A Summary/Explanation of John Maynard Keynes' General Theory

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With the recent economic crisis, there has been much talk of John Maynard Keynes and his economics. Keynes, the story goes, figured out the causes of the Great Depression and in doing so revolutionized the field of economics. Some conservative economists have forgotten or ignored his work, but society as a whole remembers his basic discovery: you get out of downturns by spending money.

Reading Keynes' *General Theory of Employment, Money, and Interest* then is a sobering experience. For the book is, indeed, truly brilliant, a definite work of genius. It's the best book on the economy I've ever read; indeed, it's one of the best books I've ever read. Everyone has seen bits and pieces of wit quoted from the book, but Keynes weaves them into a beautiful tapestry that explains the whole of the modern economy. And yet, the book is a necessary now as it was then: economics has not learned a single one of his lessons.

This is a depressing thought, especially since Keynes throughout seems optimistic that once he's explained everything so clearly, economics will be back on the right track. But politics has triumphed over logic and we've forgotten all the crucial things he explained.

Perhaps this is why it has a reputation for being a very tough book — so difficult that even economists can't follow it. But I think this is entirely due to a difference in philosophies: the *General Theory* was the first book on economics I could really understand. And that's because, unlike most economics books, it *makes sense* — the theories it proposes comport with the real world, instead of taking place in some fantasyland of perfect competition.

Still, the book isn't exactly a smooth read. Keynes uses some archaic language and is trying to communicate some complicated ideas. There's no math, but there's still a lot to chew on. So I thought I'd try my best at an explanation/summary. It's a long book, so if you're in a hurry, you might prefer my shorter summary of the fundamental ideas.

The General Theory of Employment, Interest and Money [full text]

Book I: Introduction

1: This chapter cheekily consists of a single paragraph. It says the book is an attempt to show that classical economics (basically that summarized by Alfred Marshall, including Ricardo, Mill, Edgeworth, and Pigou) addresses only a special case of the economy, while this book outlines a more general theory.

2: The classical theory of employment says the labor market is just another market: people get paid what they make and people only work if they get paid enough to make it worth it. Since it seemed unlikely that society had run out of money-making jobs, it was assumed that unemployment was caused either by people not knowing where the jobs were (frictional unemployment) or insisting on being paid more than they could make (voluntary unemployment).

It seems difficult to explain the high unemployment of the Great Depression this way, but economists didn't see how it could be otherwise. So their solution was simple: to end unemployment, people just needed to be willing to work for less.

What this amounts to is Say's Law: supply creates its own demand. If there are people around willing to work, jobs will spring up to make use of them. If people are unemployed, it must be because they're refusing to take the job.

There are two obvious problems with this. First, people may refuse to work for a lower nominal wage when they'll accept working for a lower real (i.e. inflation-adjusted) wage. That is, if management decides to pay people $4 an hour instead of $5, people might go on strike, but nobody ever goes on strike demanding a raise because the cost of milk has gone up. (So inflation might actually be a better solution than wage cuts.)

Second, if wages go down, then the cost of making things goes down, which means that prices go down, which means that in real terms wages end up staying about the same.

Keynes has found a crack in the classical theory. The first half of this book will be dedicated to prying it open. The second half is filling it in.

3: When people get money, they spend some of it — but not all of it. And businesses choose whether to hire people based on how much they expect to sell. But how much they sell is exactly dependent on how much people spend.

So it's how much people spend that determines employment. But this is totally consistent with there being unemployment — if people aren't buying, businesses aren't selling, so they fire people (who then buy less).

Indeed, this problem will be worse in richer countries, since the more people make the less of it they need to spend and thus less money is used to hire people. (The details of how the remainder gets invested has to do with interest and will be addressed later.)

Since this seems so basic, Keynes is puzzled at how it's been so ignored:

> The completeness of the [classical] victory is something of a curiosity and a mystery. It must have been due to a complex of suitabilities in the doctrine to the environment into which it was projected. That it reached conclusions quite different from what the ordinary uninstructed person would expect, added, I suppose, to its intellectual prestige. That its teaching, translated into practice, was austere and often unpalatable, lent it virtue. That it was adapted to carry a vast and consistent logical superstructure, gave it beauty. That it could explain much social injustice and apparent cruelty as an inevitable incident in the scheme of progress, and the attempt to change such things as likely on the whole to do more harm than good, commended it to authority. That it afforded a measure of justification to the free activities of the individual capitalist, attracted to it the support of the dominant social force behind authority.
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> But although the doctrine itself has remained unquestioned by orthodox economists up to a late date, its signal failure for purposes of scientific prediction has greatly impaired, in the course of time, the prestige of its practitioners. For professional economists, after Malthus, were apparently unmoved by the lack of correspondence between the results of their theory and the facts of observation;—a discrepancy which the ordinary man has not failed to observe, with the result of his growing unwillingness to accord to economists that measure of respect which he gives to other groups of scientists whose theoretical results are confirmed by observation when they are applied to the facts.
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> The celebrated optimism of traditional economic theory, which has led to economists being looked upon as Candides, who, having left this world for the cultivation of their gardens, teach that all is for the best in the best of all possible worlds provided we will let well alone, is also to be traced, I think, to their having neglected to take account of the drag on prosperity which can be exercised by an insufficiency of effective demand. For there would obviously be a natural tendency towards the optimum employment of resources in a society which was functioning after the manner of the classical postulates. It may well be that the classical theory represents the way in which we should like our economy to behave. But to assume that it actually does so is to assume our difficulties away.

Book II: Definitions and Ideas

4: The next three chapters aren't so much part of the argument as attempts to clear up some basic concepts and objections.

We start by observing it's impossible to measure things like "net output" or "price level" accurately — you're always trying to compare qualitatively different things and run into no end of difficulties.

> To say that net output to-day is greater, but the price-level lower, than ten years ago or one year ago, is a proposition of a similar character to the statement that Queen Victoria was a better queen but not a happier woman than Queen Elizabeth — a proposition not without meaning and not without interest, but unsuitable as material for the differential calculus. Our precision will be a mock precision if we try to use such partly vague and non-quantitative concepts as the basis of a quantitative analysis.

We can't measure net output, but we can count the number of people employed. In general, if more people are working then more stuff is getting made, although this obviously isn't a perfect connection. But employment is kind of a more interesting number and it will have to do.

