

All that Glitters is not Gold: A Ranking of Global Rankings¹

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Abstract

This paper examines the predictive power of different global rankings on country growth. An influential framework to shape policy decisions is to look at a specific global ranking and implement policies to reduce gaps with respect to “best practices” or the frontier. Using panel data regressions, we show that different rankings predict growth with quite dissimilar levels of success. A ranking with focus on government effectiveness, and to a lesser other on globalization, offer statistically significant and economically relevant guidance when we consider three-year ahead growth. Others, usually presented as focused on competitiveness assessments, show zero correlation with future growth. When there are effects, they appear in trend rather than cyclical GDP components, and in Foreign Direct Investment. Total Factor Productivity growth and Exports do not change appreciably. We do not detect non-linear affects.

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1. Introduction

Under an interpretation of “evidence-based policy making”, it is tempting to organize public policy efforts to improve growth using global indices and rankings. Ultimately, by using granular data and comparing large sets of countries, these rankings are supposed to identify best practices, weak points, and areas of opportunity for reform. But the actual effects of changing what is usually measured are largely unknown. If a country has a low ranking in a specific ranking area – say, resolving insolvency – what can be expected if it manages to pass legislation to improve the situation? And more broadly, what can be expected in terms of growth if the country strives and improves in a ranking?

In their growth diagnostics “mind-book”, Hausmann et al. (2008) identify international rankings as one of three workhorses to guide policy.² They argue that the idea of comparing performance provides useful feedback to society and can engender valuable social conversations. However, they caution about interpreting rankings. These may not consider important information; the aggregation methodology could have large impacts and significantly alter results, and it is not obvious whether poor performance in a specific ranking is relevant for a country main bottlenecks.

Despite their shortcomings, the relevance of rankings in the day-to-day public policy debate is difficult to match. Doshi et al. (2019) show that countries respond strategically to being publicly ranked, implementing reforms to improve their standing. They also show that professional investors change their country perceptions with these rankings. At least in Latin America, if there is one piece of economic information that makes it to the front page, it is the result of different cross-country economic rankings, especially if a country moves back a few places. A notable case is the discussion initiated by former World Bank (WB) chief economist Paul Romer in 2018 about a possibly unfair treatment of countries in the construction and update of the Doing Business ranking, an allegation that produced enormous ripple effects.³

Even multilateral agencies use some of these rankings in their policy prescriptions. For example, many International Monetary Fund (IMF) article IV consultation staff reports, when discussing the structural reform agenda with a country, use rankings to identify areas of potential improvement and changes in rankings as a measure of success.⁴

² McArthur and Sachs (2001) also offer this perspective.

³ See <https://www.economist.com/finance-and-economics/2018/01/25/paul-romer-quits-after-an-embarrassing-row>.

⁴ A random example from an IMF Article IV Consultation: “Mauritius dropped seven places in the 2017 Doing Business rankings, driven largely by difficulties in starting a business. Other factors affecting Mauritius’ competitiveness in the survey-based World Economic Forum’s rankings include [...]. The recently-adopted Business Facilitation Act is a welcome step to improve Mauritius’ business environment [...]. Nevertheless, further reforms are necessary to meet emerging cost competitiveness challenges [...]. There is also a negative relationship between perceptions of corruption and global competitiveness rankings. This highlights the potential benefits for reinforcing anti-corruption measures [...]”. 2017 IMF Article IV Consultation Staff Report, pp. 17-18.

Besides their simplicity and attractive “competition feeling”, global rankings have a very high correlation with country per capita income, which may explain the attention policymakers and the press pay to these indices. Figure 1 presents cross sections of different standardized rankings (measured as relative ranking, in a percentile scale with zero being the lowest ranking and 100 the maximum) and (log) per capita GDP at Purchasing Power Parity (PPP) and constant dollars circa 2016, confirming the very strong correlation.

[Figure 1. Standardized Rankings and Per-Capita GDP]

A simple cross-country regression of different relative rankings and per capita income yields an adjusted R2 between 0.34 and 0.76 and a beta parameter between 1.7 and 3.6, with a very high statistical significance (Table A.1 in the appendix). A naïve (and incorrect) interpretation would be that a 10% improvement in a specific ranking (about 15 positions if there are 150 countries) would yield a higher GDP on the order of 20% to 35%. This may partly explain the relevance that the public debate attaches to each one of these rankings.

Of course, this interpretation is wrong, as there are severe problems of reverse causality. Some of the elements measured by the different rankings are institutional changes brought about by development (and not the other way around). A subtler problem is that some rankings depend on perceptions, which in turn change with income and growth, or may precede them. Also, there are different ways to measure “fundamentals”, such as competitiveness or property rights protection. There is the possibility that rankings reward high income or high-growth countries as a form to influence the policy agenda (see Doshi, 2019). Or the measures could be simply noise, implying not a problem of reverse causality but of irrelevance. Irrespective of the reason, the association between global rankings and per capita GDP must be handled with extreme care.

The central question addressed in this paper is whether movement in a ranking has effects on (near) future growth. If a country improves its ranking in, say, the World Bank Doing Business, what can be expected in the next three years? Ultimately, we are addressing the effect of the wide range of policy changes *as measured* by these rankings.

Our main result is simple: only a handful of rankings (and specific ranking questions) have some predictive power on future growth. Globalization, government effectiveness measured in alternative ways, and some measures of rule-of-law appear to be the most relevant. Unsurprisingly, the economic growth literature has identified these areas as critical for quite some time. And unexpectedly, shifts in the most emblematic rankings appear to have no statistical correlation with future GDP growth performance.

Certainly, this does not mean that rankings are irrelevant as they may provide relevant granular information. Broad policy implications, however, have to be handled with care.

We are not the first to study the relationship between global rankings and growth. Using the World Bank Doing Business (WBDB) indicators, Adepoju (2017) finds that in a broad sample of countries this ranking does not affect growth, although there is a positive effect in a subsample of countries. However, he focuses on the contemporaneous relationship, making difficult to disentangle causality. Ani (2015) finds similar results in a cross-section analysis, but

again with the simultaneity issue of rankings and growth. Djankov et al. (2006) find a strong effect of WBDI, although the result has the same simultaneity shortcoming.

Our paper offers three main contributions. First, we analyze several rankings simultaneously, which allows us to present useful comparisons. Second, we study the effect of rankings on future rather than contemporaneous growth. And third, we explore non-linearities and different transmission mechanisms that may exist from rankings to growth (Concoran and Gillanders, 2015 study the relationship between WBDB and Foreign Direct Investment).

The paper is organized as follows. Section 2 discusses the estimation strategy and the econometric challenges involved. Section 3 presents econometric results for headline rankings. Section 4 repeats the exercise for some rankings components. Sections 5 and 6 explore possible non-linearities in the predictive power of rankings and some potential transmission channels, respectively. Section 7 focuses on rule-of-law and assesses how rankings correlate with respect to an outside benchmark. Finally, section 8 presents some concluding remarks.

2. Methodology and data

We consider a simple empirical approach inspired by the standard growth literature in which GDP growth is explained by “fundamentals” and possibly by (conditional) convergence towards a country-specific steady state. There are other useful approaches to analyze growth, for example temporary accelerations and long-run trends (Rodrick, 2005). While a ranking improvement would arguably be more related to growth “spurts” rather than to “sustained” growth, we are limited to the more standard approach by the availability of rankings data.

Specifically, we consider here that a (set of) global ranking(s) information X in country i and year t would influence growth as follows:

$$\Delta Y_{i,t+s,t+s+p} = \alpha_i + \alpha_t + \beta X_{i,t} + \gamma Y_{i,t-1} + e_{i,t}$$

where $\Delta Y_{i,t+s,t+s+p}$ is growth in country i between $t + s$ and $t + s + p$, α_t is a possibly time varying constant, α_i is a country specific fixed-effect, $Y_{i,t-1}$ is per capita GDP level in country i in period $t - 1$, β and γ are parameters, and $e_{i,t}$ a well-behaved disturbance. $X_{i,t}$ may include growth fundamentals in addition to global rankings, though our focus is on the latter.

The empirical growth literature typically measures growth in non-overlapping 5-year periods, with data spanning 40 years or more. Also, in that literature, growth is usually explained by “contemporaneous” fundamentals (they belong to the same 5-year period). We only have an average of 15 years for all rankings, and even less for those that appear in the press more often. This forces us to consider shorter and overlapped periods. Given that overlapping periods mechanically induce serially correlated disturbances, we report robust standard errors.

We consider as our base case average per capita GDP growth in the following three years, a horizon that seems relevant from a practical policy discussion perspective. To contrast results, we also estimate contemporaneous growth, growth in $t + 1$ and average growth between $t + 1$ to $t + 5$.

In addition to our base regression, we also consider alternative specifications to evaluate the results' robustness. Specifically, in addition to growth, we consider level distance to the world frontier (defined by the US per capita GDP) and include different controls. We also discuss a *rank-rank* specification, whereby we try to explain future growth relative rank with the different relative global rankings.

We use the International Monetary Fund World Economic Outlook per capita GDP at PPP and constant dollars as $Y(i, t)$. This allows us to use more recent global rankings as it includes growth forecasts for the next few years. For reference, in the entire sample median growth is 2.2% per year and the interquartile range is 3.8%.

