

## 09 Macroeconomics and the State Practice

This chapter explains the basics of macroeconomics and explains the state policies of induced inflation and induced expansion. When I originally wrote this chapter in 2007, I was upset by what had happened in the previous 25 years and by what I could see coming in the next 10. The tone reflects my frustration, for which I apologize. Because the basic underlying situation has not changed by 2012, I did not “clean up” the writing. Thank you for your patience.

**09 Macroeconomics and the State Practice; Synopsis.** Microeconomics (“Micro”) studies the strategies of people and business firms, as in Chapters Four and Five. Macroeconomics (“Macro”) studies the properties of whole economic systems. I used macroeconomics informally throughout the book, for example in Chapter Two on Classical economics in which we found the balance of savings, investment, the rate of interest, capacity, and growth. All the systems ideas used throughout the book belong to Macro, such as circular, closed, and self-reproducing. The fact that different kinds of profit affect the economy differently, and how they might do it, is really a Macro idea.

Formal macroeconomics developed in the 1930s to manage the business cycle of boom and bust. The suggestions originally offered by macro economists were reasonable and useful. Sadly, Macro ideas are easily abused by state officials, especially when combined with ideas about money. Officials use terms from Macro to justify programs that they want for other reasons. Often officials do not understand the ideas behind the terms. The abuse of Macro leads to serious problems, and should be discouraged.

During the down phase of the business cycle, Macro recommends that the state spend more than it takes in so as to perk up the economy. Deficit spending by the state makes up for lost demand from private people and business firms during the down phase. During the boom phase, the state should spend less than it takes in both to slow the economy and to make up for deficits incurred during the down phase. Overall, the budget should nearly balance. The state also can manipulate money or the rate of interest to stimulate investment during the down phase or curtail investment during the up phase. Sometimes a low rate of interest can spur investment while a high rate usually reduces investment. Macro theory about money and interest is not clear because the effects vary a lot with real circumstances.

Rather than face economic issues squarely, state officials call on economic growth to solve all problems. They treat the economy as if it were in a constant recession. They recommend that the state spend more than it takes in (“go into deficit”), all the time, the rate of interest be reduced, wealthy people and business firms receive tax breaks, and money be spent directly on favored industries and projects. Both political parties use this policy to shunt favors toward their clients. This is what I call “the Practice”.

This policy is based on several mistakes. The biggest is this: Ideally, when the economy is in balance due to free actions of people and business firms, savings equals investment. If savings always equaled investment, then an increase in available wealth (savings) would always lead to an increase in investment and to growth. So state officials put the state into debt so as to shove money toward their clients,

excusing the policy by saying it leads to more investment. Officials use both the tax code and direct spending to move wealth. In reality, forced savings and forced increases in wealth for some Americans might cause a little more investment sometimes but they rarely cause enough more investment. Sometimes they lead to no investment and growth at all. They almost never lead to enough more investment to make up for the problems caused by the state forcibly moving wealth from one group to another and being chronically in debt. They can cause the economy actually to shrink because of debt and distortion.

Other nations often fall back on such bad policies but America avoided this mistake until recently. This mistake “set in” in America under President Reagan. The decades since have shown it as an abuse. This error added to huge deficits under President George W. Bush, chronic inflation, and increased accumulation of wealth among rich people, the distorted housing market, and the economic collapse of 2008. The debt and distortion likely caused the economy to shrink below what it should have been.

**Microeconomics and Macroeconomics.** Most of this book has been about “microeconomics”. Microeconomics explains the strategies of individuals and of business firms, and then derives aspects of the economy from their actions. For example, we derived the price system from the actions of consumers and business firms. Microeconomics is a reductionist view.

A large feature of the economy is an “aggregate”: the general rate of interest rather than specific rates of interest on houses, furniture, or cars; the total number of all the unemployed rather than the number of unemployed plumbers, electricians, or lawyers; the total amount of savings; the total amount of investment; or the usual prevailing general rate of interest.

In contrast to microeconomics, macroeconomics works with aggregates. It looks for relations directly between large features, such as how the interest rate affects the total amount saved and the total amount invested. Macroeconomics wishes to use relations between large aspects of the economy to give state officials a basis for policy. For example, if state officials wish to ease the business cycle, they need to know if a change in savings would influence investment, and they need to know how to change savings so as to get the right results.

Macroeconomics sounds reasonable but does not work out well in practice. There is no accepted link between the level of strategies by individuals and business firms to the level of relations between the features that policies need to manipulate. There is no accepted link from the level of strategies by individuals and business firms to the level of the changes that state officials wish to make. Economists warn that, “There is no solid microeconomic foundation for macroeconomics”. We cannot be sure that any large level relation is based on individual strategies, and we cannot be sure what will happen to the terms in any large level relation (such as interest and savings) as officials manipulate relations (such as savings). Any change interferes in the public price system, so even well-intended changes have odd and bad results. Too often, state officials act in their own interests and to serve clients, and then use ideas from macroeconomics as a rationalization. Because macroeconomics does not have a solid logical base in microeconomics, it is easy to misuse macroeconomics in this way.

Macroeconomics does not have to assume that the whole economy determines the actions of consumers and business firms; it does not have to see individuals and firms as puppets of the system; it

does not have to be holistic determinism. In fact, most macroeconomists deny naïve holism. But because there is no firm link between microeconomics and macroeconomics, macroeconomists tend to overlook low-level strategies and tend to write as if low-level strategies follow changes in high-level relations. They fall into naïve holism even if they do not intend it or even if they oppose it theoretically.

For convenience, economists often abbreviate “microeconomics” as “Micro” and abbreviate “macroeconomics” as “Macro”, and I follow their lead.

**Remainder of Introduction.** Macro is fun and can be useful. We should not let its abuse by state officials entirely put us off Macro ideas.

State policies borrow the words of Macro often without getting the logic. They use Macro theory for rationalization but their poor practices do not really depend on Macro theory. Macro models dominated universities from World War II until well into the 1990s. More than because Macro models were realistic, the dominance of Macro models was due as much to the mathematical skill of economists, with their ideals, and with their desires for the economy.

Critics claim that Macro theory distorted policy for decades and still distorts policy now. Macro did not have nearly as much bad influence as its critics contend. Bad policies of the Left and the Right developed on their own. Bad policies used Macro theory as an excuse but ultimately bad policies were not founded on Macro theory and do not need it. State policies are founded on human traits of self-interest, willingness to capture the economy, and gaining clients. We need to understand Macro theory so that we are not fooled by debates about state policies and fooled by the motives of state officials and their clients. Once we have peeled away the Macro layer then we can understand policies on their own terms. Then we can figure out if policies are acceptable or not, and, if not, what to do.

Because of the confusion between Macro ideas, what state officials really do, and why they do it, this chapter has to argue in a spiral. Rather than give the Macro ideas first and then move to results, instead I present examples of state policies. Then I give the Macro ideas to show how they did not cause the policies but can be used to justify the policies. To explain Macro ideas, I have to detour through the business cycle, to show how Macro ideas arose as a response to the business cycle. That development allows me to present the Macro relations that economists most often use and that state officials refer to for justification. Then I can return to what state officials really do and to the results of what they really do.

**The Practice.** I start with what I consider to be the worst state policy of our time, both of the Left and Right. Recently, the Right has been guiltier. I call this policy “the Practice”. Think of it as the modern version of the Mercantilism against which Adam Smith and Classical economists railed. Later sections explain the points in more detail, and give details on the relation between history, theory, and the Practice. I present the Practice now beforehand to emphasize that it does not depend on Macro ideas, but developed because it works for self-interested state officials and their clients. People mistakenly blame Macro ideas for generating the Practice, and that mistake in turn causes us to badly misunderstand the Practice.

The Practice is a combination of deficit spending, induced inflation, spending on programs to reward

the clients of state officials, and tax cuts to reward the clients of state officials. It works like this:

-Condemn Keynesian ideas (see below) as wrong and socialistic while at the same time use the methods formalized by Keynes to advance your own agenda. Call what you do something else, such as "Supply Side economics".

-The Practice can be used to counteract the effects of the business cycle but that is not the main purpose. The methods of the Practice are used to counteract the business cycle partly to mollify the public but mainly to intervene in the business cycle to further the interests of officials and their clients.

-Promote growth as a way to solve all problems.

-Practice deficit spending.

-Induce inflation.

-Use projects to reward clients: build airports, "development" zones, business parks, and urban renewal zones.

-Use selective tax reduction to reward clients. Say that tax reductions increase effective total demand. Say that tax reductions increase savings, especially among the rich, so as to increase the amount available for investment and to "make jobs".

-Provide protection, tax breaks, government investment, and other favors for clients such as industries, labor groups, local regions, and social groups of all ethnicities and religion.

-Deficit spending allows state officials to have revenue to spend on themselves and on their clients.

-Do not worry about cutting back on present spending to balance any previous deficit spending. Do not try to balance the budget, even over the long run.

-Do not curtail spending very much during the upturn of the business cycle.

-Deficit spending automatically causes inflation. Rather than cause problems, inflation can help state officials and their clients. See below.

-Control inflation within the limits in which inflation is beneficial to business firms and to state officials. See below.

-Because of the results of inflation, state officials need never pay back the deficit to the extent indicated by the nominal (money) amount of the deficit. They pay back less than they take out.

-Deficit spending and inflation reinforce each other.

-Thus state officials do not have to take responsibility for sound taxes, balanced budgets, or

reasonable programs. They do whatever they wish, whatever it takes to please clients, and whatever it takes to mollify critics.

