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**The Triumph of the Rentier?
Thomas Piketty vs. Luigi Pasinetti
and John Maynard Keynes**

Lance Taylor

Schwartz Center for Economic Policy Analysis
Department of Economics
The New School for Social Research
6 East 16th Street, New York, NY 10003
www.economicpolicyresearch.org

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The Triumph of the Rentier? Thomas Piketty vs. Luigi Pasinetti and John Maynard Keynes

Lance Taylor*

Abstract: Thomas Piketty attributes increasing wealth inequality to the characteristics of a neoclassical aggregate production function, which is known not to exist. A more plausible narrative is that wage repression can lead to secular stagnation by enriching the rentier. Lower economic activity decreases labor's bargaining power so that the share of profits in output (π) tends to rise. Activity (or the output/capital ratio u) is stimulated by increased investment due to a higher π . Wealth distribution is measured à la Luigi Pasinetti by the ratio Z of capital owned by a capitalist rentier class to the total. Suppose that Z goes up. Rentiers have a high saving rate implying that in a demand-driven Keynesian economy u goes down. With the reduction in u the profit share increases, pushing up the growth rate of Z . Depending on economic structure (in particular, differences in saving rates between the classes), this positive feedback may or may not destabilize the system. If stability reigns, there will be a persistent steady state level of Z . If not, there may be euthanasia or triumph of the rentier. In the long run Z is reduced and u increased by a downward shift in π , i.e. less wage repression improves economic performance overall.

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In a celebrated passage in the *General Theory*, John Maynard Keynes (1936) argued that over time, with appropriate guidance by the state, capital would become so abundant that its return would only have to cover wastage and obsolescence together with some margin to offset risk and reward entrepreneurship. Ultimate consequences would be the “euthanasia of the rentier” and the end of “...the cumulative oppressive power of the capitalist to exploit the scarcity-value of capital.” As in other parts of the book, Keynes here sounds distressingly neoclassical – an abundant factor of production is bound to earn a low return.¹

Thomas Piketty (2014) in his recent book on *Capital in the Twenty-First Century* embraces neoclassical production theory but argues that the return to capital does *not* need to fall by very much as it becomes more abundant relative to labor because substitution between these two factors is easy (details below). The rentier class can then use its power to increase its share of total wealth to a level approaching one hundred percent.²

¹ Implicit in Keynes’s prediction is the notion that capital will become abundant as and when consumption demand stabilizes, perhaps at the level of Bliss in Frank Ramsey’s (1928) pioneering growth model. Generations of innovators of novel consumer goods from long before Henry Ford through Steve Jobs (and presumably beyond) have made sure that consumers’ Bliss has not arrived.

² Piketty defines national wealth broadly to include “physical” capital, land, and net financial assets (domestic and foreign). A more standard definition in terms of the national income and flows of funds accounts would include capital, net foreign assets, and government debt. For the record, world GDP is on the order of 60 (trillion dollars), capital is around 200, and government debt 100. The interest rate on debt is usually below the profit rate on capital, so it is ignored in this paper.

Despite Piketty's empirical brilliance and the fears that he properly raises about increasing concentration of wealth, he glosses over simple national accounting relationships and elides Luigi Pasinetti's (1962) path-breaking growth model focusing on the control of capital in a capitalist economy.³ On the basis of Pasinetti's model and subsequent literature one can show along strictly Keynesian lines that euthanasia, persistence, and triumph of the rentier are all possible.

Following Pasinetti, the analysis concentrates on the ratio (say Z) of capital held by a rich "capitalist" class to the total. Ever-increasing concentration of wealth may or may not occur because of positive feedback in the system. The algebra appears below, but it makes sense initially to talk through the mechanism.

Karl Marx observed a century and a half ago that an upswing in economic activity increases labor's bargaining power so that the share of profits in output (say π) tends to fall – this is a pioneering version of the familiar Phillips curve. In the same time frame activity itself (conveniently measured by the output/capital ratio u) is stimulated by increased investment due to a higher π .

Now suppose that the capital concentration ratio Z goes up. The rentier class has a high saving rate so that in a demand-driven economy u goes down – the paradox of thrift applies. But with a reduction in economic activity and labor militancy the profit share can increase, pushing up the growth rate of Z . Depending on the structure of the economy, this positive feedback may or may not destabilize the system. If stability reigns, there will be a persistent steady state level of Z . If not, there may be euthanasia

³ Piketty scarcely mentions the Cambridge (UK vs. US) controversies in the 1950s and 1960s about the role of capital. Pasinetti's model played a central role.

or triumph of the rentier.⁴ In the long run Z is reduced and u increased by a downward shift in π , i.e. less wage repression improves economic performance overall.

Why is $r > g$?

We begin by discussing accounting. Piketty puts a lot of emphasis on the commonplace observation that the rate of profit (or r) exceeds the rate of output growth (or g). This inequality is basically a theorem of national income and flows of funds accounting. It follows from two “fundamental laws of capitalism” (his label, they are really accounting identities), but he does not make the connection very clear.

Let X be a generally accepted measure of “real” output (such as real GDP from the national accounts) and K a similar measure of capital (such as cumulated real net capital formation). Both quantities are estimated using “appropriate” price deflators applied to nominal spending flows.