We consider eight different global rankings. All of them encompass several inputs, though we do not directly observe them in all cases. When a particular ranking shows some predictive power on growth, we also investigate the relevance of that ranking's subcomponents (insofar as we have access to the data). Table 1 lists the rankings and the available number of countries and years. As the number of countries varies within rankings, all regressions are based on unbalanced panels. N denotes number of countries and T number of years.

[Table 1. Global Rankings Description]

The behavior of standardized rankings is far from homogenous. The simple pairwise correlation for the common sample and for a specific year (2014) show several pairs quite far apart (Table 2). This suggests that some rankings may be more valuable than others for the purpose of signaling growth.

[Table 2. Standardized Rankings Correlations]

Behind headline rankings there are country-specific "scores". For instance, the WB Doing Business has a "distance to the frontier" comparing actual with best practice, and WEF Competitiveness combines a large number of indicators and arrives at an overall grade. Insofar as these scores are comparable across time, it would be best to use them directly instead of using a simple ranking. Unfortunately, these scores are seldom comparable throughout each specific sample since methodological changes and the creation of new sub-indicators are rather common.

Alternatively, using the headline ranking or absolute position has two shortcomings. First, it would only inform about the order, not the intensity of country differences and changes. Second, the routine entrance of new countries to a ranking and the exit of a few –which is a more unusual practice– would produce changes that are irrelevant (or measurement error) and possibly bias the results.

To overcome the previous problems, and given that we observe the specific score $D_{i,t}$ (except for IMD where we only observe ranking), we construct $X_{i,t}$ as a standardized score or Distance to Frontier (DTF) between 0 and 1. Specifically, $X_{i,t} = (D_{i,t} - \min_t\{D_{i,t}\}) / (\max_t\{D_{i,t}\} - \min_t\{D_{i,t}\})$, with $D_{i,t}$ the score for country i in year t.

There are three distinctive econometric issues in the empirical growth that we need to consider here too. None of them have fully satisfying solutions, or at least a cost-free solution in terms of generating other challenges.

First, there is likely endogeneity. As the growth literature has long recognized, it is relatively evident that some aspects measured by rankings could be consequences of development, rather than the other way around. After alternative efforts, the literature has offered two broad solutions: use lags of the same fundamentals as instruments (e.g., Barro, 2016) or find clever but always scarce external instruments (e.g., Acemoglu et al. 2011). In our case, in addition, it is possible that rankings not only are affected by income level but also by short-term growth, especially if a ranking “chases” successful countries.

We tackle this issue by using lagged fundamentals directly and looking at outer, not contemporaneous, growth. The question we want to answer is: what is the effect of today’s ranking distance-to-frontier on future growth? Critically, to the extent that simultaneity would result in econometric results showing that fundamentals influence growth more than what is actually the case, finding no effects can be interpreted in an uncontroversial way.

Regressions explaining current standardized ranking scores with contemporaneous and past growth shed some light on the extent of this potential simultaneity problem (Table 3). The results suggest that standardized ranking scores are not only strongly associated with GDP levels but also with current GDP growth in all rankings. However, lagged GDP growth appears to consistently influence current rankings in the case of IMD. WB Governance Indicator has a small correlation with one year lagged growth, though the parameter is barely statistically significant and quite small: an additional 1% growth would move future rankings by less than 0.031% (Table 3, panel A), which is less than one third of one position in a 100-country ranking.

[Table 3. Explaining Ranking Scores DTF with GDP]

Simple Granger causality tests shed further light on the potential endogeneity issue (Table 4).⁵ They show that, at 5% confidence, growth Granger-cause both WEF and IMD Global Competitiveness. Similarly, WB Doing Business, WB Governance Indicators, KOF Globalization and IMD Global Competitiveness Granger-cause growth. In principle, endogeneity would be more problematic for WEF and IMD.

[Table 4. Ranking Scores DTF and GDP growth Granger Causality Tests]

The second econometric challenge we face is the usual problem arising from the inclusion of a lagged dependent variable in a dynamic panel, which yields inconsistent OLS estimates. One possibility would be to simply exclude lagged GDP from the regressions. In fact, in this paper we are not particularly interested in the convergence parameter (and its direct effect on growth is not very relevant for the horizon we are analyzing). Moreover, given the short period span we have available, fixed effects should take care of most of the problem.

⁵ We thank one of the referees for this.

However, given the combination of (i) a high correlation between ranking results and GDP level (see Figure 1) and (ii) the existence of conditional convergence (say “the iron law” of 2%), not controlling for GDP level would upward bias the parameter of rankings. We thus need to include this lagged variable.

Finally, the third issue we face is the usual problem of not controlling for all relevant country characteristics that could correlate with the rankings and thus bias the results. We discuss the issue further below.

This brings us to the estimation procedure choice. As explained by Barro (2015), there is no perfect solution to these problems. On the one hand, if the object of interest is the convergence rate, fixed-effects estimates (as well as Arellano-Bond) are probably a bad choice as they overestimate the convergence rate by a significant margin in relatively short samples, as per Monte Carlo experiments.

On the other hand, simple OLS with time effects would yield a truer convergence parameter, but would tend to produce higher and more significant fundamental parameters reflecting this omitted cross-country variation. Precisely because of this problem, Acemoglu et al (2005) and (2008) prefer fixed-effects which use the within-country variation of fundamentals as the only source of identification.

Considering that Barro (2015) Monte Carlo exercises suggest that fixed-effects do not produce particularly large biases for RHS variables different from lagged GDP level, we prefer this method here. In addition, standard exclusion regression tests point to significant country fixed-effects. Moreover, to a large extent, this method is a more demanding hurdle for rankings.

For the estimation method to have power, we need within country variation of our standardized ranking score; if all variation was between countries we would not be able to identify effects. Of the overall variation, however, within variation represent between 0.20 (WBGI, WEF and CATO) to 0.45 (Heritage and WBDB).

3. Aggregate Rankings Results

We first analyze one ranking at a time, with its own available sample, and focus on average growth between $t + 1$ and $t + 3$ (and the ranking observed in year t). Standard tests indicate that in all cases the most appropriate estimation should include country fixed-effects and time dummies (Table 5). We are thus identifying the effects of rankings based on within-country variations. As discussed before, the likely ranking endogeneity is dealt with rankings observed in t and $t - 1$ GDP level explaining the growth in outer-years.

[Table 5. Ranking Specific Results.]

The results reveal significant heterogeneity across rankings. WB Doing Business, WB Governance Indicators, KOF Globalization Index, and Corruption yield statistically significant parameters measured in the standard manner (at different significant levels, with WBGI the largest, followed by KOF). We also present adjusted the p-values to take into account the

possibility of false discoveries following the method by Benjamini and Hochberg (1995). We prefer this method as we would like to raise the bar to those rankings that appear most significant but not curtailing the chances of those that appear less statistically relevant (as would be the case with the Bonferroni method). After this adjustment, only WB Governance Indicators remain statistically significant (also at 1%).

Although the results could be influenced by data availability, it is somewhat surprising that many rankings basically convey zero information in the metric we consider here. Of course, there is always the possibility that these rankings have effects at other horizons, which we explore below.

To have an idea of the economic relevance of the estimated parameters, consider that rankings have between 60 and 180 countries (approximately). Considering 150 countries and a uniform distribution, a parameter of 10 implies that improving 15 (10%) closer to the frontier would correlate with about 0.1% of higher growth. Both the WB Governance and FOF Globalization ranking changes imply economically relevant effects.

There is a possibility that these results could reflect a problem of omitted variables. We thus also estimate our baseline specification adding a couple of standard determinants of the empirical growth literature (Table A.2 in the appendix). We consider here Terms of Trade growth in period $t+1$ to $t+3$ and the ratio of investment to GDP in period t . The main result is that the relevance of WB Governance Indicators remains intact. KOF Globalization, however, loses significance. If we control for education and rule-of-law, we unfortunately lose too many observations (as rankings are fairly recent whereas standard determinants have lags). The main results are also robust to controlling for China growth (Table A.3).

More broadly, it is not evident that controlling for too many country characteristics is appropriate, as rankings are supposed to measure these exact same characteristics. Ultimately, our aim is to evaluate whether rankings contain information, not whether they compete with fundamentals.

We also evaluate two other LHS variable definitions to evaluate robustness and . First, we consider the *rank-rank* specification mentioned before. We construct a rank score for $t+1$ to $t+3$ growth (in the same way we measure ranking scores). The results show, again, that the WB Governance Indicators is the most robust, while KOF Globalization remains statistically significant if measured conventionally or with false discovery corrected p-values. (Table 6). This specification is useful in terms of interpretation: the 0.285 parameter for WBGI implies that losing 10 places in the relative ranking would yield moving back close to 3 places in the growth ranking (assuming a uniform distribution).

[Table 6. Explaining Growth Ranking.]

The second LHS we consider measures distance to a frontier GDP (in this case the relative country per capita GDP to the US). The results remain practically unchanged in terms of which rankings are statistically relevant with conventional tests (Table A.4).

The results, however, do change substantially if we consider contemporaneous growth as the dependent variable (Table A.5, Panel A). Specifically, in this case both WEF and IMD competitive rankings, as well as TI Corruption, became large and very significant, while WB Governance Indicator doubles. To a large extent this is in line with the results of the reverse regressions discussed above.