-Rely primarily on the Fed and other similar institutions to keep induced inflation below about 5% regardless of the extent of the deficit. Use other measures to control inflation (see below) only when necessary.

-Do not admit there is a natural rate of unemployment. Do not reduce current unemployment to the natural rate unless the current rate is so high as to cause political problems among dominant ethnic groups and clients. Attempts to reduce unemployment usually cause inflation in addition to the desired induced inflation. Additional inflation can interfere severely with desired induced inflation. Desired Induced inflation for clients plus with inflation to reduce unemployment can cause runaway inflation.

-Unemployment higher than the natural rate can cause deflation. If the Fed cannot control inflation, then induce a recession, including high unemployment, so as to control inflation. The poor and non-Whites bear the greatest burden of added unemployment. The majority of middle class and upper middle class people prefer a short recession with added unemployment rather than prolonged inflation above 5%, and so they will stand for this tactic. President Reagan did this in the early 1980s.

-Encourage free trade in public without really practicing it. Do not encourage free trade generally but only selectively for some industries or cases.

-Never be clear about the difference between fair foreign competition versus unfair foreign competition. Never be clear when American firms and American labor groups are themselves fair or unfair.

-Use exemptions from free trade (protection from foreign competition) to protect clients and to reward clients. Use the ideology of rigorous free trade to hurt some groups.

-Do not acknowledge that the emerging world economy will hurt some Americans in the short run of a few decades, and thus intensify class conflict. Hope that general prosperity of the world economy allows most Americans eventually to return to acceptable standards of living before intense conflict in America leads to fascism.

-Placate class conflict according to need and according to current political alliances. Go along with the religious ideologies and the social ideologies that are needed for political ends ("Family values" of the Religious Right or "Political Correctness" of the doctrinaire Left).

I consider the Practice to be the paradigm example of a bad state policy, and to be perhaps the single greatest cause of harm done by the state to the economy in the decades between 1980 and the present (it is possible to imagine greater harms at other times but I do not deal with that). Critics of macroeconomics contend that the Practice developed because of Macro ideas but I contend that the Practice started before Macro theory, would have arisen even without Macro theory, and often proceeds regardless of Macro theory. The Practice is so tempting to state officials that it is unavoidable once the state gains control of the money system. The same aspects of the Practice can be used to justify effects desired by both the Left and Right: the Left once urged that we tolerate mild inflation as a way to help

the unemployed but now mild inflation primarily serves big business.

**Deficit Spending.** Deficit spending induces inflation even without deliberate action by the Fed or the Treasury Department to change the currency. Deficit spending creates inflation by creating wealth through debt now with the promise of paying back in the future. The state creates wealth now by giving the promise of payments to be made through the official currency of the state. If the state were a real bank, the state would issue promissory notes without having any silver in its vaults. These paper promises can be negotiated just like official currency, and so add to the total supply of official currency effectively in circulation, that is, they expand the effective supply of official currency. That expansion creates inflation. The process is not hard to understand. The process can be more complicated but sometimes it is better to stay simple.

State officials also can cause inflation by deliberately expanding the money supply without also going into deficit spending – the process is called “printing money” or “printing empty money”. But these days that kind of action is rare outside of irresponsible nations. People now know of this kind of irresponsibility and usually will not tolerate it anymore.

Inflation through deficit spending, or inflation through direct expansion of the money supply, both result from the action of state officials. Libertarians and Austrians call these actions “fiat inflation”. They also call the official money of the state “fiat money”.

Deficit spending can be accomplished in two ways, both of which have variations aimed at particular client groups.

(1) Deficit spending happens when the amount spent on programs is increased without increasing the amount of revenue from taxes. The state can expand existing programs or can create new programs, or both. The state promises to pay the costs later. The promises enter the economy now as a version of the official currency. The programs are usually aimed at the clients of current state officials. Stereotypically: Republican programs would help business firms while Democratic programs would help ethnic groups. These stereotypes do not hold up anymore because both parties engage in programs now, and both parties have both kinds of clients now.

(2) The state can reduce taxes without reducing spending. The key consideration is whose taxes get reduced how much. A secondary consideration is what excuse is used for reducing the taxes. Stereotypically, Democrats try to reduce personal income taxes “across the board” or primarily for the middle class without reducing taxes on firms; the rich claim that such reductions always hurt them. Stereotypically, Republicans reduce taxes on the wealthy and on business firms. They use the excuse that such targeted reduction increases the total amount of savings, increases investment, increases economic growth, and thus eventually benefits everybody (see below).

Officials usually combine increased spending on programs with decreased taxes, often in many creative ways.

When state officials feel they have to reverse some of the bad policies of the Practice, they reduce programs and they increase taxes. Usually they do this in the opposite direction of the stereotypes,

which causes unhappy backlash by clients. When the rich have to pay fair taxes, when farmers lose their subsidies, or when Black people lose program benefits, they all scream. It is extremely hard to reverse giving once expectations have been set up.

**Induced Inflation.** Some officials cause deficit spending on purpose both to benefit directly from the spending and to induce inflation for further benefit. Other state officials are as guilty because they know that state policies contribute to the Practice but do little to stop the Practice except to oppose it in speeches. Deficit spending allows state officials to do what they like without worrying about limits imposed by responsible taxation and by the need to balance budgets.

It might seem that inflation harms the state, but that is not quite true. It harms the people in general, as described in the previous chapter, but inflation can help the governing apparatus and some business firms. Severe inflation above about 6% does hurt everybody. Yet if state officials can keep inflation below about 6% then they can benefit, and some business firms can benefit, in these ways:

-Inflation erodes the real value of payments to pensioners (Social Security), insurance recipients (Medicare), and welfare recipients, and to programs, so the state and business firms effectively pay less in real terms (exchange ratios) later even when they get all that they wanted now.

-Inflation effectively raises the tax rate automatically.

-Inflation erodes the real value of payments on the debt, so that the state pays back less than it seems. If the state goes into debt for \$100, it pays back later with dollars that are worth only 80 or 60 of the original 100.

-Because inflation erodes the real value of payments on the debt, the state can go into debt more than the people wish, and yet state officials still feel safe. Then-Vice-President Dick Cheney said something like, "Reagan showed that deficits don't matter anymore".

-The state forces the Fed to counteract the effects of induced inflation and to make sure inflation does not get out of hand. This use of the Fed is a distortion away from the mission of the Fed, undermines the ability of the Fed to respond in other ways, and undermines its credibility.

-Inflation allows for real salary levels to fall even though money salary levels stay the same. In effect, inflation gives workers a continual pay cut so firms can benefit from the fact that workers are consistently paid below cost effectiveness.

-Mild inflation increases the money supply and might lower the rate of interest. Business firms prefer a low rate of interest for reasons given in the previous chapter. (Whether or not sustained mild inflation actually does lower the rate of interest leads to debates between various schools of money theory, and I cannot go into that here. It is enough if some business people think inflation does and wish inflation for that reason.)

-The extra revenue from taxes and deficit spending can be shunted toward client groups in a home district such as for silly museums, useless roads, and "bridges to nowhere". Or it can be shunted toward

clients in a larger arena such as sugar growers, anti-drug programs such as a crackdown on “pot”, anti-abortion campaigns, or programs for any ethnic group (Black, Hispanic, Asian, and White).

The Cantillon Effect warns us that the Practice does not affect all sectors of the economy the same. Inflation does inconvenience business firms, but large firms often can anticipate inflation and can respond to neutralize it, much as described by Rational Expectations. Small firms have more trouble responding even if they recognize the inflation, and so suffer at least in comparison. Consumers and workers have a lot of trouble compensating for inflation and usually just suffer.

To see how Macro theory is to blame or is not, we have to see how Macro theory derives formulas, and see the role of formulas in policies. The next two sections do this through examples.

**Formula as Macroeconomics.** Sometimes we understand something better by looking first at what it does. The Classical model of relations between savings, interest, and investment gives a formula that can be misinterpreted along Macro lines to serve bad policy. According to the Classical model, the rate of interest serves as a mediator that keeps savings equal to investment in the middle range of the rate of interest. This happens because savers and investors respond to changes in the rate of interest so as to serve self-interest. For details, please see Chapter Two and Chapter Eight.

We stay in the realm of Micro as long as we:

- Think of the Classical model as just a description.
- See the roots of the Classical model in the strategies of individuals and firms.
- Recall that sometimes savings does not equal investment.
- Recall that the rate of interest does not always mediate to keep them equal.
- Recall that more savings cannot cause (force) more investment apart from the voluntary self-interested strategic cooperation of consumers and firms.

When we do the following things, we step over into the realm of Macro:

- We take as necessary that savings and investment nearly equal each other all the time.
- We take as necessary that investment has to follow savings. We say that savings causes investment: the more savings we have, necessarily the more investment follows.
- We think that we can directly influence the amount of savings and investment by influencing the rate of interest.
- We can directly influence the rate of interest by influencing the supply of money.
- In effect, we treat the Classical model as a formula for determining relations between aspects of the

economy without thinking about how those aspects depend on the underlying interplay of strategies. We think we can change one aspect as we wish by changing other aspects. We use description as recipe.

For the example that follows, we need one familiar empirical fact that is also based on strategies but enters Macro theory as a recipe: the greater a person's income, the greater percentage the person tends to save out of his/her income. If a person has an income of \$50,000, the person might save 5% or \$2500 per year. If a person has an income of \$200,000, the person might save 20% or \$40,000 per year.

