CHAPTER NINE

Rents and the Securities Markets

How speculative rent checks production may be seen not only in the valuable land withheld from use, but in the paroxysms of industrial depression which, originating in the speculative advance in land values, propagate themselves over the whole civilized world, everywhere paralyzing industry, and causing more waste and probably more suffering than would a general war. Taxation which would take rent for public uses would prevent all this...

— Henry George

This is what we have been leading up to: growth of the economy leads to growth in rents, just as Henry George said, but now pushing up the value of rent-backed securities, which then drags up the value of other securities, creating pressures that have a strong tendency to turn into a self-sustaining bubble. But such bubbles have to burst, though the timing cannot be predicted. As a result, the economy faces increased uncertainty and instability.



Let us again consider an "overall portfolio," that is, an aggregate of portfolios, under stable and normal conditions, where holdings have been "optimized" in the light of risk and price/earnings (P/E) ratios, and investors are satisfied. All stocks and bonds that have been issued legitimately are held in portfolios voluntarily;

no one is holding any securities because they were unable to find a market for them. Short-term securities, long-term securities, and rent-based securities are all settled in comfortably at the conclusion of a "period"—say, at the year's end, when audits are taken everywhere.

In these circumstances, consider the impact of growth from one period to the next. To keep the story simple, let's assume that growth in the real side of the economy is "balanced": all sectors expand in the same proportions, C, I, and G all expand together, and wages and prices are steady, so that initially, at least, everything remains in equilibrium. For simplicity, we can assume that profits are generally saved (except for some luxury consumption), while wages are chiefly consumed—workers also save, and therefore have wealth holdings. Profits will be paid out as dividends and interest. Provisionally, we will adopt the convention that rents, held in higher-income portfolios, are spent on luxury consumption. Savings and investment will be equal.

To examine the impact of this growth on the financial side, we have to analyze two cases:

First, balanced financial expansion—meaning that the new growth is financed with the same ratio of debt to equity as in the previous period, so that equity prices will be the same and interest rates will be unaffected, ensuring that bond prices will hold steady. Firms pay out all profits in interest and dividends, and then borrow back the funds by issuing new bonds and new stock certificates. Quantities of stocks and bonds will thus increase in

exact proportion to the increases in real investment, but the ratio of stocks to bonds will not be affected. The P/E ratios of both stocks and bonds will also be unaffected.

This might seem a safe and desirable position, a financial equilibrium built on a real equilibrium, but as any reader of Henry George will know, it is not stable. Growth increases rents, and in equilibrium the portfolios all contain, or could contain, real estate—based securities, whose P/E ratios will have fallen. The portfolio balances will be upset; if they were in equilibrium before, they will have to be adjusted, since a large class of securities now has lower P/E ratios but (based on the premises of this model) unchanged risk. Holding more of these securities will be called for; portfolios can therefore be expected to sell off some of their other holdings to buy more rent-based securities. Also, such securities will be worth more as collateral; likewise, such securities held by banks will be worth more, thus increasing bank capital and permitting more loans. As a result, money for asset buying and selling will be increased.

But "adjusting portfolios" means selling off shares, and this will tend to depress share prices. This may be offset in part by new money coming into the market, but firms that do not want to see their shares fall will adopt strategies to prevent this, as we shall see.

Second, *bonds and self-financing*—meaning that firms would continue to issue debt as before, but instead of paying out dividends they would finance investment by retained earnings: no new shares would be issued, but profits would go directly to

investment, in the expectation that existing shares would rise in price ("growth stocks"). Assuming that profits are the "right amount," the increase in share value would mean that the overall debt/equity (D/E) ratio would remain unchanged. But the situation is not so simple; the existing shares would initially be unaffected, although they would constitute a fixed set of claims to a larger productive capacity—but still priced as before. This is equivalent to a lower P/E ratio. An appropriate rise in share value will mean that equity rises to keep pace with the new bonds; but for shares to rise in price to reflect the fact that they represent claims to increased productive capacity there will have to be market pressures, which means that portfolios will have to be adjusted.