Treating π as the share of “profits” (or, say, the sum of all income flows except compensation of employees) in output, the rate of profit on K *gross* of depreciation is

$$r = \pi X / K = \pi u$$

with $u = X/K$. This output/capital ratio can be interpreted as the “productivity” (in the long run) or “utilization” (short-run) of capital

Let δ be the rate at which capital depreciates (say the inverse of the lifetime of a typical unit of physical capital). The profit rate r_n *net* of depreciation becomes

$$r_n = \pi u - \delta = r - \delta \tag{1}$$

Equation (1) is a version of the first fundamental law, consistent with national income

⁴ Well before the model herein was conceived Thomas Palley (2012) emphasized the central role of Z in determining how the economy behaves in the long run.

accounting. Typical values of these variables might be $\pi = 0.4$, $u = 0.3$, and $\delta = 0.07$. They combine to give $r_n = 0.05$, Piketty's preferred number.

Now look at growth. In continuous time, the growth rate of output is $g = \dot{X} = (dX/dt)/X = \dot{X}/X$. Ignoring business cycle and other fluctuations, it will be close to the growth rate of capital stock \hat{K} . But the increase in capital over time is

$$\dot{K} = sX - \delta K$$

with s as the saving rate from output. The growth rate \hat{K} follows as

$$\hat{K} = su - \delta \quad , \quad (2)$$

a riff on Piketty's second law.⁵

Evidently $r_n > \hat{K}$ is tantamount to $\pi > s$. National saving rates are rarely as high as forty percent. For most times and places, Piketty's inequality will be observed in the data. As discussed below, Pasinetti's macro accounting provides a clear rationale, at least if the economy is "close to" a steady state. The real puzzle is what determines π and s . One can re-engineer Pasinetti's model to address that question as well as the determination of the control ratio Z . Before doing that, however, it makes sense to look at the evolution of π and u over the last few decades.

What happens with π and u in the medium run?

Piketty relies on off-the-shelf neoclassical production theory to argue that r and π are jointly determined by the capital/labor ratio $\kappa = K/L$ with a fully employed labor force

⁵ Piketty recognizes that (1) is an accounting identity. With regard to (2) he says that a variable $\beta = u^{-1}$ (the capital/output ratio) will converge to a steady state level determined by *given* levels of s , \hat{K} , and δ . He relies on the standard neoclassical growth model by Robert Solow (1968) and Trevor Swan (1968). Computer simulations suggest that it takes decades for a variable such as β to converge close to the model's steady state. Because neither the saving rate nor the capital growth rate is stable over such a long period, his argument makes little sense. Operationally, (2) is an accounting identity.

L. In particular, because the elasticity of substitution σ of an assumed macroeconomic production function is “high” (or $\sigma \gg 1$) π will rise and r will not go down by very much when κ increases as the economy grows.⁶ If rich people control a large share of capital, they can amplify their earnings to amass dynastic fortunes.

This fable, which dates back to the 19th century economic Darwinist John Bates Clark, does not fit the facts. Certainly at the global level full employment is not observed, and π varies over time, across both business cycles *and* longer periods. It is natural to address these observations using a model in which output, economic growth, employment, and income distribution are determined along Keynesian lines by effective demand.⁷ For background, we can look at income distribution over the past few cycles.

Cyclically, saving and investment respond positively to a rise in the profit rate. If the increase in investment is strong enough, output, employment, and the growth rate of the capital stock go up. Such a “profit-led” adjustment to a shift in the income distribution appears to be characteristic of (at least) high income economies. In the same time frame Marx’s idea applies -- a tighter labor market will tend to reduce the

⁶ Of course since the Cambridge controversies, it is well known that on plausible microeconomic assumptions an aggregate production function cannot exist. This inconvenient fact is universally ignored by contemporary neoclassical economists. See James Galbraith’s (2014) review of Piketty on this issue.

⁷ Fair warning: in the modeling to follow, K is a number calculated from the national accounts that basically sets the scale of the economic system. At the macro level it is *not* a “factor of production” (and so cannot be scarce in Keynes’s terms). Neither is labor. Employment is determined as output divided by the output/labor ratio, or productivity.

profit share. This negative feedback means that any initial profit surge and increased economic activity will be offset by an induced “profit squeeze.”⁸

This cyclical growth scenario was first formalized by Richard Goodwin (1967) in a simple “predator-prey” model. Contemporary versions such as Nelson Barbosa-Filho and Lance Taylor (2006) and David Kiefer and Codrina Rada (forthcoming) treat the wage share $\psi = 1 - \pi$ as predator and capacity utilization as prey. Both papers follow Goodwin in setting up dynamics of capacity utilization and the wage share. In continuous time we have

$$\dot{u} = h(u, \psi)$$

and

$$\dot{\psi} = j(u, \psi) \quad .$$

These differential equations will be locally stable if $\partial h/\partial u < 0$ and $\partial j/\partial \psi < 0$. In the medium run, effective demand will be profit-led if $\partial h/\partial \psi < 0$. There will be a profit squeeze if $\partial j/\partial u > 0$. The opposite signs of the latter two “cross partial” derivatives suggest that a cycle is likely.

Figure 1 illustrates the dynamics. The $\dot{u} = 0$ and $\dot{\psi} = 0$ schedules are “nullclines” showing combinations of u and ψ that respectively hold the time-derivatives \dot{u} and $\dot{\psi}$ to zero. The small arrows show the directions in which u and ω move when they are away from their nullclines. The negative slope of the $\dot{u} = 0$ schedule can be interpreted to mean that aggregate demand is profit-led in the medium run; the positive slope of the

⁸ Jargon about output and/or growth being profit-led or wage-led has become popular in the literature on demand-driven models since the terminology was coined by Taylor (1991). Profit-squeeze and wage-squeeze are natural extensions.

