient of variation within five five-year periods.¹⁰ We chose to capture instability in this particular way because the coefficient of variation is scale-invariant. With other measures that are not scale-invariant, we would be unable to separate the quality of an institutional or policy measure from its actual variability. The full dataset from the ICRG quantify political risk, economic risk and financial risk. Because the latter two consist mainly of economic outcomes such as GDP ranking, inflation, foreign debt and current account balance, we use the political risk index, which is less outcome-oriented, to construct measures of quality.

Table 2 about here

The political risk index is composed of the 12 components listed in Table 2, aggregated with equal weights into a single index. Yet, aggregating different components without either substantial

knowledge of their structure or very clear theoretical priors is inappropriate given the likely multidimensionality of quality. The problem is that it is unlikely that all components are equally associated with economic growth, or indeed with each other. Aggregating levels and instability would therefore likely cause estimates to be downwards biased.

The problems of aggregation can in principle be alleviated in two different ways: 1) by manually separating components into theoretically cohesive informed groups from which to form conceptually separate indices; and 2) by using an algorithm exploiting the observed statistical associations between primary indicators to form measures that are properly statistically separable. Solution 1) has the benefit of providing readily interpretable data, as they are based on the theoretical preconception of its author, yet may suffer from problems of statistical inseparability and a likely arbitrary weighting scheme. The accepted validity of the constitutive theoretical conception therefore is crucial when choosing this option, and the risk remains that the solution tempts the researcher to cherry-pick components that generate interesting results. Conversely, solution 2) can under fairly general circumstances fail to provide meaningful index structures. We nevertheless choose solution 2), because it yields easily interpretable results.

By using PFA, we maximize variation and avoid testing partially correlated indices against each other while forming a number of indicators from the data structure of the 12 primary components.¹¹ In particular, the number of components is driven entirely by the data structure and is thus free of any theoretical priors, and the resulting components are statistically orthogonal. The results of the PFA are reported in Table 3.

The table shows that the 12 components do not load onto a single factor but split quite nicely into three underlying dimensions explaining more than 70% of the variation of the original data. We thus avoid one of the main problems of choosing solution 2). Reassuringly, the solution fits the data rather well.

The first dimension has a clear interpretation, as it includes all indices directly associated by social tensions, conflict and unrest (Alesina and Perotti 1996). As it is coded such that higher values entail less conflict, we denote it “social harmony”.¹² Likewise, the second dimension has high loadings on Socioeconomic conditions, Corruption, Law and order and Bureaucratic quality, and intermediate loadings on Democratic accountability and Military in politics. Thus, we denote this dimension a ‘legal-administrative dimension’. The final, third dimension to explain a substantial share of the variation includes heavy loadings of countries’ Government stability, Socioeconomic conditions, Investment profile and Democratic accountability, and an intermediate loading on Military in politics. We therefore interpret this dimension as a proxy for the quality of policy, in short a ‘policy dimension’.

Table 3 about here

These interpretations of the three dimensions furthermore seem reasonable based on a comparison with another index of institutions and policies, the Economic Freedom of the World Index (Gwartney *et al.* 2013). We report correlations with area two, ‘Legal system and property rights’, and area five, ‘Regulation’, of that index – see Table A2 in the Appendix. The first dimension to come out of our PFA, social harmony, is unrelated to these measures. However, the second dimension, the legal-administrative one, is strongly correlated with the corresponding area of the other index both in levels and variation.¹³ Our policy dimension correlates highly with the corresponding area five of the Economic Freedom of the World Index. Lastly, while the factor solution and the correlations with the Economic Freedom of the World Index do not entirely separate policy and institutional elements – e.g., Socioeconomic conditions and Democratic accountability load onto two dimensions – there is no practical reason why the distinction should be clear-cut. In particular, the design and effects of particular policies may crucially rest on the

enforcement capacity of legal-administrative institutions, which would tend to create the cross-dimensional loadings we observe in the data. We consider the approximations sufficiently on the mark for the chosen terminology to make sense.

