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Institutional Equilibrium and SSA Analysis.

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Abstract: Key elements of any SSA analysis include the (1) durability of institutions and systems of institutions; (2) fact that some institutions count are more important than others in stabilizing the capitalist mode of production; (3) possibility that institutions do not always work in sync or last forever; and (4) the role of the articulation of different institutions. The concept of "institutional equilibrium" (IE) can help us understand these. A "workable" IE involves an organization's operations conditioning and selecting its participants to embrace attitudes that push them to act to allow the organization to survive over time without structural changes. Understanding this IE involves examining the conditions needed to attain internal harmony plus the homeostatic mechanisms that can creating that harmony (in interaction with external conditions). IE can also imply "relative autonomy," so that it persists longer than external conditions allow, which can eventually lead to crisis and/or rapid collapse. Edwards's (1979) concept of "bureaucratic control" is discussed in order to make the analysis more concrete and focused.

Institutional Equilibrium and SSA Analysis.

My thesis is that the theory of Social Structures of Accumulation (SSAs) is incomplete, because it has a weak understanding of how an SSA's constituent institutions operate, including persisting over time. To fill the gap, I develop the concept of "Institutional Equilibrium" (IE). This conception is likely also useful to other Institutionalist theories.

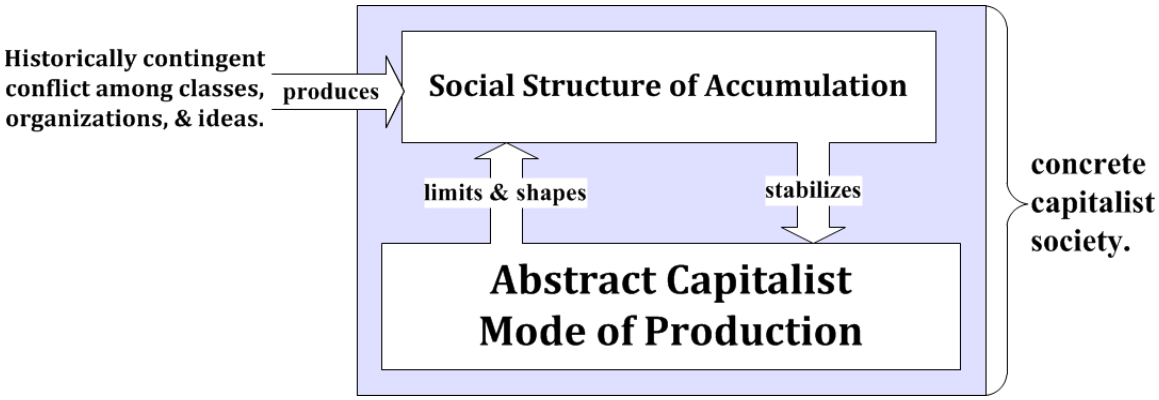
SSA Theory. The SSA literature has been well presented by Gordon, Edwards, and Reich (1982); Kotz, McDonough, and Reich, eds. (1994); and McDonough, Reich, and Kotz, eds. (2010).[1] This theory (portrayed in Figure 1) adapts Marx's original theory (as presented in Capital) to present-day conditions. It starts with the idea that Marx's abstract analysis of capital's laws of motion are often far from sufficient to understand the concrete version of capitalism that people encounter in everyday life: in practice, Marx's capitalist laws of motion do not always apply – or express themselves – as written. In addition to the institutions that make up an SSA, the operations of concrete capitalist society also reflects gender,

[1] Precursors of SSA theory included Baran and Sweezy's (1966) monopoly capital theory.

ethnic, and international relations (among others).[2]

But SSA theory goes further, saying that a specific type of system of institutions (i.e., an SSA) is *functional* to capitalism: the SSA stabilizes its operations and promote its health (by capitalism's own standards), including high and relatively stable profit rates and a fast rate of capital accumulation. However, this theory rejects functional*ism* (of the sort made famous by Parsons, 1951) as teleological: functional SSAs do not always exist, so that during certain eras, capitalism is not "healthy": profit rates are low and accumulation is stunted.

Figure 1: Capitalism and its SSA



Crucially, establishment of institutions making up an SSA is not the automatic result of capitalism's workings – i.e., a simple homeostatic response to its lack of health. Instead, that creation occurs as part of an historically-contingent process involving contending organizations, classes, and ideologies, along with the creation of tentative (experimental) stabilizing institutions. Stabilizing institutions can arise because they are created by far-sighted elites aiming, by accident (i.e., with no functional purpose in mind), or by a mixture of the two. Some of these survive, shaped by competition with other institutions and other social pressures (such as class struggle), while others do not. The surviving institutions can form an SSA (but many not necessarily do so). This process of course must not conflict with capitalism's own laws of motion, since otherwise it might *de*stabilize the system.

Once created, SSAs do not last forever, due to the crisis tendencies inherent in abstract capitalism, weaknesses within the SSA itself, and/or the uneasy relationship between the capitalist mode of production and the SSA (Kotz, 1994: 57-58). The decline of the SSA is associated with falling profit rates and a slowing of accumulation.

There at least two major variants of SSA theory. Both theories share the view that an SSA lasts for long periods despite the inherently dynamic and disruptive nature of capitalism. The original (cf. Gordon, Edwards, and Reich, 1982) was developed to explain and understand capitalism's stability over long periods (such as decades). The theory was initially linked to the idea of Kondratieff-type long waves of prosperity and stagnation of real GDP growth (cf. Gordon, 1978). An SSA promotes high and stable profitability, minimizing the

[2] The elusive concept of "orthodox" Marxism can be defined by its rejection of these propositions. In contrast, "Marxian Institutionalism" might be distinguished from other Institutionalisms by its having abstract capitalism as part of the theory.

role of uncertainty in long-term capitalist calculation, and thus encourages strong fixed investment and demand growth.

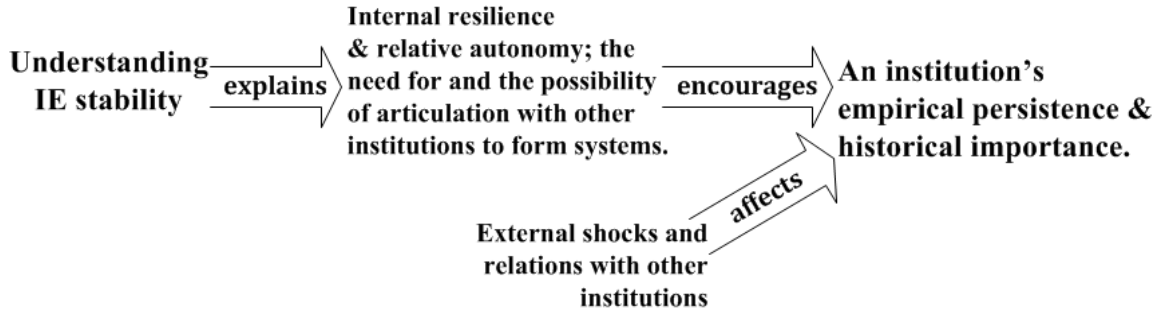
Wolfson and Katz (2010) present an alternative, rejecting the idea that an SSA automatically promotes rapid GDP growth. Instead, SSAs merely stabilize class relations and promotes profitability. This innovation seems to reflect a realization that the prosperity (real income growth) seen during the U.S. post-World War II SSA (the "PWSSA") represents a "Great Exception" rather than a template for all SSAs. That is, there is no reason to expect that the "Golden Age" (cf. Marglin and Schor, 1991), when what was good for capitalism seemed to be good for many working-class people in the rich countries, will be repeated.

