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By Dr. Mason Gaffney

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NOTES ON THOMAS PIKETTY'S *CAPITAL IN THE 21ST CENTURY*

By Dr. Mason Gaffney, Riverside, CA

Thomas Piketty's new book is kicking up a storm. It brings the Distribution of Wealth and Income back into the center of economic discourse, where it was in the 18th and 19th centuries – the era of "classical political economy". From the 1890s the "Neoclassicals" slowly and slyly redefined the subject as the study of allocating limited resources among competing ends. The new thrust was to maximize, and then to grow total output, never mind who gets it, or why, or how it is measured. Policies to help the working poor would only obstruct the new priority. By coincidence or design, neoclassical views took over economics discourse shortly after *Progress and Poverty* kicked off the original "War on Poverty", and outsold all other books on economics.

Such a book is timely and will do a lot of good. We itemize below its good elements and then, sadly, its many failings. The most basic of these is his conflating land with capital. Piketty's policy conclusions, the bottom line of it all, feature a revival of the property tax, but in a totally impracticable form. *Capital in the 21st Century* will fuel cocktail party chatter for a year or two and then be nipped to death. Meantime, for Georgists, it opens a new entry into the public dialogue. Let us enter!

Notes by MG on Thomas Piketty, 2014, *Capital in the 21st Century*.

A. Good elements

1. Brought distribution of wealth and income back into the public dialogue (or at least the academic one)

a. However, classical economics dealt with FACTOR distribution, while Piketty conflates land and capital, spiting and misquoting Ricardo.

b. There has been a steady drumbeat in the background for years, including work by Piketty and Saez, including Gaffney's publications on concentration of farmland, including Oxfam, and many others. It's just that leaders of "the conventional wisdom" have relegated this work to little insulated boxes hidden deep under the "commanding heights" they control and flaunt.

c. Through some mixture of good timing, mystique, and voluminous research, Piketty has thrust distribution back into the limelight. This is partly due to his immodest claims (itemized in Section B, below), given some credibility by voluminous research.

d. Piketty himself says that today distribution of income and wealth is already a most widely discussed issue, so he does share credit with some others, e.g. Oxfam, which has been saying this for some time. In lower tiers of the academic hierarchy "heterodox" and "radical" economists, e.g. Pizzigati, may harp on this theme continually, but popular Nobelists and journalists who are the face of the profession to the media and the lay world say little about it.

2. Piketty agrees with Kuznets that economics should be quantitative and data-based, but at the same time he faults the "balanced growth" models of Kuznets and Solow. Piketty sees capital "accumulation" overtaking GDP and/or income, so the capital/income (K/Y) ratio keeps rising. He does not, like Hirschman, see Unbalanced growth as a key to successful development. He disputes Kuznets and Solow, who said that growth of K need not lead to higher concentration of ownership or of income. He is right to note that the Kuznets-Solow view ranks high in today's "conventional wisdom", but he overstates the novelty of this finding. Piketty should give credit to Turgot with his *denier*, generations of stock and r.e. traders with their P/e ratios, Austrians with their emphasis on capital structure, Case-Shiller with their warnings based on irrational expectations, Clyde Chambers, Ag Ecst of the 1920s, who warned of overpriced farmland, or Philip Cornick's analysis of land pricing, 1934.

3. Supports his case with mountains of data going back more than 200 years, from many nations.

a. But many of his data are from government sources, which he then warns are a "chaste veil" over the awful truth.

4. Notes drop in K/Y ratio during and brought on by two world wars.

a. Fails to see this was a product of Great Depression, 1929-50, and then The Cold War, and not just the two major shooting wars

b. Fails to see this as a regular cycle, e.g. during Hoyt's cycles of 19th Century

c. Fails to see that a big element in his "K" is land, and land prices depend on expectations, and on i.r.s, giving different values to same quanta of land and capital. The writer has shown that raising the i.r. actually DOES lower the real quantum of capital in durables, because a higher fraction of the cash flow now goes for interest, leaving less for capital recovery (or Capital Consumption Allowance, "CCA"). To a lesser extent it lowers the rentability of land, hence its "quantity" when measured in money. That kind of financial insight is missing from Piketty's work.

d. He hardly addresses the strong feelings and publications of the growing body of environmentalists who aver that "growth", as defined and conceived by today's orthodox, is a primrose path leading to ruin. On this we must give more credit to Joseph Stiglitz, who combines the respect of the orthodox with a program that includes heavy Pigovian taxes on pollution and other negative externalities.