On the contrary, considering 5-year out average growth (Table A.5, Panel C), the results are quite similar to those of the baseline case, albeit with somewhat smaller and less significant coefficients. Only WB Governance and KOF Globalization remain relevant. Considering $t + 1$ growth only (Table A.5, Panel B), Heritage and CATO coefficients remain not different from zero, whereas IMD and WEF show a statistically significant ones (in contrast to the results when we consider longer growth horizons).

Finally, we consider an estimation using a common sample for the three rankings with sample-specific significant results (Table 7). The only ranking that remains statistically significant and economically relevant is WB Governance, both with conventional and corrected for false discovery p-values. Despite the large sample change in comparison to the previous results, the parameter is very similar in the two cases. The same common sample estimate but with the *rank-rank* specification yields very similar results (Table A.6.).

[Table 7. Ranking Specific Results: Common Sample.]

We also consider regressions with a group of rankings simultaneously, excluding those that show p-values north of 50% for 3-year ahead average growth, and in different combinations (Table 8). In some cases, the sample shrinks considerably to the common maximum sample.

[Table 8. Horse Race Results.]

The results indicate the following: (i) none of the rankings are consistently statistically relevant, but some appear to have higher significance than others; (ii) in smaller samples, IT Corruption appears to have a statistically significant and economically relevant effect; (iii) in larger samples, and especially when considered as a pair with other rankings, both WB Governance and KOF Globalization have economically relevant effects; and (iv) the WB Doing Business significance disappears while IMD Competitiveness has the opposite from the expected sign.

When we consider contemporaneous instead of future growth in this horse-race, several rankings increase their significance (Table A.7). Moreover, in this case, all rankings except KOF Globalization become relevant even when considered simultaneously (which again restricts the sample considerably). In regressions with pairs and triplets, WB Governance, IMD Competitiveness and TI Corruption become strongly correlated with growth. Of course, it is impossible to know how much of this is explained by reverse causality, but it is likely very relevant.

Finally, when we consider 5-year out average growth, the results became generally less precise (Table A.8). Still, in larger samples, KOF Globalization gains relevance, while in smaller

samples, TI Corruption continues to correlate with future growth. WB Governance loses significance, suggesting its effect is more concentrated in the initial years.

What can we make of the sudden relevance of some rankings when we consider contemporaneous growth? There are at least two alternative interpretations.

One is that changes in rankings actually signal higher, but short-lived growth. This could happen if there is a third variable (the measured fundamental) that affects both growth and the ranking. Alternatively, it could just be a confidence shock. In our sample, growth has a persistence of only 0.2 (independently of whether we control for lagged GDP), implying that this effect would vanish very quickly. The alternative, less benign interpretation is that some of the rankings are affected by current growth, either because they include subjective evaluations (e.g., surveys) or simply because they analyze a country with a friendlier scale when it is growing more.

At this stage is difficult to evaluate which interpretation is correct, but in either case, a ranking would not be particularly relevant as a policy guide if its effects are very short lived. If they just move to try to predict or chase growth, they would be largely irrelevant.

The overall conclusion is that, considering the 3-year out as our baseline metric – a horizon that seems appropriate in a policy discussion – the results suggest KOF Globalization and WB Governance are quite relevant, with IT Corruption less so. The other rankings, on the contrary, have no statistical capacity to predict changes in future growth. This, in turn, suggests that confidence effects after a change in these rankings are not evident.

4. Rankings components

One could argue that by combining so many different areas, rankings may lose predictive capacity. In this section, we investigate whether areas or pillars of some of the rankings have a differential impact on future growth. We consider the three rankings that simultaneously *(i)* appear to have some correlation with future growth and *(ii)* have publicly available disaggregated rankings. These are WB Governance, KOF Globalization, and WB Doing Business.

WB Governance data has, by design, six different areas, constructed using the principal component of several data sources. In the previous section, we consider the simple average of the six rankings. Here we analyze them separately. When all are considered simultaneously, none are statistically significantly different from zero in predicting growth (Table 9, column 7). When considered one at a time, each one is relevant and statistically significant, suggesting that they are highly collinear.

When analyzed in groups, the best fit occurs with the average of 5 of the 6 categories (all but voice and accountability). The statistical significance of each variable seems to be very similar across the different categories, implying, from a policy perspective, that all of them should be considered.

[Table 9. World Bank Governance Indicators.]

In the case of KOF Globalization (Table 10 and 11), there are three categories, two of which in turn have subcategories. This index has already been analyzed by Dreher (2006), who added to an otherwise standard growth regression an older version of this index. His main finding was that the overall index is quite robust in affecting growth positively. The economic integration category seems to have a large effect, and, among the subcomponents, he finds that actual flows seem robust, while information flows (part of social globalization) less so.

[Table 10. KOF Globalization Index: Components.]

In our case, the results are similar, though information flows remain statistically significant. In particular, the economic globalization ranking seems relevant thanks to actual flows (of FDI, trade, income, and portfolio) rather than trade restrictions, while social globalization seems relevant thanks to information flows (measured by internet, telephone, and newspapers). Some subcategories are relevant when considered alone but cease to be when considered with others (specifically, cultural globalization and political globalization).

[Table 11. KOF Globalization Index: Subcomponents.]

In the case of WB Doing Business (Table 12), very few components seem to have predictive power in our exercise. Getting electricity, trading across borders, enforcing contracts, and resolving insolvency yield, when considered alone, significant results. When considered simultaneously with other variables, however, they lose significance, even when in pairs. Although this suggests some collinearity, it is likely that the results are not robust to changing samples (in the case of globalization the samples varied less). Still, the average of getting electricity and trading across borders has a significant and relevant parameter, so there seems to be value in considering the questions in this subcategory.

[Table 12. World Bank Doing Business Components.]

In sum, when looking at these three rankings, one finds considerable heterogeneity within the statistical significance of the different sub-components, comparable to what we find across rankings. The implication is that even if aggregate rankings convey information, different components may tell quite different stories. The only exception seems to be WB Governance in which all aspects seem to matter. This may reflect the aggregation procedure behind its construction.

5. Non-Linearities

So far, we have been analyzing a linear relationship between rankings and future growth. It is possible, however, that changes in rankings have effects on growth that are nonlinear. We explore here two specific nonlinear forms.

First, we re-estimate our baseline case, augmented by the possibility that larger changes in a ranking's relative position have greater effects on growth. The idea is that only large changes may capture relevant structural changes. Concretely, we consider a dummy variable for absolute

changes in rankings that are larger than the median (year and ranking specific) of all absolute changes. In this case we would still assume that effects are symmetric, but potentially different for large changes.

The results (Table 13, Panel A) reveal that they barely change with this nonlinear possibility, and more importantly, in none of the rankings is there evidence of larger changes having a differential effect. WB Governance continues to be the most relevant ranking, while KOF Globalization and IT Corruption remain statistically significant. The only difference with our baseline result is that WB Doing Business appears significant in this case, with an economic effect that is not irrelevant. Intriguingly, excluding larger changes in this ranking seems to make it more informative.

[Table 13. Exploring Non-linearities.]

The second nonlinearity we explore is a potential differential effect depending on the sign of the relative change. Possibly, negative changes could gather more attention in the public discussion and have larger effects. Alternatively, positive changes may reflect actual reforms rather than inaction (and reforms by peers). We consider a dummy variable that is 1 for positive changes in the relative country position.

In this case (Table 13, Panel B) results do not change much either. The only non-linearity that appears statistically significant is with WB Governance: a positive movement in the ranking has a smaller effect on future growth compared with the effect of a negative change. The rankings that are not informative under our baseline continue to be so, even allowing for these nonlinearities.

6. Exploring transmission mechanisms

Rankings may influence growth through different channels. They may temporarily boost investment, affecting aggregate demand and the output gap. Or they may influence trend growth through persistent higher investment or more dynamic Total Factor Productivity (TFP). In order to explore these mechanisms, we consider the same baseline regression but, instead of explaining next year's GDP growth, we consider a number of independent variables of interest.

Specifically, we first analyze average net FDI flows (as % of GDP) in years t to $t+1$ (World Bank database). This is not entirely new. Corcoran and Gillanders (2015) explore how the World Bank Ease of Doing Business affect FDI using a cross section of countries. They find that it matters for middle income countries only and the key aspect of the ranking is the ease of trade across borders.

The results (Table 14, Panel A) bring no surprises. The WB Governance Indicators is again strongly associated with FDI. Under a uniform distribution and 100 countries, an improvement of 1% in a country's ranking distribution accounts for 2.07% of GDP in higher FDI. The WEF Competitiveness ranking, on the contrary, appears associated with lower FDI.

[Table 14. Exploring Mechanisms.]

We also consider decomposing GDP growth in a trend and a cycle component. Trend GDP here corresponds to a simple HP filter of each country. Cycle, in turn, is the output gap calculated as the (log) difference between actual and trend GDP. We apply our baseline regression trying to explain these two variables: trend growth between $t+1$ and $t+3$ and the average output gap in the same period. In the former case, we also consider lagged potential GDP growth as a control.

In one dimension (trend), the results (Table 13, Panel B) give a slightly different perspective than before. In addition to the three rankings that previously appeared to contain future growth information, IMD Competitiveness also displays a statistically significant (though not very large) parameter. WEF Competitiveness again has the opposite sign.