Again, the rent-based securities have experienced a rise in the underlying real earnings, so their P/E ratios are down. In short, this case is also an unstable position: both equity prices and rent-based security prices have to rise. But the equity is a claim to a larger or improved *real* asset, which should (eventually) result in higher earnings, assuming the expansion/improvements were wise; the real estate security is a claim to exactly the same real asset as before, although it is earning more now, right now. Portfolio managers will typically look carefully at real investments, especially if they don't know the business well, but when they see rents going up, if the location is good, they are likely to consider it a good sign. It is likely to be easier for real estate securities to rise than for growth stocks. Portfolios will have to sell off securities or borrow against them to buy the securities with lower P/E ratios. This may cause turmoil. Banks,

however, will eventually find themselves holding more-valuable securities, so they will be able to make more loans.

Could it be that these adjustments can be made quickly, moving to a new equilibrium? It is possible (unlikely, but possible) that the increases in productive capacity could be foreseen with accuracy—after all, the investment plans have been formed carefully, well in advance—so that a rational expectation could be formed of what the increased value of the claims to the new capacity should be. If everyone held the same expectations, then very little would be required in the way of market pressures to drive up share prices by the right amount. This is a fantasy, of course: everyone does not hold the same expectations, and there is no guarantee that the expectations will be correct. We wouldn't invest in it if we didn't expect the new technology to work—but it very often doesn't. Even if it did, our forecasts of how profitable it will be may prove far from accurate. Realistically, the adjustments cannot be made smoothly, and the fact that the rise in rent-based securities will increase both the value of collateral and the value of bank capital will threaten to set off a "positive feedback" cycle of asset price increases followed by bank lending expansion, followed by more asset price increases.

The point is, starting from an "equilibrium" balance between steady growth in the real economy and portfolio equilibrium on the financial side, a process of adjustment *has to take place* that will tend to generate destabilizing movements. The system cannot remain in equilibrium.

Look back at savings and investment: savings are made, investors issue stocks and shares—and bonds—to obtain the

savings, and they then spend the saved funds on capital goods. So real investment—expansion of productive capacity—is matched by an increase in the amount of securities outstanding. There need be no rise in the prices of stocks and shares. But when real estate values go up, this is a pure asset price increase: the amount of land and the number of locations has not gone up. As a result, a rise in real estate values will tend to set off adjustments in portfolios, as well as encouraging an increase in bank lending for dealing in asset markets. This can easily develop into an asset-pricing boom.³⁷

In fact, we have *two* destabilizing processes here. The first is the interaction between the real and financial sides of the economy arising from the effects of growth in generating rents, which in turn impact financial markets, with feedback effects on the real side. The second is the way the effects on financial markets can get swept up in a potentially runaway upward spiral—that is, a rise in asset prices leads to bank and monetary expansion, which leads to a further rise in asset prices. This can also turn down: a fall in asset prices tends to lead to bank and monetary contraction, bringing a further fall in asset prices. Each of these interaction processes strongly tends to be destabilizing. Looking more closely, for example, at what happens to the D/E ratios, if equity rises, will not debt rise also, to keep the D/E ratio constant? And will the combination drive Q (the valuation ratio) up?

First, the growth of output and real capital leads to a rise in rents, increasing the earnings of rent-backed securities, thus

³⁷ See Kindleberger (); Minsky (1986); Semmler et al.

lowering their P/E ratios. This will lead to a rise in the demand for such securities, causing portfolios to alter their compositions by selling off other securities in order to bid for rent-backed securities. The securities being sold off will tend to drift down in price, unless otherwise supported.

Issuers of other securities will want to keep their prices up, to keep them competitive with real estate securities. (If a company's stock prices are down, raising money through new issues will dilute earnings to a greater extent). They will develop strategies to support their stocks, notably "buyback" purchases of their own stock.