B. Strong and immodest claims, making for sonorous rumbling oratory, but they are not always accurate

1. Piketty claims to have a "new theoretical framework that affords a deeper understanding of the underlying mechanisms". This "new" framework depends on invoking the old specter of exponential growth over long time spans, proven by assumption.

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lot in common as a rhetorical device, in that it lets one ignore public policy, especially tax policy, as a determinant of factor ratios.

4. Since Piketty conflates land with K, he must have land growing along with K, exponentially, so there will be no problem of overcrowding land, no diminishing returns to K, no disproportion of factors. In this respect he is unconsciously like Kuznets and Solow, whom he faults for assuming "balanced growth" in their models and forecasts.

5. He claims to show "The dynamics of private capital accumulation". Not clear, though, if "accumulation" means social capital **formation** or agglomeration by individuals of both land and capital, e.g. the 1% vs. the 99%. He may use those ideas interchangeably, which would confuse readers, and perhaps Piketty himself.

6. He faults prevailing modern policies to promote growth because they "have not modified the deep structures of capital and inequality", as he would do. "Deep structures" evokes titanic tectonic forces, which is impressive, but that is only oratory. These "deep structures" want exploring and defining, lest they be only shallow.

7. Assumes that capital substitutes for labor, so more K, instead of making jobs, destroys them. Neo-liberal ecsts so dominant today assume the opposite. See, for example, Dale Jorgensen's 2013 book, *Double Dividend: Environmental Taxes and Fiscal Reform in the U.S.* Jorgensen makes a major point that we should tax carbon emissions and spend the proceeds to LOWER taxes on capital, making more jobs and raising national income. So one cannot simply assume with Piketty that K destroys jobs without at least alluding to the other doctrine (for either belief is mostly a doctrine, assumed a priori). One should also refer to J.S. Mill's demonstration that this is a matter of relative prices; and add that the AFTER-TAX relative prices are the determinants.

8. A series of Luddites, most of them more sophisticated than the original Ned Ludd, have stirred up their readers by assuming capital is primarily or always labor-saving. Karel Capek's play *RUR* dramatized the nightmare. Eli Whitney's cotton gin, Cyrus McCormick's reapers, John Deere's plowshares, Henry Ford's tractors, were all supposed to destroy small farms, but it was not until 1935 that the mean size of American farms began to creep above 160 acres. Viewing tractors superficially they seem to substitute for labor, but what they mainly displaced were draft horses. Before tractors, feed and pasture for draft animals used about 1/3 of all land in farms, so tractors displaced mainly land rather than labor.

9. He claims his data, mostly from national govt sources, go back 300 years, but the U.S. is only 225 years old, and early data-keeping was sketchy and not every reliable. Germany and Italy and Greece did not exist before ca. 1850. Even Piketty's France, ancient in song and story, is on its 5th Republic since The Revolution, and this one, from 1959, is now looking shaky again.

10. At the same time Piketty omits many good and germane data sources, e.g. the reports of several U.S. Government agencies like the Bureau of Corporations during the Progressive Era, the U.S. Census of Governments under Allen Manvel's leadership, John McEwan's recent work on *Who Owns Scotland?*, the *TNEC* reports on concentrated control of U.S. industries, the Tru-

man Committee Reports on monopoly in war industries, Professor Robert Montgomery's *The Brimstone Game* on the U.S. sulfur cartel, Hoyt's *100 Years of Land Values in Chicago, 1833-1933*, etc.

11. Thorold Rogers dug up reams of primary data in his *Six Centuries of Work and Wages* to show that English workers' living standards declined from 1340 to 1900. Epidemiologist Dr. George Miller replicated Rogers' findings, in great medical detail, in *On Fairness and Efficiency*. Many other scholars (e.g. Wilhelm Hasbach's *History of the English Agricultural Laborer*) have addressed this period.

