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Understanding the Linkages between Land and Income Inequality

Leonardo A. Lanzona, Jr.

Land inequality has been widely viewed as a factor that has constrained the country from transitioning from an agricultural to an industrial state. However, recent studies seem to underplay the importance of land (vis-a-vis other durable assets and human capital) as a driving force in inequality (see Martinez, et. al.). This is rather surprising also in light of the current agrarian reform program which focuses on reducing land inequality as a means of reducing poverty.

The redistributive outcome of agrarian reform then should be seen through the decrease in inequality measured in terms of land Gini, and then eventually a decrease in overall income inequality of the country through the income Gini¹. Figure 1 shows three estimated Gini coefficients. These are:

Panel A: Land Gini: measured in terms of the number of farm holdings in relation to the total area of the farm

Panel B: Income Gini: measured in terms of the average household incomes in relation to the no. of households

Panel C: School Gini: measured in terms of the average years of schooling in relation to individuals aged 15 and above

A number of points can be seen from the Figure 1. First, despite the fact that land Gini is slightly increasing², income Gini (Panel B) is relatively stable, and in certain years even present signs of declining.³ This suggests that the overall view that land is the most central factor in distributing incomes is overrated. This also implies that much remains to be done if redistribution of land is seen as a main objective of the program.

Second, the declining income Gini from 1997 to 2009 seems to follow the pattern of the school Gini (Panel C). Schooling or human capital may then be a more potent way of dealing with the distribution, relative to land distribution, suggesting that human capital may be underrated. In much of the debate on agrarian reform, the quality of human agents or the farmers themselves are not often seen, as the

¹ The Gini coefficient is often used to measure income inequality. Here, 0 corresponds to perfect income equality (i.e. every household has the same income) and 1 corresponds to perfect income inequality (i.e. one household has all the income, while everyone else has zero income). The Gini coefficient can also be used to measure wealth inequality. This use requires that no one has a negative net wealth.

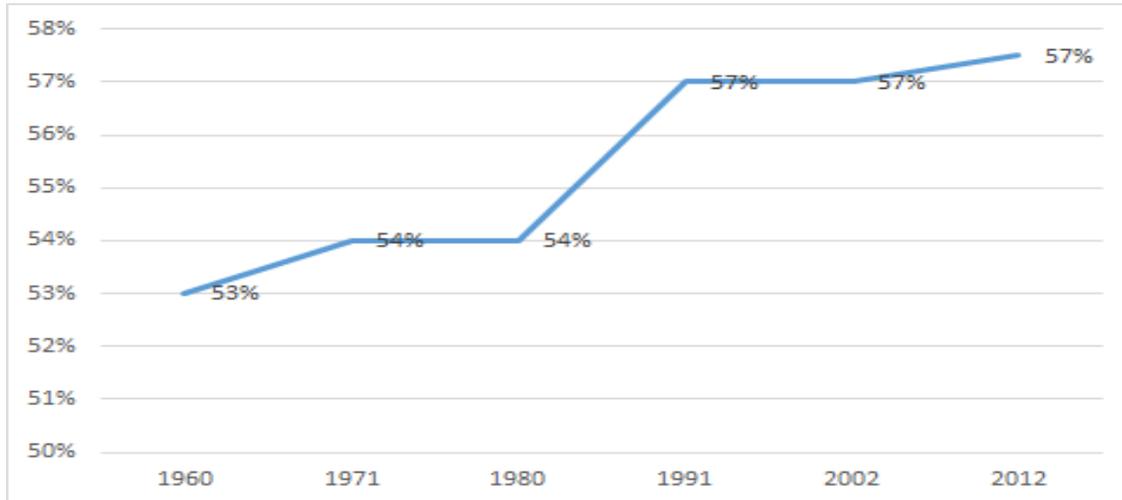
² While the figures seem stable, the trend is more significant since the assumption is that the level of inequality is even at the beginning undesirable. Any increase whether slight or not further moves the country away from this desirable situation.