As for the cyclical component of GDP (Table 13, Panel C), the results show that no ranking has a statistically significant impact. There is no evidence of cyclical or demand-side effects from changing rankings.

Finally, we explore whether rankings influence TFP (The Conference Board database) and Exports (IMF database) growth in years $t+1$ to $t+3$ (Table 13 Panels D and E). Neither shows any statistically significant reaction to our different rankings.

7. A specific look at Rule-of-Law

Finally, we examine four different rankings' components that measure the concept of rule-of-law (and we observe the specific score in each case). Each source has a different approach to measure this concept. Some focus on enforcing contracts, others on property rights. All of them, however, try to assess a critical growth fundamental: the functioning of the basic platform for well-performing markets.

We consider as a benchmark (or the true fundamental) the law-and-order indicator from *Political Risk Services*. The reason is simple: Barro (2015) used that indicator and showed it is relevant explaining growth (in regressions without fixed-effects up to 2009, with nine non-overlapping 5-year periods). After decades of cumulative work, the indicator that is used reveals valuable information.

With data spanning up to 2016, the regressions considering one ranking at a time show they correlate rather poorly to the benchmark. A between estimator shows significant and high coefficients, but far from 1. This suggests that in a cross-section all rankings measure rule-of-law in correlated ways (Table 15). However, an estimation with fixed-effects and time dummies shows that the within-country variation of different rankings has very little resemblance with the benchmark. The only exception is the WB Governance Indicator, which is not a revelation, considering that the benchmark is one of the information sources considered in its construction (among several others).

[Table 15. Explaining Law and Order.]

When we consider the four rankings simultaneously in one regression explaining the benchmark, even the between estimation shows that only WB Governance has correlation with the benchmark. The other three rankings have insignificant (or negative) coefficients. The results are quite disappointing: movements in these rankings are unrelated to changes in the benchmark. Although these indices are trying to measure the same object, they end up with very different results.

8. Concluding Remarks

When deciding structural reforms, it is important to not forget that, after 30 years of highly scrutinized work, the empirical growth literature has uncovered several stylized facts. Among the most relevant ones, there is agreement that richer countries tend to grow less (conditional on a set of fundamentals), i.e. there is convergence. Also, there are a number of variables that explain growth more or less consistently: macroeconomic stability, openness, schooling, population dynamics (fertility), rule-of-law, government investment, and democracy are all relevant. The literature still debates on how endogenous some of these are, but they are still a very good guideline for discussion.

At the same time, policymakers should be aware that making progress in the plethora of global indices and rankings that have become available in the last couple of decades has very different implications regarding future growth. Several reasons may explain this: they perhaps measure overly specific aspects (which are in turn irrelevant for a reform discussion), support specific agendas (more ideological than deeply rooted in what matters for development), focus too much on surveys (which may measure past growth), or mainly capture formalities (and not actual practice). Also, as Hausmann et al. (2008) argue, changes in a particular ranking may not be very informative if there are other bottlenecks for growth. The empirical fact is, however, that a change in several of these rankings has close-to-zero predictive power on future growth. This finding is in line with Kraay and Tawara (2013), who report, using Bayesian averaging techniques, that specific policy indicators that matter for one outcome are, on average, not important correlates of other closely-related outcomes, illustrating the difficulties in using highly-specific policy indicators to identify reform priorities using cross-country data.

It is not surprising that the rankings that closely resemble what the empirical growth literature has uncovered are those that are more useful in terms of signaling future growth. Specifically, the ranking on governance of the WB (government effectiveness), and to a lesser extent rankings on globalization, transparency and corruption (as they could reflect false discoveries), seem to be aspects that countries should look at with care. Interestingly, the most relevant transmission channel seems to be their effect on trend growth and FDI, while nonlinear effects seem largely absent.

Other rankings seem largely irrelevant in the metrics we use in this paper. This does not mean that they should be completely disregarded as they contain useful granular information. But one should not be tempted to organize a structural reform discussion around them as they do not convey statistically significant information to predict future growth. Of course, this does not imply that fundamentals are not relevant. But it does mean that the way some rankings measure fundamentals is much less useful than expected.

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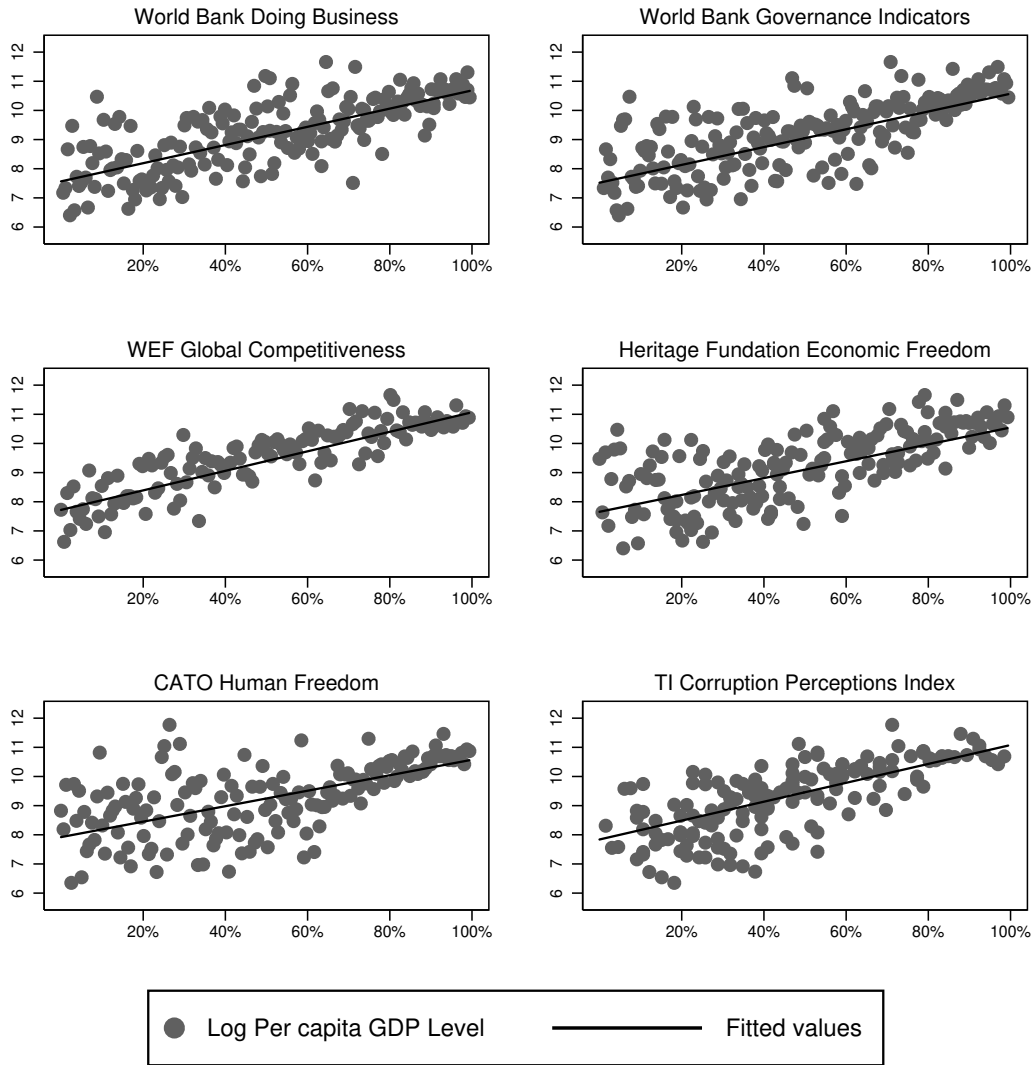
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Figure 1: Standardized Ranking and Per-Capita GDP



Note: 2016 for WBDB, WBGI, WEF and HER, 2014 for CORR and CATO due to data availability.

Table 1: Global Rankings Description

Institution	Name	N,T	Description	Subcomponents considered independently
World Bank	Doing Business (WBDB).	188, 15	Calculation of distance to frontier in 10 categories, each one base on a combination of survey (with several questions) or hard data.	Starting a Business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts and resolving insolvency.
World Bank	Governance Indicators (WBI).	191, 18	Six dimensions based on over 30 individual data sources aggregated through principal component analysis. We calculate the simple average of the six indicators.	Voice and accountability, control of corruption, government effectiveness, political stability and regulatory quality.
World Economic Forum	Global Competitiveness Index (WEF).	152,11	Aggregation of 199 indicators in 12 subcategories.	
IMD World Competitiveness Center	World Competitiveness Ranking (IMD).	63,19	Benchmarks the performance of economies based on more than 340 criteria related to competitiveness.	
Heritage Foundation	Index of Economic Freedom (HER).	180,21	Economic freedom based on 12 qualitative and quantitative indicators.	Property rights.
CATO Institute	Human Freedom (CATO).	158, 6	The state of human freedom based on 80 indicators that encompass personal, civil and economic freedom.	Rule of Law.
Transparency International	Corruption Perceptions Index (CORR).	173, 12	Aggregation of 13 sources, 3 minimum per indicator. Assessment of experts and business executives on number of corrupt behaviours in the public sector.	
KOF Swiss Economic Institute	Globalization Index (KOF).	185, 24	Composed by 23 variables in three different sub indices. The weighting technique is based on principal component analysis. Missing values of individual variables are often inter and extrapolated.	Economic globalization (flows and restrictions), political globalization (personal, informational and cultural) and social globalization.