12. Two of the best sources on concentration of wealth are direct responses to Henry George's exposes of the high concentration of landownership. One is the 1894 Report of the Illinois Bureau of Labor Statistics (rpt 1896) under Governor J.P. Altgeld and Editor Louis F. Post, publishing Lorenz data on the ownership of land in The Loop of Chicago. The other is the U.S. Census of Agriculture, with Lorenz data on the size distribution of farm real estate. From 1900-40 it even reports separate valuations for land and improvements. I label these as "Lorenz" data because that is how they are generally known today, but Lorenz did not publish his curve until 1906, while Henry George expounded the basic concept much earlier in embarrassing Francis Walker for his simplistic views on how to measure farm concentration.

13. Piketty calls his hunches or opinions "laws", when they have not risen to the dignity even of hypotheses, much less theories, much less "laws". Economists and their journalist camp-followers love to call relationships "laws" or "curves" or "functions", however superficial or transient they may be. Engler's "Law" has better stood the tests of time, but it evolved into Keynes' "consumption function", even though Keynes' version was based on nothing more solid than a statistical fallacy, the "Regression Fallacy". Using the same fallacy, Piketty assumes that consumption as a function of income rises slower, even though many (including this writer) have shown that housing and recreational spending rise faster than income.

C. Probable causes of the popularity and impact of P.'s work

1. He has a model, expressible in the simplest algebraic terms. Economists love a model; many feel lost at sea without one. Other intellectuals are impressed by them without feeling a need to understand them. This model uses just 3 terms at a time; anyone can see the point Piketty is making. The terms are ill-defined and slippery, but that lets readers of different backgrounds and ideologies fit them into their familiar doctrines, carrying whatever baggage that gives them comfort, without having to think much. A frequent way to incorporate slippery terms into one's discourse is to belittle definitions as quibbling over "mere semantics", urging impatient readers to forge ahead using the writer's preferred baggage.

2. What is new about Piketty's new model? Probably it is his emphasizing the unsustainability of capital formation. Piketty does acknowledge that Marx said it first, although with frequent reservations that irritate Marxists. Piketty is certainly right to fault today's most prominent economists for promoting more and more "growth" via policies that favor property over labor, and in this (continued on page 9)

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sense his work is "new".

It is too bad, though, he did not go further back to acknowledge historical pessimists like Augustus "Gloomy Gus" Spengler. Even Henry George, with all his optimism, catered to pessimism with his chapter on "How modern civilization may decline". Volumes have been written about the decline and fall of the glory that was Greece and the grandeur that was Rome, and several other ancient civilizations and hegemony from Mongolia to Peru. The theme was so widespread that Shelley, Goldsmith, Byron, and other English poets penned verses about it, still memorized by students of English literature. One might even argue that the archaeological wonders left to us by failed empires of the past were the **products** of "infinite accumulation", malinvested so as to drain their economies of needed working or "circulating" capital. Cynical economists today routinely mock modern white elephants as "pyramids".

3. Piketty's model is that when the rate of return on capital exceeds the rate of growth of output and income then "capitalism" "automatically generates inequalities". The word "automatically" is another invitation to accept without thinking. That compact statement is so naïve, so brimming with hidden false assumptions, it is hard to take seriously, except that the world does, at least temporarily, so to be topical we devote Section D, below, to dissecting it.

4. Piketty bolsters his model with Himalayan ranges of data from 20 nations over long time periods. Thus he speaks to historians and abstract modelers, both. That by itself is a positive and needed integration, but on the minus side, It takes patience to show that the data are flawed and/or do not fit the model, so the first reaction of an importunate reader or a journalist making a deadline is to bypass the "mere semantics" as nitpicking. "50 million Frenchmen can't be wrong", nor can one Frenchman citing several million data points, is the thinking.

5. The model involves a geometric progression (exponential growth), alleged to have no stopping point short of societal collapse. Thus it goes far back in history to forecast far ahead, giving an impression of a secular perspective in time. Doom forecasts have always boosted media sales.