This provides upward pressure in the markets for securities, which will tend to lower the D/E ratio—which would tend to encourage more borrowing, but the question here does not concern additional borrowing for building additional capacity. The issue is financing the purchase of securities. The rise in asset prices also has a dual effect on the banking system. On the one hand, it increases the value of potential collateral; on the other, it increases the value of securities in the banks' own portfolios. Both of these effects tend to allow banks to increase their lending.

These additional loans amount to an increase in the money supply for asset buying and selling. A portfolio manager takes out a loan and buys. The seller then uses the proceeds to buy further assets, but keeps a fraction of the funds for liquidity or precautionary purposes. In turn, the recipient of the funds passed on takes out a liquidity and precautionary fraction, and buys still further, and so on. This becomes a convergent series: if the

liquidity/precautionary fraction is q, then the total spending will be the initial set of loans, multiplied by 1/(1-q).

This asset price money multiplier, analogous to the (in) famous alleged money multiplier that supposedly operated in the real economy, will then engender a sequence of transactions that will drive up asset prices by more than the initial impact. So let's look at how an asset-price bubble develops.

At the outset, real growth leads to a rise in rents, which leads to an important sequence:

- a rise in rent-backed asset prices (lowering the D/E ratio), followed by buybacks to bring up the prices of other assets;
- collateral, along with bank capital, increases in value;
- the (apparently justified) expectation of rising prices encourages plans to make further purchases;
- more loans are taken out (the D/E ratio is down, so more debt is permissible);
- spending from the new loans drives up asset prices further (restoring the D/E ratio);
- initial spending leads to respending from the receipts, drives up asset prices still further (via the asset price multiplier), and again lowers the D/E ratio;
- the value of collateral and bank capital rises again, permitting more loans and strengthening expectations of rising prices;
- leading to yet another round of increases in asset prices, including more buybacks.

This spiral could be fixed in diameter, presumably depending largely on the D/E ratio, or it could expand (exploding) or contract (converging) depending on a number of variables, not all of which can be explored here. But it will certainly contract if perceived risk rises rapidly as asset prices increase—banks will not be willing to lend as much as their capital permits. If risk rises less rapidly than bank capital, they will lend to the full extent permitted (or even beyond), leading to a strong expansion, but sooner or later risk will tend to increase, and lending will be cut back.

Of course, there are other things that drive up rents and real estate values—they should be included too. The impact of rising rents on security prices seems to be an unavoidable factor driving up real estate assets. Any such perpetual pressure is going to affect asset markets in ways that are likely to encourage speculation. Let's consider this in more detail.

Real-Financial Instability

At the outset of this process, we assume the real economy is experiencing balanced growth with steady wages, prices, and profits (but inequality is growing over time). Productivity is growing, so the rise in rents need not lower profits or wages, unless rents rise more than proportionally. We also provisionally assume given and unchanging monetary policies. On the financial side, the new real capital is balanced by new issues, with a given D/E ratio; hence, the rate of profit is steady. With rising rents, the prices of real estate assets are also rising, leading, as described, to

a general rise in financial assets, driven by the asset price cycle. So real-side profits as a ratio to overall financial claims will fall. The real surplus will not be enough to provide a satisfactory rate of return on financial assets, creating pressure to drive wages down and force productivity up. This, combined with using part of profits in buybacks rather than in real investment, will tend to further weaken aggregate demand—already weakened by rising inequality—worsening the pressures.

This sets the stage for a terrible crisis: on the one hand, the growth-rent-portfolio-adjustment process tends to drive up financial assets, increasing inequality and leverage and indebtedness while raising the valuation ratio, yet at the same time creating pressure to push down wages and reduce employment through labor-saving innovation. On the other hand, higher inequality, lower wages, and higher debt increase financial fragility: the ratio of overindebted agents rises, leading to curtailed spending and, eventually, to deleveraging, so that a debt-deflation cycle may form—all of which tends to weaken aggregate demand. The feedback effects will include higher overall saving and therefore weaker markets, higher risk premiums, and bigger spreads, raising costs to households and businesses, leading to weaker household, business, and investment spending and thus a more stagnant economy.³⁸ As the real and financial sides of the

³⁸ This implies a valuation ratio above unity, Q > 1, which in conventional theory should lead to higher investment. But that theory was based on the idea that Q > 1 reflected higher expectation of profits in the future—raising equity prices—whereas in the circumstances described here the higher valuation ratio reflects the working of destabilizing processes. If Q > 1 did lead to higher investment, this would tend to keep Q from rising further, or at least

economy pull further and further apart, both the economic links and the social fabric will begin to rupture—with consequences that cannot easily be predicted.