$\dot{\psi} = 0$ curve indicates that there is a profit squeeze à la Marx when output and employment go up.

Figure 1

Suppose that there is an initially low level of u as at point A. Capital utilization will begin to rise toward its nullcline, and the wage share will fall. Later in the cycle ψ will begin to increase.⁹ Eventually the rising labor share forces the trajectory to cross the $\dot{u} = 0$ nullcline, and output declines from its cyclical peak.

Using long-term quarterly data for 13 wealthy OECD economies, Kiefer and Rada fit a discrete-time cross-country econometric model like the one illustrated in Figure 1, obtaining nullclines with relatively steep slopes in the (u, ψ) plane, i.e. the economies are weakly profit-led but demonstrate a robust profit squeeze when economic activity rises.¹⁰ Typical fluctuations of the variables over the cycle are in the range of five to ten percentage points.

In the figure the intersection of the nullclines establishes a focal point F around which the variables cycle. For our purposes, Kiefer and Rada's most significant result is that F has moved to the southwest over time. The "long run" (over four decades) wage share has dropped by around five percent and capacity utilization by two percent (before the Great Recession). Because the fall in u is proportionately less than the decrease in ψ , the profit rate $r = (1 - \psi)u$ has gone up.

⁹ If ω is the real wage and ξ is labor productivity then $\psi = \omega/\xi$. Productivity typically goes up as an economy emerges from a slump so ψ falls. After a time a tighter labor market means that ω begins to rise, and ψ increases after the trajectory crosses the $\dot{\psi} = 0$ nullcline.

¹⁰ Alternatively, the profit share rises sharply when capital utilization declines – a point of relevance below.

The causes for these changes are not easy to ascertain, not least because different authors have differing background macroeconomic models in mind. Kiefer and Rada emphasize the impacts of globalization, reductions in labor's bargaining power, contractionary monetary policy, financialization, and technical change in reducing ψ and thereby increasing the capital share π . As will be seen below, long-term shifts in the distribution of wealth may feed into the Kiefer-Rada results as well.

Growth with capitalists and workers

Now we can take up the dynamics of wealth concentration. To keep the presentation as simple as possible, business cycle fluctuations are suppressed by replacing differential equations for u and ψ with "level" relationships based on the Kiefer-Rada nullclines. To save on symbols, investment and saving functions are set up in terms of the gross profit rate $r = \pi u$.

Let capital K be the sole component of wealth, and assume that there is a class of hereditary "capitalists" or rentiers who hold capital K_c to generate income rK_c .¹¹ The rest of capital is held by "workers" who receive labor income as well as capital income $r(K - K_c)$. Shares of income saved by capitalists and workers are s_c and s_w respectively, with $s_c \geq s_w$. If for completeness we assume that there is a tax on

¹¹ The mean income of US households in the richest one percent is roughly \$2.5 million (Taylor, et.al. 2014). About one-fifth of that takes the form of employee compensation. This share would be far less for households in the top 0.1 or 0.01 percent.

capitalist income at rate t with the proceeds transferred to workers,¹² the increase in capital permitted by available saving is

$$\dot{K}^S = s_c(1-t)rK_c + s_w[X - (1-t)rK_c] - \delta K \quad . \quad (3)$$

Dividing through by K , recalling that $r = \pi u$, and letting $Z = K_c/K$ gives

$$\widehat{K}^S = [(s_c - s_w)(1-t)\pi Z + s_w]u - \delta \quad . \quad (4)$$

In this equation \widehat{K}^S is the capital stock growth rate *permitted* by available saving at economic activity level u which depends on π and the capital control ratio Z .

Piketty's macroeconomic narrative *determines* \widehat{K}^S in (4) from full employment plus the usual associated paraphernalia (aggregate production function, marginal conditions, etc.). This apparatus fixes u and π . With Z set by "history" at any point in time and pre-determined saving and depreciation rates the capital stock growth rate follows directly.¹³

These incredible assumptions are certainly *not* adopted by Marx, Keynes (mostly), and Goodwin. Bringing in effective demand is the obvious alternative. One way to do so is to follow Michal Kalecki (1971) and introduce an investment function

$$\dot{K}^I = g_0K + \alpha\pi X - \delta K$$

or

$$\widehat{K}^I = g_0 + \alpha r - \delta \quad . \quad (5)$$

¹²A negative value of t could represent tax breaks for the rich such as low rates in the USA for capital gains and "carried interest," or else the general observation that affluent households can usually contrive to get superior returns on their assets.

¹³Equation (4) is the framework of the Solow-Swan growth model which Piketty applies to determine his long-run variable β in steady state – see footnote 5. The mechanism is that β (or u) adjusts over time to equilibrate \widehat{K}^S to predetermined growth rates of employment and labor productivity. Equation (4) is more general than the usual formulation since it allows s_c to exceed s_w .

In these equations g_0 represents Keynesian animal spirits and capital stock growth responds to the profit rate (parameter $\alpha > 0$).