6. Piketty couples #5 with allusions to unstoppable global warming, etc., although this must be muted by his conflating land with capital. For if land is capital, and accumulation means capital formation, then there are no limits to nature, the environment, natural resources, or other such land categories.

7. Piketty's doom forecast incorporates Marxist elements, although not as much as Marxists would approve. He says we are approaching the "Marxist Apocalypse". "Marx's analysis" (undefined) "remains relevant". This alludes to a "principle of infinite accumulation", which is "a key insight". Not always clear if this refers to accumulation of given wealth by the 1%, or aggregate result of oversaving fortified by unequal distribution - Piketty treats them interchangeably. Piketty avers that the high ratio of private (sic) wealth to national income confirms Marx -

even though the "accumulation" cannot be infinite, as in Marx, it is still just as bad.

Isaiah is easier to understand: "Woe be unto them that ... lay field to field, until there be no place, that they may be alone in the midst of the earth". Millenia of scientific and intellectual progress since *Isaiah* seem to have led us backwards from the obvious to the mystical.

Many besides Marx have warned against high ratios of private asset values to income. Turgot was one, but he called it *le denier*. In London it is the "Years purchase". On Wall St. it is the P/e ratio. In Case-Shiller it is "irrational expectations". So why the emphasis on Marx? I would speculate that his intellectual aura shines brighter in Piketty's Parisian circles than in the U.S.A. Some Americans have also been steeped in Marx. One of them, Michael Hudson, might even be said to have scooped Piketty with this kind of thinking, except that he also credits Marx.

8. Piketty writes that Marx's Apocalypse is more important now than "Ricardo's Principle of Scarcity". Since Ricardo wrote of land scarcity, and distinguished land from capital, Piketty's contrast is mixed and confusing.

D. Piketty's model and its faults

1. Piketty's central model is that $r > g$, where "r" is the rate of return on capital, and "g" is the % growth rate (the % annual rise of output) of the economy. The gloomy forecast is that $r > g$, the returns on capital (K) are all retained and plowed back, so the fraction of GDP distributed to capital keeps growing. In Marx this became a forecast he projected into the infinite future. Piketty, more realistically, projects it only far enough to create unbearable class conflict and some kind of revolution.

2. None of the terms is carefully defined or analyzed, in either mathematical or accounting terms, so supporters and critics may quibble at length about what it all means.

3. "r" is the AVERAGE return to K, not the marginal, so where capital combines with other inputs, like land or labor, their returns are imputed to K. Piketty conflates land with capital, tempering the distortion, but calculating the rate of return to both durable capital and land entails annualizing costs and returns over periods of time, and there is no clue how Piketty does that. With land the period is infinite; with durable capital it is finite, but as variable as the life of the pyramids vary from a baker's inventory of flour and sugar.

4. Piketty does not deduct depreciation of capital from its net yield, an accounting absurdity that overstates the income imputable to capital by a large and unknown factor.

5. As he does not deduct depreciation it is nearly certain that he does not deduct depletion, or the costs of pollution, thus divorcing his work entirely from modern resource and environmental economics - even though those concerns go back at least to Jevons, and probably before. In the years before 1913, when the Haber-Bosch Process

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alleviated the fear of depleting the world's soils of nitrogen, soil conservationists led the charge against farm property taxation. With Mississippi River flooding, and then the Dust Bowl, soil losses remained a top concern, soon to be followed by depletion of oil wells, and now by global warming.

6. He does not seem to include capital gains, which are mostly land appreciation, in either the yields of land, or in Y , his denominator.

7. Piketty defines capital to include all forms of private property, including land. Returns to capital thus include profits, dividends, interest, rents – everything but wages, it seems; and the denominator of the rate of return, r , must include all forms of private property. This seems to open the door to all kinds of double-counting, both in numerator and denominator, leaving us with a ratio whose meaning is complex and unknowable. As to PUBLIC capital, Piketty says little, presumably because it is not valued in any private market, as required by his definition. Thus infrastructure, and social overhead capital, are missing from his work.