It is not important to get the details but to see that a description such as the Classical model cannot be used as a formula that binds results.

Suppose a state official wished to increase investment. The motives do not matter. Misusing the Classical model, the official thinks increased savings must lead to increased investment. The official mistakes an outcome of strategic interaction as a recipe for relations between aspects of the economy. The official decides that any increased savings is likely to come from the well-to-do people in the upper middle class and the upper class. Thus the official does two things.

(1) Forces an increase in the money supply so that more money is available for savings, and so the rate of interest decreases.

(2) Reduces taxes for the rich so they save a greater percentage of the more money that is now available to them.

In the short run, if this policy is not pushed too far, and it has not been done in the recent past, this policy might actually work. Savings increases. The rate of interest falls, so the increase in savings might not be as much as the official anticipated. But the lower rate of interest will make firms happier and will lead to more investment. This is the main result at which the official aimed, and so he/she will be happy.

If the policy is allowed to continue, or pushed too far, or repeated, it will not work nearly as well, likely will not work at all, and likely have some bad results. The policy ignores the underlying strategies and it ignores the effects of marginality (diminishing returns) even on money, savings, investment, and interest.

Even in the short run, the currency inflates, and so the additional savings do not fuel investment as anticipated. The lower rate of interest means that people save less, so savings do not boost investment as anticipated. Wealthier people do save more of their income ordinarily; but when their income increases this way they do not save as much more of their income as anticipated. So shunting money to the wealthy does not produce the savings intended. Even if savings do increase, that fact does not mean business firms must use all the extra savings for investment. Firms use savings fully for investment only if they anticipate extra return to make up for the extra loans they have to take out. If people are saving more rather than buying more, then business firms do not anticipate extra returns and so do not turn the extra savings into more investment. Savings does not necessarily cause investment as in a deterministic Macro model. The rate of interest eventually rises again along with the inflation and because the change in money supply "works its way through" as with Hume. The eventual increase in the rate of interest means that business firms do not wish to invest as much as when the money supply was first increased, so things do not improve as much as anticipated. Things return much as they were

before except the money supply has inflated and the economy has gone through a change that likely produced hardship. Even if the events did not happen exactly as described here, it is still not likely that the economy did as the official anticipated and still likely that the official caused more harm than good.

When the official sees that the policy did not work as well as anticipated, or that results died down quickly over time, rather than “back off”, the official “doubles down”. The official further inflates the money supply to boost savings and investment. The official skews taxes more in favor of the rich. That is what George W. Bush did with his tax cuts. Eventually firms cannot use additional savings for investment because they cannot make further realistic effective investments. Even investing hits a wall of diminishing returns eventually; and then even the Classical formula does not work.

Sophisticated macroeconomists have modified the Classical model to take into account a bewildering array of factors, including those just mentioned above, some of which modifications allow policies to work better or for a longer time; but even so eventually the end results are not much different. This is a simple case of interference justified by a macroeconomic formula but a common case.

**Induced Growth.** This section re-presents an example that we have seen before, induced growth. I think induced growth is the second worst current state policy after the Practice.

It makes some sense to say that we need to save now, in order to grow, in order to have even more in the future. Another way to see savings is as “not consuming”. So it makes some sense to say we need to consume less now, in order to grow, in order to consume even more in the future. Farmers do not eat their seed corn. Workers make house payments so they can retire comfortably.

The problem is with the trade-off between “not as much now” versus “more later”. If we save too much now, life is not much fun, we can suffer hardship that clouds the future, and we can even impede growth. My father used to not turn on the heat even in the winter. Oregon winters were not very cold when I was young but they were cold enough. Too much savings now can stunt the economy and stunt growth because non-consumption does not inspire business firms to build factories and produce. Why should firms make anything if nobody buys it?

It seems we should trade between “not now” and “more later” so that the sum total of benefit (utility) now plus benefit (utility) later is maximum. This too makes sense but it is hard to put into practice. It requires people to make decisions about not using now, and it requires them to make decisions in the context of uncertainty and of likely innovations in the future. Sometimes these decisions have to be about collective action too, such as building dams, roads, and electrical systems, and taking care of the environment. It took a while to establish a cable TV system in the United States because we were not certain that enough people would want it.

Proponents of the free market say we should allow individuals and firms to make these decisions, except perhaps for some collective actions such as dams, roads, and conservation. In effect, proponents of the market say we should rely on the dynamic ideal to approximate the static ideal over the long run. In that case, some people will decide to save more now (consume less now) in the hope of even greater wealth in the future while some people will decide to consume more now (save less now) in the face of an uncertain future. The average of all their decisions determines how much we collectively consume in

general now versus how much we save out of hope for the future. Besides the decisions of consumers, this is also what we have skillful entrepreneurs for. They guide us into the future by making good guesses about how much to save now (invest now) for an even better future. On behalf of their business firms, good entrepreneurs that make the right decisions about “less now” for “more later” get an automatic reward for their skill, and their skill rewards all of us by giving us both the best now and the best future.

Letting people make their own decisions about now-versus-later leads to a working solution, and the solution likely approaches the best possible outcome. Yet it is perfectly possible that the average decision by everybody, on the market, about now versus later, does NOT lead to the ideal imaginable amount of savings, for the best growth, for the greatest imaginable total utility of present and future. It might be that 8% is the rate of savings that would lead to the greatest total sum of utility for present and future, but the outcome of individual decisions leads to a savings rate of only 6%. It is not likely the real outcome will be far off some imaginable perfect outcome but it is likely that the real outcome will be a bit off.

Even if the real result differs from some imaginable ideal, we have to be careful about how we correct the real result or if we do correct the real result. The real result is what people want of their own free will. If we force the economy to another result, we go against what the people want. We treat the people as if they were not free. To stick to our policy that is against what the people want, we have to fight the current all the time. We run the risk of everything going back to what the people wanted originally when we quit fighting. We run the risk of damage done both in forcing the economy away from what the people want and when the economy returns to what the people want. If we use the state to intervene to coax more growth through forced savings, we risk that the state might be even more wrong than the real result or that the state will cause harm that we did not foresee. Even if the state does well in one situation, still we have set a bad precedent that could lead to other harm in other cases. In 2005, the Supreme Court decided that cities could confiscate property just for development and just to raise their total tax revenues; and that cities were not limited to confiscation to avoid hazards such as disease or to avoid civic problems such as crime and floods.

I believe relying on the free market is the correct policy on the whole except for some collective actions (dams, roads, the environment), even if relying on the free market does not lead to the maximum imaginable growth. We should not ask the state to set our savings rate for us. We should only force savings for growth if something is seriously wrong, we can clearly see what is wrong, and we can clearly see what to do about it without causing more harm than good. This does not happen often.

Unfortunately, the idea of trading “less now” (savings) for “even more later” plays into the hands of state officials that wish to use the ideology of growth. They can appeal to growth as a way to solve problems, especially unemployment; they can say that they know how much growth we need; and they can say they know how to induce growth. In so doing, they often serve their own needs and the needs of their clients. We saw in the previous section how a descriptive formula can be abused to justify policy intervention. With these ideas about growth, state officials have another formula, “less now means more later; forced savings for investment is a form of ‘less now for more later’, and we know how best to force savings”. This formula works within narrow limits, but still it is a formula they can push as they wish beyond those limits to serve their needs.

If a little savings now means some growth and some more wealth later, then why not even more savings for even more growth for even more wealth later, and more and more? Unless we can ground the idea in the self-interested strategies of individuals and business firms, there is no intrinsic limit to the idea embodied in the formula “less now for more later”, so clever arguments can always push it further, or push it in the direction desired by state policy makers. Of course, if we could ground the idea in the strategies of business firms and consumers, then we would not need to turn to the state for help; we could see how individual action turns out well. If problems develop in a state policy, instead of blaming the policy, policy makers can claim that the root cause is not pushing the policy hard enough or not pushing it in the right ways: “We need more growth, and we need to encourage the rich to save for us so that we can have more growth so that we can have more in the future. If we do not have enough now, that is because, in the past, we did not save enough, or because we did not shunt enough money to the rich so they could save for us.” Because there are no intrinsic limits in the formula “less now for more later”, it is hard to argue with this kind of logic.

I urge us to rely almost entirely on natural growth from the adoption of innovation, and to deny programs for induced expansion. At the end of the chapter, I return again to the problem of induced growth.

**Background: The Great Depression.** For historical reasons, Macro ideas are associated with Liberal state programs to help the poor and working people, and with attempts to ease problems of the business cycle. The historical association is correct, although we have to be clear about cause. Macro ideas did not cause Liberal state programs or cause attempts to cure the business cycle, although they did serve as a rationalization. When Liberal state programs died out in the 1970s, and when Conservative state programs replaced Liberal programs in the 1980s, Macro ideas served to rationalize Conservative state programs even though Macro ideas did not cause those programs. These Right Wing programs are not a return to the free market, despite rhetoric, but instead are strategies of state intervention for business and the wealthy. One rationalization is called “Supply Side economics”. Right Wing state programs have dominated policy since about 1980 regardless of any origin in Macro ideas or origin elsewhere.

This account makes sense by looking at the most tragic example of the business cycle, the Great Depression from 1929 to 1941. My father lived through that era, and his stories scared me as a child. I could not really appreciate what he went through, and I do not think modern Americans can. Unemployment was often at 30%. Food rotted in the fields but people starved in cities. The old died alone in tenements without water or heat while their wandering children sought jobs thousands of miles away. It did not matter who caused the Depression, only that we got out of it somehow and that we never have it again.