By setting excess effective demand to zero, $\dot{K}^I - \dot{K}^S = 0$, and solving we can get an expression for u ,

$$\{[(s_c - s_w)(1 - t)Z - \alpha]\pi + s_w\}u = g_0 \quad . \quad (6)$$

A higher Z raises saving and thereby reduces capital utilization in a demand driven model (the paradox of thrift applies). If aggregate demand is profit-led, i.e. $(s_c - s_w)(1 - t)Z - \alpha < 0$, u will respond positively to π .

In effect (6) replaces the $\dot{u} = 0$ nullcline in Figure 1 for determination of u .

Similarly, the relationship

$$\pi = \theta(u) \quad (7)$$

with $d\theta/du < 0$ replaces the $\dot{\psi} = 0$ nullcline to set π (and ψ) as a function of u .

See Figure 2. Following Kiefer and Rada the $\pi(u)$ schedule is steep, signaling a strong profit squeeze. The dashed line illustrates how a higher Z can lead to a large increase in π accompanied by a decrease in u . The implication is that $r = \pi u$ can be (but does not necessarily have to be) an *increasing* function of Z . A higher capital control ratio can make a further increment easier to obtain, which Piketty could have stated as a third fundamental law (with behavioral content as opposed to his accounting rules). As will be seen, a fourth could be that feedback to still higher Z could lead to chronic capital underutilization and stagnation in the long run.¹⁴

Figure 2

¹⁴ Households in the top one percent provide around 60% of private savings in the USA. A shift in the income distribution in their favor can significantly reduce the multiplier.

In his original model, Pasinetti operated in a rather different world, assuming full employment (determining u) and in line with Piketty a given growth rate $\widehat{K^S}$. He then argued that π would adjust so that (4) could be satisfied. If $\widehat{K^S}$ were to go up there would have to be a wage squeeze to generate “forced saving” to meet higher investment demand. As described above, wage squeezes when aggregate demand rises are not observed in the data, so in its own way Pasinetti’s macroeconomic narrative is as unsatisfactory as Piketty’s. We can do better by treating u , r , and \widehat{K} as being determined by π and Z . To do so, we have to bring in dynamics of Z , Pasinetti’s key contribution.

Pasinetti’s growth equation and $r > g$

The growth rate of capitalists’ capital is

$$\widehat{K_c} = s_c(1 - t)\pi u - \delta \quad . \quad (8)$$

It is argued immediately below that Z may converge to a steady state at which $\widehat{K_c} = \widehat{K} = \bar{g}$. But following Prabhat Patnaik (2014) it first makes sense to think through the implications of (8) for Piketty’s $r > g$ inequality.

The growth rate \bar{g} is endogenous in the present model, while both Piketty and Pasinetti treat it as exogenous, perhaps determined from the supply side. Either way, one can restate (8) as an extension of a famous formula by Pasinetti,

$$s_c(1 - t)r - \delta = \bar{g} \quad . \quad (8P)$$

Setting $t = 0$ for simplicity, note that with $s_c < 1$ then r must exceed \bar{g} as a consequence of Pasinetti’s macro accounting. Moreover if \bar{g} goes down then r must decrease unless the capitalists’ saving rate s_c falls. Piketty thinks that in the 21st century g will decrease for supply-side reasons while r will rise. Insofar as the world

macroeconomy is near a steady state (8P) shows that can only happen if capitalists (or the wealthy more generally) become spendthrifts.¹⁵ Piketty does not entertain that scenario.

Possible steady states

Returning to macro dynamics, with $\dot{Z} = \widehat{K}_c - \widehat{K}$ we can use (4) and (8) to get a differential equation for Z ,

$$\dot{Z} = \{[s_c(1 - Z) + s_w Z](1 - t)\pi - s_w\}Zu \quad (9)$$

subject to the restrictions (6) and (7).

More compact equations are easier to work with. Let

$$\begin{aligned} f(Z) &= [s_c(1 - Z) + s_w Z](1 - t)\pi - s_w \\ &= [s_c(1 - t)\pi - s_w] - (s_c - s_w)(1 - t)\pi Z \quad . \end{aligned} \quad (10)$$

For future reference the derivative of f is

$$df/dZ = f' = (1 - t)\{-(s_c - s_w)\pi + [s_c(1 - Z) + s_w Z]\pi'\} \quad (11)$$

in which $\pi' = d\pi/dZ > 0$ from Figure 2. From the same source we also have $u' < 0$.

Note that f' can take either sign. The second derivative is

$$f'' = (1 - t)\{-2(s_c - s_w)\pi' + [s_c(1 - Z) + s_w Z]\pi''\}$$

which we will assume to be negative (that is, $\pi'' = d^2\pi/dZ^2$ is not strongly positive).

With this notation we have

$$\dot{Z} = fZu \quad (12)$$

and

¹⁵ In his *Treatise on Money* (1930) Keynes called the inverse relationship between s_c and r the widow's cruse – it is a variant on forced saving. When evil King Ahab was pursuing the prophet Elijah, the latter stayed with a widow. When they partook from a cruse of oil or barrel of flour they were divinely refilled – the more they consumed the more food they received. See *1 Kings* 17: 9-16.

$$d\dot{Z}/dZ = Z[f'u + fu'] + fu \quad . \quad (13)$$

Equations (9) and (12) permit several steady state solutions with $\dot{Z} = 0$ to exist. One can describe them in terms of the profit share response parameter π' and the capitalist saving rate s_c . Pasinetti concentrated on a steady state with $0 < Z < 1$, but it clarifies the analysis to start with the solution at $Z = 0$ for which $d\dot{Z}/dZ = fu$ from (13). Suppose that $s_c = s_w = s$ as in the original Solow-Swan model. Then $f(Z) = s[(1 - t)\pi - 1] < 0$ and the steady state will be stable ($d\dot{Z}/dZ < 0$). See the arrow along the horizontal axis in Figure 3.