The three resulting indices are our measures of institutional and policy quality and of social harmony – Figure 1 shows how they have developed over time. We also use them to construct measures of instability and trends.

Figure 1 about here

3.3. Estimation strategy

In the following, we estimate regressions as in the equation below, where Gr is the growth rate of real GDP per capita over a five year period, X is a set of standard controls; D are time- and country-fixed effects and ε is a noise term. In order to separate the different effects discussed above, we include three groups of variables:

- Q , which is the set of measures of quality from the PFA,
- CV_Q , capturing institutional instability as the coefficients of variation of Q across each five-year periods,
- and TR_Q , which is a categorical variable based on Kendall's Tau, a set of non-parametric trends measures, that we add to be able to separate instability and change.¹⁴

When interpreting these effects, one must keep in mind that our trends measure is strictly categorical and allows only for separate effects between situations where the trend is positive, i.e. conditional on the quality improving (trend = 1), when the trend is negative, i.e. where the quality is worsening (trend = -1), or when the trend is roughly constant (trend = 0).

$$Gr = \alpha + \beta X + \gamma Q + \delta CV_Q + \varphi TR_Q + D + \varepsilon \quad (1)$$

In further analysis, we expand the specification and add interaction terms between CV_Q and TR_Q , CV_Q and Q , TR_Q and Q . Although our main focus is on CV_Q , we need to include Q and TR_Q in the specification at all times. As the correlations between levels and variation suggest – the correlation between legal-administrative quality and legal-administrative instability is -.50, that between policy quality and policy instability is -.61, and that between the level of social harmony and its stability is -.40 – these elements (variation, level and trend) are statistically separable, but they also need to be included since we carefully estimate the conditions under which instability matters for growth. This is the exact purpose of the interactions between CV and TR , which allow us to estimate differential effects of instability, conditional on the underlying trend and as such if, for example, observed instability along an increasing trend is better than instability with no or a declining trend.

When the interacted effects are interpreted, one should nevertheless take specific care. We report results of the interactions evaluated at the sample mean of the interacting variable (for example, evaluating the *level* of policy quality at the mean of its *instability*), and at the 25th and 75th percentiles, including the conditional standard errors (cf. Brambor *et al.* 2006). The range at which interacted associations are statistically significant can therefore only be gauged from the accompanying figures. The exception is when the interacting variable is the trend, which only takes three values (-1, 0 and 1).

The control variables in our specification are factors that are broadly used in the empirical growth literature. In all regressions, the X vector consists of the logarithm of initial GDP per capita to account for conditional convergence, government expenditures as percent of total GDP, openness (imports plus exports as percent of total GDP), the investment share of GDP, inflation, life expectancy and labour force growth. As such, we capture the most important determinants of

economic growth aside from our variables of main interest, while still keeping the specification sufficiently parsimonious to identify effects in a relatively homogenous sample of countries (in line with Barro 1997). The controls are also measured as five-year averages (except for initial GDP per capita).

Our full sample covers 35 European countries with a political risk rating in at least one of the five time periods 1984–1989, 1989–1994, 1994–1999, 1999–2004 and 2004–2009. We thus have an unbalanced panel of 154 observations, of which 42 are from formerly communist countries in Central Europe.

We are not able to ascertain with certainty that the effects we identify are causal, which means that the results in the ensuing section should be interpreted with caution in this regard.

4. Institutions, policy, social harmony and growth: empirical results

Using the data described above, we derive a series of two-way fixed effects generalized least squares estimates. The basic regression results, linking the three features to growth, are presented in Table 4.

Table 4 about here

The signs of our control variables are as expected although not always significant: initial GDP is strongly significant, indicating strong convergence effects (as expected in a sample of relatively similar countries); openness is also strongly significant and positively related to growth while government expenditures are negatively and significantly associated with growth. Conversely, investment rates and education are clearly insignificant. This also applies if we use measures of primary or tertiary education from the Barro and Lee (2013) dataset instead. However, our main

results are unaffected by the inclusion of these variables, which therefore do not appear to be important proximate determinants of growth.