Table 2: Standardized Ranking Correlations

	WBDB	WBG	WEF	HER	KOF	CATO	CORR	IMD
World Bank Doing Business	1.00	0.85	0.8	0.83	0.72	0.85	0.82	0.66
World Bank Governance Indicators	0.82	1.00	0.75	0.87	0.70	0.87	0.93	0.71
WEF Competitiveness Index	0.82	0.78	1.00	0.71	0.77	0.72	0.77	0.83
Heritage Economic Freedom	0.80	0.82	0.73	1.00	0.77	0.83	0.86	0.78
KOF Globalization Index	0.71	0.70	0.8	0.72	1.00	0.8	0.73	0.61
CATO Human Freedom	0.77	0.860	0.65	0.77	0.75	1.00	0.80	0.61
TI Corruption Perceptions Index	0.78	0.91	0.80	0.77	0.70	0.75	1.00	0.84
IMD Global Competitiveness	0.67	0.70	0.87	0.73	0.60	0.5	0.81	1.00

Note: Above diagonal, correlations in 2008; below diagonal, full sample correlations.

Table 3: Explaining Rankings
Dependent variable: Standardized DTF

	(1) WBDB	(2) WBG1	(3) WEF	(4) HER	(5) KOF	(6) CATO	(7) CORR	(8) IMD
Panel A: (t, t-1, t-2)								
GDP growth (t)	0.094* (0.050)	0.123*** (0.019)	-0.056** (0.025)	0.071* (0.039)	0.051*** (0.019)	0.131*** (0.046)	0.087*** (0.028)	0.386*** (0.128)
GDP growth (t-1)	-0.123*** (0.046)	0.031* (0.017)	0.038 (0.044)	-0.026 (0.036)	0.018 (0.017)	-0.079 (0.050)	-0.037* (0.021)	0.653*** (0.150)
GDP growth (t-2)	-0.063 (0.050)	0.025 (0.019)	0.027 (0.033)	0.030 (0.043)	0.040** (0.015)	-0.045 (0.039)	-0.002 (0.021)	0.526*** (0.102)
Lagged GDP level (Log)	0.201*** (0.050)	0.079*** (0.016)	-0.125*** (0.026)	0.121*** (0.026)	0.059* (0.026)	0.145*** (0.043)	0.111*** (0.022)	0.211*** (0.057)
Observations	2576	3311	1508	3601	3874	912	3026	1024
R ²	0.468	0.306	0.189	0.388	0.334	0.122	0.494	0.256
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Panel B: (t-1, t-2, t-3)								
GDP growth (t-1)	-0.115** (0.049)	0.029* (0.017)	0.050 (0.051)	-0.038 (0.034)	0.008 (0.016)	-0.078 (0.049)	-0.034* (0.021)	0.698*** (0.150)
GDP growth (t-2)	-0.091* (0.048)	0.028 (0.020)	0.033 (0.039)	0.006 (0.036)	0.029* (0.016)	-0.047 (0.043)	-0.003 (0.021)	0.431*** (0.088)
GDP growth (t-3)	-0.064 (0.043)	0.017 (0.014)	0.028 (0.034)	0.102*** (0.020)	0.025* (0.014)	-0.014 (0.047)	-0.028 (0.025)	0.339*** (0.110)
Lagged GDP (Log)	0.213*** (0.051)	0.080*** (0.015)	-0.128*** (0.027)	0.113*** (0.026)	0.0513** (0.025)	0.147*** (0.045)	0.113*** (0.022)	0.189*** (0.057)
Constant	-1.322*** (0.473)	-0.214 (0.141)	1.677*** (0.257)	-0.503** (0.239)	0.027 (0.225)	-0.816* (0.418)	-0.56*** (0.204)	-1.459** (0.580)
Observations	2573	3298	1508	3591	3691	912	3020	1024
R ²	0.475	0.313	0.190	0.395	0.349	0.123	0.496	0.265
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Robust standard errors in parentheses. * Significant at 10 %, ** 5 %, *** and 1 %, respectively.

Table 4: DTF Ranking and GDP Growth Granger Causality Test

DTF Ranking	DTF Causes GDP Growth	Growth Causes DTF	N
World Bank Distance to Frontier	0.008	0.147	2199
World Bank Governance Indicators	0.006	0.071	2437
World Economic Forum Global Competitiveness Index	0.320	0.006	1184
Heritage Fundation	0.811	0.059	3241
KOF Globalization Index	0.006	0.220	4047
CATO Human Freedom	0.888	0.691	456
Corruption Perception Index	0.250	0.054	2595
IMD World Competitiveness Index	0.044	0.000	854

Columns two and three present F-tests' P-values, considering two lags of the corresponding variables.

Table 5: Ranking Specific Results
 Dependent variable: Average Per-Capita GDP Growth Between t+1 and t+3 (x 100)

	(1) WBDB	(2) WBG	(3) WEF	(4) HER	(5) KOF	(6) CATO	(7) CORR	(8) IMD
WB Doing Business	1.815* (1.055) [0.174]							
WB Governance Indicators		12.67*** (3.406) [0.002]###						
WEF Global Competitiveness			-3.844 (2.372) [0.172]					
Heritage Economic Freedom				2.224 (2.515) [0.432]				
KOF Globalization Index					5.041** (2.506) [0.182]			
CATO Human Freedom						1.880 (2.265) [0.408]		
Corruption Perceptions Index							2.434* (1.356) [0.198]	
IMD Global Competitiveness								1.273 (0.886) [0.208]
Lagged GDP (Log)	-0.127*** (0.016)	-0.120*** (0.022)	-0.097*** (0.011)	-0.078*** (0.019)	-0.032*** (0.010)	-0.191*** (0.032)	-0.084*** (0.010)	-0.063*** (0.014)
Constant	1.178*** (0.147)	1.059*** (0.191)	0.958*** (0.112)	0.737*** (0.163)	0.292*** (0.091)	1.773*** (0.304)	0.799*** (0.098)	0.658*** (0.148)
Observations	2575	3328	1508	3612	4383	910	3030	1024
R ²	0.312	0.341	0.168	0.222	0.145	0.276	0.251	0.350
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Hausman random effects	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]
Country effects F-test	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]
Time effects LM-test	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]	[0.00]

Robust standard errors in parentheses. In brackets, transformed p-values of Benjamini and Hochberg procedure for multiple testing and model specification tests. Significance for multiple testing symbolized for #. * Significant at 10 %, ** 5 %, *** and 1 %, respectively. # Significant at 10 %, # 5 %, # and 1 %, respectively.

Table 6: Explaining Growth Ranking
 Dependent variable: Standardized Growth Ranking Between t+1 and t+3

	(1) WBDB	(2) WBG	(3) WEF	(4) HER	(5) KOF	(6) CATO	(7) CORR	(8) IMD
WB Doing Business	0.048 (0.033) [0.198]							
WB Governance Indicators		0.285*** (0.072) [0.001]###						
WEF Global Competitiveness			-0.131* (0.073) [0.201]					
Heritage Economic Freedom				0.074 (0.066) [0.303]				
KOF Globalization Index					0.140** (0.055) [0.046]##			
CATO Human Freedom						0.055 (0.070) [0.435]		
Corruption Perceptions Index							0.061 (0.040) [0.211]	
IMD Global Competitiveness								0.046 (0.028) [0.21]
Lagged GDP (Log)	-0.374*** (0.048)	-0.248*** (0.034)	-0.327*** (0.046)	-0.155*** (0.042)	-0.060*** (0.017)	-0.572*** (0.100)	-0.209*** (0.033)	-0.152*** (0.044)
Constant	3.689*** (0.437)	2.441*** (0.294)	3.593*** (0.442)	1.827*** (0.362)	0.825*** (0.147)	5.879*** (0.937)	2.364*** (0.308)	1.954*** (0.447)
Observations	2575	3328	1508	3612	4383	910	3030	1024
R ²	0.802	0.825	0.822	0.840	0.805	0.757	0.821	0.882
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Robust standard errors in parentheses. In brackets, transformed p-values of Benjamini and Hochberg procedure for multiple testing.

Significance for multiple testing symbolized for #. * Significant at 10 %, ** 5 %, *** and 1 %, respectively. # Significant at 10 %, # 5 %, # and 1 %, respectively.

Table 7: Ranking Specific Results: Common Sample
 Dependent Variable: Average Per-Capita GDP Growth Between t+1 and t+3 (x 100)

	(1) WBDB	(2) WBGi	(3) KOF
WB Doing Business	0.725 (1.358) [1.589]		
WB Governance Indicators		12.97*** (3.725) [0.005]###	
KOF Globalization Index			2.747 (3.326) [1.093]
Lagged GDP (Log)	-0.171*** (0.020)	-0.181*** (0.018)	-0.172*** (0.012)
Constant	1.553*** (0.176)	1.580*** (0.163)	1.552*** (0.172)
Observations	1781	1781	1781
R ²	0.378	0.392	0.379
Country FE	Yes	Yes	Yes
Time FE	Yes	Yes	Yes

Robust standard errors in parentheses. In brackets, transformed p-values of Benjamini and Hochberg procedure for multiple testing
 Significance for multiple testing symbolized for #. * Significant at 10 %, ** 5 %, *** and 1 %, respectively. # Significant at 10 %, # 5 %, # and 1 %, respectively.