So we'll use only two types of counts: those of actual currency (money-values) and those of people (employment). And while workers are obviously not all equivalent the way dollar bills are, we can take an hour of unskilled labor as our standard and count people with special skills as multiples of an hour of unskilled labor. Thus if someone makes twice as much per hour as an unskilled laborer, we'll count each hour they work as two unskilled hours. We'll call these hours labor-units and we'll call the money that gets paid for them wage-units. Thus the total amount spent on wages equals the wage-unit times the number of labor-units.

[AS: Obviously this accounting fiction isn't particularly realistic since, in reality, the multiples people get paid change as the wage-unit goes up. Let's say I'm a lawyer who makes $300 an hour and minimum wage is $5 an hour. If the minimum wage is doubled to $10 an hour, I'm not suddenly going to get paid $600 an hour, even though my relative productivity hasn't changed. Keynes seems to suggest this can be modeled as "a rapid liability to change in the supply of labor;" I guess that's possible.]

And as for some people being better at some jobs than others, we just pretend that's an artifact of the equipment they use. In other words, as employment goes up and we run out of skilled truck-builders, we say the truck factory is getting less efficient. (If, indeed, there's nobody left who can build the trucks, we say the truck factory's efficiency has gone to zero.)

As problematic as this is, Keynes points out that it's a lot more realistic than the classical theory, which just seems to magically assume everyone is paid in proportion to their productivity. By subsuming more efficient people with their machinery, Keynes says he better deals with the usual case, which is that the increase in efficiency goes to their boss (who owns the machines). And when more efficient workers actually are paid more, he takes that into account as noted above.

5: Businesses make production decisions not based on sales or anything solidly measurable, but on personal opinions: expectations. These can be either short-term expectations (the barrista will be given the day off if management doesn't expect any customers) or long-term expectations (Starbucks won't open up a new story if they expect coffee consumption to start going down).

Either way, new expectations don't always take effect immediately (if you just opened a new store and then decide it wasn't worth it, you don't immediately close it). And the process of adjusting can have some odd effects: if you need to quickly ramp up production, you might keep hiring until you have more employees than you really need in the long-run. You use the extra people to get you up to speed, then you lay them off. The result is "a gradual crescendo in the level of employment, rising to a peak and then declining to the new long-period level." This can happen even if you don't expect to sell more things, but just a slightly different thing: you "overhire" to get up to speed on the new model, but then fire people until you're back down to your previous level.

> An uninterrupted process of transition, such as the above, to a new long-period position can be complicated in detail. But the actual course of events is more complicated still. For the state of expectation is liable to constant change, a new expectation being superimposed long before the previous change has fully worked itself out; so that the economic machine is occupied at any given time with a number of overlapping activities, the existence of which is due to various past states of expectation.

That said, today's decisions are based on the conditions of today and expectations about tomorrow — not on past expectations or the conditions of the past. And, in practice, people don't calculate their expectations from scratch each morning. They keep doing what they did yesterday unless they have a reason to change. Long-term expectations can't be easily checked, so when they do change, they often change suddenly. Thus they can't even be approximately estimated.

6: When you're producing something, there are a couple of things involved. One is the amount of capital and equipment and so on you use up, which we'll call the *user cost*. Another is the amount you pay to employees and other companies and so on, the *factor cost*. These two combined are the *prime cost*. The *entrepreneur's income* is the value of his output less the prime cost — that's what he tries to maximize.

Entrepreneurs can also lose capital due to unavoidable events — a market crash, an earthquake, the passage of time. These are *supplementary costs*. In addition, there are the unavoidable and unforeseen, which we'll call *windfall loss*. We'll define *net income* as just income minus supplementary costs, since people can't really be blamed for the unforeseen events.

The *total income* of the community is just the amount sold minus the user cost. And *total consumption* is just all the stuff that isn't sold to other businesses. [AS: I've been saying businesses because I find it clearer, but Keynes actually says entrepreneurs. I think I also use this kind of interchangeably with capitalists. Sorry.] *Saving*, of course, is just income minus consumption.

Investment is just the amount of current output that isn't consumed. But since saving is just the amount of income that isn't consumed and income is just output (output is always output to someone), savings necessarily equals investment.

[AS: This seems to be a little controversial (and, indeed, tends to be a bit confusing), but let's just accept it as a quirky definition, not any kind of factual claim.]

7: Keynes spends the chapter defending his decision to define savings as equal to investment. [AS: I think he only ends up in making things more confusing, but maybe I'm missing something.]

Book III: The Propensity to Consume

8: We return now to our main argument. Earlier we said people spend the money they get, but not all of it. What changes how much they spend? Not much, Keynes argues. (Maybe large changes in interest rates, but those are rare.)

"The fundamental psychological law," he says, is that, on average, the amount people spend increases as the amount they make increases, but not as quickly. (If you make $50K a year, you might spend $40K of it. If you make $1M, you might spend $500K of it. Obviously a lot more in absolute terms, but far less proportionately.) And this is especially true in the short-term — people's habits take time to catch up with their incomes.

But this means that as national income increases, a smaller proportion of it will get spent, so more of it will have to be invested. And when national income falls, a larger proportion gets spent as people dip into savings and governments go into deficit. This is fortunate, because lower consumption also means lower income (when people buy less, businesses make less, so they pay you less). If consumption fell at the same rate as income, we'd fall into a downward spiral: lower consumption would mean lower income, which in turn would mean lower consumption, and soon we'd all be out of a job.

"Consumption — to repeat the obvious — is the sole end and object of all economic activity." What are we making things for if not to use them? People can either be put to work making things for people to use today or making things for people to use tomorrow, but that tomorrow "cannot be pushed indefinitely into the future." After all, an hour of labor cannot be "saved" and put into a bank for a rainy day! If people are out of work now, the time they're wasting will never be recovered. [AS: This is truly brilliant. It's hard to convey the excitement I felt when reading this.] Saving money for the future is not the same as making things for the future — it's only the latter that's useful.

But it's not easy to think of useful things to make for the future. Eventually, we're forced to make things for today. But as our incomes increase, we spend less on things today. And there's our trap: if we don't make things for tomorrow and we don't make things for today, people are forced out of work since there's nothing for them to make.

Another way to look at it is the more stuff we make for tomorrow, the less stuff we need to make tomorrow. And then what do we do? At some point we just need to consume more stuff.

People seem to recognize this when it comes to government making stuff. '"What will you do," it is asked, "when you have built all the houses and roads and town halls and electric grids and water supplies and so forth which the stationary population of the future can be expected to require?"' But the same logic applies to private investment. What will we do when we've built all the factories the people of the future can be expected to use?