But my concern is not with the differences between these two. The *key problem* is instead that SSA analyses elide the nuts and bolts of the component institutions and so cannot explain the persistence of institutions.[3] As McDonough writes:

> Without a more specific explanation of the longevity of the institutions that compose the SSA, [the] argument becomes circular; the durability of a set of institutions is explained by the durability of the institutions which compose the set. (1994: 75)

The usual theory cannot explain what Lippit (2010) terms the *structural integrity* of SSAs. Thus, we also cannot understand the *failure* of institutional stability. Examining an institution's internal contradictions (its inherent tendency toward disequilibration) is useful, but we need to know what prevents such contradictions from being expressed immediately.

Figure 2: The Role of Institutional Equilibrium.



Institutional Equilibrium. As summarized in Figure 2, the concept of IE aims to help us understand an institution's *resilience*, its ability to survive internal conflicts and external shocks.[4] The "institution" represents the basic unit of analysis (or "atom"), while IE itself helps to clarify exactly what the boundaries are *vis-à-vis* other institutions.

Collective activity is not "institutional" if it is not persistent, i.e., if it is not repeated over time with only minor changes. Persistent organizations inevitably get the most attention; they are more "institutionalized" and often described as "structures." These have the most

[3] Not addressed is the problem that SSA analysis sometimes has an inadequate understanding of what capitalism would look like in the absence of an SSA (i.e., its unbridled laws of motion and the meaning of its health).

[4] Below, I distinguish between an objective *organization* and an institution. That difference usually does not matter, however, since most relevant institutions have a workable IE, often in conjunction with others.

effects on the lives of their participants and those outside of them, along with the details of the larger historical process in which they play a part.

An institution's persistence is an empirical concept, while its resilience is the basis for that persistence. In turn, IE helps us understand resilience. As seen in section III0, IE involves *harmony* between the theory and practice of participants in an institution: their subjective attitudes lead to actions that imply reproduction of the objective organization over time, which in turn reproduces the required subjective attitudes. IE analysis centers on the conditions allowing an institution to be reproduced over time ("harmony conditions") and any homeostatic mechanisms which exist that promote the attainment of those conditions.

Crucial to my theory are two interacting and interdependent *aspects*, corresponding to the distinction between practice and theory. Its objective aspect (the *organization*) refers to regular, structured, or patterned behavior, i.e., the habits, customs, and formal rules that people actually put into practice, while its subjective aspect (individual *attitudes*) refers to consciousness, expectations, preferences, emotions, social values, etc.

The point of the IE concept is to help understand the "glue" that holds an institution together. But the concept does not explain the absolute degree of durability of an institution or exactly how long an institution will survive without structural or qualitative change. Rather the point is to understand relative resilience, i.e., why one institution is more durable than another. Similarly, the nature of IE gives insights on the *limits* on that durability.

Relationships among institutions are key to understanding an SSA's persistence. Different institutions can be *complementary*, with each "filling the gaps" of others, creating a resilient *system* of institutions such as an SSA, characterized by structural integrity. This approach is similar to the work of Lippit (2010). But while he starts at the macro level with the SSAs themselves and their main elements, this paper starts at the more micro level of an individual institution. He analyzes how the key institutions that constitute an SSA mesh or articulate with each other to form an overdetermined totality: they reinforce each other's durability thus implying an SSA's structural integrity. Since he does not examine the durability of the individual institutions, I focus on why individual institutions "need" each other: the insufficient resiliency of one organization (such as the bureaucratic control system in management) can be compensated for by other institutions. Going the other way, understanding IE helps illuminate an institution's ability to fulfill the "needs" of another.[5]

Resiliency also helps explain the *relative autonomy* of some institutions. For example, the financial sector is "relatively autonomous": it does not always work in step with the rest of the capitalist mode of production; its laws of motion do not simply reflect – and cannot be reduced to – the dynamics of capitalist production. The nature of that sector's IE helps the understanding of how it can differ from other institutions, despite having their nature limited and conditioned by other institutions. It also helps explain how it can seem to "take on a life of their own" having different laws of motion than the rest of capitalism, getting out of step with – and even coming into conflict with – the rest of the system.

[5] The satisfiers of the "needs" of institution X refer to the goods, services, and institutions which promote the harmony, health, and stability of X.

One major question that cannot be answered using the IE concept is which institutions are *more important* to forming an SSA. Kotz (1994) posits the difference between the "core" (crucial) and "periphery" (less important) institutions that form an SSA. To be more important, an institution must be resilient, either alone or in conjunction with other institutions (unless there is an easy-to-create alternative). But though necessary, durability is not sufficient: to be part of the core, an institution must have a big role in stabilizing capitalism. For example, in U.S. labor history, craft unions have been very durable, acting like turtles when under attack. But these unions are not very important to stabilizing capitalism as a system. To answer the question of importance, we must know the specific "needs" of capitalism (what promotes the system's "health"). But that is beyond the scope of this paper.

What's to Come. **§I** discusses the main Institutionalist traditions (sources of inspiration of this paper) and the (mis)use of the equilibrium concept. **§II** concerns what's meant by an "institution" and IE, while **§III** discusses the impact of IE. **§IV** applies of IE to bureaucratic control (BC) systems based on Edwards (1979). **§V** summarizes. Appendix 1 showing how institutional equilibrium works in two formal models, while appendix 2 describes my interpretation of the "relative autonomy of the state."

I. Institutionalism and Equilibrium.

My emphasis on the theory/practice relationship of course comes from Marx. He was a type of Institutionalist, since the social relations of production refers to an institutional system. Crucially, Marx saw capitalism and its relations of production as having been created by people (though not necessarily as they pleased) and thus historically limited. Capitalism did not arise merely from interaction of Nature, individual human desires, and technology as a neoclassical (NC) economist might see it. Marx thus shared much more with the "old" institutional economics (OIE) of Hodgson (1998) than the "new" institutional economics (NIE) of Williamson (2000). But my theory combines an element from each type of Institutionalism, i.e., the endogeneity of attitudes and equilibrium, respectively.