³ It can be seen that during the time of Marcos, inequality has to some extent because corporations were ordered to start selling their shares to the public. Companies were no longer owned only by a single family and their friends, but also by those who were willing to become shareholders by purchasing stocks. This period however was marked by corruption and cronyism (see Chapter 3), and its impact on the inequality would only be felt in the next few years.

part of the discussion naturally is focused on the land. This seems ironic since the productivity of land is ultimately based on the quality of people or human capital of agents who are cultivating them.

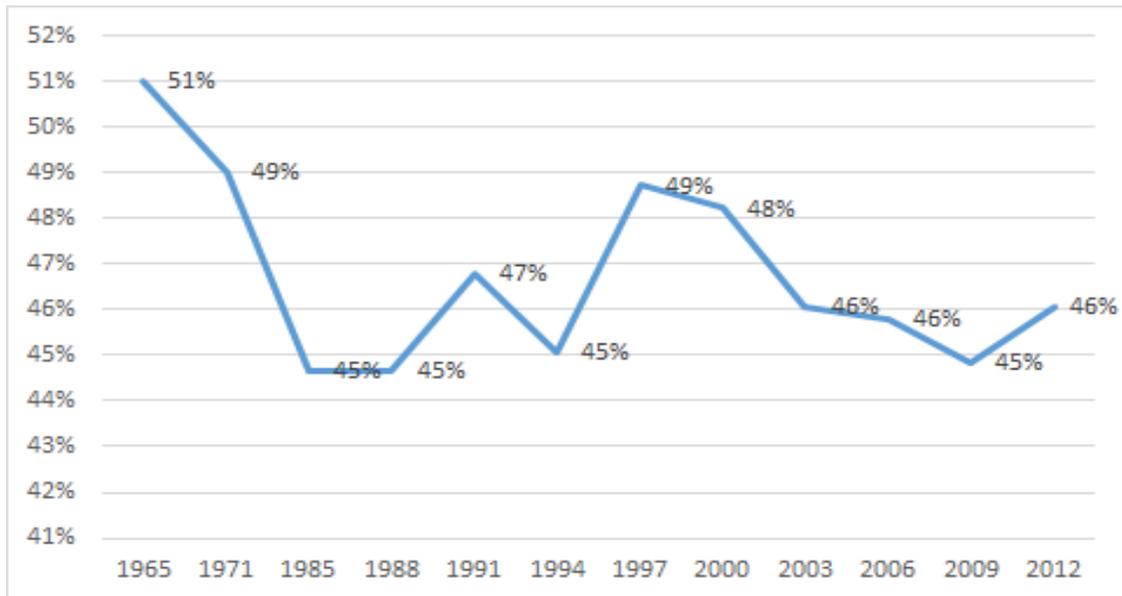
Figure 1. Land, Income and School Gini Coefficients, Selected Years

Panel A: Land Gini



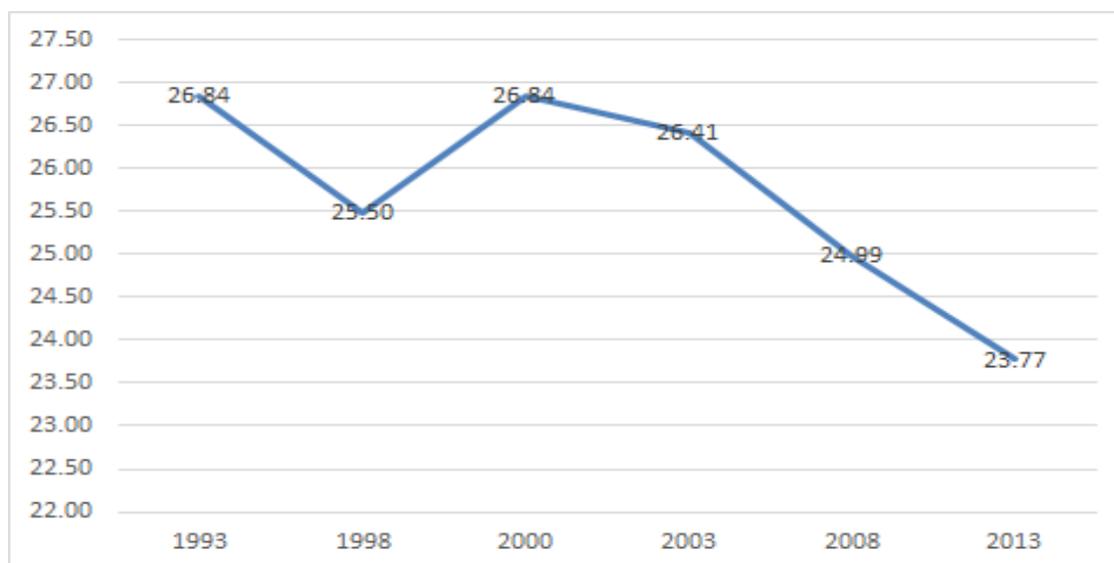
Source: Adapted from APCC (2007) . The 2012 figures are the Author's Computation from PSA, Census of Agriculture and Fishery