Money can't survive on its own. If we don't ever spend it, it becomes worthless.

9: How does raising interest rates affect consumption? We've said it doesn't have much effect on people's *propensity* to consume, but a higher interest rate means it's more expensive to borrow money, which means companies invest less, which means incomes are reduced. (Since savings=investment, incomes are reduced such that the amount left over for savings equals the lesser amount now invested. [AS: This is the first use of that suspicious definition.]) Most people think that as the interest rate goes up, spending goes down and saving goes up, but this shows that saving and spending both decrease.

> The more virtuous we are, the more determinedly thrifty, the more obstinately orthodox in our national and personal finance, the more our incomes will have to fall when interest rises relatively to the marginal efficiency of capital. Obstinacy can bring only a penalty and no reward. For the result is inevitable.
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> Thus, after all, the actual rates of aggregate saving and spending do not depend on Precaution, Foresight, Calculation, Improvement, Independence, Enterprise, Pride or Avarice. Virtue and vice play no part. It all depends on how far the rate of interest is favourable to investment, after taking account of the marginal efficiency of capital. No, this is an overstatement. If the rate of interest were so governed as to maintain continuous full employment, Virtue would resume her sway; — the rate of capital accumulation would depend on the weakness of the propensity to consume. Thus, once again, the tribute that classical economists pay to her is due to their concealed assumption that the rate of interest always is so governed.

10: We've established that an increase in investment leads to an increase in income. But how much? Even if you hire people for investment, the money those people get paid in turn gets spent on additional consumption, increasing employment indirectly as well. (Of course, this is only true until we hit full employment — then prices just inflate.)

There must be an investment multiplier — call it k — such that an extra \$1 invested leads to \$$k$ increase in income. And there must be a similar employment multiplier (*k'*) where for each person hired for a job, *k'* people get hired in total.

But spending can have negative effects as well. [AS: Keynes apparently has government investment — i.e. stimulus — in mind here, although he never really comes out and says it.] If the interest rate goes up, that will slow investment. If people lose "confidence" because of all the spending, they may decide to hold onto their money. And some of the money can "leak" out to other countries. But this just weakens the multiplier, it doesn't eliminate it.

Recall that the classical theory said people needed to be paid enough to compensate them for their distaste for working. But if you've been unemployed long enough, you might actually *want* to work. If that's true, even wasting money is a good thing. "Pyramid-building, earthquakes, even wars may serve to increase wealth, if the education of our statesmen on the principles of the classical economics stands in the way of anything better."

> It is curious how common sense, wriggling for an escape from absurd conclusions, has been apt to reach a preference for wholly "wasteful" forms of loan expenditure rather than for *partly* wasteful forms, which, because they are not *wholly* wasteful, tend to be judged on strict "business" principles. For example, unemployment relief financed by loans is more readily accepted than the financing of improvements at a charge below the current rate of interest; whilst the form of digging holes in the ground known as gold-mining, which not only adds nothing whatever to the real wealth of the world but involves the disutility of labour, is the most acceptable of all solutions.

(Recall that at this time the world was still on the gold standard and thus mining for gold was equivalent to printing new money.)

> If the Treasury were to fill old bottles with banknotes, bury them at suitable depths in disused coalmines which are then filled up to the surface with town rubbish, and leave it to private enterprise on well-tried principles of laissez-faire to dig the notes up again (the right to do so being obtained, of course, by tendering for leases of the note-bearing territory), there need be no more unemployment and, with the help of the repercussions, the real income of the community, and its capital wealth also, would probably become a good deal greater

> than it actually is. It would, indeed, be more sensible to build houses and the like; but if there are political and practical difficulties in the way of this, the above would be better than nothing.
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> The analogy between this expedient and the goldmines of the real world is complete. At periods when gold is available at suitable depths experience shows that the real wealth of the world increases rapidly; and when but little of it is so available, our wealth suffers stagnation or decline. Thus gold-mines are of the greatest value and importance to civilisation. just as wars have been the only form of large-scale loan expenditure which statesmen have thought justifiable, so gold-mining is the only pretext for digging holes in the ground which has recommended itself to bankers as sound finance; and each of these activities has played its part in progress-failing something better. To mention a detail, the tendency in slumps for the price of gold to rise in terms of labour and materials aids eventual recovery, because it increases the depth at which gold-digging pays and lowers the minimum grade of ore which is payable.

(Keynes goes on to contrast gold-mining with building new houses which, being actually useful, has the side effect of decreasing the rent of old ones.)

> Ancient Egypt was doubly fortunate, and doubtless owed to this its fabled wealth, in that it possessed two activities, namely, pyramid-building as well as the search for the precious metals, the fruits of which, since they could not serve the needs of man by being consumed, did not stale with abundance. The Middle Ages built cathedrals and sang dirges. Two pyramids, two masses for the dead, are twice as good as one; but not so two railways from London to York. Thus **we are so sensible, have schooled ourselves to so close a semblance of prudent financiers, taking careful thought before we add to the "financial" burdens of posterity by building them houses to live in**, that we have no such easy escape from the sufferings of unemployment. We have to accept them as an inevitable result of applying to the conduct of the State the maxims which are best calculated to "enrich" an individual by enabling him to pile up claims to enjoyment which he does not intend to exercise at any definite time. [emphasis added]

Book IV: The Inducement to Invest

11: Imagine you get a new widget-making machine. There's the value of the widgets you expect [AS: there's that word again] it to produce, less the cost of its inputs and maintenance. Call that the *yield*. Then there's the cost of creating one more new widget-making machine. Call that the *supply cost*. The *marginal* *efficiency of capital* is the yield less the supply cost. [AS: Marginal efficiency of capital comes up a lot, so we'll save time by calling it "your expected return."]

Of course there's lots of different things you can invest in; we're assuming that you do whatever maximizes your expected return. And obviously you'll keep borrowing money and investing it until your expected return reaches the market rate of interest.

It's through the expected yield that changes in the value of money affect output. If people expect inflation, then expected yields go up and people invest more. Deflation does the opposite.

(Tyler Cowen, in his critical comments on the *General Theory* is struck by a throw-off clause in this chapter: Keynes says that it's unlikely interest rates will go up if people expect inflation, since if people expected inflation prices would have gone up already. He writes: "This simple yet powerful point doesn't get the attention it ought to. Storage costs for goods and services may eliminate this paradox but perhaps not completely. It is striking how few economists have thought this problem through.")