Figure 3

The solution with $Z = 0$ is labeled SM, after a paper by Paul Samuelson and Franco Modigliani (1966) who pronounced it “dual” to Pasinetti’s steady state. Rentiers get euthanized because they are no more thrifty than workers and do not have access to wage income, a disadvantage pointed out long ago by James Meade (1964).

Next, suppose that $s_c > s_w$. Then if the difference between saving rates is large enough $f(0)$ can be positive as rentier thrift takes over the system.¹⁶ As Z increases from zero, with $f'' < 0$ the locus along which $\dot{Z} = 0$ can be hump-shaped or concave as illustrated in Figure 4. There can be a stable Pasinetti equilibrium at point P. At this steady state we have $f(Z) = 0$ and $d\dot{Z}/dZ = f'Zu$ from (13). With a low relatively low value of π' , $f' < 0$ from (11) so the equilibrium is stable. Also, $dr/dZ < 0$ and the capital stock growth rate \hat{K} is a decreasing function of Z from (5).

Figure 4

¹⁶ For example if $s_w = 0$ then $f(0) = s_c(1 - t)\pi > 0$.

The shift of equilibrium from SM to P is an example of a saddle-node or transcritical bifurcation of the differential equation (9) or (12) – there is a regime change parameterized by the rentier saving rate s_c .¹⁷ There can also be a bifurcation away from P when $\pi' \gg 0$. This transition is more likely to occur when

$$[s_c(1 - Z) + s_w Z](1 - t) > 0 \quad (14)$$

is also “large,” i.e. Z is well below its upper bound of one. Then Z can diverge upward from point P as illustrated in Figure 5.

Figure 5

If Z trends upward the left-hand term in inequality (14) will shrink, possibly by enough to make $d\dot{Z}/dZ < 0$ at some level of $Z < 1$. There would be a steady state at point D, so labeled after William Darity Jr (1981), perhaps the first to point out that such an “anti-dual” equilibrium can exist.¹⁸

At D, a combination of a high capitalist saving rate and a robust response of the profit share to the capital control ratio can lead to a triumph of the rentier. From Figure 3, this eventuality would be accompanied by stagnating capital utilization. One is reminded of Kalecki’s (1943) invocation of “the sack,” low employment contrived in support of capitalist income.

What is to be done?

A simple growth model cannot address all policy and political economy questions. A few points, however, stand out.

¹⁷ See Hirsch, Smale and Devaney (2013) for details.

¹⁸ A final possibility is that Z may simply converge to one, if a steady state at D does not exist. One can show that this equilibrium with a completely dominant rentier class would be stable.

The model's economy can trend toward dominance of the rentier class when their saving propensity is high and the profit share has a strong positive response to an increase in the share of capital Z that they control.

On the other hand, if the Pasinetti equilibrium is stable, then it is easy to see from (10) that the steady state level of Z (the target of the accumulation process) will fall if the profit share π shifts exogenously downward or the tax rate t on the wealthy goes up. Wealth accumulation can be curtailed if the income flows that feed it can be cut back. Dean Baker (2014) and Galbraith (2014) succinctly summarize the policy complications. For present purposes, two observations can be added.

Current flows of taxes on the upper percentiles of the income distribution and transfers to the bottom in the USA are on the order of ten percent of GDP. Meanwhile the income share of the top percentile rose by more than ten percent between 1980 and 2010 (Taylor, et. al., 2014), to a large extent due to a rising profit share π . The US tax/transfer program would have to be doubled in size (emphasizing estate taxes in particular) to offset the "autonomous" increase in π . On the policy front such an effort may not be likely.

With regard to political economy, the increase in π (and therefore the profit rate r) was not so autonomous after all. It was the outcome of a sociopolitical process which could be reversed. As Kiefer and Rada, Baker, Galbraith, and many others argue, shifting the trade-offs between π and u illustrated in Figure 2 by public intervention would go a long way toward maintaining aggregate demand and reducing capitalist control. Otherwise, wage repression leads to secular stagnation by enriching the rentier.

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ssion2_TaylorEtAl_IncomeDistributionUSA_140414.pdf](http://www.economicpolicyresearch.org/images/INET_docs/publications/2014/session2_TaylorEtAl_IncomeDistributionUSA_140414.pdf)