Table 8: Horse Race Results
 Dependent variable: Average Per-Capita GDP Growth Between t+1 and t+3 (x 100)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
WB Doing Business	2.857 (2.194)					1.387 (1.101)	
WB Governance Indicators	21.31** (9.610)	9.084*** (3.292)	8.010** (3.260)	10.78*** (3.104)		12.05*** (3.270)	
KOF Globalization Index	11.56 (7.041)	3.156 (2.867)		4.941 (3.069)	5.038* (2.842)		
Corruption Perceptions Index	1.997 (2.561)	-1.347 (1.451)	0.233 (1.337)		0.619 (1.513)		2.060 (1.890)
IMD Global Competitiveness	-2.301* (1.306)						0.915 (0.881)
Lagged GDP (Log)	-0.208*** (0.025)	-0.101*** (0.021)	-0.105*** (0.014)	-0.126*** (0.027)	-0.088*** (0.022)	-0.165*** (0.012)	-0.065*** (0.016)
Constant	1.875*** (0.214)	0.890*** (0.226)	0.953*** (0.116)	1.092*** (0.225)	0.806*** (0.195)	1.464*** (0.179)	0.667*** (0.156)
Observations	511	2211	2576	2873	2486	2193	1008
R ²	0.490	0.247	0.280	0.348	0.229	0.383	0.342
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Robust standard errors in parentheses. * Significant at 10 %, ** 5 %, *** and 1 %, respectively.

Table 9: World Bank Governance Indicators
 Dependent variable: Average Per-capita GDP growth between t+1 and t+3 (x 100)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Voice and accountability	4.726*						2.183
	(2.438)						(2.125)
Political Stability		4.121***					1.688
		(1.322)					(1.433)
Government Effectiveness			8.934***				1.387
			(2.780)				(2.227)
Regulatory Quality				3.266			-1.637
				(2.197)			(1.765)
WB Governance Rule of Law					6.105**		-0.574
					(2.836)		(3.627)
Control of Corruption						6.577***	4.177**
						(2.508)	(1.876)
Lagged GDP (Log)	-0.111***	-0.115***	-0.117***	-0.113***	-0.115***	-0.113***	-0.079***
	(0.021)	(0.022)	(0.022)	(0.023)	(0.022)	(0.022)	(0.018)
Constant	1.019***	1.056***	1.052***	1.050***	1.046***	1.035***	0.704***
	(0.192)	(0.195)	(0.190)	(0.200)	(0.195)	(0.192)	(0.146)
Observations	3378	3348	3346	3346	3375	3356	3328
R ²	0.325	0.330	0.335	0.324	0.326	0.331	0.228
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Robust standard errors in parentheses. * Significant at 10 %, ** 5 %, *** and 1 %, respectively.

Table 10: KOF Globalization Index: Components
 Dependent variable: Average Per-capita GDP growth between t+1 and t+3 (x 100)

	(1)	(2)	(3)	(4)
Economic Globalization	2.482* (1.470)			2.612* (1.465)
Social globalization		-0.038 (2.374)		-2.082 (1.898)
Political Globalization			2.796* (1.501)	1.348 (1.442)
Lagged GDP (Log)	-0.021*** (0.004)	-0.031*** (0.011)	-0.032*** (0.011)	-0.021*** (0.004)
Constant	0.193*** (0.036)	0.306*** (0.094)	0.294*** (0.095)	0.191*** (0.037)
Observations	3858	4388	4405	3858
R ²	0.128	0.140	0.143	0.130
Country FE	Yes	Yes	Yes	
Time FE	Yes	Yes	Yes	Yes

Robust standard errors in parentheses. * Significant at 10 %, ** 5 %, *** and 1 %, respectively.

Table 11: KOF Globalization Index: Subcomponents
 Dependent variable: Average Per-capita GDP growth between t+1 and t+3 (x 100)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Actual Flows	3.746** (1.864)						3.188** (1.391)
Restrictions		1.985** (0.990)					1.483 (1.087)
Personal Contact			-3.905* (2.139)				-4.674* (2.401)
Information Flows				1.475 (1.762)			-0.212 (1.767)
Culture Proximity					-0.094 (1.078)		-1.067 (1.048)
Political Globalization						2.796* (1.501)	0.678 (1.582)
Lagged GDP (Log)	-0.033*** (0.011)	-0.021*** (0.004)	-0.031*** (0.011)	-0.032*** (0.011)	-0.032*** (0.011)	-0.032*** (0.011)	-0.021*** (0.004)
Constant	0.299*** (0.093)	0.199*** (0.037)	0.316*** (0.098)	0.303*** (0.095)	0.306*** (0.098)	0.294*** (0.095)	0.205*** (0.040)
Observations	4291	3695	4300	4388	4405	4405	3670
R ²	0.153	0.136	0.144	0.141	0.140	0.143	0.151
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Robust standard errors in parenthesis. * Significant at 10 %, ** 5 %, *** and 1 %, respectively.

Table 12: World Bank Doing Business Components
 Dependent variable: Average Per-capita GDP growth between t+1 and t+3 (x 100)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Panel A: Individual Regressions										
Average GDP Growth	-0.450 (1.453)	1.115 (0.776)	3.675** (1.702)	2.700 (2.327)	0.655 (0.947)	1.266 (1.196)	0.110 (1.409)	2.622* (1.564)	9.663* (5.722)	2.065** (1.042)
Lagged GDP (Log)	-0.123*** (0.016)	-0.102*** (0.014)	-0.144*** (0.029)	-0.144*** (0.019)	-0.115*** (0.015)	-0.119*** (0.017)	-0.117*** (0.017)	-0.123*** (0.019)	-0.162*** (0.025)	-0.120*** (0.016)
Constant	1.159*** (0.146)	0.957*** (0.132)	1.329*** (0.263)	1.344*** (0.176)	1.084*** (0.137)	1.111*** (0.158)	1.098*** (0.159)	1.144*** (0.172)	1.454*** (0.220)	1.137*** (0.151)
Observations	2575	2263	1617	732	2375	2296	2291	2259	748	2271
R ²	0.310	0.194	0.267	0.365	0.262	0.240	0.236	0.245	0.277	0.326
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Panel B: Simultaneous Regression										
Average GDP Growth	-0.199 (1.597)	0.196 (1.078)	1.434 (1.675)	2.336 (2.926)	3.772 (2.397)	0.996 (1.559)	-0.757 (1.291)	1.980 (2.512)	5.405 (3.774)	-0.321 (1.186)
Observations	648	648	648	648	648	648	648	648	648	648
R ²	0.298	0.298	0.298	0.298	0.298	0.298	0.298	0.298	0.298	0.298
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Panel C: Simultaneous Regression Omitting (4) and (9)										
Average GDP Growth	2.041* (1.049)	0.479 (0.778)	1.087 (1.311)		1.224 (1.276)	-0.561 (1.345)	0.130 (1.234)	-0.105 (1.281)		1.385 (1.022)
Observations	648	1408	1408	1408	1408	1408	1408	1408	1408	1408
R ²	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.259	0.298	0.259
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Robust standard errors in parentheses. * Significant at 10 %, ** 5 %, *** and 1 %, respectively.

Column (1) is Starting Business; (2) Dealing with construction permits; (3) Getting electricity; (4) Registering property; (5) Getting credit; (6) Protecting minority investors; (7) Paying taxes; (8) Trading across borders; (9) Enforcing contracts and (10) Resolving insolvency.

Table 13: No linearities
 Dependent variable: Average Per-capita GDP growth between t+1 and t+3 (x 100)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	WBDB	WBG1	WEF	HER	KOF	CATO	CORR	IMD
Panel A:								
Change in relative position > Median								
Standardized DTF	2.342*	-0.316	-1.742	0.073	8.516***	0.227	2.961	0.960
	(1.265)	(0.760)	(2.643)	(2.226)	(2.437)	(3.069)	(1.506)	(0.884)
Dummy * Standardized DTF	-0.813	12.31***	-0.622	1.180	-0.262	-0.374	0.253	0.516
	(0.521)	(3.544)	(0.617)	(1.180)	(0.484)	(0.922)	(0.357)	(0.516)
Lagged GDP (Log)	-0.114***	-0.132***	-0.107***	-0.067***	-0.010***	-0.170***	-0.093***	-0.066***
	(0.014)	(0.017)	(0.011)	(0.013)	(0.013)	(0.0402)	(0.012)	(0.013)
Constant	1.040***	1.158***	1.020***	0.622***	0.842***	1.581***	0.848***	0.663***
	(0.127)	(0.145)	(0.108)	(0.110)	(0.108)	(0.373)	(0.110)	(0.137)
Observations	2387	2628	1343	3427	4231	612	2801	937
R ²	0.258	0.323	0.169	0.215	0.303	0.188	0.273	0.341
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Panel B:								
Change in relative position > 0								
Standardized DTF	1.594	11.73***	-2.755	0.611	8.199***	-1.483	3.093*	1.117
	(1.299)	(3.740)	(2.510)	(2.248)	(2.392)	(3.466)	(1.597)	(1.032)
Dummy * Standardized DTF	0.511	-1.201**	0.118	0.228	0.508	0.274	-0.148	-0.161
	(0.485)	(0.550)	(0.509)	(0.522)	(0.365)	(1.033)	(0.342)	(0.377)
Lagged GDP (Log)	-0.114***	-0.131***	-0.109***	-0.068***	-0.010***	-0.167***	-0.093***	-0.065***
	(0.014)	(0.018)	(0.011)	(0.013)	(0.013)	(0.042)	(0.012)	(0.013)
Constant	1.047***	1.147***	1.040***	0.620***	0.845***	1.569***	0.846***	0.660***
	(0.127)	(0.147)	(0.106)	(0.110)	(0.109)	(0.383)	(0.109)	(0.139)
Observations	2387	2628	1343	3427	4231	612	2801	937
R ²	0.256	0.325	0.168	0.213	0.302	0.191	0.273	0.340
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Robust standard errors in parentheses. * Significant at 10 %, ** 5 %, *** and 1 %, respectively.