12: As we noted before, capitalists invest if they expect future sales to be high. But how do they know what future sales will be? "If we speak frankly, we have to admit that our basis of knowledge for estimating the yield ten years hence of a railway, a copper mine, a textile factory, the goodwill of a patent medicine, an Atlantic liner, a building in the City of London amounts to little and sometimes to nothing; or even five years hence."

In olden days, what happened was that rough-riding men of business thought taking risks was manly and invested their money as a way of life. They got it in their head that they were going to build a railroad, and by Jove they did. They didn't sit down and calculate whether they could have made more money buying bonds instead. Bonds are for wusses.

But now people invest their money in the stock market, which revises its profitability estimates minute-by-minute. "It is as though a farmer, having tapped his barometer after breakfast, could decide to remove his capital from the farming business between 10 and 11 in the morning and reconsider whether he should return to it later in the week." And since much new investment money is raised on the stock market, it's these estimates which influence new investment.

And the stock market depends on "what is, in truth, a *convention*" — namely that the current valuation of a company is an accurate assessment of its expected yield — that stock prices will only change if there's new evidence suggesting the yield will be different. Thus, even though we actually have no clue what the yield might be, we all agree that the current stock price is our best guess and instead of worrying about the fact we actually have no clue what the "right" stock price is whatsoever, we only have to worry about those things which will affect it (the stock price).

So stock traders don't sit down and try to calculate the long-term expected yield; they try to guess the short-term change in the stock price and trade base on that.

> This is the inevitable result of investment markets organised with a view to so-called "liquidity". Of the maxims of orthodox finance none, surely, is more anti-social than the fetish of liquidity, the doctrine that it is a positive virtue on the part of investment institutions to concentrate their resources upon the holding of "liquid" securities. It forgets that there is no such thing as liquidity of investment for the community as a whole. The social object of skilled investment should be to defeat the dark forces of time and ignorance which envelop our future. The actual, private object of the most skilled investment to-day is "to beat the gun", as the Americans so well express it, to outwit the crowd, and to pass the bad, or depreciating, half-crown to the other fellow.
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> This battle of wits to anticipate the basis of conventional valuation a few months hence, rather than the prospective yield of an investment over a long term of years, does not even require gulls amongst the public to feed the maws of the professional; — it can be played by professionals amongst themselves. Nor is it necessary that anyone should keep his simple faith in the conventional basis of valuation having any genuine long-term validity. For it is, so to speak, a game of Snap, of Old Maid, of Musical Chairs — a pastime in which he is victor who says *Snap* neither too soon nor too late, who passes the Old Maid to his neighbour before the game is over, who secures a chair for himself when the music stops. These games can be played with zest and enjoyment, though all the players know that it is the Old Maid which is circulating, or that when the music stops some of the players will find themselves unseated.
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> Or, to change the metaphor slightly, professional investment may be likened to those newspaper competitions in which the competitors have to pick out the six prettiest faces from a hundred photographs, the prize being awarded to the competitor whose choice most nearly corresponds to the average preferences of the competitors as a whole; so that each competitor has to pick, not those faces which he himself finds prettiest, but those which he thinks likeliest to catch the fancy of the other competitors, all of whom are looking at the problem from the same point of view. It is not a case of choosing those which, to the best of one's judgment, are really the prettiest, nor even those which average opinion genuinely thinks the prettiest. We have reached the third degree where we devote our intelligences to anticipating what average opinion expects the average opinion to be. And there are some, I believe, who practise the fourth, fifth and higher degrees.

You might think that this just means someone who actually does sit down and calculate expected yields could make vast profits from all the speculators playing Snap. But calculating expected yields is much harder than guessing what everyone else will do; there's no reason to think spending the same amount of time doing that is any more profitable.

And getting money for it is much harder — people don't like it when you tell them "Yes, the stocks you bought are worthless *now* but just wait! Nothing real has changed, you just need to hold on and see if I'm right in the long run." People don't like it when their stocks go down. They'd much rather invest their money so that its valuation keeps going up and up and up.

And even if they were willing to wait, why should they trust you? "For it is in the essence of his behaviour that he should be eccentric, unconventional and rash in the eyes of average opinion. If he is successful, that will only confirm the general belief in his rashness; and if in the short run he is unsuccessful, which is very likely, he will not receive much mercy. Worldly wisdom teaches that it is better for reputation to fail conventionally than to succeed unconventionally."

The more open our stock markets get, the more speculators predominate, and the worse things get for us.

> When the capital development of a country becomes a by-product of the activities of a casino, the job is likely to be ill-done. The measure of success attained by Wall Street, regarded as an institution of which the proper social purpose is to direct new investment into the most profitable channels in terms of future yield, cannot be claimed as one of the outstanding triumphs of laissez-faire capitalism — which is not surprising, if I am right in thinking that the best brains of Wall Street have been in fact directed towards a different object.

A hefty tax on each trade might be the best way to discourage speculation and thus improve the functioning of the market. You might think (as Keynes once did) that the best solution is to just force people to hold on to what they buy, so they have to figure out what it's really worth beforehand, but this will just push people to hold on to their money. The only solution would be to force everyone to either to buy goods or capital assets with everything they own.

And we return to the problem that many of our economic decisions depend on our "spontaneous optimism," our "animal spirits," our "urge to action rather than inaction," not "the outcome of a weighted average of quantitative benefits multiplied by quantitative probabilities." This means not only that slumps get exaggerated (since they depress animal spirits, worsening the slump) but that economic performance depends to a large degree on keeping businessmen happy. If electing FDR gets them depressed, they might pull back their investments and send the economy into a slump. This isn't a conspiracy, it's just the natural outcome of a system that depends on rich people feeling good. “In estimating the prospects of investment, we must have regard, therefore, to the nerves and hysteria and even the digestions and reactions to the weather of those upon whose spontaneous activity it largely depends.”

As a result, it seems likely that the State, which can calculate these things with an eye to the long-term and the social good, will take over more and more of the job of organizing long-term investment.

[Tyler Cowen: “This is the best chapter in the book and one of the most important economics essays of all time. … The insights here have yet to be fully mined.”]

13: We said before that businesses keep investing until their expected return reaches the interest rate (so lower interest rates mean more investment), but what determines the interest rate?

It’s often said that the interest rate is the price people demand for saving money instead of spending it. But this clearly isn’t true — people can save money under their mattress and not get any interest. No, the interest rate is the “price” people demand for parting with their cash.