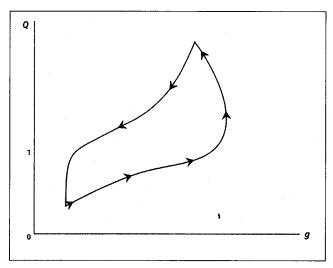


Figure 9.1. Growth and the Valuation Ratio

These steps in the cycle can be charted on a phase diagram (Figure 9.1), plotting Q, non-derivative financial assets over aggregate real capital, on the vertical axis and the growth rate of output, g, on the horizontal. A rough account can be given as follows (there can be variations in several of these steps, but they

not as fast. It would be quite possible to imagine real investment tracking the changes in Q, lagging behind by a period. However, there are other important influences on real investment besides Q.

all lead in the same direction). Starting below 1, as g rises, rents will rise, setting off a financial expansion, so that Q will rise also, from left to right, slowly at first, then faster, and finally much faster, rising vertically—at which time it will overshoot the vertical and turn back to the left, as the impact of the rapidly expanding financial system on the real economy turns negative, reducing growth. That is, the high level of asset prices—and the need for buybacks-will come to affect investment in the real economy negatively, by increasing the burden of debt and curtailing spending, so that the growth rate stops rising and begins to decrease. At this point portfolios will begin to unload, and as asset prices start to fall, selling will rapidly increase. This then leads to a fall in Q, at first slow but then becoming a vertical drop as deleveraging kicks in. Deleveraging will drive Q down below unity, dragging growth down at the same time; at the point where deleveraging is complete, the real economy should begin to recover (although this cannot be guaranteed), and both g and Q will begin to rise again. Recovery is not automatic or assured; the economy could stagnate, unless a policy stimulus is provided.

This picture could be made more precise with specific mathematical assumptions, allowing for the derivation of a specific cyclical pattern, and that might be useful at a later stage. But for now the important point is that every one of these steps is plausible, and the whole picture is realistic, although abstract. There do not seem to be any stabilizing features to offset this plausible drift towards a spiraling vortex. The financial system is fragile, and the fragility increases over time, until it breaks apart!

Policy Implications

Recent evidence and experience shows that while monetary policy alone might perhaps be able to mitigate the downswing somewhat—unless the collapse is too extreme—it will *not* be able to prevent either the upswing or the downturn. Nor will it alone be able to generate a low-level upturn. Fiscal policy and regulation are also needed. As they used to say, "you can't push on a string."

As to fiscal policy, an Employer of Last Resort policy should be considered.

An ELR policy fits well with important and widely accepted moral beliefs. It fulfils the work ethic, while providing opportunities both for work and for training to everyone. And it helps to ensure that no one who is able-bodied and competent need go without the basic necessities of life. It keeps the abilities of the workforce active and up-to-date, so our human resources do not go to waste.

There are several variations of an ELR proposal. In some the government hires the workers itself, in others the government provides subsidies to firms to hire the workers. The proposals also vary in how workers are paid. In some all workers are paid the same minimum wage, regardless of the kind of work they are performing. In others the wage rate depends upon the kind of work being done and is set at the going market rate. But any kind of ELR makes the opportunity for employment universally available. It is not that everyone has "a right to a job"; if someone doesn't do the work they can be fired. If they are not qualified and are unable to learn or refuse to learn, no one has

to hire them. But the state has the duty to provide an opportunity for a job to everyone. Nor is this a new idea in the US. It was a component of Roosevelt's economic bill of rights, and it appears in the Universal Declaration of Human Rights, to which the United States is a signatory. By making the opportunity for employment an entitlement, this right becomes effective. It is a meeting of mutual responsibilities between the society and the individual—the former offers a job, the latter takes on the responsibilities of work. (Gutmann, 1998) People are assured of the self-sufficiency and self-reliance that come with the dignity of a job. (Solow, 1998)

Now that we turn to questions of policy. when we come to taxation where better to start than with taxation of rents (the Henry George Theorem)?