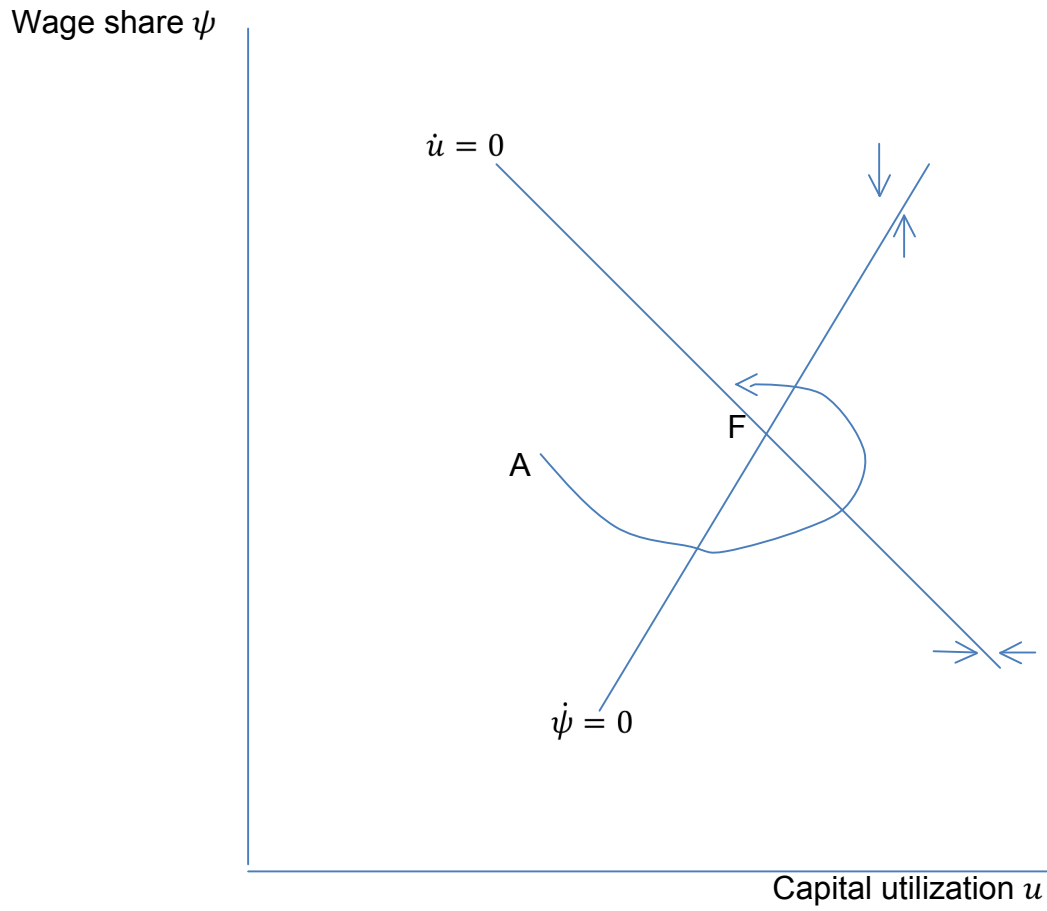


Figure 1: Cyclical dynamics between the wage share ψ and capital utilization u .

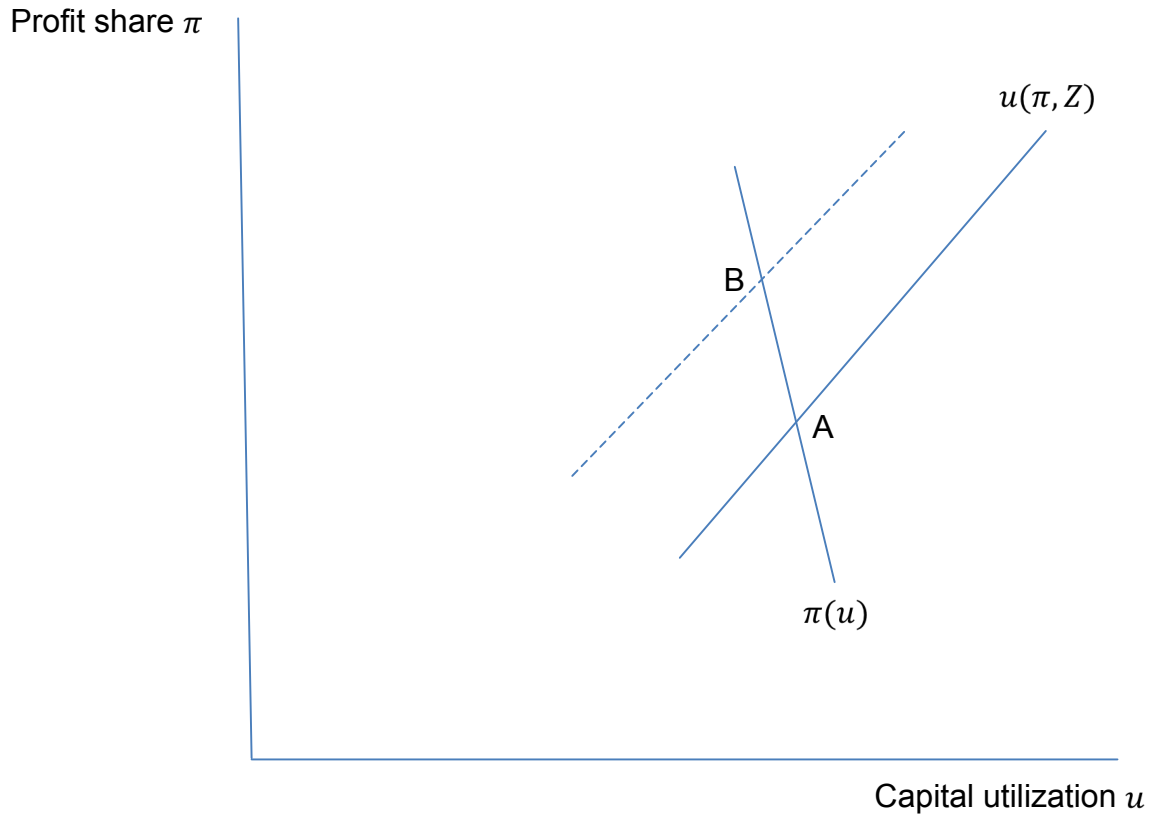


Figure 2: Determination of the profit share π and capital utilization u . The dashed line shows the effect of a higher value of the capital control ratio Z .