To Hodgson (1998: 176), the key distinction between the OIE and the NIE is the former's treatment of human attitudes as *endogenous*, i.e., partly determined by institutions, rather than taken as given by genetics or other unexplained factors. This fits Marx's approach, seeing desires or consciousness as conditioned by each individual's historical and social environment.[6] Similarly, Marx did not take technology as given but instead saw it as determined by the mode of production's imperatives. But this dimension is largely ignored here.

As with its NC roots, the NIE stresses the important of *equilibrium* in institutional processes (cf. Williamson, 2000).[7] With personal attitudes taken as given by genetics and/or more basic institutions (with minimal feedback going back to affect them), and given nature and technology, the NIE focuses on equilibrium institutions.[8]

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[6] For example, the prevalence of commodity production (a type of objective organization) encourages the subjective fetishism of commodities (Marx, 1967a: ch.1 §4).

[7] That article does not explain the theoretical basis for the NIE; I have interpolated it from the survey.

[8] Williamson (1990) sees "level 1" institutions (customs, even religion) as playing the dominant role in determining human preferences in "level 2." Unlike Hodgson, he minimizes the role of feed-back to level 1.

Despite using the equilibrium concept, I reject the standard NC view. No real-world institution is likely to be in equilibrium all – or even most – of the time. Rather, IE represents a *notional* or hypothetical equilibrium than *might* be attained rather than an *actual* equilibrium that prevails empirically. The real world of capitalist society is a disequilibrium process. The point of IE analysis is to explain elements of *continuity* and inertia within it.

Note that IE – even the total IE defined below – does not deny the role of dynamics. Instead, under IE the "laws of motion" of an organization stay constant. For example, in IE, the capitalist mode of production's division between capitalists and proletarians remains in place even if the percentage of the people belonging to the two classes changes. In addition, the system's "laws of motion" or rules of behavior persist: for example, Marx's "absolute general law of capitalist accumulation," i.e., that all else constant, capitalists push real wages down relative to labor productivity, still applies. Of course, these laws' concrete expression may be changed by articulation with other institutions, such as the SSA as in figure 1, even if the underlying laws do not change.

NC economics usually assumes that the posited equilibrium is unique. In contrast, in IE theory, the endogeneity of attitudes implies that *multiple* equilibria are possible; this seems a hallmark of a Marxian Institutionalism. For example, capitalism and socialism might be seen as representing two different IEs. That is, the existence of capitalism is not predetermined by current technology and human knowledge. Those might allow its replacement by socialism. To some extent capitalism exists due to institutional inertia.

Multiple equilibria can exist because each set of practices (an organizational routine) can imply a distinct type of consciousness which reproduces the routines. Or put another way, each set of attitudes can imply a different objective organization which reproduces those attitudes over time. This suggests that persistence of an institution thus involves "chicken and egg" process that can be explained only by concrete historical events. This idea is developed below. Further, equilibria are not always *stable*. I return to this issue in **§III**.

Similarly, though U.S. capitalism was stabilized by a specific SSA after World War II, it is quite possible that alternative institutions – what sociologists call a *functional alternative* – could have played the same role. Even though this alternative SSA would have stabilized capitalism, the historical details that resulted would have been very different.

Finally, there is no reason to see any real-world IE as efficient or "optimal." Instead, its existence reflects the relative degrees of power of actually-existing political, social, and economic forces in society and perhaps their leaders' perceived interests. That is, a micro-level institution can be "efficient" only in its own terms (at minimum, allowing its survival) and may be inefficient in other terms. For example, the existence of farm subsidies (which economists commonly see as socially inefficient) arises from the ability of the Farm Bureau and its allies to fight to defend the benefits they receive from them. The rise of these subsidies – and to some extent their changing form – reflects an accumulation of power that started during the late 1920s.

When discussing SSAs, the most important aspect of the "relative degrees of power of actu-

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("Level 3" has a similar relationship with "level 2," etc.)

ally-existing political, social, and economic forces" are the dynamics and needs of the abstract capitalist mode of production, which are largely unaffected by the SSA. Following the Marxian tradition, capitalism is the most resilient of current institutions.

II. Institutions.

Standard examples of institutions include the state, the family, and traditions. But my focus is instead on SSAs and the BC management system (and other examples) under capitalism.

Definition. As with Lippit (2010: 45), an "institution" can be formal or informal. A *formal* institution (an institution in the "narrow sense") is an organization such as "the World Bank or a university." These have a written charter and were often created consciously with specific purpose(s) in mind, even though these change over time. *Informal* institutions include customs and habits, which are usually not written. Though an informal institution may serve a purpose, that does not mean that it was created with that purpose in mind. For example, though the caste system in India helped to organize the social division of labor, it was created via military conquest as a way to dominate the conquered population.

Thus, an *institution* is defined as collective activity of a specific form that persists over time without qualitative change.[9] Its existence transcends the intentions of individual participants in it, and in fact limits and shapes each person's perspective and behavior. Because the latter affect the nature of the organization, the institution is not a necessary result of existing technology and natural constraints.

This definition is akin to standard ones.[10] As with those, this one involves permanence, the transcendence of individual lives and intentions, and the effects on limiting and shaping human attitudes and behavior. But I reject the view that all institutions involve cooperation rather than conflict, always provide order, or have some "social purpose." After all, a Hatfield/McCoy-type blood feud or the Cold War arms race should be seen as (informal) institutions, as should the class relations of capitalism. Added to standard definitions is also the idea that institutions are artificial, not simply reflecting nature and technology.

Equilibrium. To understand IE, examine the normal operations of an institution over time. Any objective organization is created and re-created – most often in an altered form – by individual and collective action by its participants, as shown in Figure 3, This includes the case where it falls apart and goes away. In the diagrams, the objective aspect (practices) is drawn in solid boxes; while the subjective aspect (attitudes) is drawn as dashed boxes.