Classical and neoclassical theory of the time could not help at all. Pioneers developed new theory on the spot, of which the greatest was John Maynard Keynes of England. His key book was “The General Theory”, published in 1934. Although Keynes wrote quite well, the book is not clear because Keynes was feeling his way through indeterminate ideas. His followers disagreed as to exactly what he meant until a general consensus was forged around the time of World War II by Alvin Hansen, John Hicks, Paul Samuelson, and others. The most relevant ideas are:

-The economy can get “stuck” at a level below full capacity, at a level below full employment and below

the full normal production of most business firms. This “getting stuck level” is even below the decrease in full capacity due to effects of imperfect firms and the structured differentiated labor market.

-If the economy cannot correct itself, the state has to intervene to correct the economy and to restore normal capacity.

-People hoped that the ideas developed to deal with the Great Depression could also be used to ease or end all business cycles and could be used to ease or end poverty. At first, even business leaders favored using the ideas to ease the business cycle.

To really understand what the state should do, we need a clear idea of what causes the business cycle and of how the economy can get stuck at below full capacity. Unfortunately, there are no clear and widely accepted ideas although nearly every famous economist since the middle 1800s offered a theory; so we have to go with opinions.

**Getting Stuck.** This long section explains ideas about how the economy can get stuck.

*Full Capacity.* The capacity of a manufacturing plant is how many units of a good the plant can turn out without suffering to much hardship. In particular, the capacity of a plant is how many units of a good a plant can turn out before diminishing returns cause marginal cost to exceed marginal revenue (the public selling price of the good it offers) and so cause the plant to lose money. The ideas apply to offices, service providers such as a doctor, and to storefronts such as a particular T.J. Maxx. This idea of capacity is the same as developed in Chapter Five on the theory of the firm.

Sometimes plants can run at over capacity briefly. Over capacity does not necessarily strain equipment or people to the point that they begin to break down, although running at over capacity can do that. The term “over capacity” just means that the plant loses money because marginal cost exceeds marginal revenue.

To be clear, I use the term “full capacity” to mean the capacity for which the plant was originally designed, so that, under normal conditions, marginal cost about equals marginal revenue, there is no strain from over-production, and there is no slack from under-production.

Full capacity implies efficient use of resources and especially it implies full employment.

*Classical and Neoclassical Full Capacity.* Ideally in mainstream thought of both Classical and neoclassical times, a free market economy should not get stuck at below full capacity. At (1) full capacity, (2) aggregate supply equals aggregate demand, and (3) savings equals investment as mediated by the rate of interest. The fact that aggregate supply equals total demand means that workers get paid enough so that they can buy all the goods that are made by the business firms that employ them. The economy is circular, closed, and self-reproduces. Of the three conditions, it is not clear which causes which when, and if they always have to occur together. Economists gave good arguments for thinking that they would all occur together. Yet the Great Depression showed that the three conditions do not always hold separately, or go together, so economists gave arguments to cover those cases as well.

It helps to have a synopsis for why the three conditions all should go together. Suppose a lot of people are unemployed, and the economy is at less-than-full capacity. In seeking jobs, the unemployed people

should bid down the general level of wages until everybody is employed. From the point of view of business firms, if factories are running at below capacity then owners are not making as much revenue (potential profit) as they could. The owners will run the factories at greater capacity until all resources are used well, including all people as resources. What could go wrong?

*Savings, Investment, and Full Capacity.* Savings and investment might always be equal, but there is no guarantee that investment equals savings at full capacity. It might be that investment equals investment at less than full capacity or that investment tries to equal savings at more than full capacity.

Investment cannot equal savings at more than full capacity because the economy can never exceed full capacity for very long. The economy has gone past the point of diminishing returns, and so business firms lose money and consumers lose utility.

If investment tries to equal savings in a situation other than at full capacity, then there will be a tug-of-war between the forces that try to reach exactly full capacity versus the forces that try to make savings equal interest. I do not go into details of how this conflict might happen or what the likely result would be. The point is that if investment tries to equal savings at other than full capacity, the economy can get stuck at less than full capacity and can have other problems as well.

Economists before Keynes realized that investment might equal savings at other than exactly full capacity, and had tried to figure out what might happen. They concluded that investment would come to equal savings at full capacity and only at full capacity. Forces would work on each other so that savings, investment, interest, and full capacity all coincided. I do not go into reasons here, I only point out that they had cogent arguments. The problem is that the Great Depression proved them factually wrong. The followers of Keynes, in particular John Hicks and Alvin Hansen, developed a plausible alternative analysis of how money and capacity might interact. Everything tends to coincide at full capacity under normal conditions but might get stuck at less than full capacity sometimes. Their ideas were standardized in an "IS-LM space" – too complicated to go into here but the reader will need to know the terms in case of further reading. The gist follows.

*Inadequate Aggregate Demand.* It makes sense to talk about the demand of one person for one good, such as my demand for dark chocolate ice cream given my income level and cholesterol count. It makes sense to talk about the demand of consumers in general for a particular good such as chocolate ice cream given average incomes and the cost of making chocolate ice cream. So far we are on solid Micro ground. It is plausible, but a little odd, to talk about the demand of consumers in general for all goods at once. This is aggregate demand. With aggregate demand, and with its counterpart aggregate supply, usually we cross over onto Macro ground.

Under normal conditions, we expect aggregate demand to be enough so that people buy all the goods produced out of the salaries that they get for producing those goods. We expect all the consumers to get jobs at salaries large enough so that they can buy all the goods. We expect aggregate demand to be enough to take care of (equal) aggregate supply. The economy is at normal, healthy full capacity. This is what circularity, closure, and self-reproduction mean. The idea of general equilibrium implies this result.

Yet we have already seen how microeconomics led us to modify the idea of general equilibrium with imperfect competition and modify the structured labor market with unemployment. These results, in particular sustained unemployment and the presence of normal expected profit at a rate greater than the rate of natural growth, indicate that aggregate supply does not always have to match aggregate demand, and that aggregate demand sometimes does not match aggregate supply.

In a longer work, it would be necessary to go into detail why aggregate supply might or might not have to match aggregate demand, and when they are in fact equal or not equal. Here, it is enough to say they are pretty much equal in most cases except for the cases discussed below. We can take the equality of aggregate demand with aggregate supply as a starting point, and then see how much that tells us.

Even when aggregate demand nearly equals aggregate supply, there is no intrinsic reason why aggregate demand should be enough so that everybody is employed. There is no reason to expect that aggregate demand equals aggregate supply at full capacity. The circle needs to be closed at some levels of aggregate demand, aggregate supply, and employment so that they aggregate supply equals aggregate demand. We hope this is at full capacity, but it might not be at full capacity.

Some group of consumers needs to be able to get jobs so that their salaries are enough to buy the goods that they produce. Even so, it is not necessary that all consumers have to be employed.

If 75% of all consumers had jobs, and those jobs paid enough for the lucky 75% of employed consumers to buy 100% of the goods that they produced at a lower level of capacity, then the economy would balance out and would be stable with 75% of the people employed, and with aggregate demand enough to take care of aggregate supply at that level. The other 25% of the people would be out in the cold. Especially they would be out in the cold if there was no reason to believe that aggregate demand would take care of adequate supply at full employment. Especially they would be out in the cold if there was no way to get from a balance of aggregate demand with aggregate supply at 75% employment to a balance of aggregate demand with aggregate supply at 100% employment. Keynes argued that this is just what happened in the Great Depression when unemployment persisted at 25%.

In fact, although at a lesser level of unemployment than 25%, this result is quite likely given some imperfect competition. We can take the persistent 5%-plus rate of unemployment as evidence that it can happen and does happen. The economy balances, at full practical capacity, but at less than full employment.

If all consumers had jobs but those jobs somehow did not pay enough so that consumers could buy all the goods that the consumers made, the economy would not balance, and the economy would try to move to another condition that was more stable. If 100% of consumers had jobs but the salaries of those consumers allowed them to buy only 75% of the goods, then the economy would not balance, and would have to adjust.

Opponents of Keynes argued that either of these results might happen every once in a while for a short time but it could not persist. The 25% unemployed will not placidly starve to death so that the 75% can live well and so the economy can remain stable at that level. The 25% unemployed will compete to lower wages to get jobs. In the end, everybody will have a job, even if at lower wages. The aggregate wages

(aggregate demand) of everybody will be enough to take care of aggregate supply because the more jobs will compensate for the lower wages.

This contra-Keynes rejoinder is true to some extent but it does not mean the economy will balance at full employment or that it will be stable at full employment. All it really means is that the economy will not be very stable at less than full employment, even if it could theoretically balance at less than full employment. It means the economy will tend toward full employment even if full employment is not stable and cannot be reached. It means oscillation in wages and employment level. Maybe the oscillation will settle down to some level of capacity and employment, and maybe it will not. Just because the 25% unemployed accept lower wages, and so increase the number of jobs, does not mean that the economy will be stable at the higher level of employment that they achieve. If all the workers at the new, higher-level-of-employment-with-lower-wages still cannot buy all the goods that they produce, if aggregate demand still does not take care of aggregate supply at some higher level of capacity, then that higher level of capacity will not be stable. The economy will tend to fall back to a stable level with fewer jobs and higher wages for the lucky employed, and then to bounce yet again as the poor compete for jobs by offering lower wages, and then to bounce yet again as that higher level of employment is not sustainable, and so on.