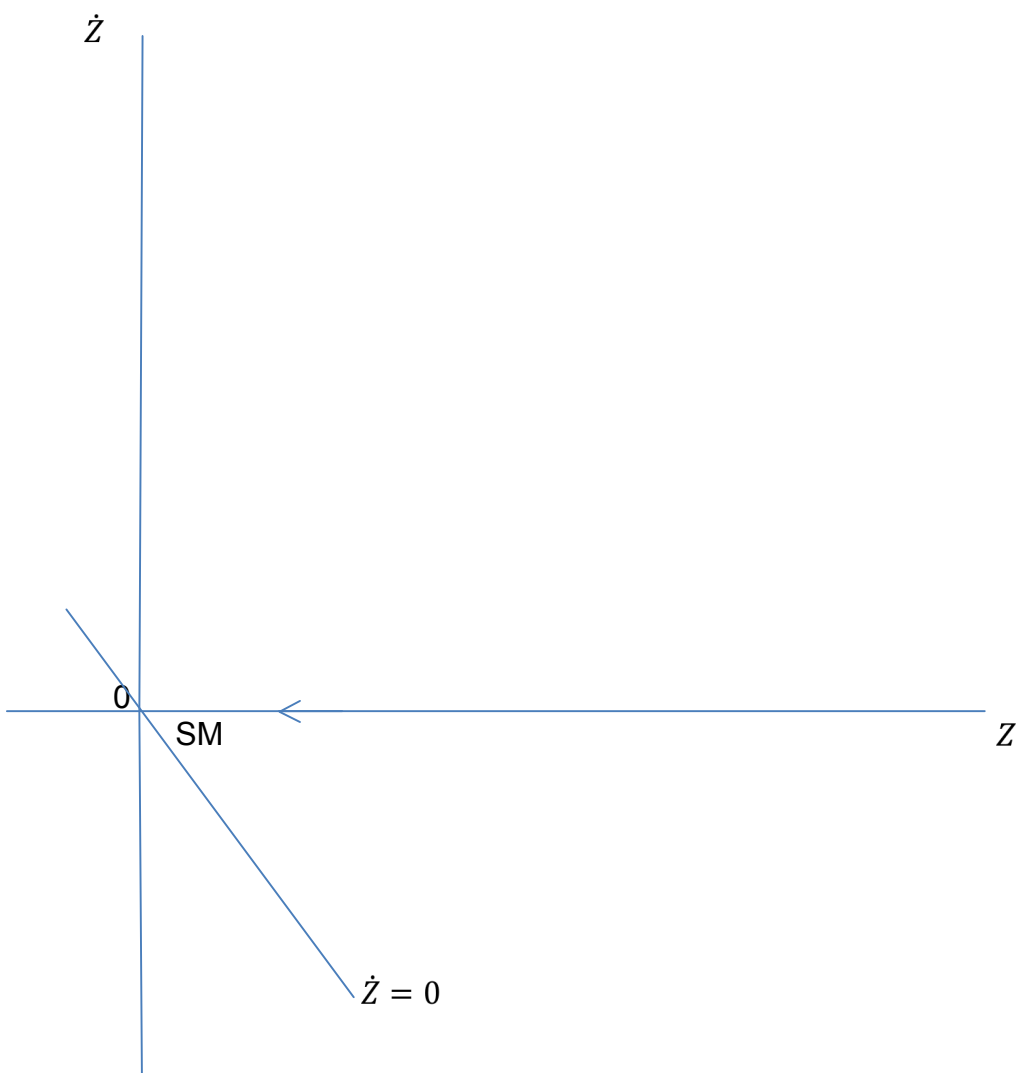


Figure 3: Stable “dual” (Samuelson-Modigliani) steady state with $Z = 0$ at point SM .