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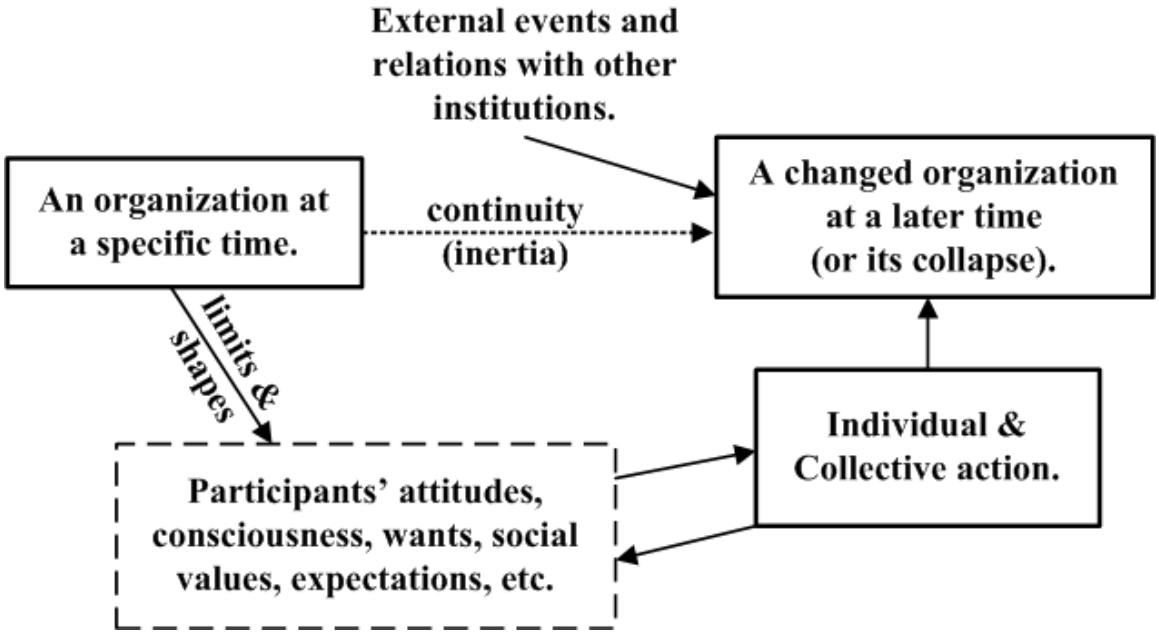
[9] Thus, an institution must have a workable IE (see below). Like the concept of a "point" in geometry, the definition involves circularity.

[10] One web definition seems similar to a standard one used in sociology: "An institution is any structure or mechanism of social order and cooperation governing the behavior of a set of individuals within a given human community. Institutions are identified with a social purpose and permanence, transcending individual human lives and intentions, and with the making and enforcing of rules governing cooperative human behavior." – found at http://answers.yahoo.com/question/index?qid=20110109141837AAxTphW.

Figure 3: The Normal Dynamics of an Institution.

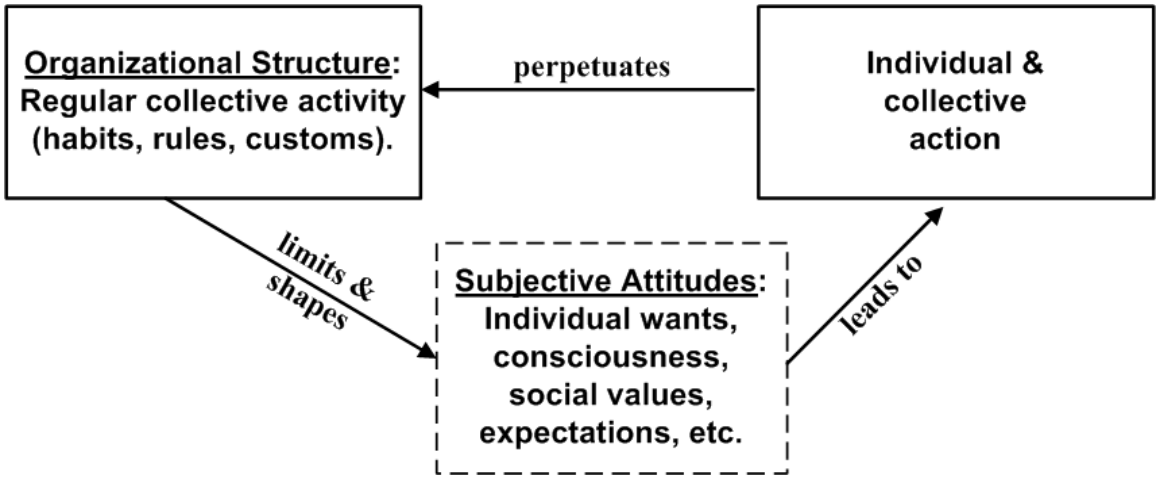


Starting at the upper right of the figure, the organization existing at a specific point in time limits and shapes the individual attitudes of its participants. Then, people act as individuals or groups based on their attitudes. These actions can bounce back to affect their attitudes (so that the arrows go both ways). For example, the success of some workers engaged in a wildcat strike makes others more optimistic about the possibilities of such a strike. Contrariwise, the failure of resistance by some makes others disheartened and encouraged compliance to rule by the organization.

Next, individual and group action causes changes in the details and/or the structure of the organization (either quantitative or qualitative change). To some extent, the organization is usually unchanged, so that there is "inertia." This continuity (the diagram's dotted arrow) represents a *residual*, i.e., the characteristics of the details and structure of the institution that turn out *not* to have been changed (after the fact). The IE concept explains this inertia.

As shown in Figure 4, IE involves the organization limiting and shaping participants' attitudes so that individual and collective action do not change the organizational structure significantly. *Institutional equilibrium* is defined as the situation where the current objective organizational structure generates subjective attitudes which imply individual and collective action that preserve the organization's current form.

Figure 4: Institutional Equilibrium.



For most individuals, conflict between theory and practice causes changing theory and/or practice. Institutional disequilibrium (which is normal) involves conflict between the subjective and objective aspects (theory *vs.* practice) and thus tension. This in turn can lead to institutional change. Absence of a conflict between theory and practice (attitudes *vs.* organization) discourages changes in both, so that the institution persists. This is IE.

Total IE involves complete institutional stasis, i.e., no change at all in the organization. Because this is completely unrealistic, focus instead on *workable* IE, which avoids qualitative or structural change in the organization but involves changes in the details. Significant changes in the organization's nature are avoided: in broad strokes, a hierarchy would remain the same general type of hierarchy, a democracy would remain the same type of democracy, while the same would apply to a tradition-run institution, a market, or chaos. Hereafter, "IE" refers to workable IE, not total IE, unless otherwise specified.

Quantitative or detailed changes occur at the margins of the organization due to altered attitudes. These might happen (for example) due to external shocks, the normal turnover of personnel, internal efforts to attain organization goals more effectively (or more incompetently), or changes in the legal and institutional environment.

Equilibrium Types. The two key elements defining an IE are harmony conditions and homeostatic forces. The former refer to the circumstances that must be met to allow conflict-free reproduction of an organization over time: otherwise, structural change occurs. In the present theory, this involves defining which individual and group attitudes are "functional" to an organization, engendering actions which fit with it, and reproduce it, over time.

Homeostatic mechanisms are internal characteristics of an institution that encourage "functional" attitudes to persist in order to attain the harmony conditions. As seen below, they may be based in either the organization or social psychology. These forces may or may not be strong enough for that attainment, however.