“— which implies that if the rate of interest were lower, *i.e.* if the reward for parting with cash were diminished, the aggregate amount of cash which the public would wish to hold would exceed the available supply, and that if the rate of interest were raised, there would be a surplus of cash which no one would be willing to hold.” And if that’s true then the quantity of money is the other factor that determines interest rates. Thus the interest rate depends on people’s desire to hoard cash — their liquidity preference (L) — and the quantity of money (M).

Why is there a liquidity preference? Why don’t people just invest all their money? Interest rates never go below zero, after all. “A full explanation is complex and must wait for Chapter 15.” But we can see one reason now: uncertainty about the expected [AS: there’s that word again] rate of interest. If we expect interest rates to go up, we might want to hold on to our cash and use it to buy higher-yield bonds later. And thus, just as capital investment was driven by stock market speculation, interest rates are driven by bond market speculation. Again we have a tradeoff between having a market (and thus volatility) or no market (and thus overcaution).

There are other reasons people might want to hold cash. If they expect to do a cash transaction in the future, they’ll need to sell a bond then — but if the interest rate has risen in the meantime, they’ll be selling the bond at a loss. And if the interest rate falls, the economy will grow and people will need more cash for these sorts of transactions.

OK, so we have the following model: more money reduces the interest rate (as long as liquidity preference doesn’t go up faster), lower interest rates increase investment (as long as expected return doesn’t fall faster), more investment leads to more employment (as long as the propensity to consume doesn't fall faster), and if employment increases prices will rise which can increase liquidity preference and thus require more money.

The public can't control the *amount* of hoarding, since that's necessarily equal to the amount of cash. All it can do is change the price of hoarding — the interest rate.

14: "Certainly the ordinary man — banker, civil servant or politician — brought up on the traditional theory, and the trained economist also, has carried away with him the idea that whenever an individual performs an act of saving he has done something which automatically brings down the rate of interest … without the necessity for any special intervention or grandmotherly care on the part of the monetary authority."

But we've seen they're quite wrong. Saving doesn't lower the interest rate and thus increase investment — an increase in money does that. Instead, saving lowers demand and thus decreases employment. In which case, "a decreased readiness to spend will be looked on in quite a different light."

[AS: And so this is the famous paradox of thrift. While each person thinks they'll do better off by saving money instead of spending it, if a whole country decides to save their money, they're all worse off, since nobody will have a job.]

[AS: I'm taking a bit from chapter 16 since it seems to really belong here:]

"An act of individual saving means — so to speak — a decision not to have dinner to-day." But it is not a promise to have dinner tomorrow — it doesn't replace current demand with future demand; it decreases demand altogether. And since future demand is estimated based on present demand, it tends to decrease investment as well. Thus decreased consumption leads to decreased employment.

It's difficult to get people to realize that investing money doesn't actually lead to an increase in investments. The problem is that capitalists aren't buying capital per se, they're buying an expected yield. They don't care how good the machine is at making widgets, what matters is whether they can make money selling the widgets. If interest rates go up, it no longer becomes possible for them to make money, even though the machine remains unchanged.

15: The central bank can lower the short-term interest rate through open-market operations: printing money and using it to buy short-term government debt. But this doesn't effect the long-term rates, which depend on people's expectations of what the government will do to short-term rates. Perhaps the government should start buying and selling long-term bonds to address this.

It's also possible (although unlikely) that no one will believe the government can keep rates so low and so they begin hoarding all the new cash the government prints. "In this event the monetary authority would have lost effective control over the rate of interest." [AS: This, I presume, is the liquidity trap.] "But whilst this limiting case might become practically important in future, I know of no example of it hitherto. … Moreover, if such a situation were to arise, it would mean that the public authority itself could borrow through the banking system on an unlimited scale at a nominal rate of interest." [AS: The US, however, is in this situation right now (2009).]

Other traps are hyperinflation (where no one wants to hold onto money) and a financial crisis (where no one trusts the banks enough to let go of money). And there's the issue that even at low rates of interest, banks still need to trust their borrowers and make enough to pay their expenses, which may require them to raise rates.

16: OK, so we're in a liquidity trap. There are all sorts of practical problems with lowering interest below zero, so instead what happens is that, in *laissez-faire*, employment falls to reach the new low levels. The only thing that can save us is if "millionaires find their satisfaction in building mighty mansions to contain their bodies when alive and pyramids to shelter them after death, or, repenting of their sins, erect cathedrals and endow monasteries or foreign missions." That's no way to run a country.

So the government will print money to keep the interest rate at a level corresponding to full employment. Presumably this means that interest rates will become very low (although you don't want them so low that nobody's making things to sell today). But as interest rates get lower, it becomes profitable to invest in building things with smaller and smaller expected yields.

If this happens, then it seems likely that within a generation expected return will reach zero [AS: !!] and everything will reach its marginal cost.

This gets rid of the most objectionable features of capitalism — people could still become rich by saving money, but there would be nothing left to invest it in, so their money wouldn't ever grow. It would be the end of the rentier — the rich person who grows richer by using his wealth to exploiting others.

17: Let's step back for a second. Why is money so special? After all, a bond is just a promise to get some money in the future. Why should it be any different from a futures contract on wheat? We could imagine paying the future wheat contracts in terms of wheat, resulting in a wheat interest rate. [AS: This sounds pretty ridiculous, I know, but give it a minute.]

The big problem is that money is the one thing market processes can't adjust. 1) You can't just go ahead and make it — it can't be "grown like a crop or manufactured like a motor-car." 2) You can't reclaim it from use for other purposes — it doesn't have any. (Land can't be grown either, but if we really needed to we could free some up by moving closer together. 3) It's very easy to store — it doesn't spoil. Which is why the suggestion of making it spoil (by printing money with expiration dates, etc.) are on the right track.

Otherwise, our only relief comes from printing more money.

> Thus in the absence of money and in the absence — we must, of course, also suppose — of any other commodity with the assumed characteristics of money, the rates of interest would only reach equilibrium when there is full employment. Unemployment develops, that is to say, because people want the moon; — men cannot be employed when the object of desire (i.e. money) is something which cannot be produced and the demand for which cannot be readily choked off. There is no remedy but to persuade the public that green cheese is practically the same thing and to have a green cheese factory (i.e. a central bank) under public control.
>
> It is interesting to notice that the characteristic which has been traditionally supposed to render gold especially suitable for use as the standard of value, namely, its inelasticity of supply, turns out to be precisely the characteristic which is at the bottom of the trouble.