Table 14: Exploring Mechanisms

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	WBDB	WBGI	WEF	HER	KOF	CATO	CORR	IMD
Panel A: Investment								
FDI Net Flows	-0.160 (0.364)	2.070*** (0.720)	-1.547** (0.781)	-0.182 (0.552)	1.072 (0.671)	0.840 (0.590)	0.059 (0.492)	0.141 (0.390)
Constant	1.449*** (0.182)	-0.328 (0.390)	1.869*** (0.373)	0.632** (0.258)	-0.460* (0.245)	0.626* (0.321)	0.751*** (0.180)	1.128*** (0.202)
Observations	1398	2335	834	2475	3555	634	2042	638
R ²	0.047	0.122	0.024	0.132	0.256	0.021	0.073	0.171
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Panel B: Trend								
Average GDP Growth (t+1 to t+3)	0.149 (0.105)	1.153*** (0.279)	-0.418** (0.182)	0.0856 (0.237)	0.463* (0.259)	0.108 (0.181)	0.275** (0.128)	0.257*** (0.070)
Constant	0.010*** (0.011)	0.093*** (0.014)	0.120*** (0.021)	0.071*** (0.012)	0.031*** (0.009)	0.120*** (0.012)	0.080*** (0.001)	0.056*** (0.010)
Observations	2575	3328	1508	3612	4383	910	3030	1024
R ²	0.347	0.412	0.418	0.272	0.182	0.368	0.340	0.326
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Panel C: Cycle								
Average GDP Gap (t+1 to t+3)	0.623 (0.527)	-0.183 (1.209)	1.561 (2.014)	1.259 (0.790)	0.944 (0.758)	-2.981 (4.561)	-0.259 (1.044)	0.874 (0.975)
Constant	-3.101 (3.106)	0.725 (7.352)	-8.971 (7.568)	-5.914* (3.178)	-3.657 (3.061)	14.93 (28.42)	1.360 (3.466)	-3.642 (4.867)
Observations	2575	3336	1520	3615	4416	910	3032	1024
R ²	0.004	0.004	0.005	0.005	0.004	0.005	0.004	0.029
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Panel D: Total Factor Productivity								
TFP Average Growth (t+1 to t+3)	-1.021 (1.595)	-4.380 (2.657)	-2.515 (2.965)	-3.706 (2.522)	1.129 (2.610)	-1.033 (3.285)	-0.751 (0.975)	-1.864* (0.738)
Constant	0.004 (0.011)	0.022 (0.015)	0.012 (0.016)	0.017 (0.014)	-0.010 (0.016)	0.002 (0.019)	0.001 (0.010)	0.009* (0.005)
Observations	1341	2090	944	2411	2878	696	2108	899
R ²	0.083	0.136	0.056	0.133	0.086	0.054	0.131	0.237
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Panel E: Goods Exports								
Average Exports Growth (t+1 to t+3)	17.710 (21.292)	3.404 (9.038)	2.488 (5.415)	-1.356 (5.027)	14.045 (12.519)	-0.505 (7.885)	12.000 (13.425)	-3.889 (2.296)
Constant	-0.052 (0.150)	0.033 (0.047)	0.035 (0.025)	0.048 (0.036)	0.076** (0.031)	0.048 (0.045)	-0.003 (0.074)	0.048*** (0.012)
Observations	2327	2962	1456	3387	3821	877	2886	1013
R ²	0.035	0.033	0.075	0.051	0.029	0.117	0.042	0.333
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Robust standard errors in parentheses. * Significant at 10 %, ** 5 %, *** and 1 %, respectively.

Table 15: Explaining Law and Order
 Dependent variable: International Country Risk Law-and-Order Indicator

	Between					Within				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Enforcing Contracts	70.32*** (9.464)					1.698 (2.290)				
WB Governance Rule of Law		74.08*** (4.342)			131.2*** (23.47)		36.81*** (8.696)			18.94*** (6.149)
Heritage Property Rights			53.61*** (4.681)		-57.87*** (13.30)			11.72** (4.589)		-1.712 (3.158)
CATO Rule of Law				67.34*** (4.499)	11.34 (14.89)				0.0661 (3.497)	-1.992 (2.654)
Constant	0.152** (0.063)	0.227*** (0.025)	0.368*** (0.026)	0.315*** (0.023)	0.099** (0.043)	0.594*** (0.014)	0.529*** (0.045)	0.667*** (0.026)	0.630*** (0.016)	0.536*** (0.037)
Observations	275	2473	2329	783	764	275	2473	2329	783	764
R^2	0.289	0.682	0.497	0.629	0.701	0.005	0.248	0.240	0.074	0.102
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Robust standard errors in parentheses. * Significant at 10 %, ** 5 %, *** and 1 %, respectively.

A Appendix

Table A.1: Standardized Ranking and Per-Capita GDP, Cross-Section

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	WBDB	WBGI	WEF	HER	KOF	CATO	CORR	IMD
WB Doing Business	3.081*** (0.207)							
WB Governance Indicators		2.996*** (0.213)						
WEF Global Competitiveness			3.364*** (0.168)					
Heritage Economic Freedom				2.990*** (0.242)				
KOF Globalization Index					2.993*** (0.212)			
CATO Human Freedom						2.445*** (0.271)		
Corruption Perceptions Index							3.597*** (0.267)	
IMD Global Competitiveness								1.757*** (0.166)
Constant	7.644*** (0.121)	7.710*** (0.123)	7.840*** (0.097)	7.759*** (0.137)	7.716*** (0.122)	8.043*** (0.156)	7.709*** (0.130)	9.379*** (0.095)
Observations	187	190	130	174	184	158	167	61
R^2	0.544	0.513	0.758	0.471	0.522	0.343	0.524	0.654

Robust standard errors in parentheses. * Significant at 10 %, ** 5 %, *** and 1 %, respectively.

Note: 2016 for WBDB, WBGI, WEF and HER, 2014 for CORR and CATO due to data availability.

Table A.2: Baseline Specification With Controls
 Dependent variable: Average Per-Capita GDP Growth Between t+1 and t+3 (x 100)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	WBDB	WBGI	WEF	HER	KOF	CATO	CORR	IMD
WB Doing Business	0.779 (1.501)							
WB Governance Indicators		10.089*** (3.274)						
WEF Global Competitiveness			-4.942* (2.906)					
Heritage Economic Freedom				0.327 (2.416)				
KOF Globalization Index					1.027 (2.156)			
CATO Human Freedom						1.963 (2.395)		
Corruption Perceptions Index							1.212 (1.491)	
IMD Global Competitiveness								1.215 (1.017)
Average Terms of Trade Growth (t to t+2)	0.020 (0.019)	0.045 (0.028)	0.057*** (0.020)	0.039 (0.027)	0.047 (0.033)	0.071*** (0.020)	0.051** (0.021)	0.065** (0.027)
Investment as GDP Percentage	0.045* (0.024)	0.089** (0.040)	0.000 (0.030)	0.069** (0.035)	0.097* (0.056)	0.042 (0.043)	0.068** (0.029)	-0.042 (0.037)
Lagged (t-1) GDP Level Log	-0.161*** (0.021)	-0.124*** (0.026)	-0.062 (0.059)	-0.099*** (0.028)	-0.098*** (0.013)	-0.192*** (0.035)	-0.086*** (0.024)	-0.071*** (0.018)
Constant	1.480*** (0.187)	1.074*** (0.228)	0.627 (0.562)	0.906*** (0.249)	0.870*** (0.107)	1.776*** (0.319)	0.789*** (0.223)	0.743*** (0.185)
Observations	1551	2266	1026	2420	2925	839	2063	731
R ²	0.398	0.412	0.102	0.314	0.387	0.341	0.282	0.464
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Robust standard errors in parentheses. * Significant at 10 %, ** 5 %, *** and 1 %, respectively.