This strength defines two polar types of equilibrium. An institution has an extremely resilient equilibrium if internal homeostatic forces are very strong so that it does not require any external help to survive. In chemistry, this is like a helium atom under normal Earthly conditions. The difference between helium and (say) an isolated hydrogen atom arises due

to internal structure: a single helium atom's first energy level has the maximum number of electrons, while hydrogen's does not. This means that the latter "needs" other atoms to attain stability, while helium does not.[11]

The other extreme case is an unstable or knife-edge equilibrium exists if internal mechanisms are too weak for an institution to attain and maintain harmony over time.[12] Only external forces can maintain the institution's balance. This is the case for Marx's reproduction schemes in volume II of Capital when examined in isolation. Under simple reproduction, the harmony conditions are that $\mathbf{C_2}$ should equal to $\mathbf{V_1} + \mathbf{S_1}$. Marx never presents a story of why capitalism's normal operations should imply this equality. In fact, he writes that "[t]his process is so complicated that it offers ever so many occasions for operating abnormally" (Marx, 1967b: 495). Such an equilibrium only persists due to help from other institutions. For example, instability can be moderated by an SSA.[13] But an institution with absolutely no homeostatic internal forces cannot really be separate from other institutions because it is so dependent on them for its persistence. That is, it is not even relatively autonomous.

Between these two extremes, some institutions require outside help to prosper but can operate independently except in a somewhat unstable way (as with a single hydrogen atom). There are at least three different kinds of "outside help" that can be seen. These are complementary institutions, similar institutions that can legitimate or support each other (the way labor unions sometimes do), and the non-existence of alternative institutions that fulfill the same function (so that society is dependent on a specific institution). These appear in more concrete form in the discussion of BC in section IV.

Homeostatic Mechanisms. The two aspects of an institution present potential sources for two different types of homeostatic mechanisms. Starting the organizational aspect, there are several abstract mechanisms. The "correct" attitudes can be engendered by: the structure of the organization, which creates experiences for participants; organized propaganda; the limiting of information available to participants; incentives for existing participants; and selection of which individuals are participants in the organization.

The subjective aspect takes into account the fact that people develop their personalities, learn their beliefs, figure out how and what to think, and discover what to desire partly from the people they live with and the institutions they live in. While NC economics emphasizes the way that individuals choose to do things and how their actions affect the nature of the economy they encounter, we must acknowledge the sociological or social-psychological side of the story: institutions train their participants, often in informal ways.

Part of convincing people to act in ways that make an organization persist is the belief that is not going to change in the near future. In fact, an image of permanence can *make* that institution more permanent, as part of a self-fulfilling prophecy. On the other hand, organizations perceived as falling apart are more likely to encourage disruptive behavior. To some extent, the durability of any institution is an *optical illusion*, i.e., order imposed by human

[11] I do not delve deeper, into issues of isotope stability, the weak nuclear force, quarks, and Higgs bosons.

[12] Harrod's Keynesian model of saving, investment, and economic growth is a knife-edge equilibrium.

[13] This presentation deliberately ignores the fact that for Marx (taking the analysis out of isolation), deviations from "harmony" (i.e., crises) evoke a purging of imbalances that restores the disturbed equilibrium.

minds in order to make sense out of randomness. But that helps to stabilize the institution.

For more on the subjective side, consider some rudimentary social psychology. In general, many or even most people simply want to live and work without having their routines disturbed. They try to avoid conflict. Thus, only relatively large conflicts between the organization and attitudes can lead to behavior that disrupts the organization.

First, most individuals adjust their attitudes partly to avoid *cognitive dissonance* (Cooper, 2007). This is the anxiety resulting from having two conflicting thoughts in one's head at the same time or from acting in a way that conflicts with one's beliefs. If I am wedded to my beliefs – for example because they makes life "make sense" – I may filter out or misinterpret information that conflicts with those beliefs. The perception of incompatibility between two cognitions compels my mind to acquire or invent new beliefs, or to modify existing ones to reduce the amount of conflict.

Second, many people can be seduced by *groupthink* (Janis, 1982). Members of a group often try to minimize conflict and reach consensus without critically testing, analyzing, and evaluating ideas; they often take others' views as correct until they are proven otherwise. They try to look at the world from other participants' perspectives, often changing their own perspectives to compromise, to avoid promoting viewpoints that would disrupt consensus thinking. This behavior is reinforced by the fact that other people in the institution are friends, peers, or people one wants to impress; many people (especially the more subordinate ones) do not want to stand out as being "different." Of course, these other people are also major sources of information and expectations of future events.

Third, many people having some power within a hierarchical organization act on *loss aversion* (Kahneman,). That is, these folks – often called careerists or opportunists – will work harder to protect their current position than to rise toward the top. Having such a position can protect them from the ravages of the cost of job loss and the reserve army of labor.

Multiple Equilibria. Is it the organization or its participants' attitudes that tends to dominate in IE? This question misses the point that the theory aims to explain institutional inertia, i.e., the importance of the weight of history and precedent in determining what we see in reality. It does not tell us exactly which aspects dominates – or exactly which institutions exist. Rather, the answer depends on circumstances.

In jargon, the character of actual institutions is *path-dependent*. It is possible for multiple micro-level equilibria to exist, with only one of them actually being attained. Consider two possibly polar cases, a capitalist firm and a workers' cooperative. The role of the social environment of these firms is represented by the reserve army of labor.

The first case is a simplified version of the BC system discussed in section IV. The corporation's profit-seeking elite sets up an organization incorporating the "divide and rule" principle: workers have individualized jobs, actively discouraging any kind of "horizontal" collective communication among them and encouraging competition. Since this type of organization actively deters collective action, only individual workers' attitudes and actions count.

The existence of the reserve army of labor pushes workers to cling to their jobs, while discontented employees face the unhappy choice of "love it or leave it." When full employment

prevails, the latter option is more attractive, while the availability of alternative jobs makes staying and fighting for better wages more attractive. This threatens to undermine the organization. But under normal conditions, the hierarchical organization persists, shaping individual attitudes and actions to fit the requirements for its reproduction.

In second case, a democratic organization of workers decides how to organize the company. Since it involves democracy, no theorist can determine exactly what the decisions would be. But the collective might minimize the role of the division of labor, instead emphasizing teamwork and rotation among jobs. This allows and encourages communication among workers, which can allow continued collective democratic decision-making and the reproduction of the system over time. The existence of a reserve army outside the firm encourages the "exclusive" approach seen in craft unions. However, full employment might encourage a more open approach emphasizing solidarity with workers in similar firms.

In the first case, it is the goal of the corporate elite that dominates if the usual conditions that characterize capitalism apply. Individual worker and group attitudes are dominated by the organization, being reduced to an individual decision of whether to quit or not. In the second case, the collective attitudes of the workers dominate the objective organization of the cooperative, while as usual under democracy individual attitudes must be adjusted to fit group goals. However, how it works out in practice depends on the social environment.