*Lucky Reality.* In fact, the economy does tend toward full employment and full capacity but never reaches that result, and the economy does wobble during the business cycle. The economy tries to reach the three ideal conditions but cannot ((1) savings equals investment; (2) aggregate supply equals aggregate demand; and (3) full capacity). The economy is limited probably by imperfect competition. The economy gets as close as it can in the United States at about 92% capacity (8% real unemployment). Especially aggregate supply about equals aggregate demand at that level, although we cannot be sure that they are equal enough to be stable or that the economy is close enough to the other conditions to be stable. The wobble of the business cycle is a warning. We cannot be sure if the wobble is because the economy is not near enough to ideal conditions, and is trying to reach them, but cannot; or why else it wobbles.

Even during the down phase of the business cycle, the economy rarely falls below 88% capacity (12% unemployment) except for events like the Great Depression. So it is possible that the economy could be stable at 88% capacity (aggregate demand equals aggregate supply at 88% capacity) or at any other level, but nobody knows for sure, and usually it is not stuck at low capacities for too long.

Nobody knows for sure why things work out as they do. We are lucky that the economy comes as close to the ideal as it does. The good luck of most of the people should not blind them to the bad luck of the people that get left out.

*Inadequate What?* Suppose that aggregate demand equals aggregate supply but not at full capacity (full employment). We can say that aggregate supply and aggregate demand are inadequate to reach full capacity. But which is most inadequate? Which is most fundamental? Which do we change if we want to coax the economy toward a higher capacity with greater employment? How do we coax, assuming that we can coax, and that we can coax without causing even more harm than good?

Does the relation between savings, investment, and the rate of interest have anything to do with where aggregate demand equals aggregate supply? Could we do the coaxing by working through relations

between savings, investment, and interest, as well as by working directly on demand and supply somehow?

In theory, this is the difference between Keynes and the later Conservative reaction against Keynes. Keynes and his followers assumed that demand was the problem, in particular that demand was inadequate. They sought to increase demand through various methods. They assumed that supply would follow an increase in demand. The later Conservative reaction said that supply was the problem. They assumed that an increase in demand would follow an increase in supply, and that the increase in demand would equal the increase in supply so that aggregate demand would equal total supply. They assumed that whatever producers paid in wages (demand) would be enough to buy all the increased supply. Contrary to Conservative rhetoric, Conservatives after 1970 did not revert back to the free market. Instead, they used the same techniques that Keynes and his followers had developed but instead applied them to supply, including wealthy people. In using the techniques that had been developed earlier, they did not necessarily understand the theory or endorse the theory. They built on successful practice to develop the Practice.

### *Summary.*

-These three conditions should hold and coincide: (1) Full capacity, (2) aggregate demand equals aggregate supply, and (3) savings equals investment through the rate of interest.

-The three conditions should all hold, and all coincide, because of automatic mechanisms based on the strategies of consumer-workers and business firms.

-Unfortunately, sometimes they do not hold, and even if they do hold they do not always coincide.

-In particular, sometimes aggregate demand almost equals aggregate supply but at less than full capacity. The economy can get stuck.

-In those cases, we need to decide what is the root of the problem, and what we can do about it. We can work through supply or demand.

**What to Do: State Intervention.** Whether economists understood what was going on during the Great Depression fully or not, they still had to do something anyway. The state intervened as a benevolent landlord would have.

What Keynes proposed, and what the state did at first, is simple enough, and probably would not have hurt much if later state action had been limited to what Keynes suggested. But his ideas and the proposed actions were rationalized through macroeconomic formulas, and later policies were not limited to Keynes' suggestions. Keynes said this:

-When things are bad and the economy is clearly at less than full capacity, the state should go into deficit spending, that is, the state should go into debt.

-The deficit spending by the state adds to aggregate demand. The additional aggregate demand is

enough to take care of all potential aggregate supply, so the economy returns to a balance of aggregate demand and aggregate supply at nearly full capacity.

-How the state collects the money and spends the money makes a difference.

-On the other hand, when the economy is doing well, and especially if the economy threatens to overheat during the boom time of the business cycle, the state can tax more than it spends. The state can use the surplus revenue to pay off the debt that it incurred during the bad times.

-Over the long run, the deficit and the surplus should just about balance, so the net effect seems like zero. Yet because the state adds when we need it and takes out when we can afford it, the net effect is like mutually beneficial trade in that it helps.

-Even if the state leans a little on one side of the ledger for a long time, that leaning should not cause worry as long as the leaning is only a little and the state is still able to intervene correctly at the right times. We should not worry too much about a lingering small deficit.

I believe Keynes meant the long-run deficit and surplus to cancel out, and he never intended the massive deficits of the Practice; but I state my opinion only to make myself clear and not because I wish to get into any disputes with historians of economics.

*The Formula.* Do not memorize this formula. I give it only because you will see it in books and articles. I modify the terms a bit so as to make the formula easier to understand and to make it more inclusive.

C = consumption

S = savings

G = government spending

-g = taxes taken in

I = investment by business firms

P = production  $C + I + G + (-g) =$  aggregate demand  $S + P =$  aggregate supply Now we have the formula:

**$C + I + G + (-g) = S + P$**  Or, in words: **aggregate demand = aggregate supply**

What consumers spend plus what firms invest, plus whatever adjustments the state makes by taxing and spending, together make up aggregate demand. What consumers save plus what firms produce together make up aggregate supply. Aggregate demand takes care of (equals) aggregate supply even if sometimes we have to make sure of that by adjusting taxes (-g) and state spending (G). If G is greater than (-g) then the government is in deficit spending. If G is less than (-g) then the government is making a surplus. The ideal is  $G = -g$ , and for both to be at a minimum. The ideal is for taxes to just equal spending, that is, a balanced budget. The ideal is for both spending and taxes to be at a minimum; that is, a small state intervening only when it has to and just as much as it has to.

*Problems.* The problems with using this formula are the same as with using the formulas from previous sections:

-We do not have enough feel for how the terms derive from microeconomics. -The formula likely is true

only within some narrow range but we do not know what that range is. -We do not know how far we can push the terms without going out of that range, and producing distortion of the economy.

-This formula suggests not only action to alleviate the Great Depression but suggests that the state can use a deficit and surplus to alleviate the effects of any business cycle. The state can spend during a bust and save during a boom to counteract what people and firms overdo. This kind of action against the business cycle to help stabilize the economy during the cycle is called “counter-cyclic spending” or “counter-cyclic policy”.

-This formula suggests not only action to alleviate any business cycle but also suggests similar actions to consistently induce expansion and other intervention on behalf of officials and clients.

-This formula and the resultant ideas lend themselves to abuse by state officials.

**Malthus’ Landlords.** I insert a historical note on Malthus. Malthus pointed out in the early 1800s that the economy might not balance due to inadequate aggregate demand. He suggested that rich landlords, who made their income from imperfect competition (land rents), might be able to save the economy then by spending their wealth, even if they had to spend it on such luxuries as religion, public works such as dams, public works of art, the theater, servants, hunting parties, and balls. In particular, the landlords can spend more during the down part of a severe business cycle. I do not know if Keynes knew of Malthus’ suggestion even though Keynes did know of Malthus’ comments on aggregate demand. In any case, Keynes’ suggestion about the role of the state amounts to the same idea as Malthus’, except that the state plays the benevolent landlord. With the state, the wealth-to-the-rescue does not come from rents but from the ability to tax and to go into deficit spending. An implication from Malthus is that the landlords can play a similar but opposite role to dampen down boom times by taking more in rents (I do not know if Malthus actually suggested this). The counterpart role in Keynes is for the state to tax more during boom times to cool down the economy.

In the modern economy, large corporations and other business firms that benefit from imperfect competition are the actors that gather unearned income and distort the economy. They are the modern landlords. The fact of imperfect competition means the economy does not balance as it should, and it means the economy could use help sometimes. Imperfect firms help create the problem, and then theoretically they could offer themselves as a solution to the very problem that they help create by spending their profits in the same ways that Malthus suggested for landlords. Yet, realistically, imperfect firms cannot come to the rescue as could Malthus’ landlords because their officers do not have the same discretion to spend as did private landlords. They cannot spend on large religious projects and art projects. If imperfect firms could play the role of landlords then maybe the state would not need to. Since imperfect firms cannot, maybe the state has to play that role. I have no good suggestions as to how the state might play that role without causing even more harm than good. I like state spending on research, parks, forests, nature of all kinds, public works, and public works of art.

**Effective Knowledge.** The formulas given so far are highly simplified from what professional macroeconomists offer. Most Macro formulas, and the policies for intervention that they support, are much more complicated than this, more uncertain, and more liable to lead to unforeseen complications. In my experience, state officials and economists are unusually intelligent and clever. Even so, most

economists and state officials do not understand Macro formulas, their limitations, and their implications. Most economists and state officials do not understand because they do not bother to understand. To paraphrase the Nobel-winning economist J. K. Galbraith, most economists do not even look at the journals where complex mathematical models appear – Micro or Macro. State officials never even think about the journals or the Macro ideas behind what they want to do other than what they might have learned in a course in college. Macro theory is too hard, and understanding is not worth the effort because officials have come up with a set of actions that actually works for them. The actions might look superficially like they arose out of Macro theory but they did not; the actions arose out of practice, and they gave rise to the Practice.