Regarding our three indicators, only the level of policy quality is robustly significant and positive throughout Table 4. More precisely, policy quality refers to the government's ability to carry out its programs and stay in office; to the socioeconomic conditions (unemployment, consumer confidence and poverty); the safety of investments; and government accountability. Levels of social harmony are never near significance, while legal-administrative quality is significantly *negatively* associated with growth, which is unexpected. This nevertheless proves to be entirely due to the transitional costs in the formerly communist countries in our sample.¹⁵ No kind of instability is ever significant, while the addition of trends shows that a positive trend in policy quality, i.e. reforms that improve the quality of policy, exerts a medium-run and positive growth effect.

However, the estimated effects are averaged across a number of rather different situations. In the right-hand side of Table 4, we therefore provide a set of interactions between levels, instability and trends in order to separate types of such situations. As one cannot interpret interaction terms directly, but need to calculate conditional marginal effects at different points of the distribution of the interacting variables (Brambor *et al.* 2006), we provide more interpretable information in Tables 5a–5c and Figures 2a–2c.

In Table 5a, we first report the results of interacting effects with the trend status of the variable. In other words, we ask whether it matters for the impact of quality and instability if they occur around a worsening, constant or improving medium-run trend – that is, if things are going the right way, the wrong way or merely hovering around an apparently stable level.

Table 5a about here

The result in Table 4, as reported in a more interpretable form in Table 5a, first of all indicate that neither effects of the level nor the stability of social harmony depend on the underlying trend: in fact, they are never significant. For legal-administrative quality, instability remains insignificant, while the level seems to exert a negative effect on growth when the trend is worsening or stable. This result is somewhat surprising, given the previous literature. Lastly, policy quality is only growth-inducing when the underlying trend is *not* negative. When there is either no clear trend or a trend towards better policy quality, the estimates suggest rather sizeable growth consequences in the medium and long run: a one standard deviation change is associated with a growth increase of roughly 0.8 percentage points.

Table 5b about here

Second, in Table 5b we report the results of interacting the three types of quality by their relative instability; we also illustrate these effects in Figures 2a–c, which show the conditional point estimates and 90% confidence intervals (dotted lines). We here find that in a European context, it seems of no importance whether medium-run *trends* of the quality measures occur around more or less stable changes. In other words, a steady trend, which would be the result of a gradual introduction of reforms that improve the policy framework (i.e. changes with little instability) or a big-bang change arising from substantial and quickly implemented reforms (with substantial instability) tend to produce very similar medium-run growth responses.

A second result in Table 5b and Figure 2b is that levels and instability of legal-administrative quality interact in an interesting way in the medium-run, which we can identify in the present

setting. We find that the quality of legal-administrative institutions is actually significantly *negatively* associated with growth when those institutions are most stable. We note that several Western European countries have levels of stability where such institutions become harmful in the medium run. This result is thus consistent with Olson's (1982) concern with excessive stability and institutional sclerosis, as excessively stable institutions allow special interests to exert and solidify their influence at low transaction costs and influence policy in a growth-retarding way. (See section 2 for the full theoretical argument.) A final result from Table 5b is that the effects of policy quality are significant and positive for virtually all values of medium-run stability. As illustrated in Figure 2c, the positive effect even appears *increasing* in instability. This result again reflects the findings pertaining to trends in policy quality: that changes in policy quality in the medium as well as the longer run have similar effects regardless of whether they are gradually implemented or the result of big-bang changes. While this may seem as a surprising result, three possible and partly related explanations are that: i) policy instability reflects political and bureaucratic actions that effectively remove obstacles to growth – the more policy instability we observe, the more effectively such obstacles are removed, enabling overall quality to affect economic actors more freely, causing higher growth; ii) instability prevents consistent influences of growth-retarding interest groups, whose ability to grasp and influence political decision-making is made more difficult by changes (Olson 1982); and iii) instability is experimentation and entails an opportunity to learn which policies that are best for growth.