III. Impact.

Now examine the *implications* of IE at an abstract level. An institution's persistence depends on external events and the resilience of its internal organization, where the latter is explained by understanding its IE. An institution's internal resiliency (like a person's immune system) makes it able to resist the effects of external events. If so, its traits may survive the evolutionary competition among institutions and the clash of class forces rather than being weeded out or having its structure changed. Of course, if external attacks are large enough, even the most resilient institution can fail.

Articulation of Institutions. Distinct institutions usually interact with each other, sometimes coming into conflict or competition, sometimes imitating each other. Thus, organizations often help to determine the nature and dynamics of each other. Institutions can articulate to form institutional systems, such as an SSA. Continuing the chemical analogy, if an "institution" is like an individual atom, then an institutional system is like a molecule. Just as combining two hydrogen atoms (or two hydrogen and one oxygen, etc.) produces more stable molecule than the individual atoms alone, two or more institutions can combine as a more durable structure. This durability is one way that a whole (a molecule) can differ from the sum of its parts (atoms).

Further, all else constant, if one institution (e.g., capitalism) is more resilient than another (e.g., as SSA or the BC management strategy), then over time it has a greater effect in determining the character and dynamics of the other. That is, the nature of capitalism as a class society determines the nature of an SSA or BC more than *vice-versa*. This is partly based on capitalism's ability to persist without an SSA or BC, while the capitalist forms of such institutions have a hard time prospering or even existing without capitalism.

Relative Autonomy. The degree to which an institution has a stable IE forms the basis for its

degree of relative autonomy. As noted, different collective activities in society affect each other's character and dynamics. But if a process of collective activity lacks any autonomy from other processes, it is not a separate institution. If, for example, the "state" lacked any independence from the capitalist mode of production, its "laws of motion" would be exactly the same as those of capitalism. Thus, there would be no point in drawing a line between the two. In fact, most people would not see any such line.

That is, to be a true institution, any collective activity must have relative autonomy. The relative autonomy of an institution *vis-à-vis* other institutions or the entire social system refers to the fact that its dynamics do not coincide with those of other institutions even though that its existence may depend on the that of those other institutions and it can contribute to their durability.

To illustrate the concept of relative autonomy, consider (my interpretation of) the nature the financial system *vis-à-vis* the rest of capitalism.[14] Marx and Engels (ref) saw two types of financial crises, those that simply reflected the underlying dynamics of the productive economy (such as falling profit rates) and those that were endogenous to finance. Here our concern is with the latter, i.e., the possibility that finance could enter a bubble or have a melt-down independent of the health of the production sectors.

First, finance's role in the social division of labor is different than is production. That is, the sector is involved in not only financial intermediation (the transfer of funds between "savers" and "borrowers") but also the trading of existing paper assets. So finance follows a different logic than production. While production involves capitalists spending money (M) to buy commodities (C, i.e., labor-power and other material inputs) in order to produce new commodities which can be sold to reap more money (M + ΔM), finance involves using M to "make" ΔM without any production happening in between. The surplus claimed by a financier may be based on production, but it may not be: it can just be a matter of "buying low and selling high," a redistribution from other financiers. In fact, to the financier, it does not matter if the ΔM received is directly based on the production of surplus-value (i.e., that finance helps finance production).

Further, finance involves intertemporal decision-making and Knight-Keynes uncertainty – and thus relies on conventional views of the future – much more than do standard production decisions. Finally, finance is subject to a completely different set of formal laws and legal precedents than is the nonfinancial sector.

If an institution is resilient enough to be relatively autonomous, then it can persist being out of step with other institutions and forces in society, causing conflict with the rest of society and even a crisis. Recent history shows the financial value of housing getting far out of sync with its fundamental value, so that the bubble eventually crashes. This process infected the entire pyramid of arcane finance, with mortgage-backed securities, collateralized debt obligations, and more. If the conditions are right, of course, such independent dynamics of finance could cause or undermine prosperity in the "real" sectors, as in 2009.

On the more abstract level of classic historical materialism, the relative autonomy of the

[14] The issue of the relative autonomy of the state is examined in appendix 2.

relations of production mean that they can persist despite changes in the forces of production. This allows the conflict between forces and relations. It also encourages social conflicts, leading to either structural change or the stifling of the dynamics of the forces of production. Similarly, current government behavior may come into conflict with what's good for reproducing capitalism over time and/or what major political/economic forces want the government to do, leading to a political crisis and even a political revolution (significant qualitative or structural change).

The relative autonomy of the PWSSA meant that it could outlast the general conditions of capitalism as a whole, so that the SSA becomes "obsolete." Within the SSA school, this is a common explanation of the fall in the rate of profit from the 1960s to the 1970s. This led to conflict, stagflation, crises, and structural change, as in the 1970s. The fall of the old SSA opened the door for the rise of a new one. This process can be seen by analyzing BC.

IV. Bureaucratic Control

My discussion here concerns only the version of BC for the "white collar" independent primary labor-market segment rather than that for the "blue collar" subordinate primary segment (cf. Edwards, 1979). There is no collective bargaining agreement in this kind of BC. The system involves what Friedman (1977) called "responsible autonomy": each employee is given some independence (rather than a large number of specific instructions) but is then judged, rewarded, and/or punished based on the results.

This management system is a part of the PWSSA as posited by Gordon, *et al.* (1982). However, to some extent, its resilience means that BC can be analyzed independently from capitalism and from the PWSSA. BC is an institution which had significant homeostatic mechanisms. But its general disappearance since the 1990s indicates that the mechanisms were insufficient, i.e., that BC was dependent on its institutional environment. Thus, BC's dependence on that environment must be considered.

The relative autonomy of BC meant that it could be out of step with the capitalist mode of production and also with the new institution set-up that followed the PWSSA. If the SSA no longer creates the conditions that allow for BC, then the creation of new methods of management or the revival of old ones is needed. This change may or may not happen instantly, as the higher-ups and others with job security in the bureaucracy resist. But then we can see a rapid decline of the management system, as seen in the rapid downsizing of the "white collar" jobs during the 1990s.

A. Strengths of BC.

BC is not the same thing as "bureaucracy" (red tape or ordered hierarchy), since it represents a system of relatively good jobs offered in an effort to stabilize antagonistic social relations in production. It involves a corporate elite's application of power, a conscious effort by capitalist management to ensure that subjective attitudes prevail that reinforce the management system. Edwards (1979: 131) sketches the general idea of an IE under BC. The objective organization is a hierarchy of power. Further, the "definition and direction of work tasks, the evaluation of worker performances, and the distribution of rewards and punishment [depended] on established rules and procedures, elaborately and systematically laid out." This specification affects employee attitudes. "Bureaucratic control establishes

the impersonal force of 'company rules' or 'company policy' as the basis for control." That is, BC replaces personal rule by supervisors with a nongovernmental system of "rule by law," *legitimating* the hierarchy and encouraging its acceptance by employees.