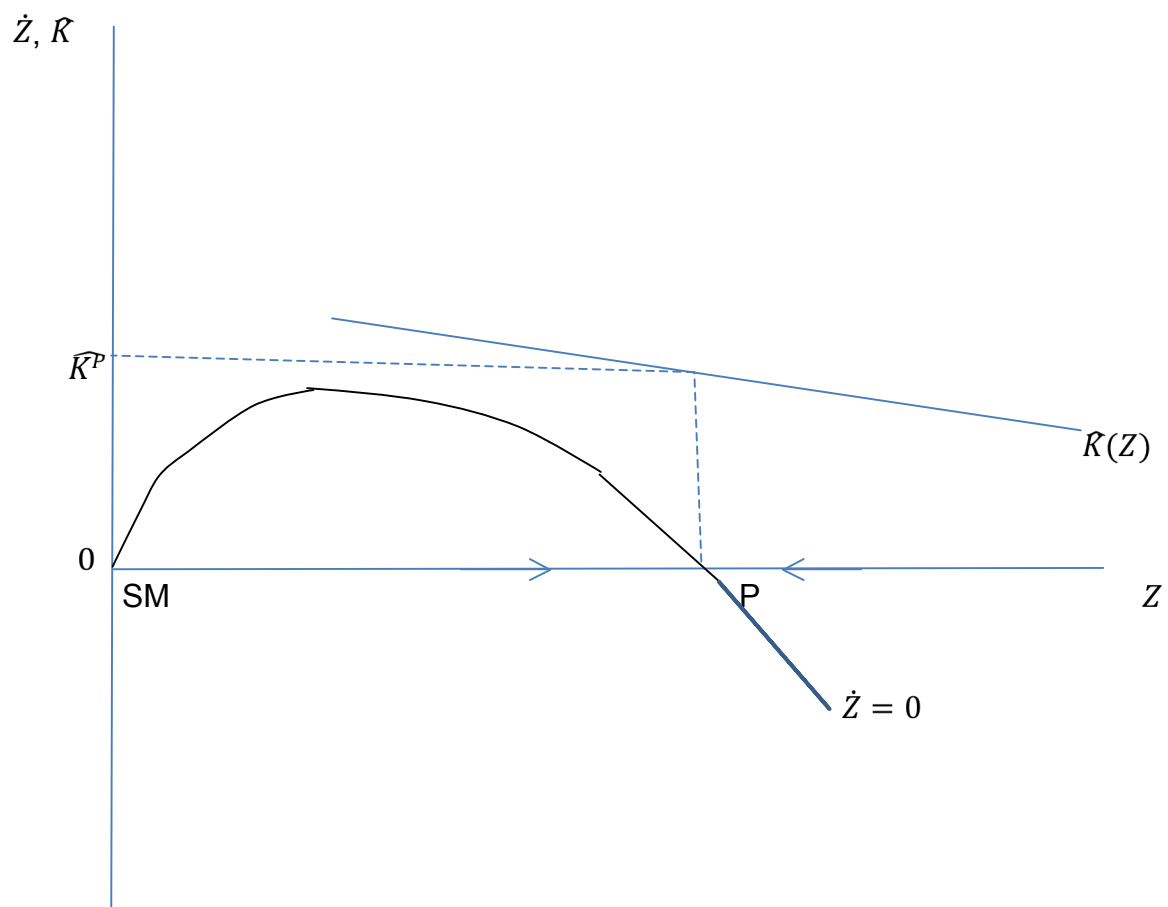


Figure 4: Stable Pasinetti equilibrium at point P. The growth rate \hat{K} is a declining function of Z with steady state level \hat{K}^P .

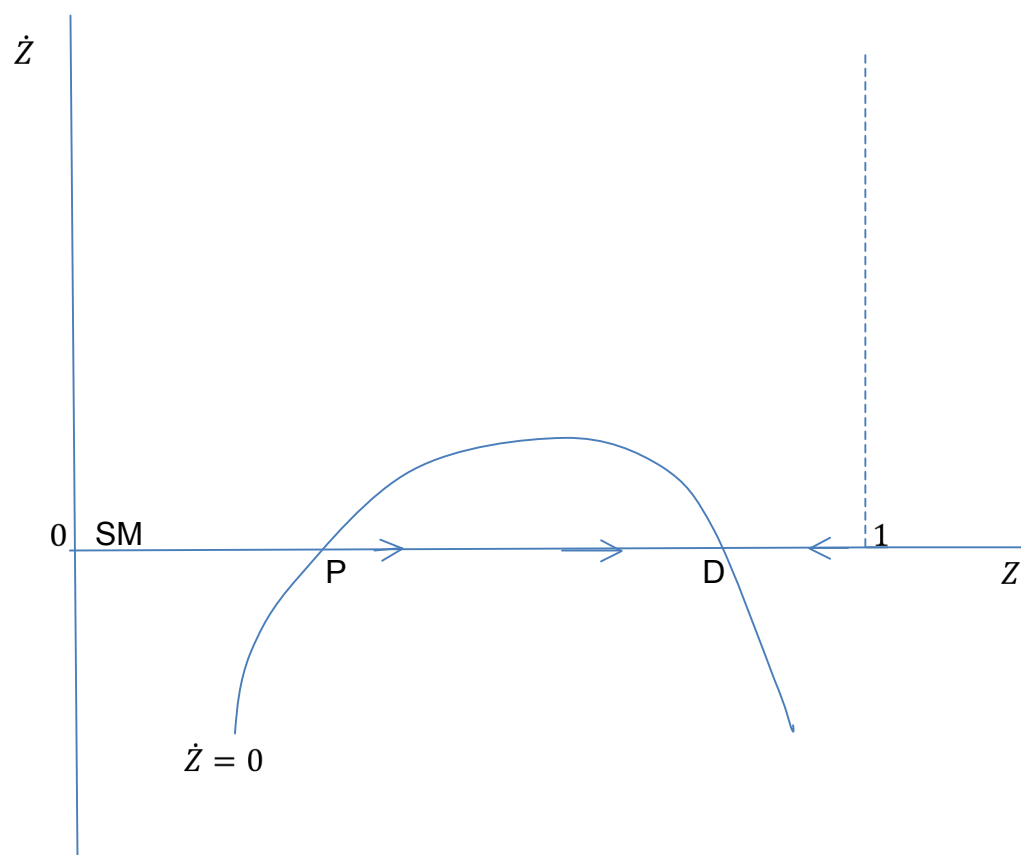


Figure 5: Unstable Pasinetti steady state at point P. Stable “anti-dual”(Darity) steady state at point D.