At a first level, responsible state officials follow the modest Keynesian idea of spending during hard times and giving back during good times. If this were all they did, it probably would be tolerable. At a second level, almost inevitably state officials figure out through experience that they can do the following:

- Spend your way out of trouble. Throw money at problems.
- Give money to people that complain. Give money to people that you want on your side.
- Do not worry about deficits.
- Do not worry about distorting the economy.
- Yes, taking money from one place (taxes) to put it in another place (spending) usually distorts and shrinks the economy. But the economy is big and resilient, and the money taken out does not disappear entirely. The economy can stand most tinkering.
- Spend even more in hard times. You can refer to counter-cyclic theories for justification, but usually you do not need justification and usually people do not know about counter-cyclic theories anyway.
- Continue to spend even in good times.
- Rationalize through appeals to stability, correcting bad times, helping the poor, helping small business, helping the unemployed, making jobs, and growth.

These actions are a large step beyond Keynes and a large step on the way to the Practice, but not quite to the Practice yet. No Macro ideas that I know of caused these actions, although Macro ideas may be used to justify these actions. State officials held to these actions because these actions work well enough. That they work well enough is a bad comment on our political process and on us as citizens but it is true anyway.

**Liberal State Programs and Macro Formulas.** After World War II, America was prosperous compared to the rest of the world. The usually stress of comparative competition lessened within the country because there was little competition outside the country. We felt there was enough wealth for everyone to live decently even if not enough for equality. Some of the programs to alleviate the Great Depression

really had worked, such as Social Security and unemployment insurance. Unions were able to get good deals for members, including high wages, medical benefits, and benefits for retirement. In that climate, it was not only reasonable but also laudable that people with jobs would help people without jobs and would help the poor in general. People that had faced routine discrimination, such as Blacks, Jews, and women, could cooperate to fight against discrimination and could seek a legal basis to make discrimination harder. People that had benefitted from discrimination could afford to give back some of their gains. Social programs had not seemed to do much harm so far, and seemed to do some good in Europe. Programs seemed to be the antidote to communism rather than a vehicle for socialism. It was only natural that people use the state to institute social programs to end poverty, provide medical care, and ease old age. There is nothing wrong with this as long as it is done in accord with the realities of human nature, capitalism, how a state works, and the real global economy. In the golden optimism of the 1950s through early 1970s, people overlooked those realities.

Politicians did use Macro theory to justify social programs such as dampening the business cycle or inducing growth, although I do not think the politicians understood the theory or that politicians developed social programs because of Macro theory. Certainly non-economists did not know the theories or care about the theories despite a small flood of popular books explaining Keynesian policies.

Maybe the biggest Liberal mistake was to think that poverty and unemployment could be entirely and permanently eliminated through manipulating the economy. Some of the most mistaken social programs were also some of the most costly, such as public housing. This is not the place to evaluate social programs, only to point out that Macro theory did not cause the social programs but did serve as a justification.

The social programs crashed in the 1970s, partly out of their own weight but also because of three external events. First, spending on the Vietnam War created strong inflation. Second, other countries, such as Germany and Japan, caught up to the United States or surpassed it. The United States lost export markets and other countries took away internal sales for such goods as cars. Third, OPEC (Organization of Petroleum Exporting Countries, the oil cartel) drastically raised the price of oil in a short period in several shocks. Suddenly people were not secure enough to care about neighbors; comparative competition reasserted, fear set in; and politicians used the fear.

One Left Wing program deserves mention for its implications. In the 1970s, Senators Humphrey and Hawkins championed a bill that intended to eliminate unemployment. The idea was that America was rich enough to do what it wanted, and what it should want is to end unemployment. Rather than leave some people on welfare, it is better if people work. If we have to tweak the economy to make work, tweaking is still better than welfare. The economic theory supposedly behind the bill was that there is a trade-off between unemployment and inflation: the more inflation, the more employment. With enough inflation, say about 5%, we could theoretically end unemployment. The economy with persistent inflation but without unemployment and without welfare is better than the economy without persistent inflation but with unemployment and with welfare. I will not go into the history of this idea or how true it is; it only matters that at least some people believed it at the time. Even now, people still believe inflation can bring more benefits than hardship, only different kinds of benefits for different groups of people. If tweaking could have achieved its intended goal, then it was not such a bad idea; but of course any such tweaking would not have worked. Sustained inflation cannot end unemployment, largely for reasons given by Hume and

by the school of Rational Expectations: business firms can anticipate a policy such as inflation, can adjust to it, and thereby neutralize it. Adjustments neutralize the hoped-for benefits such as lower unemployment.

The bill was never enforced. Events of the time made any more inflation intolerable, and people had begun to suspect that any inflation, or any tweaking of the economy, was not as predictable and beneficial as officials said. The bill never validated the use of inflation because the bill was never put into practice but the bill did show how Macro theories could be used to justify policies that people really wanted for other reasons – perhaps that is its major long-term legacy. Now the Right was about to put that lesson into the Practice.

**Conservative Policies and Macro Theory.** President Richard Nixon declared in the early 1970s to the effect that, “I am a Keynesian now, we are all Keynesians now”. He aimed his statement against Conservatives who feared state intervention and who blamed Keynes. His statement did not mean he understood Keynesian theories and macroeconomics. He meant: “Now, even all thoughtful people on the Right understand that state interference in the economy can be useful to state officials, their clients, and maybe the economy. In any case, we are going to do it anyway, and now we have guidelines and rationalizations. The Right intends to use state interference as the Left had used it.”

President Reagan got elected with a promise to stop state interference but did not, would not, and could not. Reagan explicitly repudiated Keynes and macroeconomics. Reagan’s opponent of the time, later President George H. W. Bush (Senior), called Reagan’s ideas “voodoo economics”. Instead of stopping interference, Reagan shifted state spending from social programs to the military, business firms, wealthy people. Reagan shifted the emphasis from demand to supply. Once Reagan had controlled the massive inflation of the late 1970s, he found that moderate inflation was tolerable and useful. He found he could use the Fed to counteract some of the problems. By then, the Practice was fully in place and has remained so since. Macro theory really had little to do with causing it.

*“Supply Side”.* “Supply Side” economics is a clear illustration of the ideology behind the Practice. It was the slogan for the policies adopted by Reagan and later Republicans.

As far as I can tell, there is not much substance to the theory. It is basically a naïve restatement of Say’s Law that “supply creates its own demand”, applied in specific ways to serve the needs of the Right Wing and its clients. I think Supply Side was intended to be a counter theory to the Keynesian idea of inadequate aggregate demand.

The argument: Instead of working to increase demand, Conservatives increase supply. Supply represents the natural clients of Conservatives, business firms and the wealthy. If output (supply) increases, then firms should hire more workers and/or pay them more; workers should have enough demand to buy the increased output; the economy should grow; and more tax revenues should be had without increasing the tax rate. Using the same formula as above  $[C + I + g + (-g) = S + P]$  for a rationale and a model, the Right Wing state could go into deficit spending, but, instead of shunting the money to the poor and consumers, the Right Wing state could give the revenues to business firms. The state could give money to business firms outright; devise programs to shunt money to firms such as through subsidizing research or through “start up” grants; give funds to business firms through state activities

such as the military; reduce taxes to business firms, or reduce taxes to well-to-do people so that more money was available to firms for investment; or all of the above. If this intervention resulted in some inflation that could be controlled, that is so much the better. This is what we have had ever since as the Practice.

As we saw in Chapters Two, Four, and Five, because of diminishing returns, Say's Law is true only in limited conditions. It cannot support general policy. "Supply Side" economics is not true and is misleading.

I am not sure if Supply Side economics is supposed to be a rejection of Keynes, a modification of Keynes along Right Wing lines, or subsuming of Keynes in a greater Wisdom much as Christians claim that the New Testament subsumes the Old Testament (Torah). It probably does not matter because Supply Side does not really rest on Macro theory at all. It is a strategy unto itself that borrows on Macro ideas only for justification.

**Precedents.** Both social programs and elements of the Practice came well before modern macroeconomics, and so macroeconomics cannot have caused them.

Using the state to help the poor is thousands of years old, at least as old as the first states in Mesopotamia and Egypt. States helped the poor both out of a need for internal security and out of moral obligation. Helping the poor was one of the moral tenets for which the state served as standard guardian – like America before 1980.

Some people are surprised to learn that modern ideas of state help for the poor and for the aged stem from Chancellor Bismarck of Germany in the middle-to-late 1800s. Germany was the rising economic and military power of the time and had many of the same attitudes as America did after World War II. The phrase "from cradle to grave" comes from Bismarck. American Social Security descends directly from Bismarck's ideas.

Public housing is hundreds of years old, although it varied in quality. Bad public housing was often called "the poor house". People used to threaten their parents with the poor house when families were in dire straits.

The idea of intervening through the economy to help the poor is not as old but it still predates macroeconomic ideas. One of the oldest ideas, much reviled by Conservatives, is taking from the rich to give to the poor through various kinds of unequal taxation – called "income redistribution". This began also in Europe in the 1800s, and was clearly defined in England in the early 1900s, well before the Great Depression.

State intervention along the lines of the Practice is much older than Macro theory too. The state has been intervening in the money system, and inflating money, since fractional reserves became widespread in the late 1700s. Kings have gone into debt to wage wars, to control their people, to sustain religious ideas, or just to sustain their pleasures, for thousands of years. Kings also commonly rewarded the people that supported them, assuming, of course, that the kings won the war. The Mercantilists advised many early versions of the Practice such as granting monopolies and tax breaks.