Extending Edwards' analysis, elements of Max Weber's ideal bureaucracy (ref) can legitimate a hierarchy by making it seem "rational" to participants. This involves the organization by functional specialty and technical qualifications, i.e., a division of labor justified in terms of "efficiency." It is unlikely that any organization can attain Weber's ideal, but appeals to that ideal help to legitimate the hierarchy. Thus, a hierarch who abuses power can be punished in the name of the "rules" while the rules themselves – and the hierarchy itself – are preserved. This of course avoids conflict and the hierarchy's collapse.

Next, there is indoctrination or conditioning. Company training, picnics, songs, etc., encourage pro-company attitudes. Part of this is the "we're in this together" ideology associated with welfare capitalism, i.e., corporate paternalism toward employees (cf. Jacoby, 1997).[15] Selection also plays a role in the bureaucratic process. This is seen in the firing or demotion for those with the "wrong" attitudes, while those with "wrong" attitudes quit in disgust. Of course, those with the "right" attitudes receive promotion of or other rewards.

B. External Props.

Weaknesses of BC indicate this management system's need for external help. The fact that BC systems are dependent in this way can be seen by the rapid downsizing mentioned above, which ended many of the special privileges of all but those at the top of corporate hierarchies and the shrinking of the independent primary segment.

Put another way, to prosper, BC must be part of an articulated system of institutions that forms an SSA: without the rest of the system, BC withers. So what are the external props for BC? The list starts with complementary institutions. First, having a stable macroenvironment and oligopolistic market power (institutions emphasized by the PWSSA theory) gave some companies the ability to plan ahead, allowing long-term investment projects. The planning ability required and allowed long-term and established bureaucracies.

The second part refers to BC's role in the structure of labor-market segmentation (Edwards, 1979). Even without a union contract, employment in the independent primary labor market involves non-wage compensation including various incentives that encourage loyalty, including company-specific defined-benefit pensions (deferred compensation) and medical insurance.[16] These jobs also offer promises of some job security or protection from arbitrary dismissal. This system can give some a "little bit of power" over their subordinates, potential hires, and even customers. This is what spawns the worst "red tape": a bureaucrat may interpret the rules to take advantage of personal power. Though seemingly inefficient, the boss can gain because this personal power promotes loyalty and obedience.

Unions and thus the threat of unionization also promoted BC, by motivating managers to

[15] This ideology hardly took hold completely, even during the 1960s, but applied to some extent in the independent primary segment, as with companies such as Kodak.

[16] The U.S. seems to have a unique system of employer-specific health insurance, but the general idea applies elsewhere.

offer higher wages and benefits. Further, the existence of secondary labor market ("bad") jobs provides a reserve army of labor to the primary labor market firms which offered a wage premium (including the aforementioned benefits). This operates even if the overall level of employment is relatively high and people in the secondary sector have jobs, due to the wage/benefit premium between secondary and primary sector jobs.

Third, the prevalence of similar corporations using BC creates the incentive to offer higher benefits. That is, if there is only one company offering the benefits of "good jobs," it does not have to offer a very large wage/benefit premium. But with more companies following this procedure, the premium has to be larger to have the same motivational effect. Relatedly, the prevalence of primary-sector jobs but also means that the employees with them begin see BC as "normal" or even "natural."[17]

Finally, the absence or weakness of alternative sources of non-wage benefits (such as generous public pensions and public health insurance provision) means that employers can use firm-specific pensions and health insurance to motivate workers.

C. Decline.

All of this means that the changing societal structure – the decline and fall of the PWSSA – encouraged BC to follow. In the 1970s and after, the U.S. saw a less stable macroeconomic environment and the decline of oligopolistic pricing power (encouraging a short-term mentality) along with the decline of labor unions. The rise of the unemployment rate going from the 1960s to the 1990s also meant a smaller premium in the primary sector gave management the benefits arising from the reserve army supplied by the secondary sector.

Once the decline of BC began, there was less pressure for it to continue because "other firms do it." Further, the corporate culture of "we're all in this together" was replaced by that of "you're on your own."

There were also changes in the nature of the alternative sources of non-wage benefits, which combined to make the premium more effective in evoking loyalty and work. The rise of medical costs seen by the uninsured outsiders made the provision of firm-specific medical insurance to the insiders more powerful. Thus, the quality of the latter provision could fall and have the same results of boosting employee morale and the willingness to work. The seemingly organized fanning of fears about the instability of the public pension system (OASI), though likely done for other reasons, made employees more grateful for the firm-specific retirement benefits. This legitimated the switch to "defined contribution" plans (401k type plans), which offer much less security and fewer benefits.

V. Conclusion.

(to be written)

[17] Similarly, with unions representing a significant percentage of the paid labor force, the idea of joining a union does not seem abnormal; with unions losing out, joining a union seems to be a radical act.

Appendix 1: Two Examples of Multiple IE.

An Institutionalist view – especially one of the Marxian sort – should have more than one equilibrium. Thus, individual attitudes and social movements can help to determine which institutions prevail; to some extent, we choose them as part of a collective historical process. Of course, we do not make history as we please. One reason is that the institutional environment in which we live helps to determine what it is exactly that pleases us. In fact, the currently-prevailing equilibrium may seem to be "normal" or "natural" or "inevitable" when viewed from the inside. Nonetheless, as suggested above, having two-way causation, i.e., two different homeostatic mechanisms, can cause the existence of multiple equilibria.

Here the point is how to see how it works mathematically. In the first case, the choice of equilibrium comes from outside the model, while in the second, it is more endogenous. In both, the actual choice depends on concrete historical processes that are not explained.

A. The Phillips curve and alternative equilibria.

1. The standard story.

Start with the textbook expectations-augmented Phillips curve model, which assumes that during any year **t**, expected inflation ($\mathbf{e_t}$) is completely passed on as actual inflation ($\boldsymbol{\pi_t}$) and that the excess of the actual unemployment rate ($\mathbf{U_t}$) over the Non-Accelerating Inflation Rate of Unemployment or NAIRU ($\mathbf{N_t}$) depresses the current inflation rate.

$$\boldsymbol{\pi_t} = \mathbf{e_t} - \boldsymbol{b}(\mathbf{U_t} - \mathbf{N_t}) \text{ with constant } \boldsymbol{b} > 0 \qquad (1)$$

The NC case has a unique equilibrium, based on the assumption that the NAIRU is unique and exogenously given at any given time. This is one reason why it has been termed the "natural" rate of unemployment (following Friedman and Phelps). Since **N** is determined exogenously, the NC case drops its time subscript.