Figure 2a about here

Figure 2b about here

Figure 2c about here

Table 5c about here

Finally, Table 5c reports the result of conditioning the effects of trend and instability on the levels of quality around which they take place. In other words, we ask whether a change to instability or the medium-run trend are likely to have different effects, depending on whether the country starts out having high or low quality.

Interacting levels with trends, as in the upper half of the table, suggest no substantial differences, as we find no significant results for social harmony and legal-administrative quality, and the results for policy quality do not differ across initial quality levels. Conversely, we find that the instability of social harmony – which we interpret as an underlying uncertainty whether the current level of social unrest or rest is likely to persist in the following years – mainly matters for countries with high initial levels. Put differently, for countries with much social conflict in the longer run, its instability does not matter, yet for countries with little unrest in ‘normal’ years, an increase in instability and uncertainty is detrimental for growth.

We also find that instability in the legal-administrative framework has different growth effects when occurring around high or low levels of quality: levels and instability of legal-administrative quality interact in an interesting way in the medium-run, which we can identify in the present setting. Instability of legal-administrative institutions, i.e. an increased uncertainty of the precise quality of the legal-administrative framework, is mainly bad for growth when that instability occurs around already low levels of quality. When evaluating the effect within approximately the third of European countries with the best legal-administrative institutions, our point estimate even turns positive and of a quite substantial size. While it is clear from Figure 1 that there is probably too little variation in the sample to identify long-run effects of legal quality, we note that the qualitative result is consistent with the findings for rich countries in Berggren *et al.* (2012). In other words, it seems that some instability in the legal-administrative framework in relatively well-functioning

countries may actually be beneficial for growth, in line with the Olsonian hypothesis of instability preventing institutional sclerosis.

We have also explored whether our results are mainly evidence of influences on factor accumulation or on factor productivity, by excluding investment rates and education from the Table 4 regressions. We find no significant differences between these estimates, indicating that the (already insignificant) investment rates and education estimates do not bias the estimated influence of our main factors of interest. In other words, we interpret the insensitivity of our central findings to indicate these factors, across this group of European countries, mainly drive differences in total factor productivity instead of broad factor accumulation.

Finally, an extended set of robustness tests (not shown but available upon request) includes excluding single countries from the sample, excluding all formerly communist countries, excluding the fastest and slowest growing country observations, as well as excluding observations with the best or worst institutional indicators. All main estimates, with the exception of the puzzling negative effect of legal-administrative quality, remain qualitatively unchanged.¹⁶ The single issue that cannot practically be resolved with the present data and methods is that of causality. While we are unable to provide a standard causality test,¹⁷ we think the following argument can be made for our results being causal. If our estimates were entirely due to reverse causality, we would observe that in the un-interacted trends variable, which we do not. Furthermore the interactions between instability and trends would still, following the logic in Dreher *et al.* (2014), be causal such that one can, for example, interpret the effect *difference* of policy quality at low and high levels of instability (in Figure 2c) causally. Although we suggest that this combination indicates that our main findings are likely to be causal, we acknowledge that this is a preliminary indication. With this ambiguity in mind, we turn to the conclusions.

5. Concluding remarks

Europe has seen substantial reforms since the mid-1980s. Some countries have experienced radical transitions from communism to market economies, whereas others have seen smaller but still noticeable changes in their economic policies and legal-administrative institutions. We ask what the effects of these changes have been. This seems especially relevant since the European Commission (2012) stresses the need for continued reforms, e.g., reduced administrative burdens for businesses and improved quality of the legal-administrative systems.

There is now a fairly large literature showing a positive and causal relation between the quality of institutions and policies, on the one hand, and economic growth, on the other. If the European reforms have improved this kind of quality, they can be expected to have entailed higher average growth rates. However, to achieve high quality, countries need to go through periods of change and instability, as has been the case in Europe. While uncertainty about the future institutional framework and policies intuitively would be associated with larger transaction costs and force economic actors to adopt a relatively short time horizon, thus being harmful to growth, instability could also reflect positive adjustments to shifting circumstances, beneficial institutional experimentation, and a reduction in sclerosis and policy capture of narrow special interest groups..