The classical view is that we are kept poor by our impatience — we insist on spending money now instead of saving it for later, when it will grow into more. But the truth is exactly the opposite: "That the world after several millennia of steady individual saving, is so poor as it is in accumulated capital-assets, is to be explained, in my opinion, neither by the improvident propensities of mankind, nor even by the destruction of war, but by the high liquidity-premiums formerly attaching to the ownership of land and now attaching to money."

18: Keynes restates the theory.

Book V: Money-wages and Prices

19: Now that we have the theory, we can return to the point we started with: reducing nominal wages is unhelpful. The only thing that could work is a one-time decrease in everyone's wages to a new level, but that a) is never going to happen in a democracy and b) unfairly penalizes wage-earners over everyone else. "There are advantages in some degree of flexibility in the wages of particular industries so as to expedite transfers from those which are relatively declining to those which are relatively expanding. But the money-wage level as a whole should be maintained as stable as possible, at any rate in the short period."

20: We've said that employment ultimately comes from demand. So why should the government promote investment instead of demand? It's because investment comes first. If you give people money to buy more (say) iPods, then first all the existing iPods get sold. This raises the price, which makes Apple richer but doesn't help any employees — and Apple likes to save its money much more than its employees do. Eventually they begin to run out of iPods and start investing in additional factories to make more. And then those factories hire people to work there, who spend their wages on other things. It works, it's just slow — if you want to get people employed quickly, you're better off starting with building the factories.

OK, so you promote investment, but how much investment? Well, until you have full employment obviously.

21: Traditional economics is divided between the theory of value (perfect competition, supply and demand, and all that good stuff) in the main spot and then over to the side has a separate theory of money (dealing interest rates and inflation), with no clear connection between the two. "We have all of us become used to finding ourselves sometimes on the one side of the moon and sometimes on the other, without knowing what route or journey connects them, related, apparently, after the fashion of our waking and our dreaming lives." The right split is between the theory of the individual industry and the theory of the economy as a whole. Or perhaps between the stationary economy and the shifting one, for money's power "flows from its being a link between the present and the future."

So how does printing money affect prices? Well, the naive view is that it doesn't — the additional money gets used to buy more things which hires more people — until everyone is hired. Then the money can't go to hire more people so it just goes to bid up the prices of things, creating inflation. As I said, that's the naive view — there are a couple complications.

How does money influence demand? Primarily thru the rate of interest, which depends on liquidity preferences, marginal efficiencies, and investment multipliers. But these all depend on other complicating factors.

Marginal prime costs and labor costs increase as industry is forced to use more expensive equipment and laborers, resulting in higher prices. Some industries hit "bottlenecks" first, causing their prices to rise and demand to be funneled into industries that are faster to respond. Then as some workers receive better wages other workers will demand it and, since business is booming, receive it. Finally, with the additional demand equipment and so on will have to be replaced, raising marginal costs.

There's an asymmetry in the system that workers will resist falling wages, but not rising ones. But this is good, because otherwise wages would fall to zero in any downturn and the entire economy would shut down. But the side effect is that "the very long-run course of prices has almost always been upward."

Book VI: Short Notes Suggested by the General Theory

22: Why are there trade cycles, aka business cycles, aka booms and busts?

Let's start by thinking about the end of the boom. So business is booming and everyone's optimistic — even though costs of production (and maybe interest rates) are rising, sales are too, so expected profits are looking good. But since no one really knows what they're doing, especially not the speculators, it's understandable that "when disillusion falls upon an over-optimistic and over-bought market, it should fall with sudden and even catastrophic force." Everyone gets freaked out that they're not going to make money anymore and stops investing and raises their liquidity preference, raising interest rates and lowering investment further.

Because these things go together, they're sometimes mistaken as the cause, but note that it's the expected return which falls first, then interest rates rise. So even lowering interest rates isn't enough to recover from the crash. And "it is not so easy to revive the marginal efficiency of capital, determined, as it is, by the uncontrollable and disobedient psychology of the business world. It is the return of confidence, to speak in ordinary language, which is so insusceptible to control in an economy of individualistic capitalism. This is the aspect of the slump which bankers and business men have been right in emphasising, and which the economists who have put their faith in a 'purely monetary' remedy have underestimated."

And there are other problems: when the stock market crashes, rich people see themselves as less rich and decide to start spending less. (And when everyone follows the stock market, like in the US, this applies to everyone.) And the fact that people aren't spending further decreases expected returns.

So that's the bust. What about recovery? Well, recovery can't come until old equipment is used up and has to be replaced and old stocks of goods that were produced get sold off and have to be replenished. When recovery picks up, it feeds on itself in the opposite way. But you can't jump-start it just by lowering interest rates, since the real problem is expected return. Thus the government must step in.

Reading this, you might think the solution is to raise interest rates to prevent overinvestment during booms, since lowering them doesn't get you out of slumps. But there's two kinds of overinvestment: disappointing investments, where the investment would have made sense except the economy collapsed, and genuine overinvestment, where the investment could never have made money. It's only the second kind that's an actual waste of resources, and the solution to it isn't raising interest rates "which would probably deter some useful investments and might further diminish the propensity to consume, but in taking drastic steps, by redistributing incomes or otherwise, to stimulate the propensity to consume."

Why does redistributing income work? Think about the dot-com bubble where everyone was blowing money on useless fiber-optic cable. If venture capitalists are spending all their money on useless cable, the solution is to take their money away. Instead, you can give it to poor people, who will use it to buy useful things like food and clothing.

What happens isn't so much excessive investment as misdirected investment. Everyone builds houses thinking they'll all sell for lots and lots, then they find they aren't actually selling for so much and the economy collapses. "We reach a condition where there is a shortage of houses, but where nevertheless no one can afford to live in the houses that there are."

> Thus the remedy for the boom is not a higher rate of interest but a lower rate of interest! For that may enable the so-called boom to last. The right remedy for the trade cycle is not to be found in abolishing booms and thus keeping us permanently in a semi-slump; but in abolishing slumps and thus keeping us permanently in a quasi-boom. […]
>
> Except during the war, I doubt if we have any recent experience of a boom so strong that it led to full employment. … Nor was there over-investment in the sense that the standard and equipment of housing was so high that everyone, assuming full employment, had all he wanted at a rate which would no more than cover the replacement cost, without any allowance for interest, over the life of the house; and that transport, public services and agricultural improvement had been carried to a point where further additions could not reasonably be expected to yield even their replacement cost. Quite the contrary. It would be absurd to assert of the United States in 1929 the existence of over-investment in the strict sense.