The tax upon land values is... the most just and equal of all taxes. It falls only upon those who receive from society a peculiar and valuable benefit, and upon them in proportion to the benefit they receive. It is the taking by the community for the use of the community of that value which is the creation of the community. It is the application of the common property to common uses. When all rent is taken by taxation for the needs of the community, then will the equality ordained by nature be attained. No citizen will have an advantage over any other citizen save as is given by his industry, skill and intelligence; and each will obtain what he fairly earns. P. 353

The "single tax" policy may not raise enough revenue to cover all of today's government expenses (Nell 2016), but it will certainly go a long way toward doing so. This is a tax that virtually all economists agree is non-distorting, and it falls on those who can afford it. Is it confiscatory? That depends on its specific design, but yes, to a certain extent it should be—one objective is to eliminate speculation on land values. To do this, it is necessary to eliminate the possibility of gain from holding land. A major tax on rents is surely a step in the right direction for controlling and preventing the instability we have described and analyzed here.

But as we have seen, rents and real estate are now only part of the picture. It is no longer land and rents that stand in the way of progress but the whole financial system—the servant has become the master. A very good first step would be a "Tobin tax," a tax on trading, to diminish speculation—as Henry George often proposed. A stiff tax would be desirable and would provide significant revenue. It could be made more effective by reducing or voiding the tax if the securities have been held for a long enough period of time. To counteract other financial pressures and dangers will require defining other new taxes, designed to reduce speculation, especially on derivatives, but also new regulations, as well as subsidies and forms of insurance, to ensure that credit will be available to risky start-ups and proposed expansions. Promising innovation should be encouraged, and the public, which benefits from externalities should bear some of the risk. This may require designing new financial institutions, with a large public interest, and redefining property rights and credit systems. A huge job lies ahead!

As to money itself, a case can be made that, in the digital age, it no longer makes sense to combine the medium of exchange—(essentially credit)—with the liquid store of value. Credit can be created very cheaply and, with instantaneous information, can be continually vetted: it could easily be made widely and inexpensively available. Current institutional arrangements basically serve the purpose of keeping credit and money scarce, yielding a monopoly profit. The store of value—being an asset—has to be earned, so by nature it will be "scarce." But the medium of exchange does not have to be inherently valuable, and it will benefit the whole community if it is not scarce.

International Implications

Growth rates differ between countries, and the extent to which growth drives up rents also differs between countries. Hence, the pressures that changing rents and real estate values exert on the various financial sectors of the different nations will vary, and we can expect to see different patterns of boom and bust among them.

This has consequences on two levels. At the micro level, for example, it can upset cost calculations and such things as insurance plans that cover activities that cross borders. At the macro level, it can lead to movements in relative currency values, sudden appreciations or collapses, which need not reflect in any way changes in the real economy of the various countries (although the financial changes may bring about changes in the

real economy, too). But changes in currency values can have such major consequences that it will be necessary to hedge against them.

Provisional Conclusions

In the craft economy, rents, resulting in real estate values, were a straightforward transfer from the working class, broadly considered, to landlords, but because of similar propensities to consume and other reasons this transfer did not greatly affect aggregate demand—although, over time, it did seem to significantly change the income distribution. Rents did tend to lead to rising inequality, and eventually to divergent patterns of class behavior. Much the same can be said in the case of mass production, at least in the early stages, but once rents and real estate became securitized, they came to play a truly major, and dangerously destabilizing, role in the interaction between the real and financial sides of a growing economy.

Who would have thought that Ricardian rents, reconceptualized along lines suggested by George, Marx, and Sraffa, would provide a key to understanding the processes that are chronically destabilizing the modern global financial system?