Against this background, we try to empirically assess how the quality and instability of institutions, policies and social conditions (while controlling for institutional trends) affect economic growth. We employ data from the International Country Risk Guide to form three key measures through principal factors analysis, which allows us to overcome the problems of aggregated indices hiding multiple dimensions and estimates of their effects suffering a downward bias. The empirical results based on a panel of 35 European countries observed across five five-year periods between 1984 and 2009 suggest a sizeable effect of high-quality policy on growth.

Predictable democratic governance, favourable socioeconomic conditions and an appealing political

investment climate tend to be economically beneficial over time. Interestingly, we find that the quality of legal-administrative institutions is *negatively* associated at the highest levels of stability. However, this result should be interpreted carefully, since the fixed effects imply that long-term effects of stable institutions are not fully captured and since it is primarily driven by the Central European institutional transition. We nevertheless think that this is in line with the Olsonian idea that stable institutions can simplify for interest groups to solidify their influence over the political process and generate policies that are detrimental for long-run growth.

Without overstating the causal claims in this paper, two results deserve to be emphasized. First, the beneficial association between growth and high policy quality is not undermined by instability, but instead appears to be increasing in instability.¹⁸ In other words, there is no evidence that the medium-run instability created by reforms thwarts the positive effects of the reforms. Combining this finding with the fact that policy quality is beneficial in the longer run as long as it is not trending towards worse levels in the medium run, we find that gradual policy reforms tend to yield the same medium-run effect as big-bang changes to the set of policies. European data therefore indicate that the recurring debate about how to implement policy and institutional reforms may be situated in sceptical assumptions about their immediate impact that do not bear out in the data.

Second, the negative effect of the instability of legal-administrative quality seems to hold for low initial levels, consistent with its mainly being an effect of the transition of formerly communist countries, while the effect looks positive at high levels. Across most of our sample, however, the net effect of instability on economic growth is small and insignificant. While the results should be particularly carefully interpreted, they are compatible with the idea that institutional instability can mitigate negative growth effects of Olsonian sclerosis. Our results can also be interpreted as supporting the positive effects of institutional adjustments in the spirit of Hayek. In any case, the

simplistic view that stability is always better for growth than instability seems not to hold in the case of Europe of the last three to four decades. We thus note that one of the main assumptions behind the drive towards European harmonization in recent years – that instability across as well as within nations is detrimental for overall growth – seems unwarranted when focusing on European development. Another possible conclusion based on our results is that growth-promoting reforms should not be delayed solely because the reforms themselves would create instability: this does not necessarily hamper growth. Whether or not institutional and policy instability also affects other factors central to much policy-making such as environmental quality or income inequality, and if so in which direction, are questions of interest that we must leave for future research.

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Notes

¹ For studies that indicate this to be the case, see, e.g., Berggren (2003), Acemoglu *et al.* (2005), Beck and Laeven (2006), de Haan *et al.* (2006) and Doucouliagos and Ulubasoglu (2006).

² This is not to say that all types of institutions are equally conducive to growth or that human capital does not matter (Glaeser *et al.* 2004; Acemoglu *et al.* 2005).

³ See, e.g., Alesina *et al.* (1996) and Pitlik (2002). However, Campos and Nugent (2002) fail to find a negative long-run effect on growth; cf. Jong-A-Pin (2009), who stresses that different countries may not conform to the same linear model.

⁴ See, e.g., Ramey and Ramey (1995), Merlevede and Schoors (2007), Aisen and Veiga (2008) and Fatás and Mihov (2013).

⁵ As for negative growth effects of changes that improve quality, several other studies have found evidence of transition costs after reforms have been undertaken – see, e.g., Méon *et al.* (2009) and Bjørnskov and Kurrild-Klitgaard (2014).