In short, increasing interest rates to kill booms "belongs to the species of remedy which cures the disease by killing the patient."

What would the world of the permanent boom look like? It's conceivable that it might lead not just to full employment, but *full investment* — a world with so much plenty that you couldn't expect to make a profit on any kind of durable good. "Moreover, this situation might be reached comparatively soon—say within twenty-five years or less. I must not be taken to deny this, because I assert that a state of full investment in the strict sense has never yet occurred, not even momentarily."

Others say the problem is that the country is so unequal that poor people can't spend enough. The solution, they propose, is redistributing money to the poor to promote jobs. They are "undoubtedly in the right [at present]," when investment is "unplanned and uncontrolled." There's no other way to raise employment. If you can't increase investment, you have to increase consumption.

But we *could* increase investment: "the wisest course is to advance on both fronts at once." Not just so that the people we give money to can buy the new products investment creates, but so that they have enough money to buy even more, and thus spark growth themselves!

23: Now that Keynes has outlined his revolutionary theory, it's time to look back at other economists the classical school dismissed.

The classical school — including Keynes in earlier years — grew up mocking mercantilism (protectionism) as incoherent and absurd. But maybe it makes some sense: Growth depends on the inducements to new investment. Investment is either foreign or domestic. Domestic investment is encouraged by the interest rate and foreign investment by the balance of trade. Thus, if you ignore direct investment by the government (as people had), these are the two things to be concerned about.

Now in general the interest rate is governed by the quantity of money and "in an age in which substantial foreign loans and the outright ownership of wealth located abroad are scarcely practicable" (not to mention the international gold standard), money equals precious metals which equals the balance of trade. (Since running a trade deficit with a country means sending them your precious metals instead of your exports.) Thus focusing on the balance of trade serves both purposes — and, at a time we didn't know how to control interest rates, was the only direct means of controlling them.

Not all protectionism promotes the balance of trade, of course — mid-1800s Britain probably would have done best with complete free trade. But mercantilists saw the key points sooner than most, calling for an increase in money to reduce the interest rate.

But the worst part of the international gold system is the way it sets countries against one another. For a country could only keep its citizens employed if it had gold, and the only way to get gold was by taking it from another country (and thus throwing them out of work). "Never in history was there a method devised of such efficacy for setting each country's advantage at variance with its neighbours'!"

> The mercantilists perceived the existence of the problem without being able to push their analysis to the point of solving it. But the classical school ignored the problem, as a consequence of introducing into their premisses conditions which involved its non-existence; with the result of creating a cleavage between the conclusions of economic theory and those of common sense. The extraordinary achievement of the classical theory was to overcome the beliefs of the 'natural man' and, at the same time, to be wrong.

Another thing the classical economists long mocked were laws against usury. "I was brought up to believe that the attitude of the Medieval Church to the rate of interest was inherently absurd, and that the subtle discussions aimed at distinguishing the return on money-loans from the return to active investment were merely Jesuitical attempts to find a practical escape from a foolish theory. But I now read these discussions as an honest intellectual effort to keep separate what the classical theory has inextricably confused together, namely, the rate of interest and the marginal efficiency of capital. For it now seems clear that the disquisitions of the schoolmen were directed towards the elucidation of a formula which should allow the schedule of the marginal efficiency of capital to be high, whilst using rule and custom and the moral law to keep down the rate of interest." After all, "individual savings may be absorbed either by investment or by debts, and that there is no security that they will find an outlet in the former." Laws against usury help ensure they do.

> It is convenient to mention at this point the strange, unduly neglected prophet Silvio Gesell (1862-1930), whose work contains flashes of deep insight and who only just failed to reach down to the essence of the matter. In the post-war years his devotees bombarded me with copies of his works; yet, owing to certain palpable defects in the argument, I entirely failed to discover their merit. As is often the case with imperfectly analysed intuitions, their significance only became apparent after I had reached my own conclusions in my own way. Meanwhile, like other academic economists, I treated his profoundly original strivings as being no better than those of a crank. Since few of the readers of this book are likely to be well acquainted with the significance of Gesell, I will give to him what would be otherwise a disproportionate space.

Among Gesell's proposals are the notion of stamped money (money you have to pay to get stamped regularly to keep it valid currency) which is a way of discouraging people from hoarding. "The idea behind stamped money is sound. … But there are many difficulties which Gesell did not face. In particular, he was unaware that money was not unique" — if people didn't hoard it, there's lots of other things they could hoard.

Keynes also discusses Bernard Mandeville's incredible book, *The Fable of the Bees*. This incredible work of economic thought described the division of labor and the invisible hand in 1705, a full seventy years before Adam Smith. And, Keynes points out, it's largely about the paradox of thrift — centuries before Keynes! It's basically been written out of economic history, in part, no doubt, because it was written in the form of a scandalous satirical epic poem. Indeed, it so scandalized its readers at the time that it was "convicted as a nuisance by the grand jury of Middlesex in 1723, which stands out in the history of the moral sciences for its scandalous reputation."

Finally we come to Major Douglas, who led the unorthodox Social Credit movement in the UK:

> Major Douglas is entitled to claim, as against some of his orthodox adversaries, that he at least has not been wholly oblivious of the outstanding problem of our economic system. Yet he has scarcely established an equal claim to rank — a private, perhaps, but not a major in the brave army of heretics — with Mandeville, Malthus, Gesell and Hobson, who, following their intuitions, have preferred to see the truth obscurely and imperfectly rather than to maintain error, reached indeed with clearness and consistency and by easy logic, but on hypotheses inappropriate to the facts.

24: The two great economic problems are unemployment and inequality. We have addressed the first, but what are its implications of the second? Inequality has been addressed somewhat by government redistribution, but some are hesitant to go further because they believe that growth is promoted by savings and so taking away the savings of the rich will retard growth. We have seen that it's quite the opposite — that redistribution, by increasing effective demand, *promotes* growth. "One of the chief social justifications of great inequality of wealth is, therefore, removed."

That said, one wouldn't want to get rid of money altogether:

> [D]angerous human proclivities can be canalised into comparatively harmless channels by the existence of opportunities for money-making and private wealth, which, if they cannot be satisfied in this way, may find their outlet in cruelty, the reckless pursuit of personal power and authority, and other forms of self-aggrandisement. It is better that a man should tyrannise over his bank balance than over his fellow-citizens; and whilst the former is sometimes denounced as being but a means to the latter, sometimes at least it is an alternative.

