Notes on Inequality Section (TENTATIVE)

Inequality data for our sample is from . This includes consistently estimated series of Gini indexes for Market Income (before redistribution) and for Disposable Income for the most extensive sample we found. Using this dataset we lost XX countries and for many of the rest the information is missing for the first several years, before 1980. For this reason, the 568 data points in our balanced panel are reduced to 359. Given this limitation, we first checked that the key findings in the previous section still hold in the restricted panel, namely LAC productivity growth underperformance, and then analyzed the issue of inequality within that sample. Alternatively, we attempted to bridge the divide between the two samples in order to conduct the statistical exercises based on the full sample. First, we imputed the missing information extrapolating the last available information for each country to generate a full sample with 568 observations. Such extrapolation is possibly unbiased but its use in a regression would certainly be problematic because of lack of informative variation.[[1]](#footnote-1) Instead, second, we re-run the models with the full sample importing the inequality variable with its corresponding estimated coefficient produced by the smaller sample.[[2]](#footnote-2)

The main findings in previous section hold in the restricted sample. In particular, the LAC dummies are very similar. In particular, for a significant shortfall of -0.62 for productivity growth (instead of -0.65). However, when pre-1990 and post-1990 LAC dummies are used, this restricted sample shows a substantially larger shortfall pre-1990 but a smaller shortfall post-1990 of half the size (and statistically insignificant). Productivity growth is still divergent. All in all, these findings associated to this dataset are qualitatively similar to the ones found before and give support to using it to analyze the difference that inequality makes (in the spirit of difference in differences) and whether it can be a plausible proximate explanation of LAC growth underperformance.

The main results of including the Gini Index for Market Income as a control, which is not contaminated by the variety of redistributive policies that countries follow to alter ex-post inequality reflected in Gini Index of Disposable Income, is as follows:

1. Inequality makes a statistically significant difference in productivity growth: inequality is bad for productivity growth (controlling for the income gap) .
2. Inequality is also statistically bad for overall growth.
3. The LAC shortfall in productivity growth over the period is reduced marginally, by 0.16 points. Looking at the post-1990 period, a subperiod where data is more complete and reliable, controlling for inequality, the LAC productivity growth gap improves marginally, by some 0.10 points. These impacts do not change much the findings in the previous section. This is not evidence that inequality is important to explain LAC productivity growth gaps.
4. However, LAC shortfall in overall growth is impacted more substantially by inequality (because controlling for inequality also helps LAC relative performance in factor accumulation). Over the entire period, inequality chips away 0.30 points. Post-1990, it does it by 0.24 points. These differences are substantial, and wipe out the post-1990 growth shortfall identified in the previous section.

As a robustness check, if the Disposable Income Gini is utilized instead, most qualitative results hold. However we note that effects on LAC productivity growth gap are more pronounced: over the period it is reduced by some 0.40 points (two-thirds of the shortfall found initially) and post-1990 it is reduced by a similar amount, eliminating the shortfall altogether. However the LAC shortfall in overall growth is unaltered because there is an opposite effect of similar size on the factor accumulation gap. This last effect is at odds with that of the Market Gini. Intepreting the difference between the Market Income Gini and the Disposable Income Gini as effects driven by redistribution, the implication would be that shallower redistributive policies in LAC have contributed substantially to help its relative factor accumulation.

Perhaps the best way to control for inequality is to include both Gini indexes, Market Income and Disposable Income. In fact, Market Income Gini minus Disposable Income Gini is a measure of the size of redistribution policies, which could also have a bearing with LAC growth performance gaps. By introducing both indexes this variable will be controlled for, and its effect estimated as a difference. Under this interpretation, redistribution appears to be good for productivity growth but hurtful for factor accumulation and overall (over the entire period). This is to be taken with a grain of salt because this is an average result generated by redistributive policies that vary widely across countries.

When both indexes are included, the effects on LAC dummies is similar to what is obtained with the Disposable Income Gini. In particular, the LAC shortfall in productivity growth over the period falls by 0.40 points and post-1990 it does by some 0.35 points, again eliminating the shortfall found in the previous section. However the gap in overall growth widens considerably because the gap on factor accumulation widens very substantially, by 0.60 points both over the period and post-1990. Now the gap in overall growth is some 0.40 points higher.

All in all, there is evidence that excess inequality is an important factor behind the historic gap in productivity growth, and is the whole explanation for the current gap. However, it is not clear that inequality is the smoking gun to explain the shortfall in overall growth. While there is some evidence that the inequality coming from market income may be key, actual inequality after redistribution points in the other direction. There is the intriguing implication that the lack of redistributive policies in LAC is hiding a deeper problem with factor accumulation and overall growth. In other words, if LAC pursued the redistributive policies of non-LAC countries (as measured by the difference in Gini indexes), growth gaps in factor accumulation and overall would be worse.

1. We experimented with a variety of extrapolating equations using income per-capita and income lag as driving variables, allowing for country and time dummies, but did not find any reliable specification to model the change of country Gini coefficients over time. [↑](#footnote-ref-1)
2. As long as the extrapolated Ginis are unbiased, the resulting estimations are unbiased, but their standard errors would likely be larger than the estimated ones. [↑](#footnote-ref-2)