Panel B: Income Gini



Source: PSA

C. School Gini



Source: World Bank

Third, while the declines in school Gini is associated with similar declines in income Gini, the latter remains relatively high. This implies that any significant decline in inequality should still be based on property redistribution, particularly land reform. It needs to be stressed however land reform may not be sufficient since land by itself, no matter how fertile it is, will still require other inputs, especially human capital, to be more productive than its natural state. In that case, these factors, more significantly land distribution, must be combined to bring about some meaningful change in distribution.

The general idea is that land distribution cannot itself explain for income inequality but must be seen in the context of the wider implications it may have on the institutions of the country. Hence, even if the schooling and other forms of human capital may be compressed, the Gini coefficient continues to be high as the returns to such human capital investments are likely to be constrained by the inability of the economy to transition towards greater productivity. The main presumption is that land remains as a source of political power that influences the type of institutions that prevail in the economy.

In general, the idea that human capital and associated technological waves should have a major impact on labor market inequality makes a lot of sense. However, the problem with this view is that it is excessively naïve and deterministic. In reality, the impact of human capital as well as access to basic services that influence inequality depends on a large number of institutions, and these institutions vary a great deal over time and across regions.

Chief among these are the institutions governing the use and distribution of land. To a large extent, the dynamics of labor market inequality are determined by the race between the demand for

skills and the supply of skills. While the supply of human capital and associated skills may have increased, the demand for such skills and the expected increases in wage returns are not expected to rise if land is inappropriately allocated. Under the existing land laws, risks in production are not properly shared between landowners and farmers, and because contracts are inappropriately drawn, land is not non-complementary or independent to human capital, thus limiting both production and the demand for labor. In this view, further improvements in human capital and compression in schooling will not improve equality, since the demand for higher skilled labor remains low in land intensive agriculture and does not match the increased supply of such skills.

In contrast to this argument, the analysis of income distribution by Martinez, et. al. (2016) highlight the need to improve further human capital outcomes. Using a return to human capital index, the paper showed an insignificant effect of this index on poverty reduction, suggesting that the poor did not experience improvements in their chance to be employed in the non-agriculture and formal sectors. The authors explain this phenomenon mainly as evidence of labor market segmentation wherein the poor workers continuously experience difficulty in moving to formal, non-agricultural sectors. According to the paper, since more productive sectors require higher levels of skills, the stagnant education levels, or substandard skills, could probably explain why a significant fraction of poor workers were unable to move away from less productive sectors.

Nevertheless, these results can be also be explained by the absence of a well-functioning land market that leads to outmoded industrialization as the political elite remains fixated with accumulating larger land areas and making it difficult for the majority to acquire and own land and to invest further in education and improve technology. Galor, et. al. (2003) notes that human capital accumulation has not benefited all sectors of the economy. Given the existing institutions, large landowners have no incentive to hire highly skilled workers, as growth of production is not their primary concern, but are encouraged simply to accumulate land for prestige and political reasons. In turn, institutions will not fully support growth-enhancing educational policies as long as their impact in the productivity of the agricultural sector and industrial modernization is seen to be unsubstantial.

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