Let us imagine these policies are implemented. The government lowers interest rates so that there's full employment. Expected return would then probably fall steadily keep it there, unless there's an increase in the propensity to consume (including by the State).

At this point, expected return might be just enough to cover the costs of production, plus a little for risk and skill — just like other goods.

> Now, though this state of affairs would be quite compatible with some measure of individualism, yet it would mean the euthanasia of the rentier, and, consequently, the euthanasia of the cumulative oppressive power of the capitalist to exploit the scarcity-value of capital. Interest today rewards no genuine sacrifice, any more than does the rent of land. The owner of capital can obtain interest because capital is scarce, just as the owner of land can obtain rent because land is scarce. But whilst there may be intrinsic reasons for the scarcity of land, there are no intrinsic reasons for the scarcity of capital. An intrinsic reason for such scarcity, in the sense of a genuine sacrifice which could only be called forth by the offer of a reward in the shape of interest, would not exist, in the long run, except in the event of the individual propensity to consume proving to be of such a character that net saving in conditions of full employment comes to an end before capital has become sufficiently abundant. But even so, it will still be possible for communal saving through the agency of the State to be maintained at a level which will allow the growth of capital up to the point where it ceases to be scarce.

> I see, therefore, the rentier aspect of capitalism as a transitional phase which will disappear when it has done its work. And with the disappearance of its rentier aspect much else in it besides will suffer a sea-change. It will be, moreover, a great advantage of the order of events which I am advocating, that the euthanasia of the rentier, of the functionless investor, will be nothing sudden, merely a gradual but prolonged continuance of what we have seen recently in Great Britain, and will need no revolution.
>
> Thus we might aim in practice (there being nothing in this which is unattainable) at an increase in the volume of capital until it ceases to be scarce, so that the functionless investor will no longer receive a bonus; and at a scheme of direct taxation which allows the intelligence and determination and executive skill of the financier, the entrepreneur *et hoc genus omen* (who are certainly so fond of their craft that their labour could be obtained much cheaper than at present), to be harnessed to the service of the community on reasonable terms of reward.
>
> At the same time we must recognise that only experience can show how far the common will, embodied in the policy of the State, ought to be directed to increasing and supplementing the inducement to invest; and how far it is safe to stimulate the average propensity to consume, without foregoing our aim of depriving capital of its scarcity-value within one or two generations. It may turn out that the propensity to consume will be so easily strengthened by the effects of a falling rate of interest, that full employment can be reached with a rate of accumulation little greater than at present. In this event a scheme for the higher taxation of large incomes and inheritances might be open to the objection that it would lead to full employment with a rate of accumulation which was reduced considerably below the current level. I must not be supposed to deny the possibility, or even the probability, of this outcome. For in such matters it is rash to predict how the average man will react to a changed environment. If, however, it should prove easy to secure an approximation to full employment with a rate of accumulation not much greater than at present, an outstanding problem will at least have been solved. And it would remain for separate decision on what scale and by what means it is right and reasonable to call on the living generation to restrict their consumption, so as to establish in course of time, a state of full investment for their successors.

Now the State will still have to guide things; it seems unlikely that just controlling interest rates will be enough to ensure this utopian state of affairs. Instead, it might turn out "a somewhat comprehensive socialisation of investment will prove the only means of securing an approximation to full employment; though this need not exclude all manner of compromises and of devices by which public authority will co-operate with private initiative." Still, this is a comparatively conservative claim:

> But beyond this no obvious case is made out for a system of State Socialism which would embrace most of the economic life of the community. It is not the ownership of the instruments of production which it is important for the State to assume. If the State is able to determine the aggregate amount of resources devoted to augmenting the instruments and the basic rate of reward to those who own them, it will have accomplished all that is necessary. Moreover, the necessary measures of socialisation can be introduced gradually and without a break in the general traditions of society. [...]
>
> Whilst, therefore, the enlargement of the functions of government, involved in the task of adjusting to one another the propensity to consume and the inducement to invest, would seem to a nineteenth-century publicist or to a contemporary American financier to be a terrific encroachment on individualism, I defend it, on the contrary, both as the only practicable means of avoiding the destruction of existing economic forms in their entirety and as the condition of the successful functioning of individual initiative.
>
> For if effective demand is deficient, not only is the public scandal of wasted resources intolerable, but the individual enterpriser who seeks to bring these resources into action is operating with the odds loaded against him. The game of hazard which he plays is furnished with many zeros, so that the players as a whole will lose if they have the energy and hope to deal all the cards. Hitherto the increment of the world's wealth has fallen short of the aggregate of positive individual savings; and the difference has been made up by the losses of those whose courage and initiative have not been supplemented by exceptional skill or unusual good fortune. But if effective demand is adequate, average skill and average good fortune will be enough.

And, if our theory does work and we end up with full employment, then we return to the world of the classical economic theory, whose only flaw was assuming that full employment was the only possible state of affairs. "It is in determining the volume, not the direction, of actual employment that the existing system has broken down."

> Is the fulfilment of these ideas a visionary hope? Have they insufficient roots in the motives which govern the evolution of political society? Are the interests which they will thwart stronger and more obvious than those which they will serve?
>
> I do not attempt an answer in this place. It would need a volume of a different character from this one to indicate even in outline the

practical measures in which they might be gradually clothed. But if the ideas are correct — an hypothesis on which the author himself must necessarily base what he writes — it would be a mistake, I predict, to dispute their potency over a period of time. At the present moment people are unusually expectant of a more fundamental diagnosis; more particularly ready to receive it; eager to try it out, if it should be even plausible. But apart from this contemporary mood, the ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood. Indeed the world is ruled by little else. Practical men, who believe themselves to be quite exempt from any intellectual influences, are usually the slaves of some defunct economist. Madmen in authority, who hear voices in the air, are distilling their frenzy from some academic scribbler of a few years back. I am sure that the power of vested interests is vastly exaggerated compared with the gradual encroachment of ideas. Not, indeed, immediately, but after a certain interval; for in the field of economic and political philosophy there are not many who are influenced by new theories after they are twenty-five or thirty years of age, so that the ideas which civil servants and politicians and even agitators apply to current events are not likely to be the newest. But, soon or late, it is ideas, not vested interests, which are dangerous for good or evil.