Next, there is a subjective homeostatic mechanism which makes the circumstances dominant: people adjust their perceptions ($\mathbf{e_t}$) to fit objective reality. Assume a simple version of adaptive expectations, where today's inflationary expectations are simply equal to last year's actual inflation:

$$\mathbf{e_t} = \boldsymbol{\pi_{t-1}} \qquad (2)$$

These two equations mean that the PC becomes:

$$\Delta\boldsymbol{\pi_t} = -\boldsymbol{b}(\mathbf{U_t} - \mathbf{N}). \qquad (3)$$

Define equilibrium as being characterized by a stable inflation rate.

$$\Delta\boldsymbol{\pi_t} = 0 \qquad (4)$$

This means that $\mathbf{U_t} = \mathbf{N}$. So-called "rational" expectations attain equilibrium faster, but just as with adaptive expectations, the equilibrium value of $\mathbf{U_t}$ is determined by **N**. Subjective expectations play no role in determining the equilibrium unemployment rate. The actual unemployment rate is affected by policy, but the **N** is not.

In equilibrium, policy-makers only determine the actual inflation rate. Thus, their only job should be to steer the inflation rate to a low level. On the other hand, they are totally blameless if they cause high unemployment since its creation via aggregate demand restraint is the only way to abolish accelerating inflation. That is, any mass joblessness above **N** is just a matter of eggs that *must* be broken to produce a preordained omelet, unless want constantly-changing inflation rate is desired. The equilibrium unemployment rate is determined in an entirely "natural" way, with no intervention by human subjectivity, fitting the Thatcherite view that "there is no alternative."

2. Two-way causation.

A more realistic story introduces hysteresis (cf. Hargreaves Heap, 1980). That is, $\mathbf{N_t}$ adjusts toward equaling $\mathbf{U_t}$: persistently high unemployment ($\mathbf{U_t} > \mathbf{N_t}$) encourages the rise of mismatch unemployment (skill/location differences between unemployed workers and the available jobs), which becomes a "structural problem" raising $\mathbf{N_t}$. This adds a *second* homeostatic mechanism (an objective one) to the model.

$$\mathbf{N_t} = \mathbf{N_{t-1}} + \boldsymbol{c}(\mathbf{U_{t-1}} + \mathbf{N_{t-1}}) \text{ with } 1 > \boldsymbol{c} > 0 \qquad (5)$$

Equilibrium again has $\Delta\boldsymbol{\pi_t} = 0$ and $\mathbf{U_t} = \mathbf{N_t}$. But now the value of $\mathbf{N_t}$ is endogenously determined, depending on the process of attaining equilibrium. It varies with, among other things, the type of government/central bank policies applied.

Imagine two scenarios or equilibria, out of a range of several possibilities, with distinct values of $\mathbf{N_t}$. The first is the *low road* in which persistently high unemployment raises $\mathbf{N_t}$, while the second is the *high road* in which persistently low unemployment can cause mismatch unemployment to shrink, lowering $\mathbf{N_t}$.

Both equilibria can be attained. The low road scenario occurs if only aggregate demand restraint is used to fight persistent inflation, as from 1979 to 1983 in the U.S. – or if there is a very slow recovery from a financial crisis, as with the period after 2008. In theory, the high road can be followed if aggregate demand policies are complemented by incomes policies, which fight inflationary expectations directly and thus reduce inflation, and labor-market policies, which link unemployed workers with available vacancies. The latter complements and speeds the "normal" result of persistently high aggregate demand.

Since alternative equilibria are possible, the low road is partly a matter of choice and not a "natural" or predetermined result. It is only the absence of alternative institutions such as incomes policies and labor-market policies makes the Thatcherite vision seem "inevitable."

B. Hypothetical alternative societies.

Devine's (2000) model has two homeostatic mechanisms. First, the subjective factor pays an active role, with the degree of collectivism of the "median person" at a time **t** ($\mathbf{P_t}$) determining the degree of societal collectivization ($\mathbf{S_t}$) via a hypothetical voting process. While this mirrors standard NC economics (by taking preferences as given), there is also a sociological side: the objective factor, i.e., the degree of collectivization of the society's institutions ($\mathbf{S_t}$) plays an active role by determining the degree of personal collectivism ($\mathbf{P_t}$) following a process of social conditioning.

In IE, the value of $\mathbf{S_t}$ conditions the median persion to have a value of $\mathbf{P_t}$ which implies that people freely choose $\mathbf{S_t}$. In equilibrium, $\mathbf{P_t} = \mathbf{S_t}$. But there are multiple equilibria, where an equilibrium can be stable or unstable.

Stable equilibria do not require the state's coercive enforcement: these include a Hobbesian civil war and a Rousseauean utopia. In the Hobbesian case, the civil war encourages a narrow and defensive individualism that encourages the civil war to persist. In the Rousseauean utopia, having a "good society" encourages public spiritedness which encourages the good society to persist. On the other hand, unstable equilibria and disequilibrium cases must be maintained using state coercion (to manage the "free riders"). These include the Lockean case, Rousseauean authoritarianism, and the real world.

Appendix 2: the Relative Autonomy of the State.

To illustrate the concept of relative autonomy, consider (my interpretation of) the state's autonomy: the state and its government are often seen as relatively autonomous from the laws of motion of capitalism or even from the organized collective self-interest of capitalists. This relative autonomy is based on three interrelated factors:

1. the special tasks of the state (as part of the social division of labor), dealing with collective activity and using its coercive power to reproduce the capitalist system;
2. the need to attain compromises among contending political forces to make decisions about policies and programs that only take effect in the uncertain future when the laws of motion of capitalism – and what's good for capital as a whole – are not known exactly; and
3. the fact that the constitution of the U.S. government is left over from the 1780s, modified by amendments created as part of a long historical process, along with many statutes and customs that have arisen along the way, plus interpretations by the courts and administrators and the creation of the complementary "two party system."

The first refers to the way that the state articulates with the rest of the political economy while the other two of the list refer to internal aspects of the state as an institution.

Why is it that the government maintains its autonomy even when its policies conflict with the perceived requirements for reproducing capitalism over time and/or pressure from powerful interest groups? The answer corresponds to the list above. First, the government is one part of the state as a whole, which monopolizes control of the means of coercion and is thus required to deal with the coercive side of reproducing capitalism as a whole. That coercive power is also used to preserve the integrity of the state and thus its relative autonomy. Second, it is likely the nature of any governance that no decisions about collective activity represent the interests of the collectivity perfectly. Third, outside the state, the benefits to most people of having "rule by law" makes the government's structure durable. This is especially true for those people with the most economic and political power, who benefit the most from the current system of laws and resist most changes.

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