8. " g " is the annual rise of NNP, or national income, taken from official national published data derived from tax returns. Reported taxable income varies widely and capriciously from any economists' definition of true economic income, as established by Wm. Vickrey, and Joseph Pechman during their long careers, following the pioneering work of R.M. Haig and Henry Simons. If Piketty tries to reconcile these differences in his 700 page tome, I have seen no signs of it.

9. Piketty includes slaves with capital at one point (pp.160-61), and at another point not.

10. The share of capital in national income is rK/Y – none of the 3 terms being defined carefully or correctly.

11. Piketty ignores the likelihood of diminishing returns to K , as capital rises faster than Y . That is a by-product of conflating land with K , so as capital grows so do the whole Earth and its resources – an absurd corollary from his methods.

12. The rent of land is net of a) expenses for O&M, and b) Interest and depreciation on durable capital inputs. A low value of " r ", as in Piketty's doom scenario, would leave more of the cash flow for land rent, and since land is part of K , in Piketty's definition, that would lead to a higher value of " r " – with the net result unknown. This is just one of several unknowns that Piketty must clear up before having a coherent thesis for us.

13. Having no separate category for land, Piketty cannot deal with settlement sprawl, migration, conservation, depletion, exhaustion, and other matters of scarcity of the finite Earth relative to capital and labor.

14. It's nearly forgotten now, but only a few years ago there was a great fad for Julian Simon's *The Ultimate Resource* (1991), meaning us, humans. We are so creative we can create more of everything, including natural resources. By conflating land with capital, Piketty in effect seems to side with Simon on this, although I cannot imagine how he reconciles Simon's optimism (or complacency?) with his own pessimism.

15. Attacks on Piketty's data have just begun, and will

grow. Chris Giles, economics Editor of *The Financial Times*, just fired an early shot, accusing Piketty of making up data.

16. Piketty owes readers more reconciliation of his claim that " r " is so high that $r > g$, with observed fact of extremely low interest rates on savings accounts, Treasury securities, etc.

E. Piketty's policy conclusions

1. Like Henry George, Piketty sees a solution to Marxian doom, and the two proposals even bear a superficial likeness.

George, as is well known, proposed abating all taxes but one, a tax at a high rate based on the value of land – all forms of land. Piketty proposes a similar tax on the base of ALL forms of private wealth.

2. Piketty's case was strengthened by a movement much bruited about in the 1970s, calling itself "The New View" of property tax incidence. In this "new view" property taxes on capital are not shifted forward to consumers, but lodge on the owners of capital. This depends on assuming that the tax is universal, or at least uniform over a vast nation like the U.S.A. This assumption somewhat fits Piketty's more ambitious proposal for a worldwide property tax. (Aaron, 1975; Gaffney 1977). The academic buzz ended abruptly when California passed its "Prop. 13" in 1978, but the intellectual foundations are still there to support Piketty.

3. Piketty's proposal will not withstand the predictable attacks for at least three reasons

a. It includes all forms of wealth, mobile as well as immobile.

b. It is to be worldwide, to avoid evasion maneuvers. But there is no worldwide government nor will there be in the foreseeable future.

c. It cannot impose a very high rate, because mobile capital will either never be formed, or will be consumed and dissipated, or find ways to emigrate.

d. It is to be "progressive", i.e. graduated upwards. This has been tried in many times and places for just one kind of wealth, i.e. real estate, and proven impossible. Real estate is held in dozens of ways, direct and indirect, but always *in rem*, not *in personam*, so there is no way to make existing taxes *in personam*. Even personal incomes, supposedly tracked by persons, are not really recorded that way except for low-paid blue-collar or pink-collar workers with one source of income recorded on payrolls.

4. George's land tax is free of those problems

a. It is only on land, which cannot move between nations, even towns and counties and school districts.

b. It is to be national or even subnational. The needed governments and collection institutions already exist.

c. It can be levied at very high rates, because land cannot move out of a taxing jurisdiction, which is DEFINED as an area of land.

d. Thus George's tax makes up by its very high rate for its less comprehensive base.

e. Untaxing capital and labor enhance the value of the land-tax base within the jurisdiction that untaxes them.

(GroundSwell does not have space for the footnotes of Economics Professor Dr. Mason Gaffney, but may be requested of him by emailing at m.gaffney@dslextre.me)