⁶ A potential problem with the Northian perspective as described above is that the distinction between institutions and policies is not always clear-cut. A similar problem would however arise using other theoretical approaches to institutions.

⁷ Olson (1982) explains how ‘stable societies with unchanged boundaries tend to accumulate more collusion and organizations for collective action over time’ (p. 41), why ‘special-interest organizations and collusions reduce efficiency and aggregate income in the societies in which they operate’ (p. 47) and how ‘[d]istributional coalitions slow down a society’s capacity to adopt new technologies and to reallocate resources in response to changing conditions, and thereby reduce the rate of economic growth’ (p. 65). He also describes how institutional shocks can undermine the influence of interest groups.

⁸ There is empirical support for interest groups inducing growth stability (and, by implication, that reduced interest-group strength could bring about instability): see Heckelman and Wilson (2014).

⁹ On control variables in growth regressions, see, e.g., Barro (1997), Sala-i-Martin (1997), Sturm and de Haan (2005) and Bergh and Karlsson (2010).

¹⁰ The eight other countries are Albania, Croatia, Iceland, Israel (which we treat as European), Macedonia, Norway, Switzerland and Turkey. The ICRG includes information on one additional country – Serbia. However, due to missing national accounts data, we cannot include it in the sample.

¹¹ In line with our motivation for using PFA, Sturm et al. (2005) and Rode and Coll (2012) recommend using either principle components analysis or cluster analysis when devising measures of economic-legal institutions (partly also to mitigate multicollinearity problems).

¹² The three dimensions and their interpretation mimic that in Berggren *et al.* (2012).

¹³ An often-used alternative is the Heritage Foundation (2007) index of economic freedom (distributed between one, indicating full freedom, and five, no freedom) although it is only available since 1995. The correlation between the first principal component and the Heritage index is $-.73$, indicating the same interpretation. At $.9$, the correlation with the World Governance Indicator measure of rule of law from Kaufmann et al. (2008) is even clearer. The component is also similar to the single governance component extracted using the same method in Seldadyo et al. (2007). In addition, many studies use the ‘full’ ICRG index, which is the simple average of all 12 components. We have also experimented with doing so, but consistently found that although estimates are qualitatively similar, they are substantially less precise, less significant and not as robust as when the components are separated.

¹⁴ Kendall’s Tau is calculated as the sum of changes between any points within a five-year period. We give the value of 1 to positive changes larger than a within-country standard deviation, -1 to negative changes of the same absolute values, and 0 to all remaining small changes or stable measures. This measure has the additional benefit of making our estimates relatively insensitive to the particular choice of periods, as the measure is smaller if changes are distributed partially across two five-year periods; the measure is also insensitive to missing observations, including starting and ending points.

¹⁵ We have rerun all central estimates with a sample consisting of 112 observations from the 23 countries without a communist past. This leaves legal-administrative quality insignificant

throughout, as one would expect due to its highly persistent nature (cf. Sobel and Coyne 2011).

These estimates are available upon request from the authors.

¹⁶ When excluding countries with a communist past, the only main difference from estimates obtained with the full sample is the change in legal-administrative quality. In the smaller sample of countries, the estimate turns insignificant and positive.

¹⁷ The reasons that the causality issue cannot be resolved are as follows. First, GMM methods rely on having sufficiently large datasets. With too few observations, the number of instruments can easily match the number of observations in growth regressions. In that case, which we are very likely to have with only 154 observations from 35 countries, the R squared of the first stage essentially becomes 1 (Roodman 2009). The alternative, standard 2SLS instrumental variables regressions, is also infeasible since we have found no instrument that identifies the within-country variation of institutional and policy quality, as would be required with the inclusion of country fixed effects. We note that this problem is well-known among empirical economists.

¹⁸ As an example, consider the case of deregulation of agriculture in Sweden, described by Lindberg (2007), followed by reregulation when Sweden joined the European Union. The policy instability thereby created may well have had overall beneficial effects and is easy to interpret in terms of preventing Olsonian sclerosis.

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Appendix

Table A1 about here

Table A2 about here