Perhaps the biggest difference between pre-Macro and post-Macro times is that interference now is done through economic institutions such as the money system, taxes, the Fed, and programs rather than through blunt measures such as seizure of property and granting of monopolies. Even so, modern tactics are still a version of Mercantilism. Macro theory rationalizes using institutions in the service of the Practice but it does not cause that abuse. It is ironic that the Republican Party offers free market rhetoric but really relies on policies that go back to the Mercantilists and that Adam Smith would abhor.

**Why Bother?** If Macro theory is too mathematical and too complex even for most economists, Macro theory does not accurately describe the real world, state officials do not try to understand it, and the Practice runs according to rules that have little to do with Macro theory but have a lot to do with human nature and the nature of the state, then why bother to learn Macro theory?

We need to get the basics straight so we are not fooled by arguments that blame Macro theory when deeper forces are at work. Current state Practice stems out of human nature and stems out of twisting good institutions that were established to serve real needs. Blaming Macro theory is only a way to avoid thinking about the harder problems of human nature, correct institutions, and correct policies.

The modern Practice both reacts against Keynesian Macro theory and borrows Keynesian ideas to rationalize what it does. We need to get the theory straight so that we can take away the ability of the Practice to use Macro theory for rationalization.

Conservatives, in particular Austrian economists and Libertarians, often blame Keynes for the woes of modern social programs and even for the woes of the Practice. I can understand their frustration. It would be easy if a set of ideas were to blame, so all we had to do was change the ideas to stop the abuses. It would be great if all we had to do was expose the (supposed) fallacy of Keynesian ideas so as to stop bad social programs and stop the modern state Practice. But the problem is deeper than that. We cannot get to the bottom of the problem without tearing off the ideological wrapper, but, after we have torn off the wrapper, we find there really is something underneath that has nothing to do with the wrapper. The something underneath is human nature and the state.

Undoing Macro ideas does not undo the problems that they were developed to solve. We still have to deal with those problems. We still have recessions, unemployment, poverty, and the pillage of nature. It is unlikely we can deal with all the problems on a solid Micro foundation, so we still have to use some Macro ideas. We need to have at least a warning that those ideas can be abused, and we need some hint about how to use those ideas properly.

**Easing the Business Cycle.** Macro theory developed in large part to ease problems with the business cycle. Recall that “counter-cyclical” measures are actions taken in contrast to the current phase of the business cycle so as to lessen the effects of the current phase. For example, during the down phase, the state can spend money or can encourage people to spend money. During the up phase, the state can slow down projects or can encourage people to save rather than to spend.

Macro theory gives logical support to counter-cyclical measures. Even in modern times when the business cycle seemed milder, at least until the collapse of 2007, the business cycle can still cause real

problems, as we know now. When official unemployment reaches 8%, and when people stand by the side of the road with signs saying, "Will Work for Food", then Presidents lose their office. To what extent should we still rely on Keynesian suggestions?

Regardless of theory, for purely practical reasons, counter-cyclical measures usually do not work and often make things worse, except during long hard depressions. The biggest single reason is time. Usually something large and effective has to be done within six months. If an action takes longer than six months, it is likely "too little too late" and it might even make things worse during the boom phase. State projects take too much time to get going. Even if projects can get going within six months, it takes longer for their effects to spread to counter the recession. Usually the effects of a project do not spread to the economy as a whole but are limited to a region, group, or profession, such as using out-of-work construction workers to repair infrastructure in Wisconsin. A direct check from the state can be sent within a few weeks, but they are never enough. I have seen them under both Presidents George W. Bush (Junior) and Obama, and they did not work in either case. Changes in the tax code take too much time, certainly more than six months, and do not really increase either demand or savings.

The best response for modest to moderate recessions seems to be what we have evolved into.

(1) We established a set of buffers that automatically kick in when the economy gets off-keel, without need for much additional legislation or need for interference by state officials per episode. Perhaps the most important of these buffers is unemployment insurance. With it, when the economy begins to go down, people do not automatically lose their ability to contribute to effective demand. Effective demand does not dwindle. The economy does not spiral downward to a place where it can get stuck. Modern unemployment insurance usually lasts at least a year (it varies by state) so that it is usually enough to keep people afloat, and the economy afloat, until recovery begins.

(2) We have a large class of people that get a fairly constant wage no matter if the economy is in the up phase or the down phase: civil servants. Their wages keep a constant flow moving through the economy. Their wages pump in value when the economy is in the down phase. Their wages act as a break during the up phase because they cannot spend as much as other people do unless they go into debt. They are another kind of buffer.

(3) Standing state programs such as research and the space programs are a source of steady income regardless of the phase of the business cycle. They also stimulate the down phase and slow the up phase. We do not to legislate them into existence during the down phase or legislate them out of existence during the up phase.

(4) Regardless of what else we think of welfare, welfare also is a standing program that gives money to people steadily regardless of the phase of the business cycle. It is not just steady but is positively counter-cyclic. The worse the down phase, the more people go on welfare. The better the up phase, the more people automatically go off welfare.

I do not recommend creating a large army of civil servants, instituting state programs, and making access to welfare easy, just to create automatic buffers against the business cycle. But since we already have them, we might as well appreciate what they do.

(5) The Fed and other institutions can fiddle with factors such as the size of the money supply and the rate of interest to make sure they do not get bad enough to make things stick. They can take action virtually overnight, and they can keep adjusting until the economy seems better off. The scope of their action is more limited than critics think. Nowadays, they also have to dedicate much of the scope of their action to compensating for effects of the Practice. Yet enough scope to their action remains so that they can generally make things a little better without making things too much worse.

We should not expect to cure the business cycle, end the business cycle, end all fluctuations, or even to fully end the most severe pain that can come of the business cycle. We can only hope to end most of the worst, and to make sure that people can get through the cycle so that they can reasonably expect to rebuild afterwards. They will not always rebuild quickly afterwards, and they will not always rebuild to the same level afterwards.

We should have a set of signals to warn us when a recession is really bad or has gone on too long, and we should have a set of clear responses that everybody can understand such as an immediate gift of money to working people. Unfortunately, it is unlikely that economists and politicians could agree on a set of indicators and a set of responses. That was the case in 2008 and following. If we developed a set of responses, it is likely that politicians and their clients would hijack the responses to serve the Practice. That also happened after 2008. Maybe that is why we have not developed a set of signals and responses for severe cases.

**Growth Again.** Modest counter-cyclical measures might not do much harm and might even do good, especially passive buffers like unemployment insurance. The real problem is that active counter-cyclical measures such as spending set a bad example. If it is possible to “pump up” the economy during a down phase of the business cycle by spending, then why can’t we continually pump up the economy all the time? Why can’t we continually induce expansion by deficit spending? It seems state officials and their clients came to exactly this conclusion, and so we are back at the ideology of induced expansion as part of the Practice. It was as if the economy was in constant recession, or constantly needed extra savings to grow properly. I do not need to go into the details of this version of induced expansion, or why it is wrong, because this version and its errors do not differ much from what we have seen before. I do not know exactly when state officials came to this point of view but it seems to have started during the 1960s, perhaps as a way to sustain the economic dominance that was slipping away or to make up for the growing problems coming from the Vietnam War. It came into its own under Reagan and afterwards.

When the state of New York and the federal government built the Erie Canal in the early 1800s, it cost about 7 million dollars then, the equivalent of about 3 billion dollars now. The Erie Canal produced vastly more wealth than it cost by opening up the Midwest and the Great Lakes. It much more than paid for itself. As far as I can tell, it was one of the best examples of a deliberate growth project ever. Some growth measures really do work. If we could get an equivalent project going today, I might consider it. After consideration, I would reject state sponsorship because it would be easy now for private finance to put together 3 billion dollars for a project as promising as the Erie Canal. It would be hard to get the land and the permissions, but it would be doable even without state help. Maybe some private financiers should look into modernizing the Canal. If private financing can do it, then the state should consider not doing it.

Even when some projects work, the bigger problem is that we can be fooled by the idea of induced growth. We focus on the successes such as the Erie Canal and overlook the failures such as the now-spooky industrial parks and the boarded up shopping malls that were supposed to revive neighborhoods. We overlook the seizure of private property, especially if the former owners were poor. I used to live near Los Angeles and Detroit. Dodger Stadium in Los Angeles was built by destroying Chavez Ravine, a viable vibrant Hispanic neighborhood of the time. Dodger Stadium might have benefitted a group of business people and politicians in Los Angeles but I doubt the total benefit has been as much as would have come from leaving Chavez Ravine in place. Downtown Detroit still looks like Germany after World War II despite the "Renaissance Center" and decades of speeches.

Particular projects, such as the Erie Canal or Dodger Stadium, we might be able to tolerate because particular projects live and die, and because their scope is fairly clearly limited. Each particular project ends, and with its demise ends both its benefits and damage. Eventually we bulldoze the strip mall and start over.

In contrast, pervasive direct measures such as protection, and unfocused pervasive indirect measures that work through the tax and financial system, such as tax breaks for business firms and the wealthy, are much more pernicious. They almost never die, and their scope of effects is huge. They are the fiscal undead, the vampires of the economy. They are a lot easier to get going than a particular project. It is easier to pass a tax exemption, but the tax exemption causes a lot more damage in the long run, and its run is likely to be long. Talented economists rightly spend their careers trying to figure out the hidden damage caused by tax weirdness and by protection for pet industries.

We should not be fooled by appeals to induced growth, especially because those appeals usually are not really about growth but about distorting the economy to favor some state officials and their clients. We should be especially wary of using the tax system, the financial institutions (the Fed), and protectionism of all kinds to induce expansion or sustain expansion. These are drugs worse than heroin, nicotine, and amphetamines. Just say "no".