Table A.3: Baseline Specification with China's Growth as Control
 Dependent variable: Average Per-Capita GDP Growth Between t+1 and t+3 (x 100)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	WBDB	WBG	WEF	HER	KOF	CATO	CORR	IMD
WB Doing Business	1.815*							
	(1.055)							
WB Governance Indicators		12.977***						
		(3.406)						
WEF Global Competitiveness			-3.857					
			(2.381)					
Heritage Economic Freedom				2.691				
				(2.565)				
KOF Globalization Index					8.617***			
					(2.321)			
CATO Human Freedom						1.958		
						(2.268)		
Corruption Perceptions Index							2.503*	
							(1.368)	
IMD Global Competitiveness								1.205
								(0.902)
China Growth	-1.000***	-1.606***	3.543	2.453	-0.525	-0.835*	2.572	1.994**
	(0.244)	(0.252)	(3.060)	(1.977)	(0.346)	(0.454)	(2.334)	(0.844)
Lagged GDP (Log)	-0.127***	-0.123***	-0.098***	-0.083***	-0.103***	-0.195***	-0.090***	-0.076***
	(0.016)	(0.022)	(0.012)	(0.019)	(0.012)	(0.033)	(0.010)	(0.017)
Constant	1.237***	1.186***	0.748***	0.625**	0.949***	1.871***	0.700***	0.675***
	(0.150)	(0.195)	(0.153)	(0.254)	(0.106)	(0.338)	(0.157)	(0.179)
Observations	2570	3310	1497	3589	4212	904	3007	1005
R ²	0.312	0.348	0.166	0.228	0.309	0.278	0.261	0.356
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Robust standard errors in parentheses. * Significant at 10 %, ** 5 %, *** and 1 %, respectively.

Table A.4: Distance to US Per-Capita GDP
 Dependent variable: Difference in Average Per-capita GDP Log Level (between t+1 and t+3)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	WBDB	WBGI	WEF	HER	KOF	CATO	CORR	IMD
WB Doing Business	0.056 (0.042)							
WB Governance Indicators		0.501*** (0.092)						
WEF Global Competitiveness			-0.177** (0.072)					
Heritage Economic Freedom				0.058 (0.079)				
KOF Globalization Index					0.586*** (0.169)			
CATO Human Freedom						0.165** (0.077)		
Corruption Perceptions Index							0.124*** (0.047)	
IMD Global Competitiveness								0.104*** (0.026)
Lagged GDP (Log)	0.592*** (0.081)	0.680*** (0.050)	0.494*** (0.104)	0.780*** (0.053)	0.232*** (0.062)	0.417*** (0.058)	0.754*** (0.036)	0.833*** (0.046)
Constant	-7.150*** (0.729)	-8.175*** (0.425)	-5.996*** (0.999)	-8.857*** (0.459)	-4.152*** (0.551)	-5.528*** (0.544)	-8.616*** (0.327)	-9.208*** (0.467)
Observations	2575	3328	1508	3612	4383	910	3030	1024
R ²	0.546	0.750	0.480	0.790	0.355	0.282	0.765	0.800
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Robust standard errors in parentheses. * Significant at 10 %, ** 5 %, *** and 1 %, respectively.

Table A.5: Ranking-Specific Results: Different Time Horizons
 Dependent Variable: Per-Capita GDP Growth (x 100)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	WBDB	WBGJ	WEF	HER	KOF	CATO	CORR	IMD
Panel A: (t)								
Standardized DTF	1.298 (2.01)	22.997*** (5.448)	-8.246 (5.707)	4.079 (3.281)	11.807*** (3.320)	7.894* (4.188)	6.405** (2.270)	6.816*** (1.091)
Lagged GDP (Log)	-0.123*** (0.0320)	-0.114** (0.021)	-0.196*** (0.053)	-0.090** (0.030)	-0.078*** (0.008)	-0.135*** (0.034)	-0.0834*** (0.0196)	-0.050** (0.0160)
Constant	1.184*** (0.2813)	0.9102*** (0.171)	1.899*** (0.202)	0.801** (0.255)	0.640*** (0.106)	1.213*** (0.319)	0.755*** (0.169)	0.484* (0.159)
Observations	2578	3331	1508	3615	4239	912	3033	1024
R ²	0.185	0.157	0.185	0.133	0.115	0.083	0.130	0.378
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Panel B: (t+1)								
Standardized DTF	1.162 (1.629)	23.30*** (6.181)	-1.374 (5.05)	3.545 (3.305)	7.150** (3.77)	8.081** (3.364)	3.66** (1.543)	3.485*** (1.02)
Lagged GDP (Log)	-0.160*** (0.033)	-0.144*** (0.043)	-0.103*** (0.028)	-0.0928*** (0.031)	-0.028** (0.009)	-0.300*** (0.044)	-0.077*** (0.010)	-0.061** (0.017)
Constant	1.453 (0.294)	1.172*** (0.356)	0.100** (0.284)	0.826*** (0.264)	0.241*** (0.079)	2.693*** (0.408)	0.707*** (0.09)	0.635*** (0.174)
Observations	2577	3330	1508	3614	4385	911	3032	1024
R ²	0.202	0.283	0.096	0.37	0.314	0.339	0.125	0.395
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Panel C: (t+1 and t+5)								
Standardized DTF	0.981 (0.952)	8.122** (3.153)	-3.839** (2.053)	1.390 (2.122)	4.456* (2.394)	0.014** (1.493)	2.34* (1.203)	0.713 (0.725)
Lagged GDP (Log)	-0.090*** (0.011)	-0.104*** (0.022)	-0.070*** (0.020)	-0.067*** (0.013)	-0.030*** (0.008)	-0.125*** (0.011)	-0.067*** (0.012)	-0.041*** (0.011)
Constant	0.830*** (0.098)	0.900*** (0.181)	0.677*** (0.172)	0.613*** (0.109)	0.244*** (0.072)	1.172*** (0.106)	0.636*** (0.101)	0.459*** (0.102)
Observations	2386	3326	1519	3610	4381	910	3028	1024
R ²	0.326	0.443	0.280	0.312	0.277	0.372	0.366	0.377
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Robust standard errors in parentheses. * Significant at 10 %, ** 5 %, *** and 1 %, respectively.

Table A.6: Common Sample: Growth Ranking
 Dependent variable: Standardized Growth Ranking Between t+1 and t+3

	(1) WBDB	(2) WBGI	(3) KOF
WB Doing Business	0.009 (0.041)		
WB Governance Indicators		0.415*** (0.117)	
KOF Globalization Index			0.086 (0.101)
Lagged GDP (Log)	-0.523*** (0.057)	-0.558*** (0.052)	-0.528*** (0.056)
Constant	5.381*** (0.513)	5.482*** (0.476)	5.389*** (0.502)
Observations	1781	1781	1781
R ²	0.754	0.759	0.754
Country FE	Yes	Yes	Yes
Time FE	Yes	Yes	Yes

Robust standard errors in parenthesis. * Significant at 10 %, ** 5 %, *** and 1 %, respectively

Table A.7: Horse Race Results
 Dependent variable: Per-capita GDP growth in t (x 100)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
WB Doing Business	7.739*** (2.383)					0.109 (1.809)	
WB Governance Indicators	29.21** (10.96)	31.84*** (11.67)	31.42*** (9.800)	22.87*** (5.497)		31.61*** (5.896)	
KOF Globalization Index	9.064 (8.985)	2.671 (3.308)		2.630 (3.565)	7.452** (2.976)		
Corruption Perceptions Index	0.725 (2.979)	1.868 (2.143)	1.629 (1.955)		5.229** (2.348)		0.393 (2.297)
IMD Global Competitiveness	5.719*** (2.072)						6.771*** (1.127)
Lagged GDP (Log)	-0.233*** (0.035)	-0.143*** (0.037)	-0.118*** (0.019)	-0.123*** (0.024)	-0.101*** (0.025)	-0.176*** (0.022)	-0.0497*** (0.017)
Constant	2.025*** (0.342)	1.104*** (0.278)	0.896*** (0.134)	0.968*** (0.195)	0.882*** (0.212)	1.437*** (0.193)	0.486*** (0.163)
Observations	511	2214	2579	2876	2489	2196	1008
R ²	0.612	0.170	0.163	0.169	0.134	0.255	0.371
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Robust standard errors in parentheses. * Significant at 10 %, ** 5 %, *** and 1 %, respectively.

Table A.8: Horse Race Results
 Dependent variable: Average Per-capita GDP growth between t+1 and t+5 (x 100)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
WB Doing Business	-1.098 (5.090)					-3.351 (2.231)	
WB Governance Indicators	3.913 (25.12)	-8.490 (7.064)	-7.357 (6.550)	-5.506 (5.734)		-20.41 (13.20)	
KOF Globalization Index	-8.295 (10.31)	6.752 (6.009)		2.529 (5.723)	7.107 (5.265)		
Corruption Perceptions Index	5.522 (3.756)	2.806 (3.123)	3.101 (3.117)		2.002 (2.786)		1.374 (2.752)
IMD Global Competitiveness	2.811 (3.197)						-0.107 (1.683)
Lagged GDP (Log)	-0.163* (0.089)	-0.050* (0.026)	-0.042* (0.025)	-0.055*** (0.018)	-0.050* (0.026)	-0.002 (0.043)	-0.004 (0.039)
Constant	1.652** (0.803)	0.402* (0.225)	0.394* (0.226)	0.492*** (0.155)	0.403* (0.217)	0.166 (0.333)	0.027 (0.382)
Observations	347	1603	1616	2059	1772	1219	584
R ²	0.113	0.133	0.129	0.105	0.127	0.114	0.024
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Robust standard errors in parentheses. * Significant at 10 %, ** 5 %, *** and 1 %, respectively.