After due allowance is made to protect the environment, we should not hinder innovation as with protectionism or with laws based on fear of technology. We should rely on American inventiveness, and we should rely on natural growth from the adoption of innovation. That should be enough. If it is not enough, then we have a big problem that cannot be solved by induced expansion.

**No Magic Investment.** State programs should be firmly rooted in the rate of natural growth due to the adoption of innovation. Real wealth can only grow at the same rate as natural growth. Secure investment can grow only by being based on real wealth. We should not be fooled by appeals to some killing on the stock market or by the fact that some investment company beat the national average for a few years. We cannot overlook the losses as well as the gains when investments seek a yield greater than the rate of natural growth. Even if some eye-catching fund sometimes better than the rate of natural growth, the total gain of all investing over the long run is only equal to the rate of natural growth. I invite readers to carefully look at a broad range of figures. In the long run, growth can only occur as fast as the increase in productivity through the adoption of innovation. We have to base programs such as Social Security solidly on that model. We should not privatize key programs by appealing to pie-in-the-sky.

**The Practice Lives On.** I do not know how to stop the Practice. I think President Obama made a sincere effort in his first term to curtail the Practice but failed almost completely. The level of American debt is now so high that terrible events might force us to end the Practice, at least for a while. America really could be the next Greece. It would be nice if we could end the Practice by erasing all bad theory minds but that would not work even if we could do it. I do not know how to end the willingness of state officials to put their own interests ahead of the public by capturing the institutions of spending, taxing, and money control. I do not know how to end the willingness of state officials to put the interests of their clients ahead of the general welfare by capturing state institutions for their clients. I do not wish to throw the baby out with the bath water by getting rid of otherwise useful institutions so that we take away some of the ability of state officials to screw things up. Ending the Fed or the Treasury Department would not end the Practice. I am sure state officials would develop new ways if we took away the present ways. I can think of many drastic and un-democratic ways to end the Practice but I know they would not be acceptable, I think they are not Constitutional, and I am not sure I want to carry them out. I think fall-out from more drastic methods of forcing honesty would come in bad ways that I cannot foresee.

**Two Useful Examples.** I said Macro can be fun. Here are two examples of how Macro and Micro can mix to give us insights about important issues in modern economies. This is what some professional economists think about.

*(1) Savings, Interest, and Investment after Natural Growth.* Start with an economy in which all innovation has worked through, and the Classical idea holds: the rate of interest leads savings to equal investment. Recall that people save a greater percentage when their incomes increase and/or as they become wealthier. Now allow an important innovation. As the innovation spreads through the economy, it makes people wealthier. For simplicity, say the innovation makes people materially wealthier, as did electricity and the automobile. Now people want to save at a greater rate out of their income. Now there should be too much savings. Especially after this additional innovation has worked its way completely through, and all that is needed is to replace existing capital, there should be more savings, too much savings. Even if business needs more capital for a while to implement the innovation, there is likely to be too much savings. The rate of interest should fall. Yet, in real life, both during and after innovations, neither effect seems to happen very much. Savings does not accumulate noticeably, and the rate of interest does not fall after an innovation. If business is in a hurry to implement the innovation, the opposite might happen for a while.

The rate of savings does depend on the rate of interest but the rate of savings also depends on the character of particular nations and to be an intrinsic property of some kinds of economies. Regardless of the rate of interest and the need for investment capital, Americans are among the worst savers, usually saving less than 5% of incomes. That is one reason why Conservatives push tax breaks for wealthy people, because wealthy people do save more than 5%. Yet America rarely lacks for investment capital. On the other hand, in a similar advanced capitalist economy, Japanese people routinely save about 20% of their incomes. Japan usually does not have a surplus of investment capital, even though it did go through a period of stagnation in the 1990s. In advanced capitalist countries, the rate of savings lies between these two extremes. All these economies do reasonably well most of the time, can find investment capital when they need it, and do not often have a surplus of savings in banks. When they have it, peasants save even more than 20%. Tribal people save enormous amounts through investment

in social relations, ceremonies, offices, and prestige goods.

Professional economists think about what happens to the rate of interest, and to both the rate and amount of savings, as innovations create natural growth in a capitalist economy. They try to see how these rates stay about the same in particular nations through decades of consistent natural growth. It is fun to think through the situation yourself. The findings of professional economists do not necessarily support or deny the Practice. Yet it is important to understand what is going on because we need to know what will happen in case a political program affects savings or the rate of interest, and we need to know why savings and the rate of interest are as they are. Maybe luckily, usually the results of professional economists are too complicated to be used in political programs.

(2) "*Production Possibility Frontier*". This phrase refers to a controversy that was hot during the Cold War, and lives on now in different disguises. Recall from Chapter Five that pig farming and rice growing can mutually benefit each other. If we grow only rice, we get a meager crop. If we raise only pigs, we can raise only a couple per unit of land. If we cultivate both together, we increase the yield of both. There is some mix of pigs and rice that yields the greater total amount of them combined. Because pigs and rice are qualitatively different, it would take a little fussing to decide what that optimum mix might be, but we can imagine there is such a mix for the majority of people in a village. If we use total combined weight of pigs and rice as a measure of benefit (utility, or most satisfactory yield), we can say the optimum mix occurs when yield is at maximum combined weight.

The "production possibility frontier" is the various mixes of pigs and rice on a unit of land, and the various yields that result. If we raise only rice, we get R amount of rice, and 0 amount of pigs. If we raise only pigs, we get A amount of pigs and 0 amount of rice. Both of those yields are not as good as we could do. If we raise S amount of rice and B amount of pigs, we get 2R rice and 2A pigs, and so on. At some blend, we get the most total rice and pigs. All the various blends, and their total outcomes, can be arranged along a curve that is bowed outward. That curve was used to visualize the production possibility frontier. It helps if you play around with some imaginary numbers, and use them to draw your own imaginary curve.

Usually people want the mix that brings the maximum yield, usually the maximum physical yield, in this case the maximum weight of pigs and rice combined. People do not have to want the mix that yields the greatest total weight. People might just like pigs more than rice, and prefer to raise more pigs and less rice even if that blend does not yield the greatest combined weight of pigs and rice.

The total economic output of a country is called by many terms now, but use "gross national product" or "GNP". During the Cold War, countries competed to have the greatest GNP both for prestige and to support a large military. People argued in terms of a trade-off between nonmilitary ordinary consumer goods versus durable capital, especially durable capital that could be converted to military needs. They symbolized soft consumer goods as "butter" and hard goods as "guns". So there was a trade-off between guns versus butter as there was a trade-off between pigs versus rice. Politicians argued that the largest GNP would lead to the greatest welfare in the long run. The trick was to find the largest combination of guns and butter (pigs and rice), and to hold the economy there.

If people, on their own, want the optimum mix of goods that leads to the greatest yield point on the

production possibility frontier, or greatest GNP (such jargon is common in economics and politics), then the puzzle is easy. People save just enough, on their own, at the right rate of interest, so business firms invest in producing the right mix of goods that leads to the greatest yield and the biggest GNP.

If people, on their own, do not want the optimum mix of goods, then there is a hard problem. This was always the case during the Cold War. Then the state has to alter production so business firms make the right mix of goods to reach the greatest yield on the production possibility frontier. The state can alter the rate of interest or can alter the amount of savings directly. At the same time, the state has to make sure savings are invested in the right kind of goods at the right mix. The state has to support particular industries through tax breaks, direct subsidies, protection, or research. During the Cold War, economists devoted much effort to deciding which industries would lead to the greatest overall production, and how to encourage those industries. We can even make a case that the effort was justified by the times.

To avoid seeming too biased, and to minimize “political fallout”, state officials have to give breaks to all industries, and then adjust the breaks so that some industries are favored over others in practice. Besides encouraging some industries, the state has to discourage others by not giving to them in the same ways or to the same levels. The need to boost production led to an amazing complicated confusing welter of intrusions in the economy, most of which still exist. Rather than poverty programs, this is probably the source of the most intrusion by the state. In this situation, the temptation for politicians to serve clients is overwhelming.

The parallel now to “greatest yield point on the production possibility frontier” is “greatest growth”. Just as we were never naturally at the optimum point of the production possibility frontier for greatest GNP during the Cold War, so the state always had to step in, and the state brought along distortion, likewise now we are never growing fast enough, the state has to step in, and the state continues distortion. If we adjust the economy accordingly, we can reach greatest growth, and solve all problems, especially problems of employment. The basic attitude is the same, and the techniques are the same, only the terms have changed. Today, Macro economists might present ways to alter taxes, savings, investment, interest, and how investment is channeled so as to make the greatest growth to achieve the benefits of growth that politicians cite. On the other hand, some Macro economists use the same factors to show how changing one changes others in unexpected ways, usually ways that undo whatever good we might have imagined from interfering. To the extent that I can follow, it is fun to read the arguments and counterarguments.

Earlier I presented this situation in simple terms of just increasing investment so as to increase growth. Here we see it is more complicated and pernicious. Not only is the tax code adjusted to increase savings and investment, particular measures have to be taken to make sure investment goes where intended in the amounts intended. This is almost impossible to do, and impossible to do without abuse. In the days of the Cold War, there might have been an excuse. Now that we know growth cannot solve all problems, we cannot force the economy to the point of greatest imagined growth, and trying to force growth necessarily causes distortions, we should stop most meddling and instead face the problems directly.